Technical Report

Benthic Assessment Technical Report

Revolution Wind Offshore Wind Farm

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List of Acronyms

aRPD	Apparent Redox Potential Discontinuity
BOEM	Bureau of Ocean Energy Management
CMECS	Coastal and Marine Ecological Classification Standard
COP	Construction and Operation Plan
DSLR	Digital single-lens reflex
EMF	Electric and magnetic fields
EPA	Environmental Protection Agency
FGDC	Federal Geographic Data Committee
G&G	Geological and Geophysical
IAC	Inter-Array Cable
INSPIRE	INSPIRE Environmental, LLC
IPF	Impact-producing factor
lbs	Pounds
MEC	Munitions and Explosives of Concern
NEF	Nikon Electronic Format
NEW	Net Explosive Weight
O&M	Operations & Maintenance
OCS	Outer Continental Shelf
OSS	Offshore substation
PSD	Photoshop Document
PV	Plan View
Revolution Wind	Revolution Wind, LLC
RWEC	Revolution Wind Farm Export Cable Corridor
RWEC-OCS	Revolution Wind Farm Export Cable-Outer Continental Shelf
RWEC-RI	Revolution Wind Farm Export Cable-Rhode Island
RWF	Revolution Wind Farm
SOD	Sediment oxygen demand
SPCC	Spill prevention, control, and countermeasure
SPI	Sediment Profile Imaging
USCG	U.S. Coast Guard
UXO	Unexploded Explosive Ordnance
WTG	Wind Turbine Generator

Executive Summary

The objective of this benthic assessment survey was to provide data characterizing the physical and biological components of the benthic environment associated with the Revolution Wind Farm (RWF), the proposed export cable route (RWEC), and a reference area. The survey design, the specific parameters measured, and the data reported were framed around the Bureau of Ocean Energy Management regulations and guidelines (BOEM, 2020a), in order for Revolution Wind to efficiently and accurately communicate a comprehensive depiction of the baseline conditions across the surveyed area to the necessary state and federal regulatory agencies. Specifically, the physical sediment composition and the biological benthic components were assessed through Sediment Profile and Plan View Imaging (SPI/PV) analysis using the Coastal and Marine Ecological Classification Standard (CMECS) classifications in addition to other variables that aid in describing baseline conditions. A total of 291 stations were surveyed, which included 216 stations in the RWF lease area, 36 stations along the outer continental shelf section of the export cable (RWEC-OCS), 34 stations along the Rhode Island state waters section of the export cable (RWEC-RI), and 5 stations in the reference area.

The physical sediment composition across the RWF was predominantly either Sand or Slightly Gravelly with several instances of Gravelly and Gravel Mixes (CMECS Substrate Groups). Boulders were present at 28 stations at the RWF and one station along the RWEC-OCS (~10% of all stations). Compared to the northern region of the RWF, the southern portion tended to have coarser substrate with less homogenous macrohabitat types, such as patchy pebbles on sand with mobiles gravel. This north-south spatial pattern, which was also reflected in biotic variables, was likely influenced by the underlying geological layers. The physical sediment composition of the RWEC-OCS was either Sand or Slightly Gravelly (CMECS Substrate Groups), with the exception of the three RWEC-OCS stations adjacent to the RWF lease area where Gravel and Gravel Mixes were documented; it was at one of these stations that boulders were observed. Similarly, macrohabitat type classification along the RWEC-OCS was mainly sand sheet or sand with mobile gravel, aside from these same three stations adjacent to the RWF lease area that were characterized as continuous large pebbles and cobbles on sand. The physical sediment composition of the RWEC-RI was mainly Sand, with the exception of 2 stations within Narragansett Bay classified as Slightly Gravelly. However, the macrohabitat type varied considerably across the RWEC-RI stations driven by the differences in biological components observed, and included, in addition to sand sheet, mollusk bed (or shells) on mud and patchy cobbles on sand.

The only sensitive taxa documented was the non-reef building coral, the northern star coral (*Astrangia poculata*), which occurred at 4 stations in the central-east portion of the RWF. The sea scallop (*Placopecten magellanicus*), a species of concern, was observed at 2 stations in the northern region of the RWF and 2 stations in the southwest corner of the RWF. Stations that were classified as Soft Sediment Fauna (CMECS Biotic Subclass) were dominated by Larger tube-building or Larger burrowing fauna (CMECS Biotic Groups), with other important taxa including amphipod species, solitary sea squirts (*Mogula* sp.), burrowing anemones (cerianthids), and hydroids (corymorpha). Stations classified as Attached Fauna (CMECS Biotic Subclass) tended to have a more diverse community assemblage including encrusting bryozoa, hydroids, sponges, and colonial tunicates, as well as occasional anemones, crabs, and sea stars. An orange colonial tunicate was observed at multiple stations within the RWF; its physical characteristics suggest it may an non-native species (*Botrylloides* sp.), however, further sampling would be required to resolve its taxonomic classification.

Details on environmental consequences and protection measures associated with the RWF and RWEC, specifically regarding the benthic environment (benthic resources and shellfish), are provided in Section 3.0 of this technical report. In brief summary, during construction and decommissioning, benthic resources and shellfish at both the RWF and along the RWEC are expected to experience some impacts from several impact-producing factors, including seafloor disturbance, habitat alteration, and sediment suspension and deposition. ***Long-term indirect impacts*** are expected based on anticipated benthic habitat recovery rates post-disturbance. The conversion of soft bottom habitat to hard bottom habitat associated with foundations and cable protection may result in ***long-term impacts*** on benthic species. However, population-level effects on benthic species are unlikely, due to the limited scale and intensity of activities associated with the RWF and RWEC, and the availability of similar habitat in the surrounding area. Several implementations will be made to avoid, minimize, or mitigate potential impacts on benthic resources and shellfish as discussed in detail in Section 3.3.

1.0 INTRODUCTION

1.1 Description of Proposed Action

Revolution Wind, LLC (Revolution Wind), a 50/50 joint venture between Orsted North America Inc. (Orsted NA) and Eversource Investment LLC (Eversource), proposes to construct and operate the Revolution Wind Farm Project (hereinafter referred to as the Project). The wind farm portion of the Project will be located in federal waters on the Outer Continental Shelf (OCS) in the designated Bureau of Ocean Energy Management (BOEM) Renewable Energy Lease Area OCS-A 0486 (Lease Area). The Lease Area is approximately 20 statute miles (mi) (17.4 nautical miles [nm], 30 kilometers [km]) south of the coast of Rhode Island (Figure 1.1-1). The Project consists of the Revolution Wind Farm (RWF), located within the Commercial Lease of Submerged Lands for Renewable Energy Development on the Outer Continental Shelf -A 0486 Lease Area (Lease Area) and the Revolution Wind Farm Export Cable (RWEC), traversing federal (RWEC-OCS) and Rhode Island state waters (RWEC-RI) to potential landfall options at Quonset Point in North Kingstown, Rhode Island.

The Project will be comprised of both offshore and onshore components, which are described in detail in Section 3 of the Construction and Operations Plan (COP). This Technical Report focuses on evaluation of the Project's offshore components, which include the following:

- up to 100 Wind Turbine Generators (WTGs) connected by a network of Inter-Array Cables (IAC);
- up to two Offshore Substations (OSSs) connected by an OSS-Link Cable; and
- up to two submarine export cables (referred to as the RWEC), generally co-located within a single corridor.

This Technical Report provides a detailed assessment of benthic resources that may be affected with implementation of the Project. The analyses presented in this Technical Report are summarized in Section 4.3.2 of the Project's COP.

1.2 Benthic Assessment Background

A benthic assessment is required by the Bureau of Ocean Energy Management (BOEM) to be included in the COP submission for any proposed offshore wind farm (BOEM, 2019). INSPIRE Environmental (INSPIRE) was subcontracted by VHB to conduct a Sediment Profile and Plan View Imaging (SPI/PV) survey to analyze SPI/PV images for parameters related to biological benthic assessment, as well as for ground-truthing the Geological & Geophysical (G&G) survey results collected and interpreted by Fugro USA Marine (Fugro).

INSPIRE collected SPI/PV images both within the RWF and along the RWEC as designated by Revolution Wind, as well as at reference stations sited east of the RWF. The reference stations served to provide data on pre-construction physical and biological conditions outside the RWF at standard distance intervals, to be used as a baseline reference to monitor construction and operation effects on the benthic environment. SPI/PV data collected during this survey were analyzed to provide information about surface sediments and benthic habitats in the proposed construction areas to support the benthic habitat assessment and for ground-truthing of geophysical data.

The water depths in the RWF, measured directly during the SPI/PV field survey, were in the range of 28 to 46 meters. The limited existing site-specific data that are available, suggest that the RWF area is comprised of mostly sandy sediments with some areas of coarser material (gravel or small cobble) and boulder fields in the southern portion, and finer sands and silts in the northern portion of the RWF (McMaster, 1960; Poppe et al., 2014; McMullen et al., 2009; LaFrance et al., 2010). Benthic community structure has previously only been inferred from studies in surrounding areas including the Rhode Island Ocean Special Area Management Plan (RI CRMC, 2010; LaFrance et al., 2010), the Block Island Wind Farm (Deepwater Wind, 2012), BOEM-funded studies (Collie and King, 2016; Guida et al., 2017; Siemann and Smolowitz, 2017), and data collected to support the COP for the South Fork Wind Farm (Deepwater Wind South Fork, 2019).

The southern New England OCS is an ideal area for offshore wind development. A slowly sloping shelf in concert with relatively high average wind conditions and large urban population centers along the coast provide a prime location for offshore wind energy production. BOEM has produced regulations and guidelines for preparing a COP for the proposed development of all offshore wind projects in U.S. federal waters. The SPI/PV survey was conducted to provide Revolution Wind with data addressing:

- BOEM's *Information Guidelines for a Renewable Energy Construction and Operation Plan (COP)* (BOEM, 2020a),
- *Guidelines for Providing Geophysical, Geotechnical, and Geohazard Information Pursuant to 30 CFR Part 585* (BOEM, 2020b),
- *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585* (BOEM, 2020c), and
- *Guidelines for Providing Benthic Habitat Survey Information for Renewable Energy Development on the Atlantic Outer Continental Shelf Pursuant to 30 CFR Part 585* (BOEM, 2019).

SPI/PV imagery is a proven technique to document baseline benthic conditions (physical and biological) as well as any pre-existing pollution or other environmental damage (Germano et al., 2011). This approach can accurately detect and document changes in shallow (21 cm) sediment profiles due to alteration of sedimentary structures resulting from exploration, construction, and operation activities. Furthermore, the imagery is well-suited to inform constituents and stakeholders of baseline and post-construction/operation conditions using a photographic format. These capabilities allow the SPI/PV survey to provide fine-scale ground-truthing of G&G survey data. The value in using SPI/PV imaging to assess the benthic habitat within the context of offshore wind development was exemplified by the acceptance of this technique, with no need for benthic community analysis using traditional grab methods, by BOEM and National Oceanic and Atmospheric Administration Greater Atlantic Regional Fisheries Office Habitat Division (NOAA Habitat). Specifically, this SPI/PV approach informed the South Fork Wind Farm Site Assessment Plan (Deepwater Wind New England, LLC, 2016) and COP (Deepwater Wind South Fork, 2019), and the Skipjack Wind Farm COP (Skipjack Offshore Energy, LLC, in preparation). INSPIRE also used SPI/PV imagery for the biological and benthic monitoring associated with Deepwater Wind's Block Island Wind Farm project in Rhode Island state waters during pre-construction, construction, and post-construction (Deepwater Wind, 2012; INSPIRE, 2016; INSPIRE, 2017). Similarly, INSPIRE conducted SPI/PV surveys and provided interpreted data products to support Orsted's South Fork and Ocean Wind Farms; Equinor's Empire/Boardwalk Cable Routes; and the New York State Energy Research and Development Authority's offshore project area.

INSPIRE scientists conducted a 291-station SPI/PV survey at the RWF, along the RWEC, and at potential reference stations east of the RWF on the southern New England OCS (Figures 1.2-1 and 1.2-2). The 291 stations across all survey areas are jointly referred to as the 'surveyed area' throughout the report. Four primary spatial areas were considered for interpretative purposes: the RWF, the section of the RWEC located in federal waters on the OCS (RWEC-OCS), the RWEC section within Rhode Island state waters (RWEC-RI), and the reference area to the east of the RWF (Figures 1.2-1 and 1.2-2). A small number of stations were sampled in additional survey areas requested by Revolution Wind to supplement the original survey design in which stations were selected to meet BOEM Guidelines (2019) (Figures 1.2-1 and 1.2-2). The survey was conducted in partnership with Fugro and contributed to Fugro's G&G survey. The SPI/PV survey was conducted 04-14 July 2019 aboard the research vessel *Fugro Enterprise* and at shallow water stations within Narragansett Bay on 25 July 2019 aboard the vessel *Westerly*.

1.3 Objectives

The purpose of the SPI/PV survey was to provide data assessing benthic habitats and communities and characterizing surficial sediments that can be used to ground-truth interpreted G&G data from the Fugro G&G survey at the RWF and along the RWEC. Results from the SPI/PV survey are intended to contribute to Revolution Wind's ability to satisfy multiple BOEM COP guidelines. This SPI/PV study provides data to support the assessment of the physical, geological, and biological conditions of the benthic habitat structure and surficial sediments within the study area. Pursuant to several BOEM guidelines, the Coastal and Marine Ecological Classification Standard (CMECS) (Federal Geographic Data Committee [FGDC], 2012) was used to classify dominant biotic groupings and to classify surficial sediments and associated fauna (BOEM, 2019, 2020b). "The Coastal and Marine Ecological Classification Standard (CMECS) is a catalog of terms that provides a means for classifying ecological units using a simple, standard format and common terminology. CMECS offers a way to organize and interpret data about the marine environment, and it provides a common platform for inter-relating data. It builds upon approaches from published national, regional, and local habitat classification procedures, and it offers an umbrella under which a national coastal and marine ecological classification can grow and evolve." (FGDC, 2012). CMECS modifiers are variables that provide additional descriptive information characterizing the physical and biological components of an environment and are useful in determining CMECS classifications. For example, in this SPI/PV survey descriptive information such as successional stage and the epifauna types present are considered CMECS modifiers.

The specific objectives of the SPI/PV survey, derived in part from BOEM Benthic Habitat guidelines (BOEM, 2019) and G&G guidelines (BOEM, 2020b), were to:

- Characterize and delineate benthic habitats
    - Characterization of benthic habitat attributes (SPI/PV)
    - Identification of dominant benthic macrofaunal and macrofloral communities classified using the CMECS Biotic Component to the lowest taxonomic unit practicable (PV)
    - Documentation of taxa diversity and characterization of benthic community composition visible in SPI and PV images
    - Characterization of physical hydrodynamics (SPI/PV)
    - Identification of sensitive taxa (SPI/PV)
    - Identification of non-native taxa (SPI/PV)
- Identify surficial seafloor conditions

  - Identification/confirmation of rock outcrops and boulders (PV)
  - Identification of bedforms (PV)
  - Identification of distinct horizons in subsurface sediments (SPI)
  - Identification of notable features such as corals, gas seepage, clay/silt, sand, gravel, cobbles, rock, and hardground with very dense or consolidated sediments (SPI/PV)

- Classify sediment types
  - Surface sediment composition classified to the CMECS Substrate Group and Subgroup levels (PV and SPI)
  - Grain size major mode, expressed in phi units of the Udden-Wentworth classification system (SPI)

- Identify potentially sensitive seafloor habitats, such as corals, submerged aquatic vegetation beds, and ecologically valuable cobble and boulder habitat (BOEM, 2019). Cobble and boulder habitat can serve as nursery ground for juvenile lobster and as preferable habitat for squid to deposit their eggs. Both lobster and squid are specific in their habitat requirements and are also economically important species in New England. For these reasons, federal and state agencies consider evidence of these taxa to indicate potentially sensitive habitats.
- Establish a pre-construction baseline that may be used to assess whether detectable changes occur in post-construction benthic habitats associated with proposed operations.
- Determine suitability of the sampled reference area to serve as a control site for future benthic assessment monitoring and assessment surveys.

SPI/PV parameters collected as part of this survey were ‘mapped’ to corresponding BOEM Geophysical and Benthic Habitat guidelines (BOEM, 2019; 2020b) (Table 1.3-1). This allows for a clear representation of how data collected as part of this survey contributed to the completion of the COP and satisfaction of BOEM Geophysical and Benthic Habitat guidelines.

Table 1.3-1. SPI/PV Survey Parameters with Corresponding BOEM COP Guidelines (30 CFR Part 585, BOEM, 2019; 2020b)

Table 1.3-1		
Data Source	**Parameter**	**BOEM COP Guidelines**
SPI	Sediment Type (based on Grain Size Major Mode)	Grain size analysis Classification of CMECS sediment type Identification of distinct horizons in subsurface sediment*
	Penetration Depth	Characterization of benthic habitat attributes
	Boundary Roughness	Identification of bedforms
	Apparent Redox Potential Discontinuity*	Characterization of benthic habitat attributes
	Sediment Oxygen Demand and Proxies (methane, *Beggiatoa*)	Characterization of benthic habitat attributes
	Epifauna	Characterization of macrofaunal community Identification of taxa diversity
	Tubes/Voids	Characterization of macrofaunal community Identification of taxa diversity
	Successional Stage*	Characterization of macrofaunal community
	Sensitive Taxa	Identification of potentially sensitive seafloor habitat
	Non-native Taxa	Identification of non-native taxa
PV	CMECS Substrate Classifications: Substrate Group, Subgroup	Classification of CMECS Substrate Group and Subgroup Identification of rock outcrops and boulders
	Gravel measurements	Classification of CMECS sediment type Characterization of benthic habitat attributes
	Bedform type and measurements	Identification of bedforms Characterization of physical hydrodynamic properties
	Boulder Presence	Identification of rock outcrops and boulders
	CMECS Biotic Classifications: Dominant and Co-occurring Biotic Subclass and Group	Identification of potentially sensitive seafloor habitat Characterization of macrofaunal community Classification to CMECS Biotic Component to lowest taxonomic unit practicable
	Attached Flora/Fauna Percent Cover*	Identification of potentially sensitive seafloor habitat Characterization of macrofaunal community
	Epifauna*	Identification of potentially sensitive seafloor habitat Characterization of macrofaunal community
	Burrows/Tubes/Tracks	Characterization of macrofaunal community
	Infauna	Characterization of macrofaunal community
	Flora	Characterization of macrofloral community and any submerged aquatic vegetation (seagrass and macroalgae)
	Sensitive Taxa	Identification of potentially sensitive seafloor habitat
	Non-native Taxa	Identification of non-native taxa

* Indicates variable that is a CMECS modifier. CMECS Modifiers provide additional detail to further characterize habitat components using a consistent set of definitions.

2.0 AFFECTED ENVIRONMENT

2.1 Methodology

2.1.1 Sediment Profile and Plan View Imaging

Sediment profile and plan view (SPI/PV) imaging is a monitoring technique used to provide data on the physical characteristics of the seafloor and the status of the benthic biological community (Germano et al., 2011). SPI/PV imaging has been shown to be a powerful reconnaissance tool that can efficiently map gradients in sediment type, biological communities, or disturbances from physical forces, anthropogenic input, or organic enrichment. Results and interpretations from SPI/PV data are about dynamic processes that have been deduced from imaged structures; as such, they should be considered hypotheses available for further testing/confirmation.

All stations within the RWF, reference area, and the majority of stations along the RWEC were sampled during Leg 1 conducted 04-14 July 2019 during 24-hour operations aboard the Fugro *Enterprise* out of New Bedford, Massachusetts. Leg 2 of the survey was conducted 25 July 2019 to complete sampling at seven shallow stations along the RWEC in Narragansett Bay aboard the *Westerly* out of Fall River, Massachusetts (Figures 1.2-1, 1.2-2).

SPI/PV station locations are provided in Attachment A. The methodology for data acquisition and analysis for these images was consistent with the sampling methods described in detail in INSPIRE's standard operating procedures (INSPIRE, 2019).

2.1.1.1 Sediment Profile Imaging

The SPI technique involves deploying an underwater camera system to photograph a cross-section of the sediment–water interface. High-resolution SPI images were acquired using a Nikon® D7200 digital single-lens reflex (DSLR) camera mounted inside an Ocean Imaging® Model 3731 pressure housing. The pressure housing sat atop a wedge-shaped steel prism with a plexiglass front faceplate and a back mirror, that was mounted at a 45° angle. The camera lens looked down at the mirror, which reflected the image from the faceplate. The prism had an internal strobe mounted inside at the back of the wedge to provide illumination for the image; this chamber was filled with distilled water, so the camera always had an optically clear path. The descent of the prism into the sediment was controlled by a hydraulic piston. As the prism penetrated the seafloor, a trigger activated a time-delayed circuit that fired the internal strobe to obtain a cross-sectional image of the upper 15–20 cm of the sediment column (Figure 2.1-1). The camera remained on the seafloor for approximately 20 seconds to ensure that successful images were obtained.

Test exposures of a Color Calibration Target were made on deck at the beginning of the survey to verify that all internal electronic systems were working to design specifications and to provide a color standard against which final images could be checked for proper white balance. Test images were also captured to confirm proper camera settings for site conditions. For both legs of this survey, the ISO-equivalent was set at 640, shutter speed was 1/250s, and the f-stop was f11. Images were stored in compressed raw Nikon Electronic Format (NEF) files (approximately 30 MB each). Images were checked periodically throughout the survey to confirm that the initial camera settings were still resulting in the highest quality images possible. All camera settings and any setting changes were recorded in the field log (Attachment B). Details of the camera settings for each digital image also are available in the associated parameters file embedded in each electronic image file.

Whenever the camera was brought back on board (typically after 3 to 5 stations), the frame counter was checked to ensure that the requisite number of replicates had been obtained. In addition, a prism penetration depth indicator on the camera frame was checked to verify that the optical prism had penetrated the bottom to a sufficient depth. If images were missed or the penetration depth was insufficient, the camera frame stop collars were adjusted and/or weights were added or removed, and additional replicate images were taken. Frame counts, time of image acquisition, water depth, frame stop-collar position, and the number of weights used were recorded in the field log for each replicate image (Attachment B). Visual checks and hand tightening checks of all nuts and bolts on the SPI/PV camera frame were conducted periodically to make sure nothing vibrated loose during the survey.

Prior to field operations, the internal clock in the digital SPI system was synchronized with the vessel's navigation. Each image was assigned a unique time stamp in the digital file attributes by the camera's data logger and cross-checked with the time stamp in the navigational system's computer data file. Images were downloaded periodically to verify successful sample acquisition and/or to assess the type(s) of sediment and other relevant features present at a given station. Digital image files were renamed with the appropriate station names immediately after downloading as a further quality assurance step.

2.1.1.2 Plan View Imaging

An Ocean Imaging® Model DSC24000 plan view underwater camera system with two Ocean Imaging® Model 400-37 Deep Sea Scaling lasers was attached to the sediment profile camera frame and used to collect plan view images of the seafloor surface. Both SPI and PV images were collected during each "drop" of the system. The PV system consisted of a Nikon® D7200 DSLR camera encased in a pressure housing, a 24 VDC autonomous power pack, a 500 W strobe, and a bounce trigger. A weight was attached to the bounce trigger with a stainless-steel cable so that the weight hung below the camera frame; the scaling lasers projected two red dots that were separated by a constant distance (26 cm) regardless of the field of view of the PV system. The field of view can be varied by increasing or decreasing the length of the trigger wire and, thereby, the camera height above the bottom when the picture is taken. As the SPI/PV camera system was lowered to the seafloor, the weight attached to the bounce trigger contacted the seafloor prior to the camera frame reaching the seafloor and triggered the PV camera (Figure 2.1-1).

During set-up and testing of the PV camera, the positions of lasers on the PV camera were checked and calibrated to ensure separation of 26 cm. Test images were also captured to confirm proper camera settings for site conditions. For both legs of this survey, the ISO-equivalent was set at 640, shutter speed was 1/15s and the f-stop was f18. Images were stored in compressed raw NEF files (approximately 30 MB each). Images were checked periodically throughout the survey to confirm that the initial camera settings were still resulting in the highest quality images possible. All camera settings and any setting changes were recorded in the field log (Attachment B). Details of the camera settings for each digital image also are available in the associated parameters file embedded in each electronic image file.

Prior to field operations, the internal clock in the digital PV system was synchronized with the vessel's navigation system and the SPI camera. Each image was assigned a unique time stamp in the digital file attributes by the camera's data logger and cross-checked with the time stamp in the navigational system's computer data file. In addition, the field crew kept redundant field logs (Attachment B). Throughout the survey, PV images were downloaded at the same time as SPI images and were evaluated for successful image acquisition and image clarity. Digital image files were renamed with the appropriate station names immediately after downloading as a further quality assurance step.

The ability of the PV system to collect usable images is dependent on the clarity of the water column. Water conditions during this survey allowed use of a 0.9 m (3 ft.) trigger wire, resulting in a mean image width of 0.8 m and a mean field of view of 0.41 m^2.

2.1.1.3 SPI and PV Data Collection

The Leg 1 SPI/PV survey was conducted aboard the vessel *Fugro Enterprise* while the Leg 2 SPI/PV survey was conducted aboard the vessel *Westerly*. Navigation for both legs was provided by Fugro. The following data collection details were applied to both legs of the survey. Navigation software was used for positional data acquisition and navigating the vessels to sampling stations. When the vessel was within a 25-meter radius of the target location, the SPI and PV camera system was lowered to the seafloor. The navigator electronically recorded the vessel's position and water depth when the SPI camera contacted the seafloor and the winch wire went slack. Four replicate SPI/PV samples were taken at each station. Each replicate camera position was recorded, time stamped, and linked to the SPI log by station number and replicate. During sampling, the vessel position was electronically recorded by the navigator. At the time of sample acquisition, the time, station name and replicate were recorded in the field log (Attachment B). A total of 300 stations were surveyed; however, nine stations located along an alternate export cable route were removed from downstream analysis as this cable route option has since been removed from consideration. The three replicate images with the best quality (adequate prism penetration, no or minimal sampling artifacts) at each station were selected for analysis. Based on quality, Station 220W2 had two replicate SPI images analyzed, Stations 041, 045, 246, 445, 454, and 612 had two replicate PV images analyzed, and Station 455 had one replicate PV image analyzed (Attachments C and D).

2.1.1.4 Image Conversion and Calibration

Following completion of field operations, quality control checks were conducted of filenames, date/time stamps, and the field log. After these procedures, the NEF raw image files were color calibrated in Adobe Camera Raw® by synchronizing the raw color profiles to the Color Calibration Target that was photographed prior to field operations with the SPI camera. The raw SPI and PV images were then converted to high-resolution Photoshop Document (PSD) format files, using a lossless conversion file process and maintaining an Adobe RGB (1998) color profile. The PSD images were then calibrated and analyzed in Adobe Photoshop®. Length and area measurements were recorded as number of pixels and converted to scientific units using the calibration information.

2.1.2 SPI and PV Data Analysis

Computer-aided analysis of SPI/PV images provided a set of standard measurements to allow for comparisons among different areas of interest.

Measured parameters for SPI and PV images were recorded in Microsoft Excel© spreadsheets. These data were subsequently checked by INSPIRE's senior scientists as an independent quality assurance/quality control review before final interpretation was performed. Spatial distributions of SPI/PV parameters were mapped using ESRI ArcGIS 10.6. Map backgrounds use a regional bathymetric mosaic compiled using Northwest Atlantic Marine Ecoregional Assessment spatial data (Conservation Gateway, 2019).

2.1.2.1 Sediment Profile Image Analysis Parameters

The parameters discussed below were assessed and/or measured and recorded for each replicate SPI image selected for analysis (Attachment C). Descriptive comments were also recorded for each. A depiction

of standard variables derived from example SPI images from soft bottom settings are provided in Figure 2.1-2.

2.1.2.1.1 Sediment Type

The sediment grain size major mode and range were visually estimated from the color images by overlaying a grain size comparator that was at the same scale. This comparator was prepared by photographing a series of Udden-Wentworth size classes (equal to or less than coarse silt up to granule and larger sizes) with the SPI camera: silt/clay (>4 phi), very fine sand (4 to 3 phi), fine sand (3 to 2 phi), medium sand (2 to 1 phi), coarse sand (1 to 0 phi), very coarse sand (0 to -1 phi), and granule and larger (<-1 phi). The lower limit of optical resolution of the photographic system is about 62 microns, allowing recognition of grain sizes equal to, or greater than, coarse silt (≥4 phi). The accuracy of this method has been documented by comparing SPI estimates with grain size statistics determined from laboratory sieve analyses (Marine Surveys, 1984).

The comparison of the SPI images with Udden-Wentworth sediment standards photographed through the SPI optical system was also used to map near-surface stratigraphy such as sand-over-mud or mud-over-sand, where observed. When mapped on a local scale, this stratigraphy can provide information on relative transport magnitude and frequency.

2.1.2.1.2 Prism Penetration Depth

The SPI prism penetration depth was measured from the bottom of the image to the sediment–water interface. The area of the entire cross-sectional sedimentary portion of the image was digitized; the number of pixels within this area was divided by the calibrated linear width of the image to determine the mean penetration depth. Linear maximum and minimum depths of penetration were also measured. All three measurements (maximum, minimum, and mean penetration depths) were recorded in the data file.

If the stop collar settings and the number of weights used in the camera frame are held constant throughout the survey, the camera functions as a static-load penetrometer. The depth to which the SPI prism penetrates the seafloor provides an indication of the sediment bearing capacity and shear strength. The penetration depth can range from a minimum of 0 cm (no penetration on hard substrata) to a maximum of 20 cm (full penetration of very soft substrata). Comparative penetration values from sites of similar grain size give an indication of the relative water content of the sediment. Highly bioturbated sediments and rapidly accumulating sediments tend to have the highest water contents and greatest prism penetration depths.

2.1.2.1.3 Small-Scale Surface Boundary Roughness

Surface boundary roughness was determined by measuring the vertical distance between the highest and lowest points of the sediment–water interface. The camera must be level to record accurate boundary roughness measurements. The surface boundary roughness (sediment surface relief) measured over the width of sediment profile images typically ranges from 0 to 4 cm and may be related to either physical structures (ripples, rip-up structures) or biogenic features (burrow openings, fecal mounds, foraging depressions). Biogenic roughness typically changes seasonally and is related to the interaction of bottom turbulence and bioturbation.

In sandy sediments, boundary roughness can be a measure of sand wave height. On silt/clay bottoms, boundary roughness values often reflect biogenic features such as fecal mounds or surface burrows. The

size and scale of boundary roughness values can have dramatic effects on both sediment erodibility and localized oxygen penetration into subsurface sediments (Huettel et al., 1996).

2.1.2.1.4 Apparent Redox Potential Discontinuity Depth

Aerobic near-surface marine sediments typically have higher reflectance relative to underlying hypoxic or anoxic sediments. Surface sands washed free of mud also have higher optical reflectance than underlying muddy sands. These differences in optical reflectance are visible in SPI images; oxidized surface sediments contain particles coated with ferric hydroxide (an olive or tan color when associated with particles) and reduced and muddy sediments below this oxygenated layer are darker, generally gray to black (Fenchel, 1969; Lyle, 1983; Sturdivant and Shimizu, 2017). The boundary between colored ferric hydroxide surface sediments and underlying gray to black sediments is called the apparent redox potential discontinuity (aRPD). The aRPD is described as “apparent” because of the potential discrepancy between where the sediment color shifts and the complete depletion of dissolved oxygen concentration occurs due to the lag time between when the redox potential (Eh) reaches 0 millivolts (mV) and the precipitation of darker sulfidic sediments (Jorgensen and Fenchel, 1974). However, the mean aRPD measured in SPI is a suitable proxy for the RPD with the depth of the actual Eh = 0 horizon generally either equal to or slightly shallower than the depth of the optical reflectance boundary (Rosenberg et al., 2001; Simone and Grant, 2017). Factors that influence the depth of the aRPD include biological processes such as respiration and bioturbation and physical processes including advection and diffusion. The mean aRPD depth also can be affected by local erosion. Scouring can wash away fines and shell or gravel lag deposits and can result in a very thin surface oxidized layer. During storm periods, erosion may completely remove any evidence of the aRPD (Fredette et al., 1988).

In sandy sediments that have very low sediment oxygen demand (SOD), the sediment may lack a visibly reduced layer even if an RPD is present. Because the determination of the aRPD requires discrimination of optical contrast between oxidized and reduced particles, it is difficult, if not impossible, to determine the depth of the aRPD in well-sorted sands of any size that have little to no silt or organic matter in them. When using SPI technology on sand bottoms, little information other than grain size, prism penetration depth, and boundary roughness values can be measured; while oxygen has penetrated the sand beneath the sediment–water interface due to physical forcing factors acting on surface roughness elements (Ziebis et al., 1996; Huettel et al., 1998), estimates of the mean aRPD depths in these types of sediments are indeterminate with conventional white light photography. Also, aRPD is a CMECS modifier, adding detail to the CMECS classifications.

2.1.2.1.5 Sediment Oxygen Demand Proxies

Sediment oxygen demand (SOD) represents the overall rate of oxygen consumption, biologically and chemically, by the sediment column. The relative amount of organic enrichment is indicated by sediment color; darker coloration indicates more reduced sediments with greater organic loading and higher SOD (Fenchel, 1969; Rhoads, 1974; Lyle, 1983; Bull and Williamson, 2001; Sturdivant and Shimizu, 2017). SOD levels (i.e., none, low, medium, and high) were assessed for all images. Under high organic matter loading and subsequently high SOD, microbial sulfate reduction proceeds and may completely deplete porewater sulfate concentrations. Under these conditions, methanogensis can occur, leading to methane bubbles in the sediment column. In SPI, methane appears as irregular shaped gas-filled voids with a glassy texture (due to the reflection of the strobe off the gas bubble). Any presence of methane was noted. Similarly, under highly reduced anoxic conditions, *Beggiatoa* bacteria may be present. These bacterial colonies have diagnostic morphology that has been documented in numerous other sediment profile imaging surveys (Nilsson and Rosenberg, 1997; Rosenberg et al., 2001; Karakassis et al., 2002; Germano et al., 2011).

Although unlikely to be important in OCS sediments, if encountered *Beggiatoa* or *Beggiatoa*-like colonies were noted.

2.1.2.1.6 Infaunal Successional Stage

The mapping of infaunal successional stages is readily accomplished with SPI technology. Infaunal successional stage is a measure of the biological community inhabiting the seafloor. Current theory holds that organism–sediment interactions in fine-grained sediments follow a predictable sequence of development after a major disturbance (e.g., dredged material disposal) (Pearson and Rosenberg, 1978; Rhoads and Germano, 1982; Rhoads and Boyer, 1982). This continuum is divided subjectively into four stages: Stage 0, indicative of a sediment column that is largely devoid of macrofauna, occurs immediately following a physical disturbance or in close proximity to an organic enrichment source; Stage 1 is the initial recolonizing tiny, densely populated polychaete assemblages; Stage 2 is the start of the transition to head-down deposit feeders; and Stage 3 is the mature, equilibrium community of deep-dwelling, head-down deposit feeders (Figure 2.1-3).

In dynamic environments, it is simplistic to assume that benthic communities always progress completely and sequentially through all four stages in accordance with the idealized conceptual model depicted in Figure 2.1-3. Various combinations of these basic successional stages are possible. For example, secondary succession can occur (Horn, 1974) in response to additional labile carbon input to surface sediments, with surface-dwelling Stage 1 or 2 organisms coexisting at the same time and place with Stage 3, resulting in the assignment of a “Stage 1 on 3” or “Stage 2 on 3” designation. If both Stage 1 and Stage 2 organisms exist in an image with Stage 3 fauna, the Stage 1 on 3 designation is used because it is more important to denote the presence of recruiting organisms than intermediate Stage 2 fauna. While the successional dynamics of invertebrate communities in fine-grained sediments have been well documented, the successional dynamics of invertebrate communities in sand and coarser sediments are not well known. Consequently, the insights gained from sediment profile imaging technology regarding biological community structure and dynamics in sandy and coarse-grained bottoms are limited.

Successional stage was assigned by assessing the types of infauna and related activities (e.g., feeding voids) apparent in the images. Also, successional stage is a CMECS modifier, adding detail to the CMECS classifications.

2.1.2.1.7 Taxa Present

Where visible, flora and fauna were identified to the lowest possible taxonomic grouping. Taxa were grouped into three categories: sensitive, non-native, and epifauna. The presence of surficial tubes and deep voids were also noted.

2.1.2.2 Plan View Image Analysis Parameters

Plan view images record conditions at the seafloor surface in a downward-looking orientation. They provide a much larger field-of-view than SPI images along with valuable information about the landscape ecology and sediment topography in the area where the pinpoint “optical core” of the sediment profile was taken (Figure 2.1-4). The parameters discussed below were assessed and/or measured and recorded for each replicate PV image selected for analysis (Attachment D). Descriptive comments were also recorded for each.

2.1.2.2.1 Field-of-View

For each replicate PV image, the field-of-view area was measured. The scale information provided by the underwater lasers allows accurate density counts of attached epifaunal colonies, sediment burrow openings, or larger macrofauna or fish which may not have been captured in the sediment profile cross-section, as well as measurements of features of interest observed in the image.

2.1.2.2.2 CMECS Substrate Group and Subgroup (Sediment Type)

Substrate[1] is defined in CMECS as the non-living materials that form an aquatic bottom or seafloor or that provide a surface (e.g., floating objects, buoys) for growth by attached biota. Substrate may be composed of any substance, natural or manmade. Describing the composition of the substrate is a fundamental part of any ecological classification scheme. Substrate provides context and setting for many aquatic processes and it provides living space for benthic and attached biota. The Substrate Component (SC) is a characterization of the composition and particle size of the surface layers of the substrate; this component is designed to be compatible with a range of sampling tools (FGDC, 2012).

Detailed definitions of all possible substrate classifications can be found in the CMECS document (FGDC, 2012); only the substrate classifications observed in this survey are presented here. PV images were assigned one of five Substrate Groups: Gravel, Gravel Mixes, Gravelly, Slightly Gravelly, or Sand. Subsequently, each PV image was assigned one of the following Substrate Subgroups, nested hierarchically within the Groups. Where gravels were present, the dominant grain size was measured; the diameter in millimeters was calculated and translated to a gravel type according to the Wentworth scale:

- Gravel:
  - Boulder - Geologic Substrate contains >80% Gravel, with a median Gravel size of 256 mm to <4,096 mm.
  - Cobble - Geologic Substrate contains >80% Gravel, with a median Gravel size of 64 mm to <256 mm.
  - Pebble - Geologic Substrate contains >80% Gravel, with a median Gravel size of 4 mm to <64 mm.
  - Granule - Geologic Substrate contains >80% Gravel, with a median Gravel size of 2 mm to <4 mm.
- Gravel Mixes:
  - Sandy Gravel - Geologic Substrate is 30% to <80% Gravel, with Sand composing 90% or more of the remaining Sand-Mud mix.
- Gravelly
  - Gravelly Sand - Geologic Substrate is 5% to <30% Gravel, and the remaining Sand-Mud mix is 90% or more Sand.
- Slightly Gravelly
  - Slightly Gravelly Sand - Geologic Substrate is 0.01% to <5% Gravel, and the remaining Sand-Mud mix is 90% or more Sand.
- Sand
  - Sand or Finer - All images assigned the Substrate Group “Sand”, which is defined as “Geologic Substrate surface layer contains no trace of Gravel and is composed of >90%

[1] CMECS uses the term ‘substrate’ for both a geological substratum (a layer of sediment or rock) and for biological or anthropogenic substrates (solid surfaces on which plants or animals grow). For CMECS descriptions we adopt this convention, but for SPI descriptions of sediments we use the geological term, i.e., substratum.

particles 0.0625 mm to <2 mm in diameter", were assigned the Substrate Subgroup of Sand or Finer. At these stations, more detailed grain size descriptions were obtained from the SPI grain size major mode data to describe the Substrate Subgroup categories of Very Coarse Sand, Coarse Sand, Medium Sand, Fine Sand, Very Fine Sand; Silt/Clay sediment types (see Section 2.1.2.1.1 for size classification descriptions).

2.1.2.2.3 Boulders

The CMECS size definition of boulders was utilized for this survey: gravel larger than 256 mm. Sensitive taxa and attached fauna (e.g., sponges, hydroids, barnacles) are often associated with boulders. Further, the presence of boulders in mixed bottom types has been noted as an important feature for understanding the distribution of soft and hard non reef-building corals in the region of the RWF. The presence/absence of boulders in each replicate was noted.

2.1.2.2.4 Bedforms

Seafloor bedforms are indicative of seafloor hydrodynamics and are physical features visible on the surface of the seafloor. These features can give an indication of the physical energy of the system (ripples) or of biotic activity (feeding pits). Sediment bedforms such as sand waves, sand bars, and ripples develop as a response of the seafloor to hydrodynamic conditions. For example, short wavelength sediment ripples indicate mobile sands and active bedload transport. In contrast, soft silt/clay sediments often lack surficial bedforms and indicate quiescent depositional environments. The view of the seafloor provided in the PV images was <1 m^2, the scope of this view limits the ability to distinguish bedforms that exist over larger scales. Bedforms, where present, were noted in each replicate PV image. Additionally, where regular ripples could be distinguished, ripple wavelengths were estimated by measuring and averaging the distances between each crest.

2.1.2.2.5 CMECS Biotic Subclass and CMECS Biotic Group

The Biotic Component of CMECS is a classification of the living organisms of the seabed and water column together with their physical associations at a variety of spatial scales. The Biotic Component is organized into a branched hierarchy of five nested levels: Biotic Setting, Biotic Class, Biotic Subclass, Biotic Group, and Biotic Community. Biotic Component classifications are defined by the dominance of life forms, taxa, or other classifiers in the observation. In the case of PV images dominance is assigned to the taxa with the greatest percent cover in the observational footprint (FGDC, 2012).

The Biotic Subclass is a key CMECS classifier that presents valuable information about the surveyed area in terms of physical habitat and the potential presence of sensitive taxa; therefore, it was identified as a parameter for PV image analysis. Biotic Subclasses describe dominant biota at a coarse level, and, to provide additional information, a co-occurring biotic subclass was designated as any secondarily dominant (by percent cover) Biotic Subclass. The Biotic Component Setting most applicable to all data reported here is the Benthic/Attached Biota. Within the Benthic/Attached Biota setting, there are eight classes, of which the Faunal Bed class is of most relevance to the OCS. Three subclasses fall under the Faunal Bed hierarchy: Attached Fauna, Soft Sediment Fauna, and Inferred Fauna. Inferred Fauna (e.g., tracks and trails, egg masses) are often present, but in this study, were primarily used to inform or confirm the selection of either the Attached or Soft Sediment Fauna subclass. Although the Biotic Subclass is not directly based on sediment grain size distributions, it reflects them at the scale of relevance to the dominant fauna present, thus serving as an integrator of physical and biological characteristics of the seafloor. CMECS expressly states that "substrate type is such a defining aspect of the Faunal Bed class that CMECS Faunal Bed

subclasses are assigned as physical-biological associations involving both biota and substrate (FGDC, 2012)."

Plan view images were assigned one of three Biotic Subclasses (definitions from FGDC, 2012):

- Attached Fauna – "Areas characterized by rock substrates, gravel substrates, other hard substrates, or mixed substrates that are dominated by fauna which maintain contact with the substrate surface, including firmly attached, crawling, resting, interstitial, or clinging fauna. Fauna may be found on, between, or under rocks or other hard substrates or substrate mixes. These fauna use pedal discs, cement, byssal threads, feet, claws, appendages, spines, suction, negative density, or other means to stay in contact with the (generally) hard substrate, and may or may not be capable of slow movement over the substrate. Many attached fauna are suspension feeders and feed from the water column. Other attached fauna are benthic feeders, including herbivores, predators, detritivores, and omnivores."

- Soft Sediment Fauna – "Areas that are characterized by fine unconsolidated substrates (sand, mud) and that are dominated in percent cover or in estimated biomass by infauna, sessile epifauna, mobile epifauna, mobile fauna that create semi-permanent burrows as homes, or by structures or evidence associated with these fauna (e.g., tilefish burrows, lobster burrows). These animals may tunnel freely within the sediment or embed themselves wholly or partially in the sediment. In many cases, they will regularly leave their burrows, and may move rapidly or swim actively after doing so, but any animal that creates a semi-permanent home in the sediment can be classified as Soft Sediment Fauna. These animals may also move slowly over the sediment surface, but are not capable of moving outside of the boundaries of the classification unit within one day. Most of these fauna possess specialized organs for burrowing, digging, embedding, tube-building, anchoring, or locomotory activities in soft substrates."

- Inferred Fauna – "Areas dominated by evidence (real or inferred) of faunal activity, but where the fauna themselves are not currently present or evident, given the sampling methodology."

- IND – an indeterminate Biotic Subclass

The Biotic Component subclasses of Attached and Soft Sediment Fauna are excellent broad-brush tools for screening-level assessments of seafloor habitats for offshore wind development. Mapping proposed development areas with this CMECS classifier can highlight locations, that from a benthic habitat perspective, might be considered suitable for offshore wind development (Soft Sediment Fauna) and those that may be unsuitable or require further detailed study to determine suitability (Attached Fauna). Depending on the results and scale of reconnaissance surveys, additional studies would likely be needed as specific siting alternatives are examined.

Attached Fauna habitats are also referred to in some documents as "live bottom." These hard bottom habitats that support "live bottom" are considered potentially valuable and sensitive resources for regionally important taxa. Additionally, cobbles and boulders can provide habitat for a diverse range of taxa and serve as valuable habitat for corals and as a place for squid to lay their eggs. Soft coral habitats also may play a role in creating or enhancing habitat for black sea bass (*Centropristis striata*), a species of concern for the RWF and RWEC areas (Guida et al., 2017). Hard bottom habitats are limited in distribution along the Mid-Atlantic and Northeast portions of the OCS relative to sandy and soft bottom habitats (Guida et al., 2017; USGS, 2018).

While Biotic Subclasses describe major biological characteristics at a fairly coarse level, Biotic Groups are descriptive terms based on finer distinctions of taxonomy, structure, position, environment, and salinity levels (FGDC, 2012). As with co-occurring Biotic Subclasses, co-occurring Biotic Groups were designated as secondarily dominant Biotic Groups within CMECS. CMECS provides definitions and descriptions of dozens of Biotic Groups. Only a subset of these Biotic Groups could potentially occur in the surveyed area (based on water depth, latitude, etc.). The full set of defined Biotic Groups are available in the CMECS document (FGDC, 2012) and a subset of Biotic Groups observed within the surveyed area are found in Table 2.1-1.

2.1.2.2.6 Fauna and Flora Presence

The inferred presence of fauna was identified through the presence of burrows, tubes, tracks, foraging pits, and fecal casts. Where fauna and flora were visibly present in SPI/PV images they were identified to the lowest possible taxonomic grouping. Fauna were grouped into five categories: fish, soft sediment infauna, epifauna, sensitive taxa (Section 2.1.2.2.7), and non-native taxa (Section 2.1.2.2.8). Also, epifauna taxa is a CMECS modifier (Associated Taxa), adding detail to the CMECS classifications. Where attached flora and fauna were present, the percent coverage of the image was estimated using the CMECS Percent Cover Modifier (FGDC, 2012).

2.1.2.2.7 Sensitive Taxa and Species of Concern

While G&G multibeam echosounder and side-scan sonar data provide high quality remote imaging of the seafloor, they do not provide adequate resolution for the identification of sensitive taxa. The image resolution of the SPI/PV survey allows for the identification of sensitive taxa. Sensitive seafloor habitats include corals, submerged aquatic vegetation beds, and valuable cobble and boulder habitat (BOEM, 2019). Cobble and boulder habitat can serve as structure for hard and soft corals, nursery ground for juvenile lobster, and as preferable benthic habitat for squid to deposit their eggs. Taxa considered sensitive for this survey included corals, seagrasses, squid eggs, and American lobster. Species of ecological and/or economic concern for this area included black sea bass, Atlantic cod, sea scallops, and ocean quahog (Guida et al., 2017). Presence/absence of each sensitive taxa or species of concern was noted for each replicate SPI and PV image.

2.1.2.2.8 Non-native Taxa

The introduction of non-native species to the water column and benthic habitat is an important concern related to offshore development. The utilization of vessels originating from many different ports can lead to the introduction of non-native species through fouled hulls and contaminated ballast water. The introduction of new structures, such as scour protection, WTG structure, transmission cable, and concrete mattresses, to the water column and seafloor during construction may also lead to the introduction of non-native species. The SPI/PV survey collected baseline presence/absence data for marine non-native species within the surveyed area. A list of potential non-native species was derived from the Northeastern Aquatic Nuisance Species Panel (https://www.northeastans.org/). The list of non-native species that SPI and PV images were analyzed for are found in Table 2.1-2.

2.1.2.2.9 Macrohabitat Type

Benthic habitat types, and specifically macrohabitat types, are used here as a construct to describe repeatable physical-biological associations and were derived from CMECS classifiers and modifiers obtained from the SPI/PV analysis. Given the spatial scale of the SPI/PV data, benthic habitat types derived from replicate SPI/PV images are considered macrohabitats (*sensu* Greene et al., 2007). Each PV replicate

image is between 0.2 and 0.5 m^2 and the replicate images were collected within approximately 10 m of each other. Thus, this design can provide insight into the degree of patchiness of habitat features such as boulders and cobbles within this spatial context. This sampling approach cannot capture larger habitat features such as sand waves or smaller habitat features such as cracks and crevices on a boulder. Recognizing scale is a critical component to habitat descriptions and delineations, the habitat types derived from the SPI/PV approach are most accurately described as macrohabitats, which as defined by Greene et al., 2007 as encompassing a scale of one to 10 meters. A summary of SPI/PV parameters across the replicate images were used to inform macrohabitat type at each station. The macrohabitat type at each station cannot be extrapolated beyond the scale of the station. These point data will be used to ground-truth and inform future benthic habitat mapping efforts to support Essential Fish Habitat (EFH) consultation. This habitat mapping will utilize geophysical data (bathymetry, backscatter, side-scan sonar), these SPI/PV data, as well as video transect data (where available), to provide a large-scale delineation of benthic habitats across the Project area.

2.1.3 Data Quality Assurance and Quality Control

Measures were taken both during field data collection and during post-collection analysis for data quality assurance and control in alignment with INSPIRE's standard operating procedure for sediment profile and plan view imaging sample collection and image analysis (INSPIRE, 2019).

Prior to survey mobilization, the camera electronics were "bench-tested" to ensure the cameras were focused and firing properly, the lasers were aligned properly, and the strobe was operational. The positions of lasers on the PV camera were checked and calibrated to ensure separation of 26 cm. Spare camera parts, fully charged battery packs, and spare cables were carried in the field to ensure uninterrupted sample acquisition. At the beginning of the survey, the times on the digital SPI and PV cameras were synchronized with the navigation system clock. Each SPI and PV station replicate was identified by the time stamp recorded as part of the digital image file and the corresponding time and position recorded by the navigation system. Redundant written sample logs were kept by the field crew (Attachment B). Test shots were fired on deck at the beginning of each field day to verify all internal electronic systems were working according to specifications. These test shots included taking pictures of standard color cards to ensure proper color balance of the digital images during collection and to verify the calibration of the image analysis system during processing.

At regular intervals during each survey day, the frame counter on the SPI camera was checked to make sure the desired number of replicates had been taken. In addition, both the SPI and PV images were downloaded at regular intervals (typically every 3 to 5 stations) using external USB ports. These images then were viewed to confirm the settings on the digital cameras were optimal for the conditions in the survey area. These settings were adjusted if necessary and changes noted in the field log (Attachment B). In addition, if images were missed or penetration depth was insufficient, proper adjustments were made (e.g., weight added to the frame) and additional replicates taken. Digital image files were renamed with the appropriate station names immediately after downloading as a further quality assurance step. Visual checks and hand tightening checks of all nuts and bolts on the SPI/PV camera frame were conducted periodically to make sure nothing vibrated loose during the survey.

A quality assurance review of all data and results presented in this report was performed in accordance with INSPIRE's standard operating procedure for sediment profile and plan view imaging sample collection and image analysis (INSPIRE, 2019). Image analysis parameters were thoroughly checked by senior scientists to ensure quality.

Table 2.1-1. CMECS Classification Levels Used in Analysis and Classifications for the RWF/RWEC Survey

CMECS Term	Scale of Classification	Classifications
Geoform Component		
Tectonic Setting	Site	Passive Continental Margin
Physiographic Setting	Site	Continental Shelf
Geoform Origin	Site	Geologic
Substrate Component		
Substrate Origin	Site	Geologic Substrate
Substrate Class	SPI/PV	Unconsolidated Mineral Substrate
[+]Substrate Subclass	SPI/PV	Fine Unconsolidated Substrate; Coarse Unconsolidated Substrate
[+]Substrate Group	PV	**Sand**; Slightly Gravelly; Gravelly; Gravel Mixes; Gravel
[+]Substrate Subgroup	SPI	Silt/Clay; Very Fine Sand; Fine Sand; Medium Sand; Coarse Sand; Very Coarse Sand; Slightly Gravelly Sand; Gravelly Sand; Sandy Gravel; Granule; Pebble; Cobble; Boulder
Biotic Component		
Biotic Setting	SPI/PV	Benthic/Attached Biota
Biotic Class	SPI/PV	Faunal Bed
[+]Biotic Subclass	SPI/PV	**Soft Sediment Fauna**; Attached Fauna; Inferred Fauna; Benthic Macroalgae
[+]Biotic Group	SPI/PV	**Larger Deep-Burrowing Fauna**; Small Surface-Burrowing Fauna; **Larger Tube-Building Fauna**; Attached Hydroids; Attached Sponges; Attached Tube-Building Fauna; Barnacles; Diverse Colonizers; Mobile Crustaceans; Mussel Bed; Sessile Gastropods; Tunneling Megafauna; Tracks and Trails; Filamentous Algal Bed

[+] Indicates variability within the surveyed area at this level of the hierarchy

Bold text indicates an overwhelming dominant classification across the surveyed area

Table 2.1-2. Non-native Species List for SPI and PV Image Analysis

Taxonomic Group	Scientific Name	Common Name
Anemones	*Diadumene lineata*	Orange-striped anemone
	Sagartia elegans	Purple anemone
Crustacean	*Caprella mutica*	Skeleton shrimp
Tunicates	*Didemnum vexillum*	Sea squirt
	Botrylloides violaceus	Sheath tunicate
	Botryllus schlosseri	Star tunicate
	Styela clava	Club tunicate

2.2 Baseline Conditions

Station coordinates, sampling date and time, and field comments are provided in Attachment A. Attachment B includes the field log with details on the weights and stop collar parameters used during the survey. Complete datasets of all parameters measured from each analyzed SPI and PV image are presented in Attachments C and D, respectively. Station summary data were grouped and reported by area including the Revolution Wind Farm Export Cable within state waters (RWEC-RI), the Revolution Wind Farm Export Cable within federal waters (RWEC-OCS), the Revolution Wind Farm (RWF), and the reference area (Figure 1.2-1, 1.2-2). Summary data are presented in Tables 2.2-1 through 2.2-8. A total of 291 stations were sampled, which included 34 stations along the RWEC-RI, 36 stations along the RWEC-OCS, 216 stations sampled in the RWF lease area, and 5 stations in the reference area. The 291 stations do not include the 9 stations that were removed from analysis and reporting as they were located along the cable route that has since been removed from consideration. Section 2.2.1 summarizes results for the entire surveyed area. Sections 2.2.2, 2.2.3, 2.2.4, and 2.2.5 report results from the RWEC-RI, the RWEC-OCS, the RWF, and the reference area, respectively.

2.2.1 Site Overview

2.2.1.1 Physical Features

Across the surveyed area, bottom substrate composition was fully characterized using a combination of classifications that spanned spatial scales, including CMECS Substrate Group and Subgroup obtained from PV images, and sediment type derived from SPI analyses. These three variables in addition to macrohabitat type (a combination of CMECS Substrate Group, Substrate Subgroup, and the biological parameters CMECS Biotic Subclass and Biotic Group), provided a thorough depiction of the seafloor composition at each station. The within station variability differed for CMECS Substrate Group, CMECS Substrate Subgroup, sediment type, and macrohabitat type. CMECS Substrate Group and Subgroup had generally low within station heterogeneity, i.e. two or three replicate images with similar substrate categories, and were thus mapped as predominant values, which represented a consensus across replicates at each station (Figures 2.2-1, 2.2-2, 2.2-3, 2.2-4). Within station variability was high for sediment type and macrohabitat type, i.e. two or three replicate images with different sediment or macrohabitat types, and replicates for each station were mapped as pie graphs to visualize intrastation heterogeneity (Figures 2.2-5, 2.2-6, 2.2-7, 2.2-8).

The majority of the surveyed area was composed of the Substrate Group Sand and Substrate Subgroup Sand or finer, with some exceptions (Figures 2.2-1, 2.2-2, 2.2-3, 2.2-4). The exceptions included areas in the southern portion of the RWF where the sediments tended to be more variable with Gravel Mixes and Gravelly Sand observed. Boulders occurred at 28 stations interspersed throughout the RWF and 1 station along the RWEC-OCS, directly adjacent to the RWF lease (Figures 2.2-9, 2.2-10). Sediment type, a finer-scale variable derived from SPI, in the northern portion of the RWF consisted generally of fine sand while the southern stations within the RWF were characterized by medium and coarse sand with some locations having pebbles and/or granules, particularly in the southwest region (Figure 2.2-5). Sediment type along the RWEC ranged from silt/clay and very fine sand in regions of the RWEC-RI located in Narragansett Bay to coarse sand at stations along the RWEC-OCS (Figures 2.2-6, 2.2-11).

The prism penetration measurement provided additional information about the bearing capacity and shear strength of sediments surveyed. The camera frame stops and weights were mostly held constant throughout the survey with a few exceptions (Attachment B). The weights are the key adjustment to hold

constant in order to use prism penetration to assess relative sediment shear strength. During the survey, weights were constant at every station, except at Station 056 where weights were removed to avoid over penetration. There were some adjustments to the stops, but the stops rarely had any influence on penetration as most stations contained shallow to medium penetration that rarely reached the maximum stop height. Prism penetration is therefore useful as a barometer of relative sediment shear strength and load-bearing capacity. Aside from the five stations where prism penetration was zero, station mean penetration values across the surveyed areas ranged from 0.1 cm to 18.9 cm, with a mean of 6.3 cm (SD± 3.6) (Tables 2.2-1, 2.2-3, 2.2-5, 2.2-7; Figures 2.2-12, 2.2-13). Roughly two-thirds of all stations (183 stations) were characterized by medium to high load-bearing strength reflected in the relatively shallow prism penetration depths observed (<6 cm). Approximately one-third of all stations (112 stations) had low to medium bearing capacity reflected in prism penetration values between 6.0 and 18.9 cm (Figures 2.2-12, 2.2-13, 2.2-14). There were five stations in which the prism did not penetrate the seafloor due to cobble and/or boulder substrate obstruction (Stations 076, 201, 249, 411, and 220W2) (Tables 2.2-3, 2.2-5).

Small-scale surface boundary roughness measured in SPI images can indicate physical shaping activity related to bedforms and hydrodynamics as well as biological activities such as infaunal burrowing and fish foraging. Station mean boundary roughness across the surveyed area averaged 1.4 cm (SD± 0.7), with a range of 0.3 to 4.1 cm (Tables 2.2-1, 2.2-3, 2.2-5, 2.2-7; Figures 2.2-15, 2.2-16).

2.2.1.2 Biological and Habitat Features

The most common macrohabitat type across the surveyed area was sand sheet that was observed at 66% of the stations (192 total stations had at least 1 replicate classified as sand sheet) followed by sand with mobile gravel, which was observed at 24% of the stations (69 total stations had at least 1 replicate classified as sand with mobile gravel) (Figures 2.2-7, 2.2-8). The remaining stations encompassed a variety of macrohabitat types including patchy cobbles and boulders on sand, patchy pebbles on sand with mobile gravel, and continuous large pebbles and cobbles on sand (Figure 2.2-17). In general, the central and southern portion of the RWF consisted of a variety of macrohabitat types while the northern stations of the RWF were mainly sand sheet macrohabitat type.

Across the surveyed area Soft Sediment Fauna was the most frequently observed CMECS Biotic Subclass, and frequently co-occurred with the CMECS Biotic Subclass Inferred Fauna (Tables 2.2-2, 2.2-4, 2.2-6, 2.2-8; Figures 2.2-18, 2.2-19, 2.2-20, 2.2-21). Soft Sediment Fauna is defined by CMECS as “Areas that are characterized by fine unconsolidated substrates (sand, mud) and that are dominated in percent cover or in estimated biomass by infauna, sessile epifauna, mobile epifauna, mobile fauna that create semi-permanent burrows as homes, or by structures or evidence associated with these fauna (e.g., tilefish burrows, lobster burrows)” (See Section 2.1.2.2.5 for a full definition). Observations of the Soft Sediment Fauna Subclass typically were present in the form of larger infaunal tubes and burrows at the sediment–water interface (Tables 2.2-2, 2.2-4, 2.2-6, 2.2-8; Figure 2.2-22A). Epifaunal tracks were present across much of the surveyed areas and were created by small epifauna, such as snails and hermit crabs, and by larger fauna such as sea stars and fish (Figure 2.2-22B). Attached Fauna was also observed, generally coinciding with larger CMECS Substrate Groups and boulder presence (Figures 2.2-1, 2.2-2, 2.2-9, 2.2-10, 2.2-18, 2.2-19). Attached Fauna were typically composed of bryozoa, various sponge species, barnacles, hydroids, and an orange encrusting colonial tunicate (Figure 2.2-22C).

The northern star coral, *Astrangia poculata*, a non-reef building hard coral, was the only sensitive taxa observed across the surveyed area, occurring only at 4 stations, all of which were located within the RWF lease area (Stations 208, 215, 219, and 249) (Figures 2.2-22C, 2.2-23). The only species of concern

observed across the surveyed area was the sea scallop, *Placopecten magellanicus*, which was found at Stations 141 230, 232, and 258, all of which were located within the RWF lease area (Figure 2.2-24). An orange colonial tunicate that may be a non-native species (*Botrylloides* sp.) was observed at 20 stations within the RWF (Table 2.2-6; Figure 2.2-25). Additional sampling would be required to definitively identify this organism as this non-native species.

Benthic communities have experienced increased water temperatures in the vicinity of the Project in the past several decades, and average pH is expected to continue to decline as seawater becomes more saturated with carbon dioxide (Saba et al., 2016). Acidification of seawater is associated with decreased survival and health of organisms with calcareous shells (such as the Atlantic scallop, blue clam, and hard clam). Larvae that survive to the recruitment stage may have thinner or deformed shells and poor behavior responses to predators (Stevens and Gobler, 2018). Modeled scenarios of decreasing seawater pH predict a substantial decline in the harvestable stock of the Atlantic scallop, with collateral loss of economic value (Rheuban et al., 2018).

Numerous benthic and pelagic species are predicted to shift their ranges northward and into deeper waters in response to increasing water temperatures (Selden et al., 2018; Kleisner et al., 2017). Modeling predicts that bottom temperatures in southern New England will become too warm to support larval development of the commercially valuable American lobster, causing this species to move offshore and northward (Rheuban et al., 2017). Lobster catches have declined in recent decades, which may be attributable to increases water temperatures and associated increases in shell disease (Groner et al., 2018; Jaini et al., 2018; Collie and King, 2016; Wahle et al., 2015). Egg-bearing female lobsters occur in warm coastal water in spring but may aggregate offshore for spawning where waters are cooler and strong currents are favorable for larval transport (Carloni et al., 2018). Larval lobster may be transported from Georges Bank to Rhode Island waters by currents along the continental shelf during the 2 to 9 weeks of development to recruitment size (Carloni et al., 2018). Cascading socioeconomic effects on the industries that harvest these species are anticipated although it can be difficult to accurately predict which industries; some fishermen may benefit from the presence of new target species. For example, black seabass and spiny dogfish are predicted to increase in the vicinity of the Project as sea temperatures continue to increase (Selden et al., 2018).

2.2.2 Revolution Wind Export Cable, State Waters (RWEC-RI)

Thirty-four stations were surveyed along the RWEC-RI, which included stations through the west passage of Narragansett Bay out to the three-mile state waters boundary (Figure 1.2-2). The RWEC-RI encompassed Stations 429-455, 604, and 610-615.

Patterns of physical and biological habitat features revealed the stations in the central portion of the western passage of Narragansett Bay were distinct from the other stations along the RWEC-RI, including the stations in the upper estuary, the mouth of the Bay, and leading offshore to the 3-mile state waters boundary, as described in more detail below (Figures 2.2-26, 2.2-27).

2.2.2.1 Physical Features

All stations along the RWEC-RI were characterized by the CMECS Substrate Group Sand, with the exception of two Slightly Gravelly stations located within Narragansett Bay (Stations 451 and 452) (Figure 2.2-2). Similarly, all stations along the RWEC-RI were classified by Sand or finer as the CMECS Substrate Subgroup, with the exception of these same two Narragansett Bay stations (Stations 452 and 451), which were Slightly Gravelly (Table 2.2-1; Figure 2.2-4). The within station heterogeneity was very low for both

Substrate Group and Subgroup variables, as indicated by consistent values across replicate PV images within station (Attachment D). Along the RWEC-RI, sediment type, derived from grain size major mode (phi units) from SPI analysis, ranged from silt/clay to coarse sand (Figure 2.2-6). Generally, the stations located within the western passage of Narragansett Bay consisted of fine sand or finer classifications (e.g. silt/clay, very fine sand), with the exception of Station 613, which was located up-estuary and consisted of medium sand sediment type (Table 2.2-1; Figure 2.2-6). The stations outside Narragansett Bay had slightly coarser sediment types, ranging from very fine sand over silt/clay to coarse sand over finer sediment. Boulders were not observed at any stations along the RWEC-RI region of the cable route (Figure 2.2-10).

Station mean prism penetration depths along the RWEC-RI were spatially variable ranging from a minimum of 1.9 cm to a maximum of 18.0 cm, and an average of 9.4 cm (SD± 4.3) (Table 2.2-1; Figure 2.2-13). Stations along the RWEC-RI had lower load-bearing strength compared to the other regions of the surveyed area, which is consistent with the finer sediment classifications and smaller grain sizes associated with these stations. This was particularly true for the stations within Narragansett Bay that had deeper mean prism penetration depths (6.1 to >15.0 cm), with the exception of three up-estuary stations where prism penetration did not exceed 3.0 cm and the sediment type was fine and medium sand (Stations 453, 452, and 613) (Figures 2.2-6, 2.2-13).

Station mean boundary roughness along the RWEC-RI averaged 1.2 (SD± 0.5), with a range of 0.4 to 3.3 cm (Table 2.2-1; Figure 2.2-16). Bedforms along the RWEC-RI were only observed at the stations located at the mouth of the Narragansett Bay (Stations 443, 444, and 445) and were characterized as “Ripples” (Table 2.2-1; Figure 2.2-28A). Within Narragansett Bay, biological processes were the primary influence shaping small-scale boundary roughness. For example, stations with higher boundary roughness values within Narragansett Bay (Stations 450, 449, and 615) corresponded with high abundances of mussels or mussel shells (described further in Section 2.2.2.2). While the stations outside of the Bay with slightly higher boundary roughness values were due to physical forces creating ripples.

2.2.2.2 Biological and Habitat Features

Macrohabitat type, a parameter that considers physical substrate descriptors (e.g. Substrate Group and Subgroup) and community composition characterization (e.g. Biotic Subclass and Group), was most frequently described as sand sheet along the RWEC-RI (Figure 2.2-8). Although, five stations within the central portion of the western passage of Narragansett Bay were characterized as mollusk bed (or shells) on mud (stations 448, 449, 450, 614, and 615) and two stations (451 and 452) were patchy cobbles on sand (Figures 2.2-8, 2.2-27). The physical features at these 7 mid-Bay stations (larger boundary roughness values and shallower mean prism penetration depths compared to the other RWEC-RI stations) corroborate these macrohabitat type classifications.

The majority of stations (86%) along the RWEC-RI were characterized with the CMECS Biotic Subclass Soft Sediment Fauna, with the exception of five central Narragansett Bay stations, four of which were predominantly Attached Fauna (Stations 450, 452, 614, 615) and the other was Benthic Macroalgae (Station 451) (Figure 2.2-19). The predominant Co-occurring Biotic Subclass was Inferred Fauna, which was observed at 23 of the 31 stations, most of which were located outside of Narragansett Bay (Figure 2.2-21). Within Narragansett Bay the Co-occurring Biotic Subclass varied and included Inferred Fauna, Soft Sediment Fauna, and Attached Fauna. There was a gradient in the percent cover of Attached Fauna: the densest cover was at Station 450 (dense cover 70 - 90% cover), where numerous *Crepidula* sp. were observed (Figure 2.2-27B); percent cover decreased to moderate and sparse coverage at adjacent stations to the north and south of Station 450 along the RWEC-RI within Narragansett Bay (Figure 2.2-29). Attached

fauna were not observed at the four up-estuary stations (Stations 454, 455, 612 or 613), nor were they observed at the mouth of the Bay or at the stations moving offshore to the 3-mile state water boundary (Figure 2.2-29).

Ten different Biotic Group classifications were observed across the RWEC-RI stations, although Larger Deep-Burrowing Fauna and Larger Tube-Building Fauna were the most frequently observed, describing 19 of the 34 stations (Table 2.2-2; Figure 2.2-26). In the central portion of Narragansett Bay, a diverse set of Biotic Groups were reported, including Attached Hydroids, Attached Sponges, Filamentous Algal Bed, and Sessile Gastropods (Figure 2.2-26). Many stations did not have a Co-occurring Biotic Group, although several stations outside of Narragansett Bay included Larger Tube-Building Fauna and Tracks and Trails, while stations within Narragansett Bay included Filamentous Algal Bed and Attached Sponges (Figure 2.2-30).

The areal mean aRPD at stations along the RWEC-RI ranged from 0.02 to 4.6 cm with an average of 2.0 (SD ± 0.9) (Table 2.2-2). aRPD was relatively shallow at stations within Narragansett Bay, particularly in the central portion, compared to the stations outside of the Bay (Figure 2.2-31). A qualitative estimate of the sediment oxygen demand tracked the aRPD values with higher estimated sediment oxygen demand at stations in the central portion of Narragansett Bay that had shallow aRPD (Figure 2.2-32). There was no indication of low dissolved oxygen concentrations in the water column at any of the RWEC-RI stations and methane was never observed.

Along the RWEC-RI, the predominant successional stage of benthic taxa was advanced, denoted by Stage 2 -> 3 or Stage 3 classification (Figure 2.2-33). Three stations within Narragansett Bay contained early Stage 1 succession, and a few instances of intermediate Stage 2 succession were documented haphazardly dispersed along the RWEC-RI. In general, advanced successional taxa were observed or inferred across most of the stations along the RWEC-RI, this included deep burrows and large subsurface feeding voids.

There were no observations of sensitive taxa or species of concern at any of the RWEC-RI stations.

2.2.3 Revolution Wind Export Cable, Federal Waters (RWEC-OCS)

Thirty-six SPI/PV stations were sampled along the RWEC-OCS (Figure 1.2-2). These stations extended from the three-mile state waters boundary offshore to the RWF lease area and continued through the RWF lease area to the two offshore substations. The RWEC-OCS encompassed Stations 401-428, 601-603, and 605-609.

2.2.3.1 Physical Features

The majority of stations along the RWEC-OCS were designated with a CMECS Substrate Group and CMECS Substrate Subgroup of Sand and Sand or finer, respectively (~70% of RWEC-OCS stations) (Figures 2.2-2, 2.2-4). There were several Slightly Gravelly stations interspersed along the RWEC-OCS approaching the RWF lease area (Stations 606, 609, 424, 422, and 420) as well as along the OSS-Link Cable (Stations 403 and 402) (Figures 2.2-2, 2.2-4). Notably, three stations directly adjacent to the RWF lease area (Stations 411, 418, and 419) were characterized as having larger grain sizes than the other stations, which included Gravel/Gravel Mixes (CMECS Substrate Group) and Sandy Gravel to Cobble (CMECS Substrate Subgroups), with boulders observed at one of these stations (Station 418) (Figures 2.2-2, 2.2-4, 2.2-10). In general, within station variability was very low for CMECS Substrate Group and Subgroup across the RWEC-OCS stations (Attachment D).

On a smaller-scale, sediment type at the RWEC-OCS stations were spatially variable, ranging from coarse/very coarse sand outside of the RWF and medium sand to fine sand along the cable route located within the RWF lease area (Figure 2.2-6). The three stations located adjacent to the RWF that were classified as having coarser CMECS Substrate Groups and Subgroups (Stations 411, 418, 419), had either indeterminant sediment type (where the prism penetration was zero due to hard substrate obstruction), or were a mix of indeterminant and silt/clay, highlighting the heterogenous substrate composition at these locations (Figures 2.2-6, 2.2-34). In general, intra-station sediment type heterogeneity was low along the RWEC-OCS, with the vast majority of stations containing replicates within the same sediment type (Figure 2.2-6).

Station mean prism penetration depths were variable along the RWEC-OCS ranging from 0.0 to 15.4 cm, with an average of 5.9 cm (SD±4.0 cm) (Table 2.2-3). The majority of stations along the RWEC-OCS had medium to high load-bearing strength reflected in the relatively low prism penetration depths observed (< 6.0 cm), with the exception of 9 stations haphazardly distributed along the RWEC-OCS, which had lower load-bearing strength (> 6.0 cm) (Figure 2.2-13). Mean station small-scale boundary roughness along the RWEC-OCS was generally small, ranging from 0.5 to 3.1, with an average of 1.3 (SD±0.6 cm) (Table 2.2-3). There were a few instances of larger boundary roughness values, although no stations exceeded 3.1 cm (Table 2.2-3; Figure 2.2-16). Only 6 stations along the RWEC-OCS were characterized as having bedforms, all of which were described as ripples; these stations had generally higher small-scale boundary roughness values (Stations 423, 424, 427, 605, 606, 609). (Table 2.2-3; Figures 2.2-16, 2.2-28B).

2.2.3.2 Biological and Habitat Features

Macrohabitat type along the RWEC-OCS was spatially variable, although predominantly composed of sand sheets or sands with mobile gravel (Figure 2.2-8). Three stations adjacent to the RWF (Stations 411, 418, and 419) were composed of continuous large pebbles and cobbles on sand macrohabitat types (Figure 2.2-34); these stations were characterized as having coarser CMECS Substrate Groups and Subgroups (Figures 2.2-2, 2.2-4).

The predominant CMECS Biotic Subclass and Co-occurring Biotic Subclass (when present) was Soft Sediment Fauna and Inferred Fauna, respectively. A few stations were classified as Attached Fauna for the Biotic and Co-occurring Biotic Subclass (Figures 2.2-19, 2.2-21), and these were located near or in the RWF (Stations 402, 404, 408, 411, 418, 419), with the exception of Station 425. When present, the coverage of Attached Fauna was variable, ranging from Trace (<1% cover) at 4 of these stations to Moderate and Dense at 2 of these stations (Figure 2.2-29).

The benthic taxa observed along the RWEC-OCS were diverse and spatially variable as represented by the documented Biotic Groups and Co-Occurring Biotic Groups (Figures 2.2-26, 2.2-30). Most stations along the RWEC-OCS were composed of Larger Deep-Burrowing Fauna, Larger Tube-Building Fauna, or Small Tube-Building Fauna, with the exception of the Stations 411, 418, and 419 adjacent the RWF lease boundary, which were dominated by Attached Hydroids and Barnacles (Figure 2.2-34). CMECS Co-occurring Biotic Groups were spatially variable but included mainly Larger Tube-Building Fauna at the RWEC-OCS stations (Figure 2.2-30).

The aRPD depth was typically designated as indeterminant along the RWEC-OCS (Figure 2.2-31) due to the sandy and generally porous sediment characteristics at these stations. Across the stations along the RWEC-OCS where the aRPD depth was discernible, the areal mean aRPD ranged from 2.3 to 6.7 cm with an average of 3.2 cm (SD± 1.2) (Table 2.2-4). These aRPD values are relatively high, although not

surprising due to the relatively low organic load to the sediments on the outer continental shelf and mobility of the sand. A qualitative estimate of the sediment oxygen demand corresponded with the aRPD values, with higher estimated sediment oxygen demand at stations that had shallow aRPD depths (Figure 2.2-32). There was no indication of low dissolved oxygen concentrations in the water column at any of the RWEC-OCS stations and methane was never observed.

Successional taxa at RWEC-OCS were predominantly in an advanced state of succession, represented by Stage 2->3 and Stage 3. There were a number of instances of intermediate Stage 2 succession distributed throughout the RWEC-OCS (Figure 2.2-33).

No sensitive taxa or species of concern were observed at any of the stations along the RWEC-OCS.

2.2.4 Revolution Wind Farm (RWF)

A total of 216 stations were surveyed at the RWF (Figure 1.2-1). There were a few instances where adaptive sampling was conducted (Stations 57, 73, 218, 220) and at these locations there is a greater spatial resolution for stations that were surveyed. In general, there were clear spatial trends in the physical and biological parameters observed across the RWF, which are reported in detail below referring to broad regional portions of the lease area. In the text below, when referencing the northern region of the RWF, this includes all stations along the west to east transects that begin (i.e. the western-most station for each transect) with Stations 1, 2, 4, 12, 21, 31, and 40, and the stations along the transect beginning with Station 50 moving eastward to Station 59. The central region of the RWF refers to the remaining, eastern most stations along this transect (i.e. Stations 60 moving eastward to Station 219), and all stations along the west to east transects that begin (i.e. the western most station for each transect) with Stations 70 and 82. The southern region of the RWF refers to all stations due east of the South Fork Wind Farm Survey Area, specifically, all stations along the west to east transects that begin (i.e. the western most station for each transect) with Stations 251, 207, and 116. The southwest region of the RWF refers to the group of 17 stations in the area due west of the South Fork Wind Farm Survey Area.

2.2.4.1 Physical Features

In general, the surface sediments at the RWF were spatially variable, ranging from mobile sand or finer to coarser gravels composed of granules and pebbles, with a few observations of boulders (Figures 2.2-1, 2.2-3, 2.2-5, 2.2-9). The most frequently observed CMECS Substrate Group was Sand (Figure 2.2-1), particularly in the northern region. Various larger CMECS Substrate Groups were also present including Gravel, Gravel Mixes, Gravelly, and Slightly Gravelly, particularly in the southern regions of the lease area (Figure 2.2-1). Similarly, the most frequently observed CMECS Substrate Subgroup at the RWF was Sand or Finer, particularly at the northern stations (Figure 2.2-3). CMECS Substrate Subgroups in the central and southern areas of the RWF were more variable but generally consisted of coarser classifications than the northern stations, including Slightly Gravelly Sand, Sandy Gravel, and Granule (Figure 2.2-3). Intra-station CMECS Substrate Group and Subgroup heterogeneity was generally low (i.e. consistent across replicates) (Attachment D) and were, thus, presented as consensus classifications across the replicates at each station. Substrate Group and Subgroup in the southwest corner of the RWF were predominantly Gravel Mixes/Gravelly and Sandy Gravel/Gravelly Sand, respectively (Figures 2.2-1, 2.2-3) and the sediment types included pebbles/granules/very coarse sand mixed with finer sediments (Figure 2.2-5). In the southern region of the RWF, sediment type ranged from fine sand to very coarse sand, with a few instances of larger grain sizes mixed with smaller sediments including granule over sand and small gravel and finer sediment mix (Figure 2.2-5). There was high inter-station heterogeneity associated with the sediment type among stations located in the central portion of RWF (Figure 2.2-5). In this portion of RWF, stations were

characterized by larger grain sizes (e.g. Substrate Groups of Gravelly and Gravel Mixes) mixed with finer sediment (e.g. small gravel, granules, and pebbles concurrent with sand or finer). Stations in the northern portion of RWF were predominantly composed of fine sands and tended to be more homogenous spatially than the other regions.

Boulders were infrequently observed at the RWF, occurring at 28 of the 216 stations (Figure 2.2-9). Although, notably, boulders were present at 3 adjacent stations in the middle portion of the northern region of the RWF (Stations 24, 232, and 25), at several stations in the central portion of the RWF (22 total stations), and at 3 stations in the southwestern area of the RWF (Stations 138, 142, and 201).

Mean station prism penetrations at the RWF were highly variable, ranging from a minimum of 0.0 to a maximum of 18.9 cm, with an average of 5.8 (SD±3.3) (Table 2.2-5). Mean prism penetration was deepest in the northern most stations and lowest in the central and southwestern portions of the RWF (Figure 2.2-12). Prism penetration observations corresponded with the spatial distribution patterns observed in the various sediment classifications (sediment type, CMECS Substrate Group, and CMECS Substrate Subgroup). The majority of RWF stations were documented with shallow prism penetration depths (<6.0 cm). Deep prism penetrations (>10 cm) occurred most frequently in the northern portion of the RWF lease area. Mean station small-scale boundary roughness at RWF ranged from 0.5 to 4.1 cm with an average of 1.4 (SD±0.7) (Table 2.2-5). The vast majority of RWF stations had low mean station boundary roughness (<2.5 cm) dominated by biologically driven processes, with some instances of higher boundary roughness values in the southwestern and southeastern regions of the RWF (Figure 2.2-15). The stations with higher average small-scale boundary roughness values tended to also be characterized by bedform ripples (Table 2.2-5).

2.2.4.2 Biological and Habitat Features

Macrohabitat type at the RWF was mainly composed of sand sheet or sand with mobile gravel, particularly across stations located in the northern and southeastern portion of RWF (Figure 2.2-7). The macrohabitat type in the southwestern portion of the RWF lease area was mainly patchy pebbles on sand with mobile gravel. Macrohabitat type in the central region of RWF was spatially heterogenous, with some stations classified as sand sheet or sand with mobile gravel (as observed in other portion of RWF), but also a variety of other macrohabitat types composed of continuous and/or patchy cobbles and/or boulders on sand. Generally, intra-station heterogeneity was low for macrohabitat type classifications except in the central and southwestern region where physical substrates were larger and poorly sorted (i.e. cobbles and pebbles mixed with sands and/or mobile gravel) (Table 2.2-6; Figures 2.2-7, 2.2-35).

The most frequently observed CMECS Biotic Subclass at the RWF was Soft Sediment Fauna, which characterized 92% of the stations (198 total stations), while the remaining 18 stations were classified as Attached Fauna (Figure 2.2-18). When designated, the co-occurring Biotic Subclass was most frequently Inferred Fauna (49% of stations) or Attached Fauna (22% of stations) (Figure 2.2-20). Observations of the Soft Sediment Fauna Subclass at the RWF typically were present in the form of infaunal tubes and burrows at the sediment–water interface and amphipod species on the sediment surface. The benthic communities at the RWF were spatially variable as represented by the CMECS Biotic Groups and Co-Occurring Biotic Groups observed across the region (Figures 2.2-36, 2.2-37). Of the stations classified as dominated by Soft Sediment fauna (CMECS Biotic Subclass), the majority were characterized by the Biotic Groups: Larger Deep-Burrowing Fauna (89 stations), Larger Tube-Building Fauna (64 stations), or Small Tube-building fauna (33 stations) (Figures 2.2-36, 2.2-38). At the northern stations, the predominant Biotic Groups were Larger Deep-Burrowing and Larger Tube-Building Fauna (Figure 2.2-36); the Co-Occurring Biotic Groups

were spatially variable including Larger Tube-Building Fauna and Mobile Crustaceans on Soft Sediments. In the central region of the RWF the most frequently observed CMECS Biotic Groups were Small and Larger Tube-Building Fauna. The southeastern portion consisted of mainly Larger Deep Burrowing Fauna and Small Tube Building Fauna. Co-occurring Biotic Groups across the central and southeastern stations were mainly Mobile Crustaceans on Soft Sediments, which were typically Podoceridae (Amphipoda). In fact, the vast majority of stations at the RWF, 91% of RWF stations, had amphipods (*Dyopedos* sp., Caprellidae, and/or Ampeliscid) present on the sediment surface (Figures 2.2-39, 2.2-40). Podoceridae amphipods (most likely *Dyopedos* sp.), and/or their associated mucus stems, were observed at 90% of the stations at the RWF, with the other amphipod species (Caprellidae and/or Ampeliscid) co-occurring with *Dyopedos* sp. at some stations. *Dyopedos* sp. amphipods form distinct vertical, mucus threads or stacks on the sediment surface, which they climb to aid in acquiring food particles from the water column (Mattson and Cedhagen, 1989) (Figure 2.2-40A). Solitary tunicates (i.e. sea squirts) were also quite prevalent across the RWF lease area (Figure 2.2-41). This sea squirt was most likely *Mogula* sp. and occurred typically at stations characterized by soft sediment fauna (Figure 2.2-42).

When attached fauna were observed in RWF the percent cover ranged from Trace (<1% cover) to Complete coverage (90-100% cover) (Figure 2.2-43). Attached Fauna were observed most often at stations in the southwestern and central portions of RWF, concurrent with the larger CMECS Substrate Group and Subgroup classifications (Figures 2.2-1, 2.2-3). At the northern and southeastern stations, mainly None or Trace levels of Attached Fauna coverage were observed (Figure 2.2-43). At the stations classified by Attached Fauna, diverse faunal assemblages were observed including hydroids, sea pens (*Halipteris* sp.), barnacles, bryozoa, sponges (*Polymastia* spp. and other species), colonial tunicates, and soft coral (*Astrangia poculata*) (Table 2.2-6; Figure 2.2-44). The sea pen species observed at the RWF was most likely *Halipteris finmarchia*; these organisms were typically observed where slightly coarser substrates were present (Figures 2.2-5, 2.2454). Sea pens were generally observed as a solitary individual in PV images, but were also occasionally observed in small aggregates; individual sea pens were typically observed encrusted with biotic growth, such as bryozoa (Figure 2.2-46).

The only Sensitive Taxa observed across the entire RWF was the star coral *Astrangia poculata*, a non-reef building hard coral (Figures 2.2-23, 2.2-22C). This organism was rarely observed, appearing in only 4 of the 216 stations, which were located in the central-east portion of the RWF (Stations 208, 215, 219, and 249) (Figure 2.2-23). The sea scallop, *Placopecten magellanicus,* was the only Species of Concern observed at the RWF lease area. Sea scallops were only found at 4 stations: two stations located in the southwestern region (Stations 141 and 258) and two stations in the northern portion of the RWF (Stations 230 and 232) (Figure 2.2-24). When observed sea scallops were documented as solitary individuals (Figure 2.2-47).

At 20 SPI/PV stations within the RWF, an orange colonial ascidian (or tunicate) was observed in at least one replicate image (Table 2.2-6; Figures 2.2-25, 2.2-48). Given the geographic distribution, depth, and morphological characteristics it cannot be ruled out that this organism is an non-native tunicate species, either the non-native tunicate *Botrylloides violaceus* (the violet tunicate) (Oka, 1927) or the non-native tunicate *Botrylloides diegensis* (the orange sheath tunicate) (Ritter and Forsyth, 1917). However, despite the high-resolution of the PV images, it is not possible to identify this organism to a taxonomic rank of species and definitively state, without doubt, that this organism is a known non-native species. Both *Botrylloides* species are colonial or compound ascidians consisting of individual zooids, each with an inhalant siphon, within a common gelatinous matrix or tunic with a shared exhalent canal and chamber. Like other botryllid ascidians, these organisms are tolerant of a wide range of environmental conditions,

occurring on a variety of natural and artificial substrates. Several morphological characteristics suggest the observed colonial tunicate at the RWF is either *B. violaceus* or *B. diegensis.* In general, the specimens appeared gelatinous or fleshy, the individual zooids were oval in shape (1-3 mm in diameter) and, where visible, each zooid had a single inhalant siphon. *B. violaceus* is known to have a wide range of colors including orange, brown, yellow, and dark purple; this phenotypic plasticity makes it challenging to use color as an identifying feature. However, since the color of the tunicates observed at the RWF was generally uniform within a colony (mono-toned) it may be more likely to be *B. violaceus* (Saito et al., 1981) and not *B. diegensis*, which have zooids that are bi-colored, having darker margins and lighter zooids (Lambert and Lambert, 2003).

Similar to the aRPD depth along the RWEC-OCS, the aRPD depth at the RWF was typically designated as indeterminant (Figure 2.2-49) due to the coarse grain sizes and generally porous sediment at these stations, particularly in the central and southern regions of RWF. These outer continental shelf benthic environments likely receive limited organic matter input from the water column, and as a result have deeper RPD depths. Under these low organic loading conditions, often the aRPD depth is not visible due to the lack of ferrous iron build-up as a result of low microbial respiration rates. Across the stations at the RWF where the aRPD depth was discernible, the areal mean aRPD ranged from 1.1 to 8.1 cm with an average of 3.6 cm (SD±1.5) (Table 2.2-6). When visible, the aRPD depth values at RWF were relatively high, which is to be expected due to the relatively low organic load associated with this continental shelf environment. A qualitative estimate of the sediment oxygen demand tracked the aRPD values with higher estimated sediment oxygen demand at stations that had shallow aRPD (e.g. Station 43) (Figure 2.2-50). There was no indication of low dissolved oxygen concentrations in the water column at any of the RWF stations and methane was never observed. There were several stations in the central portion of the RWF (e.g., Stations 046, 067, 088, and 243) where oxidized medium sand was layered over anoxic silt/clay (Figure 2.2-51). Often this observation was made for only one replicate at a station and not all three replicates. There was no discernable spatial pattern to the documentation of this sediment feature.

The benthic communities in the RWF were generally characterized as being in an intermediate or advanced state of succession. Advanced succession was defined by the designation of successional Stage 2 -> 3 or Stage 3 (Figure 2.2-52), with the transitory Stage 2 -> 3 being the most prevalent advanced successional state observed across the RWF. Intermediate Stage 2 classifications were predominantly driven by the presence of Podoceridae amphipods. Approximately 90% of Stage 2 designations were driven by the presence of Podoceridae. Only 4 stations had replicates indicative of early Stage 1 succession, Stations 69, 057W1, 216, 257.

2.2.5 Reference Area

Five stations located to the east of the northern region of the RWF lease area were surveyed as reference. Oriented west to east, the reference area stations were 501, 502, 503, 504, and 505.

2.2.5.1 Physical Features

Four of the five stations at the reference area were composed of CMECS Substrate Group Sand, while the middle station, Station 503, was classified as Slightly Gravelly (Figure 2.2-1). Similarly, the CMECS Substrate Subgroup at four stations was Sand or Finer while Slightly Gravelly Sand was observed at Station 503 (Figure 2.2-3). Sediment type was more variable across the reference stations: Stations 501 and 502 were characterized as medium sand, with no within station heterogeneity; Station 503, the middle station, had high sediment type heterogeneity, with coarse sand, fine sand over very fine sand, and medium sand

over finer sediment observed; and the two eastern-most reference stations (504 and 505) consisted of fine sand (Figure 2.2-6). Boulders were not observed at any of the reference stations (Figure 2.2-9).

Mean station prism penetration ranged from 3.6 to 8.8 cm, with an average of 6.0 cm (SD ± 1.9) across the reference area stations (Table 2.2-7; Figure 2.2-12). Mean station small-scale boundary roughness ranged from a minimum of 0.3 cm at Station 504 to a maximum of 2.4 at Station 505 and averaged 1.3 (SD ± 0.8) (Table 2.2-7; Figure 2.2-15). At a larger scale, no bedforms were observed at any of the reference area stations (Table 2.2-7).

2.2.5.2 Biological and Habitat Features

In agreement with the CMECS Substrate Group and Subgroup classifications, all of the stations at the reference area were classified with the macrohabitat type of sand sheet, with the exception of the middle station, Station 503, where Sand with Mobile Gravel was observed (Figure 2.2-7). The CMECS Biotic Subclass was Soft Sediment Fauna for all the reference area stations (Figure 2.2-18), with Inferred Fauna observed as the co-occurring CMECS Biotic Subclass (Figure 2.2-20). Notably Attached Fauna was the co-occurring CMECS Biotic Subclass at station 502, however, the maximum percent cover was only Trace (<1%), with barnacles observed on a small shell fragment. At Stations 501, 504, and 505, Larger Tube-Building Fauna were observed as the CMECS Biotic Group. Small Tube-Building Fauna and Larger Deep Burrowing Fauna were the CMECS Biotic Groups observed at Stations 502 and 503, respectively (Figure 2.2-36). No sensitive taxa or species of concern were observed at any of the reference area stations. Similar to the majority of stations at the RWF lease area, the successional stage across the reference stations was advanced and generally classified as Stage 2->3 due to the presence of large burrows visible in the PV images (Figure 2.2-52). One station (Station 501) contained a single replicate of Stage 2 taxa.

2.3 Summary

The purpose of the SPI/PV survey was to provide data about the surficial sediments and characterize the benthic habitats and fauna at the Revolution Wind Farm (RWF) lease area, along the proposed export cable route, including portions within state waters (RWEC-RI) and federal waters (RWEC-OCS), and at a reference area. Results from the SPI/PV survey are intended to support spatial planning decisions, reduce uncertainty associated with baseline conditions, and inform future approaches. This SPI/PV study provides data for the assessment of the physical, geological, and biological conditions of the surficial sediments within the surveyed area. This study carefully considered all BOEM regulations and guideline recommendations; SPI and PV images provide important data pertaining to several of these regulations and guidelines (Table 2.3-1). The data from this study were collected and interpreted in consideration of these regulations and guidelines to assist Orsted in providing the best available information for review by state and federal regulators. The SPI and PV images were used to map physical, geological, and biological properties of the surface sediments and helped to document and characterize processes structuring surface sediments along the proposed cable route, the wind farm lease area, and at the reference stations. Below is a summary of the physical and biological observations from the survey, beginning with a discussion of findings from the RWF, RWEC-OCS, and reference area, followed by details regarding the RWEC-RI.

The physical sediment composition was fully described using a combination of CMECS Substrate Group and Subgroup classifications as well as sediment type derived from grain size major mode obtained from SPI analysis. Broadly, sediment composition at the RWF, RWEC-OCS, and reference area corresponded with the surficial geology of the region (Figure 2.3-1). Southern and central regions of the RWF, where Pleistocene Moraine Deposits occur (O'Hara and Oldale, 1980), had a sediment composition with a higher

prevalence of pebbles, cobbles, and boulders compared to the northern portion of the RWF. In the Northern portion of RWF Quaternary Fluvial-Estuarine Deposits and Holocene Marine Deposits dominate the surficial geology (O'Hara and Oldale, 1980). The reference area and most of the RWEC-OCS, which were not associated with Pleistocene Moraine Deposits (O'Hara and Oldale, 1980), were classified as either sand or slightly gravelly sand, similar to the northern region of the RWF. Boulders predominantly occurred at stations associated with Pleistocene Moraine Deposits (28 of the 29 total stations with boulders) (Figure 2.3-2). The exception to this was the observation of boulders at station 418, which was located along the RWEC-OCS directly adjacent to the RWF lease area and associated with Quaternary Fluvial-Estuarine Deposits (O'Hara and Oldale, 1980).

Macrohabitat types generally tracked the CMECS Substrate Group and Subgroup classifications and were defined based on the physical structure and mobility of the seabed, as well as the dominant CMECS Biotic Subclass and CMECS Biotic Group present (Table 2.3-2). Similar to the distribution of sediment composition (sediment type, CMECS Substrate Group, and CMECS Substrate Subgroup), the spatial distribution of macrohabitat types at the RWF, reference station, and along the RWEC-OCS was strongly influenced by the surficial geology of the surveyed area (Figure 2.3-3). Across the vast majority of the RWEC-OCS and the northern region of the RWF, macrohabitat type was sand sheet, aside from a cluster of 4 stations in the northern center of the RWF (Stations 024, 232, 025, and 415) that coincided with a patch of Coastal Plain Deposits (O'Hara and Oldale, 1980). These 4 stations consisted of a variety of macrohabitat types including patchy pebbles on sand with mobile gravel, patchy cobbles and boulders on sand, and sand with mobile gravel. Other regions of the RWF such as the southwest region of the RWF and the central and southern portions of the RWF, tended to have more heterogenous macrohabitat types composed of patchy pebbles on sand with mobile gravel, patchy cobbles on sand, and patchy boulders on sand. These locations were associated with Pleistocene Moraine Deposits (O'Hara and Oldale, 1980). As a result of the more heterogenous physical composition and generally coarser substrates, these benthic environments harbored more diverse epifaunal assemblages compared to the northern region of the RWF and the RWEC-OCS stations.

At the RWF, RWEC-OCS, and reference area, dominant CMECS Biotic Subclasses and Biotic Groups were strongly correlated with surficial sediment composition (i.e. CMECS Substrate Group and Subgroup) and macrohabitat type. Where sand sheet or sand with mobile gravel habitats occurred, and Soft Sediment Infauna (Biotic Subclass) and Larger Deep-Burrowing or Tube-Building Fauna (Biotic Group) dominated. Podocerid amphipods and/or their associated vertical mucus strands were present at 90% of the stations within the RWF and often co-occurred with Caprellid amphipods and/or Ampeliscid amphipods. The presence of these amphipods was often documented as the Co-occurring CMECS Biotic Group Mobile Crustaceans on Soft Sediment. Amphipods have limited mobility and are restricted to a localized area incapable of migrating out of an area if there is a perturbation. However, the CMECS definition of Mobile Crustaceans on Soft Sediment specifically states "This group is limited to the relatively non-motile, epifaunal, crustacean taxa (e.g., hermit crabs, mole crabs, amphipods, mysids, isopods) and does not include the more mobile arthropod forms…" (FGDC, 2012), and thus these amphipods are considered under this classification. The dominance of these podocerid amphipods may be a seasonal phenomenon as they were not observed in high frequency at the nearby South Fork Wind Farm, which was surveyed during a different time of year than this survey. Other organisms that were prevalent across the sand sheet and sand with mobile gravel habitats included solitary sea squirts (*Mogula* sp.), sea stars, Corymorpha (hydroids), Cerianthids (burrowing anemones), and small tube building fauna (e.g. Spionid polychaetes). Where coarser gravel (i.e., cobbles and boulders) on sandy substrates were documented (the central and southern portions of the RWF), epifaunal organisms were typically found growing on the physical substrate,

including hydroids, bryozoa, barnacles, colonial tunicates, and occasional anemones. Sea pens occurred at stations characterized as Gravelly or Gravel Mixes (CMECS Substrate Group) predominantly in the southern regions of the RWF. An orange colonial tunicate that may be an non-native species (*Botrylloides* sp.) was observed at the RWF; additional sampling would be required to definitively identify this organism as this non-native species.

Broadly, the stations along the RWEC-RI were low in environmental complexity, consisting mainly of sand sheet macrohabitat type. The exception was stations located in the central of Narragansett Bay, which were characterized by the CMECS Biotic Subclass Attached Fauna and included the macrohabitat types of mollusk bed (or shells) on mud and patchy cobbles on sand. Despite the general consistency of these high-level classifications along the RWEC-RI, the CMECS Biotic Group classifications were diverse across these stations (Filamentous Algal Bed, Attached Sponges, Sessile Gastropods, Larger Deep-Burrowing Fauna), providing a greater level of detail in describing these benthic environments and highlighting the spatial variation in diversity found on the seafloor along this portion of the export cable. Along the RWEC-RI there were spatial trends associated with the observed biological and physical features. The up-estuary stations were generally characterized by finer substrate, dominated by soft-sediment fauna, higher turbidity, and more reduced sediments. The mid-bay stations were characterized by mussel and *Crepidula* beds with other attached organisms including barnacles, sponges, and macroalgae. The stations at the mouth of Narragansett Bay and the stations leading offshore to the 3-mile state water boundary were generally dominated by soft sediment infauna concurrent with inferred fauna through visible tracks, trails, and burrows; these stations tended to be characterized by Larger Deep-Burrowing Fauna or Small Tube-Building Fauna, with Larger Tube-Building Fauna (CMECS Biotic Groups) increasing in prevalence at stations near the state waters boundary.

Sensitive taxa were not documented along the RWEC-RI, RWEC-OCS or at the reference stations. The only sensitive taxon that was observed at the RWF was the northern star coral, *Astrangia poculata*. This organism was documented at a total of 4 stations, Stations 208, 215, 219, and 249, all of which occurred within the central east portion of the RWF lease area. *Astrangia poculata* is not a reef forming coral but enhances the value of hard substratum by attracting other fauna when it occurs (Guida et al., 2017). This taxon is found in hard bottom habitats attached to cobbles and boulders. The four stations where *Astrangia poculata* was observed were characterized by habitats of continuous or patchy cobbles and/or boulders on sand. *Astrangia* spp. has a broad geographical distribution, and its low relief and non-reef building life history strategy provides a population level resiliency to disturbance. *Astrangia* spp. is also not documented to provide essential fish habitat (Dimond and Carrington, 2007). Any impacts to the star coral from construction should be minimal and recovery should be rapid (Aronson et al., 2008).

There were 4 instances in which a species of concern was documented, all of which were the sea scallop, *Placopecten magellanicus.* PV images at Stations 141, 258, and 232 revealed single, solitary scallops on the seafloor. Additionally, a juvenile scallop was documented in a SPI at Station 230 and a small scallop valve (i.e. a dead juvenile) was observed in a SPI at Station 071. In general, there were low occurrences of this important commercial fishing taxa.

The results and images from this survey provide an accurate characterization and delineation of benthic habitats and establish a baseline of both large- and small-scale biological features along the proposed cable route, the RWF lease area, and the reference area. The results allow Orsted to broadly communicate predevelopment conditions using high resolution seafloor images. Contributions from this survey provide valuable information to address BOEM guidelines and regulations, as well as stakeholder concerns.

Table 2.2-1. Summary of Sediment Profile and Plan View Image Analysis G&G Results at the RWEC-RI

Table 2.2-1 SPI/PV G&G Results – RWEC-RI														
Station ID	Water Depth (m)	SPI Replicate (n)	SPI Sediment Type (# of reps)	Mean Prism Penetration Depth (cm)	Mean Boundary Roughness (cm)	PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Substrate Group	CMECS Substrate Subgroup	Max Gravel Measurement (mm)	Boulder Presence	Bedforms (# of reps)	Mean Bedform Wavelength (cm)	Biological Debris
429	27.5	3	Coarse sand over finer sediment (3)	5.4	0.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Moon Snail Egg Case, Shell Hash, Small Shell Fragment(s)
430	28.2	3	Fine sand (3)	4.6	0.4	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Shell Hash, Small Shell Fragment(s)
431	32.4	3	Very fine sand (3)	13.4	0.6	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
432	34.1	3	Very fine sand (3)	13.8	1.5	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
433	33.7	3	Very fine sand over silt/clay (3)	14.7	1.1	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
434	31.0	3	Fine sand (3)	5.8	0.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
435	31.1	3	Fine sand (3)	6.0	1.3	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
436	31.1	3	Fine sand over very fine sand (3)	8.2	1.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
437	30.5	3	Fine sand over very fine sand (3)	9.1	1.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
438	30.1	3	Coarse sand (1), Coarse sand over finer sediment (2)	5.3	1.3	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s), Small Shell Fragment(s)
439	29.9	3	Fine sand over very fine sand (1), Finer sediment over coarse sand (2)	7.3	1.6	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
440	29.4	3	Fine sand over very fine sand (1), Very fine sand over silt/clay (2)	18.0	1.2	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Moon Snail Egg Case
441	29.8	3	Very fine sand (3)	16.7	1.1	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
442	29.4	3	Very fine sand over silt/clay (3)	14.7	2.5	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
443	23.5	3	Very fine sand (3)	10.0	1.5	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	Ripples (3)	11.93	None
444	19.9	3	Very fine sand (3)	10.8	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	Ripples (3)	IND	None
445	17.6	3	Very fine sand (3)	8.4	1.1	2	Sand Sheet (2)	Sand	Sand or Finer	IND	No	Ripples (1)	IND	Large Shell Fragment(s)

Table 2.2-1 SPI/PV G&G Results – RWEC-RI

Station ID	Water Depth (m)	SPI Replicate (n)	SPI Sediment Type (# of reps)	Mean Prism Penetration Depth (cm)	Mean Boundary Roughness (cm)	PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Substrate Group	CMECS Substrate Subgroup	Max Gravel Measurement (mm)	Boulder Presence	Bedforms (# of reps)	Mean Bedform Wavelength (cm)	Biological Debris
446	14.7	3	Medium sand over finer sediment (1), Very fine sand over silt/clay (2)	9.5	0.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s), Small Shell Fragment(s)
447	15.0	3	Very fine sand over silt/clay (3)	9.3	0.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s)
448	10.9	3	Silt/clay (3)	8.2	1.2	3	Mollusk Bed (or Shells) on Mud (3)	Sand	Sand or Finer	IND	No	None	-	Large Mussel Shell Fragments
449	13.8	3	Silt/clay (3)	15.1	1.5	3	Mollusk Bed (or Shells) on Mud (3)	Sand	Sand or Finer	IND	No	None	-	Large Mussel Shell Fragments
450	11.0	3	Silt/clay (3)	11.8	3.3	3	Mollusk Bed (or Shells) on Mud (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s)
451	25.5	3	Very fine sand over silt/clay (3)	11.6	1.3	3	IND (1), Patchy Cobbles on Sand (2)	Slightly Gravelly	Slightly Gravelly Sand	IND	No	None	-	Large Shell Fragment(s)
452	21.5	3	Fine sand (2), Fine sand over silt/clay (1)	3.1	0.9	3	Patchy Cobbles on Sand (2), Patchy Pebbles on Sand (1)	Slightly Gravelly	Slightly Gravelly Sand	114.61	No	None	-	Large Shell Fragment(s), Small Shell Fragment(s)
453	13.6	3	Fine sand (3)	1.9	0.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
454	8.6	3	Very fine sand over silt/clay (3)	13.3	1.0	2	Sand Sheet (2)	Sand	Sand or Finer	IND	No	None	-	None
455	5.2	3	Silt/clay (1), Very fine sand (2)	8.9	1.3	1	Sand Sheet (1)	Sand	Sand or Finer	IND	No	None	-	None
604	27.8	3	Fine sand (3)	4.6	1.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
610	29.5	3	Fine sand (3)	5.1	1.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
611	30.8	3	Fine sand (3)	5.3	1.6	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
612	8.9	3	Very fine sand (3)	11.7	1.1	2	Sand Sheet (2)	Sand	Sand or Finer	IND	No	None	-	None
613	9.2	3	Medium sand (3)	2.2	1.3	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Shell Hash
614	11.2	3	Silt/clay (3)	9.4	0.7	3	Mollusk Bed (or Shells) on Mud (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s), Shell Hash
615	14.2	3	Silt/clay (3)	15.7	1.5	3	Mollusk Bed (or Shells) on Mud (3)	Sand	Sand or Finer	IND	No	None	-	Large Mussel Shell Fragments

Table 2.2-1 SPI/PV G&G Results – RWEC-RI

Station ID	Water Depth (m)	SPI Replicate (n)	SPI Sediment Type (# of reps)	Mean Prism Penetration Depth (cm)	Mean Boundary Roughness (cm)	PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Substrate Group	CMECS Substrate Subgroup	Max Gravel Measurement (mm)	Boulder Presence	Bedforms (# of reps)	Mean Bedform Wavelength (cm)	Biological Debris
n = 34														
Max	34.1			18.0	3.3					114.6			11.9	
Min	5.2			1.9	0.4					114.6			11.9	
Mean	22.4			9.4	1.2					114.6			11.9	
Standard Deviation	9.1			4.3	0.5									
n = 291														
Max	46.1			18.9	4.1					735.4			90.1	
Min	5.2			0.0	0.3					2.1			7.6	
Mean	34.5			6.2	1.4					63.5			56.3	
Standard Deviation	6.4			3.7	0.7					129.1			17.3	

IND=Indeterminate
"-" Replicate image not analyzed

Table 2.2-2. Summary of Sediment Profile and Plan View Image Analysis Benthic Results at the RWEC-RI

Table 2.2-2 SPI/PV Benthic Results – RWEC-RI																							
Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Other Epifauna Present*	Possible Non-native *Botryloides* sp.*
429	3	IND	Low	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	None	None	None	None	No	Yes	None	Yes	Unidentified	No	Shrimp	Shrimp	No
430	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Varies	None	None	None	Yes	Yes	None	Yes	None	No	None	None	No
431	3	1.80	Low	2 on 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	None	None	No
432	3	2.08	Low	2 on 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	None	None	No
433	3	1.63	Low	2 on 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Crab	Crab	No
434	3	1.97	Low	2	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid	No	Paguroid	Paguroid	No
435	3	2.51	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Moon Snail, Paguroid	Moon Snail, Paguroid	No
436	3	2.95	Low	2 -> 3	2 -> 3	3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	None	No	Gastropods, Paguroid, Unidentified Organism	Gastropods, Paguroid, Unidentified Organism	No
437	3	3.16	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Gastropod(s)	Gastropod(s)	No
438	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	None	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Gastropod(s), Paguroid(s)	Gastropod(s), Paguroid(s)	No
439	3	2.92	Low	2	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Gastropod(s), Moon Snail, Paguroid(s)	Gastropod(s), Moon Snail, Paguroid(s)	No
440	3	2.00	Medium	1 on 3	1 on 3	1 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Tracks and Trails	None	None	None	Yes	Yes	None	Yes	None	No	Gastropod, Paguroid, Unidentified Organism	Gastropod, Paguroid, Unidentified Organism	No
441	3	2.30	Low	2 -> 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Tunneling Megafauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	None	None	No
442	3	1.77	Low	2 -> 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Tunneling Megafauna	Tracks and Trails	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Crab(s)	Crab(s)	No
443	3	1.99	Low	1 on 3	1 on 3	1 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Tracks and Trails	Varies	None	None	None	Yes	Yes	None	Yes	None	No	Gastropod(s), Paguroid(s)	Gastropod(s), Paguroid(s)	No
444	3	2.26	Medium	2 -> 3	1 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	None	None	None	None	Yes	Yes	None	Yes	unidentified	No	Paguroid(s), Shrimp	Paguroid(s), Shrimp	No
445	3	1.84	Medium	2	2	2	2	Sand Sheet (2)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	None	Trace (<1%)	None	None	Yes	Yes	None	Yes	Podoceridae	No	Barnacles, Gastropod(s), Paguroid(s)	Barnacles, Gastropod(s), Paguroid(s)	No

Table 2.2-2 SPI/PV Benthic Results – RWEC-RI

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Other Epifauna Present*	Possible Non-native *Botryloides* sp.*
446	3	1.52	Medium	2 -> 3	1 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	None	None	None	None	None	No	Yes	Northern Sea Robin	Yes	None	No	Crab, Gastropod, Paguroid(s)	Crab, Gastropod, Paguroid(s)	No
447	3	1.22	Medium	2	2	1 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Attached Fauna	Attached Hydroids	None	Sparse (1 to <30%)	None	None	Yes	Yes	None	Yes	None	No	Barnacles, Hydroids, Paguroid(s)	Barnacles, Hydroids, Paguroid(s)	No
448	3	0.98	Medium	2 -> 3	IND	IND	3	Mollusk Bed (or Shells) on Mud (3)	Soft Sediment Fauna	Attached Fauna	Mussel Bed	Varies	Moderate (30 to < 70%)	None	None	Yes	No	None	Yes	None	No	Barnacles, Gastropod, Hydroids, Mussels	Barnacles, Gastropod, Hydroids, Mussels	No
449	3	0.98	Medium	3	3	3	3	Mollusk Bed (or Shells) on Mud (3)	Soft Sediment Fauna	Attached Fauna	Small Tube-Building Fauna	Filamentous Algal Bed	Sparse (1 to <30%)	None	None	No	No	None	Yes	None	No	Crab, Hydroids	Crab, Hydroids	No
450	3	IND	Medium	IND	IND	IND	3	Mollusk Bed (or Shells) on Mud (3)	Attached Fauna	None	Sessile Gastropods	Attached Hydroids	Complete (90-100%)	None	None	No	No	None	No	None	No	Barnacles, Crepidula, Hydroids, Sponges	Barnacles, Crepidula, Hydroids, Sponges	No
451	3	1.06	Medium	1	2 -> 3	3	3	IND (1), Patchy Cobbles on Sand (2)	Benthic Macroalgae	Soft Sediment Fauna	Filamentous Algal Bed	Attached Sponges	Moderate (30 to < 70%)	None	None	IND	Yes	None	Yes	None	No	Gastropod, Sponge(s), Whelk	Gastropod, Sponge(s), Whelk	No
452	3	0.02	Medium	1	1	1	3	Patchy Cobbles on Sand (2), Patchy Pebbles on Sand (1)	Attached Fauna	Soft Sediment Fauna	Attached Sponges	None	Sparse (1 to <30%)	None	None	No	Yes	None	No	None	No	Barnacles, Barnacles, Gastropod(s), Sponge(s)	Barnacles, Barnacles, Gastropod(s), Sponge(s)	No
453	3	1.10	Low	1	IND	IND	3	Sand Sheet (3)	Soft Sediment Fauna	Benthic Macroalgae	Larger Deep-Burrowing Fauna	Filamentous Algal Bed	Sparse (1 to <30%)	None	None	Yes	No	None	No	None	No	None	None	No
454	3	1.96	Low	2 -> 3	2 on 3	2 on 3	2	Sand Sheet (2)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	None	None	None	None	Yes	Yes	None	No	None	No	None	None	No
455	3	2.20	Medium	2	2 -> 3	2 on 3	1	Sand Sheet (1)	Soft Sediment Fauna	Inferred Fauna	Tracks and Trails	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	None	No	None	None	No
604	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	None	None	None	None	No	Yes	None	Yes	Ampeliscid	No	Gastropod(s)	Gastropod(s)	No
610	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	Tracks and Trails	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Paguroid(s)	Paguroid(s)	No
611	3	4.62	Low	2 -> 3	2 -> 3	IND	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Gastropods, Paguroid	Gastropods, Paguroid	No
612	3	2.10	Low	2 on 3	2 on 3	2 on 3	2	Sand Sheet (2)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Tracks and Trails	None	None	None	Yes	Yes	None	Yes	None	No	None	None	No
613	3	IND	None	IND	IND	IND	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	IND	None	None	None	Yes	IND	None	No	None	No	None	None	No
614	3	2.18	High	3	3	IND	3	Mollusk Bed (or Shells) on Mud (3)	Attached Fauna	None	Attached Hydroids	None	Sparse (1 to <30%)	None	None	No	No	None	No	None	No	Hydroids, Sponges	Hydroids, Sponges	No

Table 2.2-2 SPI/PV Benthic Results – RWEC-RI

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Other Epifauna Present*	Possible Non-native *Botryloides* sp.*
615	3	1.55	High	3	2 on 3	2 on 3	3	Mollusk Bed (or Shells) on Mud (3)	Attached Fauna	None	IND	None	Sparse (1 to <30%)	None	None	No	No	None	Yes	None	No	Hydroids, Jonah Crab	Hydroids, Jonah Crab	No
n = 34																								
Max		**4.6**																						
Min		**0.0**																						
Mean		**2.0**																						
Standard Deviation		**0.9**																						
n = 291																								
Max		**8.1**																						
Min		**0.0**																						
Mean		**3.0**																						
Standard Deviation		**1.5**																						

IND=Indeterminate
*Variable determined from combined SPI and PV analysis

Table 2.2-3. Summary of Sediment Profile and Plan View Image Analysis G&G Results at the RWEC-OCS

Table 2.2-3. SPI/PV G&G Results – RWEC-OCS														
Station ID	Water Depth (m)	SPI Replicate (n)	SPI Sediment Type (# of reps)	Mean Prism Penetration Depth (cm)	Mean Boundary Roughness (cm)	PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Substrate Group	CMECS Substrate Subgroup	Max Gravel Measurement (mm)	Boulder Presence	Bedforms (# of reps)	Mean Bedform Wavelength (cm)	Biological Debris
401	33.9	3	Fine sand (3)	4.0	1.3	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
402	33.6	3	Indeterminate (1), Medium sand (2)	1.1	2.0	3	Patchy Pebbles on Sand (2), Sand with Mobile Gravel (1)	Slightly Gravelly	Slightly Gravelly Sand	31.99	No	None	-	Shell Hash
403	35.3	3	Coarse sand (3)	6.6	1.1	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	2.73	No	None	-	Shell Hash, Small Shell Fragment(s)
404	36.0	3	Fine sand over silt/clay (1), Medium sand over finer sediment (2)	15.4	2.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s), Shell Hash
405	33.4	3	Medium sand (3)	4.9	1.2	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
406	41.6	3	Very fine sand (3)	5.3	1.2	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s), Small Shell Fragment(s)
407	38.5	3	Fine sand (3)	4.3	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s), Small Shell Fragment(s)
408	38.1	3	Medium sand (3)	4.1	0.6	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s), Shell Hash
409	38.0	3	Medium sand (3)	4.7	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Shell Hash
410	45.6	3	Very fine sand (3)	12.7	0.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
411	44.9	3	Indeterminate (3)	0.0	IND	3	Continuous Large Pebbles and Cobbles on Sand (3)	Gravel	Cobble	82.12	No	None	-	Large Shell Fragment(s)
412	37.7	3	Fine sand (2), Fine sand over very fine sand (1)	5.1	1.4	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
413	39.9	3	Fine sand (1), Fine sand over very fine sand (1)	4.5	2.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
414	34.5	3	Medium sand (3)	5.0	1.1	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
415	35.8	3	Indeterminate (1), Medium sand (2)	0.2	0.9	3	Patchy Pebbles on Sand (2), Sand Sheet (1)	Slightly Gravelly	Slightly Gravelly Sand	31.86	No	None	-	None
416	42.8	3	Fine sand (3)	4.7	2.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
417	46.1	3	Very fine sand (3)	13.6	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None

Table 2.2-3. SPI/PV G&G Results – RWEC-OCS

Station ID	Water Depth (m)	SPI Replicate (n)	SPI Sediment Type (# of reps)	Mean Prism Penetration Depth (cm)	Mean Boundary Roughness (cm)	PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Substrate Group	CMECS Substrate Subgroup	Max Gravel Measurement (mm)	Boulder Presence	Bedforms (# of reps)	Mean Bedform Wavelength (cm)	Biological Debris
418	43.3	3	Indeterminate (1), Silt/clay (2)	1.6	2.3	3	Continuous Large Cobbles and Boulders on Sand (1), Continuous Large Pebbles and Cobbles on Sand (2)	Gravel Mixes	Sandy Gravel	100.87	Yes	None	-	Large Shell Fragment(s)
419	37.2	3	Indeterminate (1), Silt/clay (1), Very fine sand (1)	0.9	1.1	3	Continuous Large Pebbles and Cobbles on Sand (3)	Gravel	Pebble	81.56	No	None	-	Large Shell Fragment(s)
420	37.2	3	Fine sand (2), Medium sand over finer sediment (1)	4.1	1.5	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	19.29	No	None	-	Small Shell Fragment(s)
421	40.4	3	Very fine sand over silt/clay (3)	14.8	1.4	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
422	38.8	3	Fine sand (3)	5.0	0.7	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	12.94	No	None	-	None
423	34.4	3	Coarse sand (3)	5.2	2.2	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	Ripples (3)	69.01	Shell Hash
424	32.6	3	Coarse sand (3)	7.8	3.1	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	7.84	No	Ripples (3)	59.96	Shell Hash, Small Shell Fragment(s)
425	31.6	3	Coarse sand (1), Medium sand (2)	5.3	1.6	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s), Shell Hash
426	31.5	3	Fine sand (2), Medium sand over finer sediment (1)	4.7	1.5	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
427	27.6	3	Medium sand (3)	4.4	0.6	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	Ripples (1)	IND	Moon Snail Egg Case
428	26.7	3	Coarse sand over finer sediment (1), Medium sand (2)	4.9	1.2	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Shell Hash
601	33.0	3	Medium sand (3)	5.7	0.6	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
602	36.0	3	Medium sand (3)	6.1	1.5	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
603	36.3	3	Fine sand (3)	4.2	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
605	27.3	3	Coarse sand (3)	5.5	1.4	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	Ripples (1)	IND	Large Shell Fragment(s), Shell Hash
606	28.6	3	Very coarse sand (2), Very coarse sand over sand (1)	3.4	2.1	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	7.49	No	Ripples (3)	68.36	Shell Hash
607	34.7	3	Very fine sand (3)	13.0	1.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None

Table 2.2-3. SPI/PV G&G Results – RWEC-OCS														
Station ID	**Water Depth (m)**	**SPI Replicate (n)**	**SPI Sediment Type (# of reps)**	**Mean Prism Penetration Depth (cm)**	**Mean Boundary Roughness (cm)**	**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Substrate Group**	**CMECS Substrate Subgroup**	**Max Gravel Measurement (mm)**	**Boulder Presence**	**Bedforms (# of reps)**	**Mean Bedform Wavelength (cm)**	**Biological Debris**
608	36.1	3	Very fine sand (3)	13.4	0.5	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
609	31.6	3	Medium sand (3)	5.8	1.2	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	2.36	No	Ripples (3)	38.80	Shell Hash, Small Shell Fragment(s)
n = 36														
Max	**46.1**			**15.4**	**3.1**					**100.9**			**69.0**	
Min	**26.7**			**0.0**	**0.5**					**2.4**			**38.8**	
Mean	**36.1**			**5.9**	**1.3**					**34.6**			**59.0**	
Standard Deviation	**5.0**			**4.0**	**0.6**					**36.2**			**14.1**	
n = 291														
Max	**46.1**			**18.9**	**4.1**					**735.4**			**90.1**	
Min	**5.2**			**0.0**	**0.3**					**2.1**			**7.6**	
Mean	**34.5**			**6.2**	**1.4**					**63.5**			**56.3**	
Standard Deviation	**6.4**			**3.7**	**0.7**					**129.1**			**17.3**	

IND=Indeterminate
"-" Replicate image not analyzed

Table 2.2-4. Summary of Sediment Profile and Plan View Image Analysis Benthic Results at the RWEC-OCS

Table 2.2-4 SPI/PV Benthic Results – RWEC-OCS																							
Station ID	**SPI Replicate (n)**	**Mean aRPD Depth (cm)**	**Sediment Oxygen Demand Level**	**Successional Stage (by replicate)**			**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Biotic Subclass**	**CMECS Co-occurring Biotic Subclasses**	**CMECS Biotic Group**	**CMECS Co-occurring Biotic Group**	**Maximum Attached Fauna Percent Cover**	**Sensitive Taxa Type***	**Species of Concern***	**Burrow Presence**	**Tracks Presence**	**Fish Presence/Type**	**Presence of Tubes***	**Amphipod Presence/Type***	**Sea Pen Presence***	**Other Epifauna Present***	**Other Epifauna Present***	**Possible Non-native *Botryllioides* sp.***
401	3	IND	Low	2	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	No	Hake	Yes	Podoceridae	Yes	Tunicates	Tunicates	No
402	3	IND	Low	2	2 -> 3	2 -> 3	3	Patchy Pebbles on Sand (2), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	Trace (<1%)	None	None	Yes	Yes	None	Yes	Podoceridae	No	Barnacles, Gastropod, Hydroids, Shrimp, Tunicates	Barnacles, Gastropod, Hydroids, Shrimp, Tunicates	No
403	3	IND	Low	2	2	2 -> 3	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Hydroids, Shrimp, Tunicate(s)	Hydroids, Shrimp, Tunicate(s)	No
404	3	2.87	High	2	2 -> 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Attached Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	Trace (<1%)	None	None	Yes	Yes	None	Yes	Podoceridae	No	Barnacles, Gastropod, Shrimp, Tunicates	Barnacles, Gastropod, Shrimp, Tunicates	No
405	3	IND	Low	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	None	None	Yes	No	None	Yes	Podoceridae	No	Tunicates	Tunicates	No
406	3	2.94	Medium	2 -> 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	No	None	Yes	Podoceridae	No	Paguroid, Tunicates, Unidentified Organism	Paguroid, Tunicates, Unidentified Organism	No
407	3	IND	Low	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Isopods, Tunicate(s)	Isopods, Tunicate(s)	No
408	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	Attached Fauna	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	Trace (<1%)	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Hydroids, Tunicates	Hydroids, Tunicates	No
409	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Tube-Building Fauna	Small Tube-Building Fauna	None	None	None	Yes	No	None	Yes	Podoceridae	No	Sea Star(s)	Sea Star(s)	No
410	3	3.72	Medium	2 on 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	None	Yes	Sea Star(s)	Sea Star(s)	No
411	3	IND	IND	IND	IND	IND	3	Continuous Large Pebbles and Cobbles on Sand (3)	Attached Fauna	Soft Sediment Fauna	Barnacles	Attached Hydroids	Dense (70 to < 90%)	None	None	Yes	No	None	No	None	No	Barnacle(s), Crab, Hydroids, Sea Star, Shrimp, Sponges	Barnacle(s), Crab, Hydroids, Sea Star, Shrimp, Sponges	No
412	3	2.32	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	No	None	Yes	Podoceridae	No	Tunicates	Tunicates	No
413	3	3.47	Low	2	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Paguroid, Tunicates	Paguroid, Tunicates	No
414	3	IND	Low	2	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Tunicates	Tunicates	No
415	3	IND	Low	2	2 -> 3	2 -> 3	3	Patchy Pebbles on Sand (2), Sand Sheet (1)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Paguroid, Shrimp, Tunicates	Paguroid, Shrimp, Tunicates	No

Table 2.2-4 SPI/PV Benthic Results – RWEC-OCS

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Other Epifauna Present*	Possible Noon-native *Botryllioides* sp.*
416	3	3.07	Low	2 -> 3	2 -> 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Shrimp, Unidentified Organism	Shrimp, Unidentified Organism	No
417	3	2.59	Medium	2 on 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Sea Star(s)	Sea Star(s)	No
418	3	IND	Low	IND	IND	IND	3	Continuous Large Cobbles and Boulders on Sand (1), Continuous Large Pebbles and Cobbles on Sand (2)	Attached Fauna	Soft Sediment Fauna	Attached Hydroids	Varies	Moderate (30 to < 70%)	None	None	Yes	No	Red Hake	Yes	None	No	Anemone, Barnacles, Crab, Hydroids, Sea Star	Anemone, Barnacles, Crab, Hydroids, Sea Star	No
419	3	IND	Low	IND	IND	IND	3	Continuous Large Pebbles and Cobbles on Sand (3)	Attached Fauna	Soft Sediment Fauna	Attached Hydroids	None	Sparse (1 to <30%)	None	None	Yes	No	None	No	None	Yes	Barnacles, Crab, Hydroids, Paguroid, Shrimp	Barnacles, Crab, Hydroids, Paguroid, Shrimp	No
420	3	IND	Low	2	2	2	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	No	None	Yes	Ampeliscid, Podoceridae	No	Shrimp	Shrimp	No
421	3	2.35	Medium	2 -> 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Sea Star, Shrimp	Sea Star, Shrimp	No
422	3	2.76	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Ampeliscid	No	Shrimp	Shrimp	No
423	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Tube-Building Fauna	Small Tube-Building Fauna	None	None	None	No	No	None	Yes	Ampeliscid, Podoceridae	No	Crab	Crab	No
424	3	IND	Low	2	2	2	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	No	None	Yes	Podoceridae	No	Tunicates	Tunicates	No
425	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	Attached Fauna	Small Tube-Building Fauna	Larger Tube-Building Fauna	Trace (<1%)	None	None	Yes	No	None	Yes	Podoceridae	No	Hydroids, Sand Dollar, Shrimp, Tunicates	Hydroids, Sand Dollar, Shrimp, Tunicates	No
426	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	None	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Sand Dollar, Tunicates	Sand Dollar, Tunicates	No
427	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Paguroid, Tunicates	Paguroid, Tunicates	No
428	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	None	None	None	None	No	Yes	None	Yes	Podoceridae	No	Paguroid(s), Shrimp	Paguroid(s), Shrimp	No
601	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Corymorpha, Gastropod(s), Tunicates	Corymorpha, Gastropod(s), Tunicates	No
602	3	6.66	Low	2 -> 3	2 -> 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Tunicates	Tunicates	No
603	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Tunicates	Tunicates	No
605	3	IND	None	2 -> 3	IND	IND	3	Sand Sheet (3)	Soft Sediment Fauna	None	Small Tube-Building Fauna	None	None	None	None	Yes	No	None	Yes	Podoceridae	No	Gastropod, Paguroid	Gastropod, Paguroid	No

Table 2.2-4 SPI/PV Benthic Results – RWEC-OCS

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Other Epifauna Present*	Possible Noon-native *Botryloides* sp.*
606	3	IND	None	2	2	IND	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Small Tube-Building Fauna	None	None	None	None	Yes	No	None	Yes	Podoceridae	No	Gastropod, Sand Dollar	Gastropod, Sand Dollar	No
607	3	3.08	Low	2 -> 3	2 -> 3	3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Caprellidae, Podoceridae	No	Corymorpha, Shrimp	Corymorpha, Shrimp	No
608	3	2.88	Low	2 on 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Shrimp	Shrimp	No
609	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Varies	None	None	None	Yes	No	None	Yes	Podoceridae	No	Tunicates	Tunicates	No
n = 36																								
Max		**6.7**																						
Min		**2.3**																						
Mean		**3.2**																						
Standard Deviation		**1.2**																						
n = 291																								
Max		**8.1**																						
Min		**0.0**																						
Mean		**3.0**																						
Standard Deviation		**1.5**																						

IND=Indeterminate

*Variable determined from combined SPI and PV analysis

Table 2.2-5. Summary of Sediment Profile and Plan View Image Analysis G&G Results at the RWF

Table 2.2-5 SPI/PV G&G Results – RWF														
Station ID	**Water Depth (m)**	**SPI Replicate (n)**	**SPI Sediment Type (# of reps)**	**Mean Prism Penetration Depth (cm)**	**Mean Boundary Roughness (cm)**	**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Substrate Group**	**CMECS Substrate Subgroup**	**Max Gravel Measurement (mm)**	**Boulder Presence**	**Bedforms (# of reps)**	**Mean Bedform Wavelength (cm)**	**Biological Debris**
001	37.7	3	Pebble over finer sediment (1), Very fine sand (2)	3.6	1.2	3	Continuous Large Pebbles and Cobbles on Sand (3)	Gravel Mixes	Sandy Gravel	35.77	No	None	-	Large Shell Fragment(s), Small Shell Fragment(s)
002	41.5	3	Fine sand (2), Fine sand over very fine sand (1)	12.3	0.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
003	42.8	3	Fine sand (3)	12.8	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
004	42.3	3	Coarse sand (3)	5.3	2.1	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s), Small Shell Fragment(s)
005	44.5	3	Very fine sand (3)	14.4	1.4	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
006	44.4	3	Fine sand over very fine sand (3)	12.7	0.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
007	42.2	3	Fine sand (3)	10.1	1.4	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s), Small Shell Fragment(s)
008	42.3	3	Fine sand (3)	9.8	1.5	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s), Small Shell Fragment(s)
009	41.9	3	Fine sand (3)	6.0	0.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
010	42.8	3	Fine sand over very fine sand (3)	13.8	0.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s), Small Shell Fragment(s)
011	42.5	3	Very fine sand (3)	16.8	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
012	42.5	3	Medium sand (2), Medium sand over finer sediment (1)	6.8	1.1	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
013	43.8	3	Very fine sand (3)	18.9	1.3	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
014	40.1	3	Fine sand (3)	4.7	0.5	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
015	37.9	3	Fine sand (3)	4.5	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Shell Hash
016	38.7	3	Fine sand (3)	4.2	1.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
017	41.3	3	Fine sand over very fine sand (3)	16.7	0.6	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
018	41.5	3	Fine sand over very fine sand (3)	17.1	1.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
019	38.9	3	Fine sand (3)	5.0	0.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
020	37.3	3	Fine sand (3)	4.9	0.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
021	44.9	3	Very fine sand (3)	14.0	1.1	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
022	42.4	3	Medium sand (3)	5.2	1.2	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
023	43.2	3	Very fine sand (3)	16.1	0.5	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None

Table 2.2-5 SPI/PV G&G Results – RWF														
Station ID	**Water Depth (m)**	**SPI Replicate (n)**	**SPI Sediment Type (# of reps)**	**Mean Prism Penetration Depth (cm)**	**Mean Boundary Roughness (cm)**	**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Substrate Group**	**CMECS Substrate Subgroup**	**Max Gravel Measurement (mm)**	**Boulder Presence**	**Bedforms (# of reps)**	**Mean Bedform Wavelength (cm)**	**Biological Debris**
024	37.3	3	Granule (2), Granule over sand (1)	9.3	2.3	3	Patchy Cobbles & Boulders on Sand (1), Sand with Mobile Gravel (2)	Gravel	Granule	2.23	Yes	Ripples (2)	IND	Large Shell Fragment(s), Small Shell Fragment(s)
025	34.2	3	Coarse sand (2), Medium sand (1)	3.0	0.7	3	Patchy Cobbles & Boulders on Sand (3)	Gravelly	Gravelly Sand	33.09	Yes	None	-	Small Shell Fragment(s)
026	37.0	3	Fine sand (3)	4.4	0.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
027	40.4	3	Fine sand over very fine sand (3)	9.0	1.2	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
028	37.5	3	Medium sand over finer sediment (3)	5.7	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
029	35.3	3	Coarse sand over finer sediment (1), Medium sand (2)	4.7	1.5	3	Patchy Cobbles on Sand (1), Sand Sheet (2)	Sand	Sand or Finer	44.17	No	None	-	Large Shell Fragment(s), Small Shell Fragment(s)
030	34.3	3	Fine sand (3)	4.5	0.5	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
031	42.1	3	Medium sand (3)	5.0	0.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
032	40.4	3	Fine sand (3)	4.3	0.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
033	39.5	3	Coarse sand over finer sediment (3)	7.1	2.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
034	39.9	3	Fine sand (1), Medium sand (2)	5.7	1.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
035	38.1	3	Fine sand (3)	5.8	1.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
036	36.8	3	Fine sand (3)	5.4	1.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
037	35.8	3	Fine sand (3)	4.0	1.4	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
038	38.5	3	Medium sand (3)	4.9	1.3	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
039	39.1	3	Fine sand (2), Fine sand over very fine sand (1)	4.6	0.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
040	37.6	3	Medium sand (3)	6.1	0.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
041	36.3	3	Fine sand (3)	5.7	1.1	2	Sand Sheet (2)	Sand	Sand or Finer	IND	No	None	-	None
042	39.8	3	Fine sand (2), Fine sand over very fine sand (1)	5.5	0.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
043	41.0	3	Very fine sand (2), Very fine sand over silt/clay (1)	11.3	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
044	39.9	3	Fine sand (3)	6.0	1.5	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
045	39.1	3	Fine sand (3)	6.4	0.7	2	Sand Sheet (2)	Sand	Sand or Finer	IND	No	None	-	None

Table 2.2-5 SPI/PV G&G Results – RWF														
Station ID	**Water Depth (m)**	**SPI Replicate (n)**	**SPI Sediment Type (# of reps)**	**Mean Prism Penetration Depth (cm)**	**Mean Boundary Roughness (cm)**	**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Substrate Group**	**CMECS Substrate Subgroup**	**Max Gravel Measurement (mm)**	**Boulder Presence**	**Bedforms (# of reps)**	**Mean Bedform Wavelength (cm)**	**Biological Debris**
046	37.9	3	Fine sand (2), Fine sand over very fine sand (1)	9.1	1.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s)
047	36.2	3	Medium sand (3)	6.1	1.2	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
048	37.1	3	Fine sand (3)	4.8	0.5	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
049	36.6	3	Medium sand (3)	4.6	1.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
050	43.3	3	Fine sand (2), Fine sand over silt/clay (1)	7.7	1.2	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
051	40.2	3	Fine sand (3)	5.8	0.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Shell Hash
052	37.1	3	Fine sand (3)	6.4	1.3	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Shell Hash
053	39.6	3	Sand over very coarse sand (2), Very coarse sand over sand (1)	8.5	3.3	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	8.07	No	None	-	None
054	38.5	3	Fine sand (3)	6.2	1.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
055	38.8	3	Fine sand (3)	6.2	2.1	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
056	45.1	3	Very fine sand over silt/clay (3)	14.0	0.5	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
057	35.8	3	Fine sand (3)	5.0	1.1	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s)
057E1	35.2	3	Fine sand (3)	5.0	0.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
057E2	34.7	3	Fine sand (3)	6.2	0.6	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
057W1	36.6	3	Fine sand (3)	5.1	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragments, Shell Hash, Unidentified Object
057W2	38.5	3	Fine sand (3)	4.2	0.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
058	33.2	3	Coarse sand over finer sediment (3)	6.0	1.7	3	Sand Sheet (3)	Slightly Gravelly	Slightly Gravelly Sand	2.63	No	None	-	Large Shell Fragment(s), Shell Hash, Sand Dollar Test
059	35.0	3	Medium sand (3)	5.8	1.5	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
060	36.2	3	Medium sand (1), Very coarse sand (1), Very coarse sand over sand (1)	7.1	1.7	3	Patchy Pebbles on Sand with Mobile Gravel (2), Sand with Mobile Gravel (1)	Slightly Gravelly	Slightly Gravelly Sand	17.41	No	Ripples (3)	90.10	None
061	34.7	3	Fine sand (3)	4.9	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None

Table 2.2-5 SPI/PV G&G Results – RWF														
Station ID	**Water Depth (m)**	**SPI Replicate (n)**	**SPI Sediment Type (# of reps)**	**Mean Prism Penetration Depth (cm)**	**Mean Boundary Roughness (cm)**	**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Substrate Group**	**CMECS Substrate Subgroup**	**Max Gravel Measurement (mm)**	**Boulder Presence**	**Bedforms (# of reps)**	**Mean Bedform Wavelength (cm)**	**Biological Debris**
062	35.2	3	Fine sand over silt/clay (1), Fine sand over very fine sand (1), Very fine sand (1)	8.4	0.7	3	Sand Sheet (1), Sand with Mobile Gravel (2)	Slightly Gravelly	Slightly Gravelly Sand	4.75	No	None	-	Shell Hash
063	33.3	3	Medium sand (3)	6.5	1.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
064	34.1	3	Medium sand (3)	6.7	1.4	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
065	33.3	3	Medium sand (3)	5.4	1.4	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Shell Hash
066	34.1	3	Medium sand (3)	5.2	1.3	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
067	35.8	3	Fine sand over silt/clay (2), Medium sand over finer sediment (1)	13.7	0.7	3	Sand Sheet (1), Sand with Mobile Gravel (2)	Slightly Gravelly	Slightly Gravelly Sand	8.10	No	None	-	Shell Hash, Small Shell Fragment(s)
068	34.2	3	Fine sand (3)	5.3	0.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
069	32.5	3	Finer sediment over pebble (1), Granule over sand (1), Very coarse sand over sand over pebble (1)	4.5	1.8	3	Sand with Mobile Gravel (3)	Gravelly	Gravelly Sand	10.70	No	Ripples (2)	52.58	Small Shell Fragment(s)
070	38.3	3	Fine sand (3)	4.6	2.1	3	Sand Sheet (2), Sand with Mobile Gravel (1)	Sand	Sand or Finer	6.61	No	None	-	Shell Hash
071	36.4	3	Coarse sand over finer sediment (2), Medium sand (1)	3.6	0.8	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	3.46	No	None	-	Large Shell Fragments, Seagrass Detritus, Shell Hash
072	35.2	3	Pebble over finer sediment (2), Very coarse sand over sand (1)	5.6	1.6	3	Sand with Mobile Gravel (3)	Gravel Mixes	Sandy Gravel	4.39	No	Ripples (1)	48.75	None
073	33.1	3	Fine sand (1), Indeterminate (2)	1.0	0.8	3	Coarse Pebbles on Sand (1), Continuous Large Pebbles and Cobbles on Sand (2)	Gravel Mixes	Sandy Gravel	39.86	No	None	-	None
073E1	32.9	3	Fine sand (1), Indeterminate (2)	0.1	1.1	3	Continuous Large Pebbles and Cobbles on Sand (3)	Gravel Mixes	Sandy Gravel	19.64	No	None	-	None
073E2	32.4	3	Indeterminate (3)	0.1	1.8	3	Continuous Large Pebbles and Cobbles on Sand (3)	Gravel Mixes	Sandy Gravel	21.75	No	None	-	None

Table 2.2-5 SPI/PV G&G Results – RWF														
Station ID	**Water Depth (m)**	**SPI Replicate (n)**	**SPI Sediment Type (# of reps)**	**Mean Prism Penetration Depth (cm)**	**Mean Boundary Roughness (cm)**	**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Substrate Group**	**CMECS Substrate Subgroup**	**Max Gravel Measurement (mm)**	**Boulder Presence**	**Bedforms (# of reps)**	**Mean Bedform Wavelength (cm)**	**Biological Debris**
073W1	33.2	3	Fine sand (3)	1.0	0.9	3	Patchy Cobbles on Sand (2), Sand with Mobile Gravel (1)	Gravelly	Gravelly Sand	138.09	Yes	None	-	None
073W2	33.7	3	Fine sand (1), Indeterminate (1), Medium sand (1)	1.7	0.9	3	Patchy Cobbles & Boulders on Sand (2), Patchy Cobbles on Sand (1)	Gravelly	Gravelly Sand	48.73	Yes	None	-	Large Shell Fragment(s), Small Shell Fragment(s)
074	32.7	3	Medium sand over finer sediment (3)	6.7	1.6	3	Sand Sheet (3)	Sand	Sand or Finer	2.12	No	None	-	None
075	32.9	3	Fine sand (2), Indeterminate (1)	3.6	1.1	3	Continuous Large Cobbles and Boulders on Sand (1), Patchy Cobbles on Sand (1), Sand Sheet (1)	Slightly Gravelly	Slightly Gravelly Sand	302.55	Yes	None	-	None
076	33.3	3	Indeterminate (3)	0.0	IND	3	IND (1), Patchy Cobbles & Boulders on Sand (2)	Gravel Mixes	Sandy Gravel	580.21	Yes	None	-	None
077	33.8	3	Fine sand (3)	4.0	1.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
078	31.7	3	Fine sand (1), Sand over granule (2)	5.0	1.4	3	Patchy Pebbles on Sand with Mobile Gravel (2), Sand Sheet (1)	Gravel Mixes	Sandy Gravel	4.67	No	Ripples (2)	51.09	Small Shell Fragment(s)
079	32.5	3	Medium sand over finer sediment (3)	4.0	1.2	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
080	31.3	3	Fine sand (3)	5.4	0.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
081	30.7	3	Coarse sand (3)	2.0	2.6	3	Patchy Cobbles on Sand (2), Sand with Mobile Gravel (1)	Gravelly	Gravelly Sand	5.12	No	None	-	None
082	37.0	3	Medium sand (3)	5.2	1.1	3	Sand Sheet (2), Sand with Mobile Gravel (1)	Sand	Sand or Finer	9.67	No	None	-	Small Shell Fragment(s)
083	33.8	3	Coarse sand (1), Pebble over finer sediment (1), Very coarse sand over sand (1)	3.6	1.5	3	Patchy Pebbles on Sand with Mobile Gravel (3)	Gravelly	Gravelly Sand	9.99	No	Ripples (2)	61.28	Small Shell Fragment(s)

Table 2.2-5 SPI/PV G&G Results – RWF														
Station ID	**Water Depth (m)**	**SPI Replicate (n)**	**SPI Sediment Type (# of reps)**	**Mean Prism Penetration Depth (cm)**	**Mean Boundary Roughness (cm)**	**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Substrate Group**	**CMECS Substrate Subgroup**	**Max Gravel Measurement (mm)**	**Boulder Presence**	**Bedforms (# of reps)**	**Mean Bedform Wavelength (cm)**	**Biological Debris**
084	32.9	3	Fine sand (2), Indeterminate (1)	1.8	1.7	3	Patchy Cobbles & Boulders on Sand (1), Patchy Cobbles on Sand (2)	Gravelly	Gravelly Sand	35.26	Yes	None	-	Small Shell Fragment(s)
085	35.0	3	Fine sand (3)	5.5	1.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
086	33.9	3	Medium sand (1), Medium sand over finer sediment (2)	5.4	1.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Sand Dollar Test(s)
087	33.8	3	Granule over sand (2), Sand over granule (1)	5.9	1.7	3	Patchy Pebbles on Sand with Mobile Gravel (3)	Gravel Mixes	Sandy Gravel	8.20	No	Ripples (1)	57.77	Small Shell Fragment(s)
088	32.8	3	Medium sand (2), Medium sand over finer sediment (1)	6.9	1.8	3	Patchy Boulders on Sand (1), Patchy Pebbles on Sand (1), Sand Sheet (1)	Slightly Gravelly	Slightly Gravelly Sand	315.35	Yes	None	-	Large Shell Fragment(s), Small Shell Fragment(s)
089	32.1	3	Granule over sand (1), Very coarse sand over sand (2)	7.9	4.1	3	Sand with Mobile Gravel (3)	Gravel Mixes	Sandy Gravel	2.93	No	None	-	Small Shell Fragment(s)
090	32.3	3	Coarse sand over finer sediment (2), Medium sand (1)	5.9	1.6	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	2.76	No	Ripples (2)	IND	Large Shell Fragment(s)
091	32.7	3	Fine sand (3)	5.0	1.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
092	33.4	3	Fine sand (3)	4.8	0.5	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
093	33.9	3	Fine sand (3)	5.3	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
094	33.4	3	Fine sand (3)	5.2	1.9	3	Sand Sheet (2), Sand with Mobile Gravel (1)	Sand	Sand or Finer	7.86	No	None	-	None
095	32.8	3	Finer sediment over coarse sand (1), Medium sand (1), Medium sand over finer sediment (1)	7.0	1.2	3	Sand Sheet (1), Sand with Mobile Gravel (2)	Slightly Gravelly	Slightly Gravelly Sand	2.62	No	Ripples (3)	63.23	Large Shell Fragment(s)
096	33.7	3	Fine sand (3)	5.2	1.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
097	34.5	3	Medium sand (3)	6.2	1.4	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Shell Hash, Small Shell Fragment(s)
098	35.9	3	Medium sand (3)	7.7	1.1	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
099	35.2	3	Medium sand (3)	5.8	1.2	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
100	35.5	3	Coarse sand over finer sediment (1), Fine sand (2)	5.6	1.5	3	Sand Sheet (2), Sand with Mobile Gravel (1)	Sand	Sand or Finer	2.24	No	None	-	None

Table 2.2-5 SPI/PV G&G Results – RWF														
Station ID	**Water Depth (m)**	**SPI Replicate (n)**	**SPI Sediment Type (# of reps)**	**Mean Prism Penetration Depth (cm)**	**Mean Boundary Roughness (cm)**	**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Substrate Group**	**CMECS Substrate Subgroup**	**Max Gravel Measurement (mm)**	**Boulder Presence**	**Bedforms (# of reps)**	**Mean Bedform Wavelength (cm)**	**Biological Debris**
101	34.6	3	Finer sediment over coarse sand (2), Medium sand (1)	5.7	2.6	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	3.29	No	None	-	None
102	34.1	3	Fine sand (3)	4.3	1.2	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Sand Dollar Test(s)
103	34.9	3	Fine sand (3)	5.1	1.6	3	Sand Sheet (2), Sand with Mobile Gravel (1)	Sand	Sand or Finer	2.68	No	None	-	None
104	34.8	3	Coarse sand over finer sediment (1), Very coarse sand over sand (2)	5.2	1.5	3	Sand with Mobile Gravel (3)	Gravelly	Gravelly Sand	3.24	No	None	-	Large Shell Fragment(s), Small Shell Fragment(s)
105	37.1	3	Fine sand (3)	6.3	0.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
106	37.7	3	Coarse sand (1), Coarse sand over finer sediment (1), Very coarse sand over sand (1)	5.9	2.3	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	3.27	No	Ripples (3)	59.03	None
107	38.3	3	Coarse sand (1), Sand over very coarse sand (1), Very coarse sand (1)	8.0	2.2	3	Sand with Mobile Gravel (3)	Gravelly	Gravelly Sand	2.74	No	Ripples (3)	68.66	None
108	37.5	3	Coarse sand (2), Coarse sand over finer sediment (1)	5.8	3.0	3	Patchy Cobbles on Sand (1), Sand with Mobile Gravel (2)	Gravelly	Gravelly Sand	3.15	No	None	-	None
109	36.4	3	Coarse sand over finer sediment (3)	5.9	3.4	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	3.36	No	None	-	None
110	36.0	3	Fine sand (3)	5.6	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
111	37.3	3	Coarse sand over finer sediment (3)	7.3	1.8	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	5.04	No	Ripples (2)	71.39	Large Shell Fragment(s), Shell Hash
112	37.5	3	Medium sand (3)	5.8	1.3	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
113	37.3	3	Medium sand (3)	5.3	1.2	3	Sand Sheet (2), Sand with Mobile Gravel (1)	Sand	Sand or Finer	2.20	No	None	-	Sand Dollar Test(s)
114	36.9	3	Very coarse sand (3)	5.1	1.8	3	Sand with Mobile Gravel (3)	Gravelly	Gravelly Sand	3.01	No	Ripples (3)	71.63	Small Shell Fragment(s)
115	36.2	3	Coarse sand (2), Very coarse sand over sand (1)	6.9	2.0	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	3.96	No	Ripples (1)	64.12	None

Table 2.2-5 SPI/PV G&G Results – RWF														
Station ID	**Water Depth (m)**	**SPI Replicate (n)**	**SPI Sediment Type (# of reps)**	**Mean Prism Penetration Depth (cm)**	**Mean Boundary Roughness (cm)**	**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Substrate Group**	**CMECS Substrate Subgroup**	**Max Gravel Measurement (mm)**	**Boulder Presence**	**Bedforms (# of reps)**	**Mean Bedform Wavelength (cm)**	**Biological Debris**
116	34.9	3	Very coarse sand (1), Very coarse sand over sand (2)	7.3	1.4	3	Sand with Mobile Gravel (3)	Gravel	Granule	2.41	No	Ripples (1)	IND	Large Shell Fragment(s)
117	35.0	3	Very coarse sand (3)	6.7	3.2	3	Sand with Mobile Gravel (3)	Gravelly	Gravelly Sand	2.47	No	None	-	Skate Egg Case
118	36.1	3	Coarse sand over finer sediment (3)	6.3	2.1	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	4.92	No	Ripples (1)	63.87	None
119	35.6	3	Coarse sand (1), Very coarse sand over sand (2)	6.3	2.0	3	Patchy Pebbles on Sand with Mobile Gravel (1), Sand with Mobile Gravel (2)	Slightly Gravelly	Slightly Gravelly Sand	5.12	No	None	-	Small Shell Fragment(s)
120	34.9	3	Coarse sand over finer sediment (2), Medium sand (1)	6.3	2.1	3	Sand Sheet (2), Sand with Mobile Gravel (1)	Slightly Gravelly	Slightly Gravelly Sand	3.66	No	None	-	Large Shell Fragment(s), Small Shell Fragment(s)
121	35.0	3	Coarse sand over finer sediment (1), Medium sand (1), Very coarse sand over sand (1)	6.2	1.0	3	Sand with Mobile Gravel (3)	Gravelly	Gravelly Sand	4.74	No	Ripples (3)	65.35	Large Shell Fragment(s), Small Shell Fragment(s)
122	36.3	3	Coarse sand over finer sediment (2), Medium sand (1)	4.6	0.8	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	2.97	No	None	-	Moon Snail Egg Case, Sand Dollar Test, Shell Hash
123	35.6	3	Medium sand (3)	5.3	2.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	Ripples (3)	33.05	Shell Hash
124	32.9	3	Fine sand (3)	5.6	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
125	34.5	3	Coarse sand over finer sediment (2), Medium sand (1)	6.1	1.2	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
126	37.1	3	Coarse sand over finer sediment (1), Medium sand (2)	5.9	1.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	Ripples (1)	7.62	None
127	37.7	3	Coarse sand (2), Very coarse sand (1)	2.7	1.2	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	3.12	No	Ripples (3)	70.15	Small Shell Fragment(s)
128	37.6	3	Very coarse sand over sand (3)	8.1	2.4	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	2.49	No	Ripples (2)	IND	Small Shell Fragment(s)
129	37.8	3	Very coarse sand (1), Very coarse sand over sand (2)	5.9	3.3	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	7.48	No	Ripples (1)	78.06	Large Shell Fragment(s)

Table 2.2-5 SPI/PV G&G Results – RWF														
Station ID	**Water Depth (m)**	**SPI Replicate (n)**	**SPI Sediment Type (# of reps)**	**Mean Prism Penetration Depth (cm)**	**Mean Boundary Roughness (cm)**	**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Substrate Group**	**CMECS Substrate Subgroup**	**Max Gravel Measurement (mm)**	**Boulder Presence**	**Bedforms (# of reps)**	**Mean Bedform Wavelength (cm)**	**Biological Debris**
136	34.2	3	Granule over sand (1), Pebble over finer sediment (1), Very coarse sand over sand (1)	4.9	3.0	3	Patchy Pebbles on Sand with Mobile Gravel (3)	Gravel Mixes	Sandy Gravel	7.49	No	Ripples (3)	34.62	None
137	32.7	3	Pebble over finer sediment (2), Very coarse sand over sand (1)	6.9	3.6	3	Patchy Pebbles on Sand with Mobile Gravel (3)	Gravel Mixes	Sandy Gravel	9.92	No	Ripples (1)	67.43	None
138	31.8	3	Indeterminate (2), Very coarse sand over sand (1)	1.5	2.1	3	Continuous Large Cobbles and Boulders on Sand (1), IND (1), Patchy Cobbles & Boulders on Sand (1)	Gravel	Sandy Gravel	66.29	Yes	None	-	Large Shell Fragment(s), Shell Hash
139	31.6	3	Coarse sand (1), Very coarse sand over sand (2)	2.8	1.5	3	Patchy Cobbles on Sand (2), Patchy Pebbles on Sand with Mobile Gravel (1)	Gravelly	Gravelly Sand	37.78	No	Ripples (1)	67.96	Large Shell Fragment(s)
140	33.2	3	Fine sand (3)	4.9	1.1	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
141	36.4	3	Pebble over finer sediment (2), Very coarse sand over sand (1)	4.0	2.5	3	Patchy Pebbles on Sand with Mobile Gravel (1), Sand with Mobile Gravel (2)	Gravel Mixes	Sandy Gravel	9.94	No	Ripples (3)	40.55	None
142	34.7	3	Pebble over finer sediment (1), Very coarse sand (2)	6.0	1.2	3	Patchy Boulders on Sand (1), Patchy Pebbles on Sand with Mobile Gravel (2)	Gravel Mixes	Sandy Gravel	2.88	Yes	Ripples (3)	49.32	None
143	33.2	3	Coarse sand (1), Fine sand (2)	3.7	1.5	3	Patchy Pebbles on Sand with Mobile Gravel (1), Sand Sheet (2)	Sand	Sand or Finer	2.08	No	Ripples (1)	53.79	Skate Egg Case
144	34.6	3	Coarse sand (1), Pebble over finer sediment (1), Very coarse sand (1)	2.6	3.0	3	Patchy Pebbles on Sand with Mobile Gravel (3)	Gravelly	Gravelly Sand	5.90	No	Ripples (3)	IND	Small Shell Fragment(s)

Table 2.2-5 SPI/PV G&G Results – RWF														
Station ID	**Water Depth (m)**	**SPI Replicate (n)**	**SPI Sediment Type (# of reps)**	**Mean Prism Penetration Depth (cm)**	**Mean Boundary Roughness (cm)**	**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Substrate Group**	**CMECS Substrate Subgroup**	**Max Gravel Measurement (mm)**	**Boulder Presence**	**Bedforms (# of reps)**	**Mean Bedform Wavelength (cm)**	**Biological Debris**
201	32.5	3	Indeterminate (3)	0.0	IND	3	Continuous Large Cobbles and Boulders on Sand (1), Patchy Cobbles & Boulders on Sand (2)	Gravel Mixes	Sandy Gravel	355.11	Yes	None	-	Small Shell Fragment(s)
202	35.0	3	Granule (2), Granule over sand (1)	6.5	1.0	3	Patchy Pebbles on Sand with Mobile Gravel (1), Sand with Mobile Gravel (2)	Gravel	Granule	2.90	No	Ripples (3)	75.21	None
203	34.5	3	Fine sand (2), Indeterminate (1)	1.2	2.2	3	Patchy Cobbles on Sand (3)	Slightly Gravelly	Slightly Gravelly Sand	122.40	No	None	-	Nudibranch Eggs
204	31.6	3	Fine sand (3)	5.7	1.3	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
205	34.1	3	Medium sand over finer sediment (3)	5.7	1.3	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s), Small Shell Fragment(s)
206	32.8	3	Very coarse sand over sand (3)	4.8	2.0	3	Patchy Boulders on Sand (1), Sand with Mobile Gravel (2)	Gravelly	Gravelly Sand	3.96	Yes	Ripples (1)	IND	None
207	33.1	3	Medium sand (3)	1.8	1.5	3	Sand Sheet (3)	Sand	Sand or Finer	2.36	No	None	-	Large Shell Fragment(s)
208	32.7	3	Fine sand (1), Medium sand (2)	2.1	1.3	3	Patchy Boulders on Sand (2), Patchy Cobbles on Sand (1)	Gravelly	Gravelly Sand	679.66	Yes	None	-	None
209	35.4	3	Indeterminate (1), Medium sand (2)	1.6	1.1	3	Patchy Cobbles on Sand (2), Patchy Pebbles on Sand (1)	Slightly Gravelly	Slightly Gravelly Sand	117.94	No	None	-	None
210	30.9	3	Coarse sand over finer sediment (1), Very coarse sand over sand (2)	4.2	1.1	3	Patchy Cobbles on Sand (1), Sand Sheet (1), Sand with Mobile Gravel (1)	Slightly Gravelly	Slightly Gravelly Sand	2.89	No	Ripples (1)	IND	None
211	33.9	3	Very coarse sand (2), Very coarse sand over sand (1)	2.5	2.3	3	Patchy Pebbles on Sand with Mobile Gravel (2), Sand with Mobile Gravel (1)	Gravel	Granule	3.36	No	None	-	Moon Snail Egg Case, Small Shell Fragment(s)
212	37.7	3	Coarse sand (1), Coarse sand over finer sediment (2)	6.9	1.6	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	11.14	No	Ripples (3)	IND	None

Table 2.2-5 SPI/PV G&G Results – RWF														
Station ID	**Water Depth (m)**	**SPI Replicate (n)**	**SPI Sediment Type (# of reps)**	**Mean Prism Penetration Depth (cm)**	**Mean Boundary Roughness (cm)**	**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Substrate Group**	**CMECS Substrate Subgroup**	**Max Gravel Measurement (mm)**	**Boulder Presence**	**Bedforms (# of reps)**	**Mean Bedform Wavelength (cm)**	**Biological Debris**
213	34.4	3	Coarse sand over finer sediment (3)	2.5	2.9	3	Patchy Cobbles on Sand (2), Sand with Mobile Gravel (1)	Gravelly	Gravelly Sand	92.73	No	None	-	Small Shell Fragment(s)
214	33.2	3	Indeterminate (1), Pebble over finer sediment (2)	3.4	1.3	3	Continuous Large Cobbles and Boulders on Sand (1), Patchy Pebbles on Sand with Mobile Gravel (1), Sand with Mobile Gravel (1)	Gravel Mixes	Sandy Gravel	337.24	Yes	Ripples (2)	73.82	None
215	31.4	3	Fine sand (2), Indeterminate (1)	1.0	0.8	3	Patchy Cobbles & Boulders on Sand (2), Patchy Pebbles on Sand with Mobile Gravel (1)	Gravel Mixes	Sandy Gravel	92.59	Yes	None	-	Barnacle Hash
216	30.8	3	Indeterminate (1), Very coarse sand (2)	1.7	2.3	3	Patchy Boulders on Sand (2), Patchy Pebbles on Sand (1)	Gravelly	Gravelly Sand	28.50	Yes	None	-	Barnacle Hash, Shell Hash
217	31.5	3	Coarse sand (1), Indeterminate (2)	0.3	0.5	3	Patchy Cobbles & Boulders on Sand (1), Patchy Pebbles on Sand (1), Patchy Pebbles on Sand with Mobile Gravel (1)	Gravel Mixes	Sandy Gravel	165.70	Yes	Ripples (1)	41.67	Barnacle Hash
218	29.2	3	Fine sand (1), Indeterminate (2)	0.1	0.9	3	Patchy Cobbles & Boulders on Sand (3)	Gravel Mixes	Sandy Gravel	89.34	Yes	None	-	None
218E1	29.0	3	Fine sand (1), Indeterminate (2)	0.1	1.0	3	Patchy Cobbles & Boulders on Sand (3)	Gravelly	Gravelly Sand	60.23	Yes	None	-	None
218E2	28.8	3	Medium sand (1), Very coarse sand over sand (2)	2.8	1.3	3	Patchy Pebbles on Sand with Mobile Gravel (3)	Gravelly	Gravelly Sand	7.00	No	Ripples (3)	41.22	None
218W1	29.7	3	Indeterminate (2), Medium sand (1)	0.1	0.9	3	Patchy Boulders on Sand (1), Patchy Cobbles & Boulders on Sand (1), Patchy Cobbles on Sand (1)	Gravel Mixes	Sandy Gravel	398.10	Yes	None	-	Spent Squid Eggs

Table 2.2-5 SPI/PV G&G Results – RWF														
Station ID	**Water Depth (m)**	**SPI Replicate (n)**	**SPI Sediment Type (# of reps)**	**Mean Prism Penetration Depth (cm)**	**Mean Boundary Roughness (cm)**	**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Substrate Group**	**CMECS Substrate Subgroup**	**Max Gravel Measurement (mm)**	**Boulder Presence**	**Bedforms (# of reps)**	**Mean Bedform Wavelength (cm)**	**Biological Debris**
218W2	29.9	3	Coarse sand (1), Coarse sand over finer sediment (1), Very coarse sand over sand (1)	4.3	1.5	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	7.92	No	Ripples (2)	56.06	None
219	28.3	3	Indeterminate (2), Very coarse sand (1)	1.7	0.7	3	IND (1), Patchy Cobbles & Boulders on Sand (2)	Gravel Mixes	Sandy Gravel	308.89	Yes	None	-	Barnacle Hash
220	34.8	3	Indeterminate (2), Pebble over finer sediment (1)	0.6	2.2	3	Patchy Boulders on Sand (1), Patchy Cobbles & Boulders on Sand (1), Patchy Cobbles on Sand (1)	Gravel Mixes	Sandy Gravel	54.41	Yes	None	-	Barnacle Hash, Small Shell Fragment(s)
220E1	34.7	3	Fine sand (1), Indeterminate (2)	0.1	0.5	3	Patchy Cobbles & Boulders on Sand (3)	Gravel Mixes	Sandy Gravel	231.39	Yes	None	-	Barnacle Hash, Large Shell Fragment(s), Skate Egg Sack
220E2	34.7	3	Indeterminate (2), Very coarse sand over sand (1)	1.5	1.7	3	Patchy Cobbles & Boulders on Sand (2), Sand with Mobile Gravel (1)	Gravelly	Gravelly Sand	156.45	Yes	Ripples (1)	52.66	Barnacle Hash
220W1	35.0	3	Coarse sand (1), Indeterminate (1), Medium sand (1)	2.5	2.4	3	Patchy Boulders on Sand (1), Patchy Cobbles on Sand (1), Patchy Pebbles on Sand with Mobile Gravel (1)	Gravelly	Gravelly Sand	735.37	Yes	None	-	Large Shell Fragment(s)
220W2	34.8	2	Indeterminate (2)	0.0	IND	3	Patchy Cobbles & Boulders on Sand (3)	Gravelly	Gravelly Sand	130.53	Yes	None	-	Small Shell Fragment(s)
221	34.5	3	Fine sand (3)	4.8	1.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
222	33.5	3	Fine sand (3)	5.5	0.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Shell Hash
223	42.1	3	Very fine sand (3)	11.8	1.1	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
224	44.7	3	Very coarse sand (3)	7.1	2.1	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	2.62	No	None	-	Large Shell Fragment(s)
225	42.6	3	Very fine sand (3)	8.8	0.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
226	42.7	3	Very fine sand (3)	11.7	1.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
227	46.0	3	Very fine sand (3)	18.3	1.1	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
228	38.2	3	Fine sand (3)	4.6	0.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
229	39.7	3	Fine sand (3)	5.0	1.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)

Table 2.2-5 SPI/PV G&G Results – RWF														
Station ID	**Water Depth (m)**	**SPI Replicate (n)**	**SPI Sediment Type (# of reps)**	**Mean Prism Penetration Depth (cm)**	**Mean Boundary Roughness (cm)**	**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Substrate Group**	**CMECS Substrate Subgroup**	**Max Gravel Measurement (mm)**	**Boulder Presence**	**Bedforms (# of reps)**	**Mean Bedform Wavelength (cm)**	**Biological Debris**
230	40.3	3	Fine sand over very fine sand (3)	9.1	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
231	42.3	3	Medium sand over finer sediment (3)	5.2	1.2	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
232	35.3	3	Indeterminate (1), Medium sand (2)	1.6	1.8	3	Continuous Large Pebbles and Cobbles on Sand (1), Patchy Pebbles on Sand with Mobile Gravel (2)	Gravelly	Gravelly Sand	223.13	Yes	None	-	Barnacle Hash, Large Shell Fragment(s)
233	36.2	3	Fine sand (3)	4.2	0.6	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
234	38.8	3	Fine sand (1), Fine sand over very fine sand (1)	7.6	1.4	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
235	40.0	3	Very coarse sand (3)	6.8	1.1	3	Sand with Mobile Gravel (3)	Gravelly	Gravelly Sand	2.10	No	None	-	None
236	39.4	3	Fine sand (3)	7.0	1.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
237	36.6	3	Medium sand (3)	5.8	2.4	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
238	36.9	3	Fine sand (2), Fine sand over silt/clay (1)	5.3	1.1	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
239	38.7	3	Fine sand (2), Medium sand (1)	3.9	1.6	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s), Shell Hash
240	41.4	3	Fine sand (3)	5.9	1.1	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
241	38.0	3	Fine sand (3)	5.7	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Shell Hash
242	38.4	3	Coarse sand (1), Coarse sand over finer sediment (2)	6.0	0.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Moon Snail Egg Case
243	36.4	3	Fine sand (1), Fine sand over silt/clay (2)	7.6	1.2	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Shell Hash, Small Shell Fragment(s)
244	33.7	3	Fine sand (3)	5.3	1.2	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
245	34.6	3	Fine sand (3)	4.3	0.5	3	Patchy Cobbles on Sand (1), Sand Sheet (1), Sand with Mobile Gravel (1)	Slightly Gravelly	Slightly Gravelly Sand	106.30	No	None	-	Small Shell Fragment(s)
246	35.4	3	Fine sand (3)	5.3	1.2	2	Sand Sheet (2)	Sand	Sand or Finer	IND	No	None	-	Moon Snail Egg Case

Table 2.2-5 SPI/PV G&G Results – RWF														
Station ID	**Water Depth (m)**	**SPI Replicate (n)**	**SPI Sediment Type (# of reps)**	**Mean Prism Penetration Depth (cm)**	**Mean Boundary Roughness (cm)**	**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Substrate Group**	**CMECS Substrate Subgroup**	**Max Gravel Measurement (mm)**	**Boulder Presence**	**Bedforms (# of reps)**	**Mean Bedform Wavelength (cm)**	**Biological Debris**
247	33.0	3	Very coarse sand (1), Very coarse sand over sand (2)	4.5	1.9	3	Patchy Pebbles on Sand with Mobile Gravel (2), Sand with Mobile Gravel (1)	Gravelly	Gravelly Sand	22.16	No	Ripples (3)	38.45	None
248	33.5	3	Very coarse sand (1), Very coarse sand over sand (2)	3.6	2.6	3	Patchy Pebbles on Sand with Mobile Gravel (1), Sand with Mobile Gravel (2)	Gravelly	Gravelly Sand	13.58	No	Ripples (1)	IND	Moon Snail Egg Case
249	31.7	3	Indeterminate (3)	0.0	IND	3	Continuous Large Cobbles and Boulders on Sand (3)	Gravel	Cobble	174.91	Yes	None	-	Shell Hash
250	34.5	3	Fine sand (3)	8.2	0.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
251	34.8	3	Fine sand (1), Very coarse sand over sand (2)	7.4	3.1	3	Sand Sheet (1), Sand with Mobile Gravel (2)	Gravelly	Gravelly Sand	5.43	No	Ripples (1)	62.86	Shell Hash
252	36.0	3	Coarse sand (2), Medium sand (1)	4.4	1.3	3	Patchy Cobbles on Sand (2), Patchy Pebbles on Sand (1)	Gravelly	Gravelly Sand	163.69	No	None	-	Small Shell Fragment(s)
253	34.2	3	Coarse sand (3)	8.2	1.9	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	2.78	No	None	-	Large Shell Fragment(s)
254	35.6	3	Coarse sand (3)	5.0	3.9	3	Sand Sheet (1), Sand with Mobile Gravel (2)	Slightly Gravelly	Slightly Gravelly Sand	2.41	No	None	-	Small Shell Fragment(s)
255	32.6	3	Coarse sand (1), Medium sand (2)	5.1	1.1	3	Sand Sheet (1), Sand with Mobile Gravel (2)	Slightly Gravelly	Slightly Gravelly Sand	6.47	No	None	-	None
256	34.5	3	Very coarse sand (2), Very coarse sand over sand (1)	8.4	1.3	3	Patchy Pebbles on Sand with Mobile Gravel (2), Sand with Mobile Gravel (1)	Gravel Mixes	Sandy Gravel	16.49	No	Ripples (3)	66.36	None
257	33.6	3	Very coarse sand (2), Very coarse sand over sand (1)	5.7	3.6	3	Sand with Mobile Gravel (3)	Gravelly	Gravelly Sand	4.76	No	Ripples (1)	72.31	None

Table 2.2-5 SPI/PV G&G Results – RWF														
Station ID	**Water Depth (m)**	**SPI Replicate (n)**	**SPI Sediment Type (# of reps)**	**Mean Prism Penetration Depth (cm)**	**Mean Boundary Roughness (cm)**	**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Substrate Group**	**CMECS Substrate Subgroup**	**Max Gravel Measurement (mm)**	**Boulder Presence**	**Bedforms (# of reps)**	**Mean Bedform Wavelength (cm)**	**Biological Debris**
258	35.4	3	Coarse sand (1), Pebble over finer sediment (1), Very coarse sand (1)	5.0	1.3	3	Patchy Pebbles on Sand with Mobile Gravel (2), Sand with Mobile Gravel (1)	Gravel Mixes	Sandy Gravel	17.81	No	Ripples (2)	32.81	Moon Snail Egg Case
259	34.7	3	Medium sand (3)	7.4	0.7	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Shell Hash
260	37.6	3	Fine sand (3)	5.1	1.9	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
261	36.0	3	Very coarse sand (3)	8.4	3.8	3	Sand with Mobile Gravel (3)	Gravel	Granule	2.18	No	Ripples (1)	IND	None
262	33.9	3	Fine sand (3)	5.4	0.8	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
n = 216														
Max	**46.0**			**18.9**	**4.1**					**735.4**			**90.1**	
Min	**28.3**			**0.0**	**0.5**					**2.1**			**7.6**	
Mean	**36.2**			**5.8**	**1.4**					**66.6**			**57.3**	
Standard Deviation	**3.5**			**3.3**	**0.7**					**136.0**			**16.4**	
n = 291														
Max	**46.1**			**18.9**	**4.1**					**735.4**			**90.1**	
Min	**5.2**			**0.0**	**0.3**					**2.1**			**7.6**	
Mean	**34.5**			**6.2**	**1.4**					**63.5**			**56.3**	
Standard Deviation	**6.4**			**3.7**	**0.7**					**129.1**			**17.3**	

IND=Indeterminate
"-" Replicate image not analyzed

Table 2.2-6. Summary of Sediment Profile and Plan View Image Analysis Benthic Results at the RWF

Table 2.2-6 SPI/PV Benthic Results – RWF																						
Station ID	**SPI Replicate (n)**	**Mean aRPD Depth (cm)**	**Sediment Oxygen Demand Level**	**Successional Stage (by replicate)**			**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Biotic Subclass**	**CMECS Co-occurring Biotic Subclasses**	**CMECS Biotic Group**	**CMECS Co-occurring Biotic Group**	**Maximum Attached Fauna Percent Cover**	**Sensitive Taxa Type***	**Species of Concern***	**Burrow Presence**	**Tracks Presence**	**Fish Presence/Type**	**Presence of Tubes***	**Amphipod Presence/Type***	**Sea Pen Presence***	**Other Epifauna Present***	**Possible Non-native *Botryllolides* sp.***
001	3	IND	Low	2	IND	IND	3	Continuous Large Pebbles and Cobbles on Sand (3)	Attached Fauna	Soft Sediment Fauna	Attached Hydroids	Barnacles	Sparse (1 to <30%)	None	None	No	Yes	None	No	None	No	Barnacles, Bryozoan, Hydroids, Sea Star	No
002	3	4.77	Low	2 on 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Hydroid, Shrimp, Unidentified Organism	No
003	3	3.93	Low	2 on 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Caprellidae, Podoceridae	No	None	No
004	3	IND	Low	2	2	IND	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Shrimp	No
005	3	4.30	Low	2 on 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Shrimp	No
006	3	4.80	Low	2 on 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Shrimp	No
007	3	4.82	Low	2 on 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Shrimp	No
008	3	6.35	Low	2	2 -> 3	3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Hydroids, Nudibranch, Paguroid(s), Shrimp	No
009	3	4.46	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	None	No
010	3	5.73	Low	2 on 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	None	No
011	3	4.15	Low	2 on 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	Silver Hake	Yes	Ampeliscid, Caprellidae, Podoceridae	No	None	No
012	3	4.15	Low	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Paguroid, Shrimp	No
013	3	3.62	Medium	3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Tracks and Trails	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	None	No
014	3	IND	Low	2 on 3	IND	IND	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Sea Star(s)	No
015	3	4.18	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	None	No	Sea Star, Shrimp	No
016	3	IND	Low	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Caprellidae, Podoceridae	No	None	No
017	3	5.38	Low	2 on 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Caprellidae, Podoceridae	No	Shrimp	No
018	3	5.52	Low	2 on 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	None	No

Table 2.2-6 SPI/PV Benthic Results – RWF

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Possible Non-native *Botryllioides* sp.*
019	3	3.21	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Shrimp	No
020	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Caprellidae, Podoceridae	No	None	No
021	3	3.27	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Starfish Bed	None	None	None	Yes	Yes	None	Yes	None	No	Sea Star(s)	No
022	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	None	No	Crab, Sea Star(s), Shrimp	No
023	3	1.92	Low	2 -> 3	2 -> 3	1 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Varies	None	None	None	Yes	Yes	None	Yes	None	No	Sea Star(s)	No
024	3	IND	None	2	IND	IND	3	Patchy Cobbles & Boulders on Sand (1), Sand with Mobile Gravel (2)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Attached Hydroids	Trace (<1%)	None	None	Yes	No	None	No	Podoceridae	Yes	Barnacles, Hydroids	No
025	3	IND	None	2	IND	IND	3	Patchy Cobbles & Boulders on Sand (3)	Soft Sediment Fauna	Attached Fauna	Attached Hydroids	Varies	Sparse (1 to <30%)	None	None	No	Yes	None	No	Caprellidae, Podoceridae	Yes	Barnacles, Colonial Tunicate(s), Crab, Hydroids, Shrimp	Yes
026	3	3.11	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	None	No
027	3	3.90	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Caprellidae, Podoceridae	No	Crab, Nudibranch	No
028	3	4.03	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Mobile Crustaceans on Soft Sediments	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Shrimp	No
029	3	IND	Low	2	2	IND	3	Patchy Cobbles on Sand (1), Sand Sheet (2)	Soft Sediment Fauna	Attached Fauna	Mobile Crustaceans on Soft Sediments	Varies	Trace (<1%)	None	None	No	Yes	None	No	Caprellidae, Podoceridae	No	Crab(s), Hydroids, Shrimp	No
030	3	4.06	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Crab, Shrimp	No
031	3	IND	Low	2	2 -> 3	IND	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Varies	None	None	None	Yes	Yes	None	Yes	None	No	Sea Star(s)	No
032	3	3.23	Low	2	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Sea Star(s), Shrimp	No
033	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	No	None	Yes	Podoceridae	No	Crab, Shrimp, Tunicate(s)	No
034	3	1.75	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Shrimp	No

Table 2.2-6 SPI/PV Benthic Results – RWF

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Possible Non-native *Botrylloides* sp.*
035	3	2.94	Low	2 -> 3	2 -> 3	IND	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Isopod, Shrimp	No
036	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	Hake	Yes	Podoceridae	No	Corymorpha, Shrimp, Tunicates	No
037	3	IND	Low	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Paguroid, Shrimp	No
038	3	2.68	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Shrimp, Tunicates	No
039	3	2.49	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Shrimp	No
040	3	IND	Low	2	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	No	None	Yes	Podoceridae	No	Paguroid, Shrimp	No
041	3	IND	Low	2	2 -> 3	2 -> 3	2	Sand Sheet (2)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Caprellidae, Podoceridae	No	Sea Star, Tunicates	No
042	3	2.29	Low	2	2 -> 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	None	No
043	3	1.13	Medium	2	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Caprellidae, Podoceridae	No	Shrimp	No
044	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Caprellidae, Podoceridae	No	Isopod, Shrimp	No
045	3	2.10	Low	2	2 -> 3	2 -> 3	2	Sand Sheet (2)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	No	None	Yes	Podoceridae	No	None	No
046	3	3.17	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Attached Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	Trace (<1%)	None	None	Yes	Yes	Red Hake	Yes	Ampeliscid, Podoceridae	No	Hydroids, Tunicates	No
047	3	IND	Low	2	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Tunicate Bed	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Tunicates	No
048	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	No	None	Yes	Ampeliscid, Podoceridae	No	None	No
049	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	No	None	Yes	Podoceridae	No	Tunicates	No
050	3	2.28	Low	2 -> 3	2 -> 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Tracks and Trails	None	None	None	Yes	Yes	Silver Hake	Yes	Ampeliscid	No	Nudibranch, Sea Star(s)	No
051	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Tube-Building Fauna	None	None	None	None	No	No	None	Yes	Podoceridae	No	Tunicates	No
052	3	IND	Low	2 -> 3	2 on 3	IND	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	None	No
053	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Small Surface-Burrowing Fauna	Small Tube-Building Fauna	None	None	None	Yes	No	None	Yes	Podoceridae	No	None	No

Table 2.2-6 SPI/PV Benthic Results – RWF

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Possible Non-native *Botryloides* sp.*
054	3	IND	Low	2	2 -> 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Corymorpha, Crab, Paguroid, Shrimp, Tunicates	No
055	3	7.47	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	No	No	None	Yes	Ampeliscid, Podoceridae	No	Shrimp, Tunicates	No
056	3	2.19	Medium	2	2	3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	None	None	Yes	Yes	Hake	Yes	Podoceridae	No	Sea Star(s)	No
057	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Attached Fauna	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	Trace (<1%)	None	None	Yes	No	None	Yes	Podoceridae	Yes	Corymorpha, Gastropod, Hydroids, Shrimp, Tunicates	No
057E1	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Tube-Building Fauna	Tunicate Bed	None	None	None	No	No	None	Yes	Podoceridae	No	Crab, Paguroid, Tunicates	No
057E2	3	IND	Low	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Tube-Building Fauna	Tunicate Bed	None	None	None	No	No	None	Yes	Ampeliscid, Podoceridae	No	Paguroid, Shrimp, Tunicates	No
057W1	3	IND	Low	1	1	1	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Tunicate Bed	None	None	None	No	Yes	None	Yes	Podoceridae	No	Paguroid, Shrimp, Tunicates	No
057W2	3	IND	Low	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Tube-Building Fauna	Tunicate Bed	None	None	None	No	No	None	Yes	Podoceridae	No	Crab, Paguroid, Tunicates	No
058	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	None	Small Tube-Building Fauna	None	None	None	None	No	No	None	Yes	Podoceridae	No	Cerianthid, Gastropod, Paguroid, Tunicates	No
059	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	None	Small Tube-Building Fauna	Larger Tube-Building Fauna	None	None	None	No	No	None	Yes	Podoceridae	No	Paguroid, Sand Dollar	No
060	3	IND	Low	2	2 -> 3	2 -> 3	3	Patchy Pebbles on Sand with Mobile Gravel (2), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Attached Fauna	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	Trace (<1%)	None	None	Yes	Yes	None	Yes	Podoceridae	No	Hydroids, Shrimp	No
061	3	IND	Low	2	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Tunicate Bed	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Crab, Shrimp, Tunicates	No
062	3	2.46	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (1), Sand with Mobile Gravel (2)	Soft Sediment Fauna	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	No	None	Yes	Podoceridae	No	Shrimp, Tunicates	No
063	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	None	Small Tube-Building Fauna	None	None	None	None	No	No	None	Yes	Podoceridae	No	Corymorpha, Gastropod, Sand Dollar, Shrimp, Tunicates	No
064	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	No	No	None	Yes	Podoceridae	No	Gastropod, Paguroid, Shrimp, Tunicate(s)	No
065	3	IND	Low	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Gastropod, Shrimp, Tunicates	No

Table 2.2-6 SPI/PV Benthic Results – RWF

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Possible Non-native *Botrylloides* sp.*
066	3	IND	Low	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	No	None	Yes	Podoceridae	No	Gastropod, Isopod, Shrimp, Tunicates	No
067	3	2.77	Medium	2	2	2 -> 3	3	Sand Sheet (1), Sand with Mobile Gravel (2)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Tunicates	No
068	3	IND	Low	2	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Hydroid, Paguroid, Shrimp, Tunicates	No
069	3	IND	Low	1	2	2 -> 3	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Mobile Crustaceans on Soft Sediments	None	Trace (<1%)	None	None	Yes	No	None	Yes	Podoceridae	No	Barnacle, Hydroid(s), Shrimp, Tunicate(s)	No
070	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (2), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Corymorpha, Crab, Tunicate(s)	No
071	3	IND	Low	2	2 -> 3	IND	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	None	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Gastropod, Shrimp, Unidentified Crustacean	No
072	3	IND	Low	2	2	2	3	Sand with Mobile Gravel (3)	Attached Fauna	None	Mobile Crustaceans on Hard or Mixed Substrates	None	Trace (<1%)	None	None	Yes	No	None	Yes	Podoceridae	No	Paguroid(s)	No
073	3	IND	Low	IND	IND	IND	3	Coarse Pebbles on Sand (1), Continuous Large Pebbles and Cobbles on Sand (2)	Attached Fauna	Soft Sediment Fauna	Attached Hydroids	Barnacles	Dense (70 to < 90%)	None	None	Yes	No	None	No	None	Yes	Barnacle(s), Bryozoan, Colonial Tunicate, Crab(s), Hydroids	Yes
073E1	3	IND	Low	IND	IND	IND	3	Continuous Large Pebbles and Cobbles on Sand (3)	Attached Fauna	Soft Sediment Fauna	Attached Hydroids	Barnacles	Moderate (30 to < 70%)	None	None	Yes	No	None	No	None	Yes	Anemone, Barnacle(s), Bryozoan, Hydroids, Shrimp	No
073E2	3	IND	IND	IND	IND	IND	3	Continuous Large Pebbles and Cobbles on Sand (3)	Attached Fauna	Soft Sediment Fauna	Attached Hydroids	Barnacles	Moderate (30 to < 70%)	None	None	Yes	Yes	None	No	Podoceridae	Yes	Barnacle(s), Cerianthid, Colonial Tunicate, Crab, Hydroids, Nudibranchs, Shrimp	Yes
073W1	3	IND	Low	2 -> 3	2 -> 3	IND	3	Patchy Cobbles on Sand (2), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Varies	Sparse (1 to <30%)	None	None	Yes	Yes	None	Yes	Podoceridae	Yes	Barnacles, Bryozoan, Hydroids	No
073W2	3	IND	Low	2 -> 3	2 -> 3	IND	3	Patchy Cobbles & Boulders on Sand (2), Patchy Cobbles on Sand (1)	Soft Sediment Fauna	Attached Fauna	Attached Hydroids	Barnacles	Sparse (1 to <30%)	None	None	Yes	Yes	Pout	Yes	Podoceridae	Yes	Barnacles, Hydroids, Shrimp	No
074	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Shrimp	No

Table 2.2-6 SPI/PV Benthic Results – RWF

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Possible Non-native *Botrylloides* sp.*
075	3	IND	Low	2	2 -> 3	2 -> 3	3	Continuous Large Cobbles and Boulders on Sand (1), Patchy Cobbles on Sand (1), Sand Sheet (1)	Soft Sediment Fauna	Attached Fauna	Larger Tube-Building Fauna	Varies	Complete (90-100%)	None	None	Yes	Yes	None	Yes	Podoceridae	Yes	Anemone, Barnacles, Crabs, Hydroids, Shrimp, Sponges, Tunicates	No
076	3	IND	IND	IND	IND	IND	3	IND (1), Patchy Cobbles & Boulders on Sand (2)	Attached Fauna	Soft Sediment Fauna	Attached Hydroids	Varies	Moderate (30 to < 70%)	None	None	Yes	No	None	Yes	Podoceridae	Yes	Barnacles, Bryozoan, Colonial Tunicate(s), Hydroids, Shrimp, Tunicates	Yes
077	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Gastropod, Tunicates	No
078	3	IND	Low	2 -> 3	2 -> 3	IND	3	Patchy Pebbles on Sand with Mobile Gravel (2), Sand Sheet (1)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	Trace (<1%)	None	None	Yes	Yes	None	Yes	Podoceridae	No	Barnacles, Hydroids, Tunicates	No
079	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Gastropod, Tunicates	No
080	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	None	No
081	3	IND	Low	IND	IND	IND	3	Patchy Cobbles on Sand (2), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	None	Trace (<1%)	None	None	Yes	Yes	None	Yes	Caprellidae, Podoceridae	Yes	Barnacles, Bryozoan, Hydroids, Shrimp	No
082	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (2), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	None	No
083	3	IND	Low	2 -> 3	IND	IND	3	Patchy Pebbles on Sand with Mobile Gravel (3)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Varies	Sparse (1 to <30%)	None	None	Yes	No	None	No	Podoceridae	Yes	Barnacles, Bryozoan, Hydroids, Paguroid, Shrimp	No
084	3	IND	Low	2 -> 3	2 -> 3	IND	3	Patchy Cobbles & Boulders on Sand (1), Patchy Cobbles on Sand (2)	Soft Sediment Fauna	Attached Fauna	Small Tube-Building Fauna	Barnacles	Moderate (30 to < 70%)	None	None	Yes	Yes	None	Yes	Podoceridae	Yes	Barnacle(s), Bryozoan, Colonial Tunicate(s), Hydroids, Shrimp, Sponge	Yes
085	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Mobile Crustaceans on Soft Sediments	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	None	No
086	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	No	None	Yes	Podoceridae	No	Corymorpha	No

Table 2.2-6 SPI/PV Benthic Results – RWF

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Possible Non-native *Botryloides* sp.*
087	3	3.06	Low	2	2 -> 3	IND	3	Patchy Pebbles on Sand with Mobile Gravel (3)	Attached Fauna	None	Barnacles	None	Trace (<1%)	None	None	Yes	No	Pout, Red Hake	Yes	Podoceridae	No	Barnacles, Hydroids, Paguroid(s), Shrimp	No
088	3	7.00	Low	2 -> 3	2 -> 3	2 on 3	3	Patchy Boulders on Sand (1), Patchy Pebbles on Sand (1), Sand Sheet (1)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Varies	Sparse (1 to <30%)	None	None	Yes	Yes	None	Yes	Podoceridae	Yes	Barnacles, Colonial Tunicate, Gastropod(s), Hydroids, Paguroid, Shrimp	Yes
089	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Mobile Crustaceans on Soft Sediments	Larger Deep-Burrowing Fauna	None	None	None	Yes	No	Fourspot Flounder	No	Podoceridae	No	Paguroid	No
090	3	IND	Low	2 -> 3	2 -> 3	IND	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Podoceridae	Yes	Gastropod, Tunicates	No
091	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Paguroid, Tunicates	No
092	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Corymorpha, Gastropod, Tunicate(s)	No
093	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Corymorpha, Tunicate(s)	No
094	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (2), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Tunicates	No
095	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (1), Sand with Mobile Gravel (2)	Soft Sediment Fauna	Attached Fauna	Small Tube-Building Fauna	Varies	Trace (<1%)	None	None	Yes	Yes	None	Yes	Caprellidae, Podoceridae	No	Barnacles, Paguroid, Shrimp, Tunicates	No
096	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Corymorpha, Tunicate(s)	No
097	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Tunicates	No
098	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Corymorpha, Tunicate(s)	No
099	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Sand Dollar, Shrimp, Tunicates	No
100	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (2), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Tunicates	No
101	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	Inferred Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	None	Yes	Yes	None	Yes	Podoceridae	Yes	Shrimp, Tunicate(s)	No

Table 2.2-6 SPI/PV Benthic Results – RWF

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Possible Non-native *Botrylloides* sp.*
102	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	Hake, Silver Hake	Yes	Ampeliscid, Podoceridae	No	Shrimp	No
103	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (2), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Shrimp, Tunicates	No
104	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	Attached Fauna	Small Tube-Building Fauna	Varies	Trace (<1%)	None	None	Yes	No	None	Yes	Podoceridae	No	Barnacles, Hydroids, Tunicates	No
105	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Cerianthid, Tunicates	No
106	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Caprellidae, Podoceridae	No	None	No
107	3	IND	Low	2	2 -> 3	IND	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Mobile Crustaceans on Soft Sediments	None	None	None	None	Yes	No	None	No	Podoceridae	Yes	Cerianthid, Shrimp	No
108	3	IND	Low	2	2 -> 3	2 -> 3	3	Patchy Cobbles on Sand (1), Sand with Mobile Gravel (2)	Soft Sediment Fauna	Attached Fauna	Larger Tube-Building Fauna	None	Trace (<1%)	None	None	Yes	No	None	Yes	Podoceridae	Yes	Barnacles, Colonial Tunicate, Gastropod	Yes
109	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Tunicates	No
110	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	No	None	Yes	Podoceridae	Yes	Tunicates	No
111	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	None	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Barnacles, Shrimp, Tunicate(s)	No
112	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Varies	None	None	None	Yes	Yes	Hake	Yes	Caprellidae, Podoceridae	Yes	Bryozoan, Shrimp, Tunicate(s)	No
113	3	IND	Low	2	2	2	3	Sand Sheet (2), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Caprellidae, Podoceridae	No	Shrimp, Tunicates	No
114	3	IND	Low	2	2	2	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	No	None	Yes	Podoceridae	No	Gastropod, Shrimp	No
115	3	IND	Low	2	2	2	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	None	None	Yes	No	None	Yes	Podoceridae	No	Tunicates	No
116	3	IND	Low	2	2	2 -> 3	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Hard or Mixed Substrates	Trace (<1%)	None	None	Yes	No	None	Yes	Podoceridae	No	Barnacles, Corymorpha	No
117	3	IND	None	2	2	2	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	No	None	Yes	Podoceridae	No	None	No
118	3	IND	Low	2	2	2	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Varies	None	None	None	Yes	No	None	Yes	Podoceridae	No	Tunicates	No

Table 2.2-6 SPI/PV Benthic Results – RWF

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Possible Non-native *Botrylloides* sp.*
119	3	IND	Low	2	2	2	3	Patchy Pebbles on Sand with Mobile Gravel (1), Sand with Mobile Gravel (2)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	Trace (<1%)	None	None	Yes	Yes	None	Yes	Podoceridae	Yes	Barnacles, Shrimp, Tunicates	No
120	3	IND	Low	2	2	2	3	Sand Sheet (2), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	None	No
121	3	IND	Low	2	2	2	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	Trace (<1%)	None	None	Yes	No	None	Yes	Podoceridae	No	Barnacles, Paguroid, Tunicates	No
122	3	IND	Low	2	2	2	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	Yes	Paguroids, Tunicates	No
123	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	No	None	No	Podoceridae	No	Tunicates	No
124	3	IND	Low	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Corymorpha, Gastropods, Paguroid, Tunicate(s)	No
125	3	IND	Low	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Tunicates	No
126	3	IND	Low	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Varies	None	None	None	Yes	No	None	Yes	Podoceridae	No	Shrimp, Tunicates	No
127	3	IND	None	2	2	2	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	None	None	None	None	Yes	No	None	No	Podoceridae	No	None	No
128	3	IND	Low	2	2	2	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	None	No
129	3	IND	Low	2	2	2	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Small Tube-Building Fauna	Varies	None	None	None	Yes	No	Hake	Yes	Podoceridae	No	None	No
136	3	IND	Low	2	2	2	3	Patchy Pebbles on Sand with Mobile Gravel (3)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Attached Hydroids	Trace (<1%)	None	None	Yes	No	None	Yes	None	No	Barnacles, Hydroids, Shrimp	No
137	3	IND	Low	2	2	2	3	Patchy Pebbles on Sand with Mobile Gravel (3)	Attached Fauna	Soft Sediment Fauna	Attached Hydroids	Barnacles	Trace (<1%)	None	None	No	No	None	Yes	Podoceridae	Yes	Barnacle(s), Hydroids, Shrimp	No
138	3	IND	None	2	IND	IND	3	Continuous Large Cobbles and Boulders on Sand (1), IND (1), Patchy Cobbles &	Attached Fauna	Soft Sediment Fauna	Barnacles	Attached Hydroids	Complete (90-100%)	None	None	No	No	None	Yes	None	No	Anemone, Barnacle(s), Hydroids, Sea Star, Shrimp, Sponges	No

Table 2.2-6 SPI/PV Benthic Results – RWF

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Possible Non-native *Botrylloides* sp.*
								Boulders on Sand (1)															
139	3	IND	Low	2	2	2	3	Patchy Cobbles on Sand (2), Patchy Pebbles on Sand with Mobile Gravel (1)	Soft Sediment Fauna	Attached Fauna	Small Tube-Building Fauna	Barnacles	Trace (<1%)	None	None	Yes	No	None	Yes	None	Yes	Barnacles, Gastropod, Hydroids	No
140	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	No	None	Yes	Ampeliscid, Podoceridae	No	Nudibranch, Tunicates	No
141	3	IND	Low	2	2	2 -> 3	3	Patchy Pebbles on Sand with Mobile Gravel (1), Sand with Mobile Gravel (2)	Soft Sediment Fauna	Attached Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	Trace (<1%)	None	Sea Scallop	Yes	No	None	Yes	Podoceridae	No	Barnacles, Hydroids, Sea Scallop, Shrimp	No
142	3	IND	None	2	2	1 -> 2	3	Patchy Boulders on Sand (1), Patchy Pebbles on Sand with Mobile Gravel (2)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	Sparse (1 to <30%)	None	None	Yes	No	None	Yes	Podoceridae	No	Barnacles, Hydroids, Shrimp, Sponges, Tunicates, Unidentified Organism	No
143	3	IND	Low	2	2	IND	3	Patchy Pebbles on Sand with Mobile Gravel (1), Sand Sheet (2)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	Trace (<1%)	None	None	Yes	Yes	None	Yes	Podoceridae	Yes	Barnacles, Hydroids, Shrimp	No
144	3	IND	None	2	2	2	3	Patchy Pebbles on Sand with Mobile Gravel (3)	Soft Sediment Fauna	Attached Fauna	Larger Tube-Building Fauna	Barnacles	Trace (<1%)	None	None	Yes	No	None	Yes	Podoceridae	Yes	Barnacles, Hydroids	No
201	3	IND	IND	IND	IND	IND	3	Continuous Large Cobbles and Boulders on Sand (1), Patchy Cobbles & Boulders on Sand (2)	Attached Fauna	Soft Sediment Fauna	Barnacles	Attached Hydroids	Complete (90-100%)	None	None	Yes	Yes	None	Yes	None	No	Barnacle(s), Colonial Tunicate, Hydroids, Sea Star, Shrimp	Yes
202	3	IND	None	2	2	2	3	Patchy Pebbles on Sand with Mobile Gravel (1), Sand with Mobile Gravel (2)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	None	Trace (<1%)	None	None	Yes	No	None	Yes	Podoceridae	No	Barnacles	No
203	3	IND	Low	2	2	2	3	Patchy Cobbles on Sand (3)	Soft Sediment Fauna	Attached Fauna	Larger Tube-Building Fauna	Barnacles	Sparse (1 to <30%)	None	None	Yes	Yes	None	Yes	Podoceridae	Yes	Barnacles, Paguroid, Shrimp	No

Table 2.2-6 SPI/PV Benthic Results – RWF

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Possible Non-native *Botrylloides* sp.*
204	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	None	No
205	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Shrimp, Tunicates	No
206	3	IND	Low	2	2	2 -> 3	3	Patchy Boulders on Sand (1), Sand with Mobile Gravel (2)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Attached Hydroids	Sparse (1 to <30%)	None	None	Yes	Yes	None	Yes	Podoceridae	Yes	Barnacles, Colonial Tunicate(s), Hydroids	Yes
207	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	Trace (<1%)	None	None	Yes	Yes	None	Yes	Podoceridae	Yes	Barnacles, Tunicates	No
208	3	IND	Low	2	2	IND	3	Patchy Boulders on Sand (2), Patchy Cobbles on Sand (1)	Soft Sediment Fauna	Attached Fauna	Larger Tube-Building Fauna	Varies	Moderate (30 to < 70%)	Non-Reef Building Hard Coral	None	Yes	No	None	Yes	Podoceridae	Yes	Barnacles, Hydroids, Northern Star Coral, Polymastia Sponge, Sea Star(s), Tunicates	No
209	3	IND	Low	2	2	2	3	Patchy Cobbles on Sand (2), Patchy Pebbles on Sand (1)	Soft Sediment Fauna	Attached Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	Sparse (1 to <30%)	None	None	Yes	No	None	Yes	Podoceridae	Yes	Barnacles, Shrimp	No
210	3	IND	Low	2	2	2	3	Patchy Cobbles on Sand (1), Sand Sheet (1), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Attached Fauna	Mobile Crustaceans on Soft Sediments	Varies	Trace (<1%)	None	None	Yes	No	Silver Hake	Yes	Podoceridae	Yes	Barnacles, Gastropods, Paguroid	No
211	3	IND	Low	2	2	2	3	Patchy Pebbles on Sand with Mobile Gravel (2), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Varies	Trace (<1%)	None	None	Yes	No	None	Yes	Podoceridae	Yes	Barnacles, Hydroids, Paguroid	No
212	3	IND	Low	2	2	2	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	Hake	Yes	Podoceridae	Yes	Paguroid	No
213	3	IND	Low	2	2	IND	3	Patchy Cobbles on Sand (2), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Varies	Sparse (1 to <30%)	None	None	Yes	Yes	None	Yes	Podoceridae	Yes	Barnacles	No
214	3	IND	None	IND	IND	IND	3	Continuous Large Cobbles and Boulders on Sand (1), Patchy Pebbles on Sand with Mobile Gravel	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Attached Hydroids	Dense (70 to < 90%)	None	None	Yes	No	None	Yes	Podoceridae	No	Barnacles, Colonial Tunicate, Crabs, Hydroids, Shrimp	Yes

Table 2.2-6 SPI/PV Benthic Results – RWF

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Possible Non-native *Botrylloides* sp.*
								(1), Sand with Mobile Gravel (1)															
215	3	IND	Low	2	IND	IND	3	Patchy Cobbles & Boulders on Sand (2), Patchy Pebbles on Sand with Mobile Gravel (1)	Attached Fauna	Soft Sediment Fauna	Attached Hydroids	Barnacles	Moderate (30 to < 70%)	Non-Reef Building Hard Coral	None	Yes	Yes	None	Yes	Podoceridae	No	Anemone, Barnacles, Colonial Tunicate, Hydroids, Moon Snail, Northern Star Coral, Paguroid, Polymastia Sponge, Sea Star	Yes
216	3	IND	Low	1	2	IND	3	Patchy Boulders on Sand (2), Patchy Pebbles on Sand (1)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Varies	Sparse (1 to <30%)	None	None	Yes	No	None	Yes	None	Yes	Barnacles, Colonial Tunicate(s), Gastropods, Hydroids, Sea Star, Sponges	Yes
217	3	IND	Low	2	IND	IND	3	Patchy Cobbles & Boulders on Sand (1), Patchy Pebbles on Sand (1), Patchy Pebbles on Sand with Mobile Gravel (1)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Varies	Moderate (30 to < 70%)	None	None	Yes	No	None	Yes	Podoceridae	Yes	Anemone, Barnacles, Colonial Tunicate, Crab(s), Hydroids, Polymastia Sponge, Sea Star, Sponges	Yes
218	3	IND	Low	IND	IND	IND	3	Patchy Cobbles & Boulders on Sand (3)	Attached Fauna	Soft Sediment Fauna	Attached Tube-Building Fauna	Barnacles	Moderate (30 to < 70%)	None	None	Yes	Yes	None	Yes	None	Yes	Barnacles, Hydroids, Polymastia Sponge, Shrimp, Sponges	No
218E1	3	IND	Low	2	IND	IND	3	Patchy Cobbles & Boulders on Sand (3)	Soft Sediment Fauna	Attached Fauna	Small Tube-Building Fauna	Attached Tube-Building Fauna	Complete (90-100%)	None	None	Yes	No	None	Yes	None	Yes	Barnacles, Colonial Tunicate, Gastropod, Hydroids, Polymastia Sponge, Sea Star, Sponges, Unidentified Organism	Yes
218E2	3	IND	Low	2	2	2	3	Patchy Pebbles on Sand with Mobile Gravel (3)	Soft Sediment Fauna	Attached Fauna	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	Trace (<1%)	None	None	Yes	No	None	Yes	Caprellidae, Podoceridae	Yes	Barnacles, Hydroids	No
218W1	3	IND	Low	2	IND	IND	3	Patchy Boulders on Sand (1), Patchy Cobbles & Boulders on Sand (1), Patchy Cobbles on Sand (1)	Attached Fauna	Soft Sediment Fauna	Attached Tube-Building Fauna	Varies	Moderate (30 to < 70%)	None	None	Yes	Yes	None	Yes	None	Yes	Barnacles, Colonial Tunicate, Polymastia Sponge, Sea Star(s), Shrimp, Sponges	Yes

Table 2.2-6 SPI/PV Benthic Results – RWF

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Possible Non-native *Botryllioides* sp.*
218W2	3	IND	Low	2	2	2	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Small Tube-Building Fauna	None	None	None	None	Yes	No	None	Yes	Podoceridae	No	Nudibranchs, Tunicates	No
219	3	IND	Low	2	IND	IND	3	IND (1), Patchy Cobbles & Boulders on Sand (2)	Attached Fauna	Soft Sediment Fauna	Attached Tube-Building Fauna	Varies	Dense (70 to < 90%)	Non-Reef Building Hard Coral	None	Yes	Yes	None	Yes	None	Yes	Barnacles(s), Hydroids, Northern Star Coral, Shrimp, Sponges	No
220	3	IND	Low	IND	IND	IND	3	Patchy Boulders on Sand (1), Patchy Cobbles & Boulders on Sand (1), Patchy Cobbles on Sand (1)	Attached Fauna	Soft Sediment Fauna	Diverse Colonizers	Larger Deep-Burrowing Fauna	Dense (70 to < 90%)	None	None	Yes	Yes	None	Yes	Podoceridae	No	Barnacle(s), Colonial Tunicate, Hydroids, Sea Star, Shrimp, Sponges	Yes
220E1	3	IND	Low	IND	IND	IND	3	Patchy Cobbles & Boulders on Sand (3)	Attached Fauna	Soft Sediment Fauna	Diverse Colonizers	Larger Deep-Burrowing Fauna	Dense (70 to < 90%)	None	None	Yes	No	None	Yes	None	Yes	Barnacle(s), Crab, Hydroids, Shrimp, Sponges	No
220E2	3	IND	Low	2	IND	IND	3	Patchy Cobbles & Boulders on Sand (2), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Attached Fauna	Small Tube-Building Fauna	Varies	Moderate (30 to < 70%)	None	None	Yes	No	None	Yes	Podoceridae	No	Barnacles, Colonial Tunicate, Hydroids, Shrimp, Sponges, Tunicate	Yes
220W1	3	IND	Low	2	2	IND	3	Patchy Boulders on Sand (1), Patchy Cobbles on Sand (1), Patchy Pebbles on Sand with Mobile Gravel (1)	Soft Sediment Fauna	Attached Fauna	Small Tube-Building Fauna	Varies	Sparse (1 to <30%)	None	None	Yes	Yes	None	Yes	Podoceridae	No	Barnacles, Hydroids, Paguroid(s)	No
220W2	2	IND	IND	2	IND	-	3	Patchy Cobbles & Boulders on Sand (3)	Attached Fauna	Soft Sediment Fauna	Diverse Colonizers	Larger Deep-Burrowing Fauna	Moderate (30 to < 70%)	None	None	Yes	Yes	None	Yes	Podoceridae	Yes	Barnacles, Colonial Tunicate, Hydroids, Sponges, Tunicates	Yes
221	3	IND	Low	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	None	None	Yes	No	None	Yes	Podoceridae	No	None	No
222	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	None	Small Tube-Building Fauna	None	None	None	None	Yes	No	None	Yes	Podoceridae	No	Shrimp, Tunicates	No
223	3	3.47	Low	2 -> 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid	No	None	No
224	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	None	No

Table 2.2-6 SPI/PV Benthic Results – RWF

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Possible Non-native *Botrylloides* sp.*
225	3	3.24	Low	2 -> 3	2 -> 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Shrimp	No
226	3	4.32	Low	2 on 3	2 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Shrimp	No
227	3	1.73	Medium	1 on 3	1 on 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Tracks and Trails	None	None	None	Yes	Yes	Silver Hake	Yes	Podoceridae	No	Sea Star(s)	No
228	3	2.77	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Paguroids, Sea Star, Shrimp	No
229	3	2.54	Low	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Shrimp	No
230	3	3.16	Medium	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	Sea Scallop	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Sea Scallop, Shrimp	No
231	3	3.21	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	Red Hake	Yes	Ampeliscid, Podoceridae	No	Crab, Sea Star, Shrimp	No
232	3	IND	Low	2	2	IND	3	Continuous Large Pebbles and Cobbles on Sand (1), Patchy Pebbles on Sand with Mobile Gravel (2)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Varies	Moderate (30 to < 70%)	None	Sea Scallop	Yes	No	None	Yes	Podoceridae	Yes	Barnacles, Hydroids, Scallop, Sea Star	No
233	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Varies	None	None	None	Yes	No	None	Yes	Podoceridae	No	Jonah Crab, Shrimp	No
234	3	4.03	Medium	2	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Shrimp	No
235	3	IND	Low	2	2	2	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	None	None	None	None	Yes	No	None	Yes	Podoceridae	No	Sea Star(s)	No
236	3	1.59	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Tracks and Trails	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Paguroid, Shrimp	No
237	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	No	None	Yes	Podoceridae	Yes	Shrimp, Tunicate(s)	No
238	3	3.00	Low	2	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Shrimp	No
239	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Varies	Sparse (1 to <30%)	None	None	Yes	Yes	None	Yes	Podoceridae	No	Hydroids, Shrimp, Tunicates	No
240	3	2.33	Low	2	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	No	None	Yes	Podoceridae	No	Shrimp, Tunicates	No
241	3	IND	Low	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	No	None	Yes	Podoceridae	No	Jonah Crab, Tunicates	No

Table 2.2-6 SPI/PV Benthic Results – RWF

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Possible Non-native *Botrylloides* sp.*
242	3	IND	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Paguroid, Shrimp, Tunicates, Unidentified Organism	No
243	3	2.06	High	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	No	None	Yes	Podoceridae	No	Tunicates	No
244	3	2.29	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	No	None	Yes	Ampeliscid, Podoceridae	No	Tunicates	No
245	3	1.87	Low	2	2	2	3	Patchy Cobbles on Sand (1), Sand Sheet (1), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	Trace (<1%)	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Barnacle(s), Shrimp, Tunicates	No
246	3	IND	Low	2	2	2	2	Sand Sheet (2)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	No	None	Yes	Ampeliscid, Caprellidae, Podoceridae	No	Tunicates	No
247	3	IND	Low	2	2	2	3	Patchy Pebbles on Sand with Mobile Gravel (2), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Attached Fauna	Small Tube-Building Fauna	None	Trace (<1%)	None	None	Yes	Yes	None	Yes	Podoceridae	Yes	Barnacles, Hydroids, Shrimp	No
248	3	IND	Low	2	2	IND	3	Patchy Pebbles on Sand with Mobile Gravel (1), Sand with Mobile Gravel (2)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	None	Trace (<1%)	None	None	Yes	No	None	Yes	Podoceridae	No	Barnacles, Hydroids, Paguroid(s)	No
249	3	IND	IND	IND	IND	IND	3	Continuous Large Cobbles and Boulders on Sand (3)	Attached Fauna	None	Diverse Colonizers	Attached Hydroids	Dense (70 to < 90%)	Non-Reef Building Hard Coral	None	No	No	Red Hake	Yes	None	No	Barnacle(s), Colonial Tunicate, Hydroids, Northern Star Coral, Sea Star(s)	Yes
250	3	8.08	Low	2	2	2	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Paguroid, Shrimp, Tunicate(s)	No
251	3	IND	Low	2	2	2 -> 3	3	Sand Sheet (1), Sand with Mobile Gravel (2)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Shrimp, Tunicate(s)	No
252	3	IND	Low	2	2	2	3	Patchy Cobbles on Sand (2), Patchy Pebbles on Sand (1)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	Varies	Sparse (1 to <30%)	None	None	Yes	Yes	None	Yes	Podoceridae	Yes	Barnacles, Colonial Tunicate, Hydroids, Shrimp	Yes
253	3	IND	Low	2	2	2	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Moon Snail, Tunicates	No
254	3	IND	Low	2	2	2	3	Sand Sheet (1), Sand with	Soft Sediment Fauna	Attached Fauna	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	Trace (<1%)	None	None	Yes	No	None	Yes	Podoceridae	No	Barnacles, Shrimp, Tunicate(s)	No

Table 2.2-6 SPI/PV Benthic Results – RWF

Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Possible Non-native *Botryloides* sp.*
								Mobile Gravel (2)															
255	3	IND	Low	2	2	2 -> 3	3	Sand Sheet (1), Sand with Mobile Gravel (2)	Soft Sediment Fauna	Inferred Fauna	Mobile Crustaceans on Soft Sediments	Tracks and Trails	None	None	None	Yes	Yes	None	Yes	Podoceridae	Yes	Tunicates	No
256	3	IND	Low	2	2	2	3	Patchy Pebbles on Sand with Mobile Gravel (2), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Attached Fauna	Larger Deep-Burrowing Fauna	None	Trace (<1%)	None	None	Yes	Yes	None	Yes	Podoceridae	No	Barnacles, Hydroids	No
257	3	IND	Low	1	1	2	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	No	None	Yes	Podoceridae	No	Shrimp	No
258	3	IND	Low	2	2	2	3	Patchy Pebbles on Sand with Mobile Gravel (2), Sand with Mobile Gravel (1)	Soft Sediment Fauna	Attached Fauna	Larger Tube-Building Fauna	Small Tube-Building Fauna	Trace (<1%)	None	Sea Scallop	Yes	Yes	None	Yes	Caprellidae, Podoceridae	Yes	Barnacles, Sea Scallop, Shrimp	No
259	3	IND	Low	2	2	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Paguroid, Tunicates	No
260	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	No	Hake	Yes	Podoceridae	No	Tunicates	No
261	3	IND	Low	2	2	2 -> 3	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	None	Larger Deep-Burrowing Fauna	None	None	None	None	Yes	No	None	No	Podoceridae	No	Tunicates	No
262	3	IND	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Shrimp, Tunicates	No
n = 216																							
Max		**8.1**																					
Min		**1.1**																					
Mean		**3.6**																					
Standard Deviation		**1.5**																					
n = 291																							
Max		**8.1**																					
Min		**0.0**																					
Mean		**3.0**																					
Standard Deviation		**1.5**																					

IND=Indeterminate

*Variable determined from combined SPI and PV analysis

Table 2.2-7. Summary of Sediment Profile and Plan View Image Analysis G&G Results at the Reference Area

Table 2.2-7 SPI/PV G&G Results – Reference														
Station ID	**Water Depth (m)**	**SPI Replicate (n)**	**SPI Sediment Type (# of reps)**	**Mean Prism Penetration Depth (cm)**	**Mean Boundary Roughness (cm)**	**PV Replicate (n)**	**Macrohabitat Type (# of reps)**	**CMECS Substrate Group**	**CMECS Substrate Subgroup**	**Max Gravel Measurement (mm)**	**Boulder Presence**	**Bedforms (# of reps)**	**Mean Bedform Wavelength (cm)**	**Biological Debris**
501	33.6	3	Medium sand (3)	5.8	1.6	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	None
502	33.3	3	Medium sand (3)	3.6	1.0	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment(s), Shell Hash
503	35.1	3	Coarse sand (1), Fine sand over very fine sand (1), Medium sand over finer sediment (1)	8.8	1.4	3	Sand with Mobile Gravel (3)	Slightly Gravelly	Slightly Gravelly Sand	10.10	No	None	-	Large Shell Fragment(s), Small Shell Fragment(s)
504	34.4	3	Fine sand (3)	6.3	0.3	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
505	33.7	3	Fine sand (2), Fine sand over very fine sand (1)	5.3	2.4	3	Sand Sheet (3)	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment(s)
n = 5														
Max	**35.1**			**8.8**	**2.4**					**10.1**				
Min	**33.3**			**3.6**	**0.3**					**10.1**				
Mean	**34.0**			**6.0**	**1.3**					**10.1**				
Standard Deviation	**0.7**			**1.9**	**0.8**									
n = 291														
Max	**46.1**			**18.9**	**4.1**					**735.4**			**90.1**	
Min	**5.2**			**0.0**	**0.3**					**2.1**			**7.6**	
Mean	**34.5**			**6.2**	**1.4**					**63.5**			**56.3**	
Standard Deviation	**6.4**			**3.7**	**0.7**					**129.1**			**17.3**	

IND=Indeterminate
*Variable determined from combined SPI and PV analysis

Table 2.2-8. Summary of Sediment Profile and Plan View Image Analysis Benthic Results at the Reference Area

Table 2.2-8 SPI/PV Benthic Results – Reference																							
Station ID	SPI Replicate (n)	Mean aRPD Depth (cm)	Sediment Oxygen Demand Level	Successional Stage (by replicate)			PV Replicate (n)	Macrohabitat Type (# of reps)	CMECS Biotic Subclass	CMECS Co-occurring Biotic Subclasses	CMECS Biotic Group	CMECS Co-occurring Biotic Group	Maximum Attached Fauna Percent Cover	Sensitive Taxa Type*	Species of Concern*	Burrow Presence	Tracks Presence	Fish Presence/Type	Presence of Tubes*	Amphipod Presence/Type*	Sea Pen Presence*	Other Epifauna Present*	Possible Non-native Botrylloides sp.*
501	3	IND	Low	2	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Shrimp, Tunicates	No
502	3	IND	Low	2 -> 3	2 -> 3	IND	3	Sand Sheet (3)	Soft Sediment Fauna	Attached Fauna	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	Trace (<1%)	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	Barnacles, Hydroids, Paguroid, Shrimp, Tunicates	No
503	3	3.51	Medium	2 -> 3	2 -> 3	IND	3	Sand with Mobile Gravel (3)	Soft Sediment Fauna	Inferred Fauna	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	None	None	Yes	Yes	None	Yes	Podoceridae	No	Paguroid(s)	No
504	3	2.49	Low	2 -> 3	2 -> 3	2 -> 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	None	No
505	3	3.39	Low	2 -> 3	2 -> 3	2 on 3	3	Sand Sheet (3)	Soft Sediment Fauna	Inferred Fauna	Larger Tube-Building Fauna	Varies	None	None	None	Yes	Yes	None	Yes	Ampeliscid, Podoceridae	No	None	No
n = 5																							
Max		**3.5**																					
Min		**2.5**																					
Mean		**3.1**																					
Standard Deviation		**0.6**																					
n = 291																							
Max		**8.1**																					
Min		**0.0**																					
Mean		**3.0**																					
Standard Deviation		**1.5**																					

IND=Indeterminate
*Variable determined from combined SPI and PV analysis

Table 2.3-1. Summary of SPI/PV Approaches and Results as they Relate to BOEM Guidelines

Table 2.3-1		
BOEM COP Guidelines	**SPI/PV Survey Approach and Parameter(s)**	**Results summary**
Classification of CMECS sediment type Grain size analysis	PV: CMECS Substrate Group and Subgroup, Gravel measurements SPI: Sediment type (based on Grain size major mode)	• Majority of the surveyed area was Sand (Substrate Group) and Sand or Finer (Substrate Subgroup); • Coarser Substrate Groups/Subgroups were documented in the southwest and center of RWF (e.g. Sandy Gravel, Gravelly Sand, and Slightly Gravelly Sand) and were associated with Pleistocene Moraine Deposits; • Stations with gravel generally had higher heterogeneity both across replicates (intra-station variability) and within a replicate (orientation of sediment grains/poorly sorted sediments); • RWEC-RI was dominated by Sand (Substrate Group) and Sand or Finer (Substrate Subgroup); • Substrate Groups along RWEC-OCS were generally Sand or Slightly Gravelly, three stations adjacent to the RWF lease area were Gravel or Gravel Mixes
Identification of distinct horizons in subsurface sediment*	SPI: Sediment type (based on Grain Size major mode), aRPD	• Poorly sorted sediments (mixed grain sizes with gravel in sediment profiles) in the southwest and central regions of RWF; • Distinct dark layer of reduced silt/clay below a coarser grain size of sand was documented at several stations in the center of RWF
Identification of bedforms Characterization of physical hydrodynamic properties	PV: Bedform type and measurements SPI: Boundary Roughness	• Only bedform observed were ripples; • Ripple observations corresponded with the presence of gravelly mixtures; • Small-scale boundary roughness tended to be higher in southern portion of RWF; • Smaller sand ripples observed at mouth of Narragansett Bay (RWEC-RI).
Identification of rock outcrops and boulders	PV: Boulder presence	• Boulders were documented at 28 stations distributed throughout RWF; • Boulders generally co-located with Pleistocene Moraine Deposits; • Boulder presence documented at one station along the RWEC-OCS, located directly adjacent to RWF
Characterization of benthic habitat attributes	SPI: aRPD, Penetration Depth, Sediment Oxygen Demand and proxies (methane, *Beggiatoa*) PV: Gravel Measurements SPI and PV: Macrohabitat type	• Overwhelmingly Sand Sheet habitat type across surveyed area; • Sand with Mobile Gravel documented along RWEC-OCS and southeast RWF; • Patchy Pebbles on Sand with Mobile Gravel in center and southwest RWF; • Patchy Cobbles and Boulders on Sand in center RWF;

Table 2.3-1		
BOEM COP Guidelines	**SPI/PV Survey Approach and Parameter(s)**	**Results summary**
		• Generally deep or indeterminant aRPD with low sediment oxygen demand; • No methane or *Beggiatoa* documented; • Narragansett Bay stations (portion of RWEC-RI) included Mollusk Bed (or Shells) on Mud with generally higher sediment oxygen demand and more reduced sediments (shallower aRPD).
Classification to CMECS Biotic Component to lowest taxonomic unit practicable	PV: CMECS Dominant and Co-occurring Biotic Subclass and Group	• Survey area overwhelmingly dominated by Soft Sediment Fauna, • Attached Fauna documented at only 25 stations (corresponded with coarser Substrate Groups/Subgroups); • One station composed of Benthic Macroalgae (RWEC-RI, Narragansett Bay); • Co-occurring Biotic Subclass generally Attached Fauna (southern region of RWF) or Inferred Fauna; • Larger Deep-Burrowing and Tube Building Fauna (Biotic Group) dominated the survey area.
Identification of potentially sensitive seafloor habitat	SPI and PV: Sensitive Taxa, Epifauna* PV: CMECS Dominant and Co-occurring Biotic Subclass and Group, Attached Flora/Fauna Percent Cover* SPI and PV: Macrohabitat type	• Non-reef building hard coral (Northern star coral, *Astrangia poculata*) documented at 4 stations in the central east region of RWF.
Characterization of macrofaunal community and any submerged aquatic vegetation (seagrass and macroalgae) Identification of taxa diversity	SPI and PV: Epifauna* SPI: Tubes/Voids, Successional Stage* PV: CMECS Dominant and Co-occurring Biotic Subclass and Group, Attached Flora/Fauna Percent Cover*, Burrows/Tubes/Tracks, Infauna, Flora	• Larger Deep-Burrowing and Tube-Building Fauna most prevalent Biotic Groups; • Majority of surveyed area characterized as advanced successional stage 2->3; • Amphipods widespread across RWF including Podoceridae, Caprellidae, and Ampeliscid; • Sea squirts (*Mogula* sp.) prevalent across soft sediment stations as well as Corymorpha hydroids and burrowing anemones (Cerianthids); • Stations designated as Attached Fauna (Biotic Subclass) tended to have more diverse epifaunal assemblages including bryozoa, sponges, barnacles, colonial tunicates, mobile crustaceans • Macroalgae documented at the inner Narragansett Bay stations; • Seagrass not observed
Identification of non-native taxa	SPI and PV: Non-native Taxa	• No non-native species documented.

Table 2.3-2. Description of Macrohabitat Types at the RWF, RWEC, and Reference Area

Table 2.3-2					
Macrohabitat Type	**Physical Habitat Stability**	**CMECS Benthic Biotic Subclass**	**Predominant CMECS Benthic Biotic Groups**	**Other Benthic Taxa Likely Present**	**Spatial Prevalence in Surveyed Area***
Sand sheet	Mobile	Soft Sediment Fauna	Larger Deep-Burrowing Fauna; Larger Tube-Building Fauna; Small Tube-Building Fauna	Jonah crab (*Cancer borealis*); Horseshoe crab (*Limulus polyphemus*); Ocean quahog (*Arctica islandica*); Sand dollar (*Echinorachnius parma)*; Sea scallop (*Placopecten magellanicus*); surf clam (*Spisula solidissima*); Channeled whelk (*Busycotypus canaliculatus*); Amphipods (Podoceridae); Sea star species	Very common (192 stations; 66%)

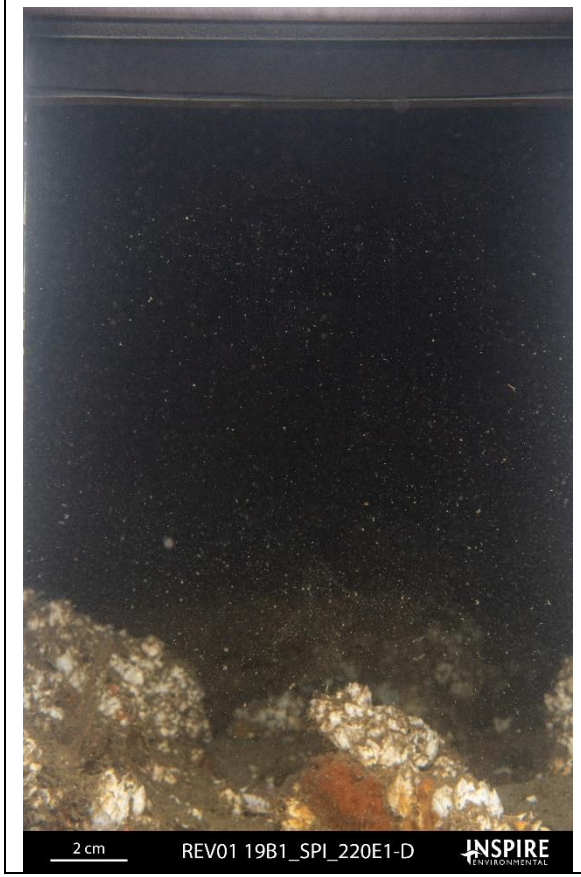
Example SPI and PV Images: Sand Sheets

Table 2.3-2					
Macrohabitat Type	**Physical Habitat Stability**	**CMECS Benthic Biotic Subclass**	**Predominant CMECS Benthic Biotic Groups**	**Other Benthic Taxa Likely Present**	**Spatial Prevalence in Surveyed Area***
Sand with mobile gravel	Mobile	Soft Sediment Fauna	Larger Deep-Burrowing Fauna; Small Tube-Building Fauna; Mobile Crustaceans on Soft Sediments	Sea grape tunicate (*Mogula* sp.); Lobster (*Homarus americanus*); Jonah crab (*Cancer borealis*); Sea scallop (*Placopecten magellanicus*); Hermit crab (*Paguroid* spp.); shrimp; cerianthid; moon snail; Amphipods (Podoceridae)	Common (69 stations; 24%)

Example SPI and PV Images: Sand with Mobile Gravel

Table 2.3-2					
Macrohabitat Type	**Physical Habitat Stability**	**CMECS Benthic Biotic Subclass**	**Predominant CMECS Benthic Biotic Groups**	**Other Benthic Taxa Likely Present**	**Spatial Prevalence in Surveyed Area***
Patchy cobbles & boulders on sand	Mix of mobile & stable	Attached Fauna; Soft Sediment Fauna	Attached Hydroids; Barnacles; Attached Tube-Building Fauna; Diverse Colonizers; Larger Deep-Burrowing Fauna; Small Tube-Building Fauna	Anemones; Lobster (*Homarus americanus*); Jonah crab (*Cancer borealis*); Sea pens (Pennatulidae); Sea scallops (*Placopecten magellanicus*); Shrimp; Squid (Loliginidae); Sponge species (*Polymastia* sp.); shrimp; sea stars; Northern Star coral (*Astrangia poculata*)	Limited (17 stations; 6%)

Example SPI and PV Images: Patchy Cobbles and Boulders on Sand



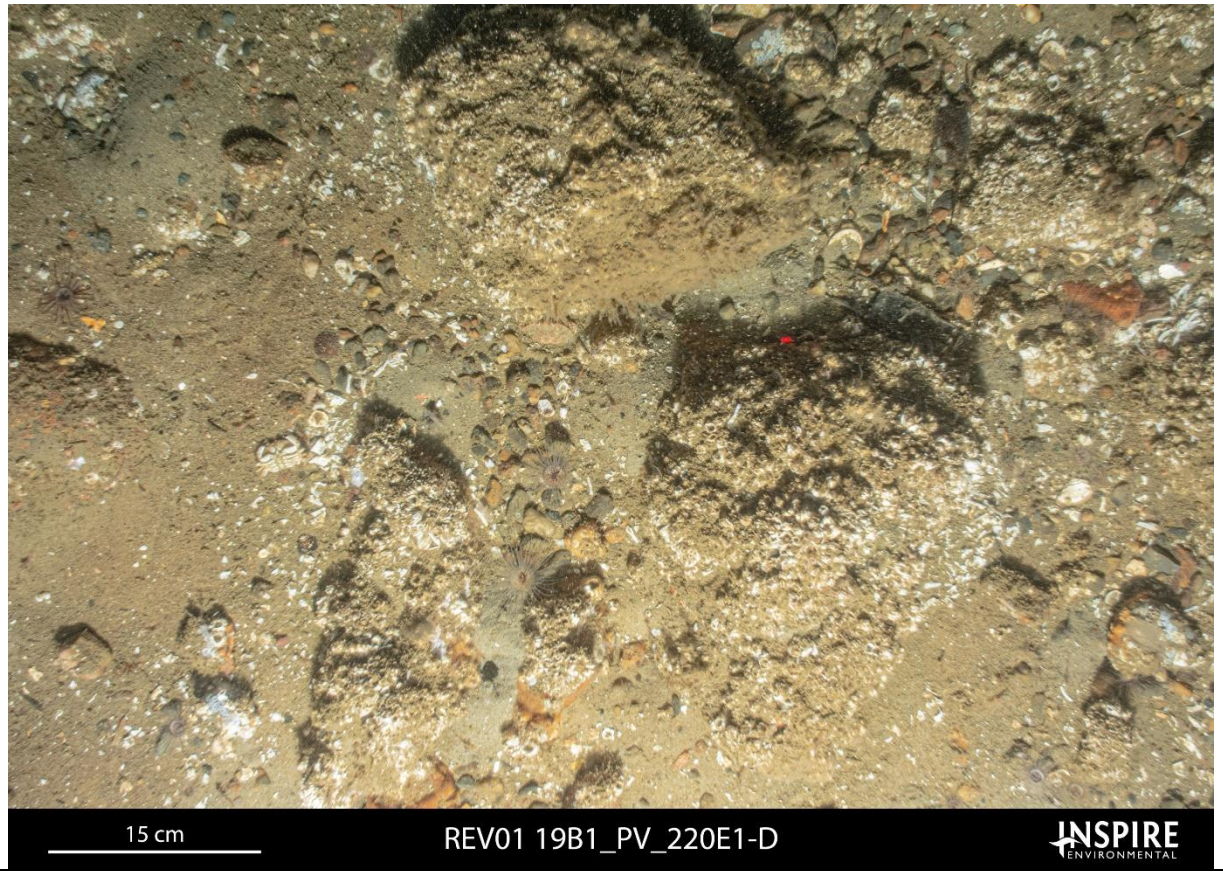


Table 2.3-2

Macrohabitat Type	Physical Habitat Stability	CMECS Benthic Biotic Subclass	Predominant CMECS Benthic Biotic Groups	Other Benthic Taxa Likely Present	Spatial Prevalence in Surveyed Area*
Mollusk Bed (or Shells) on Mud	Mix of mobile & stable	Soft Sediment Fauna	Mussel Bed; Small Tube-Building Fauna; Sessile Gastropods; Attached Hydroids	Filamentous Macroalgae; *Crepidula* sp.; crab species; sponges (*Cliona celata*); Hermit crabs (*Paguroid* spp.)	Very Limited (5 stations; 2%)

Example SPI and PV Images: Mollusk Bed (or Shells) on Mud

Table 2.3-2

Macrohabitat Type	Physical Habitat Stability	CMECS Benthic Biotic Subclass	Predominant CMECS Benthic Biotic Groups	Other Benthic Taxa Likely Present	Spatial Prevalence in Surveyed Area*
Patchy pebbles on sand with mobile gravel	Mix of mobile & stable	Attached Fauna; Soft Sediment Fauna	Attached Hydroids; Barnacles; Larger Deep-Burrowing Fauna; Larger Tube-Building Fauna; Small Tube-Building Fauna	Anemones; Lobster (*Homarus americanus*); Jonah crab (*Cancer borealis*); Sea pens (Pennatulidae); Sea scallops (*Placopecten magellanicus*); Shrimp; Squid (Loliginidae); Hydroids; Hermit crabs (*Paguroid* spp.); Tunicates (*Mogula* sp.); barnacles; amphipods; bryozoa	Limited (24 stations; 7%)

Example SPI and PV Images: Patchy Pebbles on Sand with Mobile Gravel

*Station counts include all stations that had at least one replicate classified as the specific habitat type.

3.0 ENVIRONMENTAL CONSEQUENCES AND PROTECTION MEASURES

3.1 Impact Assessment

Potential impacts are characterized as direct or indirect and whether they result from construction, operations and maintenance (O&M), and/or decommissioning of the Project. Anticipated impacts are characterized as short-term or long-term. Consistent with NEPA (40 C.F.R. § 1508.8.), evaluations in this COP consider both detrimental (or negative) and beneficial impacts of the Project.

- *Direct or Indirect*: Direct effects are those occurring at the same place and time as the initial cause or action. Indirect effects are those that occur later in time or are spatially removed from the activity.
- *Short-term or Long-term Impacts:* Short- or long-term impacts do not refer to any defined period. In general, short-term impacts are those that occur only for a limited period or only during the time required for construction activities. Impacts that are short-lived, such as noise from routine maintenance work during operations, may also be short-term if the activity is short in duration and the impact is restricted to a short, defined period. Long-term impacts are those that are likely to occur on a recurring or permanent basis or impacts from which a resource does not recover quickly. In general, direct impacts associated with construction and decommissioning are considered short-term because they will occur within the approximate 1-year construction phase. Indirect impacts are determined to be either short-term or long-term depending on if resource recovery may take several years. Impacts associated with O&M are considered long-term because they occur over the life of the Project (i.e., 25 years per the Lease but could be extended up to 35 years [see Section 3.5 of the COP]).
- *Proposed Environmental Protection Measures:* If measures are proposed to avoid or minimize potential impacts, the impact evaluation included consideration of these environmental protection measures.

Different impact-producing factors (IPFs) may result in varying levels of impact on benthic resources and shellfish. IPFs that could impact benthic resources and shellfish include seafloor disturbance, habitat alteration, sediment suspension and deposition, noise, discharges and releases, and trash and debris.

The analysis of impacts is discussed separately for the RWF and RWEC in the following sections. The IPFs are further subdivided into IPFs during the construction and decommissioning phases of the Project and the O&M phase of the Project. The construction and decommissioning phases are grouped as activities and equipment usage are similar between these two phases.

3.1.1 Revolution Wind Farm

IPFs resulting in potential impacts on benthic resources and shellfish in the RWF area are described in Table 3.1-1 for the construction and decommissioning phases and in Table 3.1-2 for the O&M phase. At the end of the Project's operational life, the Project will be decommissioned in accordance with a detailed decommissioning plan to be developed in compliance with applicable laws, regulations, and BMPs at that time. All of these activities are anticipated to be similar to or less than those described for construction, unless otherwise noted.

Table 3.1-1. IPFs and Potential Impact Characterization for Benthic Resources and Shellfish within the RWF during Construction and Decommissioning

Table 3.1-1: RWF, Construction and Decommissioning				
IPF	**Project Activity**	**Impact Characterization for Benthic Resources and Shellfish**		**Discussion**
		Sessile Species and Life Stages [a]	**Mobile Species and Life Stages**	
Seafloor Disturbance	Seafloor preparation	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Direct impacts on benthic resources and shellfish from seafloor preparation will primarily affect species that prefer the types of habitats that will be disturbed. These activities could cause injury or mortality to benthic species and affect their habitats. Impacts are expected to be short-term as the direct effects will cease after seafloor preparation is completed in a given area, and impacts will disturb a small portion of similar available habitat in the area. Mobile species may temporarily vacate the area of disturbance. Decommissioning activities are expected to cause similar impacts as construction, but these impacts would be shorter in duration.
	In-situ MEC/UXO disposal	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Direct impacts on benthic resources and shellfish from in-situ munitions and explosives of concern/unexploded explosive ordnance (MEC/UXO) disposal will primarily affect benthic/demersal species. In-situ MEC/UXO disposal could cause injury or mortality or behavioral responses and affect their habitats. Impacts are expected to be short-term as the direct effects will cease after disposal is completed in a given area, and impacts will disturb a small portion of similar available habitat in the area. Mobile species may temporarily vacate the area of disturbance.
	Impact pile driving and/or vibratory pile driving/foundation installation	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Direct impacts on benthic resources and shellfish associated with seafloor disturbance from impact pile driving and/or vibratory pile driving and installation of the foundations (WTG and OSS) and scour protection (if necessary) are expected to result in similar direct effects as seafloor preparation. Impact pile driving and/or vibratory pile driving and foundation installation or removal of the foundations during decommissioning could crush and/or displace benthic species, particularly sessile species and eggs and larvae. Long-term impacts on benthic resources and shellfish associated with the presence of the foundations and scour protection are discussed in the O&M table for the RWF (Table 3.1-2).
	RWF IAC and OSS-Link Cable installation	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Direct impacts on benthic resources and shellfish associated with the IAC and OSS-Link Cable installation are expected to result in similar impacts as those discussed for seafloor preparation, as the IAC will be installed in the same area that was disturbed during seafloor preparation. Decommissioning activities are expected to cause similar impacts as construction, but these impacts would be shorter in duration. Sessile and slow-moving benthic species, including infaunal species that cannot get out of the way of the cable installation equipment, may be subject to mortality and injury. Because of the slow speed of the installation equipment and limited size of the impact area, it is expected that most mobile benthic species will be able to move out of the way and not be subject to mortality, but may still experience *direct, short-term impacts*. Sessile species and species with limited mobility may be subject to mortality or injury if they are present within the impact area during construction.
	Vessel anchoring (including spuds)	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Direct impacts on benthic resources and shellfish associated with vessel anchoring (including spuds) are similar to those discussed in seafloor preparation. *Direct, short-term impacts*, including mortality or injury of slow-moving or sessile species within the impact areas of the spuds, anchors, anchor chain sweep, may occur. The extent of the impacts will vary, depending on the vessel type, number of vessels, and duration onsite, but would be smaller in spatial extent than other seafloor-disturbing construction/decommissioning activities.

Table 3.1-1: RWF, Construction and Decommissioning				
IPF	**Project Activity**	**Impact Characterization for Benthic Resources and Shellfish**		**Discussion**
		Sessile Species and Life Stages [a]	**Mobile Species and Life Stages**	
Habitat Alteration	In-situ MEC/UXO disposal	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Direct impacts to habitat alteration on benthic resources and shellfish from in-situ MEC/UXO disposal will primarily affect species that prefer the types of habitats that will be disturbed. In-situ MEC/UXO disposal could affect habitats as identified MEC/UXO that cannot be neutralize may need to be detonated in place. Impacts are expected to be short-term as the direct effects will cease after disposal is completed in a given area, and impacts will disturb a small portion of similar available habitat in the area.
	Seafloor preparation Impact pile driving and/or vibratory pile driving/foundation installation RWF IAC and OSS-Link Cable installation Vessel anchoring (including spuds)	***Direct, long-term***	***Direct, long-term*** ***Indirect, long-term***	Direct and Indirect Impacts: In areas of sediment disturbance and/or areas with increased sedimentation, benthic habitat recovery and benthic infaunal and epifaunal species abundances may take up to 1 to 3 years to recover to pre-impact levels, based on the results of a number of studies on benthic recovery (e.g., AKRF, Inc. et al., 2012; Germano et al., 1994; Hirsch et al., 1978; Kenny and Rees, 1994). Recolonization rates of benthic habitats are driven by the benthic communities inhabiting the area surrounding the affected region. Sand sheet and mobile sand with gravel habitats as found within and near the RWF are often more dynamic in nature; therefore, they are quicker to recover than more stable environments, such as fine-grained (e.g., silt) habitats and rocky reefs (Dernie et al., 2003). Species found in these more dynamic areas are often adapted to deal with more dynamic habitats and handle increases in sedimentation associated with wind and waves. These communities are expected to quickly recolonize a disturbed area, while communities not well adapted to frequent disturbance (e.g., cobble and boulder habitats) may take upwards of a year to begin recolonization. Regardless, the time needed for benthic recovery would result in a *direct, long-term impact* on both mobile and sessile species and life stages. Mobile species may also be indirectly affected by the temporary reduction of benthic forage species, but these impacts are expected to be minimal given the availability of similar habitats in the area. During decommissioning, foundations and other facilities will be removed to a depth of 15 ft (4.6 m) below the mudline, unless otherwise authorized by BOEM (30 CFR § 585.910(a)). Decommissioning would result in the reversal of beneficial effects for species and life stages that inhabited the structures during the life of the Project. Over time, the disturbed area is expected to revert to pre-construction conditions, which would result in a beneficial impact for species and life stages that inhabit soft bottom habitats. Overall, habitat alteration from decommissioning is expected to cause minimal impacts because similar soft and hard bottom habitats are already present in and around the RWF, and the conversion of a relatively small area of habitat is unlikely to result in substantial effects, as any effect observed will be limited to the immediate vicinity of the individual structures.
Sediment Suspension and Deposition	Seafloor preparation In-situ MEC/UXO disposal Impact pile driving and/or vibratory pile driving/foundation installation RWF IAC and OSS-Link Cable	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Seafloor-disturbing activities will result in temporary increases in sediment suspension and deposition. Sediment transport modeling was performed using RPS' Suspended Sediment Fate (SSFATE) model, which is a three-dimensional model developed jointly with the USACE and the Environmental Research Development Center. SSFATE is a well-known model that has been successfully applied in projects around the globe to simulate the sediment transport from dredging, cable and pipeline burial operations, sediment dumping, dewatering operations, and other sediment-disturbing activities. SSFATE computes TSS concentrations released into the water column and predicts the transport, dispersion, and settling of the suspended sediment. RPS also performed hydrodynamic modeling using their three-dimensional HYDROMAP modeling system to simulate water levels, circulation patterns, and water volume flux through the study area and to provide hydrodynamic input (spatially and temporally varying currents) for input into the

Table 3.1-1: RWF, Construction and Decommissioning				
IPF	**Project Activity**	**Impact Characterization for Benthic Resources and Shellfish**		**Discussion**
		Sessile Species and Life Stages [a]	**Mobile Species and Life Stages**	
	installation Vessel anchoring (including spuds)			sediment transport model. The models, inputs, and results are described in detail in the Hydrodynamic and Sediment Transport Modeling Report (RPS, 2020). Several model simulations were run to evaluate the concentrations of suspended sediments, spatial extent and duration of sediment plumes, and the seafloor deposition resulting from cable burial activities. The grain size distributions used for modeling were based on samples collected during field studies performed for the project (Fugro, 2019), which indicate the sediments are predominately coarse grained in the RWF. For the RWF IAC, a representative segment of 7,392 ft (2,253 m) of installation was simulated. The modeling results indicate that sediment plumes with TSS concentrations exceeding the ambient conditions by 100 mg/L could extend up to 853 feet (260 m) from the cable centerline. The plume is expected to be mostly contained within the bottom of the water column. The model estimated that the elevated TSS concentrations would be of short duration and expected to return to ambient conditions in less than 4.8 hours following the cessation of cable burial activities. The modeling results indicate that sedimentation from IAC burial may exceed 0.4 inch (10 mm) of deposition up to 197 feet (60 m) from the cable and could cover up to 47 acres (190,202 m^2). Sediment suspension and deposition associated with decommissioning activities are expected to be similar, but slightly lower in magnitude. Suspension of sediments in the water column and the redistribution of sediments that fall out of suspension, could result in mortality of benthic organisms through smothering and irritation to respiratory structures; however, mobile benthic organisms are expected to temporarily vacate the area and move out of the way of incoming sediments (MMS, 2007). Most marine species have some degree of tolerance to higher concentrations of suspended sediment because storms, currents, and other natural processes regularly result in increases in turbidity (MMS, 2009). However, eggs and larval organisms are especially susceptible to smothering through sedimentation, and smaller organisms are likely more affected than larger organisms, as larger organisms may be able to extend feeding tubes and respiratory structures above the sediment (U.K. Department for Business Enterprise and Regulatory Reform, 2008). Maurer et al. (1986) found that several species of marine benthic infauna (e.g., the clam *Mercenaria*, the amphipod *Parahaustorius longimerus*, and the polychaetes *Scoloplos fragilis* and *Nereis succinea*) exhibited little to no mortality when buried under up to 3 inches (8 cm) of various types of sediment (from predominantly silt/clay to pure sand). Deposition thicknesses greater than 3 inches resulting from Project installation activities would occur within very limited areas, less than 66 ft (20 m) from the centerline of the IAC. Based on this information, increases in sediment suspension and deposition associated with construction/decommissioning may cause *short-term impacts* on sessile species and species with limited mobility.
Noise	In-situ MEC/UXO disposal	***Direct, short-term***	***Direct, short-term***	Direct Impacts: In-situ MEC/UXO disposal would involve underwater detonations that generate pressure waves with high intensity, impulsive, broadband acoustic levels and rapid pressure changes that could cause disturbance and/or injury to marine fauna. Rapid pressure changes are most impactful to gas-containing organs. Most marine invertebrates lack air cavities in their bodies, and therefore are comparatively less vulnerable to these damaging effects than organisms with gas-containing organs. Young (1991) estimated the distances from a variety of explosives beyond which at least 90 percent of adult benthic marine invertebrates would survive. With the expectation that most detonations near the seafloor are of 60 pounds (lbs) Net Explosive Weight (NEW) or less, it was estimated that most benthic invertebrates beyond approximately 275 ft (83.8 m) from the detonation of a 60 lbs NEW would survive, with the potential mortality zone for some taxa (e.g.,

Table 3.1-1: RWF, Construction and Decommissioning				
IPF	**Project Activity**	**Impact Characterization for Benthic Resources and Shellfish**		**Discussion**
		Sessile Species and Life Stages [a]	**Mobile Species and Life Stages**	
				shrimp, lobsters, worms, amphipods) being much smaller (U.S. Department of the Navy, 2018). Beyond the range of potential mortality and/or injury from rapid pressure changes, marine invertebrates may detect acoustic energy as described above, but the duration of sound from an explosion would be short and any behavioral response or auditory masking would be very brief.
	Impact pile driving and/or vibratory pile driving	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Several sources of noise are expected during construction at the RWF including construction equipment, pile driving, and vessels. The effects of underwater noise on benthic invertebrates are not well understood, and sound exposure level criteria for assessing injury and mortality have not been established (Morley et al., 2014; Hawkins et al., 2015; Murchy et al., 2019). However, because benthic species and shellfish lack gas-filled organs, they are likely to be less sensitive than finfish and marine mammals to sound pressure waves. Few marine invertebrates have the sensory organs to perceive sound pressure, but many can perceive particle motion (Vella et al., 2001), detecting acoustic energy with sensory organs such as mechanoreceptor hairs, chordotonal organs, statocysts and statoliths (Vella et al., 2001; Popper and Hawkins, 2018; Jones et al., 2020). Several studies have documented the responses of different marine invertebrates to natural and anthropogenic vibration, although no exposure criteria have been established (as reviewed in Roberts and Elliot, 2017). Several recent studies have focused on determining threshold detection and responses of cephalopods to underwater noise. Cephalopods, including cuttlefish, octopus, and squid species, are sensitive to particle motion rather than sound pressure (e.g. Packard et al., 1990; Mooney et al., 2010), with the lowest particle motion thresholds reported at 1 to 2 Hz (Packard et al., 1990). Particle motion thresholds were measured for longfin squid between 100 and 300 Hz, with a threshold of 110 dB re 1 µPa reported at 200 Hz (Mooney et al., 2010). No other studies have measured particle motion. Specific hearing thresholds for sound pressure at higher frequencies have been reported for the oval squid (*Sepiooteuthis lessoniana*) and the common octopus (134 and 139 dB re 1 µPa at 1,000 Hz, respectively) (Hu et al., 2009). Cephalopods appear to be particularly sensitive to low frequency sound. Sole et al. (2017) estimated that trauma onset may begin to occur in cephalopods at sound pressure levels (SPL_{rms}) from 139 to 142 dB re 1 µPa at one-third octave bands centered at 315 Hz and 400 Hz. Low frequency continuous noise (2 hours of 50 to 400 Hz at received SPL_{rms} of 157 dB re 1 uPa) resulted in lesions on the sensory hair cells of the statocysts, which worsened over time, in several cephalopod species (Andre et al., 2016, Sole et al., 2013). At sound frequencies lower than 1,000 Hz, cephalopod behavioral and physiological responses have included inking, locomotor responses, body pattern changes, and changes in respiratory rates (Kaifu et al., 2008; Hu et al., 2009). Common cuttlefish exhibited escape responses (i.e., inking, jetting) when exposed to sound frequencies between 80 and 300 Hz with SPL_{rms} above 140 dB re 1 µPa, but they habituated to repeated 200 Hz sounds (Samson et al., 2014). Decapod crustaceans, including crab, lobster, and shrimp species, detect sound through an array of hair-like receptors within and upon the body surface that potentially respond to water- or substrate-borne vibrations. These organisms also have proprioceptive organs that could serve secondarily to perceive vibrations (as reviewed in Popper et al., 2001). While it is believed that decapod crustaceans would be most sensitive to particle motion, studies have focused on sound pressure level measurements. A change in feeding and stress response in American lobster was observed at an exposure level of 202 dB re 1µPa (Payne and Funds, 2007); this exposure level was modelled to occur at up to 1,640 ft (500 m) from the source of pile driving, where particle

Table 3.1-1: RWF, Construction and Decommissioning				
IPF	**Project Activity**	**Impact Characterization for Benthic Resources and Shellfish**		**Discussion**
		Sessile Species and Life Stages [a]	**Mobile Species and Life Stages**	
				velocity was estimated to be 0.1 cm s^{-1} (Miller et al., 2016). Given the experimentally determined sensitivities of blue mussel (*Mytilus* edulis) and common hermit crab (*Pagurus* bernhardus) to particle motion (Roberts et al., 2015; Roberts et al., 2016), this modelled particle velocity would likely elicit behavioral response from these organisms (Roberts and Elliot, 2017; Roberts et al., 2017). Prawns (*Palaemon serratus*) showed auditory sensitivity to sounds from 100 to 3,000 Hz (Lovell et al., 2005, 2006). Prawns showed greatest sensitivity at an SPL_{rms} of 106 dB re 1 µPa at 100 Hz, although this was the lowest frequency tested, so prawns might be more sensitive at frequencies below this (Lovell et al., 2005). Sessile invertebrates such as bivalves may respond to sound exposure by closing their valves (e.g. Kastelein, 2008; Roberts et al., 2015; Solan et al., 2016) much as they do when water quality is temporarily unsuitable. In one study, the duration of valve closure was shown to increase with increasing vibrational strength (Roberts et al., 2015). Clams may respond to anthropogenic noise by reducing activity and moving to a position above the sediment-water interface, which affects ecosystem processes such as bioirrigation, as documented in the clam *Ruditapes philippinarum* (Solan et al., 2016). In response to noise associated with construction at the RWF, it is expected that mobile macroinvertebrates would temporarily relocate during construction and would not be in the areas of greatest acoustic stressors. Slow start (ramp up) of pile driving equipment would allow mobile benthic species to move out of the area and not be subject to mortality or injury but they may still experience some direct impact, such as behavioral responses. A recent study found impulsive pile driving noise resulted in a change in squid (*Doryteuthis pealeii*) behavior, with squid exhibiting body pattern changes, inking, jetting, and startle responses (Jones et al., 2020). Indirect impacts on benthic species may also result from a temporary degradation of habitat quality due to elevated noise levels associated with construction activities at the RWF. Noise from impact pile driving and/or vibratory pile driving may temporarily reduce benthic habitat quality for exposed species. These impacts will be short-lived as habitat suitability is expected to return to pre-pile driving conditions shortly after cessation of pile driving activity. *Short-term impacts* on benthic resources and shellfish could occur due to vessel noise, construction equipment noise (exclusive of impact pile driving and/or vibratory pile driving noise), and/or aircraft noise. Sounds created by mechanical/hydro-jet plows, vessels, or aircraft are continuous or non-impulsive sounds, which have different characteristics underwater and impacts on marine life. Limited research has been conducted on underwater noise from mechanical/hydro-jet plows. Generally, the noise from this equipment is expected to be masked by louder sounds from vessels. The duration of noise at a given location will be short, as the installation vessel will only be present for a short period at any given location along the cable route. *Direct, short-term impacts* on benthic species are expected from mechanical/hydro-jet plow installation noise. For exposed species, noise from impact pile driving and/or vibratory pile driving may temporarily reduce habitat quality, result in behavioral changes, or cause mobile species to temporarily vacate the area. Noise impacts on benthic resources and shellfish may result in *short-term impacts*, as the habitat suitability is expected to return to pre-impact pile driving and/or vibratory pile driving conditions shortly after cessation of the impact pile driving and/or vibratory pile driving activity.
	Vessel noise, construction	***Direct, short-term***	***Direct, short-term***	Direct Impacts: *Short-term impacts* on benthic resources and shellfish could occur due to vessel noise, construction equipment noise (exclusive of impact pile driving and/or vibratory pile driving noise), and/or aircraft noise during construction and decommissioning. Sounds created by

Table 3.1-1: RWF, Construction and Decommissioning				
IPF	**Project Activity**	**Impact Characterization for Benthic Resources and Shellfish**		**Discussion**
		Sessile Species and Life Stages [a]	**Mobile Species and Life Stages**	
	equipment noise, aircraft noise			mechanical/hydro-jet plows, vessels, or aircraft are continuous or non-impulsive sounds, which have different characteristics underwater and impacts on marine life. Limited research has been conducted on underwater noise from mechanical/hydro-jet plows. Generally, the noise from this equipment is expected to be masked by louder sounds from vessels. The duration of noise at a given location will be short, as the installation vessel will only be present for a short period at any given location along the cable route. *Direct, short-term impacts* on benthic species are expected from mechanical/hydro-jet plow installation noise. Helicopters may be used during construction of the Project for emergency transport and crew changes during installation of the WTGs. Underwater noise associated with helicopters is generally brief as compared with the duration of audibility in the air (Richardson et al., 1995). Because of this, direct impacts on benthic species from aircraft noise are not expected. Benthic species in the vicinity of Project construction vessels may be affected by vessel noise but the duration of the disturbance will occur over a very short period at any given location in the RWF area or between ports and the RWF. *Direct, short-term impacts* on benthic species are expected due to vessel noise. Direct impacts on benthic species may result from a temporary degradation of habitat quality due to elevated noise levels. The noise generated by vessel and aircrafts will be similar to the range of noise from existing vessel and aircraft traffic in the region, and are not expected to substantially affect the existing underwater noise environment. Thus, overall noise impacts are expected to be short-term.
Discharges and releases	Hazardous materials spills Wastewater discharge	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Routine discharges of wastewater (e.g., gray water or black water) or liquids (e.g., ballast, bilge, deck drainage, stormwater) may occur from vessels, WTGs, or the OSS during construction and decommissioning; however, those discharges and releases are not anticipated to have impacts because all vessel waste will be offloaded, stored, and disposed of in accordance with all applicable local, state and federal regulations, such as the Environmental Protection Agency (EPA) and (U.S. Coast Guard) USCG requirements for discharges and releases to surface waters. In addition, compliance with applicable Project-specific management practices and requirements will minimize potential impacts on water quality and marine life. The construction/decommissioning of the RWF is not anticipated to lead to any spills of hazardous materials into the marine environment. Minor releases of hazardous materials, if they were to occur, could result in direct and indirect, short-term impacts on benthic resources and shellfish. The impacts of spills are caused by either the physical nature of the material (e.g., physical contamination and smothering) or by its chemical components (e.g., toxic effects and bioaccumulation). Minor releases of hazardous materials could also result in indirect impacts on invertebrate species if the spilled materials affect their eggs/larvae and food sources. Impacts would depend on the depth and volume of the spill, as well as the properties of the material spilled. All vessels participating in the construction of the RWF will comply with USCG requirements for management of onboard fluids and fuels, including maintaining and implementing spill prevention, control, and countermeasure (SPCC) plans. Vessels will be navigated by trained, licensed vessel operators who will adhere to navigational rules and regulations and vessels will be equipped with spill handling materials adequate to control or clean up an accidental spill. Best management practices (BMPs) for fueling and power equipment servicing will be incorporated into the Project's Emergency Response Plan and Oil Spill Response Plan (ERP/OSRP). Accidental releases are minimized by containment and clean-up measures detailed in the OSRP.

Table 3.1-1: RWF, Construction and Decommissioning				
IPF	**Project Activity**	**Impact Characterization for Benthic Resources and Shellfish**		**Discussion**
		Sessile Species and Life Stages [a]	**Mobile Species and Life Stages**	
				Given these measures and the very low likelihood of an inadvertent release, potential impacts are benthic resources and shellfish are not expected.
Marine trash and debris		***Direct, short-term***	***Direct, short-term***	Direct Impacts: The release of trash and debris into offshore waters potentially may occur from any on-water activities. Certain types of trash and debris could be accidentally lost overboard during construction and decommissioning, with subsequent effects on marine species. USCG and the Environmental Protection Agency (EPA) regulations require operators to develop waste management plans, post informational placards, manifest trash sent to shore, and use special precautions such as covering outside trash bins to prevent accidental loss of solid materials. Also, BOEM lease stipulations require adherence to Notice to Lessee (NTL) 2015-G03, which instructs operators to exercise caution in the handling and disposal of small items and packaging materials, requires the posting of placards at prominent locations on offshore vessels and structures, and mandates a yearly marine trash and debris awareness training and certification process. As such, measures will be implemented prior to and during construction to avoid, minimize, and mitigate impacts related to trash and debris disposal. Given these measures, impacts from trash and debris on benthic resources and shellfish are not expected.

[a] Includes eggs and larvae of mobile species, as well as species with limited mobility.

Table 3.1-2. IPFs and Potential Impact Characterization for Benthic Resources and Shellfish within the RWF during Operations and Maintenance

Table 3.1-2: RWF, O&M				
IPF	**Project Activity**	**Impact Characterization for Benthic Resources and Shellfish**		**Discussion**
		Sessile Species and Life Stages [a]	**Mobile Species and Life Stages**	
Seafloor Disturbance	Foundations (WTG and OSS)	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Seafloor disturbance during O&M of the RWF may occur during maintenance of bottom-founded infrastructure (e.g., foundations, scour protection). These maintenance activities are expected to result in similar direct impacts on benthic resources and shellfish as those discussed for construction/decommissioning (Table 3.1-1), although the extent of disturbance would be limited to specific areas.
	RWF IAC and OSS-Link Cable non-routine O&M	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Minimal impacts on benthic species are expected from operation of the IAC and OSS-Link Cable, as they will be buried beneath the seabed. However, non-routine maintenance may involve sediment-disturbing activities. These maintenance activities are expected to result in similar direct impacts on benthic resources and shellfish as those discussed for construction/decommissioning (Table 3.1-1), although the extent of disturbance would be limited to specific areas along the cable routes..
	Vessel anchoring (including spuds)	***Direct, short-term***	***Direct, short-term***	Direct Impacts: During O&M, anchoring will be limited to vessels required to be onsite for an extended duration. Impacts on benthic resources and shellfish resulting from potential vessel anchoring during O&M activities are expected to be similar to those discussed in Table 3.1-1.
Habitat Alteration	Foundations RWF IAC and OSS-Link Cable	***Direct, long-term***	***Direct, long-term***	Direct Impacts: Once constructed, the RWF will result in changes to seafloor topography and hydrodynamics because of the presence of foundations, scour protection, and cable protection. The seafloor overlaying the majority of buried IAC and OSS-Link Cable (where cable protection will not exist) is expected to return to pre-construction conditions over time and no long-term changes to sediment mobility and depositional patterns are expected. Presence of the foundations, associated scour protection, and cable protection may result in both *direct, negative and beneficial impacts* on benthic species due to conversion of habitat from primarily soft bottom to hard bottom. Species that have life stages associated with soft bottom habitats may experience long-term effects, as available habitat will be slightly reduced. Species and life stages that inhabit hard bottom habitats may experience a beneficial effect, depending on the quality of the habitat created by the foundations, scour protection, and cable protection, and the quality of the benthic community that colonizes that habitat. Habitat conversion is expected to cause a shift in species assemblages towards those found in rocky reef/rock outcrop habitat; this is known as the "reef effect" (Wilhelmsson et al., 2006; Reubens et al., 2013). This effect is also well known from other anthropogenic structures in the sea, such as oil platforms, artificial reefs piers, and shipwrecks (Claudet and Pelletier, 2004; Wilhelmsson et al., 2006; Seaman, 2007; Langhamer and Wilhelmsson, 2009). The use of gravel, boulders, and/or concrete mats will create new hard substrate, and this substrate is expected to be initially colonized by barnacles, tube-forming species, hydroids, and other fouling species found on existing hard bottom habitat in the region. Mobile organisms, such as lobsters and crabs, may also be attracted to and occur in and around the foundation in higher numbers than surrounding areas. Monopiles attract a range of attached epifauna and epifloral, including barnacles and filamentous algae (Petersen and Malm, 2006). Jacket foundations (which may be used for the OSS) provide a more complex structure than monopile foundations, and may increase

Table 3.1-2: RWF, O&M				
IPF	**Project Activity**	**Impact Characterization for Benthic Resources and Shellfish**		**Discussion**
		Sessile Species and Life Stages [a]	**Mobile Species and Life Stages**	
				habitat complexity through more suitable fouling surfaces and increased protection from predators (MMS, 2009). As these foundations extend from below the seafloor to above the surface of the water, there is expected to be a zonation of macroalgae from deeper growing red foliose algae and calcareous algae, to kelps and other species, including those that may grow in subtidal, intertidal, and splash zone areas. Foundations and cable protection typically also have crevices that increase structural complexity of the area and attract finfish and invertebrate species seeking shelter, including crabs and American lobster. Other species that may be beneficially affected include sea anemones and other anthozoans, bivalves such as horse mussel, green sea urchin, barnacles, hydrozoans, sponges, and other fouling organisms. There is expected to be a similar zonation of these species with depth, as well. Species that prefer softer bottom habitat, such as ocean quahog, waved and chestnut astarte clam, Atlantic surf clam, sand shrimp, channeled whelk, and horseshoe crab, may be impacted. The increase in habitat heterogeneity and hard substrate may promote not only the growth of native epibenthic species, as discussed above, but also may potentially promote colonization by non-indigenous species and/or range-expanding species. The concept of offshore wind structures as "stepping stones" for these groups of species has been suggested and observed in other regions (as reviewed in Dannheim et al., 2019; e.g., De Mesel et al., 2015; Coolen et al., 2018). Non-indigenous species, including, although not limited to, crustaceans (e.g., the Asian shore crab (*Hemigrapsus sanguineus*)), molluscs, and tunicates (e.g., *Didemnum vexillum*) have the potential to colonize the foundations in this region, as observed in other regions (e.g., Kerckhof et al., 2016). The effects of the colonization of these types of species on the community assemblage and ecosystem function varies depending on the particular species and its abundance. Additionally, epibenthic species from southern regions, such as the Mid-Atlantic, may utilize this novel habitat as their populations move northward as suitable environmental conditions shift northward in response to climatic drivers (i.e., range-expansion species). Habitat conversion is expected to cause a *direct, long-term impact* because similar soft and hard bottom habitats are already present in and around the RWF (as detailed in this report), and the conversion of a relatively small area of habitat is unlikely to result in substantial effects, as any "reef effect" observed will be limited to the immediate vicinity of the individual structures.
Sediment Suspension and Deposition	RWF IAC and OSS-Link Cable non-routine O&M Vessel anchoring (including spuds)	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Increases in sediment suspension and deposition during the O&M phase will result from vessel anchoring and non-routine maintenance activities that require exposing the IAC and/or OSS-Link Cable. Direct impacts on benthic resources and shellfish resulting from sediment suspension and deposition during the O&M phase are expected to be similar to those discussed for the construction and decommissioning phase (Table 3.1-1), but on a more limited spatial scale.
Noise	Vessel and aircraft noise	***Direct, long-term***	***Direct, long-term***	Direct Impacts: Impacts on benthic resources and shellfish from ship and aircraft noise during O&M of the RWF are expected to be similar to those discussed for the construction/decommissioning phase (Table 3.1-1), though lesser in extent. The noise generated by vessel and aircrafts will be similar to the range of noise from existing vessel and aircraft traffic in the region, and are not expected to substantially affect the existing underwater noise environment.

Table 3.1-2: RWF, O&M				
IPF	**Project Activity**	**Impact Characterization for Benthic Resources and Shellfish**		**Discussion**
		Sessile Species and Life Stages [a]	**Mobile Species and Life Stages**	
	WTG operational noise	***Direct, long-term***	***Direct, long-term***	Direct Impacts: The WTGs will produce low-level continuous underwater noise (infrasound) during operation; however, there are no conclusive studies associating WTG operational noise with impacts on benthic resources and shellfish. Noise levels from operation of the RWF WTGs are not expected to result in injury or mortality.
Electric and Magnetic Fields	RWF IAC and OSS-Link Cable	***Direct, long-term***	***Direct, long-term***	Direct Impacts: Operation of the WTG does not generate electric and magnetic fields (EMF); however, once the inter-array and OSS-Link Cables become energized, the cables will produce a magnetic field, both perpendicularly and in a lateral direction around the cables. The cable will be shielded and buried beneath the seafloor. Shielded electrical transmission cables do not directly emit electrical fields into surrounding areas, but are surrounded by magnetic fields that can cause induced electrical fields in moving water (Gill et al., 2012). Exposure to EMF could be short- or long-term, depending on the mobility of the species. Sessile species will be exposed for the entire duration that the cables are energized (U.K. Department for Business Enterprise and Regulatory Reform, 2008; Woodruff et al., 2012; Love et al., 2015, 2016). Compared to fish and elasmobranchs, relatively little is known about the response of marine invertebrates to EMF, and how this might impact migration, orientation, or prey identification. Aquatic crustaceans, a group that includes commercially important crab and lobster species, have been observed to use geomagnetic fields to guide orientation and migration, which suggests that this group of organisms is capable of detecting static magnetic fields (Ugolini and Pezzani, 1995; Cain et al., 2005; Boles and Lohmann, 2003; Lohmann et al., 1995). The ability to detect geomagnetic fields, however, is likely integrated with other environmental cues, including slope, light, currents, and water temperature. Furthermore, Project cables will produce AC magnetic fields, which differ from the static geomagnetic fields to which magneto-sensitive marine invertebrates are attuned; therefore, operation of the IAC and OSS-Link Cable is not expected to impact benthic invertebrate orientation or migration. A modeling analysis of the magnetic fields and induced electric fields anticipated to be produced during operation of the RWF IAC, OSS-Link Cable, and RWEC was performed and results are included in the Offshore Electric- and Magnetic-Field Assessment (Exponent, 2020). That assessment also summarizes data from field studies conducted to assess impacts of EMF on marine organisms. These studies constitute the best source of evidence to demonstrate that impacts on benthic invertebrate behavior or distribution are not expected due to the presence of energized cables. Field surveys on the behavior of large crab species and lobster at submarine cable sites (Love et al., 2017; Hutchinson et al., 2018) indicate that the Project's calculated magnetic-field levels are not likely to impact the distribution and movement of large epibenthic crustaceans. Ancillary data and observations from these field studies also suggest that cephalopod behavior is similarly unaffected by the presence of 60-Hz AC cables. Based on the modeling results and existing evidence, the EMF associated with the cables will be below the detection capability of invertebrate species. Given that the calculated values are below the thresholds of detection reported in the scientific literature, behavioral effects and/or changes in species abundance and distributions are not expected. These conclusions are consistent with the findings of a previous comprehensive review of the ecological impacts of marine renewable energy projects, where it was determined that there has been no evidence demonstrating that EMF at the levels expected from marine renewable energy projects will cause an effect (negative or positive) on any species (Copping et al., 2016).

Table 3.1-2: RWF, O&M				
IPF	**Project Activity**	**Impact Characterization for Benthic Resources and Shellfish**		**Discussion**
		Sessile Species and Life Stages [a]	**Mobile Species and Life Stages**	
Discharges and Releases	Hazardous materials spills Wastewater discharges	***Direct, short-term***	***Direct, short-term***	Direct Impacts: As discussed for the construction/decommissioning phase, routine discharges of wastewater or liquids (e.g., ballast, bilge, deck drainage, stormwater) are not anticipated to have impacts because all vessel waste will be offloaded, stored, and disposed of in accordance with all applicable local, state and federal regulations. In addition, compliance with applicable Project-specific management practices and requirements will minimize potential impacts on water quality and marine life. The operation of the RWF is not anticipated to lead to any spills of hazardous materials into the marine environment. The WTG and the OSS will be designed for secondary levels of containment to prevent accidental discharges of hazardous materials to the marine environment. Most maintenance will occur inside the WTGs, thereby reducing the risk of a spill, and no oils or other wastes are expected to be discharged during maintenance activities. All vessels participating in O&M of the RWF will comply with USCG requirements for management of onboard fluids and fuels, including maintaining and implementing SPCC plans. Vessels will be navigated by trained, licensed vessel operators who will adhere to navigational rules and regulations and vessels will be equipped with spill handling materials adequate to control or clean up an accidental spill. Best management practices (BMPs) for fueling and power equipment servicing will be incorporated into the Project's ERP/OSRP. Accidental releases are minimized by containment and clean-up measures detailed in the OSRP. Given these measures and the very low likelihood of an inadvertent release, potential impacts of a hazardous material spill on benthic resources and shellfish are not anticipated.
Marine Trash and Debris		***Direct, short-term***	***Direct, short-term***	Direct Impacts: As discussed in Table 3.1-1, vessels will adhere to the USCG and EPA marine trash regulations, as well as BOEM guidance, and trash and debris generated during O&M of the RWF will be contained on vessels or at staging areas until disposal at an approved facility. Measures will be implemented prior to and during construction to avoid, minimize, and mitigate impacts related to trash and debris disposal.

[a] Includes eggs and larvae of mobile species, as well as species with limited mobility.

3.1.2 Revolution Wind Export Cable

IPFs resulting in potential impacts on benthic resources and shellfish associated with the RWEC are described in Table 3.1-3 for the construction and decommissioning phases and in Table 3.1-4 for the O&M phase. At the end of the Project's operational life, the Project will be decommissioned in accordance with a detailed decommissioning plan to be developed in compliance with applicable laws, regulations, and BMPs at that time. All of these activities are anticipated to be similar to or less than those described for construction, unless otherwise noted. The impacts discussed in this section apply to both the RWEC-OCS and RWEC-RI, though the impacts would vary slightly by habitat composition, which differs slightly between the nearshore and offshore portions of the RWEC route.

Table 3.1-3. IPFs and Potential Impact Characterization for Benthic Resources and Shellfish for the RWEC during Construction and Decommissioning

Table 3.1-3: RWEC, Construction and Decommissioning				
IPF	**Project Activity**	**Impact Characterization for Benthic Resources and Shellfish**		**Discussion**
		Sessile Species and Life Stages [a]	**Mobile Species and Life Stages**	
Seafloor Disturbance	Seafloor preparation	***Direct, short-term***	***Direct, short-term***	Direct Impacts: As discussed in Table 3.1-1, the potential impacts on benthic resources and shellfish from seafloor preparation are primarily associated with species and life stages that prefer the types of habitats that will be disturbed by seafloor preparation. Direct impacts on benthic resources and shellfish from seafloor preparation are expected to be similar to those discussed in Table 3.1-1, with the exception of shallower areas being affected as the RWEC-RI nears landfall. These shallower areas are expected to have slightly different species assemblages than the deeper offshore areas near the RWF. See Table 2.2-4, for species that may occur in these areas and be affected by seafloor preparation. Decommissioning activities are expected to cause similar impacts as construction, but these impacts would be shorter in duration.
	In-situ MEC/UXO disposal	***Direct, short-term***	***Direct, short-term***	Direct Impacts: As discussed in Table 3.1-1, potential impacts on benthic resources and shellfish from in-situ MEC/UXO disposal will primarily affect benthic/demersal species. In-situ MEC/UXO disposal could cause injury or mortality or behavioral responses and affect their habitats. Impacts are expected to be short-term as the direct effects will cease after disposal is completed in a given area, and impacts will disturb a small portion of similar available habitat in the area. Mobile species may temporarily vacate the area of disturbance.
	RWEC installation	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Direct impacts on benthic resources and shellfish associated with the RWEC installation/decommissioning are expected to result in similar impacts as those for seafloor preparation. Construction of the RWEC landfall would be accomplished with HDD methodology. A cofferdam may be used to allow for a dry environment during construction and manage sediment, contaminated soils, and bentonite (for HDD operations). Impacts associated with the installation of a cofferdam (if necessary) would be similar to those discussed for seafloor preparation, but on a smaller scale. The cofferdam will be a temporary structure used during construction only. Therefore, no conversion of habitat is expected, and the cofferdam will be removed prior to the O&M phase. Long-term impacts on benthic resources and shellfish associated with the presence of cable protection along portions of the RWEC are discussed the O&M table (Table 3.1-4).

Table 3.1-3: RWEC, Construction and Decommissioning				
IPF	**Project Activity**	**Impact Characterization for Benthic Resources and Shellfish**		**Discussion**
		Sessile Species and Life Stages [a]	**Mobile Species and Life Stages**	
	Vessel anchoring (including spuds)	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Direct impacts on benthic resources and shellfish associated with vessel anchoring (including spuds) are similar to those discussed in seafloor preparation.
Habitat Alteration	In-situ MEC/UXO disposal	***Direct, short-term***	***Direct, short-term***	Direct Impacts: As discussed in Table 3.1-1, potential impacts on benthic resources and shellfish from habitat alteration due to in-situ MEC/UXO disposal will primarily affect species that prefer the types of habitats that will be disturbed. In-situ MEC/UXO disposal could affect habitats as identified MEC/UXO that cannot be neutralize may need to be detonated in place. Impacts are expected to be short-term as the direct effects will cease after disposal is completed in a given area, and impacts will disturb a small portion of similar available habitat in the area.
	Seafloor Preparation RWEC installation Vessel anchoring (including spuds)	***Direct, long-term***	***Direct, long-term*** ***Indirect, long-term***	Direct and Indirect Impacts: As discussed for the construction/decommissioning of the RWF, in areas of sediment disturbance and/or areas with increased sedimentation, benthic habitat recovery and benthic infaunal and epifaunal species abundances may take up to 1 to 3 years to recover to pre-impact levels, based on the results of a number of studies on benthic recovery (e.g., AKRF, Inc. et al., 2012; Germano et al., 1994; Hirsch et al., 1978; Kenny and Rees, 1994). Recolonization rates of benthic habitats are driven by the benthic communities inhabiting the area surrounding the affected region. Communities well-adapted to disturbance within their habitats (e.g., sand sheets) are expected to quickly recolonize a disturbed area, while communities not well adapted to frequent disturbance (e.g., cobble and boulder habitats) may take upwards of a year to begin recolonization. Regardless, the time needed for benthic recovery would result in a ***direct, long-term impact*** on both mobile and sessile species and life stages. Mobile species may also be indirectly affected by the temporary reduction of benthic forage species, but these impacts are expected to be minimal given the availability of similar habitats in the area. During decommissioning, facilities will be removed to a depth of 15 ft (4.6 m) below the mudline, unless otherwise authorized by BOEM (30 CFR § 585.910(a)). Decommissioning would result in the reversal of beneficial effects for species and life stages that inhabited the cable protection (concrete mattresses or rock structures) during the life of the Project. Over time, the disturbed area is expected to revert to pre-construction conditions, which would result in a beneficial impact for species and life stages that inhabit soft bottom habitats. Overall, habitat alteration from decommissioning is expected to cause minimal impacts because similar soft and hard bottom habitats are already present in and around the RWEC corridor, and the conversion of a relatively small area of habitat is unlikely to result in substantial effects, as any effect observed will be limited to the immediate vicinity of the individual structures.

Table 3.1-3: RWEC, Construction and Decommissioning				
IPF	**Project Activity**	**Impact Characterization for Benthic Resources and Shellfish**		**Discussion**
		Sessile Species and Life Stages [a]	**Mobile Species and Life Stages**	
Sediment Suspension and Deposition	Seafloor Preparation In-situ MEC/UXO disposal RWEC installation Vessel anchoring (including spuds)	***Direct, short-term***	***Direct, short-term***	Direct Impacts: As discussed in Table 3.1-1, seafloor-disturbing activities will result in temporary increases in sediment suspension and deposition. Sediment transport modeling was performed using RPS' SSFATE model to evaluate the concentrations of suspended sediments, spatial extent and duration of sediment plumes, and the seafloor deposition resulting from Project cable burial activities. The RWEC-RI installation is considered in two perspectives, (1) the majority of the route that has jet assisted installation and (2) the landing alternatives that represent the possible landfall sites and installation techniques that may be used landward of the 13.12 ft (4 m) bathymetry contour; these activities are referred to as the landings herein. The modeling results indicate that sediment plumes with TSS concentrations exceeding the ambient conditions by 100 mg/L could extend up to 4,528 feet (1,380 m) from the RWEC-RI centerline in state waters, and up to 1,542 feet (470 m) from RWEC-OCS centerline in federal waters. The plume is expected to be mostly contained within the bottom of the water column, though in shallower waters it may occupy most of the water column due to the water depth. For the RWEC-OCS, predicted TSS concentrations above ambient for any single circuit installation do not persist in any given location for greater than 24 hours, though in most locations (>75 % of the affected area) concentrations return to ambient within 8 hours. This maximum was predicted to occur along a part of the route that will only see one circuit installation. The maximum duration above ambient along the portion of the RWEC where two circuits will be installed was predicted to be 14 hours per circuit. This corresponds to a total of 28 hours above ambient, however the two 14 hour periods will likely be separated by time. For the installation of one circuit of the RWEC-RI, predicted TSS concentrations above ambient do not persist in any given location for greater than 16.3 hours, though in most locations (>75 % of the affected area) concentrations return to ambient within 4 hours). For installation of two circuits, the maximum plume exposure is doubled at 32.6 hours, however, the two 16.3-hour periods will likely be separated by time. The modeling results indicate that sedimentation from RWEC burial may exceed 0.4 inch (10 mm) of deposition up to 919 feet (280 m) from the cable centerline in state waters and up to 328 feet (100 m) in federal waters. This thickness of sedimentation could cover up to 1,126 acres (4,556,760 m^2) in state waters, and 1,020 acres (4,127,794 m^2) in federal waters. For the cable landfall, TSS concentrations exceeding ambient conditions by 100 mg/L could extend up 2,084 ft (624 m) from the centerline and plume concentrations above ambient could persist for 256 hours for the HDD. This duration is longer relative to the water jet assisted cable installation due to the slower installation rate of the activity and since both trenching and backfilling for two circuits are included. Sedimentation greater than 0.4 in (10 mm) may extend up to 572 ft (174 m) from the RWEC-RI centerline and could cover up to 85 acres (343,983 m^2). The models, inputs, and results are described in detail in the Hydrodynamic and Sediment Transport Modeling Report (RPS, 2020). Direct impacts on benthic resources and shellfish from sediment suspension and deposition are expected to be similar to those discussed in Table 3.1-1.
Noise	Vessel noise, construction equipment noise, aircraft noise, in-situ MEC/UXO disposal	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Direct impacts on benthic resources and shellfish resulting from vessel, construction equipment, and aircraft noise and in-situ MEC/UXO disposal during construction and decommissioning are expected to be similar to those discussed in Table 3.1-1.

Table 3.1-3: RWEC, Construction and Decommissioning				
IPF	**Project Activity**	**Impact Characterization for Benthic Resources and Shellfish**		**Discussion**
		Sessile Species and Life Stages [a]	**Mobile Species and Life Stages**	
	Vibratory pile driving (cofferdam)	***Direct, short-term***	***Direct, short-term***	Direct Impacts: The cofferdam at the RWEC landfall, if required, may be installed as either a sheet piled structure into the seafloor or a gravity cell structure placed on the seafloor using ballast weight. Sheet pile installation would require the use of a vibratory hammer to drive the sidewalls and endwalls into the seabed, which may take approximately up to 3 days. The effects of underwater noise on benthic invertebrates are not well understood, and sound exposure level criteria for assessing injury have not been established. However, because benthic species and shellfish lack gas-filled organs, they are likely to be less sensitive than finfish and marine mammals to sound pressure waves. Few marine invertebrates have the sensory organs to perceive sound pressure, but many can perceive particle motion (Vella et al., 2001). For exposed species, noise from vibratory pile driving may temporarily reduce habitat quality, result in behavioral changes, or cause mobile species to temporarily vacate the area. Noise impacts on benthic resources and shellfish from vibratory pile driving may result in short-term *impacts*, as the habitat suitability is expected to return to pre-vibratory pile driving conditions shortly after cessation of the vibratory pile driving activity.
Discharges and Releases	Hazardous materials spills Wastewater discharges	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Impacts associated with wastewater discharges or an inadvertent release of hazardous material during construction or decommissioning of the RWEC are expected to be similar to those discussed in Table 3.1-1.
Marine Trash and Debris		***Direct, short-term***	***Direct, short-term***	Direct Impacts: Impacts associated with marine trash and debris are expected to be similar to those discussed in Table 3.1-1.

[a] Includes eggs and larvae of mobile species, as well as species with limited mobility.

Table 3.1-4. IPFs and Impact Characterization for Benthic Resources and Shellfish for the RWEC during Operations and Maintenance

Table 3.1-4: RWEC, O&M				
IPF	**Project Activity**	**Impact Characterization for Benthic Resources and Shellfish**		**Discussion**
		Sessile Species and Life Stages [a]	**Mobile Species and Life Stages**	
Seafloor Disturbance	RWEC non-routine O&M	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Minimal impacts on benthic resources and shellfish are expected from operation of the RWEC, as it will be buried beneath the seabed. Seafloor disturbance during O&M of the RWEC will be limited to non-routine maintenance that may require uncovering and reburial of the cables, as well as maintenance of cable protection. These maintenance activities are expected to result in similar impacts on benthic resources and shellfish as those discussed for construction/decommissioning (Table 3.1-1), although the extent of disturbance would be limited to specific areas along the RWEC corridor.
	Vessel anchoring (including spuds)	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Impacts on benthic resources and shellfish resulting from potential vessel anchoring during O&M activities are expected to be similar to those discussed in Table 3.1-1.
Habitat Alteration	RWEC O&M	***Direct, long-term***	***Direct, long-term***	Direct Impacts: Cable protection (e.g., concrete mattresses) may be placed in select areas along the RWEC. The introduction of engineered concrete mattresses or rock to areas of the seafloor can cause local disruptions to circulation, currents, and natural sediment transport patterns. Under normal circumstances these segments of the RWEC are expected to remain covered as accretion of sediment covers the cable and associated cable protection (where applicable). In non-routine situations, these segments may be uncovered, and re-burial might be required. Direct impacts on benthic resources and shellfish associated with O&M activities for the RWEC are expected to result in similar impacts as those discussed for the IAC and OSS-Link Cable in Table 3.1-2, but will be limited in spatial extent. The secondary protection of the cable may result in the long-term conversion of soft bottom habitat to hard bottom habitat. Similar to the RWF foundations (see Table 3.1-2), the cable protection may have a long-term impact on species associated with soft bottom habitats and a long-term beneficial impact on species associated with hard bottom habitats, depending on the quality of the habitat created by the cable protection, and the quality of the benthic community that colonizes that habitat.
Sediment Suspension and Deposition	RWEC non-routine O&M Vessel anchoring (including spuds)	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Increases in sediment suspension and deposition during the O&M phase will result from vessel anchoring and routine and non-routine maintenance activities that require exposing portions of the RWEC. Direct impacts on benthic resources and shellfish resulting from sediment suspension and deposition during the O&M phase are expected to be similar to those discussed for the construction and decommissioning phase of the RWF (Table 3.1-1), but on a more limited spatial scale.
Noise	Vessel and aircraft noise	***Direct, long-term***	***Direct, long-term***	Direct Impacts: Impacts on benthic resources and shellfish from ship and aircraft noise during O&M of the RWEC are expected to be similar to those discussed for the construction/decommissioning phase of the RWF (Table 3.1-1), though lesser in extent.

Table 3.1-4: RWEC, O&M				
IPF	**Project Activity**	**Impact Characterization for Benthic Resources and Shellfish**		**Discussion**
		Sessile Species and Life Stages [a]	**Mobile Species and Life Stages**	
Electric and Magnetic Fields	RWEC operations	***Direct, long-term***	***Direct, long-term***	Direct Impacts: Once the RWEC becomes energized, the cables will produce a magnetic field, both perpendicularly and in a lateral direction around the cables. The cable will be shielded and buried beneath the seafloor. Shielded electrical transmission cables do not directly emit electrical fields into surrounding areas, but are surrounded by magnetic fields that can cause induced electrical fields in moving water (Gill et al., 2012). Exposure to EMF could be short- or long-term, depending on the mobility of the species. Sessile species will be exposed for the entire duration that the cables are energized (U.K. Department for Business Enterprise and Regulatory Reform, 2008; Woodruff et al., 2012; Love et al., 2015, 2016). A modeling analysis of the magnetic fields and induced electric fields anticipated to be produced during operation of the RWF IAC, OSS-Link Cable, and RWEC was performed and results are included in the Offshore Electric- and Magnetic-Field Assessment (Exponent, 2020). That assessment also summarizes data from field studies conducted to assess impacts of EMF on marine organisms. As discussed for the RWF IAC and OSS-Link Cable in Table 3.1-2, behavioral effects and/or changes in species abundance and distributions due to EMF are not expected. These conclusions are consistent with the findings of a previous comprehensive review of the ecological impacts of marine renewable energy projects, where it was determined that there has been no evidence demonstrating that EMF at the levels expected from marine renewable energy projects will cause an effect (negative or positive) on any species (Copping et al., 2016).
Discharges and Releases	Hazardous materials spills Wastewater discharges	***Direct, short-term***	***Direct, short-term***	Direct Impacts: Impacts associated with wastewater discharges or an inadvertent release of hazardous material during O&M of the RWEC are expected to be similar to those discussed in Table 3.1-1.
Marine Trash and Debris		***Direct, short-term***	***Direct, short-term***	Direct Impacts: Impacts associated with marine trash and debris are expected to be similar to those discussed in Table 3.1-1.

[a] Includes eggs and larvae of mobile species, as well as species with limited mobility.

3.2 Summary of Impacts

3.2.1 Summary of Impacts on Benthic and Shellfish Resources from RWF IPFs

Based on the IPFs discussed in Tables 3.1-1 and 3.1-2, during construction and decommissioning of the RWF, seafloor disturbance, habitat alteration, and sediment suspension/deposition are expected to affect sessile species and organisms with limited mobility, including early life stages (e.g., larvae and eggs) more than mobile species. However, these impacts, as well as impacts associated with construction noise and potential in-situ MEC/UXO disposal, are expected to be temporary and cease when construction activity stops. During O&M and decommissioning of the RWF, impacts associated with seafloor disturbance, sediment suspension/deposition, and noise are expected to be similar but lesser in extent compared to construction. Seafloor disturbance activities that result in the conversion of soft sediment habitats to hard bottom habitat associated with foundations, scour protection, and cable protection (e.g., concrete mattresses or rock berms) along portions of the OSS–Link Cable and IAC routes, is expected to have long-term beneficial impacts on benthic organisms that rely on complex, hard bottom habitats. Long-term impacts may occur as a result of habitat alteration, as benthic habitat recovery and benthic infaunal and epifaunal species abundances may take up to 1 to 3 years to recover to pre-impact levels in disturbed areas (e.g., Guarinello and Carey, 2020; AKRF, Inc. et al., 2012; Germano et al., 1994; Hirsch et al., 1978; Kenny and Rees, 1994). Benthic species may experience long-term impacts caused by the conversion of soft bottom habitat to hard bottom habitat associated with foundations and associated scour protection, and cable protection (e.g., concrete mattresses) along portions of the OSS-Link Cable and IAC routes. Inadvertent discharges/releases, trash and debris, and EMF are expected to have minimal impacts on benthic and shellfish resources during construction, O&M and decommissioning of the RWF. None of the IPFs are expected to result in population-level effects on benthic species, due to the scale and intensity of the Project activities, and the availability of similar habitat in the surrounding area. The impacts discussed in this section would vary slightly by habitat composition within the RWF.

3.2.2 Summary of Impacts on Benthic and Shellfish Resources from RWEC IPFs

Based on the IPFs discussed in Tables 3.1-3 and 3.1-4, during construction and decommissioning of the RWEC-OCS, seafloor disturbance, habitat alteration, and sediment suspension/deposition are expected to affect sessile species and organisms with limited mobility, including early life stages (e.g., larvae and eggs) more than mobile species. However, these impacts, as well as impacts associated with construction noise and potential in-situ MEC/UXO disposal, are expected to be temporary and cease when construction activity stops. During O&M and decommissioning of the RWEC-OCS, impacts on benthic resources and shellfish associated with seafloor disturbance, sediment suspension/deposition, and noise, are expected to be similar but lesser in extent compared to construction. Seafloor disturbance activities that result in the conversion of soft sediment habitats too hard bottom habitat associated with cable protection (e.g., concrete mattresses or rock berms) along portions of the RWEC-OCS routes are expected to have long-term beneficial impacts on benthic organisms that rely on complex, hard bottom habitats. Long-term impacts may occur as a result of habitat alteration, as benthic habitat recovery and benthic infaunal and epifaunal species abundances may take up to 1 to 3 years to recover to pre-impact levels in disturbed areas (e.g., Guarinello and Carey, 2020; AKRF, Inc. et al., 2012; Germano et al., 1994; Hirsch et al., 1978; Kenny and Rees, 1994). Soft-sediment benthic species may experience long-term impacts caused by the conversion of soft bottom habitat to hard bottom habitat associated with the cable protection along portions of the RWEC-OCS route. Inadvertent discharges/releases, trash and debris, and EMF are expected to have minimal impacts on benthic and shellfish resources during construction, O&M and decommissioning of the RWEC-OCS. None of the IPFs are expected to result in population-level effects on benthic species, due to

the limited scale and intensity of the Project activities, and the availability of similar habitat in the surrounding area. The impacts discussed in this section would vary slightly by habitat composition along the RWEC-OCS route.

Impacts are generally expected to be similar along the RWEC-OCS and RWEC-RI; therefore, the two IPFs for the two export cable segments are presented together with key differences noted here and in Tables 3.1-3 and 3.1-4. Differences between the two cable segments were present in modeled suspended sediment concentrations, durations, and predicted areas of deposition (Table 3.1-3). As is true across the Project, some variability in impact between RWEC-OCS and RWEC-RI is expected related to habitat distribution. Benthic macroalgae and mollusk beds, as well as attached sponges, were observed at several stations along the RWEC-RI within the central portion of Narragansett Bay; these habitats were not observed along the RWEC-OCS or at RWF (see Section 2.2.2.2 for more details).

3.3 Proposed Environmental Protection Measures

To ensure that impacts associated with the RWF and RWEC are minimized, Revolution Wind will implement the following environmental protection measures to reduce potential impacts on benthic resources and shellfish. These measures are based on protocols and procedures successfully implemented for similar offshore projects.

- The RWF and RWEC will be sited to avoid and minimize impacts to sensitive habitats (e.g., hard bottom habitats) to the extent practicable.
- To the extent feasible, installation of the IACs, OSS-Interlink Cable, and RWEC will occur using equipment such as mechanical cutter, mechanical plow, or jet plow.
- To the extent feasible, the RWEC, IAC, and OSS-Link Cable will typically target a burial depth of 4 to 6 ft (1.2 to 1.8 m) below seabed. The target burial depth will be determined based on an assessment of seabed conditions, seabed mobility, the risk of interaction with external hazards such as fishing gear and vessel anchors, and a site-specific Cable Burial Risk Assessment.
- Dynamic Positioning (DP) vessels will be used for installation of the IACs, OSS-Link Cable, and RWEC to the extent practicable. DP vessels minimize impacts to benthic resources, as compared to use of a vessel relying on multiple anchors.
- A plan for vessels will be developed prior to construction to identify no-anchorage areas to avoid documented sensitive resources.
- Revolution Wind is committed to collaborative science with the commercial and recreational fishing industries pre-, during, and post-construction. Fisheries monitoring studies are being planned to assess the impacts associated with the Project on economically and ecologically important fisheries resources. These studies will be conducted in collaboration with the local fishing industry and will build upon monitoring efforts being conducted by affiliates of Revolution Wind at other wind farms in the region.
- Revolution Wind will require all construction and operations vessels to comply with regulatory requirements related to the prevention and control of spills and discharges.
- Accidental spill or release of oils or other hazardous materials will be managed through the Project's ERP/OSRP.
- All vessels will comply with United States Coast Guard (USCG) and EPA regulations that require operators to develop waste management plans, post informational placards, manifest trash sent to shore, and use special precautions such as covering outside trash bins to prevent accidental loss of solid materials. Vessels will also comply with BOEM lease stipulations that require adherence to Notice to Lessee (NTL) 2015-G03, which instructs operators to exercise caution in the handling and disposal of small items and packaging materials, requires the posting of placards at prominent

locations on offshore vessels and structures, and mandates a yearly marine trash and debris awareness training and certification process.

- A ramp-up or soft-start will be used at the beginning of each pile segment during impact pile driving and/or vibratory pile driving to provide additional protection to mobile species (e.g., lobster, crabs) in the vicinity by allowing them to vacate the area prior to the commencement of pile-driving activities.
- Construction and operational lighting will be limited to the minimum necessary to ensure safety and compliance with applicable regulations.

4.0 REFERENCES

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Technical Report

Benthic Assessment Technical Report

FIGURES

Revolution Wind Offshore Wind Farm

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December 2021

LIST OF FIGURES

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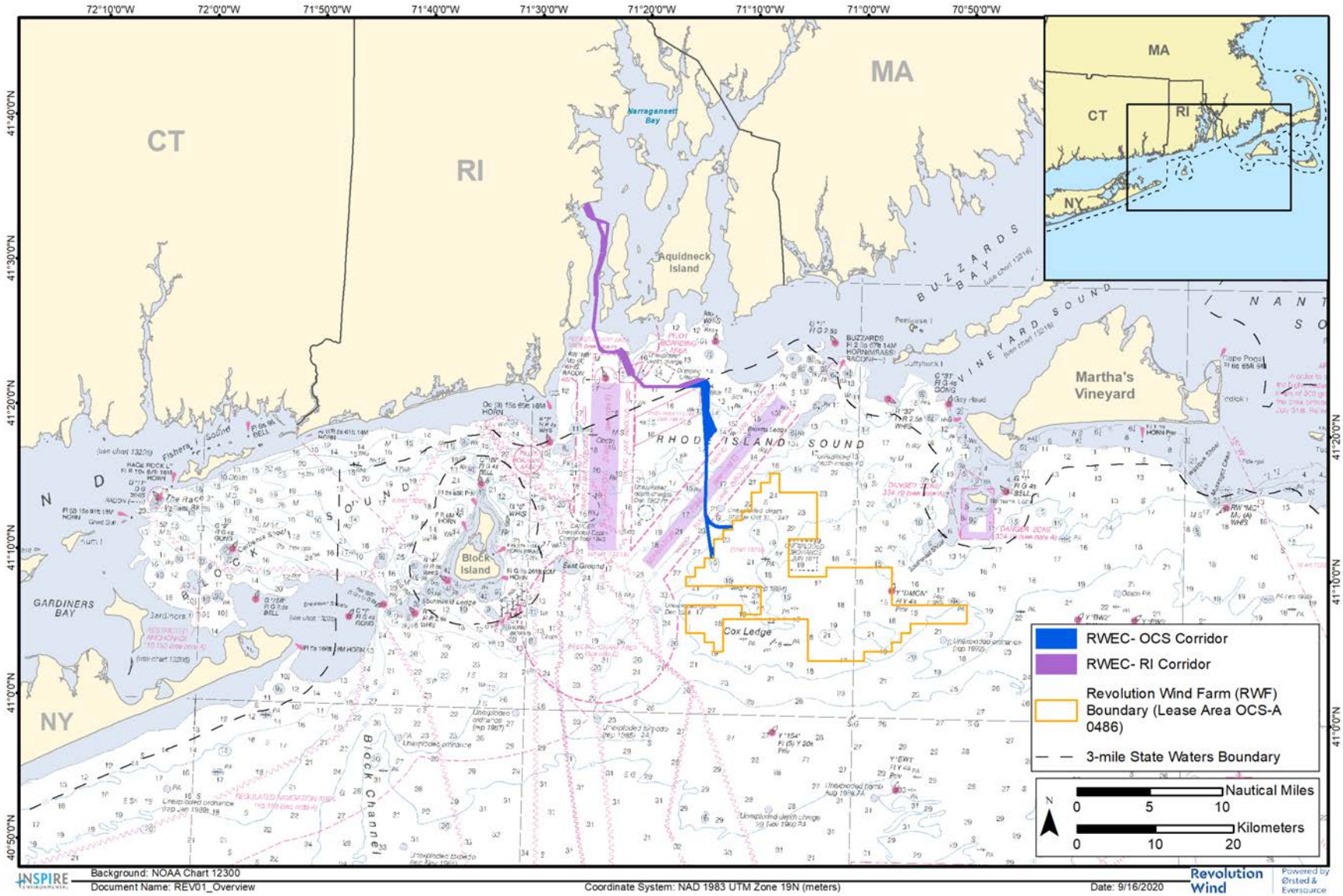


Figure 1.1-1. Location of the planned Revolution Wind Farm (RWF) and Export Cable Corridor (RWEC)

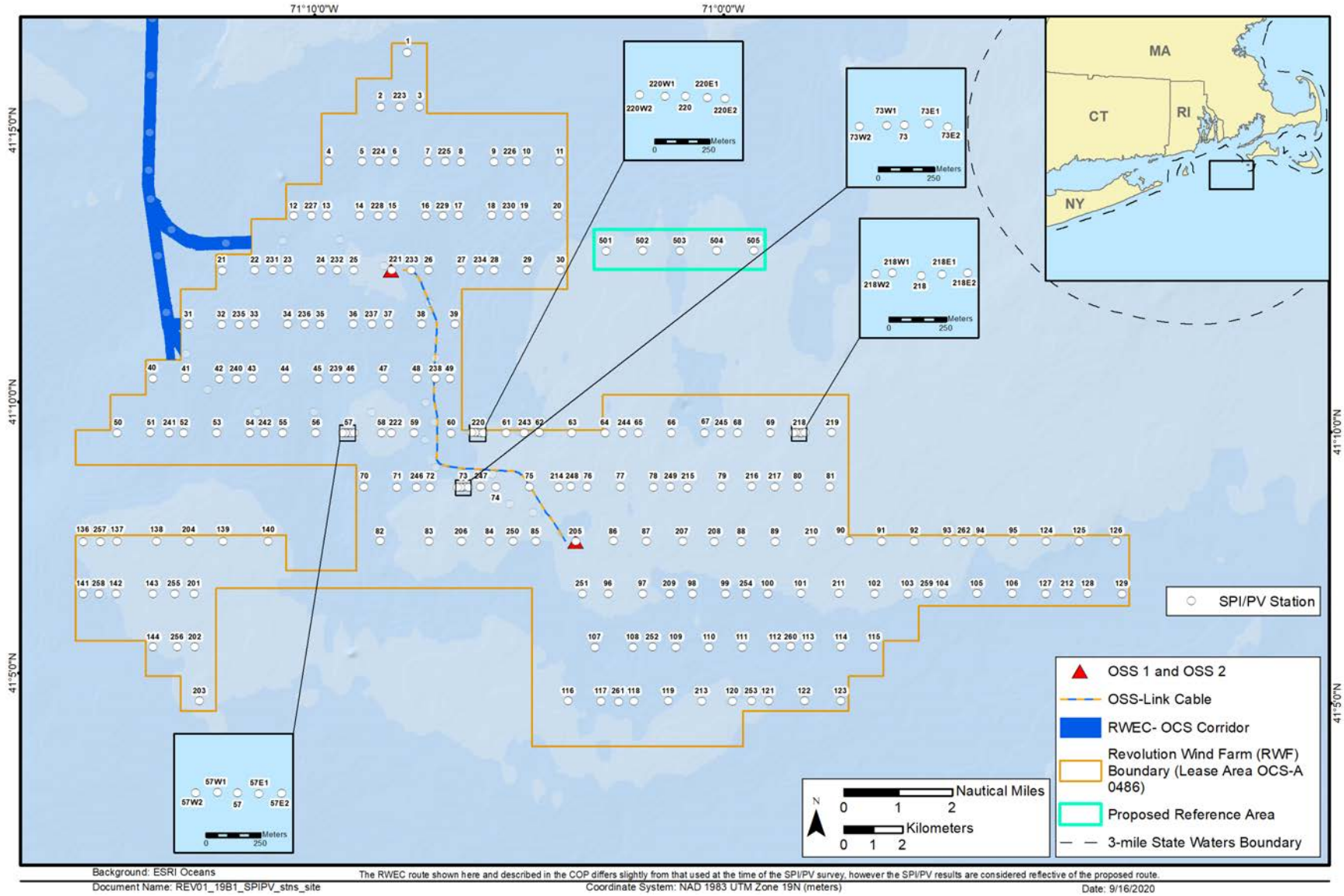


Figure 1.2-1. Station locations sampled with SPI and PV at the RWF and reference area

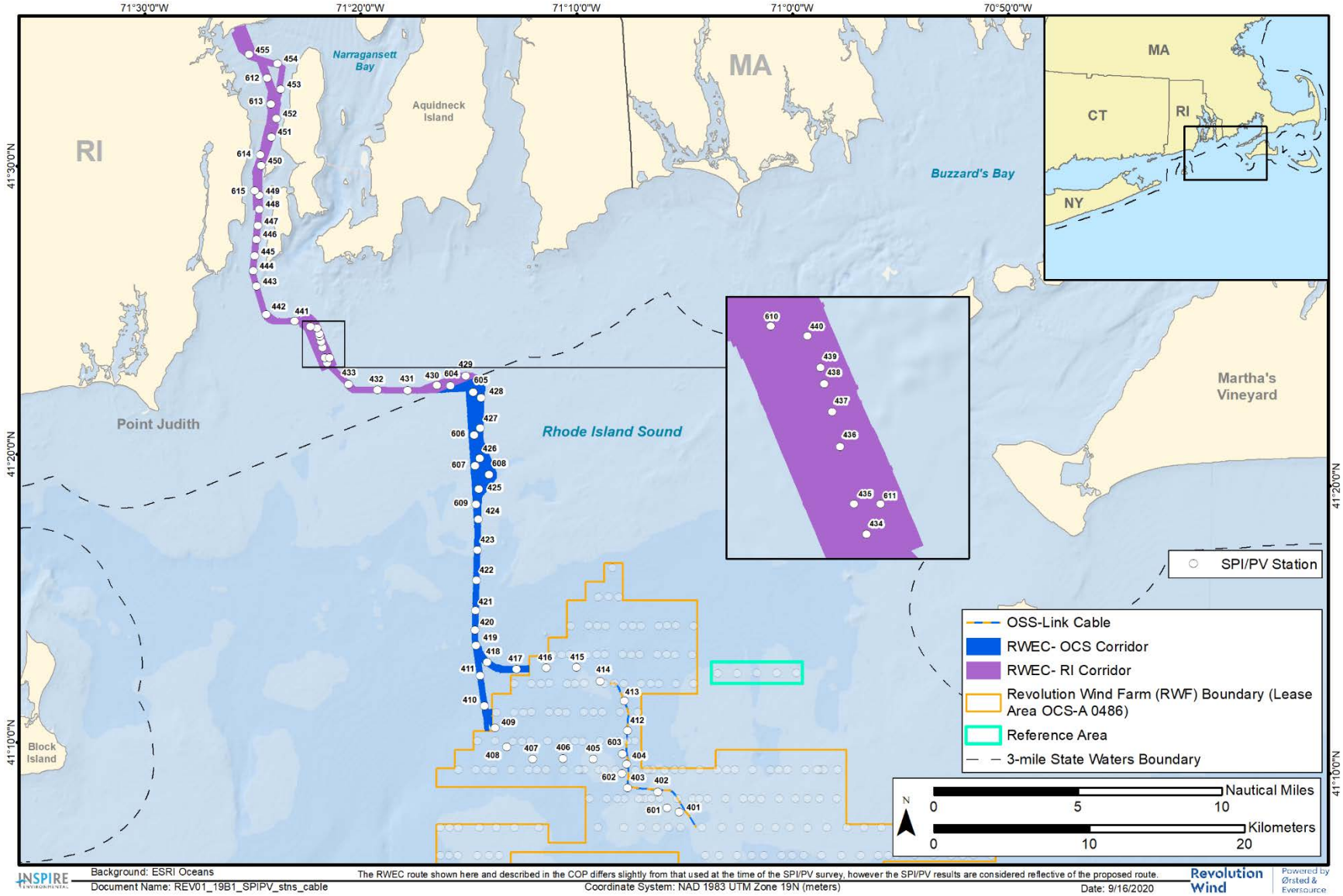


Figure 1.2-2. Station locations sampled with SPI and PV along the RWEC

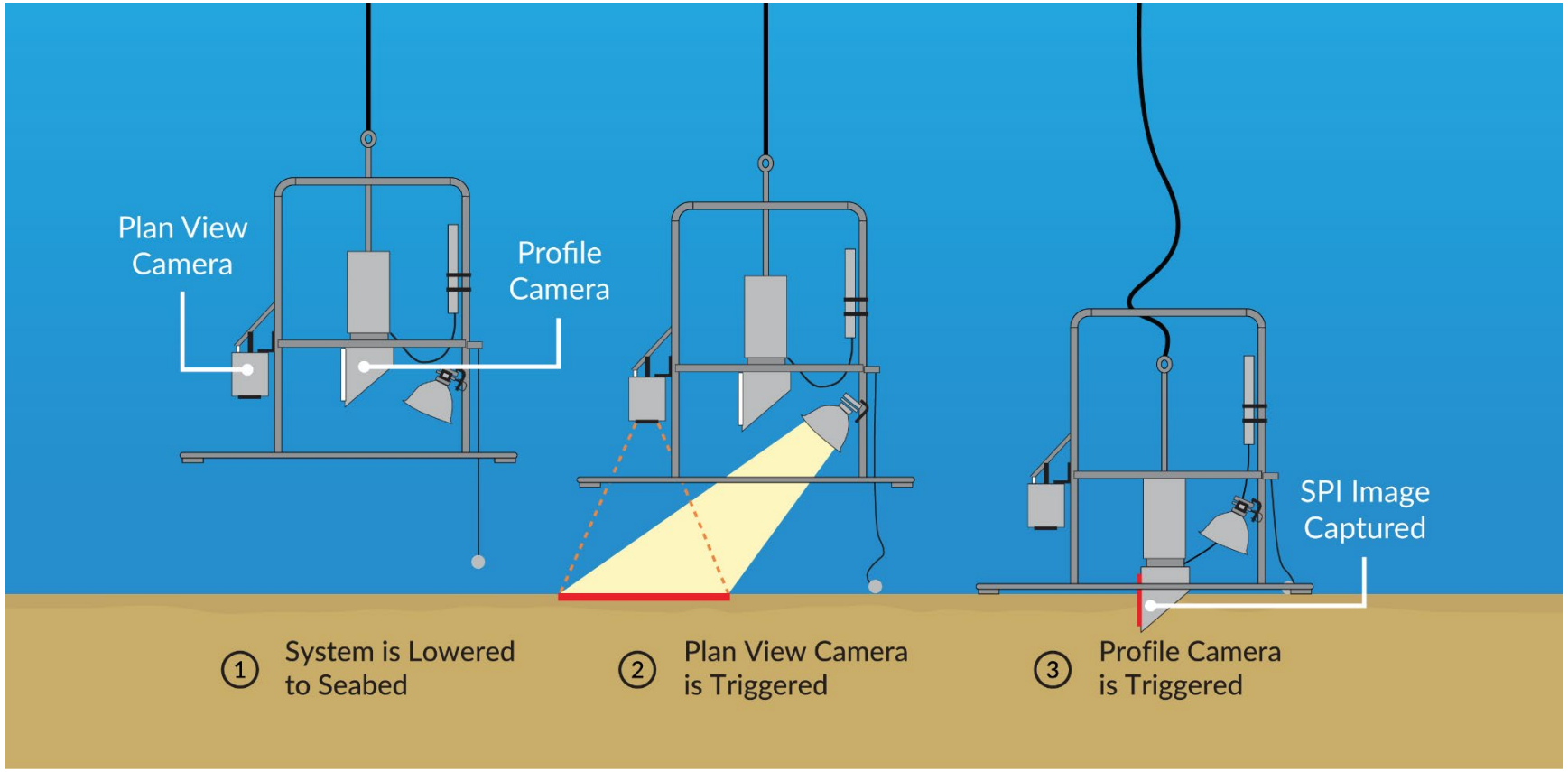


Figure 2.1-1. Schematic diagram of the operation of the sediment profile and plan view camera imaging system

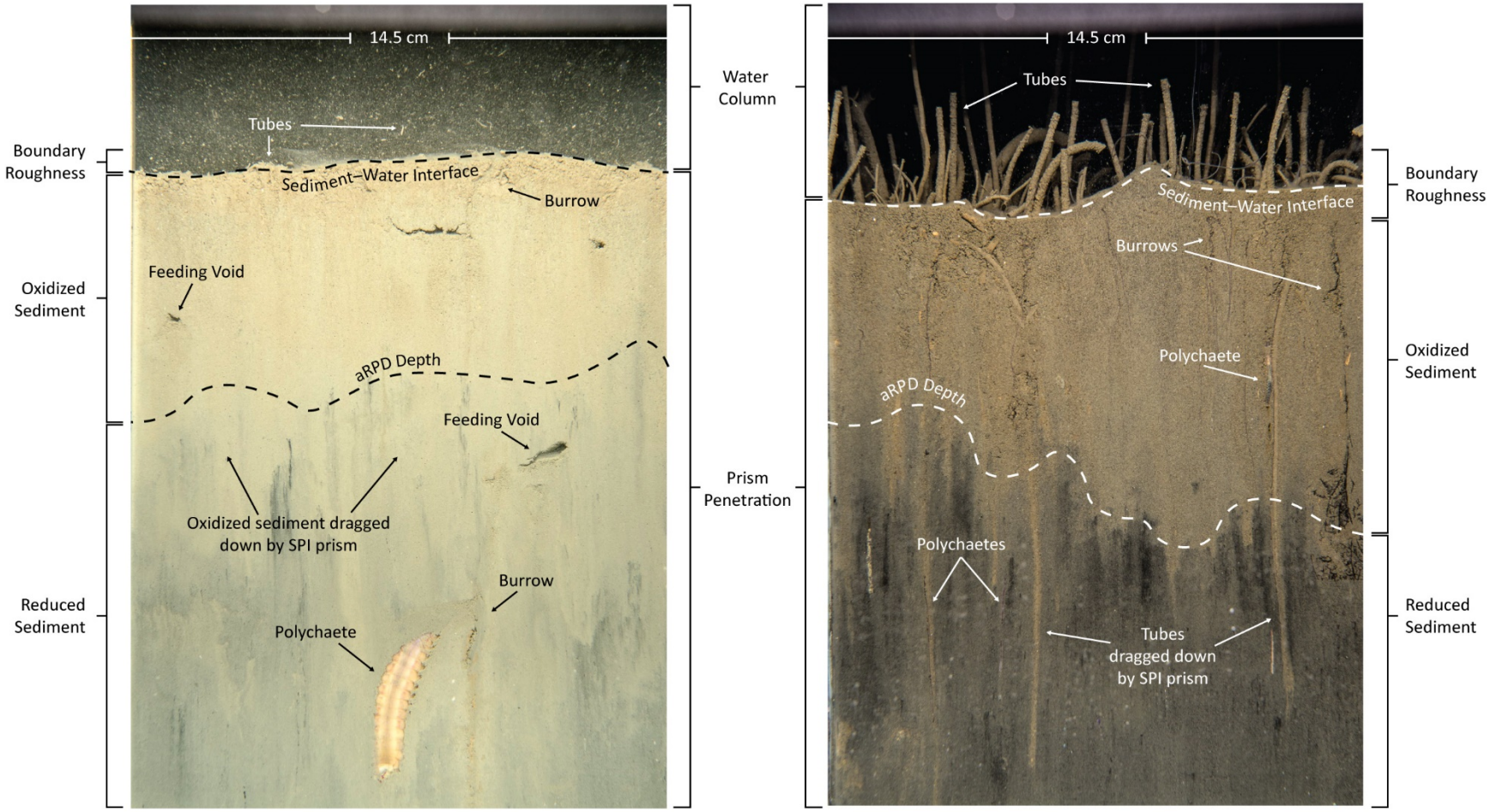


Figure 2.1-2. SPI images from soft bottom coastal and estuarine environments annotated with many standard variables derived from SPI images. The water column, depth of prism penetration, boundary roughness of the sediment–water interface, and zones of oxidized and reduced sediment are denoted with brackets. The apparent redox potential discontinuity (aRPD), the boundary between oxidized and reduced sediments, is marked with a dashed line. Infauna and related structures (tubes, burrows, feeding voids) are noted with arrows.

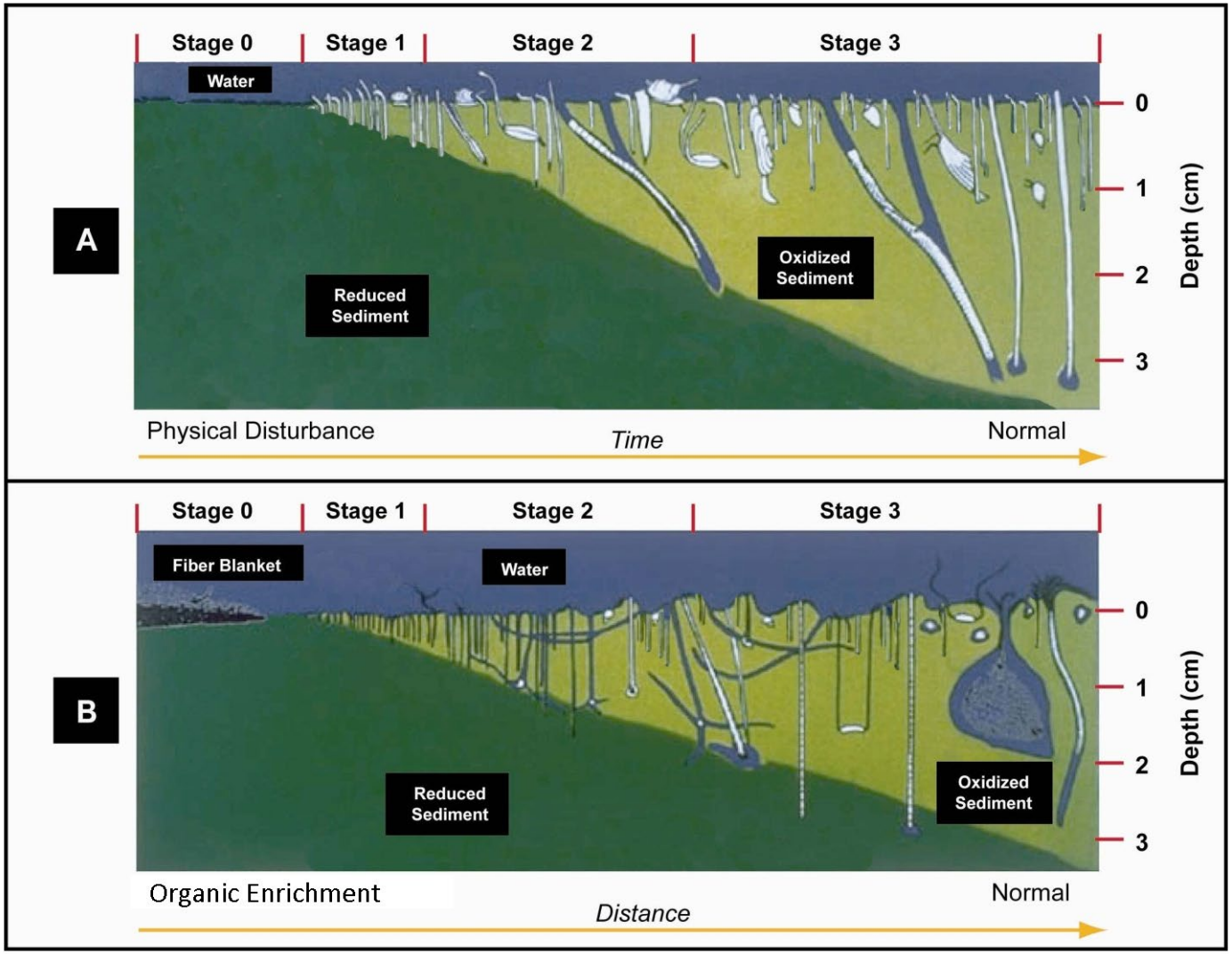


Figure 2.1-3. The stages of infaunal succession as a response of soft bottom benthic communities to (A) physical disturbance or (B) organic enrichment; from Rhoads and Germano (1982)

Figure 2.1-4. This representative plan view image shows the sampling relationship between plan view and sediment profile images. Note: plan view images differ between surveys and stations and the area covered by each plan view image may vary slightly between images and stations.

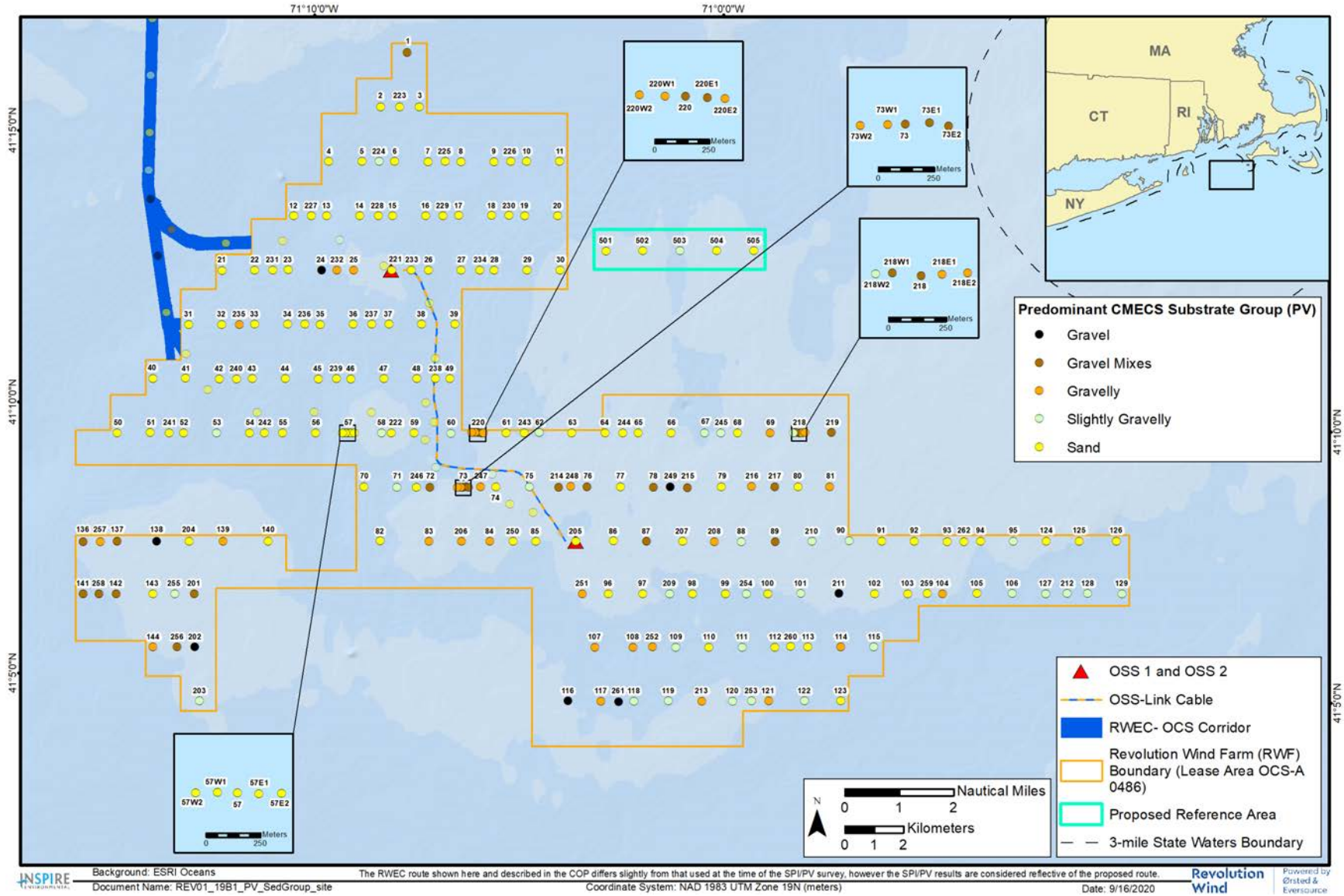


Figure 2.2-1. Predominant CMECS Substrate Group determined from PV images at the RWF and reference area

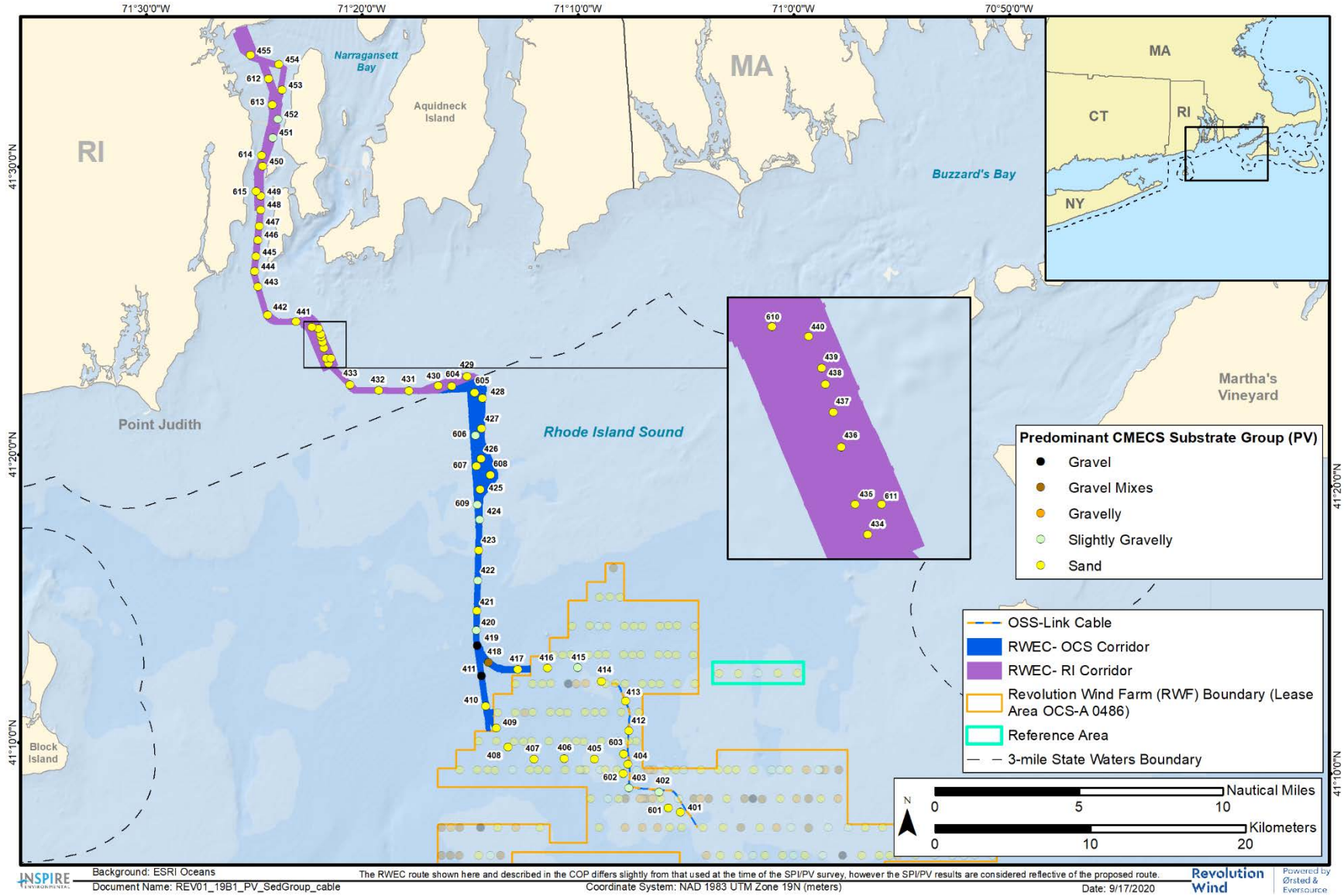


Figure 2.2-2. Predominant CMECS Substrate Group determined from PV images along the RWEC

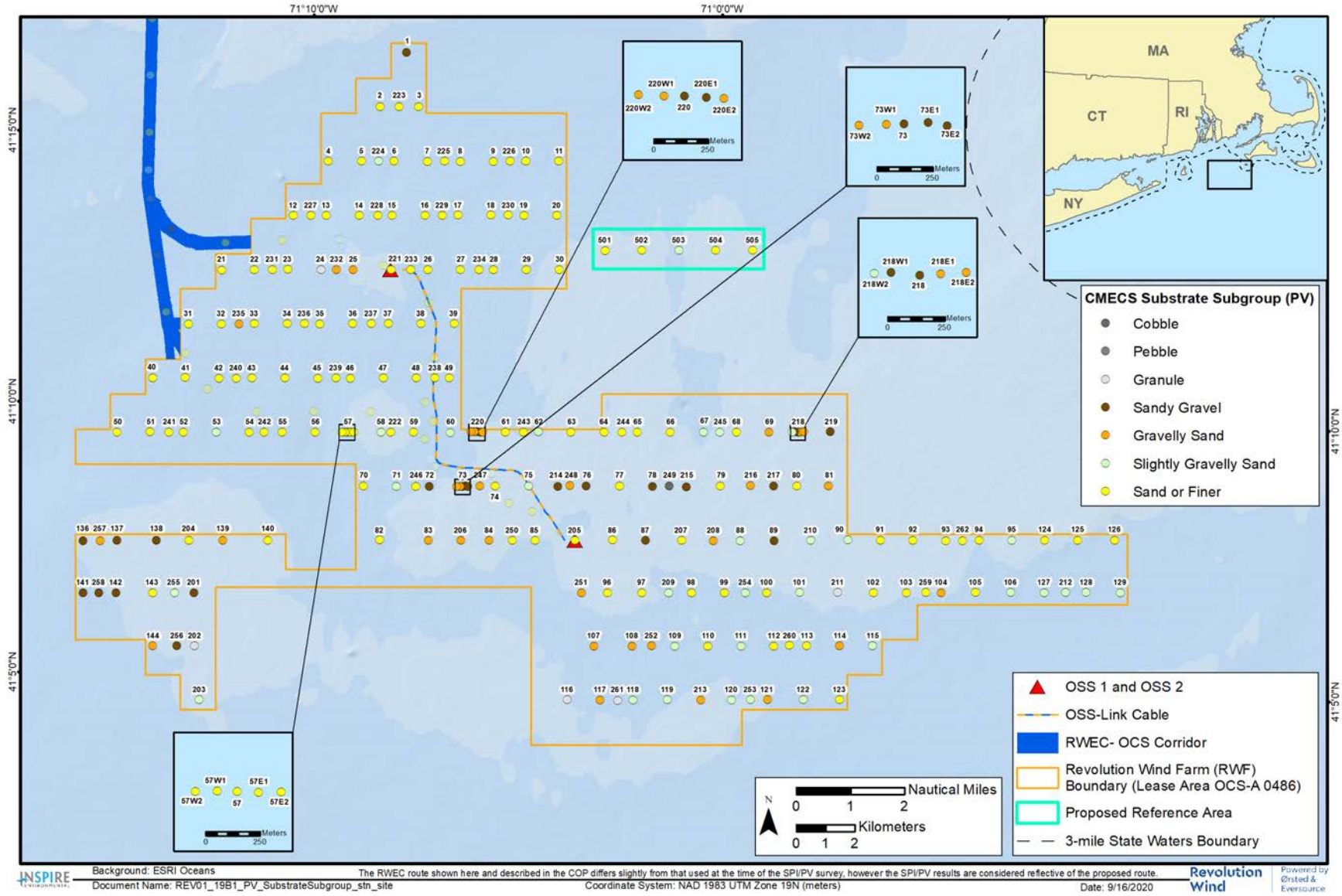


Figure 2.2-3. Predominant CMECS Substrate Subgroup determined from PV images at the RWF and reference area

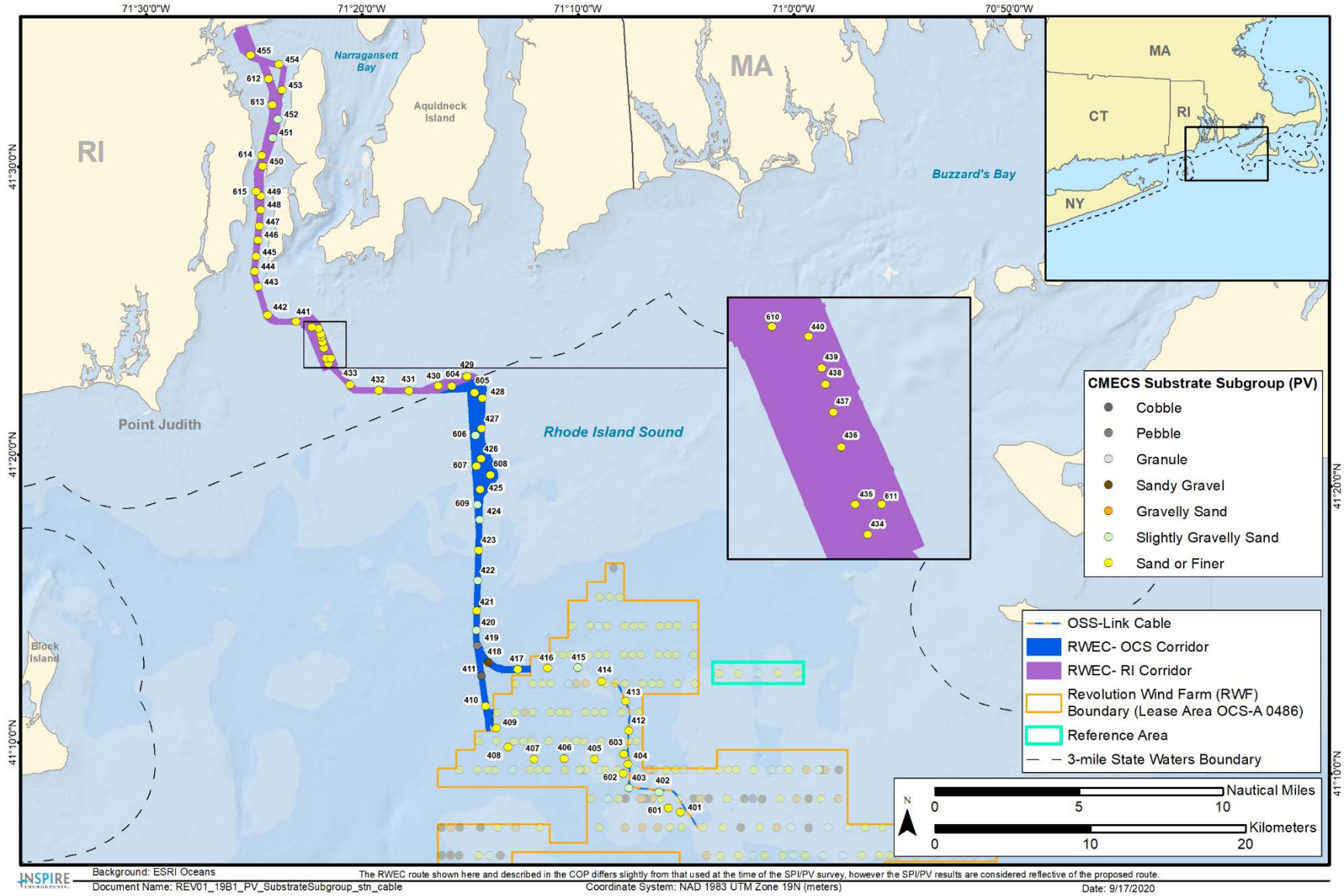


Figure 2.2-4. Predominant CMECS Substrate Subgroup determined from PV images along the RWEC

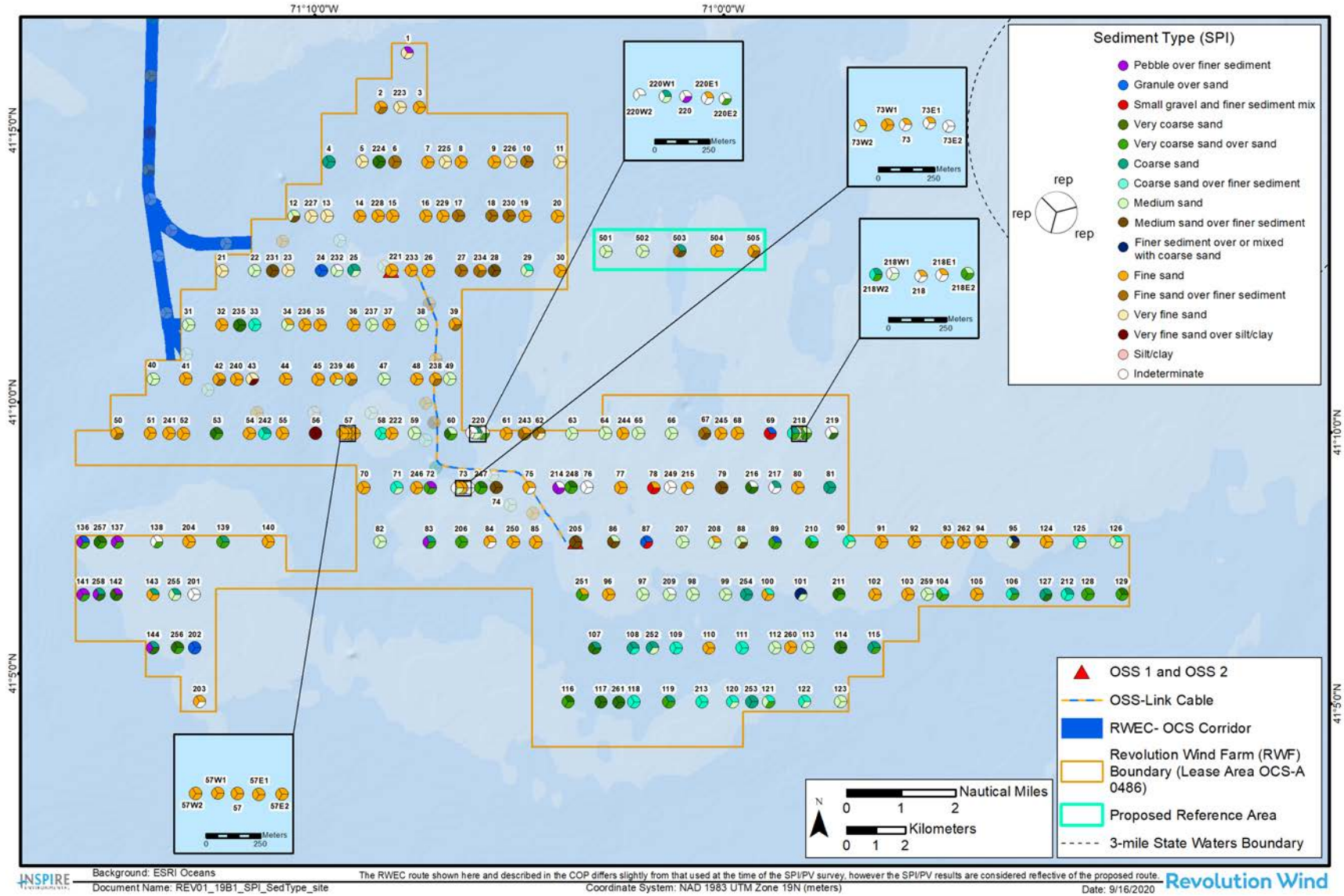


Figure 2.2-5. Sediment types aggregated from grain size major mode (phi units) derived from SPI images at the RWF and reference area, each replicate value at each station is shown, data were grouped to consolidate categories to aid in mapping, the summary tables and Attachment C provide the most descriptive information on sediment types at each station

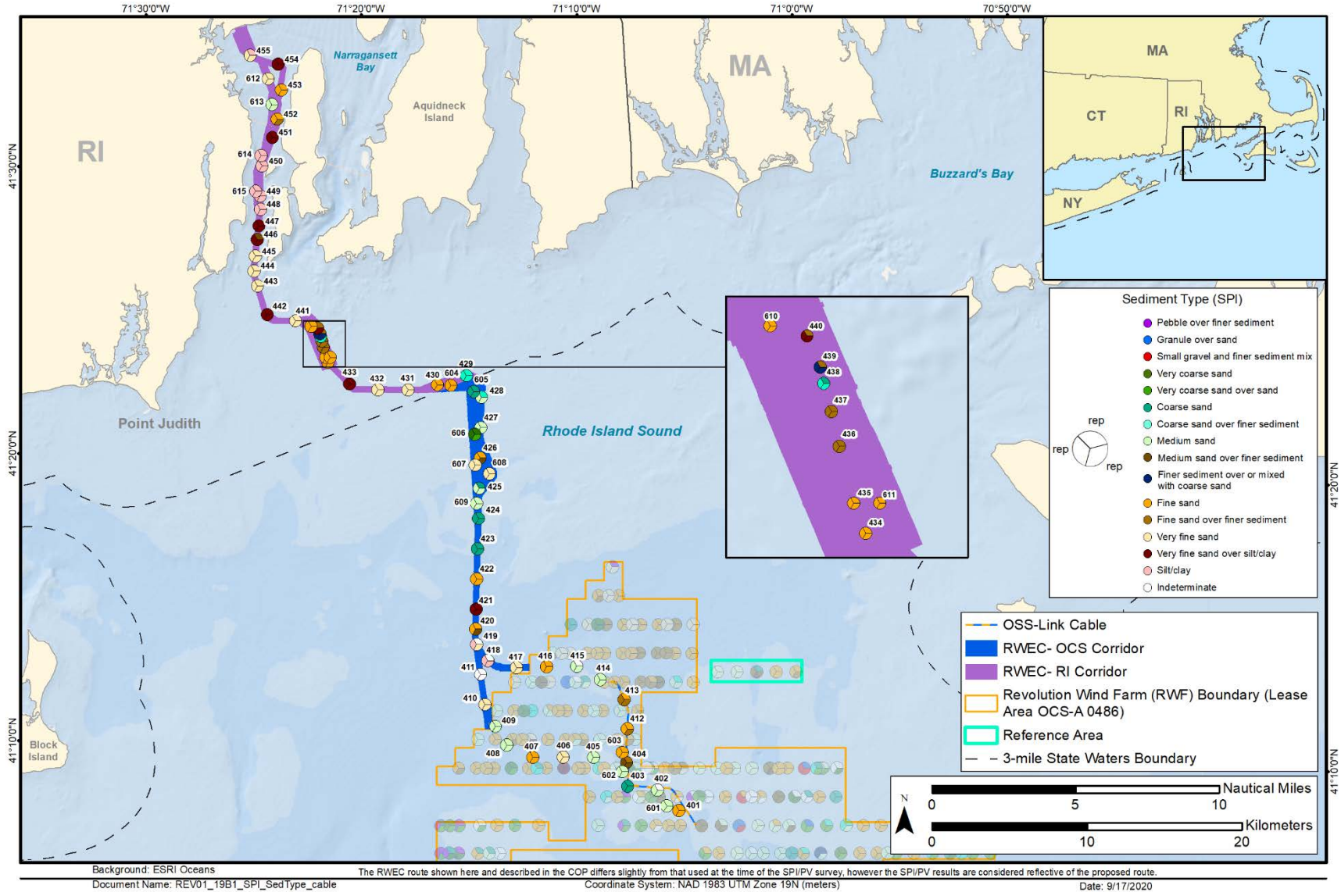


Figure 2.2-6. Sediment types aggregated from grain size major mode (phi units) derived from SPI images along the RWEC, each replicate value at each station is shown, data were grouped to consolidate categories to aid in mapping, the summary tables and Attachment C provide the most descriptive information on sediment types at each station

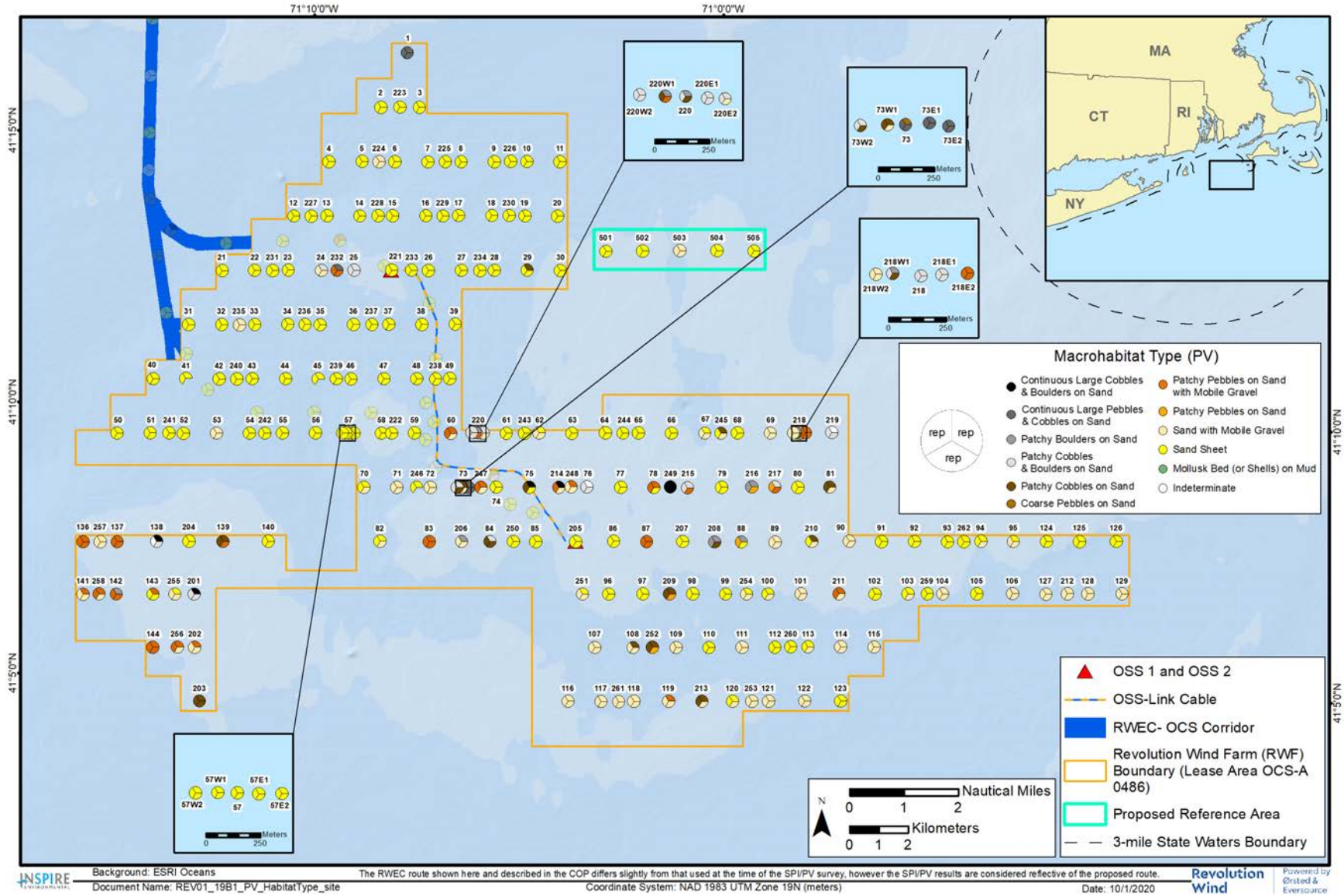


Figure 2.2-7. Macrohabitat type determined from PV images at the RWF and reference area, each replicate value at each station is shown

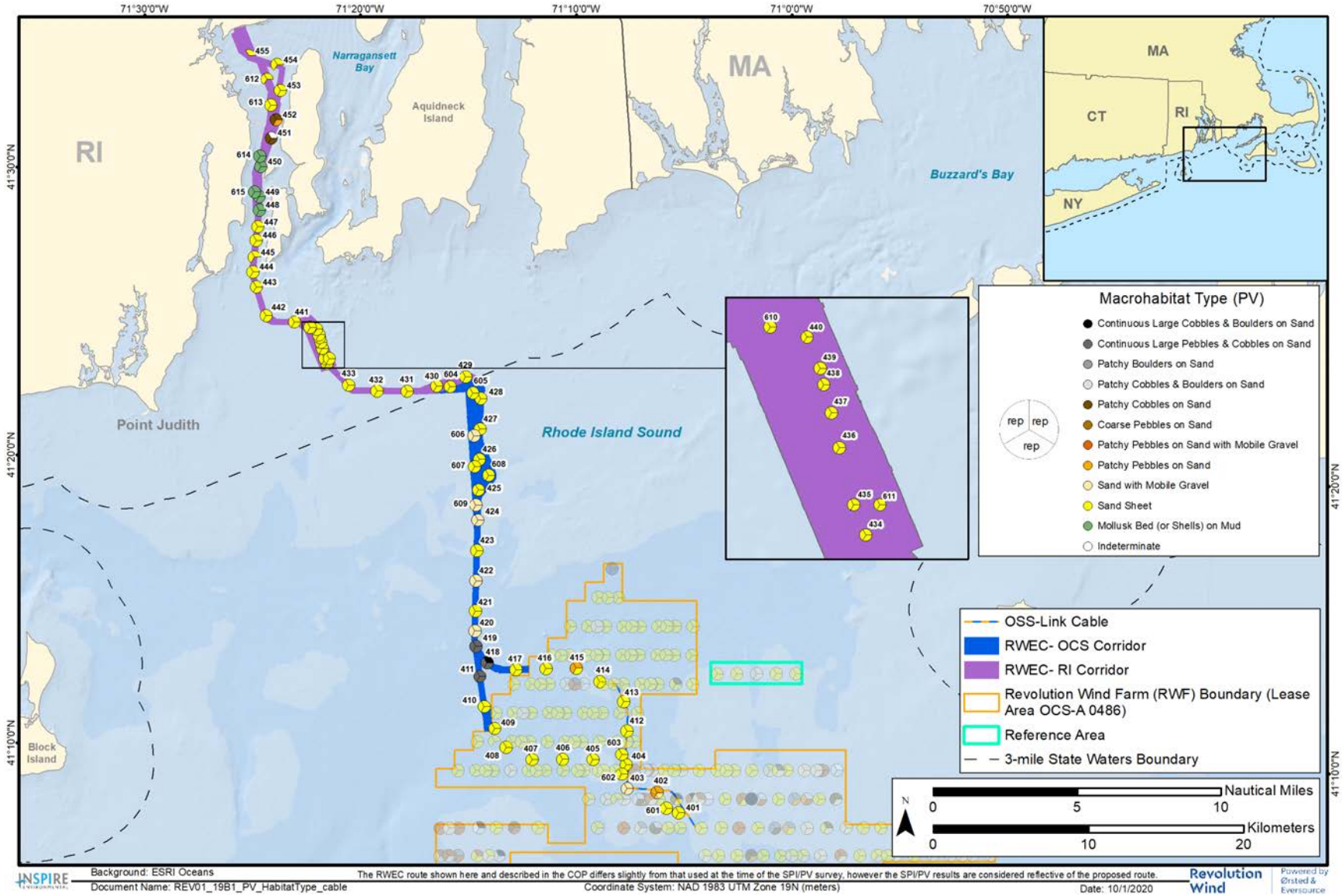


Figure 2.2-8. Macrohabitat type determined from PV images along the RWEC, each replicate value at each station is shown

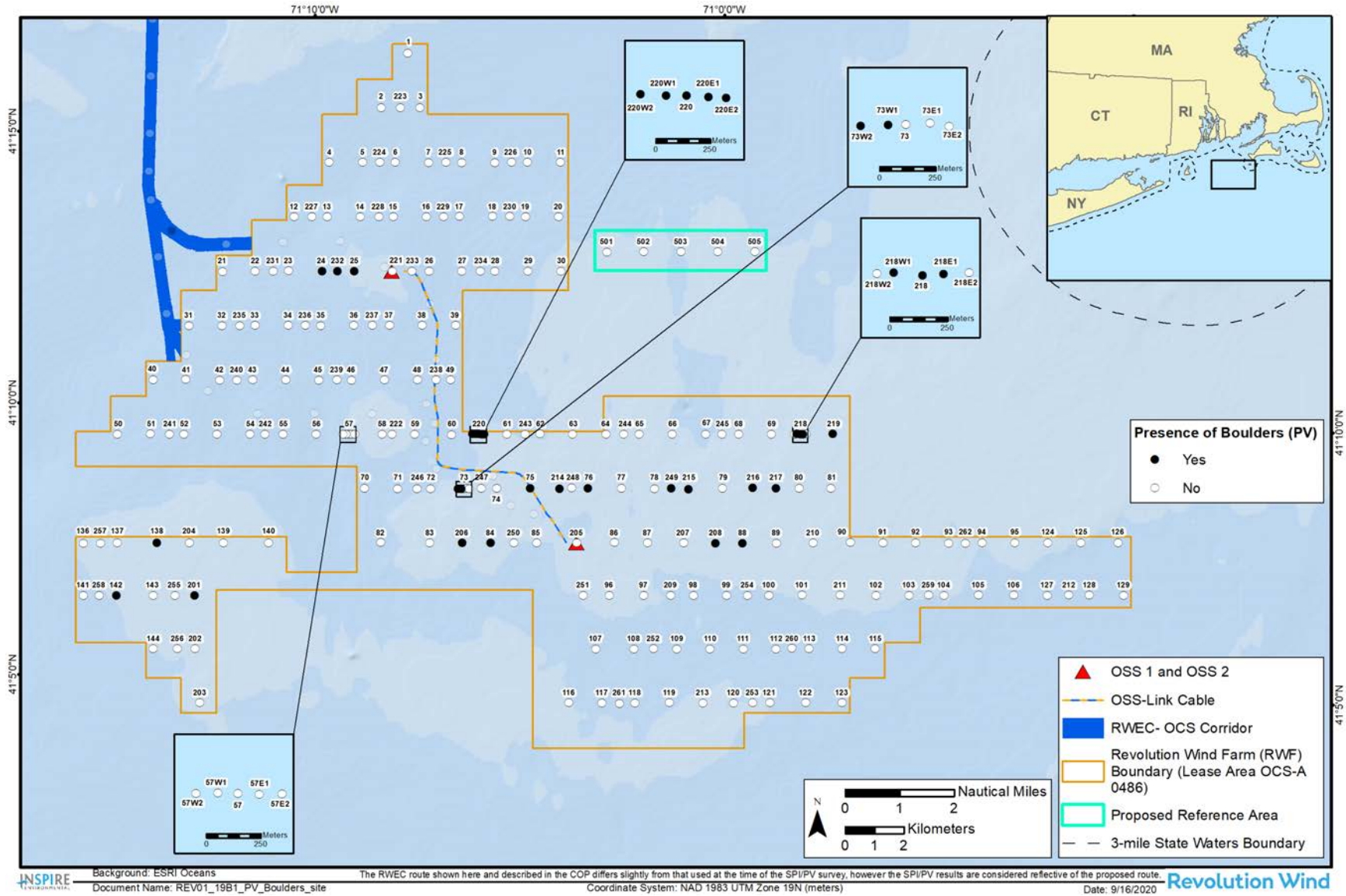


Figure 2.2-9. Presence/absence of boulders at the RWF and reference area

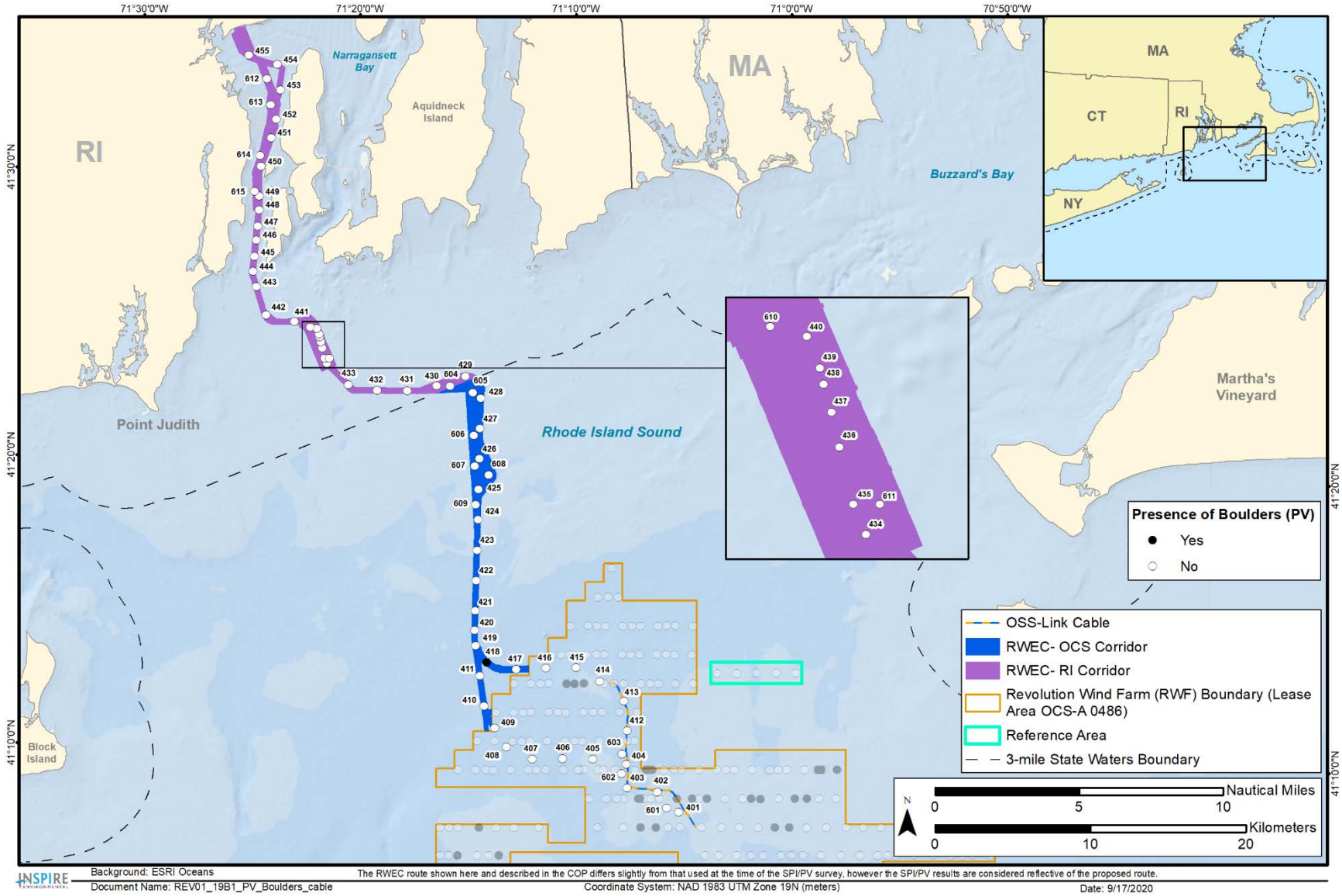


Figure 2.2-10. Presence/absence of boulders across the RWEC stations

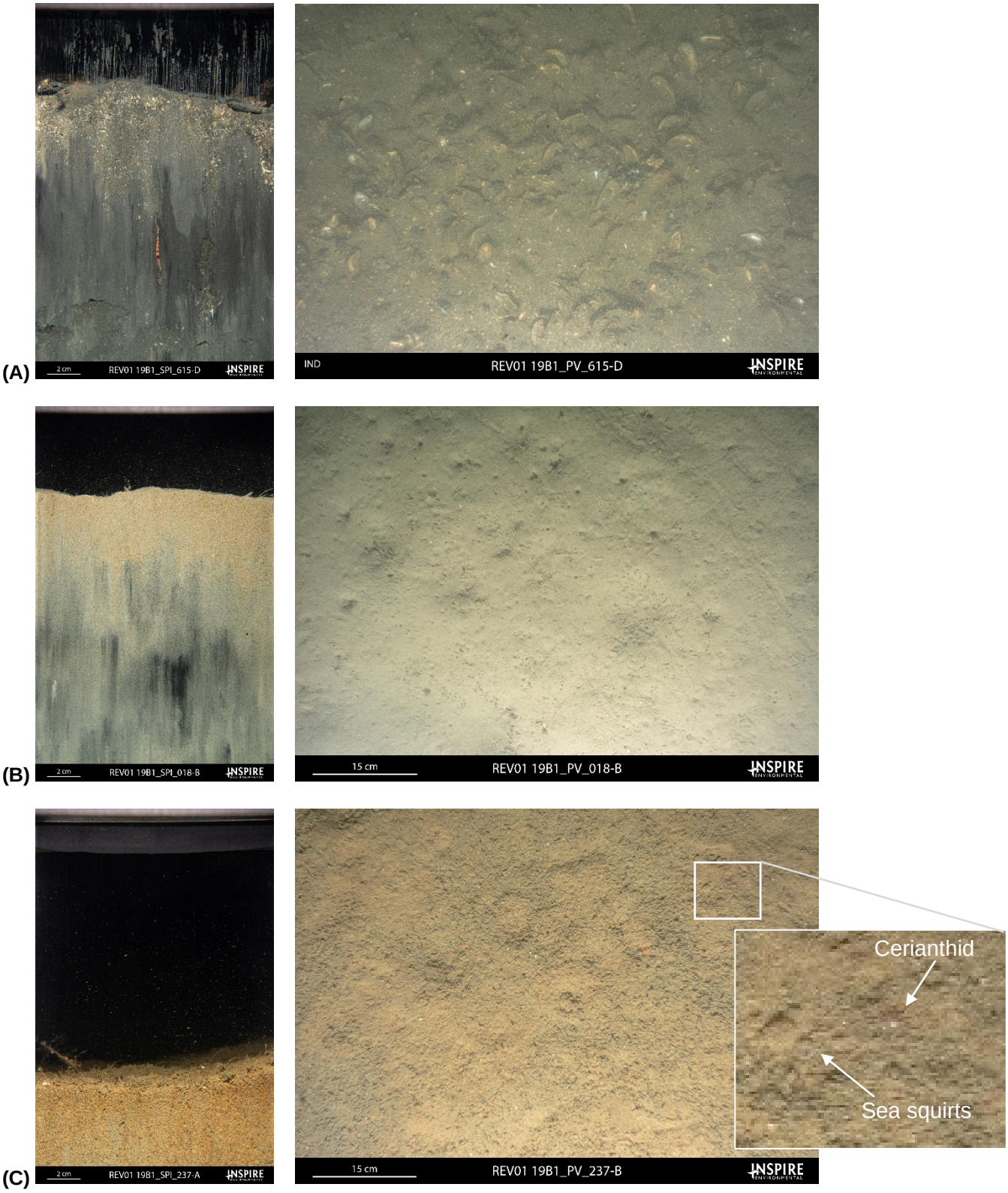


Figure 2.2-11. Representative SPI and PV images depicting the range of sediment types across the surveyed area; (A) silt/clay; (B) fine sand over finer sediment; (C) medium sand; (D) very coarse sand; and (E) pebble over finer sediment

(D)

(E)

Figure 2.2-11. continued ***Representative SPI and PV images depicting the range of sediment types across the surveyed area; (A) silt/clay; (B) fine sand over finer sediment; (C) medium sand; (D) very coarse sand; and (E) pebble over finer sediment***

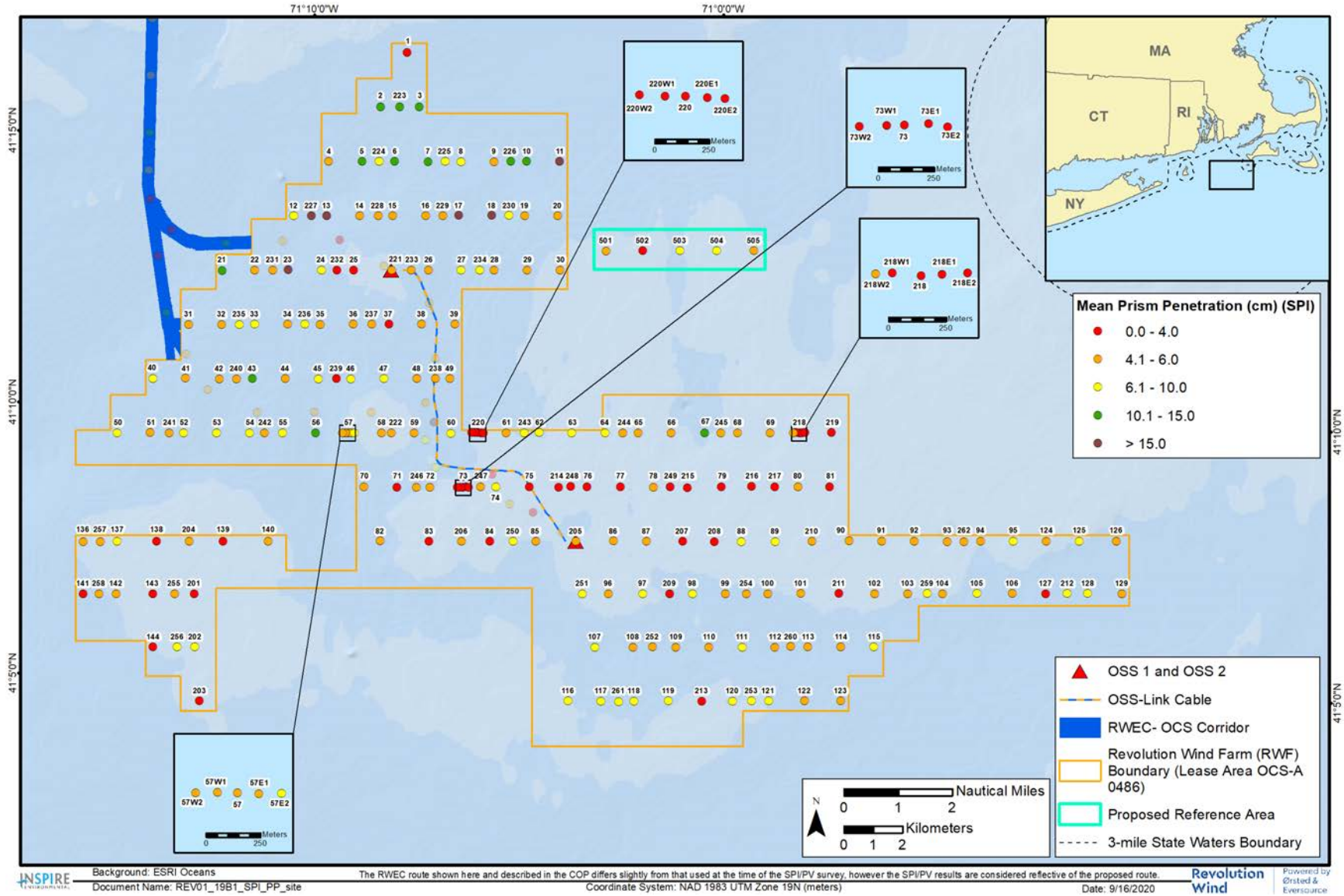


Figure 2.2-12. Mean station camera prism penetration depths (cm) at the RWF and reference area

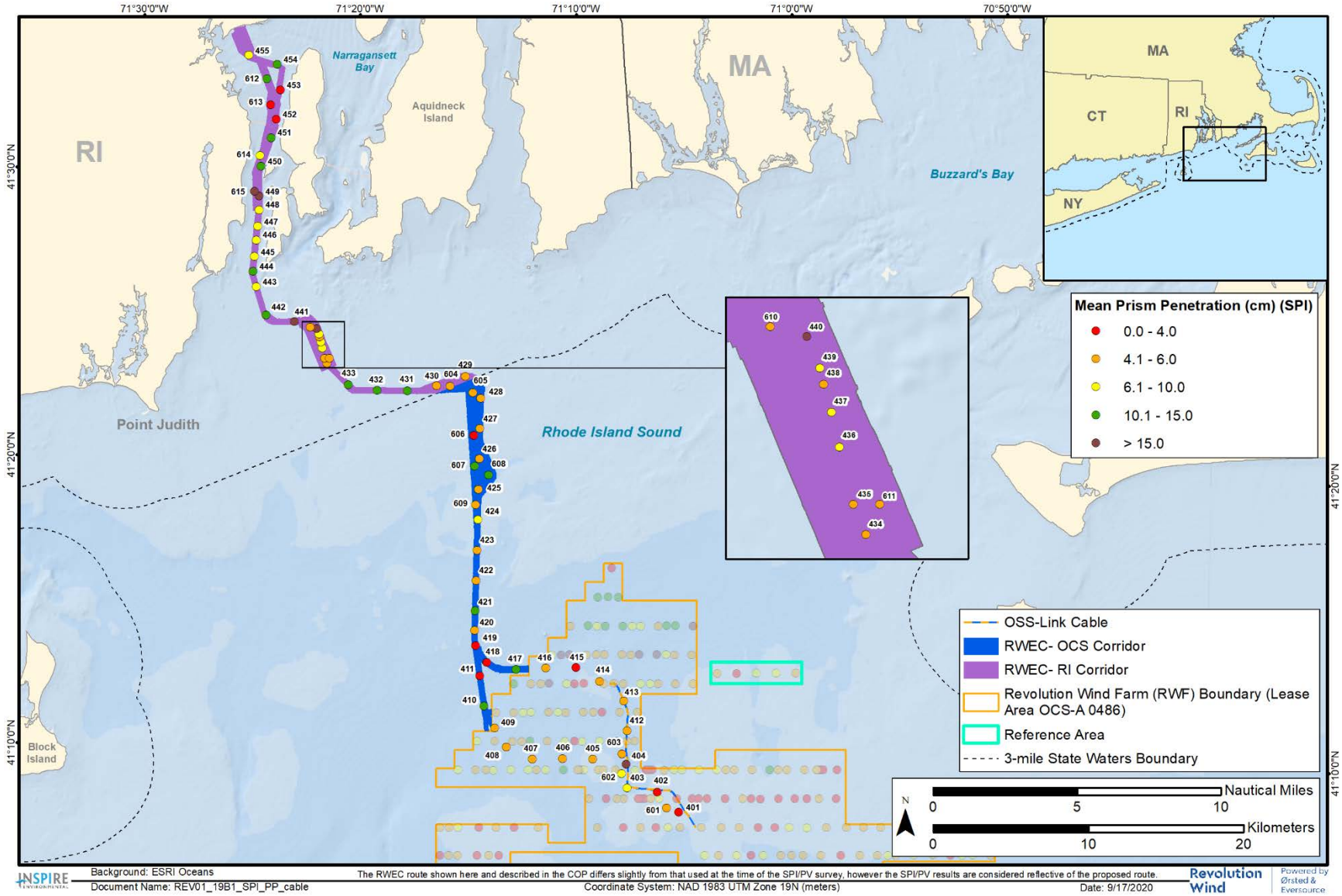
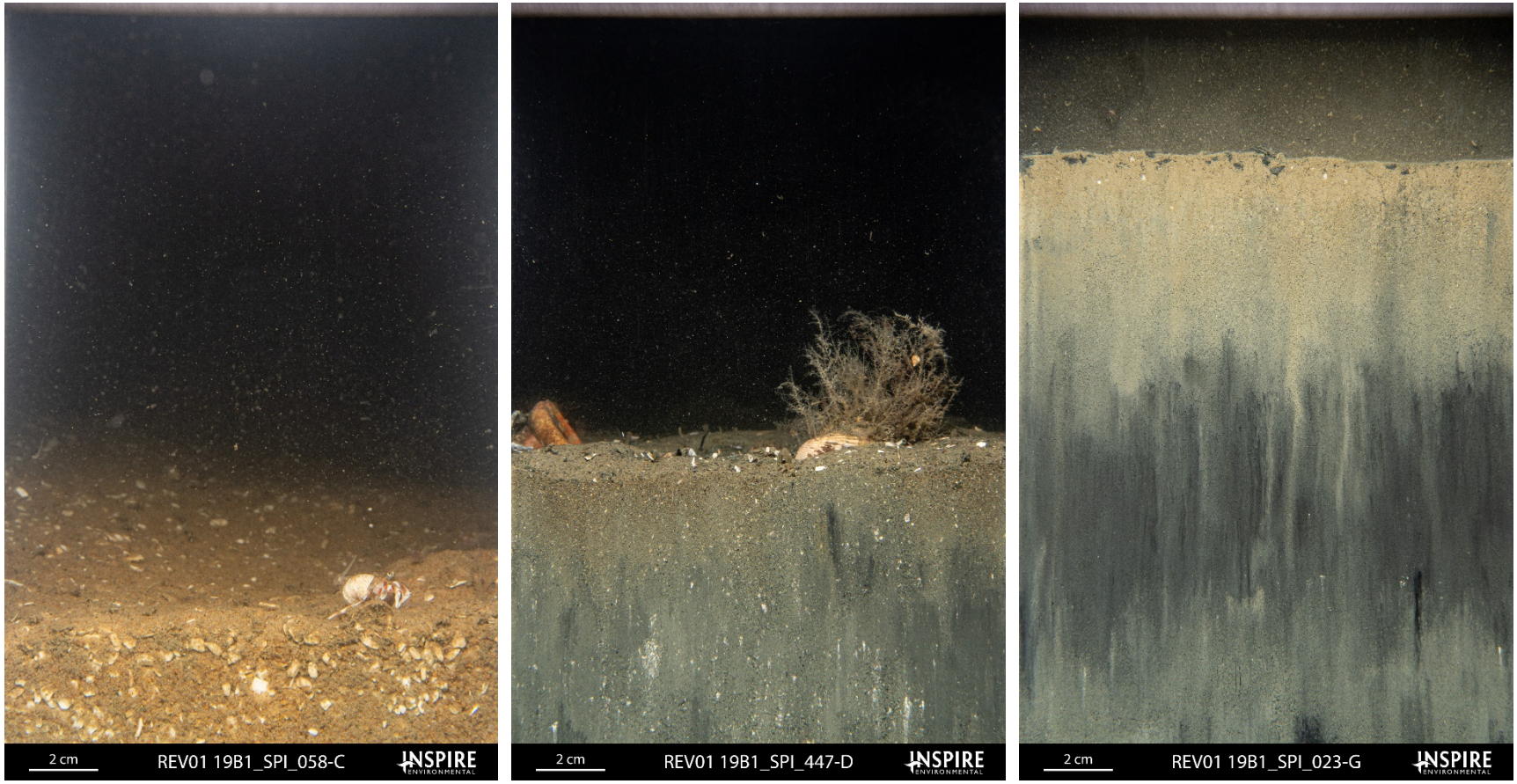


Figure 2.2-13. Mean station camera prism penetration depths (cm) along the RWEC



(A) **(B)** **(C)**

Figure 2.2-14. Representative SPI images showing sediments with (A) low; (B) medium; and (C) high prism penetration values, corresponding to high, medium, and low load-bearing strength, respectively

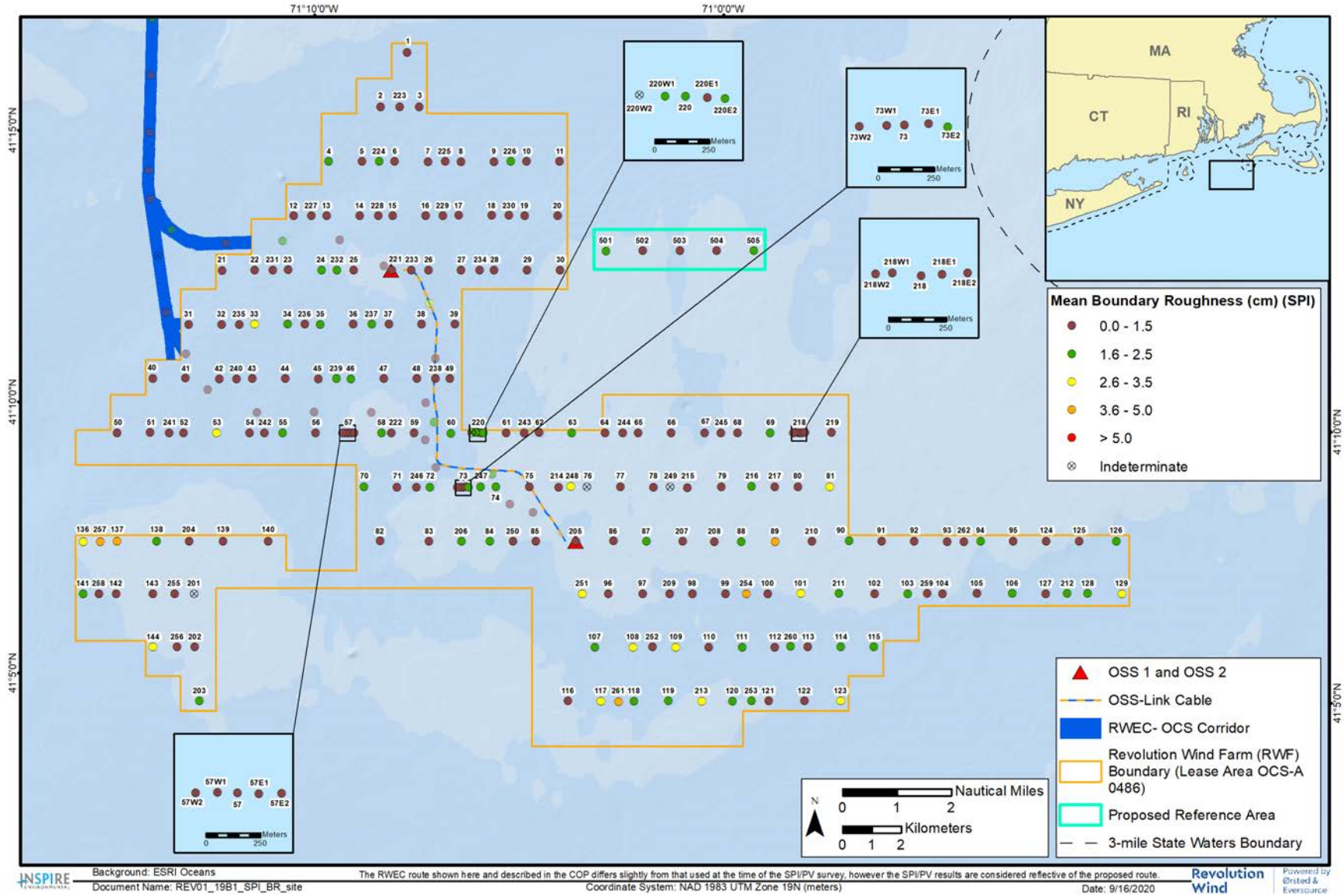


Figure 2.2-15. Mean station small-scale boundary roughness (cm) at the RWF and reference area

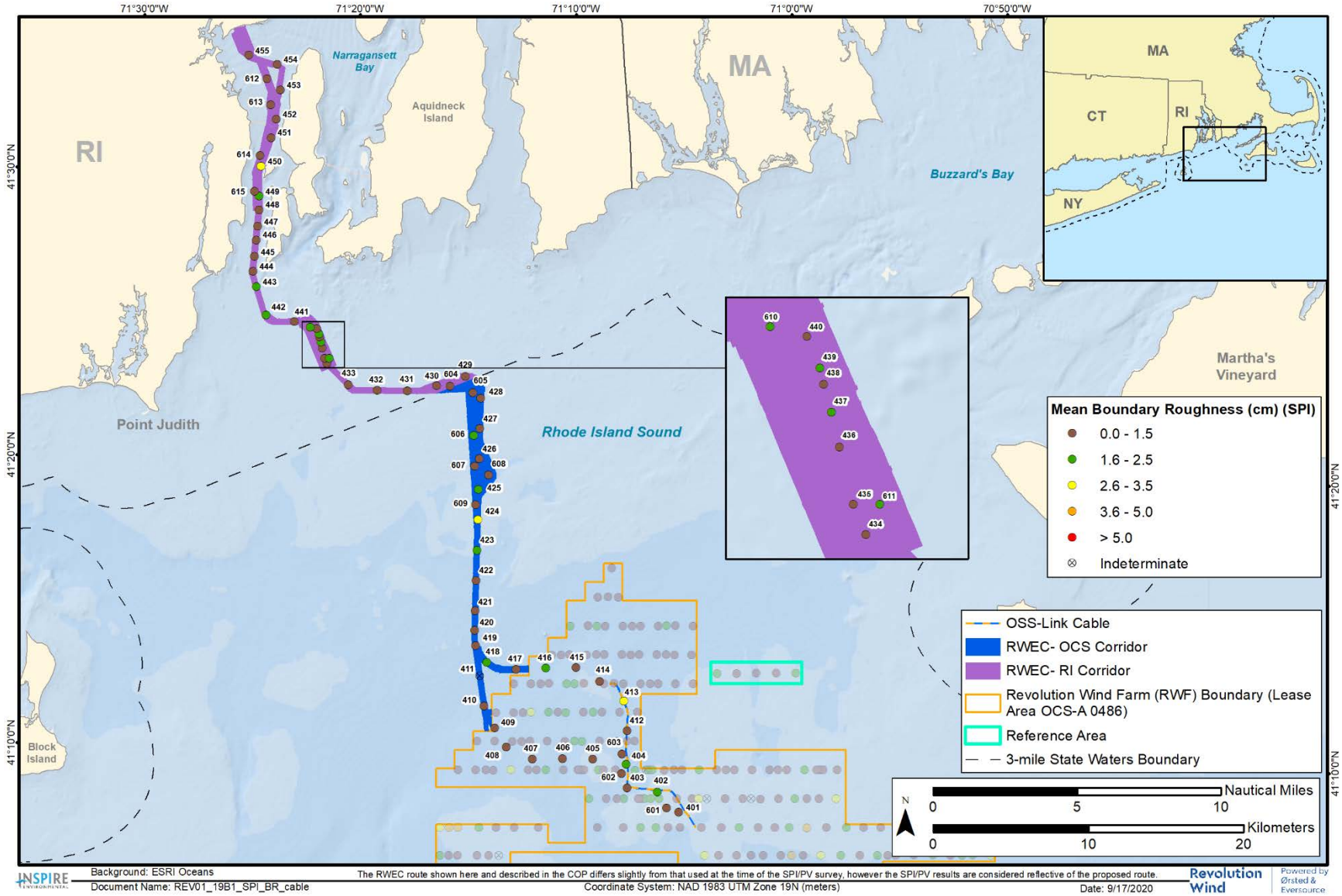


Figure 2.2-16. Mean station small-scale boundary roughness (cm) along the RWEC

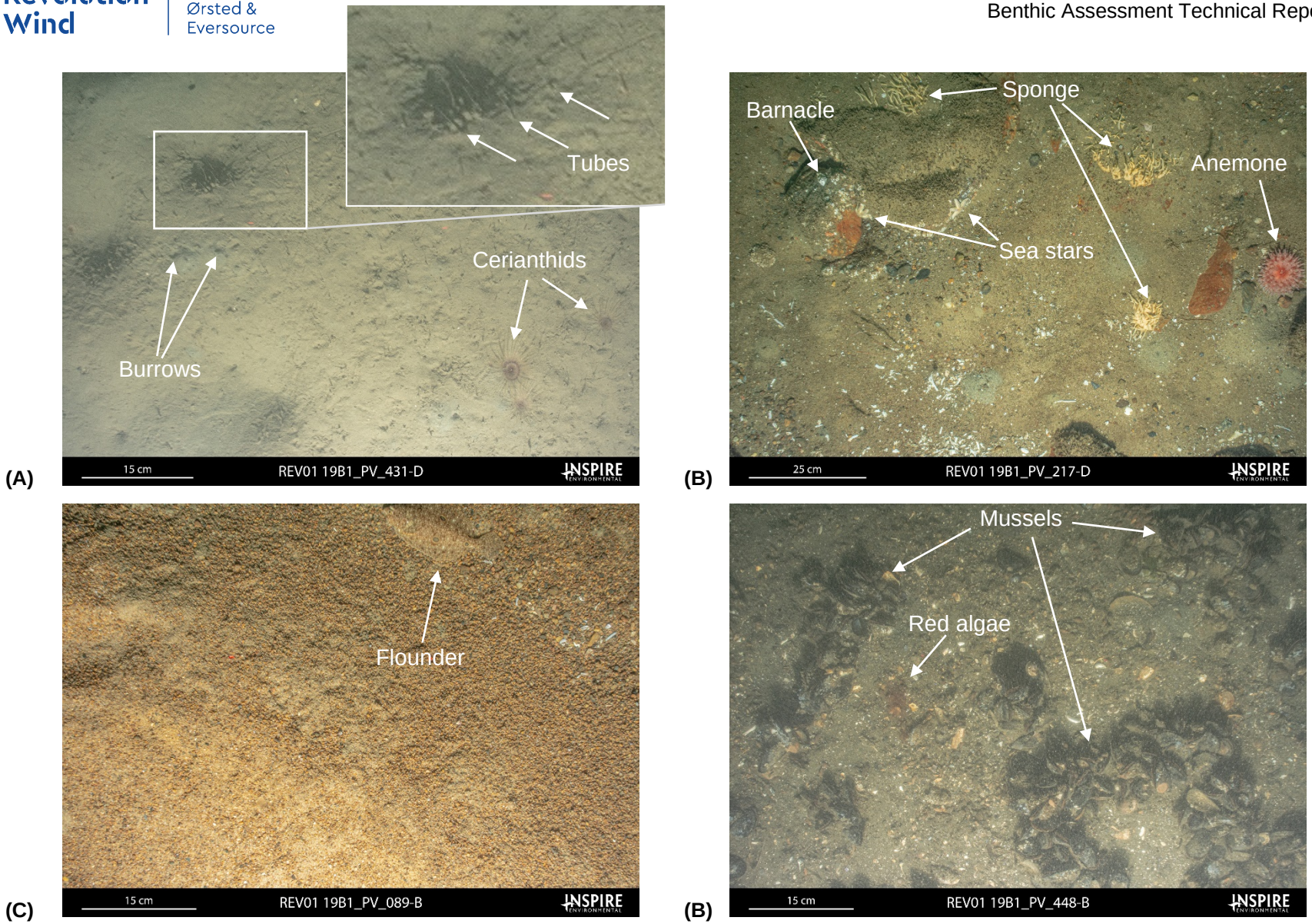


Figure 2.2-17. Representative PV images depicting common macrohabitat types and associated fauna observed across the surveyed area including; (A) sand sheet, with several Cerianthids, large burrows, and larger tubes visible; (B) patchy cobbles and boulders on sand, with sea stars, barnacles, sponges, and an anemone; (C) sand with mobile gravel with a fourspot flounder; and (D) mollusk bed (or shells) on mud with blue mussels and red algae tuft

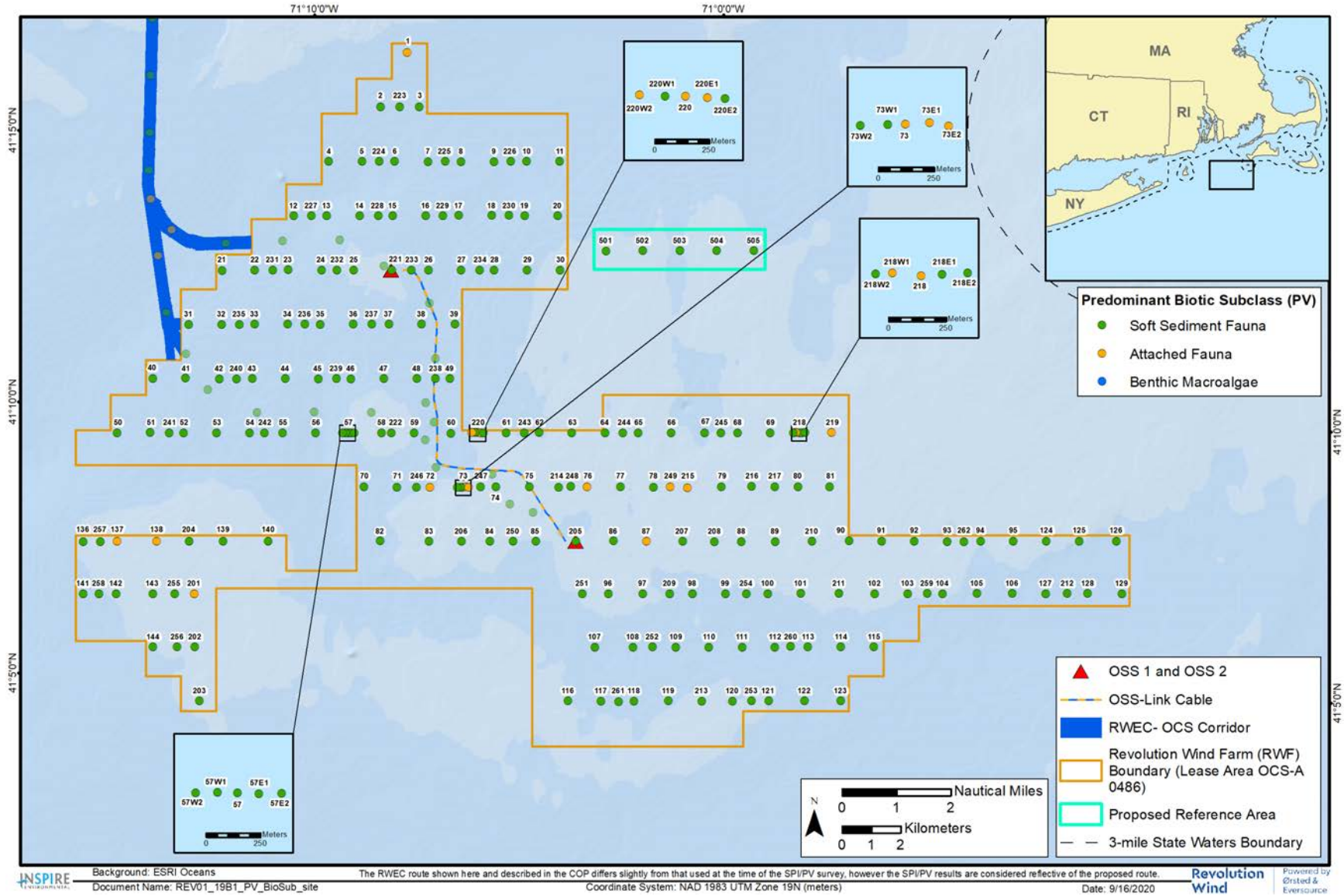


Figure 2.2-18. Predominant CMECS Biotic Subclass determined from PV images at the RWF and reference area

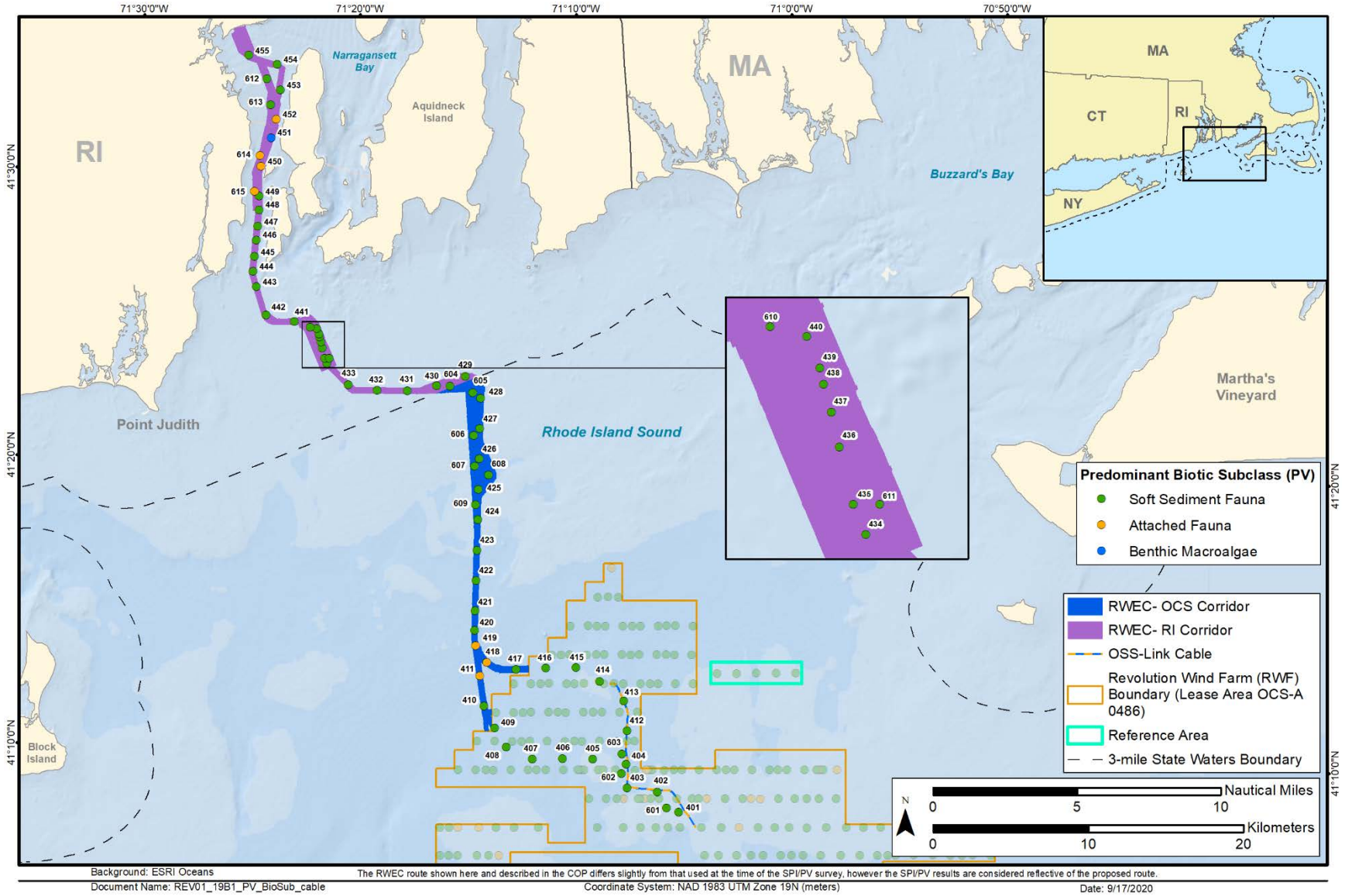


Figure 2.2-19. Predominant CMECS Biotic Subclass determined from PV images along the RWEC

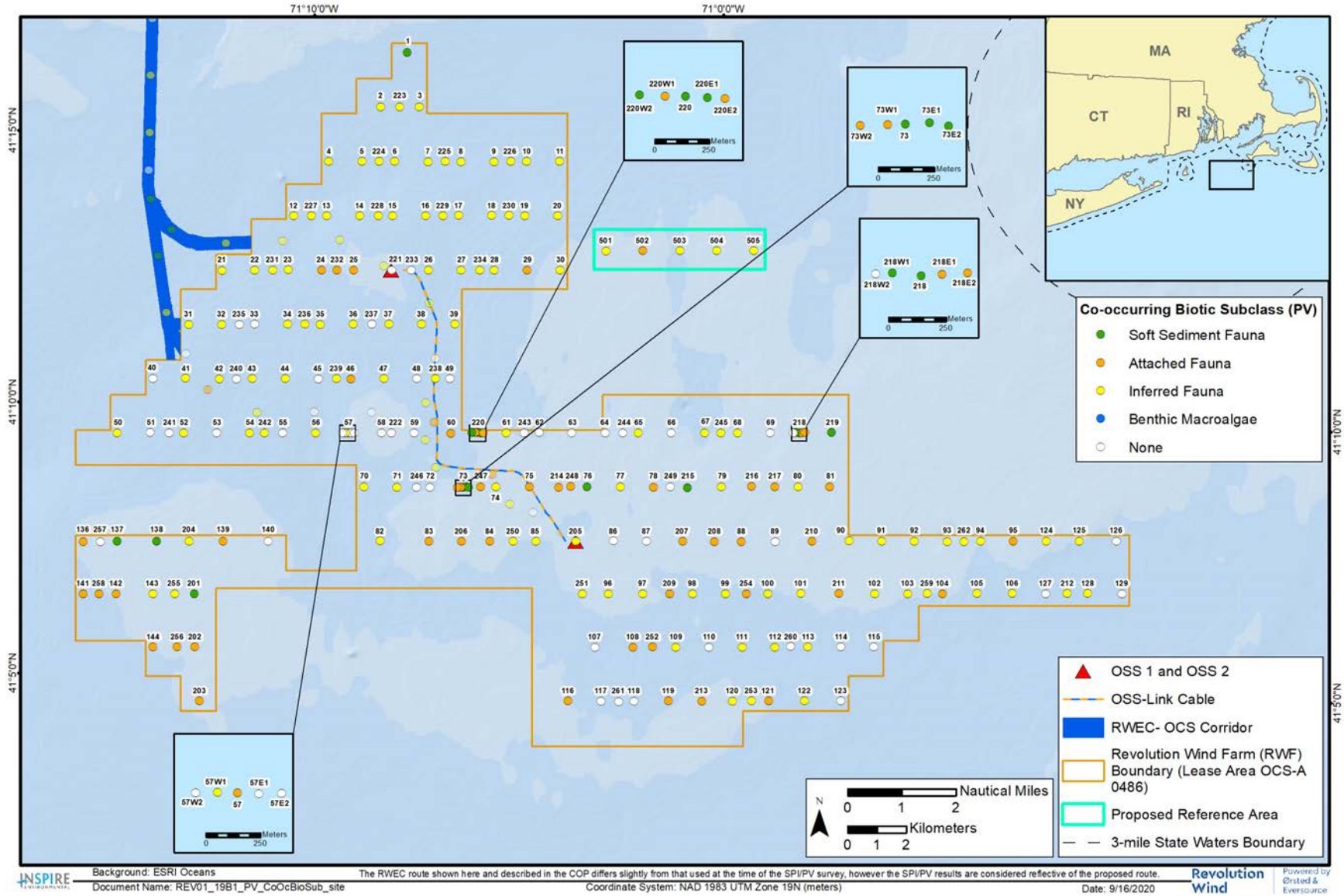


Figure 2.2-20. Predominant Co-Occurring CMECS Biotic Subclass determined from PV images at the RWF and reference area

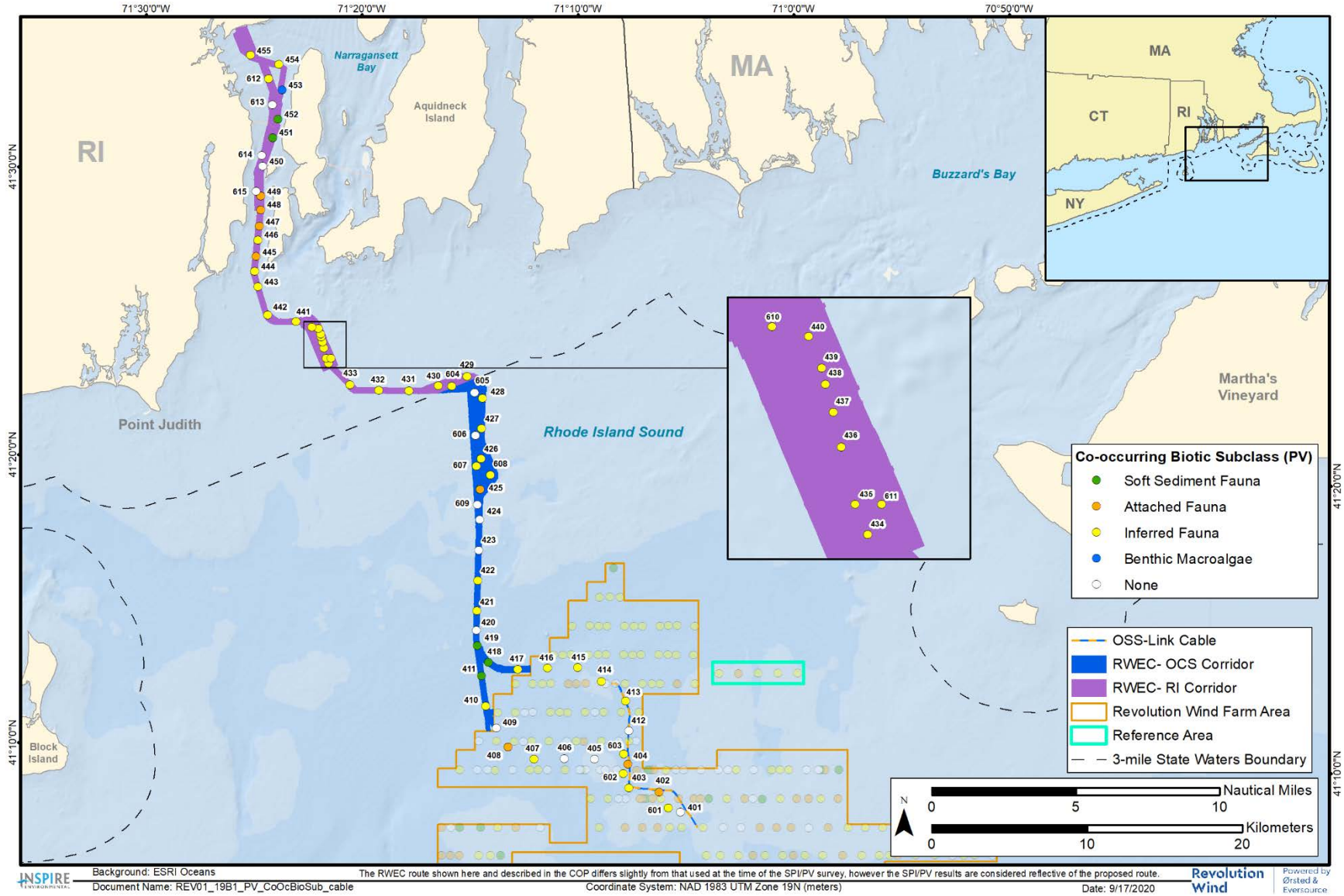


Figure 2.2-21. Predominant Co-Occurring CMECS Biotic Subclass determined from PV images along the RWEC

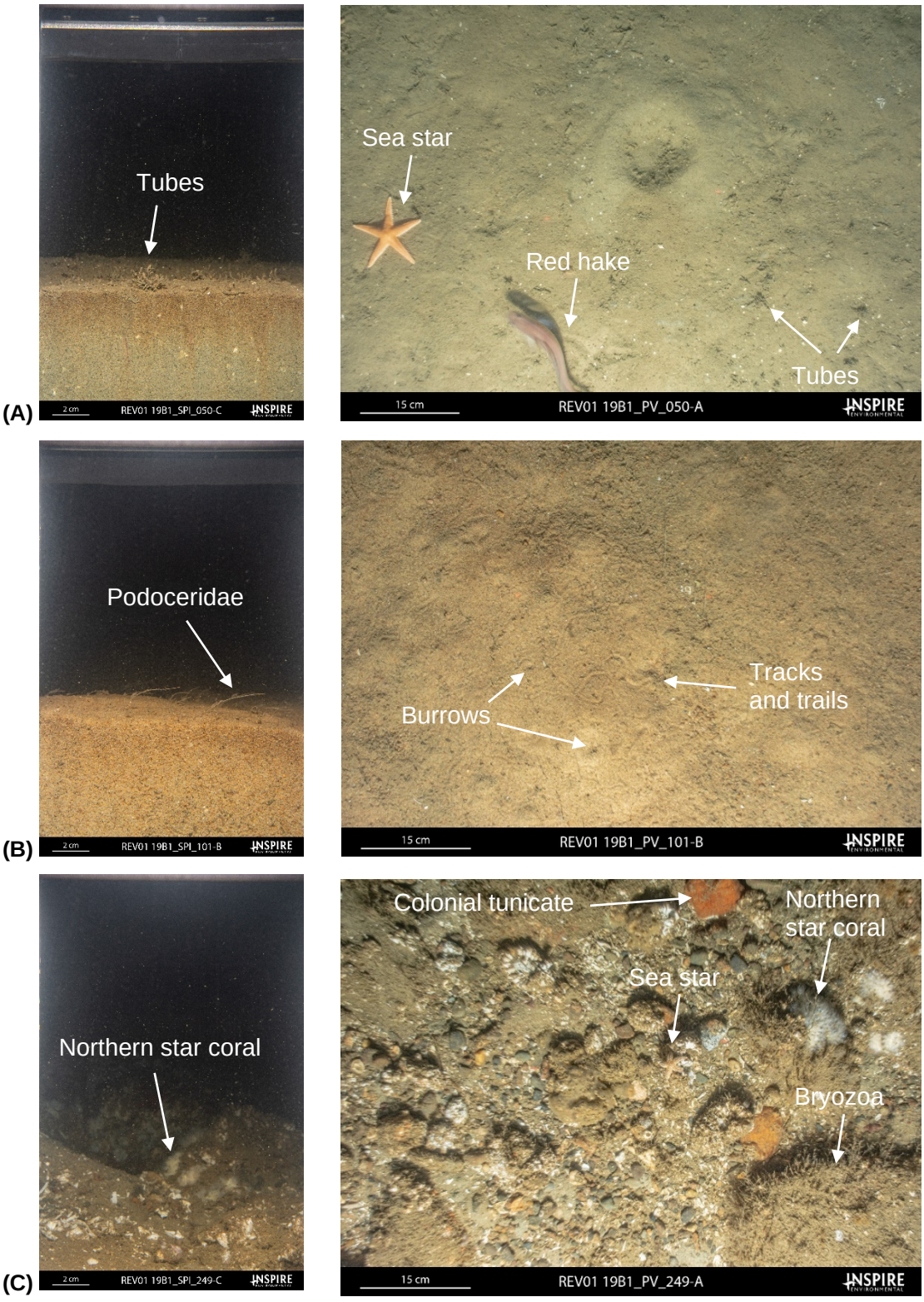


Figure 2.2-22. Representative SPI and PV images showing CMECS Biotic Subclass and/or Co-Occurring Subclass of (A) Soft Sediment Fauna, with large infaunal tubes (Ampeliscid), tracks, trails, and burrows present, as well as a sea star and red hake; (B) Inferred Fauna, characterized by tracks and trails; and (C) Attached Fauna, with sea stars, bryozoa, northern star coral, colonial tunicate, hydroids, and sponge species present

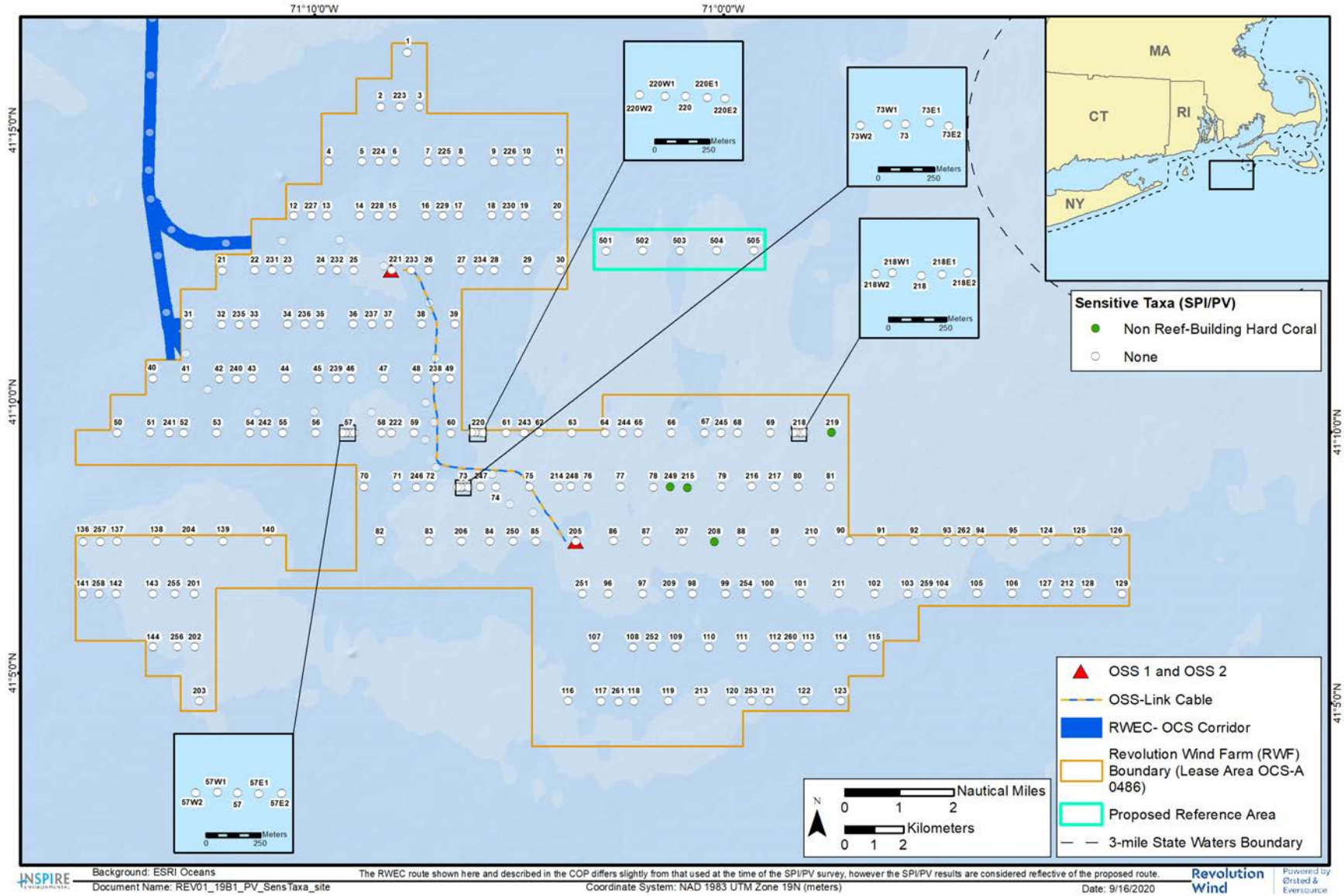


Figure 2.2-23. Distribution of sensitive taxa, the northern star coral (Astrangia poculata) at the RWF, not observed at the reference area

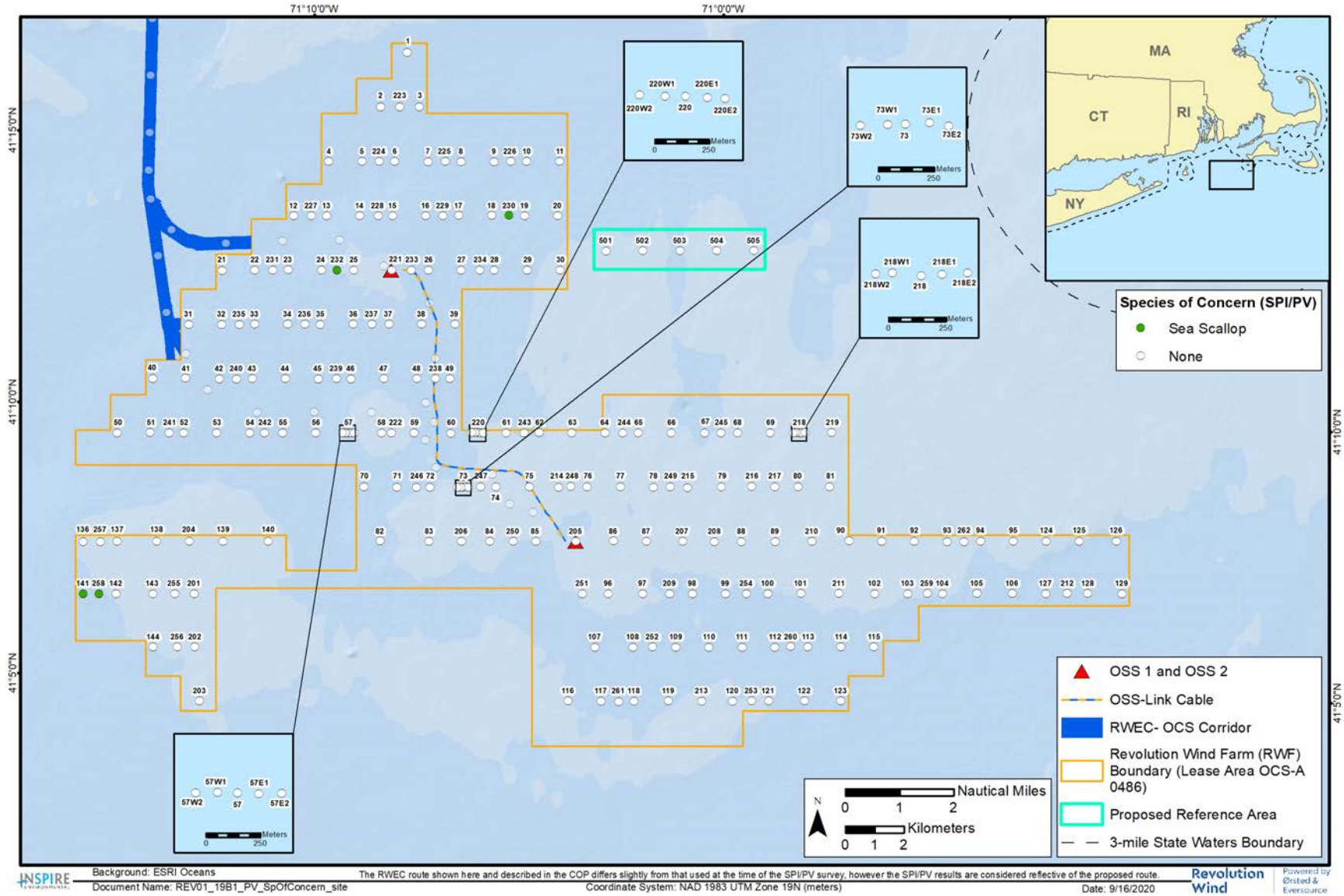


Figure 2.2-24. Distribution of species of concern, which only included the sea scallop (Placopecten magellanicus) at the RWF, not observed at the reference area

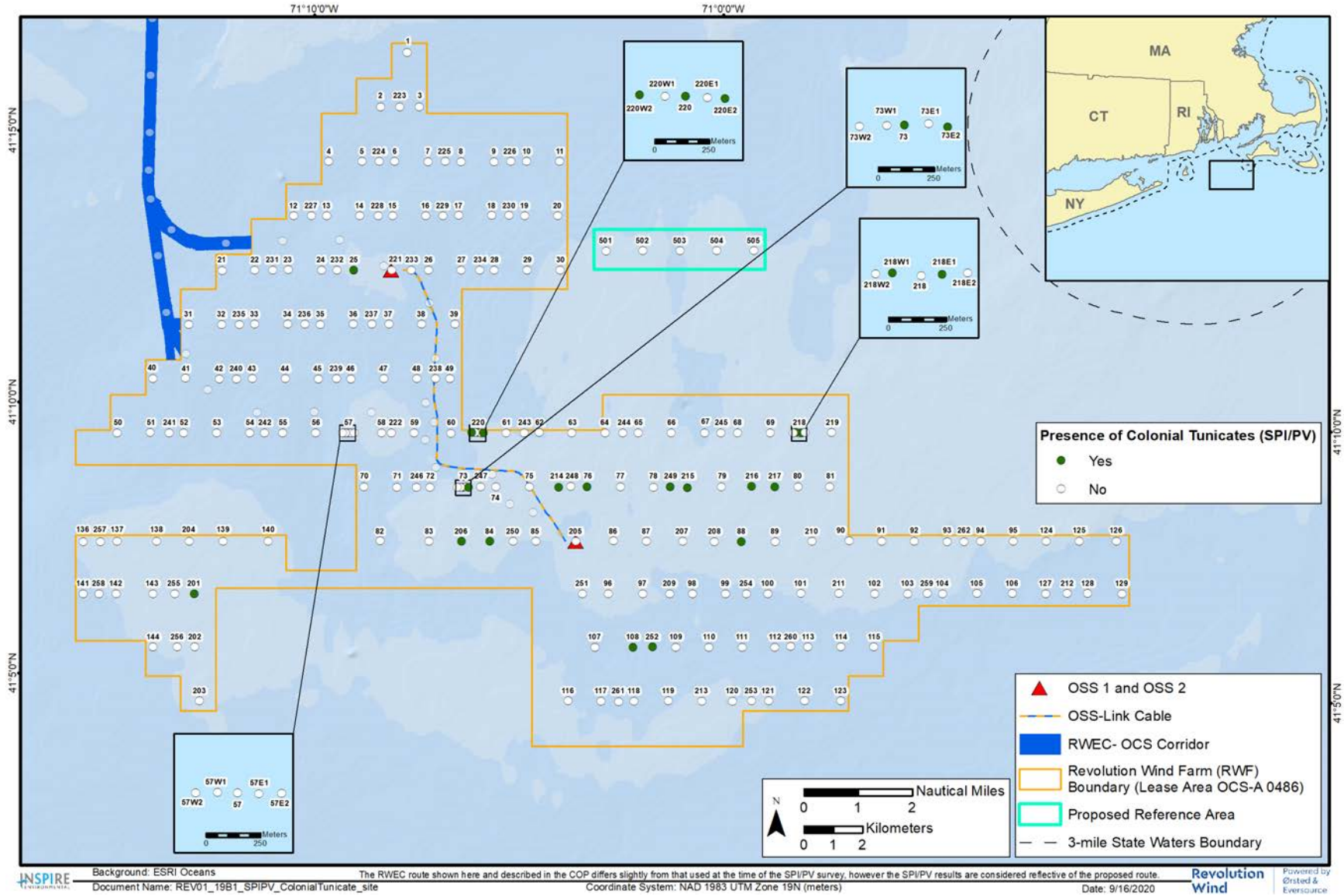


Figure 2-2.25. Potential non-native species (Botrylloides sp.) at the RWF and reference area

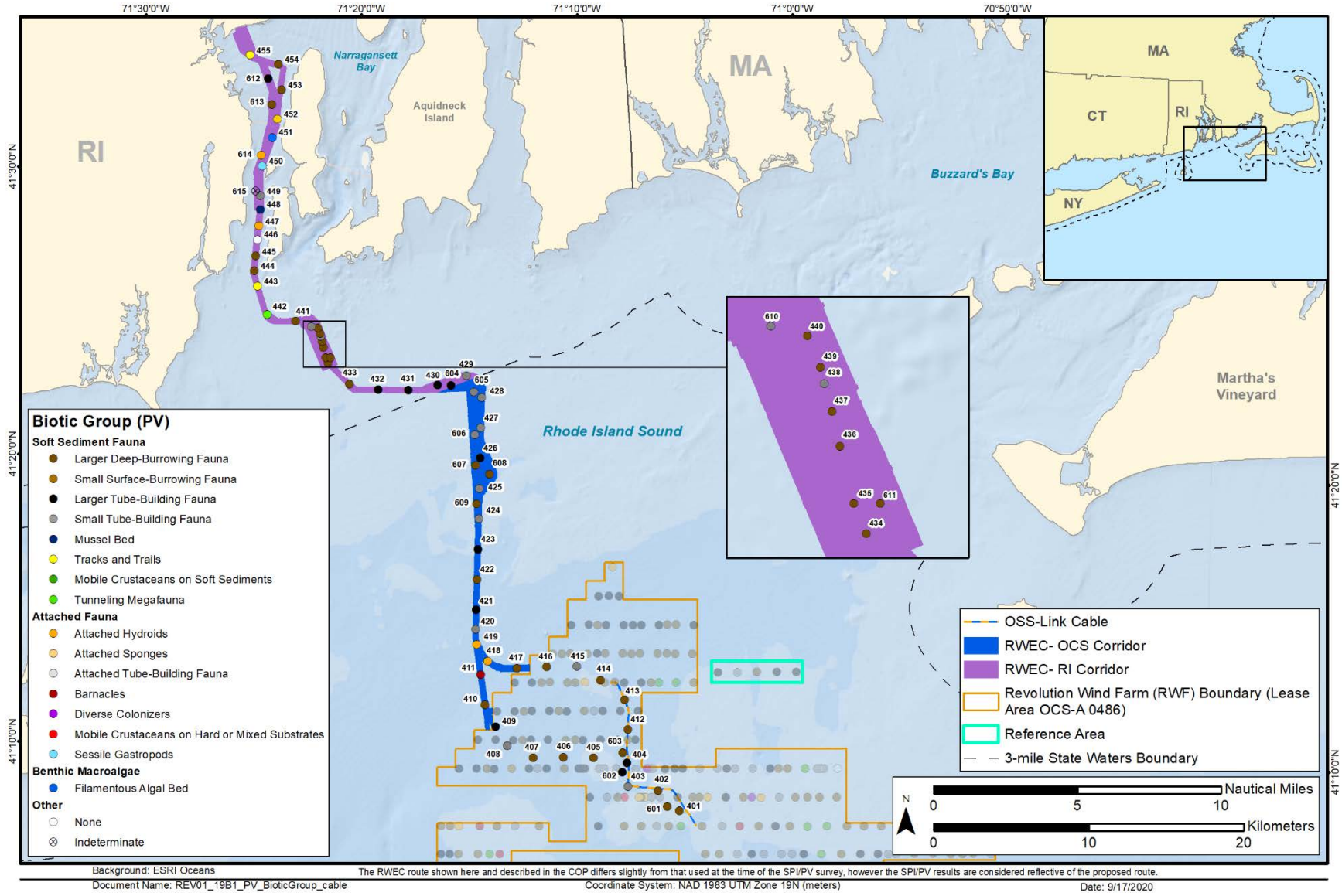


Figure 2.2-26. Predominant CMECS Biotic Group determined from PV images along the RWEC

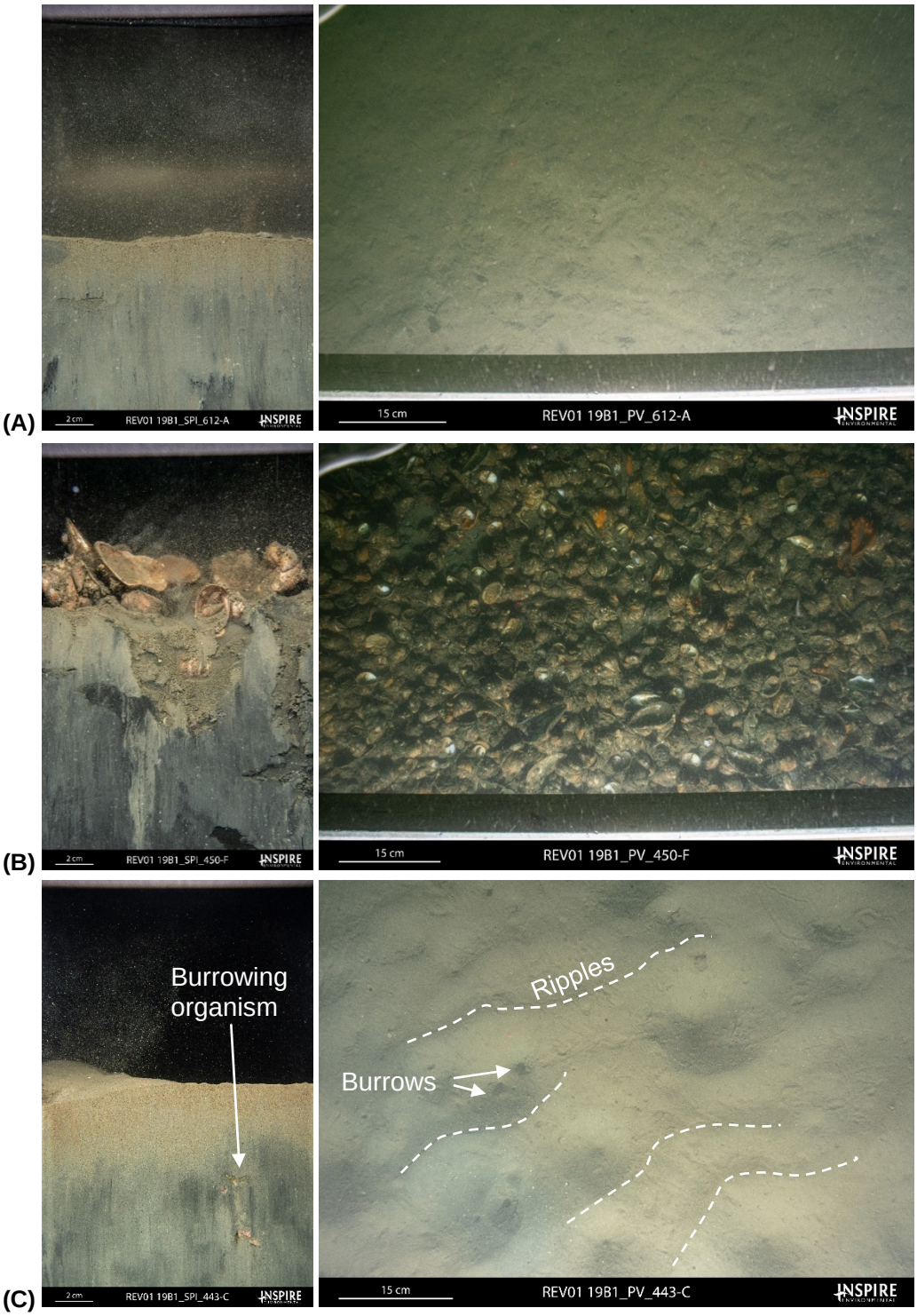


Figure 2.2-27. Representative SPI and PV images at stations along the RWEC-RI depicting general physical and biological observations; (A) an up-estuary station (Station 612) where water column turbidity was relatively high, some elevated SOD, consisting of very fine sands, and soft sediment infauna dominated; (B) a mid-estuary station (Station 450) characterized by a Crepidula bed with some attached sponges over top of reduced silt/clay; and (C) a station at the mouth of the Narragansett Bay with ripples and larger deep burrowing organisms

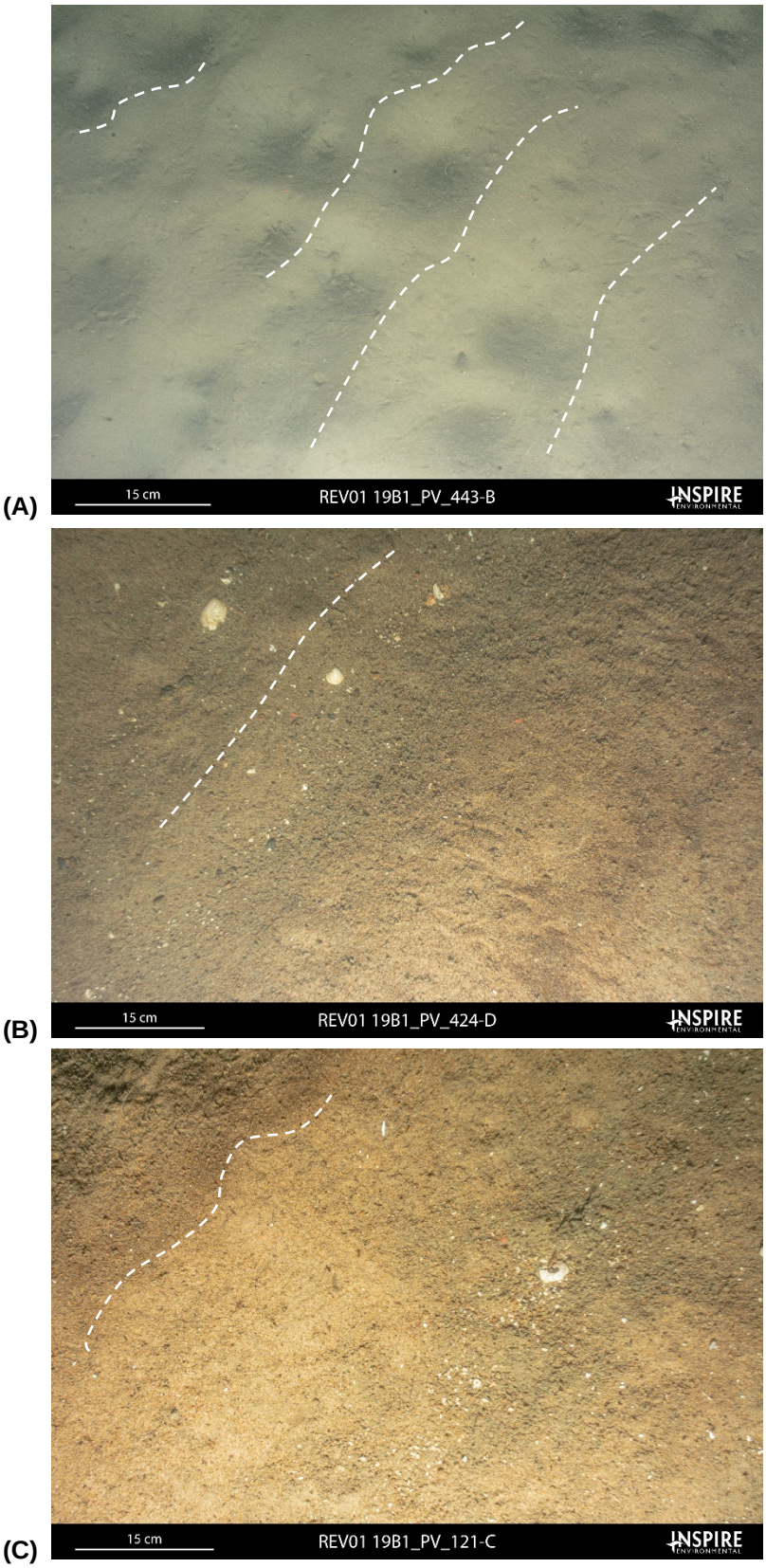


Figure 2.2-28. Representative PV images depicting regular ripple bedforms (dashed lines) at; (A) a station along the RWEC-RI (Station 443); (B) a station along the RWEC-OCS (Station 424); and (C) a station at the RWF (Station 121)

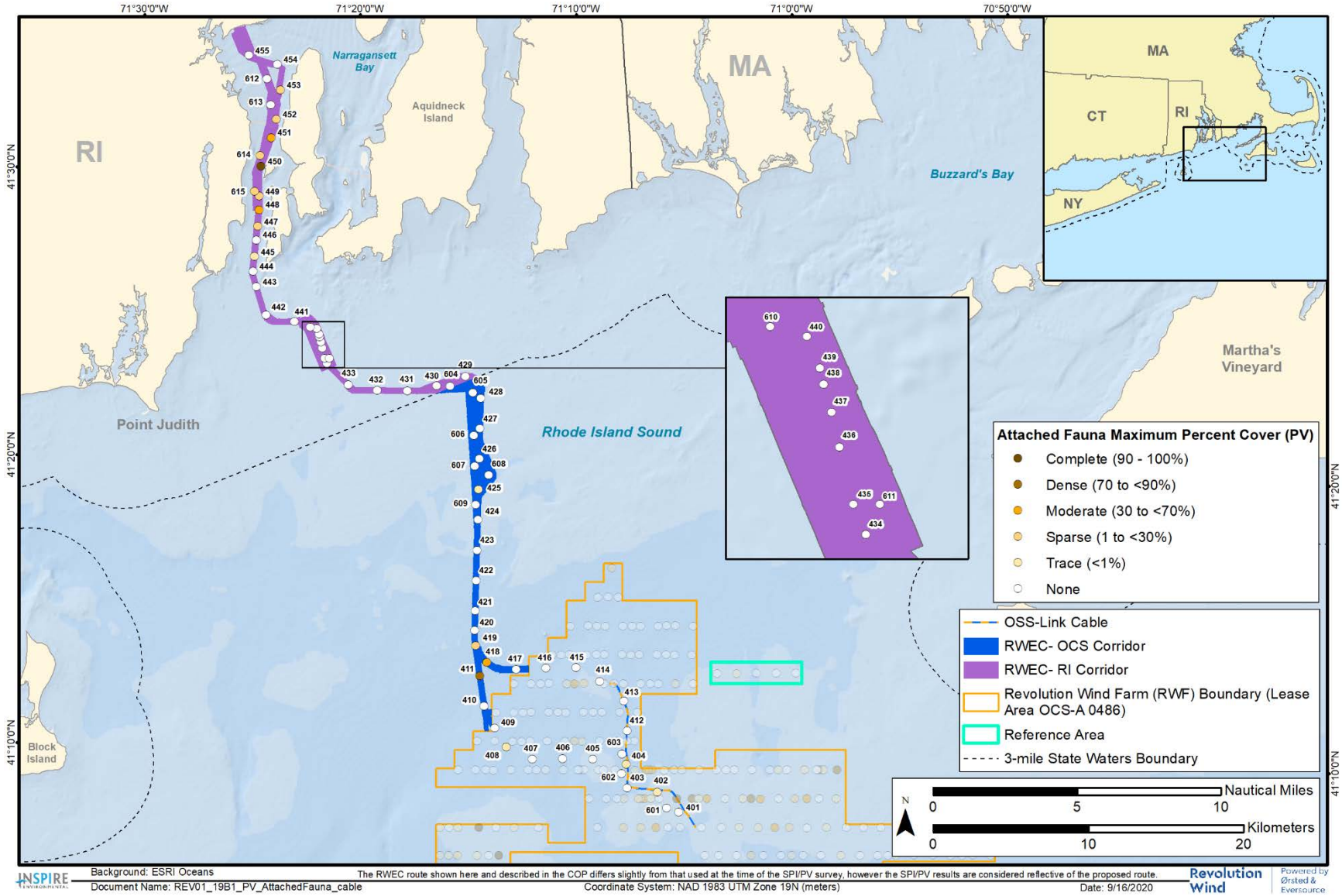


Figure 2.2-29. Maximum Attached Fauna Percent Cover (CMECS Percent Cover Modifier) along the RWEC

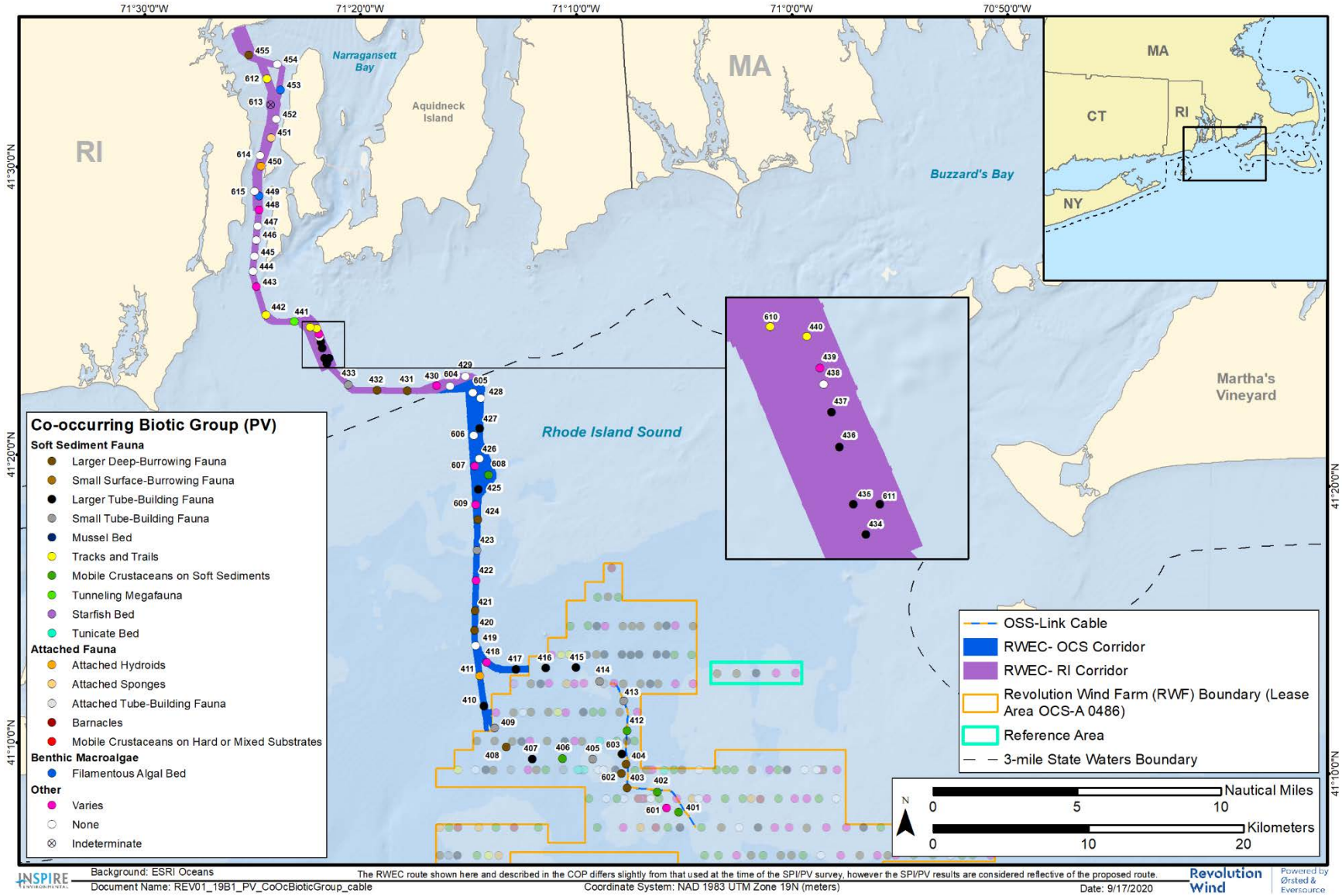


Figure 2.2-30. Predominant Co-occurring CMECS Biotic Group determined from PV images along the RWEC

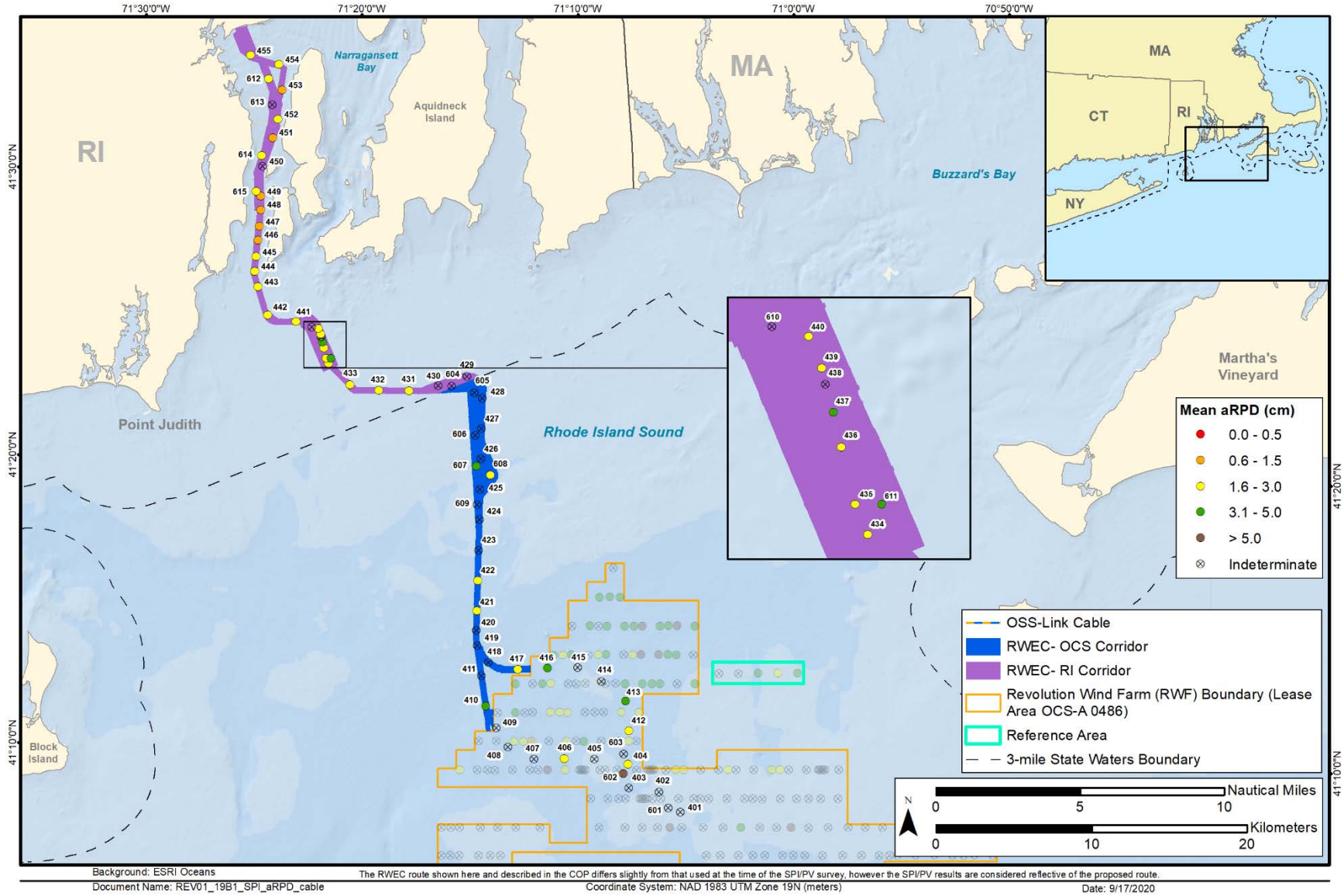


Figure 2.2-31. Mean station aRPD depth values (cm) along the RWEC

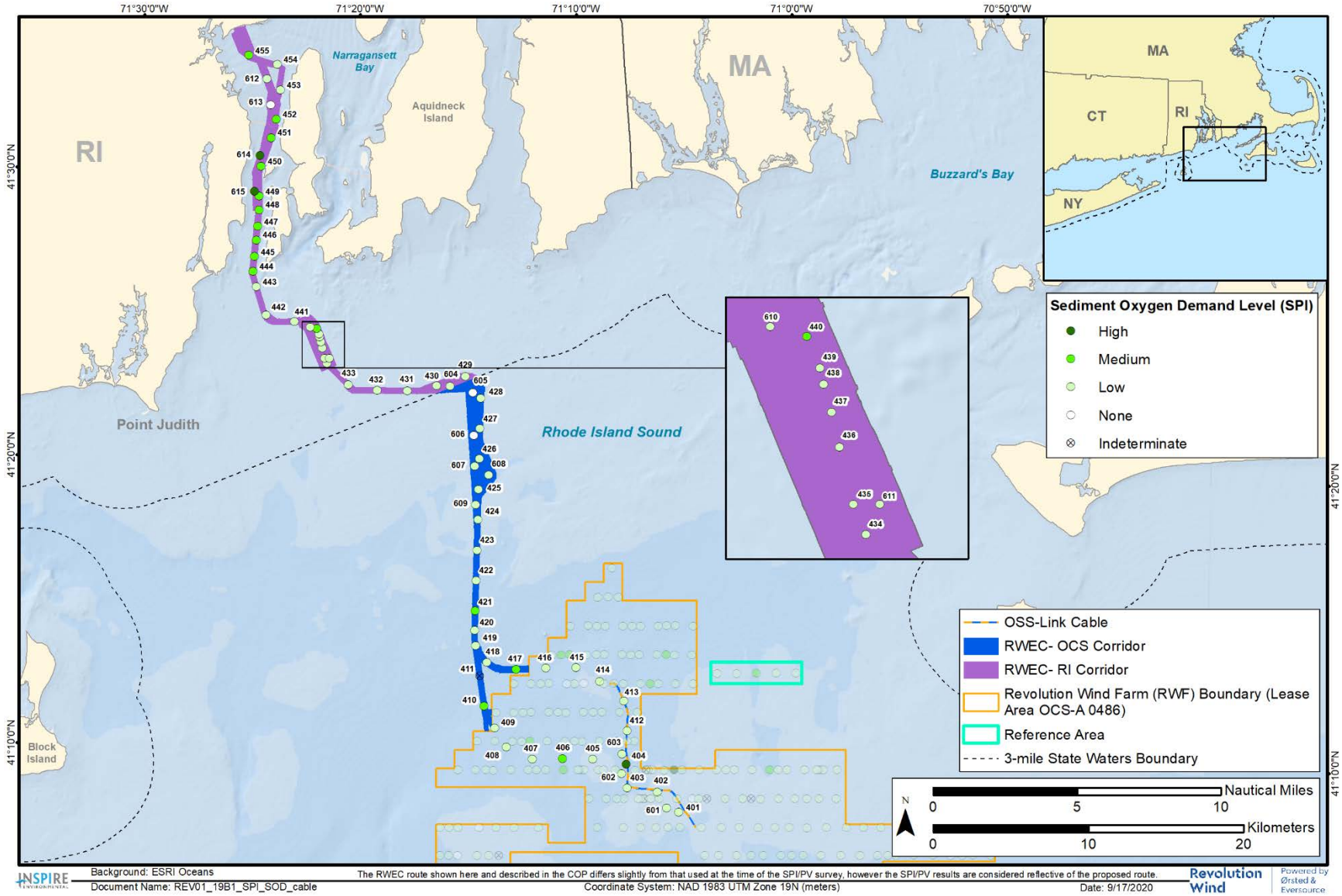


Figure 2.2-32. Sediment oxygen demand classifications along the RWEC

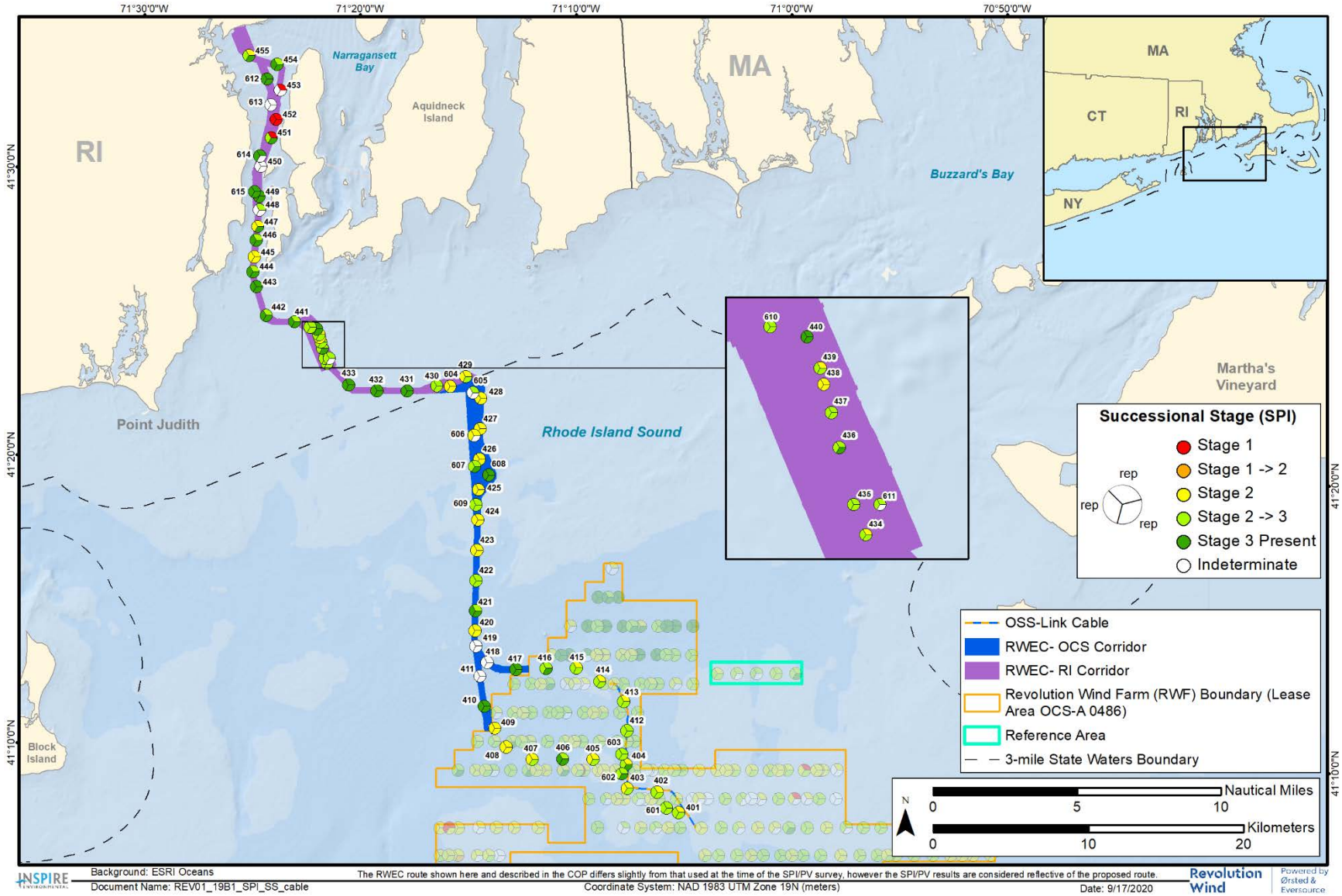


Figure 2.2-33. Infaunal successional stages along the RWEC, each replicate value at each station is shown

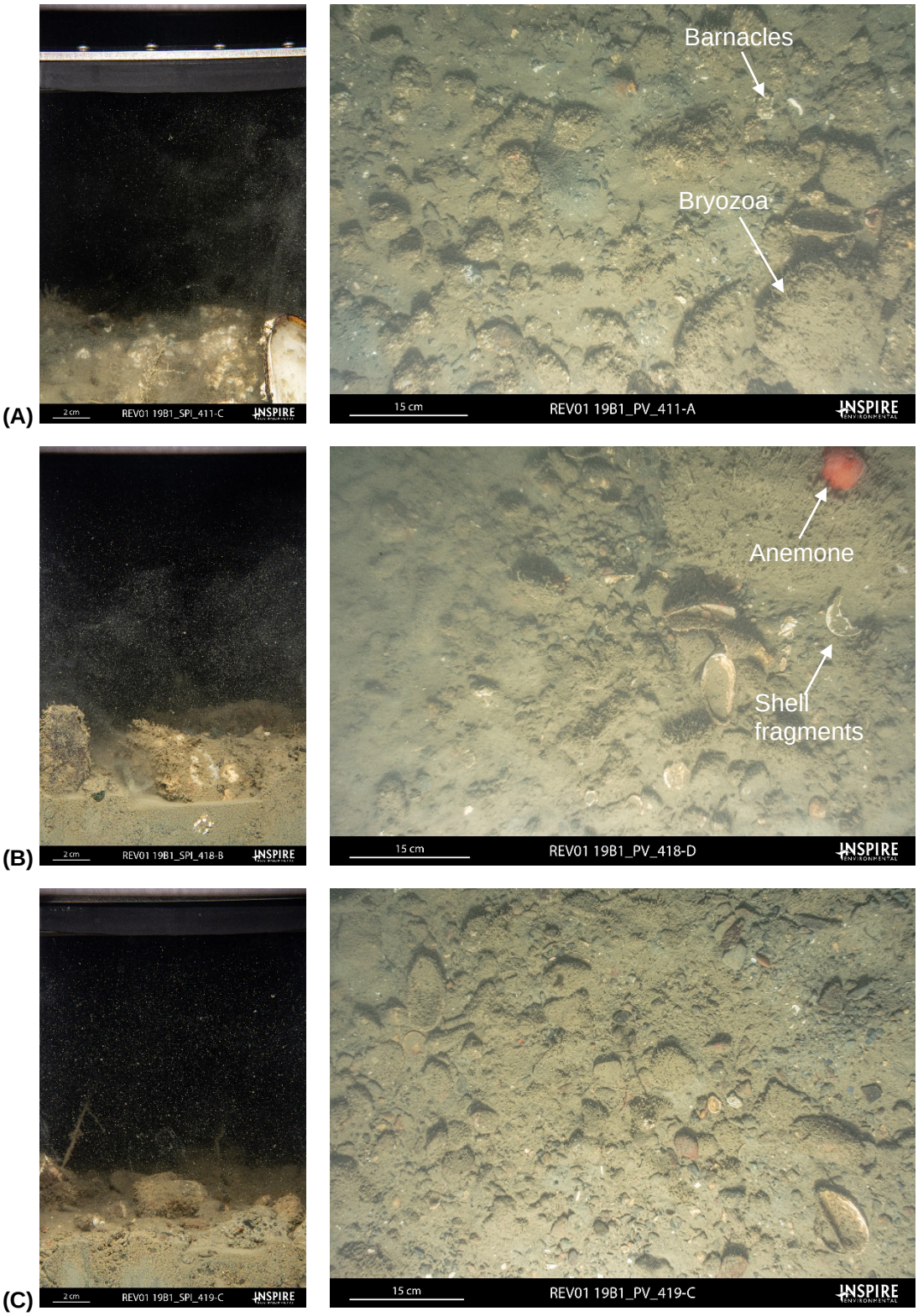
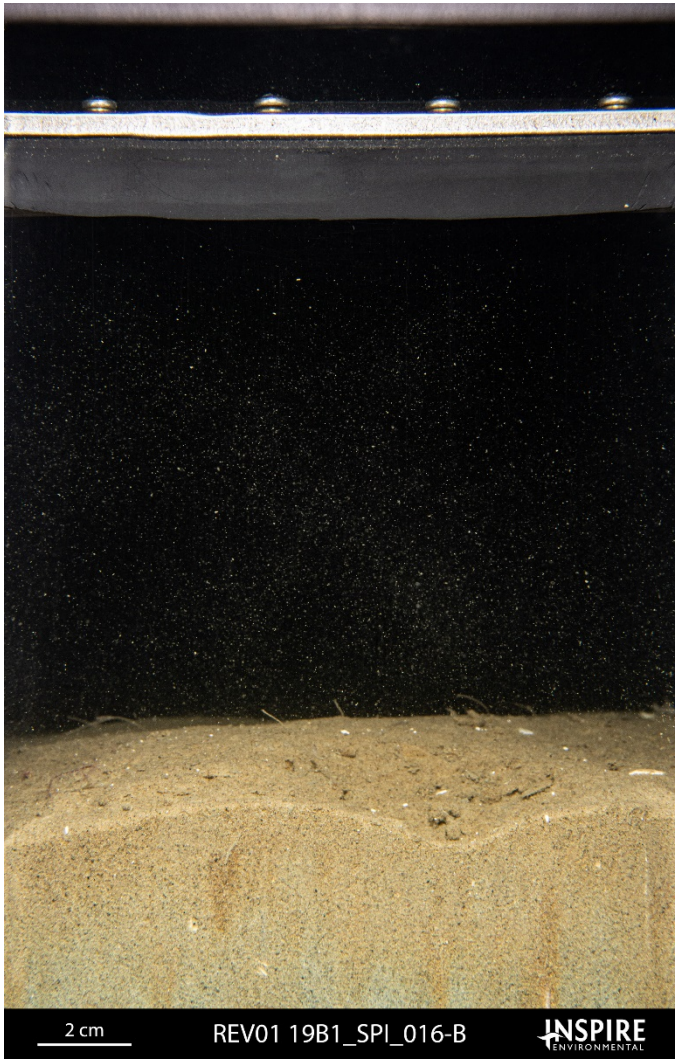


Figure 2.2-34. SPI and PV images from Stations (A) 411; (B) 418; and (C) 419 located along the RWEC-OCS directly adjacent to the RWF lease area. This portion of the RWEC-OCS consisted of very heterogenous substrate composition, characterized as Continuous Large Pebbles and Cobbles on Sand; visible are barnacles, anemone, bryozoa, bivalve, and shell fragments.



(A)

(B)

Figure 2.2-35. Representative SPI images depicting (A) a well-mixed, homogenous sediment type, specifically described at this station (016) as fine sand, Sand or Finer (CMECS Substrate Subgroup), and sand sheet (macrohabitat type); and (B) a poorly sorted sediment type described at this station (083) as pebble over finer sediment, Gravelly Sand (CMECS Substrate Subgroup), and patchy pebbles on sand with mobile gravel (macrohabitat type)

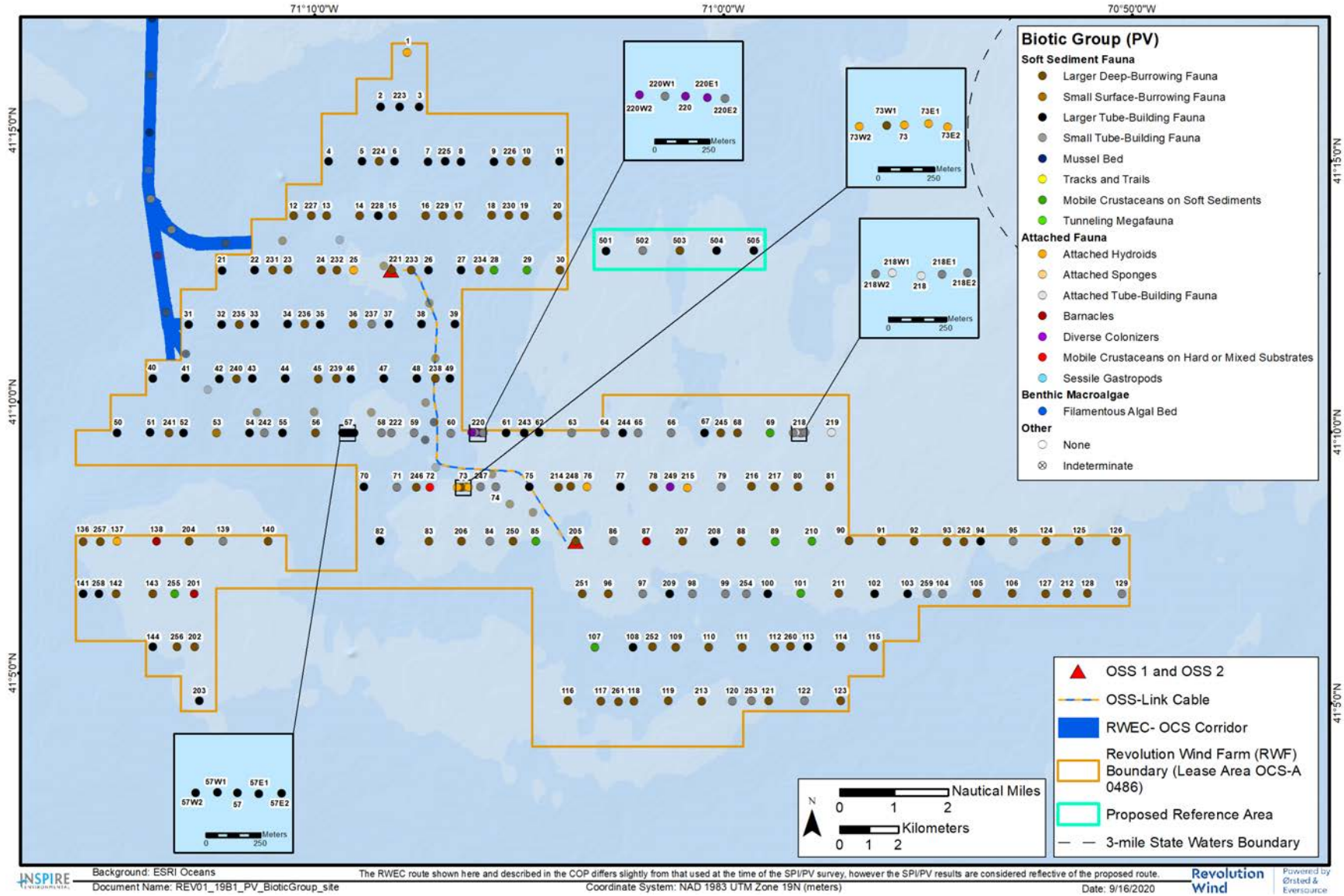


Figure 2.2-36. Predominant CMECS Biotic Group determined from PV images at the RWF and reference area

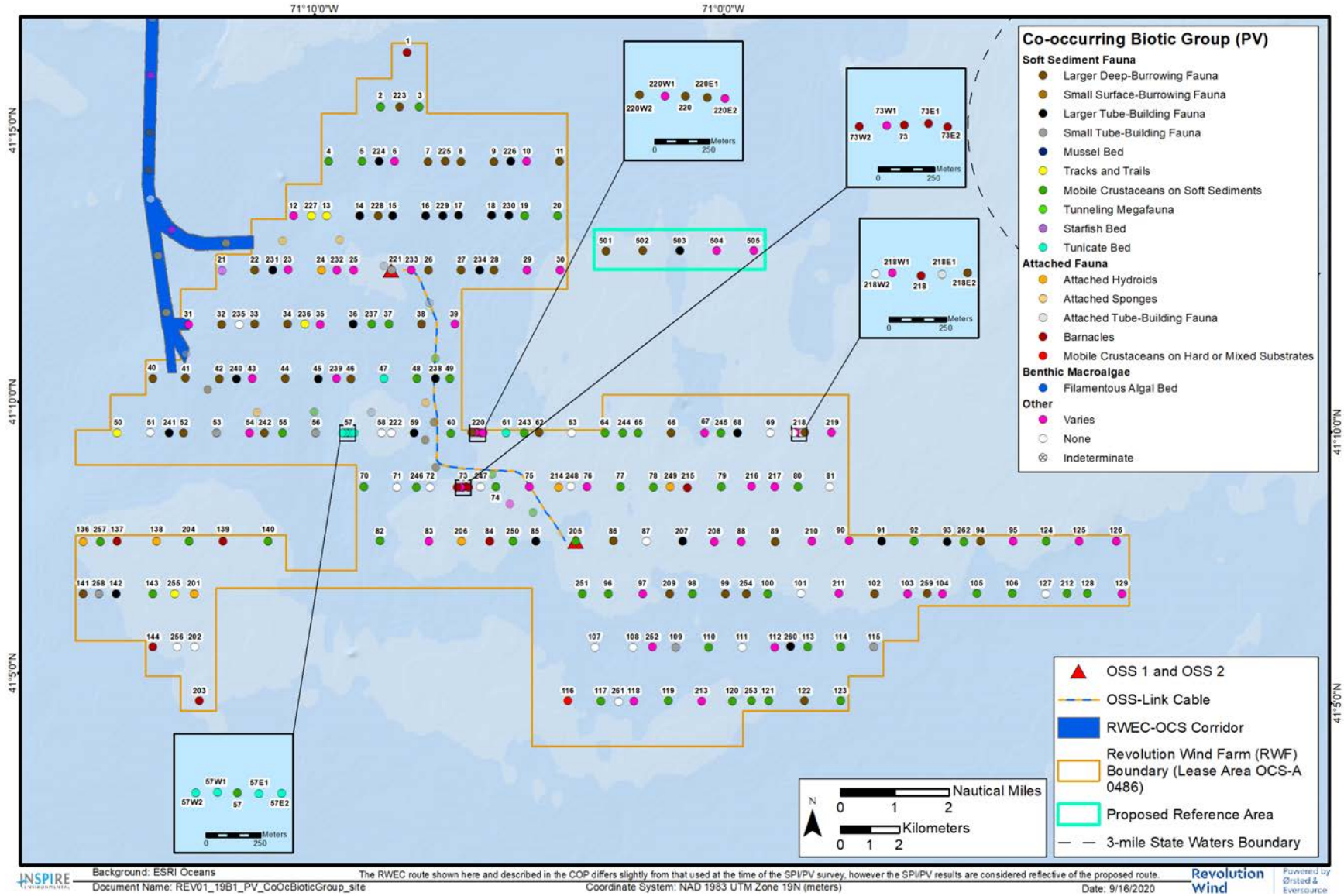


Figure 2.2-37. Predominant Co-occurring CMECS Biotic Group determined from PV images at the RWF and reference area

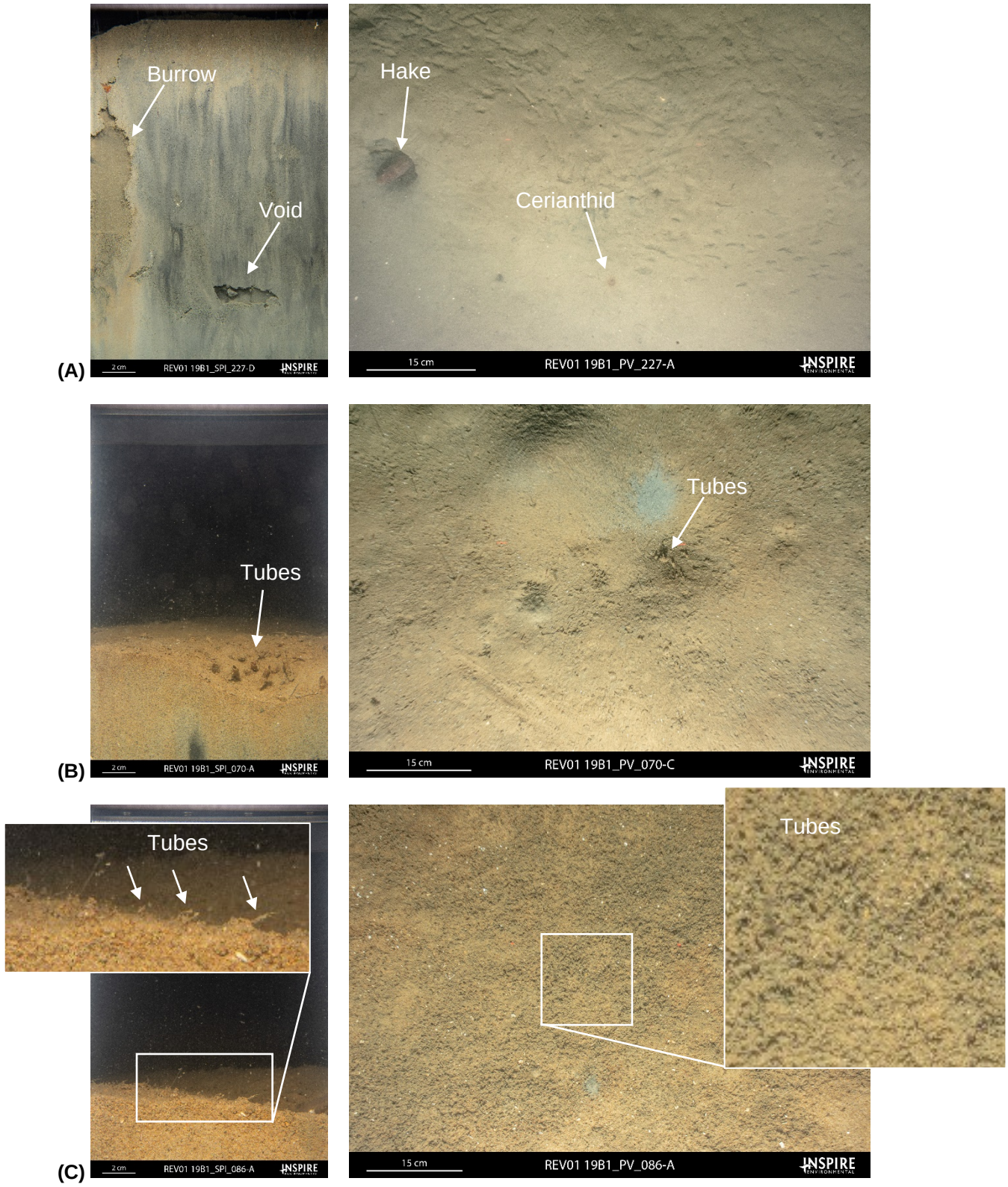


Figure 2.2-38. Representative SPI and PV images from the RWF where the CMECS Subclass Soft Sediment Fauna was observed, concurrent with the following CMECS Biotic Groups: (A) Larger Deep-Burrowing Fauna; (B) Larger Tube-Building Fauna; and (C) Small Tube-Building Fauna

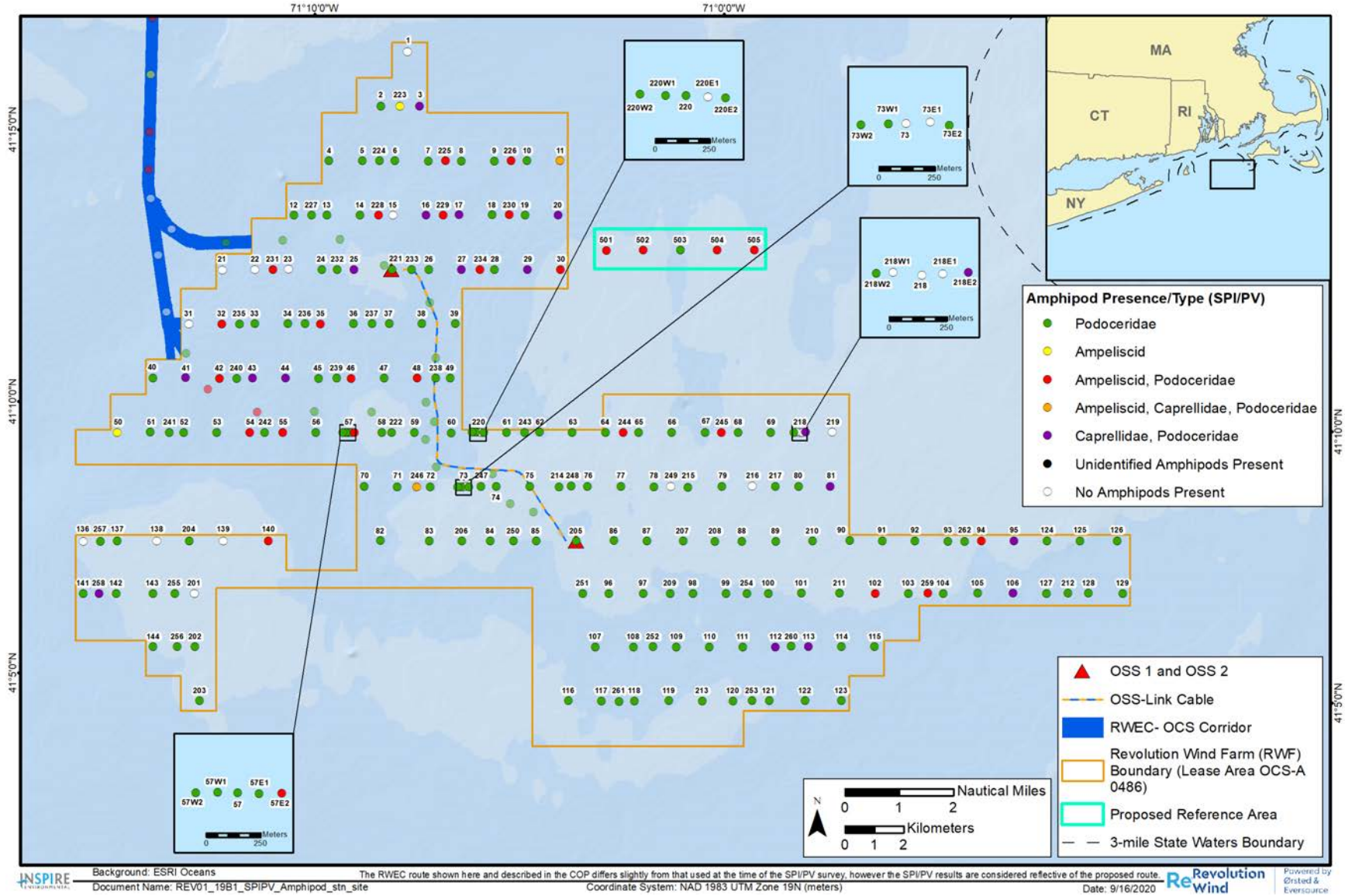


Figure 2.2-39. The distribution of three prevalent amphipod families, Podoceridae, Caprellidae, and Ampeliscid identified from SPI and PV images across the RWF and reference area

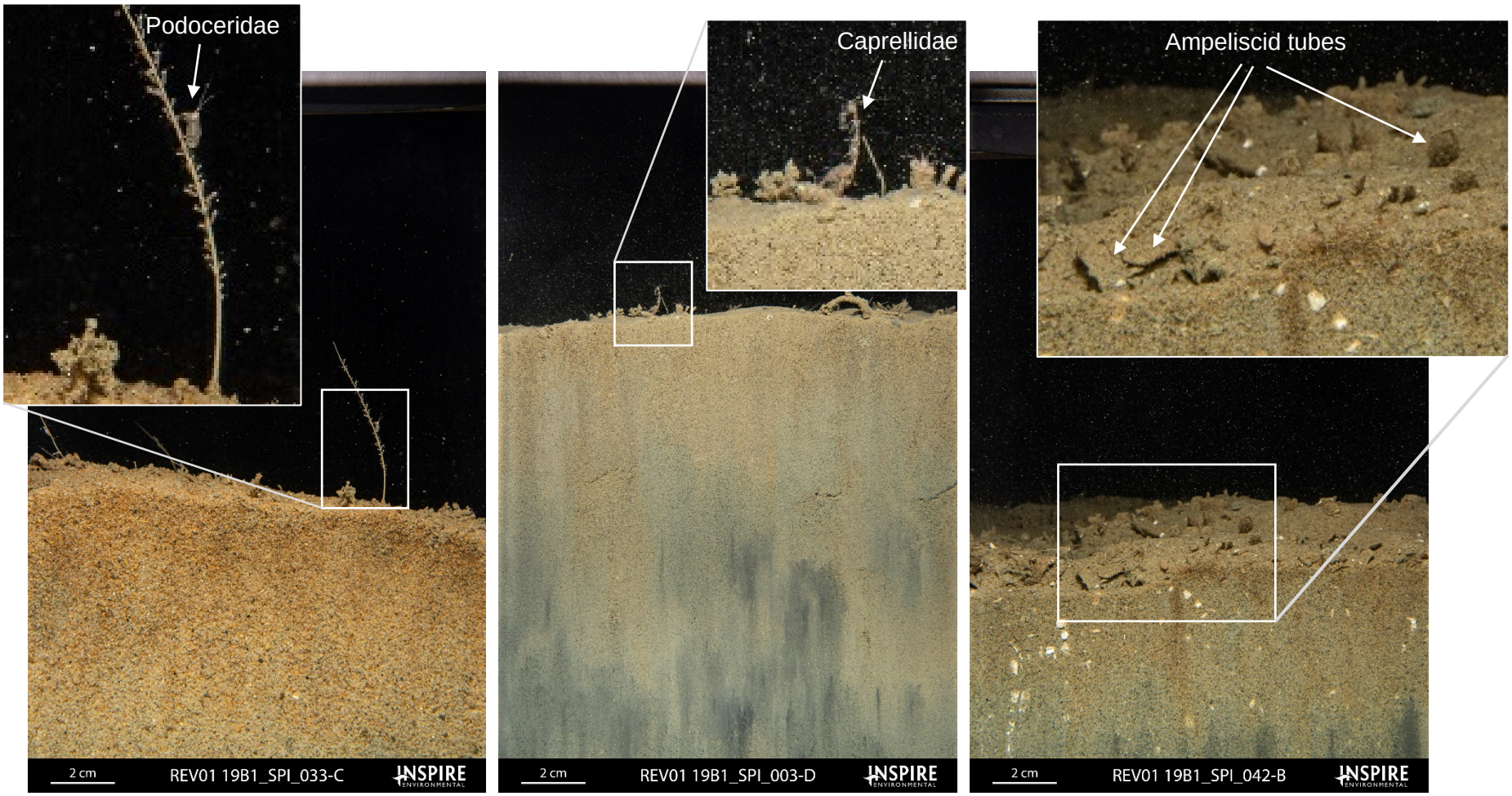


Figure 2.2-40. Representative SPI at the RWF showing examples of the three prevalent amphipod families; (A) Podoceridae; (B) Caprellidae; and (C) Ampeliscid

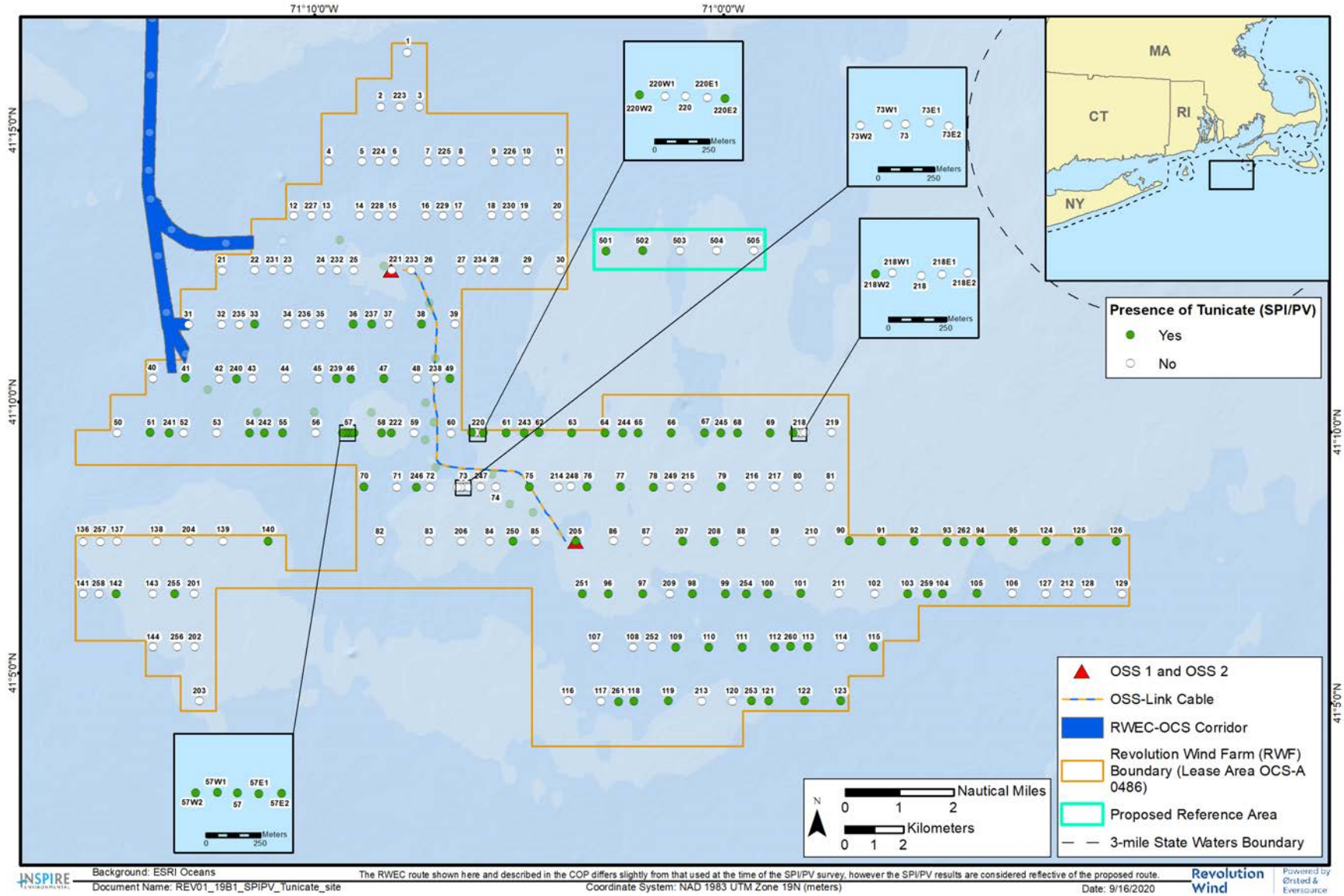


Figure 2.2-41. Distribution of solitary tunicates (sea squirts; most likely Mogula sp.) at the RWF and reference area

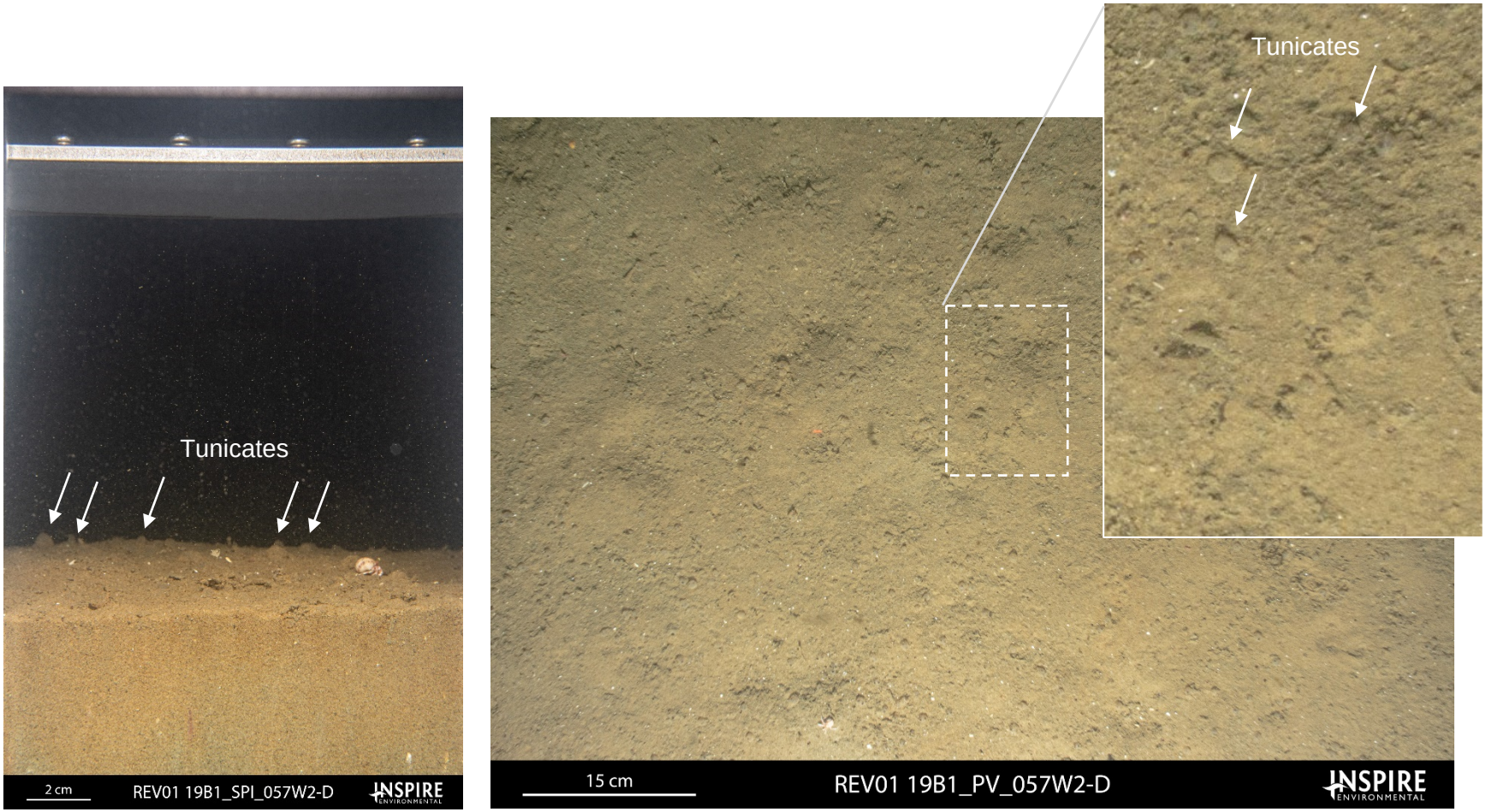


Figure 2.2-42. SPI and PV images showing the occurrence of solitary tunicates (most likely Mogula sp.) associated with soft sediments at Station 057W2 located in the central portion of the RWF lease area

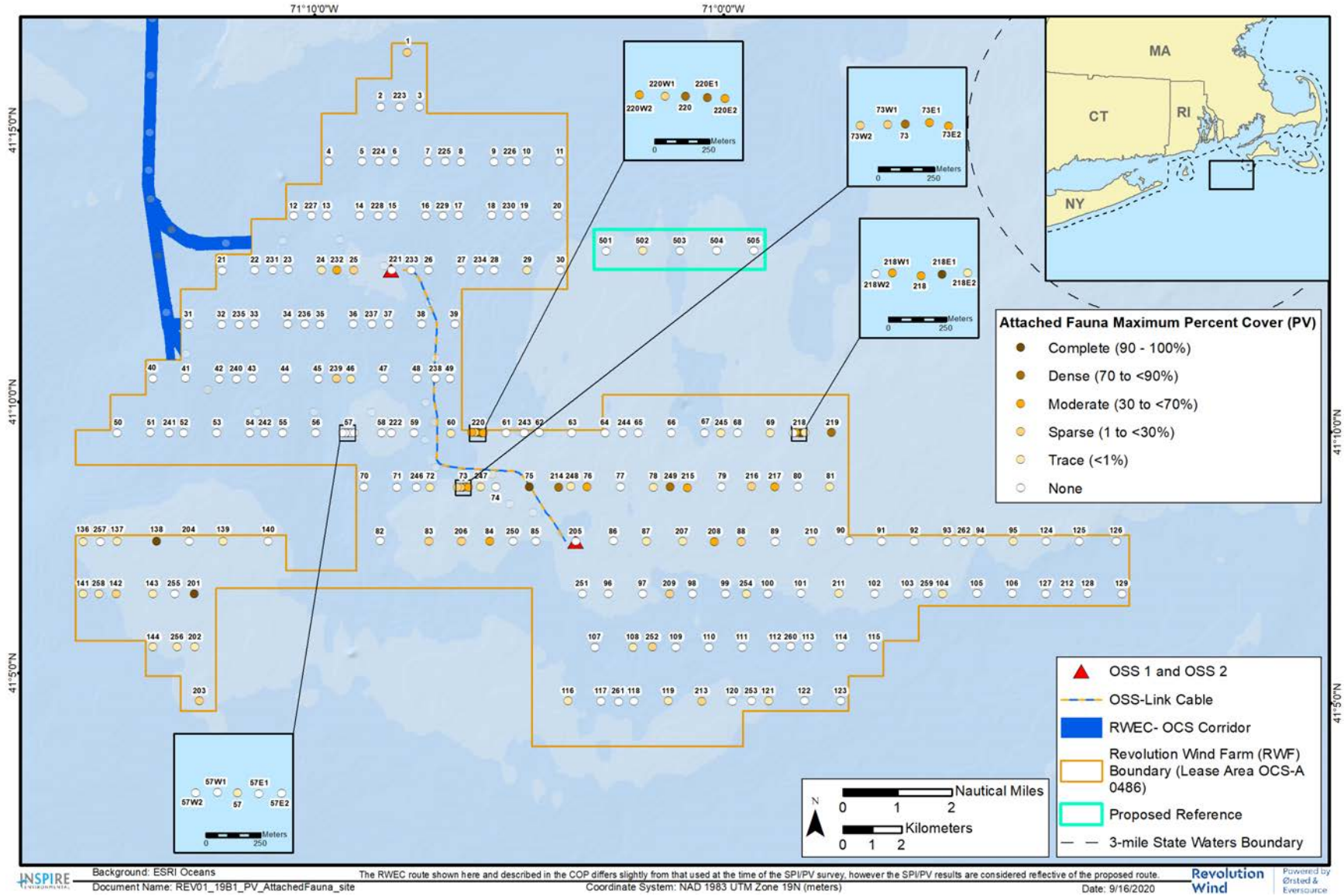
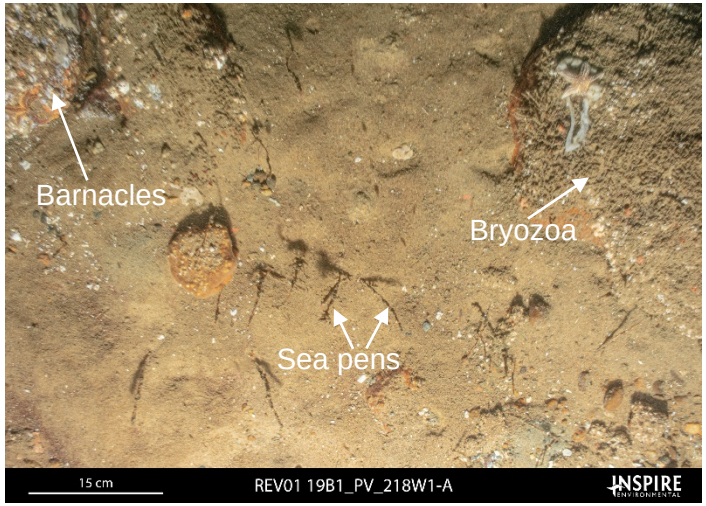
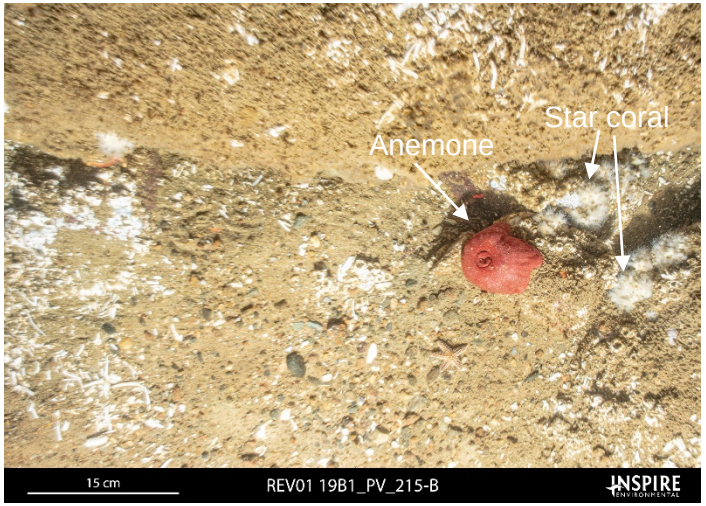


Figure 2.2-43. Maximum Attached Fauna Percent Cover (CMECS Percent Cover Modifier) at the RWF and reference area

(A)



(B)



(C)

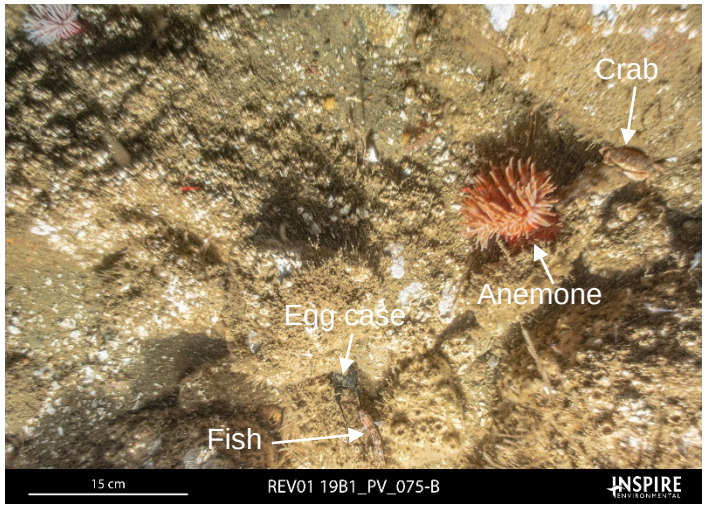


Figure 2.2-44. Representative PV images from the RWF where the CMECS Subclass Attached Fauna was observed, concurrent with the following CMECS Biotic Groups: (A) Attached Tube-Building Fauna, where bryozoan, sea pens, barnacles, and spent squid eggs were also observed; (B) Attached Hydroids, where barnacles, an anemone, northern star coral, and bryozoa were also observed; and (C) Diverse Colonizers, where anemones, sponges, bryozoa, sea pens, and barnacles were observed, in addition to a small fish, a skate egg case, and crabs.

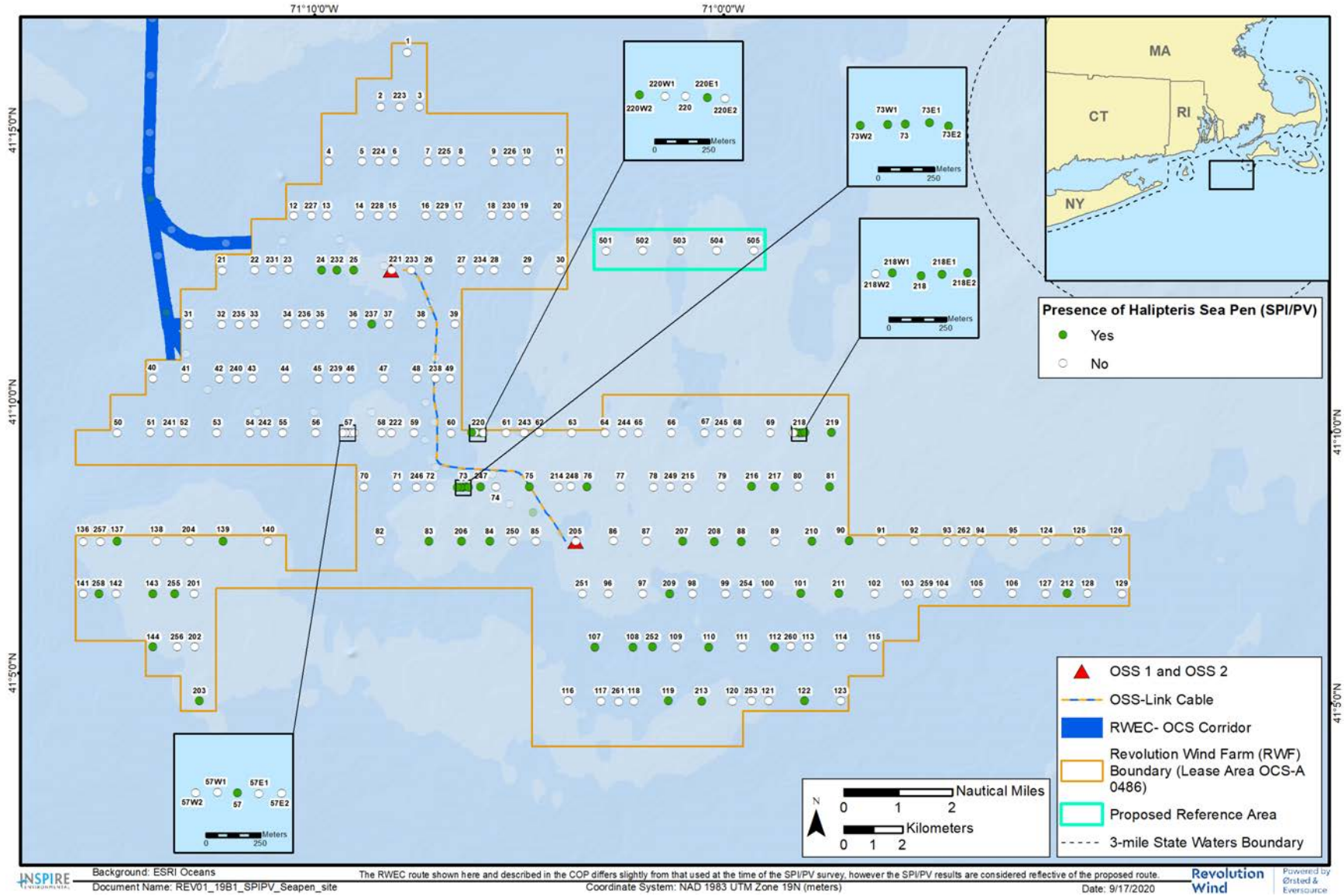


Figure 2.2-45. Distribution of the sea pen, Halipteris finmarchia, at the RWF, not observed at the reference area

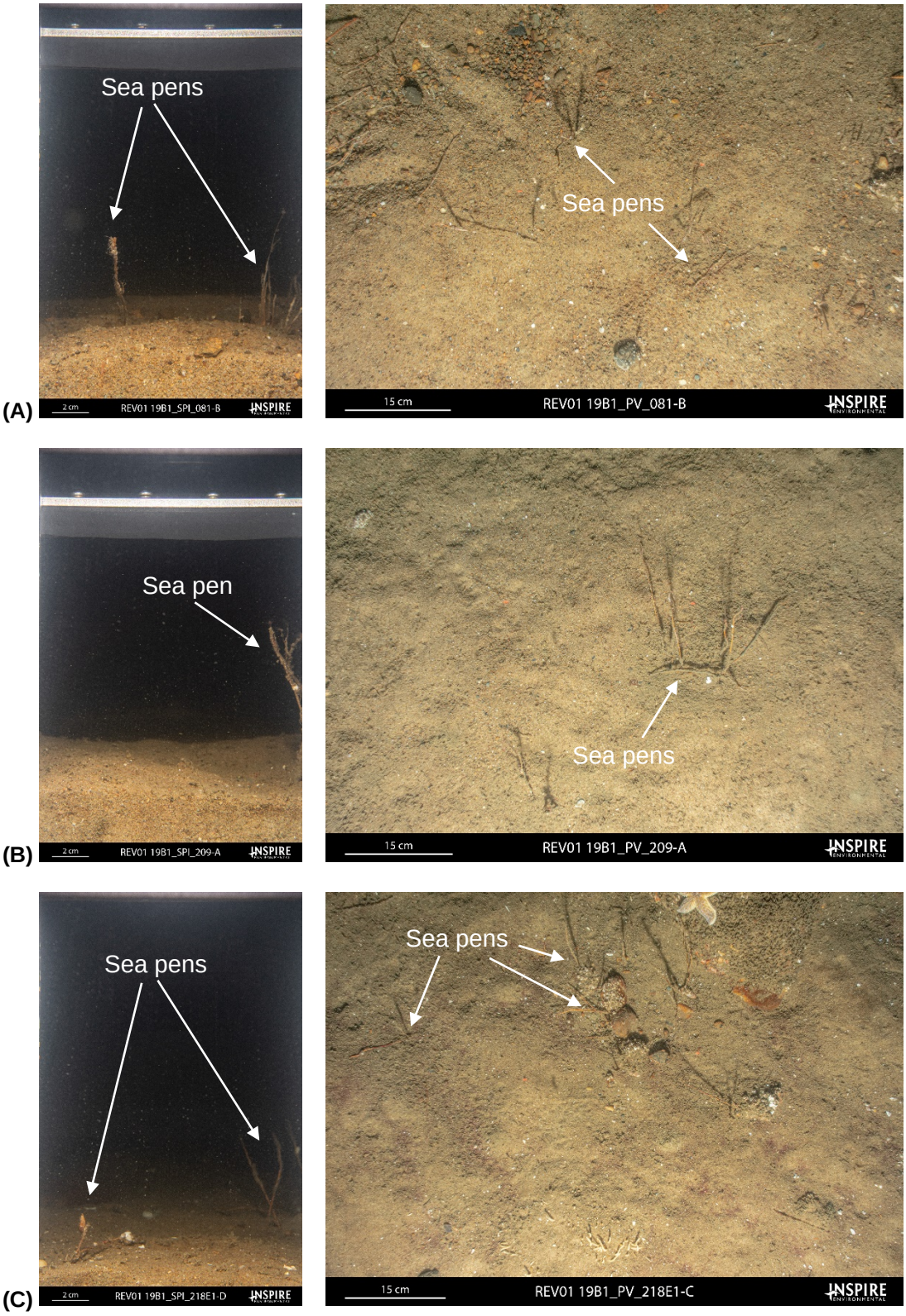


Figure 2.2-46. Representative SPI and PV images featuring the sea pen, Halipteris finmarchia, at the RWF Stations (A) 081; (B) 209; and (C) 218E1

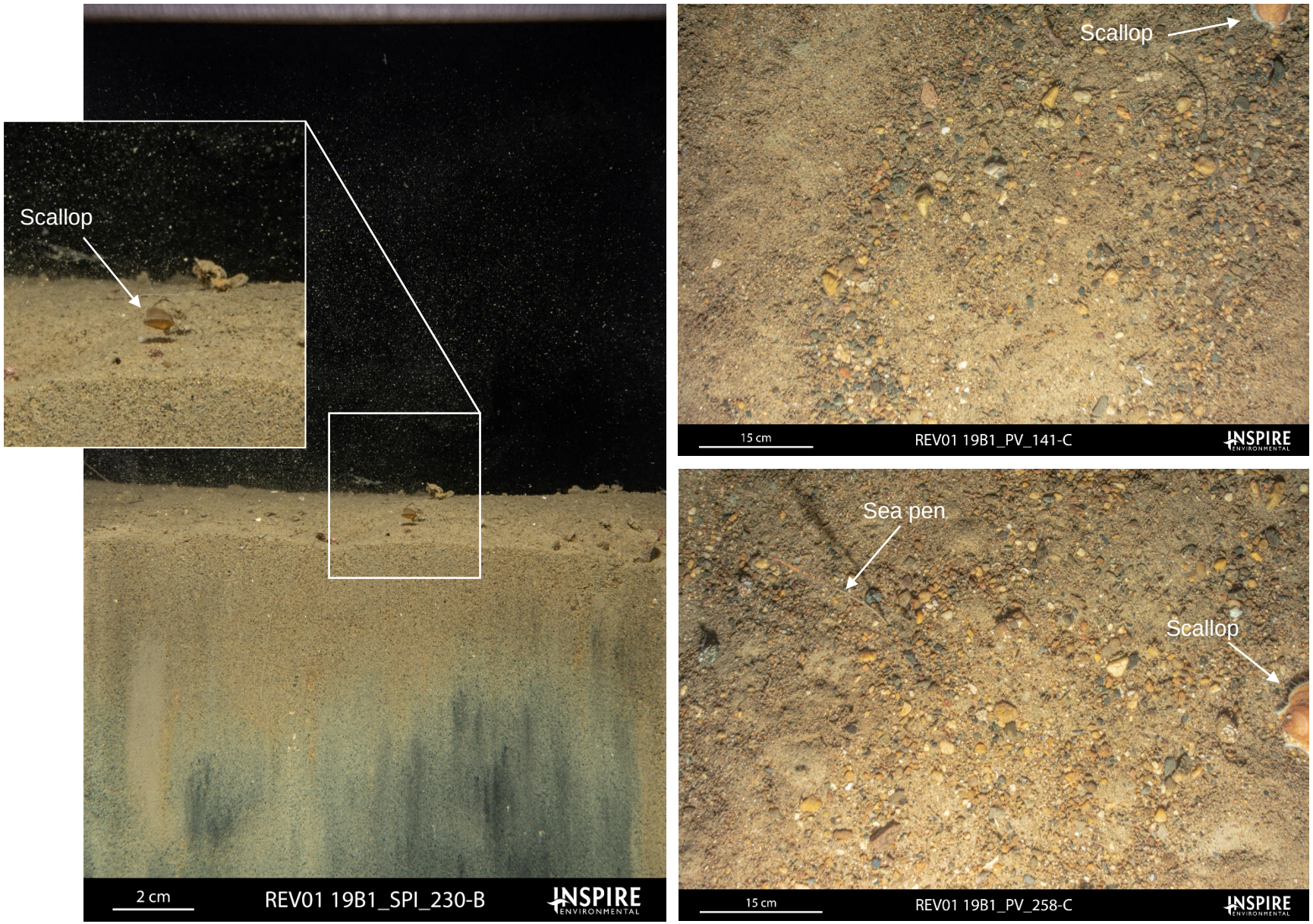


Figure 2.2-47. Representative PV and SPI images where sea scallops, a species of concern, were observed

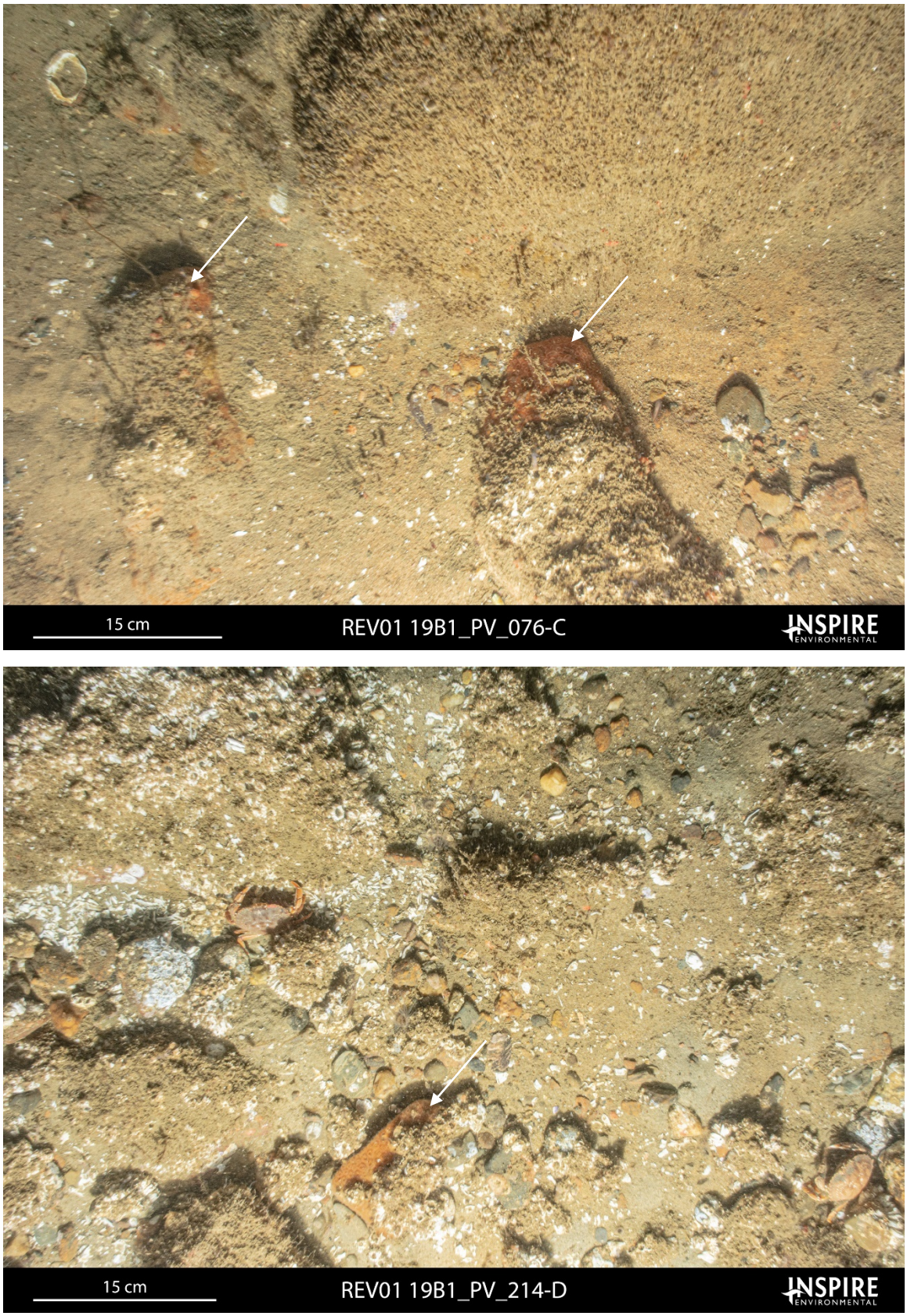


Figure 2.2-48. Representative PV images where orange colonial tunicates (arrows), which may be the non-native species, Botrylloides sp., were observed

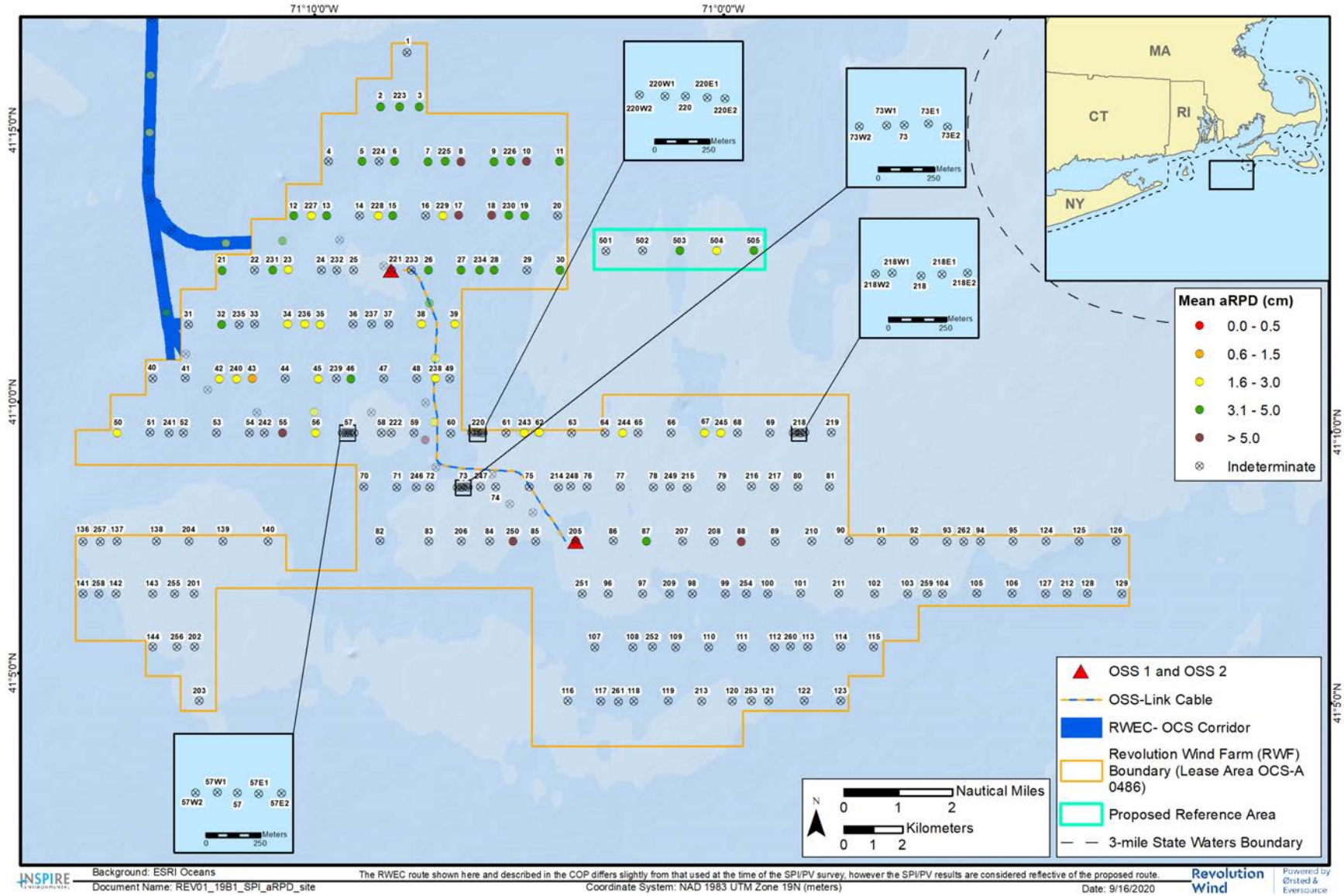


Figure 2.2-49. Mean station aRPD depth values (cm) at the RWF and reference area

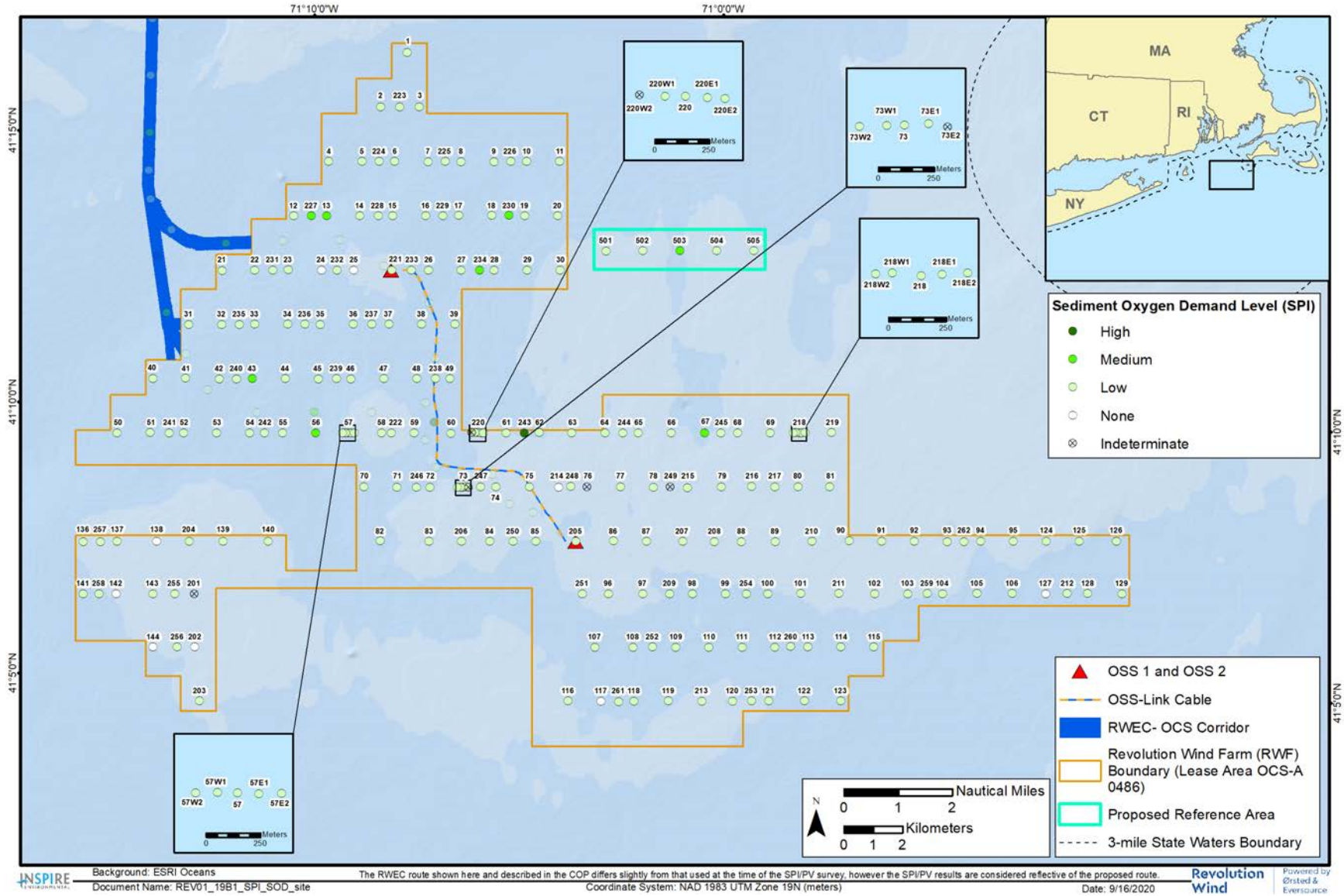


Figure 2.2-50. Sediment oxygen demand classifications at the RWF and reference area

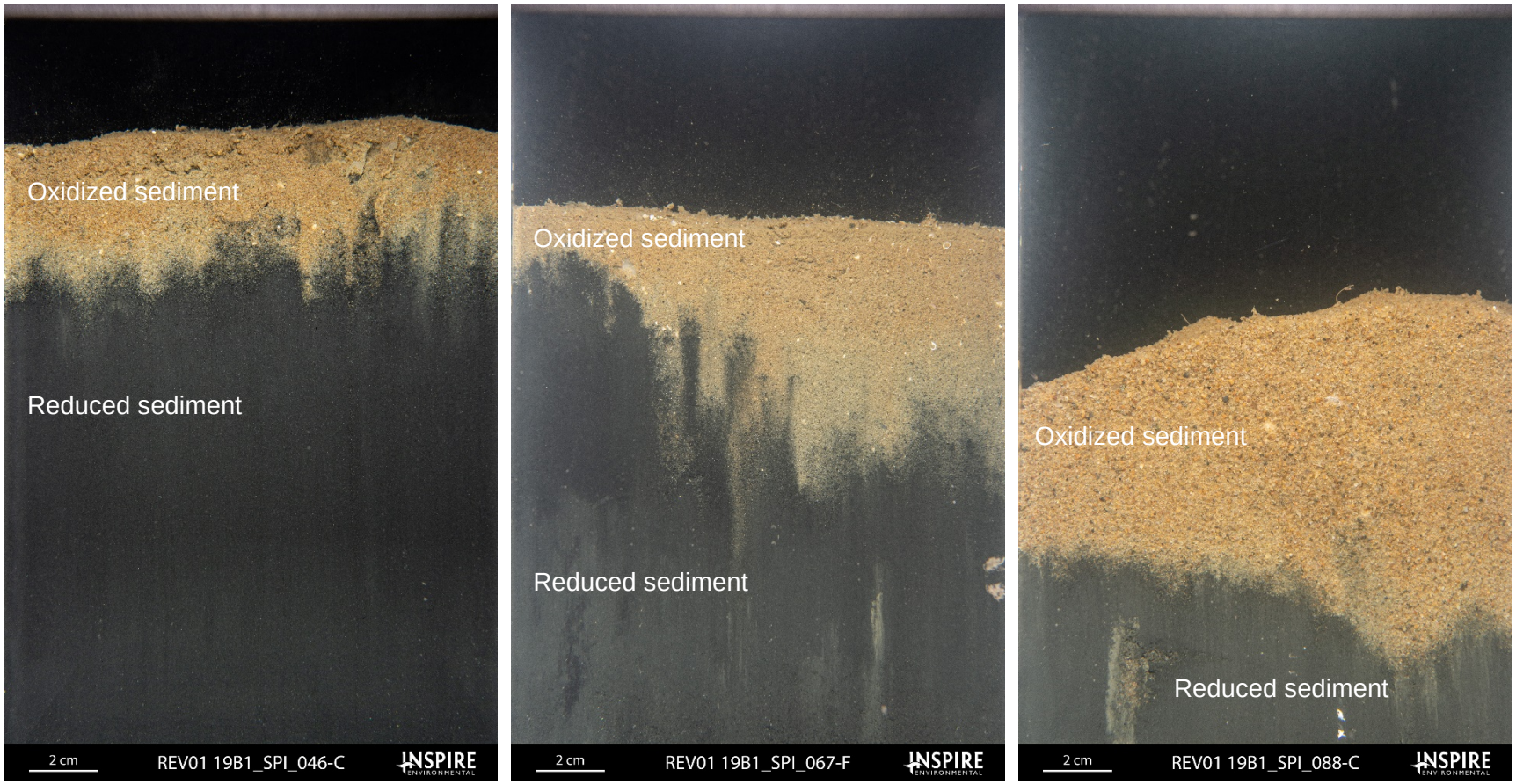


Figure 2.2-51. Representative SPI images showing sediment layering with light oxidized sediments overlying very dark reduced sediments at stations haphazardly distributed in the central region of the RWF including stations (A) 046; (B) 067; and (C) 088.

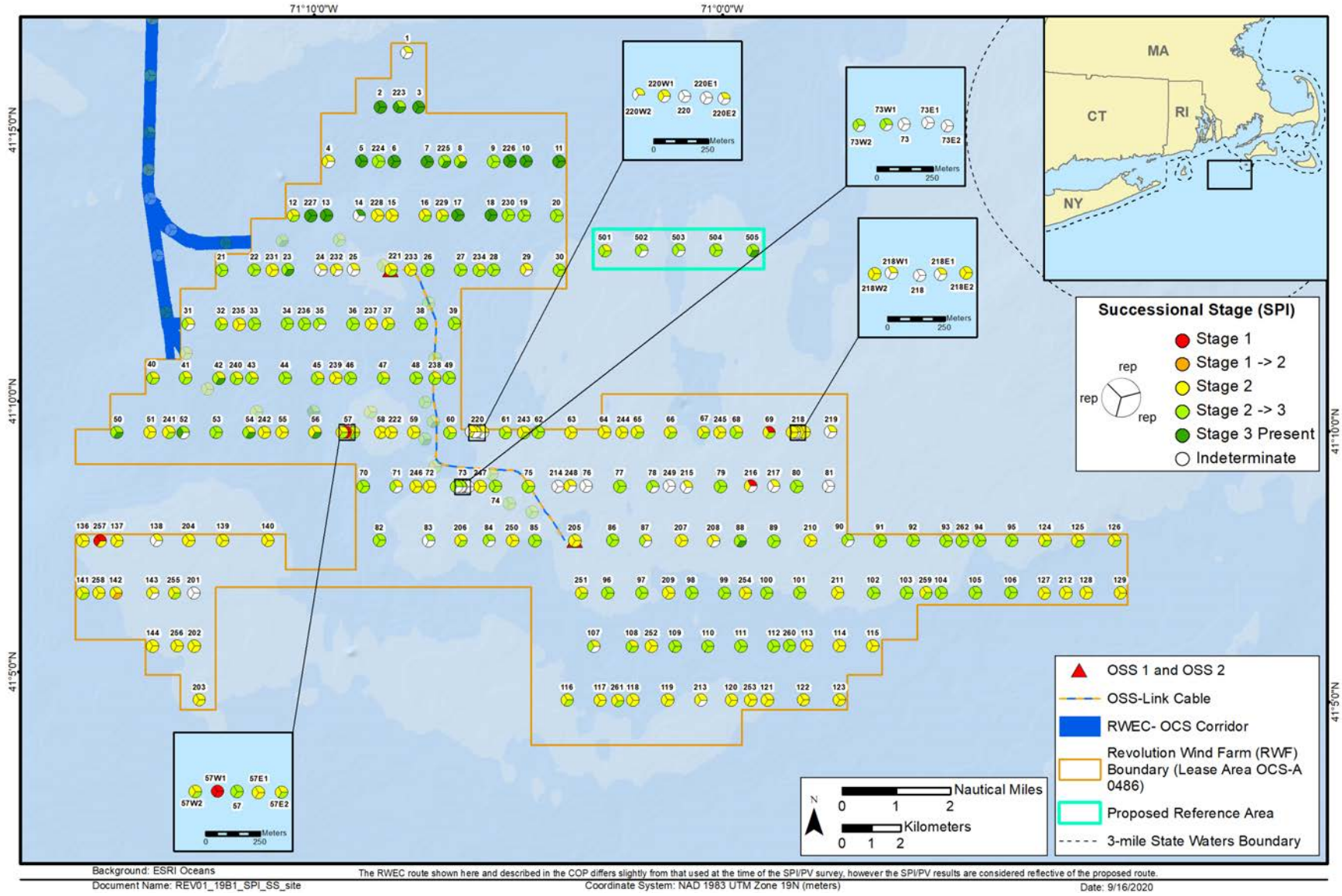


Figure 2.2-52. Infaunal successional stages at the RWF and reference area, each replicate value at each station is shown

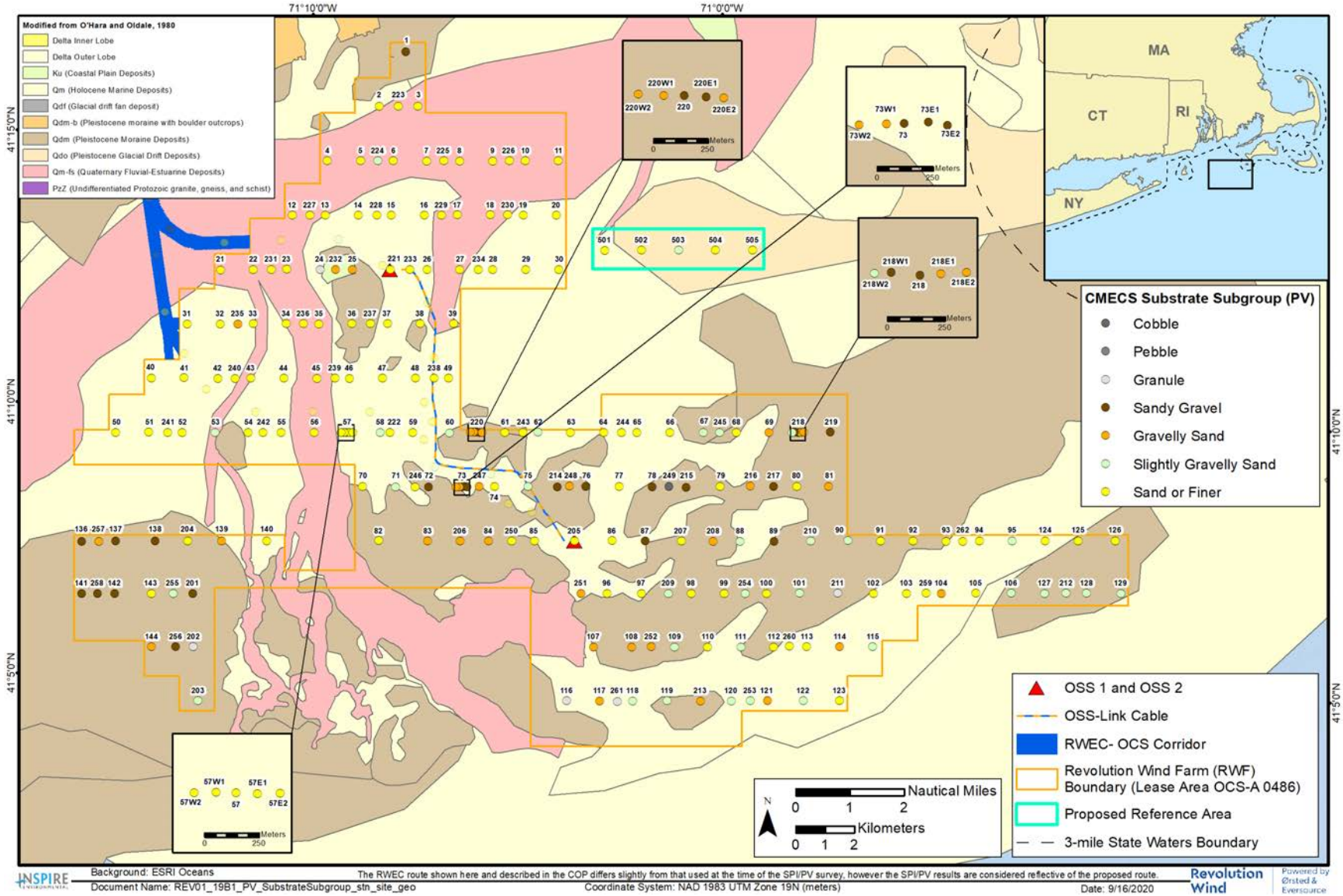


Figure 2.3-1. Predominant CMECS Substrate Subgroup at the RWF and reference area within the context of modeled regional geology

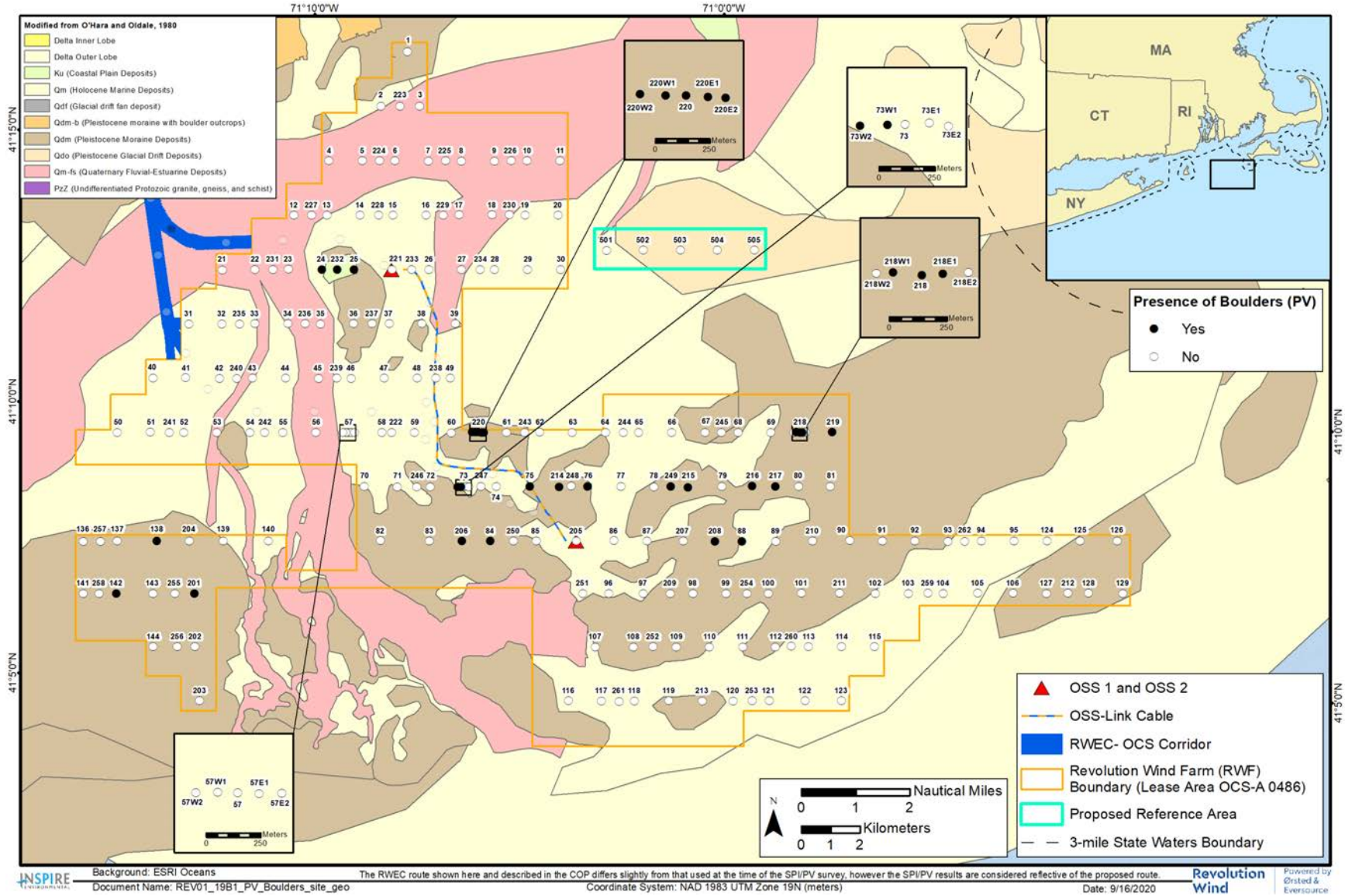


Figure 2.3-2. Presence/absence of boulders across the RWF and reference area within the context of modeled regional geology

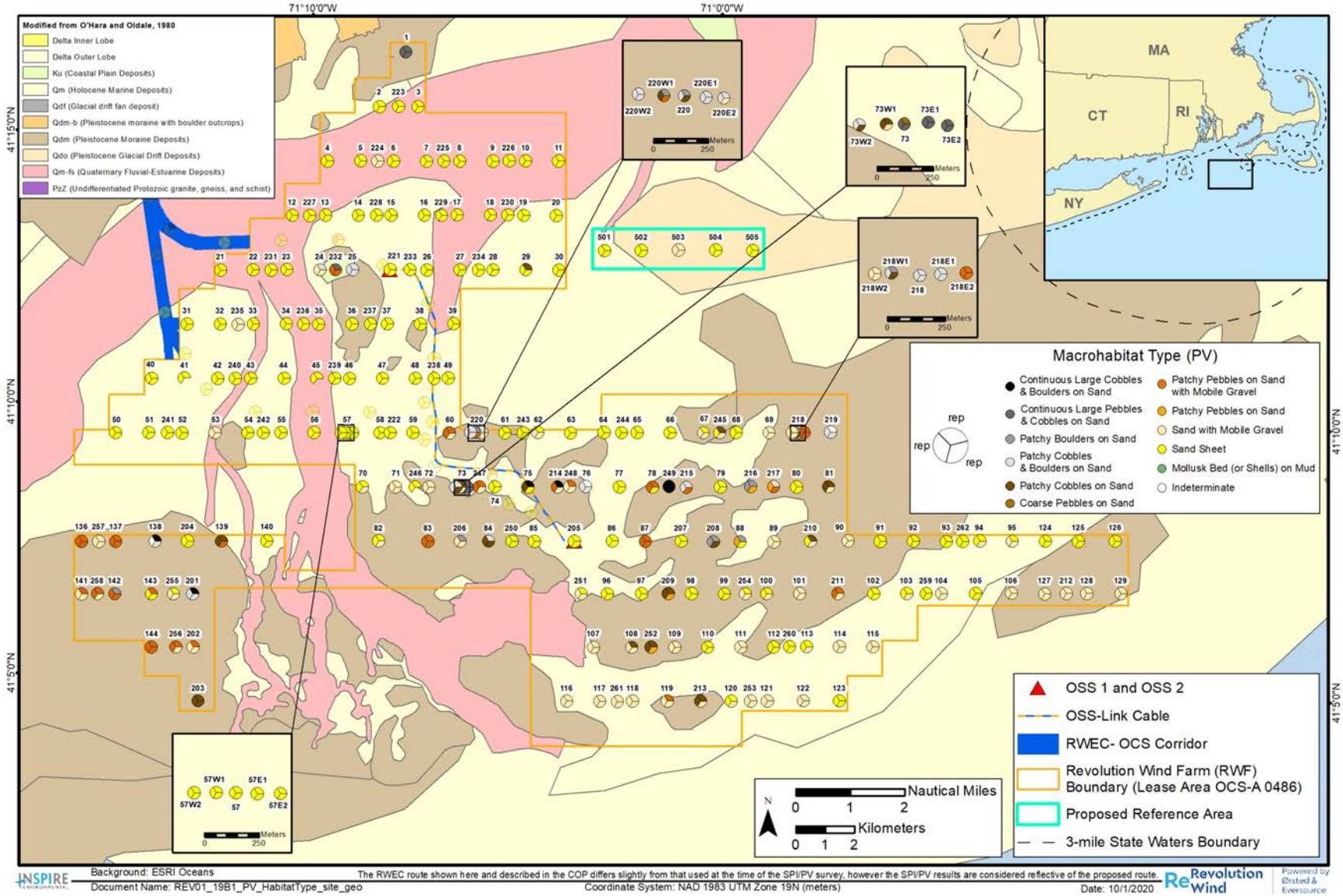


Figure 2.3-3. Macrohabitat type determined from PV images at the RWF and reference area within the context of modeled regional geology, each replicate value at each station is shown

Technical Report

Benthic Assessment Technical Report

ATTACHMENTS

Revolution Wind Offshore Wind Farm

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December 2021

ATTACHMENT A

SPI/PV STATION LOCATIONS

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	050	A	7/4/2019	21:54	311809.43	4558702.40	41°09'28.17324"N	071°14'34.58569"W	No Depth Sensor
SPI_PV	RWF	REV01	050	B	7/4/2019	21:55	311810.75	4558705.14	41°09'28.26325"N	071°14'34.53214"W	
SPI_PV	RWF	REV01	050	C	7/4/2019	21:56	311813.09	4558713.58	41°09'28.44374"N	071°14'34.47955"W	
SPI_PV	RWF	REV01	050	D	7/4/2019	21:57	311812.20	4558713.58	41°09'28.53791"N	071°14'34.47955"W	
SPI_PV	RWF	REV01	051	A	7/4/2019	22:25	312942.47	4558712.55	41°09'29.44597"N	071°13'46.01743"W	
SPI_PV	RWF	REV01	051	B	7/4/2019	22:27	312949.59	4558715.56	41°09'29.54918"N	071°13'45.71565"W	
SPI_PV	RWF	REV01	051	C	7/4/2019	22:28	312945.77	4558714.04	41°09'29.49680"N	071°13'45.87756"W	
SPI_PV	RWF	REV01	051	D	7/4/2019	22:29	312945.57	4558713.52	41°09'29.47999"N	071°13'45.88571"W	
SPI_PV	RWF	REV01	241	A	7/4/2019	22:57	313589.31	4558704.10	41°09'29.70806"N	071°13'18.27458"W	
SPI_PV	RWF	REV01	241	B	7/4/2019	22:58	313590.33	4558698.93	41°09'29.54145"N	071°13'18.22508"W	
SPI_PV	RWF	REV01	241	C	7/4/2019	22:59	313590.78	4558697.33	41°09'29.48986"N	071°13'18.20432"W	
SPI_PV	RWF	REV01	241	D	7/4/2019	23:00	313591.12	4558693.52	41°09'29.36691"N	071°13'18.18561"W	
SPI_PV	RWF	REV01	052	A	7/4/2019	23:33	314080.98	4558692.65	41°09'29.74327"N	071°12'57.18116"W	
SPI_PV	RWF	REV01	052	B	7/4/2019	23:34	314084.93	4558690.16	41°09'29.66594"N	071°12'57.00918"W	
SPI_PV	RWF	REV01	052	C	7/4/2019	23:36	314094.66	4558685.18	41°09'29.51246"N	071°12'56.58649"W	
SPI_PV	RWF	REV01	052	D	7/4/2019	23:37	314098.97	4558675.92	41°09'29.21609"N	071°12'56.39175"W	
SPI_PV	RWF	REV01	053	A	7/5/2019	0:24					Missed Call
SPI_PV	RWF	REV01	053	B	7/5/2019	0:27	315211.66	4558698.91	41°09'30.87636"N	071°12'08.70881"W	
SPI_PV	RWF	REV01	053	C	7/5/2019	0:29	315207.73	4558696.69	41°09'30.80116"N	071°12'08.87461"W	
SPI_PV	RWF	REV01	053	D	7/5/2019	0:31	315208.83	4558690.48	41°09'30.60103"N	071°12'08.82103"W	
SPI_PV	RWF	REV01	053	E	7/5/2019	0:32	315208.34	4558688.50	41°09'30.53639"N	071°12'08.83966"W	
SPI_PV	RWF	REV01	054	A	7/5/2019	0:55	316334.99	4558700.87	41°09'31.85858"N	071°11'20.54602"W	
SPI_PV	RWF	REV01	054	B	7/5/2019	0:56	316334.00	4558704.85	41°09'31.98665"N	071°11'20.59249"W	
SPI_PV	RWF	REV01	054	C	7/5/2019	0:58	316333.35	4558702.92	41°09'31.92364"N	071°11'20.61823"W	
SPI_PV	RWF	REV01	054	D	7/5/2019	0:59	316333.11	4558699.81	41°09'31.82276"N	071°11'20.62542"W	
SPI_PV	RWF	REV01	242	A	7/5/2019	1:18	316857.20	4558702.33	41°09'32.33095"N	071°10'58.15647"W	
SPI_PV	RWF	REV01	242	B	7/5/2019	1:19	316858.88	4558701.17	41°09'32.29466"N	071°10'58.08299"W	
SPI_PV	RWF	REV01	242	C	7/5/2019	1:20	316855.08	4558695.82	41°09'32.11834"N	071°10'58.24015"W	
SPI_PV	RWF	REV01	242	D	7/5/2019	1:22	316855.37	4558689.98	41°09'31.92937"N	071°10'58.22174"W	
SPI_PV	RWF	REV01	055	A	7/5/2019	1:38	317462.39	4558706.80	41°09'32.96693"N	071°10'32.21195"W	
SPI_PV	RWF	REV01	055	B	7/5/2019	1:39	317465.44	4558705.80	41°09'32.93708"N	071°10'32.08004"W	
SPI_PV	RWF	REV01	055	C	7/5/2019	1:41	317467.26	4558704.96	41°09'32.91136"N	071°10'32.00129"W	
SPI_PV	RWF	REV01	055	D	7/5/2019	1:43	317465.93	4558702.37	41°09'32.82616"N	071°10'32.05554"W	
SPI_PV	RWF	REV01	056	A	7/5/2019	2:24	318600.43	4558690.15	41°09'33.34678"N	071°09'43.39754"W	
SPI_PV	RWF	REV01	056	B	7/5/2019	2:25	318597.76	4558688.03	41°09'33.27567"N	071°09'43.50942"W	
SPI_PV	RWF	REV01	056	C	7/5/2019	2:27	318592.18	4558682.54	41°09'33.09333"N	071°09'43.74316"W	
SPI_PV	RWF	REV01	056	D	7/5/2019	2:28	318582.45	4558678.05	41°09'32.94011"N	071°09'44.15565"W	
SPI_PV	RWF	REV01	057	A	7/5/2019	2:51	319708.08	4558697.47	41°09'34.47306"N	071°08'55.91057"W	
SPI_PV	RWF	REV01	057	B	7/5/2019	2:52	319709.76	4558702.03	41°09'34.62229"N	071°08'55.84363"W	
SPI_PV	RWF	REV01	057	C	7/5/2019	2:54	319712.76	4558697.29	41°09'34.47102"N	071°08'55.70999"W	
SPI_PV	RWF	REV01	057	D	7/5/2019	2:55	319714.68	4558686.84	41°09'34.13371"N	071°08'55.61639"W	
SPI_PV	RWF	REV01	058	A	7/5/2019	3:15	320845.52	4558699.55	41°09'35.44791"N	071°08'07.14077"W	
SPI_PV	RWF	REV01	058	B	7/5/2019	3:16	320845.28	4558696.48	41°09'35.34811"N	071°08'07.14748"W	
SPI_PV	RWF	REV01	058	C	7/5/2019	3:18	320847.85	4558696.98	41°09'35.36624"N	071°08'07.03805"W	
SPI_PV	RWF	REV01	058	D	7/5/2019	3:19	320843.00	4558696.49	41°09'35.34683"N	071°08'07.24544"W	
SPI_PV	RWF	REV01	222	A	7/5/2019	3:34	321189.90	4558697.56	41°09'35.65682"N	071°07'52.37168"W	
SPI_PV	RWF	REV01	222	B	7/5/2019	3:35	321190.89	4558693.05	41°09'35.51174"N	071°07'52.32433"W	
SPI_PV	RWF	REV01	222	C	7/5/2019	3:36	321193.31	4558687.38	41°09'35.32969"N	071°07'52.21454"W	
SPI_PV	RWF	REV01	222	D	7/5/2019	3:38	321186.78	4558681.89	41°09'35.14662"N	071°07'52.48881"W	
SPI_PV	RWF	REV01	059	A	7/5/2019	3:55	321968.20	4558704.72	41°09'36.50552"N	071°07'19.00576"W	
SPI_PV	RWF	REV01	059	B	7/5/2019	3:58	321968.45	4558699.13	41°09'36.32454"N	071°07'18.98946"W	
SPI_PV	RWF	REV01	059	C	7/5/2019	3:58	321967.38	4558690.19	41°09'36.03387"N	071°07'19.02589"W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	059	D	7/5/2019	3:59	321962.68	4558681.88	41°09'35.76077"N	071°07'19.21864"W	
SPI_PV	RWF	REV01	056	E	7/5/2019	4:48	318589.22	4558696.14	41°09'33.53168"N	071°09'43.88442"W	
SPI_PV	RWF	REV01	056	F	7/5/2019	4:49	318583.42	4558690.93	41°09'33.53168"N	071°09'43.88442"W	
SPI_PV	RWF	REV01	056	G	7/5/2019	4:51	318581.71	4558688.69	41°09'33.28413"N	071°09'44.19847"W	
SPI_PV	RWF	REV01	056	H	7/5/2019	4:53	318586.77	4558690.05	41°09'33.33252"N	071°09'43.98298"W	
SPI_PV	RWF	REV01	057E1	A	7/5/2019	5:15	319811.81	4558699.28	41°09'34.65047"N	071°08'51.48297"W	
SPI_PV	RWF	REV01	057E1	B	7/5/2019	5:16	319808.34	4558697.31	41°09'34.54808"N	071°08'51.61179"W	
SPI_PV	RWF	REV01	057E1	C	7/5/2019	5:18	319811.24	4558684.48	41°09'34.13469"N	071°08'51.47353"W	
SPI_PV	RWF	REV01	057E1	D	7/5/2019	5:19	319799.24	4558679.19	41°09'33.95372"N	071°08'51.98278"W	
SPI_PV	RWF	REV01	057E2	A	7/5/2019	5:45	319914.86	4558698.55	41°09'34.67334"N	071°08'47.04523"W	
SPI_PV	RWF	REV01	057E2	B	7/5/2019	5:47	319911.98	4558695.66	41°09'34.57743"N	071°08'47.16568"W	
SPI_PV	RWF	REV01	057E2	C	7/5/2019	5:48	319906.07	4558700.15	41°09'34.71833"N	071°08'47.42393"W	
SPI_PV	RWF	REV01	057E2	D	7/5/2019	5:50	319897.57	4558710.07	41°09'35.03293"N	071°08'47.79909"W	
SPI_PV	RWF	REV01	057W1	A	7/5/2019	6:17	319618.90	4558702.84	41°09'34.57568"N	071°08'59.74060"W	
SPI_PV	RWF	REV01	057W1	B	7/5/2019	6:18	319611.40	4558700.24	41°09'34.48553"N	071°09'00.05927"W	
SPI_PV	RWF	REV01	057W1	C	7/5/2019	6:19	319604.72	4558697.70	41°09'34.39781"N	071°09'00.34294"W	
SPI_PV	RWF	REV01	057W1	D	7/5/2019	6:21	319599.03	4558699.56	41°09'34.45357"N	071°09'00.58881"W	
SPI_PV	RWF	REV01	057W2	A	7/5/2019	6:32	319517.27	4558701.98	41°09'34.46644"N	071°09'04.09705"W	
SPI_PV	RWF	REV01	057W2	B	7/5/2019	6:33	319512.89	4558712.12	41°09'34.79153"N	071°09'04.29588"W	
SPI_PV	RWF	REV01	057W2	C	7/5/2019	6:34	319507.61	4558716.00	41°09'34.91291"N	071°09'04.52634"W	
SPI_PV	RWF	REV01	057W2	D	7/5/2019	6:36	319504.07	4558715.79	41°09'34.90328"N	071°09'04.67807"W	
SPI_PV	RWF	REV01	056	I	7/5/2019	7:16	318591.75	4558707.46	41°09'33.90057"N	071°09'43.78788"W	
SPI_PV	RWF	REV01	056	J	7/5/2019	7:18	318591.05	4558712.94	41°09'34.07777"N	071°09'43.82381"W	
SPI_PV	RWF	REV01	056	K	7/5/2019	7:19	318584.37	4558715.67	41°09'34.16067"N	071°09'44.11325"W	
SPI_PV	RWF	REV01	056	L	7/5/2019	7:21	318561.83	4558717.21	41°09'34.19244"N	071°09'45.08146"W	
SPI_PV	RWF	REV01	056	M	7/5/2019	7:53	318586.29	4558722.73	41°09'34.39096"N	071°09'44.03838"W	
SPI_PV	RWF	REV01	056	N	7/5/2019	8:51	318592.82	4558710.94	41°09'34.01422"N	071°09'43.74594"W	
SPI_PV	RWF	REV01	056	O	7/5/2019	8:52	318593.15	4558711.74	41°09'34.04034"N	071°09'43.73264"W	
SPI_PV	RWF	REV01	060	A	7/5/2019	17:03	323211.43	4558687.77	41°09'36.93508"N	071°06'25.67816"W	
SPI_PV	RWF	REV01	060	B	7/5/2019	17:04	323209.89	4558685.57	41°09'36.86251"N	071°06'25.74180"W	
SPI_PV	RWF	REV01	060	C	7/5/2019	17:05	323209.02	4558681.84	41°09'36.74119"N	071°06'25.77552"W	
SPI_PV	RWF	REV01	060	D	7/5/2019	17:16	323207.37	4558705.69	41°09'37.51273"N	071°06'25.87089"W	
SPI_PV	RWF	REV01	220	A	7/5/2019	17:58	324140.85	4558710.98	41°09'38.41480"N	071°05'45.84810"W	
SPI_PV	RWF	REV01	220	B	7/5/2019	18:01	324140.62	4558713.82	41°09'38.50661"N	071°05'45.86091"W	
SPI_PV	RWF	REV01	220	C	7/5/2019	18:02	324140.77	4558719.97	41°09'38.70615"N	071°05'45.86101"W	
SPI_PV	RWF	REV01	220	D	7/5/2019	18:03	324142.75	4558724.86	41°09'38.86594"N	071°05'45.78076"W	
SPI_PV	RWF	REV01	061	A	7/5/2019	18:24	325106.30	4558693.67	41°09'38.60539"N	071°05'04.43070"W	
SPI_PV	RWF	REV01	061	B	7/5/2019	18:25	325108.52	4558700.97	41°09'38.84363"N	071°05'04.34279"W	
SPI_PV	RWF	REV01	061	C	7/5/2019	18:26	325109.45	4558704.24	41°09'38.95051"N	071°05'04.30632"W	
SPI_PV	RWF	REV01	061	D	7/5/2019	18:27	325108.54	4558707.64	41°09'39.05984"N	071°05'04.34899"W	
SPI_PV	RWF	REV01	243	A	7/5/2019	19:02	325730.39	4558696.51	41°09'39.18118"N	071°04'37.67167"W	
SPI_PV	RWF	REV01	243	B	7/5/2019	19:03	325726.23	4558693.46	41°09'39.07899"N	071°04'37.84687"W	
SPI_PV	RWF	REV01	243	C	7/5/2019	19:04	325726.64	4558692.20	41°09'39.03848"N	071°04'37.82786"W	
SPI_PV	RWF	REV01	243	D	7/5/2019	19:05	325724.28	4558695.07	41°09'39.12979"N	071°04'37.93205"W	
SPI_PV	RWF	REV01	062	A	7/5/2019	19:27	326226.10	4558709.90	41°09'39.99798"N	071°04'16.42846"W	
SPI_PV	RWF	REV01	062	B	7/5/2019	19:29	326225.04	4558710.81	41°09'40.02680"N	071°04'16.47479"W	
SPI_PV	RWF	REV01	062	C	7/5/2019	19:30	326229.19	4558717.20	41°09'40.23700"N	071°04'16.30343"W	
SPI_PV	RWF	REV01	062	D	7/5/2019	19:31	326234.43	4558723.90	41°09'40.45812"N	071°04'16.08533"W	
SPI_PV	RWF	REV01	220W2	A	7/5/2019	20:36	323927.62	4558707.75	41°09'38.14357"N	071°05'54.98830"W	
SPI_PV	RWF	REV01	220W2	B	7/5/2019	20:37	323927.91	4558709.41	41°09'38.19756"N	071°05'54.97753"W	
SPI_PV	RWF	REV01	220W2	C	7/5/2019	20:38	323928.67	4558720.98	41°09'38.57320"N	071°05'54.95703"W	
SPI_PV	RWF	REV01	220W2	D	7/5/2019	20:40	323931.80	4558723.57	41°09'38.65958"N	071°05'54.82544"W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	220W1	A	7/5/2019	21:29	324046.09	4558714.18	41°09’38.44438”N	071°05’49.91488”W	
SPI_PV	RWF	REV01	220W1	B	7/5/2019	21:30	324041.07	4558723.67	41°09’38.74801”N	071°05’50.13977”W	
SPI_PV	RWF	REV01	220W1	C	7/5/2019	21:32	324036.16	4558720.94	41°09’38.65593”N	071°05’50.34748”W	
SPI_PV	RWF	REV01	220W1	D	7/5/2019	21:33	324035.27	4558725.76	41°09’38.81127”N	071°05’50.39085”W	
SPI_PV	RWF	REV01	220E1	A	7/5/2019	21:58	324256.83	4558709.00	41°09’38.44098”N	071°05’40.87258”W	
SPI_PV	RWF	REV01	220E1	B	7/5/2019	22:07	324240.73	4558706.61	41°09’38.35119”N	071°05’41.56064”W	
SPI_PV	RWF	REV01	220E1	C	7/5/2019	22:08	324233.29	4558719.57	41°09’38.76542”N	071°05’41.89294”W	
SPI_PV	RWF	REV01	220E1	D	7/5/2019	22:10	324232.56	4558723.21	41°09’38.88270”N	071°05’41.92831”W	
SPI_PV	RWF	REV01	220E2	A	7/5/2019	22:32	324316.53	4558698.55	41°09’38.14899”N	071°05’38.30181”W	
SPI_PV	RWF	REV01	220E2	B	7/5/2019	22:33	324322.17	4558703.12	41°09’38.30165”N	071°05’38.06471”W	
SPI_PV	RWF	REV01	220E2	C	7/5/2019	22:34	324327.78	4558705.00	41°09’38.36695”N	071°05’37.82636”W	
SPI_PV	RWF	REV01	220E2	D	7/5/2019	22:35	324331.32	4558708.73	41°09’38.49034”N	071°05’37.67820”W	
SPI_PV	RWF	REV01	063	A	7/5/2019	23:11	327345.23	4558695.84	41°09’40.40303”N	071°03’28.42317”W	
SPI_PV	RWF	REV01	063	B	7/5/2019	23:12	327345.28	4558704.58	41°09’40.68625”N	071°03’28.43016”W	
SPI_PV	RWF	REV01	063	C	7/5/2019	23:13	327351.99	4558709.74	41°09’40.85859”N	071°03’28.14740”W	
SPI_PV	RWF	REV01	063	D	7/5/2019	23:15	327355.39	4558717.79	41°09’41.12216”N	071°03’28.00982”W	
SPI_PV	RWF	REV01	064	A	7/6/2019	0:15	328493.07	4558703.14	41°09’41.51620”N	071°02’39.20812”W	
SPI_PV	RWF	REV01	064	B	7/6/2019	0:17	328491.14	4558708.03	41°09’41.67328”N	071°02’39.29595”W	
SPI_PV	RWF	REV01	064	C	7/6/2019	0:18	328494.94	4558707.12	41°09’41.64668”N	071°02’39.13188”W	
SPI_PV	RWF	REV01	064	D	7/6/2019	0:20	328496.55	4558703.79	41°09’41.54018”N	071°02’39.05963”W	
SPI_PV	RWF	REV01	244	A	7/6/2019	0:38	329087.16	4558702.18	41°09’41.93676”N	071°02’13.73082”W	
SPI_PV	RWF	REV01	244	B	7/6/2019	0:39	329084.51	4558702.43	41°09’41.94291”N	071°02’13.84496”W	
SPI_PV	RWF	REV01	244	C	7/6/2019	0:41	329088.71	4558704.76	41°09’42.02140”N	071°02’13.66707”W	
SPI_PV	RWF	REV01	244	D	7/6/2019	0:42	329096.20	4558701.44	41°09’41.91960”N	071°02’13.34244”W	
SPI_PV	RWF	REV01	065	A	7/6/2019	1:00	329618.83	4558703.23	41°09’42.37352”N	071°01’50.93233”W	
SPI_PV	RWF	REV01	065	B	7/6/2019	1:01	329621.51	4558699.00	41°09’42.23856”N	071°01’50.81296”W	
SPI_PV	RWF	REV01	065	C	7/6/2019	1:03	329625.69	4558698.54	41°09’42.22668”N	071°01’50.63329”W	
SPI_PV	RWF	REV01	065	D	7/6/2019	1:04	329626.01	4558702.36	41°09’42.35065”N	071°01’50.62339”W	
SPI_PV	RWF	REV01	066	A	7/6/2019	2:04	330745.99	4558698.39	41°09’43.06638”N	071°01’02.59054”W	
SPI_PV	RWF	REV01	066	B	7/6/2019	2:05	330739.06	4558703.17	41°09’43.21616”N	071°01’02.89253”W	
SPI_PV	RWF	REV01	066	C	7/6/2019	2:07	330740.51	4558705.08	41°09’43.27897”N	071°01’02.83214”W	
SPI_PV	RWF	REV01	066	D	7/6/2019	2:09	330739.50	4558705.85	41°09’43.30346”N	071°01’02.87602”W	
SPI_PV	RWF	REV01	067	A	7/6/2019	2:51	331859.29	4558701.82	41°09’44.01130”N	071°00’14.85088”W	
SPI_PV	RWF	REV01	067	B	7/6/2019	2:53	331860.86	4558698.41	41°09’43.90199”N	071°00’14.77998”W	
SPI_PV	RWF	REV01	067	C	7/6/2019	2:54	331863.06	4558700.67	41°09’43.97682”N	071°00’14.68789”W	
SPI_PV	RWF	REV01	067	D	7/6/2019	2:55	331865.52	4558699.67	41°09’43.94641”N	071°00’14.58172”W	
SPI_PV	RWF	REV01	245	A	7/6/2019	3:38	332441.50	4558698.04	41°09’44.32268”N	070°59’49.87937”W	
SPI_PV	RWF	REV01	245	B	7/6/2019	3:40	332442.77	4558692.58	41°09’44.14651”N	070°59’49.81940”W	
SPI_PV	RWF	REV01	245	C	7/6/2019	3:41	332448.45	4558690.51	41°09’44.08374”N	070°59’49.57375”W	
SPI_PV	RWF	REV01	245	D	7/6/2019	3:43	332450.69	4558687.89	41°09’44.00046”N	070°59’49.47535”W	
SPI_PV	RWF	REV01	068	A	7/6/2019	4:07	333005.38	4558706.06	41°09’45.00147”N	070°59’25.70529”W	
SPI_PV	RWF	REV01	068	B	7/6/2019	4:08	333005.12	4558713.71	41°09’45.24920”N	070°59’25.72390”W	
SPI_PV	RWF	REV01	068	C	7/6/2019	4:10	332999.03	4558707.52	41°09’45.04386”N	070°59’25.97885”W	
SPI_PV	RWF	REV01	068	D	7/6/2019	4:11	332996.40	4558699.86	41°09’44.79383”N	070°59’26.08431”W	
SPI_PV	RWF	REV01	069	A	7/6/2019	5:35	334121.00	4558702.11	41°09’45.69751”N	070°58’37.85769”W	
SPI_PV	RWF	REV01	069	B	7/6/2019	5:37	334119.88	4558701.41	41°09’45.67424”N	070°58’37.90509”W	
SPI_PV	RWF	REV01	069	C	7/6/2019	5:38	334121.36	4558699.28	41°09’45.60630”N	070°58’37.83974”W	
SPI_PV	RWF	REV01	069	D	7/6/2019	5:39	334120.67	4558695.34	41°09’45.47810”N	070°58’37.86517”W	
SPI_PV	RWF	REV01	218	A	7/6/2019	6:25	335115.12	4558697.06	41°09’46.26378”N	070°57’55.21952”W	
SPI_PV	RWF	REV01	218	B	7/6/2019	6:26	335109.99	4558691.43	41°09’46.07758”N	070°57’55.43395”W	
SPI_PV	RWF	REV01	218	C	7/6/2019	6:32	335119.37	4558702.45	41°09’46.44177”N	070°57’55.04225”W	
SPI_PV	RWF	REV01	218	D	7/6/2019	6:33	335117.50	4558693.39	41°09’46.14677”N	070°57’55.11368”W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	218E1	A	7/6/2019	7:21	335206.26	4558702.65	41°09'46.51186"N	070°57'51.31623"W	
SPI_PV	RWF	REV01	218E1	B	7/6/2019	7:23	335217.35	4558712.43	41°09'46.83691"N	070°57'50.85002"W	
SPI_PV	RWF	REV01	218E1	C	7/6/2019	7:24	335216.73	4558708.56	41°09'46.71088"N	070°57'50.87269"W	
SPI_PV	RWF	REV01	218E1	D	7/6/2019	7:26	335213.21	4558714.69	41°09'46.90696"N	070°57'51.02951"W	
SPI_PV	RWF	REV01	218E2	A	7/6/2019	7:40	335317.70	4558708.67	41°09'46.78830"N	070°57'46.54271"W	
SPI_PV	RWF	REV01	218E2	B	7/6/2019	7:42	335311.03	4558711.09	41°09'46.86177"N	070°57'46.83090"W	
SPI_PV	RWF	REV01	218E2	C	7/6/2019	7:43	335313.04	4558713.76	41°09'46.95003"N	070°57'46.74762"W	
SPI_PV	RWF	REV01	218E2	D	7/6/2019	7:45	335303.78	4558715.38	41°09'46.99571"N	070°57'47.14602"W	
SPI_PV	RWF	REV01	218W1	A	7/6/2019	8:38	334990.27	4558708.70	41°09'46.54974"N	070°58'00.58487"W	
SPI_PV	RWF	REV01	218W1	B	7/6/2019	8:56	335014.39	4558706.99	41°09'46.51184"N	070°57'59.54890"W	
SPI_PV	RWF	REV01	218W1	C	7/6/2019	8:57	335018.54	4558707.91	41°09'46.54497"N	070°57'59.37170"W	
SPI_PV	RWF	REV01	218W1	D	7/6/2019	8:59	335027.14	4558709.77	41°09'46.61140"N	070°57'59.00491"W	
SPI_PV	RWF	REV01	218W2	A	7/6/2019	9:24	334917.53	4558704.59	41°09'46.36334"N	070°58'03.70041"W	
SPI_PV	RWF	REV01	218W2	B	7/6/2019	9:25	334918.56	4558708.29	41°09'46.48383"N	070°58'03.65980"W	
SPI_PV	RWF	REV01	218W2	C	7/6/2019	9:26	334918.35	4558709.62	41°09'46.52691"N	070°58'03.67034"W	
SPI_PV	RWF	REV01	218W2	D	7/6/2019	9:28	334915.89	4558709.98	41°09'46.53659"N	070°58'03.77614"W	
SPI_PV	RWF	REV01	219	A	7/6/2019	10:24	336222.67	4558720.17	41°09'47.82082"N	070°57'07.74306"W	
SPI_PV	RWF	REV01	219	B	7/6/2019	10:34	336243.82	4558700.11	41°09'47.18610"N	070°57'06.81655"W	
SPI_PV	RWF	REV01	219	C	7/6/2019	10:36	336247.63	4558697.18	41°09'47.09394"N	070°57'06.65039"W	
SPI_PV	RWF	REV01	219	D	7/6/2019	10:38	336256.54	4558705.49	41°09'47.36970"N	070°57'06.27630"W	
SPI_PV	RWF	REV01	081	A	7/6/2019	11:13	336155.34	4556859.19	41°08'47.45775"N	070°57'08.83987"W	
SPI_PV	RWF	REV01	081	B	7/6/2019	11:14	336155.00	4556864.67	41°08'47.63501"N	070°57'08.85974"W	
SPI_PV	RWF	REV01	081	C	7/6/2019	11:24	336189.06	4556865.88	41°08'47.69905"N	070°57'07.40080"W	
SPI_PV	RWF	REV01	081	D	7/6/2019	11:26	336195.13	4556856.88	41°08'47.41168"N	070°57'07.13195"W	
SPI_PV	RWF	REV01	080	A	7/6/2019	14:05	335071.51	4556851.44	41°08'46.41618"N	070°57'55.30234"W	
SPI_PV	RWF	REV01	080	B	7/6/2019	14:25	335069.46	4556840.12	41°08'46.04752"N	070°57'55.37927"W	
SPI_PV	RWF	REV01	080	C	7/6/2019	14:26	335071.43	4556839.94	41°08'46.04312"N	070°57'55.29449"W	
SPI_PV	RWF	REV01	080	D	7/6/2019	14:29	335061.31	4556842.02	41°08'46.10325"N	070°57'55.73035"W	
SPI_PV	RWF	REV01	217	A	7/6/2019	15:01	334282.60	4556865.66	41°08'46.29816"N	070°58'29.14047"W	
SPI_PV	RWF	REV01	217	B	7/6/2019	15:03	334289.49	4556863.58	41°08'46.23576"N	070°58'28.84298"W	
SPI_PV	RWF	REV01	217	C	7/6/2019	15:04	334293.70	4556862.25	41°08'46.19598"N	070°58'28.66108"W	
SPI_PV	RWF	REV01	217	D	7/6/2019	15:05	334295.71	4556862.80	41°08'46.21521"N	070°58'28.57559"W	
SPI_PV	RWF	REV01	216	A	7/6/2019	15:26	333491.92	4556866.79	41°08'45.75221"N	070°59'03.04169"W	
SPI_PV	RWF	REV01	216	B	7/6/2019	15:27	333494.10	4556872.91	41°08'45.95187"N	070°59'02.95429"W	
SPI_PV	RWF	REV01	216	C	7/6/2019	15:39	333499.13	4556867.72	41°08'45.78763"N	070°59'02.73354"W	
SPI_PV	RWF	REV01	216	D	7/6/2019	15:43	333484.93	4556855.58	41°08'45.38357"N	070°59'03.33023"W	
SPI_PV	RWF	REV01	079	A	7/6/2019	16:11	332461.47	4556853.25	41°08'44.54977"N	070°59'47.20820"W	
SPI_PV	RWF	REV01	079	B	7/6/2019	16:12	332469.14	4556857.03	41°08'44.67797"N	070°59'46.88276"W	
SPI_PV	RWF	REV01	079	C	7/6/2019	16:13	332472.91	4556861.49	41°08'44.82516"N	070°59'46.72547"W	
SPI_PV	RWF	REV01	079	D	7/6/2019	16:14	332472.17	4556865.14	41°08'44.94284"N	070°59'46.76096"W	
SPI_PV	RWF	REV01	067	E	7/6/2019	17:23	331882.01	4558697.44	41°09'43.88643"N	071°00'13.87242"W	
SPI_PV	RWF	REV01	067	F	7/6/2019	17:53	331867.84	4558693.01	41°09'43.73220"N	071°00'14.47542"W	
SPI_PV	RWF	REV01	067	G	7/6/2019	17:54	331873.79	4558681.34	41°09'43.35835"N	071°00'14.20890"W	
SPI_PV	RWF	REV01	067	H	7/6/2019	17:55	331869.41	4558684.11	41°09'43.44479"N	071°00'14.39935"W	
SPI_PV	RWF	REV01	215	A	7/6/2019	18:18	331294.10	4556831.00	41°08'42.95508"N	071°00'37.23528"W	
SPI_PV	RWF	REV01	215	B	7/6/2019	18:19	331300.68	4556831.04	41°08'42.96383"N	071°00'36.95328"W	
SPI_PV	RWF	REV01	215	C	7/6/2019	18:20	331305.18	4556838.95	41°08'43.22363"N	071°00'36.76817"W	
SPI_PV	RWF	REV01	215	D	7/6/2019	18:21	331303.51	4556845.44	41°08'43.43263"N	071°00'36.84642"W	
SPI_PV	RWF	REV01	249	A	7/6/2019	19:02	330707.92	4556861.74	41°08'43.51443"N	071°01'02.39750"W	
SPI_PV	RWF	REV01	249	B	7/6/2019	19:03	330712.80	4556866.37	41°08'43.66815"N	071°01'02.19265"W	
SPI_PV	RWF	REV01	249	C	7/6/2019	19:05	330712.78	4556868.92	41°08'43.75090"N	071°01'02.19607"W	
SPI_PV	RWF	REV01	249	D	7/6/2019	19:06	330716.69	4556862.38	41°08'43.54170"N	071°01'02.02219"W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	078	A	7/6/2019	19:51	330143.98	4556843.35	41°08'42.49433"N	071°01'26.55669"W	
SPI_PV	RWF	REV01	078	B	7/6/2019	19:52	330150.22	4556844.61	41°08'42.53960"N	071°01'26.29074"W	
SPI_PV	RWF	REV01	078	C	7/6/2019	19:53	330146.10	4556858.75	41°08'42.99504"N	071°01'26.48121"W	
SPI_PV	RWF	REV01	078	D	7/6/2019	19:54	330139.04	4556872.98	41°08'43.45089"N	071°01'26.79807"W	
SPI_PV	RWF	REV01	077	A	7/6/2019	21:00	329016.10	4556854.17	41°08'41.99213"N	071°02'14.92283"W	
SPI_PV	RWF	REV01	077	B	7/6/2019	21:01	329009.60	4556855.94	41°08'42.04447"N	071°02'15.20319"W	
SPI_PV	RWF	REV01	077	C	7/6/2019	21:02	329005.94	4556872.72	41°08'42.58556"N	071°02'15.37697"W	
SPI_PV	RWF	REV01	077	D	7/6/2019	21:03	329001.38	4556866.72	41°08'42.38774"N	071°02'15.56646"W	
SPI_PV	RWF	REV01	076	A	7/6/2019	21:45	327861.75	4556863.62	41°08'41.41957"N	071°03'04.42180"W	
SPI_PV	RWF	REV01	076	B	7/6/2019	21:46	327862.51	4556863.27	41°08'41.40886"N	071°03'04.38892"W	
SPI_PV	RWF	REV01	076	C	7/6/2019	22:01	327860.99	4556857.38	41°08'41.21686"N	071°03'04.44819"W	
SPI_PV	RWF	REV01	076	D	7/6/2019	22:03	327858.48	4556857.83	41°08'41.22945"N	071°03'04.55591"W	
SPI_PV	RWF	REV01	248	A	7/6/2019	22:17	327318.60	4556866.64	41°08'41.10207"N	071°03'27.71046"W	
SPI_PV	RWF	REV01	248	B	7/6/2019	22:18	327320.23	4556874.27	41°08'41.35050"N	071°03'27.64840"W	
SPI_PV	RWF	REV01	248	C	7/6/2019	22:19	327319.64	4556870.42	41°08'41.22527"N	071°03'27.67011"W	
SPI_PV	RWF	REV01	248	D	7/6/2019	22:20	327323.27	4556868.94	41°08'41.18023"N	071°03'27.51285"W	
SPI_PV	RWF	REV01	214	A	7/6/2019	22:43	326900.55	4556850.25	41°08'40.25013"N	071°03'45.61633"W	
SPI_PV	RWF	REV01	214	B	7/6/2019	22:44	326900.75	4556853.21	41°08'40.34617"N	071°03'45.61106"W	
SPI_PV	RWF	REV01	214	C	7/6/2019	22:45	326897.55	4556860.59	41°08'40.58293"N	071°03'45.75553"W	
SPI_PV	RWF	REV01	214	D	7/6/2019	22:46	326891.71	4556868.23	41°08'40.82600"N	071°03'46.01389"W	
SPI_PV	RWF	REV01	075	A	7/6/2019	23:26	325892.56	4556852.15	41°08'39.53545"N	071°04'28.83207"W	
SPI_PV	RWF	REV01	075	B	7/6/2019	23:27	325883.64	4556847.23	41°08'39.36920"N	071°04'29.20950"W	
SPI_PV	RWF	REV01	075	C	7/6/2019	23:28	325880.53	4556841.67	41°08'39.18650"N	071°04'29.33716"W	
SPI_PV	RWF	REV01	075	D	7/6/2019	23:30	325880.54	4556842.92	41°08'39.22699"N	071°04'29.33768"W	
SPI_PV	RWF	REV01	074	A	7/7/2019	0:14	324759.42	4556857.38	41°08'38.82675"N	071°05'17.41597"W	
SPI_PV	RWF	REV01	074	B	7/7/2019	0:15	324765.39	4556856.89	41°08'38.81562"N	071°05'17.15959"W	
SPI_PV	RWF	REV01	074	C	7/7/2019	0:17	324759.94	4556871.47	41°08'39.28378"N	071°05'17.40831"W	
SPI_PV	RWF	REV01	074	D	7/7/2019	0:22	324758.15	4556861.68	41°08'38.96535"N	071°05'17.47471"W	
SPI_PV	RWF	REV01	247	A	7/7/2019	0:37	324237.53	4556852.58	41°08'38.26493"N	071°05'39.78457"W	
SPI_PV	RWF	REV01	247	B	7/7/2019	0:38	324238.30	4556854.80	41°08'38.33737"N	071°05'39.75370"W	
SPI_PV	RWF	REV01	247	C	7/7/2019	0:40	324243.24	4556856.54	41°08'38.39783"N	071°05'39.54370"W	
SPI_PV	RWF	REV01	247	D	7/7/2019	0:42	324246.99	4556849.41	41°08'38.16948"N	071°05'39.37563"W	
SPI_PV	RWF	REV01	073	A	7/7/2019	1:26	323632.94	4556849.59	41°08'37.69593"N	071°06'05.70047"W	
SPI_PV	RWF	REV01	073	B	7/7/2019	1:27	323628.50	4556852.22	41°08'37.77750"N	071°06'05.89331"W	
SPI_PV	RWF	REV01	073	C	7/7/2019	1:28	323629.02	4556849.50	41°08'37.68972"N	071°06'05.86834"W	
SPI_PV	RWF	REV01	073	D	7/7/2019	1:30	323628.11	4556844.49	41°08'37.52673"N	071°06'05.90209"W	
SPI_PV	RWF	REV01	072	A	7/7/2019	2:17	322505.16	4556850.02	41°08'36.82460"N	071°06'54.04810"W	
SPI_PV	RWF	REV01	072	B	7/7/2019	2:19	322503.40	4556851.03	41°08'36.85596"N	071°06'54.12468"W	
SPI_PV	RWF	REV01	072	C	7/7/2019	2:20	322508.02	4556849.03	41°08'36.79462"N	071°06'53.92434"W	
SPI_PV	RWF	REV01	072	D	7/7/2019	2:21	322505.83	4556850.68	41°08'36.84637"N	071°06'54.01999"W	
SPI_PV	RWF	REV01	246	A	7/7/2019	2:35	322040.34	4556849.35	41°08'36.43642"N	071°07'13.97402"W	
SPI_PV	RWF	REV01	246	B	7/7/2019	2:36	322038.18	4556851.08	41°08'36.49079"N	071°07'14.06839"W	
SPI_PV	RWF	REV01	246	C	7/7/2019	2:37	322038.65	4556850.03	41°08'36.45697"N	071°07'14.04699"W	
SPI_PV	RWF	REV01	246	D	7/7/2019	2:39	322038.35	4556852.50	41°08'36.53663"N	071°07'14.06239"W	
SPI_PV	RWF	REV01	083	A	7/7/2019	3:08	322476.70	4554997.13	41°07'36.75604"N	071°06'53.33876"W	
SPI_PV	RWF	REV01	083	B	7/7/2019	3:09	322479.80	4554995.69	41°07'36.71164"N	071°06'53.20417"W	
SPI_PV	RWF	REV01	083	C	7/7/2019	3:10	322479.18	4554993.90	41°07'36.65302"N	071°06'53.22917"W	
SPI_PV	RWF	REV01	083	D	7/7/2019	3:11	322476.97	4554994.97	41°07'36.68600"N	071°06'53.32500"W	
SPI_PV	RWF	REV01	206	A	7/7/2019	3:38	323580.27	4555000.15	41°07'37.71955"N	071°06'06.04404"W	
SPI_PV	RWF	REV01	206	B	7/7/2019	3:39	323582.20	4554999.09	41°07'37.68674"N	071°06'05.96023"W	
SPI_PV	RWF	REV01	206	C	7/7/2019	3:41	323580.03	4554992.84	41°07'37.48248"N	071°06'06.04678"W	
SPI_PV	RWF	REV01	206	D	7/7/2019	3:42	323571.21	4554986.44	41°07'37.26829"N	071°06'06.41827"W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	084	A	7/7/2019	4:18	324548.60	4555002.29	41°07’38.54458”N	071°05’24.54469”W	
SPI_PV	RWF	REV01	084	B	7/7/2019	4:20	324541.82	4554995.91	41°07’38.33251”N	071°05’24.82840”W	
SPI_PV	RWF	REV01	084	C	7/7/2019	4:26	324549.92	4555005.05	41°07’38.63492”N	071°05’24.49079”W	
SPI_PV	RWF	REV01	084	D	7/7/2019	4:27	324547.36	4555004.54	41°07’38.61639”N	071°05’24.59979”W	
SPI_PV	RWF	REV01	250	A	7/7/2019	5:16	325348.75	4555003.55	41°07’39.20621”N	071°04’50.25156”W	
SPI_PV	RWF	REV01	250	B	7/7/2019	5:23	325335.72	4554995.99	41°07’38.95115”N	071°04’50.80241”W	
SPI_PV	RWF	REV01	250	C	7/7/2019	5:25	325331.66	4554996.55	41°07’38.96628”N	071°04’50.97672”W	
SPI_PV	RWF	REV01	250	D	7/7/2019	5:27	325325.29	4554986.86	41°07’38.64713”N	071°04’51.23981”W	
SPI_PV	RWF	REV01	085	A	7/7/2019	5:52	326112.83	4554998.44	41°07’39.63115”N	071°04’17.49771”W	
SPI_PV	RWF	REV01	085	B	7/7/2019	5:54	326114.00	4554992.81	41°07’39.44962”N	071°04’17.44218”W	
SPI_PV	RWF	REV01	085	C	7/7/2019	5:59	326103.17	4555004.37	41°07’39.81591”N	071°04’17.91812”W	
SPI_PV	RWF	REV01	085	D	7/7/2019	6:02	326098.09	4554996.59	41°07’39.55982”N	071°04’18.12758”W	
SPI_PV	RWF	REV01	205	A	7/7/2019	6:48	327480.87	4554993.51	41°07’40.52202”N	071°03’18.85814”W	
SPI_PV	RWF	REV01	205	B	7/7/2019	6:51	327478.48	4554995.33	41°07’40.57928”N	071°03’18.96237”W	
SPI_PV	RWF	REV01	205	C	7/7/2019	6:53	327472.25	4554990.02	41°07’40.40218”N	071°03’19.22390”W	
SPI_PV	RWF	REV01	205	D	7/7/2019	6:57	327474.53	4555001.95	41°07’40.79053”N	071°03’19.13817”W	
SPI_PV	RWF	REV01	086	A	7/7/2019	7:28	328770.63	4555012.01	41°07’42.10458”N	071°02’23.59597”W	
SPI_PV	RWF	REV01	086	B	7/7/2019	8:17	328750.49	4555003.48	41°07’41.81274”N	071°02’24.45087”W	
SPI_PV	RWF	REV01	086	C	7/7/2019	8:30	328750.85	4554991.38	41°07’41.42084”N	071°02’24.42339”W	
SPI_PV	RWF	REV01	086	D	7/7/2019	8:32	328756.72	4554982.07	41°07’41.12352”N	071°02’24.16216”W	
SPI_PV	RWF	REV01	087	A	7/7/2019	10:54	329899.91	4554993.47	41°07’42.35814”N	071°01’35.17483”W	
SPI_PV	RWF	REV01	087	B	7/7/2019	10:56	329898.11	4554994.86	41°07’42.40184”N	071°01’35.25328”W	
SPI_PV	RWF	REV01	087	C	7/7/2019	10:57	329904.81	4555001.32	41°07’42.61636”N	071°01’34.97235”W	
SPI_PV	RWF	REV01	087	D	7/7/2019	10:59	329898.98	4555002.98	41°07’42.66584”N	071°01’35.22402”W	
SPI_PV	RWF	REV01	207	A	7/7/2019	11:34	331132.31	4555006.12	41°07’43.69433”N	071°00’42.36386”W	
SPI_PV	RWF	REV01	207	B	7/7/2019	11:36	331129.57	4555001.96	41°07’43.55740”N	071°00’42.47713”W	
SPI_PV	RWF	REV01	207	C	7/7/2019	11:37	331133.97	4554995.72	41°07’43.35862”N	071°00’42.28241”W	
SPI_PV	RWF	REV01	207	D	7/7/2019	11:38	331142.06	4554998.81	41°07’43.46474”N	071°00’41.93896”W	
SPI_PV	RWF	REV01	208	A	7/7/2019	12:30	332223.85	4554985.12	41°07’43.82850”N	070°59’55.55688”W	
SPI_PV	RWF	REV01	208	B	7/7/2019	12:31	332222.18	4554980.26	41°07’43.66976”N	070°59’55.62370”W	
SPI_PV	RWF	REV01	208	C	7/7/2019	12:32	332223.91	4554982.62	41°07’43.74734”N	070°59’55.55180”W	
SPI_PV	RWF	REV01	208	D	7/7/2019	12:34	332223.09	4554977.41	41°07’43.57792”N	070°59’55.58178”W	Outside of 25m Radius
SPI_PV	RWF	REV01	208	E	7/7/2019	12:44	332219.77	4554990.10	41°07’43.98694”N	070°59’55.73647”W	
SPI_PV	RWF	REV01	088	A	7/7/2019	13:16	333137.26	4554985.79	41°07’44.52779”N	070°59’16.40606”W	
SPI_PV	RWF	REV01	088	B	7/7/2019	13:17	333138.70	4554984.46	41°07’44.48566”N	070°59’16.34303”W	
SPI_PV	RWF	REV01	088	C	7/7/2019	13:18	333144.15	4554983.23	41°07’44.45010”N	070°59’16.10822”W	
SPI_PV	RWF	REV01	088	D	7/7/2019	13:27	333137.84	4554983.05	41°07’44.43960”N	070°59’16.37838”W	
SPI_PV	RWF	REV01	089	A	7/7/2019	14:21	334283.25	4554986.89	41°07’45.40840”N	070°58’27.28583”W	
SPI_PV	RWF	REV01	089	B	7/7/2019	14:23	334291.83	4554980.45	41°07’45.20608”N	070°58’26.91192”W	
SPI_PV	RWF	REV01	089	C	7/7/2019	14:24	334298.05	4554983.29	41°07’45.30277”N	070°58’26.64813”W	
SPI_PV	RWF	REV01	089	D	7/7/2019	14:25	334297.56	4554982.26	41°07’45.26894”N	070°58’26.66790”W	
SPI_PV	RWF	REV01	210	A	7/7/2019	14:50	335546.58	4554999.69	41°07’46.74803”N	070°57’33.14657”W	
SPI_PV	RWF	REV01	210	B	7/7/2019	14:51	335547.35	4554999.03	41°07’46.72729”N	070°57’33.11302”W	
SPI_PV	RWF	REV01	210	C	7/7/2019	14:53	335548.43	4554996.11	41°07’46.63348”N	070°57’33.06389”W	
SPI_PV	RWF	REV01	210	D	7/7/2019	14:54	335546.46	4554995.01	41°07’46.59639”N	070°57’33.14732”W	
SPI_PV	RWF	REV01	090	A	7/7/2019	15:17	336819.82	4555011.01	41°07’48.04005”N	070°56’38.58048”W	
SPI_PV	RWF	REV01	090	B	7/7/2019	15:19	336819.10	4555011.04	41°07’48.04039”N	070°56’38.61131”W	
SPI_PV	RWF	REV01	090	C	7/7/2019	15:20	336818.45	4555008.90	41°07’47.97069”N	070°56’38.63704”W	
SPI_PV	RWF	REV01	090	D	7/7/2019	15:21	336818.22	4555005.06	41°07’47.84612”N	070°56’38.64328”W	
SPI_PV	RWF	REV01	091	A	7/7/2019	16:14	337925.95	4554994.92	41°07’48.31606”N	070°55’51.15060”W	
SPI_PV	RWF	REV01	091	B	7/7/2019	16:16	337924.38	4554988.17	41°07’48.09633”N	070°55’51.21161”W	
SPI_PV	RWF	REV01	091	C	7/7/2019	16:17	337922.42	4554988.37	41°07’48.10136”N	070°55’51.29564”W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	091	D	7/7/2019	16:18	337923.59	4554986.67	41°07’48.04722”N	070°55’51.24397”W	
SPI_PV	RWF	REV01	092	A	7/7/2019	16:49	339050.68	4555002.15	41°07’49.35615”N	070°55’02.94519”W	
SPI_PV	RWF	REV01	092	B	7/7/2019	16:50	339047.83	4555008.09	41°07’49.54671”N	070°55’03.07284”W	
SPI_PV	RWF	REV01	092	C	7/7/2019	16:51	339051.68	4555007.62	41°07’49.53425”N	070°55’02.90739”W	
SPI_PV	RWF	REV01	092	D	7/7/2019	16:53	339047.58	4555001.34	41°07’49.32760”N	070°55’03.07741”W	
SPI_PV	RWF	REV01	093	A	7/7/2019	17:28	340176.57	4554986.48	41°07’49.64885”N	070°54’14.66780”W	
SPI_PV	RWF	REV01	093	B	7/7/2019	17:29	340181.51	4554986.60	41°07’49.65648”N	070°54’14.45627”W	
SPI_PV	RWF	REV01	093	C	7/7/2019	17:31	340180.63	4554983.82	41°07’49.56570”N	070°54’14.49104”W	
SPI_PV	RWF	REV01	093	D	7/7/2019	17:32	340179.02	4554984.58	41°07’49.58902”N	070°54’14.56075”W	
SPI_PV	RWF	REV01	262	A	7/7/2019	17:50	340736.48	4554992.19	41°07’50.23022”N	070°53’50.67179”W	
SPI_PV	RWF	REV01	262	B	7/7/2019	17:52	340733.47	4554995.82	41°07’50.34582”N	070°53’50.80399”W	
SPI_PV	RWF	REV01	262	C	7/7/2019	17:53	340734.25	4554995.82	41°07’50.34632”N	070°53’50.77056”W	
SPI_PV	RWF	REV01	262	D	7/7/2019	17:54	340733.15	4554999.41	41°07’50.46198”N	070°53’50.82125”W	
SPI_PV	RWF	REV01	094	A	7/7/2019	18:13	341316.16	4555008.94	41°07’51.18184”N	070°53’25.83841”W	
SPI_PV	RWF	REV01	094	B	7/7/2019	18:14	341308.38	4555002.38	41°07’50.96359”N	070°53’26.16590”W	
SPI_PV	RWF	REV01	094	C	7/7/2019	18:15	341304.94	4555000.51	41°07’50.90055”N	070°53’26.31147”W	
SPI_PV	RWF	REV01	094	D	7/7/2019	18:16	341298.14	4554996.25	41°07’50.75794”N	070°53’26.59911”W	
SPI_PV	RWF	REV01	095	A	7/7/2019	18:51	342426.60	4554999.04	41°07’51.63959”N	070°52’38.22792”W	
SPI_PV	RWF	REV01	095	B	7/7/2019	18:52	342426.97	4555000.35	41°07’51.68221”N	070°52’38.21292”W	
SPI_PV	RWF	REV01	095	C	7/7/2019	18:54	342426.62	4554998.52	41°07’51.62266”N	070°52’38.22625”W	
SPI_PV	RWF	REV01	095	D	7/7/2019	18:55	342425.93	4554994.42	41°07’51.48922”N	070°52’38.25231”W	
SPI_PV	RWF	REV01	124	A	7/7/2019	19:13	343554.58	4555001.29	41°07’52.49782”N	070°51’49.87608”W	
SPI_PV	RWF	REV01	124	B	7/7/2019	19:14	343552.91	4554998.61	41°07’52.40975”N	070°51’49.94503”W	
SPI_PV	RWF	REV01	124	C	7/7/2019	19:15	343550.90	4554996.42	41°07’52.33738”N	070°51’50.02945”W	
SPI_PV	RWF	REV01	124	D	7/7/2019	19:16	343553.38	4554990.99	41°07’52.16340”N	070°51’49.91815”W	
SPI_PV	RWF	REV01	125	A	7/7/2019	19:53	344681.78	4554998.32	41°07’53.18083”N	070°51’01.55236”W	
SPI_PV	RWF	REV01	125	B	7/7/2019	19:54	344679.98	4555002.63	41°07’53.31928”N	070°51’01.63354”W	
SPI_PV	RWF	REV01	125	C	7/7/2019	19:55	344677.32	4555005.40	41°07’53.40744”N	070°51’01.74992”W	
SPI_PV	RWF	REV01	125	D	7/7/2019	19:57	344679.69	4555003.93	41°07’53.36132”N	070°51’01.64727”W	
SPI_PV	RWF	REV01	126	A	7/7/2019	20:17	345943.35	4555002.92	41°07’54.19548”N	070°50’07.47494”W	
SPI_PV	RWF	REV01	126	B	7/7/2019	20:19	345934.33	4555002.38	41°07’54.17192”N	070°50’07.86094”W	
SPI_PV	RWF	REV01	126	C	7/7/2019	20:20	345936.00	4555003.24	41°07’54.20062”N	070°50’07.79017”W	
SPI_PV	RWF	REV01	126	D	7/7/2019	20:21	345933.37	4555002.65	41°07’54.17983”N	070°50’07.90260”W	
SPI_PV	RWF	REV01	129	A	7/7/2019	21:00	346140.13	4553217.31	41°06’56.45398”N	070°49’57.42819”W	
SPI_PV	RWF	REV01	129	B	7/7/2019	21:02	346137.99	4553214.99	41°06’56.37721”N	070°49’57.51789”W	
SPI_PV	RWF	REV01	129	C	7/7/2019	21:03	346132.97	4553216.47	41°06’56.42174”N	070°49’57.73428”W	
SPI_PV	RWF	REV01	129	D	7/7/2019	21:04	346130.07	4553216.01	41°06’56.40497”N	070°49’57.85840”W	
SPI_PV	RWF	REV01	128	A	7/7/2019	21:18	344971.30	4553218.76	41°06’55.70088”N	070°50’47.52355”W	
SPI_PV	RWF	REV01	128	B	7/7/2019	21:19	344969.04	4553217.68	41°06’55.66429”N	070°50’47.61949”W	
SPI_PV	RWF	REV01	128	C	7/7/2019	21:20	344970.32	4553221.68	41°06’55.79490”N	070°50’47.56807”W	
SPI_PV	RWF	REV01	128	D	7/7/2019	21:22	344965.36	4553220.71	41°06’55.76013”N	070°50’47.78000”W	
SPI_PV	RWF	REV01	212	A	7/7/2019	21:46	344269.17	4553216.84	41°06’55.15504”N	070°51’17.61352”W	
SPI_PV	RWF	REV01	212	B	7/7/2019	21:47	344269.43	4553216.26	41°06’55.13660”N	070°51’17.60205”W	
SPI_PV	RWF	REV01	212	C	7/7/2019	21:49	344265.82	4553221.29	41°06’55.29697”N	070°51’17.76136”W	
SPI_PV	RWF	REV01	212	D	7/7/2019	21:50	344266.46	4553224.93	41°06’55.41555”N	070°51’17.73705”W	
SPI_PV	RWF	REV01	127	A	7/7/2019	22:04	343535.94	4553204.01	41°06’54.23191”N	070°51’49.02638”W	
SPI_PV	RWF	REV01	127	B	7/7/2019	22:05	343536.12	4553206.70	41°06’54.31941”N	070°51’49.02102”W	
SPI_PV	RWF	REV01	127	C	7/7/2019	22:06	343535.99	4553212.93	41°06’54.52098”N	070°51’49.03221”W	
SPI_PV	RWF	REV01	127	D	7/7/2019	22:07	343536.23	4553214.59	41°06’54.57512”N	070°51’49.02368”W	
SPI_PV	RWF	REV01	106	A	7/7/2019	22:48	342397.56	4553222.84	41°06’54.04990”N	070°52’37.83135”W	
SPI_PV	RWF	REV01	106	B	7/7/2019	22:49	342394.21	4553224.58	41°06’54.10401”N	070°52’37.97656”W	
SPI_PV	RWF	REV01	106	C	7/7/2019	22:50	342394.54	4553227.58	41°06’54.20149”N	070°52’37.96533”W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	106	D	7/7/2019	22:51	342395.50	4553226.83	41°06’54.17779”N	070°52’37.92336”W	
SPI_PV	RWF	REV01	105	A	7/7/2019	23:08	341180.82	4553219.02	41°06’53.07287”N	070°53’29.97308”W	
SPI_PV	RWF	REV01	105	B	7/7/2019	23:09	341180.92	4553221.81	41°06’53.16333”N	070°53’29.97154”W	
SPI_PV	RWF	REV01	105	C	7/7/2019	23:09	341177.47	4553226.51	41°06’53.31324”N	070°53’30.12385”W	
SPI_PV	RWF	REV01	105	D	7/7/2019	23:10	341178.02	4553227.05	41°06’53.33110”N	070°53’30.10056”W	
SPI_PV	RWF	REV01	104	A	7/7/2019	23:51	340011.50	4553212.10	41°06’52.02245”N	070°54’20.07937”W	
SPI_PV	RWF	REV01	104	B	7/7/2019	23:52	340009.82	4553211.25	41°06’51.99375”N	070°54’20.15061”W	
SPI_PV	RWF	REV01	104	C	7/7/2019	23:53	340007.51	4553213.39	41°06’52.06161”N	070°54’20.25141”W	
SPI_PV	RWF	REV01	104	D	7/7/2019	23:54	340006.90	4553210.79	41°06’51.97676”N	070°54’20.27523”W	
SPI_PV	RWF	REV01	259	A	7/8/2019	0:13	339486.52	4553216.78	41°06’51.80131”N	070°54’42.58222”W	
SPI_PV	RWF	REV01	259	B	7/8/2019	0:15	339481.91	4553215.11	41°06’51.74383”N	070°54’42.77810”W	
SPI_PV	RWF	REV01	259	C	7/8/2019	0:16	339487.51	4553215.73	41°06’51.76806”N	070°54’42.53893”W	
SPI_PV	RWF	REV01	259	D	7/8/2019	0:18	339485.21	4553218.12	41°06’51.84383”N	070°54’42.63973”W	
SPI_PV	RWF	REV01	103	A	7/8/2019	0:34	338828.49	4553213.31	41°06’51.21973”N	070°55’10.77914”W	
SPI_PV	RWF	REV01	103	B	7/8/2019	0:35	338826.01	4553211.15	41°06’51.14795”N	070°55’10.88333”W	
SPI_PV	RWF	REV01	103	C	7/8/2019	0:37	338825.42	4553209.02	41°06’51.07859”N	070°55’10.90659”W	
SPI_PV	RWF	REV01	103	D	7/8/2019	0:38	338823.92	4553210.71	41°06’51.13239”N	070°55’10.97267”W	
SPI_PV	RWF	REV01	102	A	7/8/2019	1:27	337697.12	4553209.38	41°06’50.28149”N	070°55’59.26041”W	
SPI_PV	RWF	REV01	102	B	7/8/2019	1:28	337696.05	4553208.41	41°06’50.24910”N	070°55’59.30527”W	
SPI_PV	RWF	REV01	102	C	7/8/2019	1:29	337692.61	4553209.99	41°06’50.29805”N	070°55’59.45428”W	
SPI_PV	RWF	REV01	102	D	7/8/2019	1:31	337691.02	4553215.38	41°06’50.47157”N	070°55’59.52749”W	
SPI_PV	RWF	REV01	211	A	7/8/2019	1:48	336470.58	4553215.85	41°06’49.60555”N	070°56’51.82977”W	
SPI_PV	RWF	REV01	211	B	7/8/2019	1:49	336471.25	4553214.32	41°06’49.55656”N	070°56’51.79959”W	
SPI_PV	RWF	REV01	211	C	7/8/2019	1:50	336471.00	4553212.76	41°06’49.50583”N	070°56’51.80884”W	
SPI_PV	RWF	REV01	211	D	7/8/2019	1:51	336468.02	4553215.66	41°06’49.59763”N	070°56’51.93917”W	
SPI_PV	RWF	REV01	101	A	7/8/2019	2:08	335175.84	4553215.44	41°06’48.65001”N	070°57’47.31394”W	
SPI_PV	RWF	REV01	101	B	7/8/2019	2:09	335171.42	4553216.50	41°06’48.68136”N	070°57’47.50461”W	
SPI_PV	RWF	REV01	101	C	7/8/2019	2:11	335176.45	4553213.79	41°06’48.59697”N	070°57’47.28634”W	
SPI_PV	RWF	REV01	101	D	7/8/2019	2:12	335179.75	4553212.37	41°06’48.55366”N	070°57’47.14380”W	
SPI_PV	RWF	REV01	100	A	7/8/2019	2:46	334043.35	4553206.88	41°06’47.54259”N	070°58’35.83724”W	
SPI_PV	RWF	REV01	100	B	7/8/2019	2:47	334041.54	4553203.56	41°06’47.43360”N	070°58’35.91138”W	
SPI_PV	RWF	REV01	100	C	7/8/2019	2:48	334039.96	4553203.92	41°06’47.44418”N	070°58’35.97950”W	
SPI_PV	RWF	REV01	100	D	7/8/2019	2:50	334050.55	4553201.74	41°06’47.38122”N	070°58’35.52338”W	
SPI_PV	RWF	REV01	254	A	7/8/2019	3:06	333310.79	4553209.87	41°06’47.09943”N	070°59’07.23255”W	
SPI_PV	RWF	REV01	254	B	7/8/2019	3:07	333310.64	4553212.17	41°06’47.17401”N	070°59’07.24096”W	
SPI_PV	RWF	REV01	254	C	7/8/2019	3:08	333311.97	4553209.77	41°06’47.09704”N	070°59’07.18182”W	
SPI_PV	RWF	REV01	254	D	7/8/2019	3:09	333314.95	4553208.61	41°06’47.06186”N	070°59’07.05313”W	
SPI_PV	RWF	REV01	099	A	7/8/2019	3:45	332596.67	4553206.23	41°06’46.45296”N	070°59’37.83079”W	
SPI_PV	RWF	REV01	099	B	7/8/2019	3:46	332592.45	4553204.67	41°06’46.39928”N	070°59’38.01037”W	
SPI_PV	RWF	REV01	099	C	7/8/2019	3:47	332600.82	4553198.08	41°06’46.19180”N	070°59’37.64524”W	
SPI_PV	RWF	REV01	099	D	7/8/2019	3:48	332596.41	4553194.09	41°06’46.05932”N	070°59’37.83033”W	
SPI_PV	RWF	REV01	098	A	7/8/2019	4:31	331473.45	4553214.32	41°06’45.87902”N	071°00’25.97151”W	
SPI_PV	RWF	REV01	098	B	7/8/2019	4:32	331473.95	4553211.23	41°06’45.77936”N	071°00’25.94704”W	
SPI_PV	RWF	REV01	098	C	7/8/2019	4:33	331473.00	4553211.87	41°06’45.79928”N	071°00’25.98836”W	
SPI_PV	RWF	REV01	098	D	7/8/2019	4:35	331477.07	4553206.83	41°06’45.63905”N	071°00’25.80896”W	
SPI_PV	RWF	REV01	209	A	7/8/2019	4:52	330689.01	4553210.86	41°06’45.17957”N	071°00’59.58299”W	
SPI_PV	RWF	REV01	209	B	7/8/2019	4:53	330688.94	4553209.32	41°06’45.12971”N	071°00’59.58434”W	
SPI_PV	RWF	REV01	209	C	7/8/2019	4:54	330689.37	4553206.52	41°06’45.03928”N	071°00’59.56319”W	
SPI_PV	RWF	REV01	209	D	7/8/2019	4:55	330693.24	4553208.49	41°06’45.10610”N	071°00’59.39921”W	
SPI_PV	RWF	REV01	097	A	7/8/2019	5:17	329773.67	4553210.68	41°06’44.48526”N	071°01’38.80659”W	
SPI_PV	RWF	REV01	097	B	7/8/2019	5:18	329772.82	4553208.83	41°06’44.42458”N	071°01’38.84141”W	
SPI_PV	RWF	REV01	097	C	7/8/2019	5:19	329774.85	4553206.02	41°06’44.33489”N	071°01’38.75143”W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	097	D	7/8/2019	5:21	329772.42	4553199.72	41°06'44.12887"N	071°01'38.84919"W	
SPI_PV	RWF	REV01	096	A	7/8/2019	5:52	328600.40	4553209.16	41°06'43.54787"N	071°02'29.08112"W	
SPI_PV	RWF	REV01	096	B	7/8/2019	5:53	328601.53	4553209.14	41°06'43.54780"N	071°02'29.03279"W	
SPI_PV	RWF	REV01	096	C	7/8/2019	5:55	328598.09	4553204.03	41°06'43.37958"N	071°02'29.17487"W	
SPI_PV	RWF	REV01	096	D	7/8/2019	5:56	328602.98	4553201.17	41°06'43.29082"N	071°02'28.96234"W	
SPI_PV	RWF	REV01	251	A	7/8/2019	6:36	327708.35	4553208.64	41°06'42.85144"N	071°03'07.30566"W	
SPI_PV	RWF	REV01	251	B	7/8/2019	6:38	327710.62	4553204.71	41°06'42.72586"N	071°03'07.20404"W	
SPI_PV	RWF	REV01	251	C	7/8/2019	6:39	327705.84	4553200.18	41°06'42.57545"N	071°03'07.40450"W	
SPI_PV	RWF	REV01	251	D	7/8/2019	6:41	327700.79	4553202.59	41°06'42.64963"N	071°03'07.62310"W	
SPI_PV	RWF	REV01	111	A	7/8/2019	7:23	333162.37	4551386.29	41°05'47.88845"N	070°59'11.81068"W	
SPI_PV	RWF	REV01	111	B	7/8/2019	7:25	333157.46	4551374.45	41°05'47.50119"N	070°59'12.00957"W	
SPI_PV	RWF	REV01	111	C	7/8/2019	7:30	333163.67	4551387.81	41°05'47.93876"N	070°59'11.75626"W	
SPI_PV	RWF	REV01	111	D	7/8/2019	7:31	333161.66	4551379.17	41°05'47.65722"N	070°59'11.83398"W	
SPI_PV	RWF	REV01	112	A	7/8/2019	8:40	334281.91	4551388.33	41°05'48.77926"N	070°58'23.84872"W	
SPI_PV	RWF	REV01	112	B	7/8/2019	8:41	334282.42	4551387.66	41°05'48.75764"N	070°58'23.82623"W	
SPI_PV	RWF	REV01	112	C	7/8/2019	8:42	334282.00	4551386.04	41°05'48.70493"N	070°58'23.84279"W	
SPI_PV	RWF	REV01	112	D	7/8/2019	8:44	334280.34	4551390.95	41°05'48.86294"N	070°58'23.91857"W	
SPI_PV	RWF	REV01	260	A	7/8/2019	9:21	334822.17	4551406.63	41°05'49.76809"N	070°58'00.72027"W	
SPI_PV	RWF	REV01	260	B	7/8/2019	9:28	334821.53	4551390.22	41°05'49.23577"N	070°58'00.73176"W	
SPI_PV	RWF	REV01	260	C	7/8/2019	9:29	334818.60	4551393.59	41°05'49.34293"N	070°58'00.86064"W	
SPI_PV	RWF	REV01	260	D	7/8/2019	9:31	334817.71	4551396.27	41°05'49.42901"N	070°58'00.90134"W	
SPI_PV	RWF	REV01	113	A	7/8/2019	9:55	335407.61	4551400.76	41°05'50.00541"N	070°57'35.63230"W	
SPI_PV	RWF	REV01	113	B	7/8/2019	9:56	335405.77	4551401.88	41°05'50.04037"N	070°57'35.71206"W	
SPI_PV	RWF	REV01	113	C	7/8/2019	9:58	335406.11	4551404.58	41°05'50.12825"N	070°57'35.70031"W	
SPI_PV	RWF	REV01	113	D	7/8/2019	9:59	335403.93	4551403.86	41°05'50.10320"N	070°57'35.79296"W	
SPI_PV	RWF	REV01	114	A	7/8/2019	11:09	336531.93	4551405.04	41°05'50.96096"N	070°56'47.46652"W	
SPI_PV	RWF	REV01	114	B	7/8/2019	11:10	336526.87	4551402.70	41°05'50.88142"N	070°56'47.68088"W	
SPI_PV	RWF	REV01	114	C	7/8/2019	11:11	336528.31	4551406.60	41°05'51.00892"N	070°56'47.62300"W	
SPI_PV	RWF	REV01	114	D	7/8/2019	11:13	336524.51	4551404.25	41°05'50.93021"N	070°56'47.78355"W	
SPI_PV	RWF	REV01	115	A	7/8/2019	11:43	337664.85	4551398.92	41°05'51.58009"N	070°55'58.92191"W	
SPI_PV	RWF	REV01	115	B	7/8/2019	11:44	337659.99	4551402.31	41°05'51.68660"N	070°55'59.13332"W	
SPI_PV	RWF	REV01	115	C	7/8/2019	11:45	337659.99	4551402.31	41°05'51.68660"N	070°55'59.13332"W	
SPI_PV	RWF	REV01	115	D	7/8/2019	11:47	337647.71	4551399.54	41°05'51.58795"N	070°55'59.65667"W	
SPI_PV	RWF	REV01	123	A	7/8/2019	12:56	336530.17	4549554.81	41°04'50.99306"N	070°56'45.77160"W	
SPI_PV	RWF	REV01	123	B	7/8/2019	12:57	336528.60	4549555.45	41°04'51.01281"N	070°56'45.83960"W	
SPI_PV	RWF	REV01	123	C	7/8/2019	12:58	336525.25	4549557.84	41°04'51.08766"N	070°56'45.98553"W	
SPI_PV	RWF	REV01	123	D	7/8/2019	12:59	336523.51	4549557.47	41°04'51.07456"N	070°56'46.05968"W	
SPI_PV	RWF	REV01	122	A	7/8/2019	13:28	335294.82	4549553.56	41°04'50.05529"N	070°57'38.68418"W	
SPI_PV	RWF	REV01	122	B	7/8/2019	13:29	335293.29	4549556.00	41°04'50.13314"N	070°57'38.75189"W	
SPI_PV	RWF	REV01	122	C	7/8/2019	13:30	335292.77	4549560.01	41°04'50.26273"N	070°57'38.77813"W	
SPI_PV	RWF	REV01	122	D	7/8/2019	13:31	335292.01	4549560.62	41°04'50.28214"N	070°57'38.81097"W	
SPI_PV	RWF	REV01	121	A	7/8/2019	14:11	334070.59	4549550.56	41°04'49.06201"N	070°58'31.11768"W	
SPI_PV	RWF	REV01	121	B	7/8/2019	14:12	334070.43	4549553.58	41°04'49.15993"N	070°58'31.12732"W	
SPI_PV	RWF	REV01	121	C	7/8/2019	14:13	334066.99	4549555.11	41°04'49.20683"N	070°58'31.27600"W	
SPI_PV	RWF	REV01	121	D	7/8/2019	14:14	334061.88	4549557.06	41°04'49.26641"N	070°58'31.49695"W	
SPI_PV	RWF	REV01	253	A	7/8/2019	14:34	333491.54	4549550.04	41°04'48.61925"N	070°58'55.91895"W	
SPI_PV	RWF	REV01	253	B	7/8/2019	14:35	333489.67	4549552.33	41°04'48.69188"N	070°58'56.00124"W	
SPI_PV	RWF	REV01	253	C	7/8/2019	14:36	333489.21	4549556.53	41°04'48.82790"N	070°58'56.02492"W	
SPI_PV	RWF	REV01	253	D	7/8/2019	14:37	333488.01	4549553.31	41°04'48.72242"N	070°58'56.07322"W	
SPI_PV	RWF	REV01	120	A	7/8/2019	14:57	332833.38	4549547.83	41°04'48.06163"N	070°59'24.10673"W	
SPI_PV	RWF	REV01	120	B	7/8/2019	14:58	332834.45	4549543.29	41°04'47.91528"N	070°59'24.05648"W	
SPI_PV	RWF	REV01	120	C	7/8/2019	14:59	332833.78	4549541.77	41°04'47.86543"N	070°59'24.08362"W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	120	D	7/8/2019	15:00	332835.98	4549542.82	41°04'47.90093"N	070°59'23.99054"W	
SPI_PV	RWF	REV01	213	A	7/8/2019	15:47	331788.85	4549545.60	41°04'47.21382"N	071°00'08.84269"W	
SPI_PV	RWF	REV01	213	B	7/8/2019	15:48	331790.17	4549546.51	41°04'47.24433"N	071°00'08.78737"W	
SPI_PV	RWF	REV01	213	C	7/8/2019	15:50	331788.60	4549540.74	41°04'47.05603"N	071°00'08.84890"W	
SPI_PV	RWF	REV01	213	D	7/8/2019	15:51	331790.65	4549544.91	41°04'47.19283"N	071°00'08.76510"W	
SPI_PV	RWF	REV01	119	A	7/8/2019	16:08	330650.61	4549546.85	41°04'46.40401"N	071°00'57.59554"W	
SPI_PV	RWF	REV01	119	B	7/8/2019	16:09	330649.15	4549549.35	41°04'46.48389"N	071°00'57.66044"W	
SPI_PV	RWF	REV01	119	C	7/8/2019	16:11	330645.22	4549553.41	41°04'46.61264"N	071°00'57.83317"W	
SPI_PV	RWF	REV01	119	D	7/8/2019	16:12	330645.15	4549553.31	41°04'46.60933"N	071°00'57.83583"W	
SPI_PV	RWF	REV01	118	A	7/8/2019	16:49	329464.96	4549545.01	41°04'45.45234"N	071°01'48.37551"W	
SPI_PV	RWF	REV01	118	B	7/8/2019	16:50	329466.64	4549550.62	41°04'45.63555"N	071°01'48.30902"W	
SPI_PV	RWF	REV01	118	C	7/8/2019	16:51	329471.76	4549552.64	41°04'45.70476"N	071°01'48.09191"W	
SPI_PV	RWF	REV01	118	D	7/8/2019	16:52	329478.74	4549554.38	41°04'45.76653"N	071°01'47.79430"W	
SPI_PV	RWF	REV01	261	A	7/8/2019	17:23	328945.90	4549528.89	41°04'44.53762"N	071°02'10.59048"W	
SPI_PV	RWF	REV01	261	B	7/8/2019	17:24	328949.25	4549528.73	41°04'44.53487"N	071°02'10.44693"W	
SPI_PV	RWF	REV01	261	C	7/8/2019	17:25	328956.95	4549532.69	41°04'44.66914"N	071°02'10.12098"W	
SPI_PV	RWF	REV01	261	D	7/8/2019	17:26	328963.75	4549537.30	41°04'44.82355"N	071°02'09.83414"W	
SPI_PV	RWF	REV01	117	A	7/8/2019	17:41	328343.91	4549539.92	41°04'44.43830"N	071°02'36.38431"W	
SPI_PV	RWF	REV01	117	B	7/8/2019	17:42	328342.15	4549538.04	41°04'44.37632"N	071°02'36.45775"W	
SPI_PV	RWF	REV01	117	C	7/8/2019	17:44	328345.22	4549536.83	41°04'44.33932"N	071°02'36.32508"W	
SPI_PV	RWF	REV01	117	D	7/8/2019	17:45	328348.74	4549534.95	41°04'44.28095"N	071°02'36.17240"W	
SPI_PV	RWF	REV01	116	A	7/8/2019	18:24	327217.38	4549549.21	41°04'43.88058"N	071°03'24.64212"W	
SPI_PV	RWF	REV01	116	B	7/8/2019	18:25	327215.63	4549552.05	41°04'43.97147"N	071°03'24.71995"W	
SPI_PV	RWF	REV01	116	C	7/8/2019	18:26	327214.82	4549555.38	41°04'44.07879"N	071°03'24.75763"W	
SPI_PV	RWF	REV01	116	D	7/8/2019	18:27	327210.37	4549557.81	41°04'44.15407"N	071°03'24.95090"W	
SPI_PV	RWF	REV01	108	A	7/8/2019	18:48	329436.77	4551379.32	41°05'44.87881"N	071°01'51.41361"W	
SPI_PV	RWF	REV01	108	B	7/8/2019	18:51	329438.28	4551374.09	41°05'44.71032"N	071°01'51.34392"W	
SPI_PV	RWF	REV01	108	C	7/8/2019	18:52	329437.64	4551373.62	41°05'44.69484"N	071°01'51.37071"W	
SPI_PV	RWF	REV01	108	D	7/8/2019	18:53	329438.76	4551371.35	41°05'44.62212"N	071°01'51.32042"W	
SPI_PV	RWF	REV01	109	A	7/8/2019	19:36	330905.20	4551381.71	41°05'46.06093"N	071°00'48.50714"W	
SPI_PV	RWF	REV01	109	B	7/8/2019	19:37	330910.76	4551377.00	41°05'45.91238"N	071°00'48.26455"W	
SPI_PV	RWF	REV01	109	C	7/8/2019	19:38	330909.59	4551376.08	41°05'45.88165"N	071°00'48.31356"W	
SPI_PV	RWF	REV01	109	D	7/8/2019	19:40	330909.91	4551372.38	41°05'45.76210"N	071°00'48.29603"W	
SPI_PV	RWF	REV01	110	A	7/8/2019	19:53	332025.49	4551380.13	41°05'46.84584"N	071°00'00.51076"W	
SPI_PV	RWF	REV01	110	B	7/8/2019	19:55	332026.32	4551380.83	41°05'46.86913"N	071°00'00.47581"W	
SPI_PV	RWF	REV01	110	C	7/8/2019	19:56	332031.82	4551382.59	41°05'46.93028"N	071°00'00.24214"W	
SPI_PV	RWF	REV01	110	D	7/8/2019	19:57	332030.00	4551377.12	41°05'46.75168"N	071°00'00.31450"W	
SPI_PV	RWF	REV01	107	A	7/8/2019	20:45	328133.58	4551383.94	41°05'44.04033"N	071°02'47.24723"W	
SPI_PV	RWF	REV01	107	B	7/8/2019	20:47	328137.03	4551379.06	41°05'43.88475"N	071°02'47.09468"W	
SPI_PV	RWF	REV01	107	C	7/8/2019	20:48	328134.82	4551378.71	41°05'43.87162"N	071°02'47.18881"W	
SPI_PV	RWF	REV01	107	D	7/8/2019	20:49	328139.73	4551375.69	41°05'43.77750"N	071°02'46.97551"W	
SPI_PV	RWF	REV01	252	A	7/8/2019	21:06	330099.72	4551391.84	41°05'45.78450"N	071°01'23.02489"W	
SPI_PV	RWF	REV01	252	B	7/8/2019	21:07	330098.65	4551387.10	41°05'45.62995"N	071°01'23.06593"W	
SPI_PV	RWF	REV01	252	C	7/8/2019	21:08	330101.48	4551391.41	41°05'45.77193"N	071°01'22.94890"W	
SPI_PV	RWF	REV01	252	D	7/8/2019	21:09	330100.68	4551394.31	41°05'45.86531"N	071°01'22.98612"W	
SPI_PV	RWF	REV01	203	A	7/8/2019	22:40	314627.09	4549561.39	41°04'34.29607"N	071°12'23.84579"W	
SPI_PV	RWF	REV01	203	B	7/8/2019	22:41	314627.59	4549558.48	41°04'34.20222"N	071°12'23.82109"W	
SPI_PV	RWF	REV01	203	C	7/8/2019	22:42	314629.31	4549555.36	41°04'34.10242"N	071°12'23.74389"W	
SPI_PV	RWF	REV01	203	D	7/8/2019	22:44	314627.34	4549555.68	41°04'34.11126"N	071°12'23.82858"W	
SPI_PV	RWF	REV01	202	A	7/8/2019	23:00	314465.42	4551390.75	41°05'33.44403"N	071°12'32.75463"W	
SPI_PV	RWF	REV01	202	B	7/8/2019	23:01	314463.11	4551391.34	41°05'33.46099"N	071°12'32.85436"W	
SPI_PV	RWF	REV01	202	C	7/8/2019	23:02	314460.68	4551389.43	41°05'33.39736"N	071°12'32.95650"W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	202	D	7/8/2019	23:03	314460.30	4551390.62	41°05’33.43532”N	071°12’32.97405”W	
SPI_PV	RWF	REV01	256	A	7/8/2019	23:16	313869.36	4551400.13	41°05’33.25742”N	071°12’58.29604”W	
SPI_PV	RWF	REV01	256	B	7/8/2019	23:17	313872.73	4551394.05	41°05’33.06308”N	071°12’58.14519”W	
SPI_PV	RWF	REV01	256	C	7/8/2019	23:18	313871.70	4551395.22	41°05’33.10013”N	071°12’58.19062”W	
SPI_PV	RWF	REV01	256	D	7/8/2019	23:19	313871.61	4551399.10	41°05’33.22568”N	071°12’58.19861”W	
SPI_PV	RWF	REV01	144	A	7/8/2019	23:32	313034.84	4551391.40	41°05’32.28514”N	071°13’34.03167”W	
SPI_PV	RWF	REV01	144	B	7/8/2019	23:33	313028.27	4551386.53	41°05’32.12193”N	071°13’34.30787”W	
SPI_PV	RWF	REV01	144	C	7/8/2019	23:35	313029.73	4551390.49	41°05’32.25131”N	071°13’34.24963”W	
SPI_PV	RWF	REV01	144	D	7/8/2019	23:36	313030.57	4551394.38	41°05’32.37816”N	071°13’34.21768”W	
SPI_PV	RWF	REV01	201	A	7/9/2019	0:11	314446.80	4553207.55	41°06’32.30176”N	071°12’35.52653”W	
SPI_PV	RWF	REV01	201	B	7/9/2019	0:12	314439.89	4553212.10	41°06’32.44355”N	071°12’35.82749”W	
SPI_PV	RWF	REV01	201	C	7/9/2019	0:14	314438.02	4553217.93	41°06’32.63109”N	071°12’35.91386”W	
SPI_PV	RWF	REV01	201	D	7/9/2019	0:15	314427.56	4553211.30	41°06’32.40744”N	071°12’36.35473”W	
SPI_PV	RWF	REV01	201	E	7/9/2019	0:56	314460.07	4553209.94	41°06’32.39021”N	071°12’34.96047”W	
SPI_PV	RWF	REV01	201	F	7/9/2019	0:57	314451.27	4553211.90	41°06’32.44635”N	071°12’35.33955”W	
SPI_PV	RWF	REV01	255	A	7/9/2019	1:13	313783.93	4553207.99	41°06’31.77006”N	071°13’03.92684”W	
SPI_PV	RWF	REV01	255	B	7/9/2019	1:14	313776.68	4553211.06	41°06’31.86362”N	071°13’04.24089”W	
SPI_PV	RWF	REV01	255	C	7/9/2019	1:16	313773.50	4553217.99	41°06’32.08552”N	071°13’04.38450”W	
SPI_PV	RWF	REV01	255	D	7/9/2019	1:17	313760.77	4553220.01	41°06’32.14056”N	071°13’04.93207”W	
SPI_PV	RWF	REV01	143	A	7/9/2019	1:31	313040.58	4553206.41	41°06’31.10423”N	071°13’35.77296”W	
SPI_PV	RWF	REV01	143	B	7/9/2019	1:32	313030.33	4553221.53	41°06’31.58572”N	071°13’36.22883”W	
SPI_PV	RWF	REV01	143	C	7/9/2019	1:37	313030.26	4553199.11	41°06’30.85934”N	071°13’36.20693”W	
SPI_PV	RWF	REV01	143	D	7/9/2019	1:39	313035.41	4553200.54	41°06’30.91000”N	071°13’35.98794”W	
SPI_PV	RWF	REV01	142	A	7/9/2019	2:10	311784.39	4553209.28	41°06’30.15323”N	071°14’29.59532”W	
SPI_PV	RWF	REV01	142	B	7/9/2019	2:11	311782.96	4553210.03	41°06’30.17641”N	071°14’29.65719”W	
SPI_PV	RWF	REV01	142	C	7/9/2019	2:13	311783.99	4553211.86	41°06’30.23649”N	071°14’29.61538”W	
SPI_PV	RWF	REV01	142	D	7/9/2019	2:14	311786.79	4553213.42	41°06’30.28943”N	071°14’29.49687”W	
SPI_PV	RWF	REV01	258	A	7/9/2019	2:29	311197.71	4553210.08	41°06’29.68931”N	071°14’54.73094”W	
SPI_PV	RWF	REV01	258	B	7/9/2019	2:31	311197.64	4553209.52	41°06’29.67107”N	071°14’54.73344”W	
SPI_PV	RWF	REV01	258	C	7/9/2019	2:32	311203.49	4553213.47	41°06’29.80387”N	071°14’54.48733”W	
SPI_PV	RWF	REV01	258	D	7/9/2019	2:33	311206.67	4553215.76	41°06’29.88080”N	071°14’54.35356”W	
SPI_PV	RWF	REV01	141	A	7/9/2019	2:49	310651.08	4553203.44	41°06’29.01619”N	071°15’18.14257”W	
SPI_PV	RWF	REV01	141	B	7/9/2019	2:50	310650.36	4553203.68	41°06’29.02335”N	071°15’18.17366”W	
SPI_PV	RWF	REV01	141	C	7/9/2019	2:51	310657.10	4553206.56	41°06’29.12228”N	071°15’17.88801”W	
SPI_PV	RWF	REV01	141	D	7/9/2019	2:53	310661.98	4553211.77	41°06’29.29517”N	071°15’17.68469”W	
SPI_PV	RWF	REV01	136	A	7/9/2019	3:45	310650.66	4554992.02	41°07’26.97258”N	071°15’20.14516”W	
SPI_PV	RWF	REV01	136	B	7/9/2019	3:46	310652.55	4554993.58	41°07’27.02456”N	071°15’20.06606”W	
SPI_PV	RWF	REV01	136	C	7/9/2019	3:48	310656.39	4554996.83	41°07’27.13339”N	071°15’19.90519”W	
SPI_PV	RWF	REV01	136	D	7/9/2019	3:49	310661.80	4554998.10	41°07’27.17907”N	071°15’19.67460”W	
SPI_PV	RWF	REV01	257	A	7/9/2019	4:02	311240.08	4554989.24	41°07’27.37664”N	071°14’54.88384”W	
SPI_PV	RWF	REV01	257	B	7/9/2019	4:03	311240.29	4554990.14	41°07’27.40591”N	071°14’54.87602”W	
SPI_PV	RWF	REV01	257	C	7/9/2019	4:04	311244.81	4554994.67	41°07’27.55640”N	071°14’54.68723”W	
SPI_PV	RWF	REV01	257	D	7/9/2019	4:06	311251.19	4555001.56	41°07’27.78509”N	071°14’54.42146”W	
SPI_PV	RWF	REV01	137	A	7/9/2019	4:18	311817.88	4554993.49	41°07’27.99687”N	071°14’30.12801”W	
SPI_PV	RWF	REV01	137	B	7/9/2019	4:19	311823.41	4554990.74	41°07’27.91237”N	071°14’29.88828”W	
SPI_PV	RWF	REV01	137	C	7/9/2019	4:20	311828.23	4554993.51	41°07’28.00631”N	071°14’29.68458”W	
SPI_PV	RWF	REV01	137	D	7/9/2019	4:22	311827.99	4554995.68	41°07’28.07631”N	071°14’29.69745”W	
SPI_PV	RWF	REV01	138	A	7/9/2019	5:32	313164.21	4555002.48	41°07’29.40750”N	071°13’32.44299”W	
SPI_PV	RWF	REV01	138	B	7/9/2019	5:34	313167.55	4555004.12	41°07’29.46329”N	071°13’32.30139”W	
SPI_PV	RWF	REV01	138	C	7/9/2019	5:35	313168.90	4555009.24	41°07’29.63036”N	071°13’32.24922”W	
SPI_PV	RWF	REV01	138	D	7/9/2019	5:36	313174.22	4555008.05	41°07’29.59619”N	071°13’32.01984”W	
SPI_PV	RWF	REV01	204	A	7/9/2019	5:51	314272.25	4555006.50	41°07’30.45284”N	071°12’44.96317”W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	204	B	7/9/2019	5:52	314268.52	4555006.12	41°07'30.43756"N	071°12'45.12252"W	
SPI_PV	RWF	REV01	204	C	7/9/2019	5:53	314268.46	4555006.11	41°07'30.43701"N	071°12'45.12508"W	
SPI_PV	RWF	REV01	204	D	7/9/2019	5:54	314275.35	4555005.30	41°07'30.41655"N	071°12'44.82874"W	
SPI_PV	RWF	REV01	139	A	7/9/2019	6:11	315432.52	4555003.57	41°07'31.31021"N	071°11'55.23658"W	
SPI_PV	RWF	REV01	139	B	7/9/2019	6:12	315433.81	4555003.73	41°07'31.31654"N	071°11'55.18137"W	
SPI_PV	RWF	REV01	139	C	7/9/2019	6:13	315436.66	4555002.47	41°07'31.27821"N	071°11'55.05778"W	
SPI_PV	RWF	REV01	139	D	7/9/2019	6:14	315440.96	4555001.78	41°07'31.25911"N	071°11'54.87313"W	
SPI_PV	RWF	REV01	140	A	7/9/2019	6:58	316977.07	4555004.72	41°07'32.60603"N	071°10'49.04534"W	
SPI_PV	RWF	REV01	140	B	7/9/2019	6:59	316977.13	4555005.28	41°07'32.62427"N	071°10'49.04343"W	
SPI_PV	RWF	REV01	140	C	7/9/2019	7:00	316977.49	4555005.65	41°07'32.63659"N	071°10'49.02835"W	
SPI_PV	RWF	REV01	140	D	7/9/2019	7:02	316982.97	4554999.63	41°07'32.44603"N	071°10'48.78722"W	
SPI_PV	RWF	REV01	070	A	7/9/2019	10:37	320240.69	4556851.89	41°08'35.09064"N	071°08'31.12527"W	
SPI_PV	RWF	REV01	070	B	7/9/2019	10:39	320241.37	4556848.88	41°08'34.99344"N	071°08'31.09276"W	
SPI_PV	RWF	REV01	070	C	7/9/2019	10:41	320243.47	4556847.35	41°08'34.94583"N	071°08'31.00120"W	
SPI_PV	RWF	REV01	070	D	7/9/2019	10:42	320240.02	4556853.41	41°08'35.13935"N	071°08'31.15548"W	
SPI_PV	RWF	REV01	040	A	7/9/2019	13:51	313045.95	4560556.94	41°10'29.29747"N	071°13'43.60647"W	
SPI_PV	RWF	REV01	040	B	7/9/2019	13:52	313039.97	4560554.47	41°10'29.21268"N	071°13'43.86034"W	
SPI_PV	RWF	REV01	040	C	7/9/2019	13:53	313036.67	4560553.00	41°10'29.16227"N	071°13'44.00020"W	
SPI_PV	RWF	REV01	040	D	7/9/2019	13:54	313032.41	4560552.22	41°10'29.13336"N	071°13'44.18202"W	
SPI_PV	RWF	REV01	041	A	7/9/2019	14:27	314157.70	4560568.34	41°10'30.58750"N	071°12'55.93994"W	
SPI_PV	RWF	REV01	041	B	7/9/2019	14:28	314159.36	4560569.90	41°10'30.63919"N	071°12'55.87023"W	
SPI_PV	RWF	REV01	041	C	7/9/2019	14:29	314157.29	4560568.04	41°10'30.57727"N	071°12'55.95707"W	
SPI_PV	RWF	REV01	041	D	7/9/2019	14:30	314158.49	4560568.83	41°10'30.60382"N	071°12'55.90656"W	
SPI_PV	RWF	REV01	042	A	7/9/2019	14:48	315304.15	4560547.67	41°10'30.86103"N	071°12'06.74910"W	
SPI_PV	RWF	REV01	042	B	7/9/2019	14:49	315304.70	4560547.64	41°10'30.86035"N	071°12'06.72573"W	
SPI_PV	RWF	REV01	042	C	7/9/2019	14:50	315308.84	4560547.06	41°10'30.84498"N	071°12'06.54760"W	
SPI_PV	RWF	REV01	042	D	7/9/2019	14:52	315313.53	4560548.17	41°10'30.88476"N	071°12'06.34755"W	
SPI_PV	RWF	REV01	240	A	7/9/2019	15:17	315901.61	4560548.57	41°10'31.37949"N	071°11'41.12637"W	
SPI_PV	RWF	REV01	240	B	7/9/2019	15:19	315906.04	4560547.64	41°10'31.35295"N	071°11'40.93569"W	
SPI_PV	RWF	REV01	240	C	7/9/2019	15:20	315912.23	4560550.31	41°10'31.44454"N	071°11'40.67300"W	
SPI_PV	RWF	REV01	240	D	7/9/2019	15:21	315917.30	4560553.13	41°10'31.54006"N	071°11'40.45872"W	
SPI_PV	RWF	REV01	043	A	7/9/2019	15:38	316432.21	4560558.26	41°10'32.12640"N	071°11'18.38059"W	
SPI_PV	RWF	REV01	043	B	7/9/2019	15:39	316428.20	4560558.20	41°10'32.12145"N	071°11'18.55270"W	
SPI_PV	RWF	REV01	043	C	7/9/2019	15:41	316423.94	4560560.29	41°10'32.18548"N	071°11'18.73740"W	
SPI_PV	RWF	REV01	043	D	7/9/2019	15:42	316428.77	4560562.65	41°10'32.26592"N	071°11'18.53303"W	
SPI_PV	RWF	REV01	044	A	7/9/2019	16:55	317568.66	4560559.27	41°10'33.08278"N	071°10'29.64129"W	
SPI_PV	RWF	REV01	044	B	7/9/2019	16:56	317564.21	4560557.20	41°10'33.01215"N	071°10'29.82986"W	
SPI_PV	RWF	REV01	044	C	7/9/2019	16:57	317562.81	4560560.12	41°10'33.10587"N	071°10'29.89282"W	
SPI_PV	RWF	REV01	044	D	7/9/2019	16:58	317564.24	4560560.83	41°10'33.12981"N	071°10'29.83233"W	
SPI_PV	RWF	REV01	045	A	7/9/2019	17:54	318686.86	4560549.13	41°10'33.65757"N	071°09'41.67178"W	
SPI_PV	RWF	REV01	045	B	7/9/2019	17:55	318690.27	4560553.23	41°10'33.79305"N	071°09'41.52985"W	
SPI_PV	RWF	REV01	045	C	7/9/2019	17:56	318685.15	4560554.38	41°10'33.82638"N	071°09'41.75085"W	
SPI_PV	RWF	REV01	045	D	7/9/2019	17:57	318685.14	4560556.48	41°10'33.89436"N	071°09'41.75354"W	
SPI_PV	RWF	REV01	034	A	7/9/2019	18:45	317644.19	4562416.28	41°11'33.32106"N	071°10'28.39302"W	
SPI_PV	RWF	REV01	034	B	7/9/2019	18:46	317637.55	4562420.12	41°11'33.44002"N	071°10'28.68209"W	
SPI_PV	RWF	REV01	034	C	7/9/2019	18:47	317638.77	4562415.42	41°11'33.28882"N	071°10'28.62494"W	
SPI_PV	RWF	REV01	034	D	7/9/2019	18:49	317641.53	4562411.63	41°11'33.16824"N	071°10'28.50219"W	
SPI_PV	RWF	REV01	033	A	7/9/2019	19:28	316518.72	4562407.09	41°11'32.10819"N	071°11'16.66512"W	
SPI_PV	RWF	REV01	033	B	7/9/2019	19:29	316526.38	4562407.62	41°11'32.13167"N	071°11'16.33702"W	
SPI_PV	RWF	REV01	033	C	7/9/2019	19:30	316526.40	4562400.00	41°11'31.88483"N	071°11'16.32813"W	
SPI_PV	RWF	REV01	033	D	7/9/2019	19:31	316520.87	4562396.24	41°11'31.75833"N	071°11'16.56103"W	
SPI_PV	RWF	REV01	235	A	7/9/2019	19:44	315999.26	4562394.93	41°11'31.29013"N	071°11'38.93631"W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	235	B	7/9/2019	19:46	316007.54	4562407.96	41°11'31.71912"N	071°11'38.59534"W	
SPI_PV	RWF	REV01	235	C	7/9/2019	19:47	316006.97	4562401.43	41°11'31.50702"N	071°11'38.61272"W	
SPI_PV	RWF	REV01	235	D	7/9/2019	19:48	316005.86	4562399.58	41°11'31.44603"N	071°11'38.65798"W	
SPI_PV	RWF	REV01	032	A	7/9/2019	20:01	315387.72	4562403.27	41°11'31.05951"N	071°12'05.17937"W	
SPI_PV	RWF	REV01	032	B	7/9/2019	20:03	315390.52	4562402.11	41°11'31.02426"N	071°12'05.05803"W	
SPI_PV	RWF	REV01	032	C	7/9/2019	20:04	315392.44	4562405.38	41°11'31.13167"N	071°12'04.97926"W	
SPI_PV	RWF	REV01	032	D	7/9/2019	20:05	315385.87	4562414.32	41°11'31.41597"N	071°12'05.27080"W	
SPI_PV	RWF	REV01	031	A	7/9/2019	20:48	314259.12	4562402.06	41°11'30.09169"N	071°12'53.59316"W	
SPI_PV	RWF	REV01	031	B	7/9/2019	20:49	314261.96	4562402.95	41°11'30.12265"N	071°12'53.47225"W	
SPI_PV	RWF	REV01	031	C	7/9/2019	20:51	314260.70	4562402.42	41°11'30.10468"N	071°12'53.52554"W	
SPI_PV	RWF	REV01	031	D	7/9/2019	20:52	314265.27	4562399.16	41°11'30.00268"N	071°12'53.32609"W	
SPI_PV	RWF	REV01	021	A	7/9/2019	21:18	315405.26	4564246.75	41°12'30.81106"N	071°12'06.42966"W	
SPI_PV	RWF	REV01	021	B	7/9/2019	21:19	315412.94	4564251.06	41°12'30.95701"N	071°12'06.10480"W	
SPI_PV	RWF	REV01	021	C	7/9/2019	21:20	315414.84	4564250.67	41°12'30.94587"N	071°12'06.02325"W	
SPI_PV	RWF	REV01	021	D	7/9/2019	21:21	315410.49	4564248.67	41°12'30.87761"N	071°12'06.20770"W	
SPI_PV	RWF	REV01	022	A	7/9/2019	22:18	316509.49	4564255.22	41°12'31.98895"N	071°11'19.05689"W	
SPI_PV	RWF	REV01	022	B	7/9/2019	22:20	316520.85	4564256.15	41°12'32.02857"N	071°11'18.57048"W	
SPI_PV	RWF	REV01	022	C	7/9/2019	22:23	316526.80	4564253.84	41°12'31.95859"N	071°11'18.31266"W	
SPI_PV	RWF	REV01	022	D	7/9/2019	22:24	316531.38	4564251.37	41°12'31.88232"N	071°11'18.11367"W	
SPI_PV	RWF	REV01	231	A	7/9/2019	22:34	317130.85	4564251.39	41°12'32.37097"N	071°10'52.39018"W	
SPI_PV	RWF	REV01	231	B	7/9/2019	22:35	317128.24	4564243.68	41°12'32.11912"N	071°10'52.49405"W	
SPI_PV	RWF	REV01	231	C	7/9/2019	22:36	317133.35	4564244.05	41°12'32.13524"N	071°10'52.27514"W	
SPI_PV	RWF	REV01	231	D	7/9/2019	22:37	317138.67	4564246.38	41°12'32.21517"N	071°10'52.04925"W	
SPI_PV	RWF	REV01	023	A	7/9/2019	22:49	317647.57	4564244.68	41°12'32.57332"N	071°10'30.21035"W	
SPI_PV	RWF	REV01	023	B	7/9/2019	22:50	317645.34	4564252.52	41°12'32.82552"N	071°10'30.31477"W	
SPI_PV	RWF	REV01	023	C	7/9/2019	22:51	317654.84	4564255.53	41°12'32.93053"N	071°10'29.91036"W	
SPI_PV	RWF	REV01	023	D	7/9/2019	22:52	317664.93	4564262.18	41°12'33.15432"N	071°10'29.48445"W	
SPI_PV	RWF	REV01	024	A	7/9/2019	23:29	318797.21	4564255.03	41°12'33.83781"N	071°09'40.88987"W	
SPI_PV	RWF	REV01	024	B	7/9/2019	23:31	318792.27	4564259.86	41°12'33.99038"N	071°09'41.10696"W	
SPI_PV	RWF	REV01	024	C	7/9/2019	23:32	318794.65	4564255.87	41°12'33.86287"N	071°09'41.00032"W	
SPI_PV	RWF	REV01	024	D	7/9/2019	23:33	318795.23	4564261.49	41°12'34.04571"N	071°09'40.98148"W	
SPI_PV	RWF	REV01	023	E	7/9/2019	23:53	317659.08	4564266.81	41°12'33.29966"N	071°10'29.74016"W	
SPI_PV	RWF	REV01	023	F	7/9/2019	23:54	317659.44	4564263.20	41°12'33.18307"N	071°10'29.72086"W	
SPI_PV	RWF	REV01	023	G	7/9/2019	23:56	317657.98	4564264.29	41°12'33.21699"N	071°10'29.78471"W	
SPI_PV	RWF	REV01	023	H	7/9/2019	23:57	317666.31	4564267.19	41°12'33.31774"N	071°10'29.43042"W	
SPI_PV	RWF	REV01	082	A	7/10/2019	0:54	320798.81	4555012.49	41°07'35.92674"N	071°08'05.26612"W	
SPI_PV	RWF	REV01	082	B	7/10/2019	0:55	320818.04	4555011.62	41°07'35.91390"N	071°08'04.44105"W	
SPI_PV	RWF	REV01	082	C	7/10/2019	1:01	320806.43	4555000.81	41°07'35.55421"N	071°08'04.92692"W	
SPI_PV	RWF	REV01	082	D	7/10/2019	1:02	320816.86	4555000.26	41°07'35.54462"N	071°08'04.47932"W	
SPI_PV	RWF	REV01	071	A	7/10/2019	1:37	321368.88	4556849.52	41°08'35.91051"N	071°07'42.75911"W	
SPI_PV	RWF	REV01	071	B	7/10/2019	1:38	321372.58	4556850.19	41°08'35.93537"N	071°07'42.60110"W	
SPI_PV	RWF	REV01	071	C	7/10/2019	1:39	321371.74	4556855.04	41°08'36.09192"N	071°07'42.64211"W	
SPI_PV	RWF	REV01	071	D	7/10/2019	1:41	321374.81	4556855.96	41°08'36.12412"N	071°07'42.51125"W	
SPI_PV	RWF	REV01	239	A	7/10/2019	3:05	319308.21	4560552.22	41°10'34.25728"N	071°09'15.02571"W	
SPI_PV	RWF	REV01	239	B	7/10/2019	3:06	319305.17	4560552.96	41°10'34.27878"N	071°09'15.15714"W	
SPI_PV	RWF	REV01	239	C	7/10/2019	3:07	319303.70	4560553.60	41°10'34.29847"N	071°09'15.22093"W	
SPI_PV	RWF	REV01	239	D	7/10/2019	3:08	319308.44	4560555.16	41°10'34.35251"N	071°09'15.01937"W	
SPI_PV	RWF	REV01	046	A	7/10/2019	3:25	319801.87	4560547.59	41°10'34.50269"N	071°08'53.84827"W	
SPI_PV	RWF	REV01	046	B	7/10/2019	3:27	319798.28	4560552.76	41°10'34.66749"N	071°08'54.00752"W	
SPI_PV	RWF	REV01	046	C	7/10/2019	3:28	319804.06	4560556.96	41°10'34.80813"N	071°08'53.76415"W	
SPI_PV	RWF	REV01	046	D	7/10/2019	3:29	319804.77	4560561.21	41°10'34.94645"N	071°08'53.73803"W	
SPI_PV	RWF	REV01	047	A	7/10/2019	4:06	320927.98	4560557.81	41°10'35.73240"N	071°08'05.55984"W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	047	B	7/10/2019	4:07	320930.18	4560557.28	41°10'35.71720"N	071°08'05.46504"W	
SPI_PV	RWF	REV01	047	C	7/10/2019	4:08	320930.94	4560561.83	41°10'35.86519"N	071°08'05.43727"W	
SPI_PV	RWF	REV01	047	D	7/10/2019	4:09	320930.67	4560567.03	41°10'36.03341"N	071°08'05.45436"W	
SPI_PV	RWF	REV01	048	A	7/10/2019	4:24	322051.58	4560555.92	41°10'36.56206"N	071°07'17.36623"W	
SPI_PV	RWF	REV01	048	B	7/10/2019	4:25	322055.40	4560556.77	41°10'36.59263"N	071°07'17.20342"W	
SPI_PV	RWF	REV01	048	C	7/10/2019	4:26	322056.42	4560555.80	41°10'36.56214"N	071°07'17.15842"W	
SPI_PV	RWF	REV01	048	D	7/10/2019	4:27	322052.84	4560556.71	41°10'36.58864"N	071°07'17.31309"W	
SPI_PV	RWF	REV01	238	A	7/10/2019	4:55	322690.48	4560554.36	41°10'37.01563"N	071°06'49.96138"W	
SPI_PV	RWF	REV01	238	B	7/10/2019	4:56	322692.27	4560551.03	41°10'36.90909"N	071°06'49.88147"W	
SPI_PV	RWF	REV01	238	C	7/10/2019	4:57	322698.46	4560550.84	41°10'36.90794"N	071°06'49.61556"W	
SPI_PV	RWF	REV01	238	D	7/10/2019	4:59	322702.67	4560543.24	41°10'36.66467"N	071°06'49.42722"W	
SPI_PV	RWF	REV01	049	A	7/10/2019	5:38	323178.71	4560560.35	41°10'37.59367"N	071°06'29.02686"W	
SPI_PV	RWF	REV01	049	B	7/10/2019	5:39	323176.44	4560558.58	41°10'37.53456"N	071°06'29.12252"W	
SPI_PV	RWF	REV01	049	C	7/10/2019	5:41	323169.20	4560556.43	41°10'37.45902"N	071°06'29.43083"W	
SPI_PV	RWF	REV01	049	D	7/10/2019	5:43	323179.59	4560538.91	41°10'36.89957"N	071°06'28.96694"W	
SPI_PV	RWF	REV01	239	E	7/10/2019	6:21	319305.74	4560557.76	41°10'34.43464"N	071°09'15.13786"W	
SPI_PV	RWF	REV01	239	F	7/10/2019	6:25	319296.98	4560550.54	41°10'34.19386"N	071°09'15.50580"W	
SPI_PV	RWF	REV01	239	G	7/10/2019	6:26	319290.95	4560572.27	41°10'34.89324"N	071°09'15.78757"W	
SPI_PV	RWF	REV01	239	H	7/10/2019	6:32	319315.71	4560541.18	41°10'33.90561"N	071°09'14.69234"W	
SPI_PV	RWF	REV01	039	A	7/10/2019	7:05	323358.14	4562419.36	41°11'37.97868"N	071°06'23.26202"W	
SPI_PV	RWF	REV01	039	B	7/10/2019	7:06	323349.27	4562425.14	41°11'38.15907"N	071°06'23.64875"W	
SPI_PV	RWF	REV01	039	C	7/10/2019	7:07	323341.10	4562417.93	41°11'37.91903"N	071°06'23.99161"W	
SPI_PV	RWF	REV01	039	D	7/10/2019	7:08	323340.63	4562412.95	41°11'37.75730"N	071°06'24.00667"W	
SPI_PV	RWF	REV01	038	A	7/10/2019	7:42	322222.59	4562408.35	41°11'36.72763"N	071°07'11.96806"W	
SPI_PV	RWF	REV01	038	B	7/10/2019	7:43	322210.17	4562400.36	41°11'36.45904"N	071°07'12.49277"W	
SPI_PV	RWF	REV01	038	C	7/10/2019	7:44	322203.87	4562398.73	41°11'36.40107"N	071°07'12.76138"W	
SPI_PV	RWF	REV01	038	D	7/10/2019	7:46	322192.55	4562389.94	41°11'36.10734"N	071°07'13.23756"W	
SPI_PV	RWF	REV01	236	A	7/10/2019	8:23	318233.31	4562411.93	41°11'33.65659"N	071°10'03.11547"W	
SPI_PV	RWF	REV01	236	B	7/10/2019	8:25	318228.27	4562403.88	41°11'33.39179"N	071°10'03.32283"W	
SPI_PV	RWF	REV01	236	C	7/10/2019	8:26	318223.36	4562410.16	41°11'33.59127"N	071°10'03.54041"W	
SPI_PV	RWF	REV01	236	D	7/10/2019	8:28	318224.48	4562406.77	41°11'33.48221"N	071°10'03.48867"W	
SPI_PV	RWF	REV01	236	E	7/10/2019	8:59	318226.00	4562396.65	41°11'33.15555"N	071°10'03.41263"W	
SPI_PV	RWF	REV01	236	F	7/10/2019	9:00	318222.13	4562395.54	41°11'33.11631"N	071°10'03.57730"W	
SPI_PV	RWF	REV01	236	G	7/10/2019	9:02	318215.27	4562394.08	41°11'33.06355"N	071°10'03.87022"W	
SPI_PV	RWF	REV01	236	H	7/10/2019	9:03	318211.92	4562395.92	41°11'33.12061"N	071°10'04.01581"W	
SPI_PV	RWF	REV01	035	A	7/10/2019	9:25	318757.68	4562409.66	41°11'34.00603"N	071°09'40.61771"W	
SPI_PV	RWF	REV01	035	B	7/10/2019	9:26	318756.44	4562405.57	41°11'33.87245"N	071°09'40.66625"W	
SPI_PV	RWF	REV01	035	C	7/10/2019	9:28	318755.15	4562408.65	41°11'33.97127"N	071°09'40.72491"W	
SPI_PV	RWF	REV01	035	D	7/10/2019	9:30	318751.98	4562408.74	41°11'33.97172"N	071°09'40.86113"W	
SPI_PV	RWF	REV01	036	A	7/10/2019	10:13	319888.81	4562408.53	41°11'34.87754"N	071°08'52.09045"W	
SPI_PV	RWF	REV01	036	B	7/10/2019	10:15	319887.62	4562406.12	41°11'34.79847"N	071°08'52.13888"W	
SPI_PV	RWF	REV01	036	C	7/10/2019	10:16	319888.19	4562410.09	41°11'34.92771"N	071°08'52.11857"W	
SPI_PV	RWF	REV01	036	D	7/10/2019	10:17	319889.19	4562404.89	41°11'34.75990"N	071°08'52.07014"W	
SPI_PV	RWF	REV01	012	A	7/10/2019	10:53	317848.43	4566111.03	41°13'33.21526"N	071°10'23.59419"W	
SPI_PV	RWF	REV01	012	B	7/10/2019	10:54	317845.21	4566111.52	41°13'33.22833"N	071°10'23.73293"W	
SPI_PV	RWF	REV01	012	C	7/10/2019	10:56	317844.82	4566111.24	41°13'33.21905"N	071°10'23.74928"W	
SPI_PV	RWF	REV01	012	D	7/10/2019	10:57	317843.40	4566113.11	41°13'33.27853"N	071°10'23.81231"W	
SPI_PV	RWF	REV01	227	A	7/10/2019	11:29	318449.29	4566106.17	41°13'33.54377"N	071°09'57.79884"W	
SPI_PV	RWF	REV01	227	B	7/10/2019	11:31	318442.31	4566105.92	41°13'33.52997"N	071°09'58.09821"W	
SPI_PV	RWF	REV01	227	C	7/10/2019	11:33	318435.43	4566110.59	41°13'33.67593"N	071°09'58.39871"W	
SPI_PV	RWF	REV01	227	D	7/10/2019	11:34	318431.34	4566114.98	41°13'33.81481"N	071°09'58.57879"W	
SPI_PV	RWF	REV01	013	A	7/10/2019	11:58	318980.76	4566118.51	41°13'34.37238"N	071°09'35.00036"W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	013	B	7/10/2019	12:00	318975.73	4566122.78	41°13’34.50679”N	071°09’35.22094”W	
SPI_PV	RWF	REV01	013	C	7/10/2019	12:02	318969.22	4566125.99	41°13’34.60553”N	071°09’35.50360”W	
SPI_PV	RWF	REV01	013	D	7/10/2019	12:03	318962.01	4566126.64	41°13’34.62056”N	071°09’35.81393”W	
SPI_PV	RWF	REV01	014	A	7/10/2019	13:09	320103.81	4566115.60	41°13’35.17971”N	071°08’46.79352”W	
SPI_PV	RWF	REV01	014	B	7/10/2019	13:11	320106.12	4566117.63	41°13’35.24754”N	071°08’46.69663”W	
SPI_PV	RWF	REV01	014	C	7/10/2019	13:12	320101.99	4566120.04	41°13’35.32215”N	071°08’46.87633”W	
SPI_PV	RWF	REV01	014	D	7/10/2019	13:14	320103.94	4566126.97	41°13’35.54834”N	071°08’46.79990”W	
SPI_PV	RWF	REV01	228	A	7/10/2019	13:32	320731.73	4566120.61	41°13’35.84386”N	071°08’19.84690”W	
SPI_PV	RWF	REV01	228	B	7/10/2019	13:33	320734.61	4566117.74	41°13’35.75327”N	071°08’19.72019”W	
SPI_PV	RWF	REV01	228	C	7/10/2019	13:34	320726.29	4566124.85	41°13’35.97680”N	071°08’20.08476”W	
SPI_PV	RWF	REV01	228	D	7/10/2019	13:36	320723.44	4566133.61	41°13’36.25849”N	071°08’20.21636”W	
SPI_PV	RWF	REV01	015	A	7/10/2019	14:02	321227.97	4566120.17	41°13’36.22469”N	071°07’58.54618”W	
SPI_PV	RWF	REV01	015	B	7/10/2019	14:03	321229.73	4566122.02	41°13’36.28630”N	071°07’58.47269”W	
SPI_PV	RWF	REV01	015	C	7/10/2019	14:05	321225.16	4566125.10	41°13’36.38235”N	071°07’58.67191”W	
SPI_PV	RWF	REV01	015	D	7/10/2019	14:06	321220.14	4566129.07	41°13’36.50699”N	071°07’58.89150”W	
SPI_PV	RWF	REV01	016	A	7/10/2019	15:01	322359.05	4566120.05	41°13’37.11781”N	071°07’09.99623”W	
SPI_PV	RWF	REV01	016	B	7/10/2019	15:02	322356.31	4566122.74	41°13’37.20270”N	071°07’10.11658”W	
SPI_PV	RWF	REV01	016	C	7/10/2019	15:04	322353.95	4566129.48	41°13’37.41921”N	071°07’10.22515”W	
SPI_PV	RWF	REV01	016	D	7/10/2019	15:05	322356.07	4566133.94	41°13’37.56557”N	071°07’10.13887”W	
SPI_PV	RWF	REV01	229	A	7/10/2019	15:23	322946.93	4566113.70	41°13’37.37597”N	071°06’44.75555”W	
SPI_PV	RWF	REV01	229	B	7/10/2019	15:24	322947.16	4566116.29	41°13’37.46013”N	071°06’44.74836”W	
SPI_PV	RWF	REV01	229	C	7/10/2019	15:25	322943.72	4566118.32	41°13’37.52319”N	071°06’44.89812”W	
SPI_PV	RWF	REV01	229	D	7/10/2019	15:27	322944.03	4566125.88	41°13’37.76833”N	071°06’44.89279”W	
SPI_PV	RWF	REV01	017	A	7/10/2019	16:19	323481.29	4566128.51	41°13’38.27627”N	071°06’21.83412”W	
SPI_PV	RWF	REV01	017	B	7/10/2019	16:20	323481.09	4566125.66	41°13’38.18373”N	071°06’21.83991”W	
SPI_PV	RWF	REV01	017	C	7/10/2019	16:22	323485.65	4566125.42	41°13’38.17956”N	071°06’21.64380”W	
SPI_PV	RWF	REV01	017	D	7/10/2019	16:23	323480.64	4566131.32	41°13’38.36675”N	071°06’21.86487”W	
SPI_PV	RWF	REV01	018	A	7/10/2019	17:38	324613.05	4566119.77	41°13’38.87884”N	071°05’33.24483”W	
SPI_PV	RWF	REV01	018	B	7/10/2019	17:40	324613.84	4566127.69	41°13’39.13627”N	071°05’33.21916”W	
SPI_PV	RWF	REV01	018	C	7/10/2019	17:41	324614.44	4566126.95	41°13’39.11270”N	071°05’33.19253”W	
SPI_PV	RWF	REV01	018	D	7/10/2019	17:42	324618.16	4566125.21	41°13’39.05930”N	071°05’33.03131”W	
SPI_PV	RWF	REV01	230	A	7/10/2019	17:56	325207.39	4566131.48	41°13’39.72159”N	071°05’07.74501”W	
SPI_PV	RWF	REV01	230	B	7/10/2019	17:58	325208.87	4566129.30	41°13’39.65182”N	071°05’07.67949”W	
SPI_PV	RWF	REV01	230	C	7/10/2019	17:59	325210.03	4566127.94	41°13’39.60867”N	071°05’07.62826”W	
SPI_PV	RWF	REV01	230	D	7/10/2019	18:00	325211.77	4566122.84	41°13’39.44489”N	071°05’07.54804”W	
SPI_PV	RWF	REV01	019	A	7/10/2019	18:15	325747.22	4566115.90	41°13’39.63576”N	071°04’44.55678”W	
SPI_PV	RWF	REV01	019	B	7/10/2019	18:17	325743.07	4566120.21	41°13’39.77229”N	071°04’44.73921”W	
SPI_PV	RWF	REV01	019	C	7/10/2019	18:18	325740.87	4566123.57	41°13’39.87944”N	071°04’44.83722”W	
SPI_PV	RWF	REV01	019	D	7/10/2019	18:19	325739.13	4566119.22	41°13’39.73700”N	071°04’44.90738”W	
SPI_PV	RWF	REV01	020	A	7/10/2019	18:53	326860.51	4566106.47	41°13’40.19059”N	071°03’56.75882”W	
SPI_PV	RWF	REV01	020	B	7/10/2019	18:54	326863.86	4566114.31	41°13’40.44718”N	071°03’56.62283”W	
SPI_PV	RWF	REV01	020	C	7/10/2019	18:56	326865.07	4566124.15	41°13’40.76694”N	071°03’56.58076”W	
SPI_PV	RWF	REV01	020	D	7/10/2019	18:58	326861.68	4566122.39	41°13’40.70744”N	071°03’56.72482”W	
SPI_PV	RWF	REV01	011	A	7/10/2019	19:14	326937.09	4567966.38	41°14’40.52395”N	071°03’55.36926”W	
SPI_PV	RWF	REV01	011	B	7/10/2019	19:15	326938.90	4567962.14	41°14’40.38794”N	071°03’55.28740”W	
SPI_PV	RWF	REV01	011	C	7/10/2019	19:16	326942.00	4567962.53	41°14’40.40297”N	071°03’55.15454”W	
SPI_PV	RWF	REV01	011	D	7/10/2019	19:17	326941.21	4567965.63	41°14’40.50308”N	071°03’55.19164”W	
SPI_PV	RWF	REV01	010	A	7/10/2019	19:58	325808.21	4567973.23	41°14’39.87354”N	071°04’43.84634”W	
SPI_PV	RWF	REV01	010	B	7/10/2019	19:59	325813.72	4567976.68	41°14’39.98936”N	071°04’43.61339”W	
SPI_PV	RWF	REV01	010	C	7/10/2019	20:01	325809.57	4567966.98	41°14’39.67184”N	071°04’43.78147”W	
SPI_PV	RWF	REV01	010	D	7/10/2019	20:02	325808.59	4567966.63	41°14’39.65994”N	071°04’43.82330”W	
SPI_PV	RWF	REV01	226	A	7/10/2019	20:14	325255.85	4567978.68	41°14’39.62102”N	071°05’07.56795”W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	226	B	7/10/2019	20:16	325256.55	4567978.56	41°14'39.61755"N	071°05'07.53805"W	
SPI_PV	RWF	REV01	226	C	7/10/2019	20:17	325242.63	4567965.77	41°14'39.19229"N	071°05'08.12237"W	
SPI_PV	RWF	REV01	226	D	7/10/2019	20:19	325249.13	4567967.89	41°14'39.26615"N	071°05'07.84542"W	
SPI_PV	Reference Area	REV01	505	A	7/10/2019	21:05	333568.60	4564920.36	41°13'06.81809"N	070°59'07.63581"W	
SPI_PV	Reference Area	REV01	505	B	7/10/2019	21:06	333558.10	4564922.07	41°13'06.86576"N	070°59'08.08831"W	
SPI_PV	Reference Area	REV01	505	C	7/10/2019	21:08	333565.18	4564922.09	41°13'06.87158"N	070°59'07.78443"W	
SPI_PV	Reference Area	REV01	505	D	7/10/2019	21:09	333568.08	4564919.96	41°13'06.80465"N	070°59'07.65770"W	
SPI_PV	Reference Area	REV01	504	A	7/10/2019	21:25	332299.49	4564927.87	41°13'06.11834"N	071°00'02.11540"W	
SPI_PV	Reference Area	REV01	504	B	7/10/2019	21:27	332295.40	4564923.35	41°13'05.96890"N	071°00'02.28624"W	
SPI_PV	Reference Area	REV01	504	C	7/10/2019	21:28	332292.53	4564921.70	41°13'05.91316"N	071°00'02.40781"W	
SPI_PV	Reference Area	REV01	504	D	7/10/2019	21:29	332294.00	4564923.01	41°13'05.95671"N	071°00'02.34617"W	
SPI_PV	Reference Area	REV01	503	A	7/10/2019	21:47	331034.59	4564925.88	41°13'05.10656"N	071°00'56.40408"W	
SPI_PV	Reference Area	REV01	503	B	7/10/2019	21:48	331029.72	4564922.78	41°13'05.00251"N	071°00'56.61010"W	
SPI_PV	Reference Area	REV01	503	C	7/10/2019	21:49	331028.46	4564920.47	41°13'04.92663"N	071°00'56.66162"W	
SPI_PV	Reference Area	REV01	503	D	7/10/2019	21:50	331031.44	4564927.98	41°13'05.17241"N	071°00'56.54125"W	
SPI_PV	Reference Area	REV01	502	A	7/10/2019	22:07	329767.57	4564918.22	41°13'03.90275"N	071°01'50.77732"W	
SPI_PV	Reference Area	REV01	502	B	7/10/2019	22:08	329768.07	4564921.03	41°13'03.99418"N	071°01'50.75883"W	
SPI_PV	Reference Area	REV01	502	C	7/10/2019	22:10	329767.14	4564924.39	41°13'04.10209"N	071°01'50.80170"W	
SPI_PV	Reference Area	REV01	502	D	7/10/2019	22:11	329764.73	4564927.76	41°13'04.20965"N	071°01'50.90853"W	
SPI_PV	Reference Area	REV01	501	A	7/10/2019	22:27	328513.11	4564907.42	41°13'02.59913"N	071°02'44.60758"W	
SPI_PV	Reference Area	REV01	501	B	7/10/2019	22:29	328507.39	4564907.54	41°13'02.59865"N	071°02'44.85313"W	
SPI_PV	Reference Area	REV01	501	C	7/10/2019	22:30	328503.62	4564909.93	41°13'02.67336"N	071°02'45.01746"W	
SPI_PV	Reference Area	REV01	501	D	7/10/2019	22:31	328503.80	4564915.51	41°13'02.85438"N	071°02'45.01504"W	
SPI_PV	Reference Area	REV01	501	E	7/10/2019	22:33	328499.73	4564913.95	41°13'02.80080"N	071°02'45.18847"W	
SPI_PV	RWF	REV01	035	E	7/10/2019	23:24	318750.42	4562400.00	41°11'33.68712"N	071°09'40.91877"W	
SPI_PV	RWF	REV01	035	F	7/10/2019	23:25	318750.76	4562397.49	41°11'33.60623"N	071°09'40.90123"W	
SPI_PV	RWF	REV01	035	G	7/10/2019	23:27	318751.26	4562395.55	41°11'33.54370"N	071°09'40.87767"W	
SPI_PV	RWF	REV01	035	H	7/10/2019	23:28	318747.31	4562399.44	41°11'33.66656"N	071°09'41.05167"W	
SPI_PV	RWF	REV01	237	A	7/10/2019	23:48	320514.53	4562407.29	41°11'35.33741"N	071°08'25.24497"W	
SPI_PV	RWF	REV01	237	B	7/10/2019	23:49	320512.46	4562403.71	41°11'35.21959"N	071°08'25.33031"W	
SPI_PV	RWF	REV01	237	C	7/10/2019	23:50	320511.72	4562403.53	41°11'35.21335"N	071°08'25.36164"W	
SPI_PV	RWF	REV01	237	D	7/10/2019	23:52	320506.57	4562397.98	41°11'35.02923"N	071°08'25.57671"W	
SPI_PV	RWF	REV01	037	A	7/11/2019	0:08	321097.16	4562414.40	41°11'36.03190"N	071°08'00.25740"W	
SPI_PV	RWF	REV01	037	B	7/11/2019	0:10	321094.88	4562410.73	41°11'35.91100"N	071°08'00.35101"W	
SPI_PV	RWF	REV01	037	C	7/11/2019	0:11	321098.60	4562409.25	41°11'35.86613"N	071°08'00.18989"W	
SPI_PV	RWF	REV01	037	D	7/11/2019	0:12	321099.17	4562408.62	41°11'35.84620"N	071°08'00.16472"W	
SPI_PV	RWF	REV01	025	A	7/11/2019	0:57	319905.37	4564262.59	41°12'34.97294"N	071°08'53.34517"W	
SPI_PV	RWF	REV01	025	B	7/11/2019	0:58	319901.16	4564264.34	41°12'35.02619"N	071°08'53.52793"W	
SPI_PV	RWF	REV01	025	C	7/11/2019	1:00	319899.69	4564258.43	41°12'34.83361"N	071°08'53.58437"W	
SPI_PV	RWF	REV01	025	D	7/11/2019	1:01	319895.27	4564256.62	41°12'34.77134"N	071°08'53.77250"W	
SPI_PV	RWF	REV01	221	A	7/11/2019	1:19	321191.90	4564259.69	41°12'35.90551"N	071°07'58.13460"W	
SPI_PV	RWF	REV01	221	B	7/11/2019	1:20	321189.83	4564260.62	41°12'35.93413"N	071°07'58.22468"W	
SPI_PV	RWF	REV01	221	C	7/11/2019	1:21	321185.70	4564261.36	41°12'35.95474"N	071°07'58.40278"W	
SPI_PV	RWF	REV01	221	D	7/11/2019	1:23	321179.46	4564262.09	41°12'35.97340"N	071°07'58.67110"W	
SPI_PV	RWF	REV01	233	A	7/11/2019	1:53	321868.73	4564263.37	41°12'36.56209"N	071°07'29.09424"W	
SPI_PV	RWF	REV01	233	B	7/11/2019	1:55	321867.50	4564264.10	41°12'36.58465"N	071°07'29.14765"W	
SPI_PV	RWF	REV01	233	C	7/11/2019	1:56	321865.51	4564262.98	41°12'36.54679"N	071°07'29.23209"W	
SPI_PV	RWF	REV01	233	D	7/11/2019	1:58	321863.35	4564264.46	41°12'36.59289"N	071°07'29.32645"W	
SPI_PV	RWF	REV01	026	A	7/11/2019	2:13	322448.34	4564252.44	41°12'36.66613"N	071°07'04.21047"W	
SPI_PV	RWF	REV01	026	B	7/11/2019	2:14	322445.61	4564252.09	41°12'36.65280"N	071°07'04.32694"W	
SPI_PV	RWF	REV01	026	C	7/11/2019	2:15	322442.77	4564257.28	41°12'36.81873"N	071°07'04.45426"W	
SPI_PV	RWF	REV01	026	D	7/11/2019	2:17	322436.64	4564257.50	41°12'36.82088"N	071°07'04.71746"W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	027	A	7/11/2019	2:52	323570.77	4564254.52	41°12’37.61682”N	071°06’16.04563”W	
SPI_PV	RWF	REV01	027	B	7/11/2019	2:53	323568.03	4564258.61	41°12’37.74742”N	071°06’16.16751”W	
SPI_PV	RWF	REV01	027	C	7/11/2019	2:55	323564.74	4564264.63	41°12’37.93990”N	071°06’16.31487”W	
SPI_PV	RWF	REV01	027	D	7/11/2019	2:56	323559.08	4564263.96	41°12’37.91380”N	071°06’16.55689”W	
SPI_PV	RWF	REV01	234	A	7/11/2019	3:14	324205.43	4564253.43	41°12’38.07877”N	071°05’48.80918”W	
SPI_PV	RWF	REV01	234	B	7/11/2019	3:15	324203.29	4564255.94	41°12’38.15829”N	071°05’48.90356”W	
SPI_PV	RWF	REV01	234	C	7/11/2019	3:17	324202.09	4564257.00	41°12’38.19157”N	071°05’48.95591”W	
SPI_PV	RWF	REV01	234	D	7/11/2019	3:18	324196.44	4564258.21	41°12’38.22665”N	071°05’49.19962”W	
SPI_PV	RWF	REV01	028	A	7/11/2019	3:31	324697.52	4564256.31	41°12’38.55628”N	071°05’27.69465”W	
SPI_PV	RWF	REV01	028	B	7/11/2019	3:33	324692.29	4564253.42	41°12’38.45850”N	071°05’27.91616”W	
SPI_PV	RWF	REV01	028	C	7/11/2019	3:34	324689.93	4564250.46	41°12’38.36051”N	071°05’28.01439”W	
SPI_PV	RWF	REV01	028	D	7/11/2019	3:35	324681.38	4564259.29	41°12’38.64008”N	071°05’28.39057”W	
SPI_PV	RWF	REV01	029	A	7/11/2019	4:21	325821.25	4564260.50	41°12’39.56494”N	071°04’39.47513”W	
SPI_PV	RWF	REV01	029	B	7/11/2019	4:22	325819.20	4564261.42	41°12’39.59328”N	071°04’39.56399”W	
SPI_PV	RWF	REV01	029	C	7/11/2019	4:23	325816.28	4564256.84	41°12’39.44250”N	071°04’39.68448”W	
SPI_PV	RWF	REV01	029	D	7/11/2019	4:25	325809.63	4564256.43	41°12’39.42406”N	071°04’39.96957”W	
SPI_PV	RWF	REV01	030	A	7/11/2019	4:42	326946.00	4564250.48	41°12’40.10863”N	071°03’51.19689”W	
SPI_PV	RWF	REV01	030	B	7/11/2019	4:43	326943.52	4564253.28	41°12’40.19744”N	071°03’51.30583”W	
SPI_PV	RWF	REV01	030	C	7/11/2019	4:45	326942.27	4564263.18	41°12’40.51762”N	071°03’51.36961”W	
SPI_PV	RWF	REV01	030	D	7/11/2019	4:46	326940.39	4564257.96	41°12’40.34694”N	071°03’51.44514”W	
SPI_PV	RWF	REV01	009	A	7/11/2019	5:30	324694.58	4567961.21	41°14’38.61740”N	071°05’31.64855”W	
SPI_PV	RWF	REV01	009	B	7/11/2019	5:31	324691.35	4567965.51	41°14’38.75449”N	071°05’31.79160”W	
SPI_PV	RWF	REV01	009	C	7/11/2019	5:33	324684.16	4567965.52	41°14’38.74918”N	071°05’32.10069”W	
SPI_PV	RWF	REV01	009	D	7/11/2019	5:34	324670.60	4567961.37	41°14’38.60389”N	071°05’32.67831”W	
SPI_PV	RWF	REV01	008	A	7/11/2019	5:54	323567.10	4567962.36	41°14’37.77183”N	071°06’20.05840”W	
SPI_PV	RWF	REV01	008	B	7/11/2019	5:56	323561.91	4567962.24	41°14’37.76404”N	071°06’20.28116”W	
SPI_PV	RWF	REV01	008	C	7/11/2019	5:57	323554.76	4567963.66	41°14’37.80433”N	071°06’20.58981”W	
SPI_PV	RWF	REV01	008	D	7/11/2019	5:59	323545.90	4567967.45	41°14’37.92030”N	071°06’20.97398”W	
SPI_PV	RWF	REV01	225	A	7/11/2019	6:27	323023.79	4567966.58	41°14’37.48148”N	071°06’43.38983”W	
SPI_PV	RWF	REV01	225	B	7/11/2019	6:28	323014.56	4567967.54	41°14’37.50518”N	071°06’43.78712”W	
SPI_PV	RWF	REV01	225	C	7/11/2019	6:30	323009.50	4567970.32	41°14’37.59139”N	071°06’44.00734”W	
SPI_PV	RWF	REV01	225	D	7/11/2019	6:31	323001.90	4567971.39	41°14’37.62011”N	071°06’44.33478”W	
SPI_PV	RWF	REV01	007	A	7/11/2019	7:09	322433.44	4567957.56	41°14’36.72306”N	071°07’08.72713”W	
SPI_PV	RWF	REV01	007	B	7/11/2019	7:10	322431.05	4567965.87	41°14’36.99058”N	071°07’08.83819”W	
SPI_PV	RWF	REV01	007	C	7/11/2019	7:12	322425.12	4567960.86	41°14’36.82342”N	071°07’09.08751”W	
SPI_PV	RWF	REV01	007	D	7/11/2019	7:13	322422.50	4567962.32	41°14’36.86886”N	071°07’09.20165”W	
SPI_PV	RWF	REV01	006	A	7/11/2019	7:46	321300.57	4567967.76	41°14’36.15532”N	071°07’57.37666”W	
SPI_PV	RWF	REV01	006	B	7/11/2019	7:52	321300.89	4567966.39	41°14’36.11121”N	071°07’57.36159”W	
SPI_PV	RWF	REV01	006	C	7/11/2019	7:54	321298.50	4567971.83	41°14’36.28561”N	071°07’57.46985”W	
SPI_PV	RWF	REV01	006	D	7/11/2019	7:55	321293.13	4567974.89	41°14’36.38045”N	071°07’57.70335”W	
SPI_PV	RWF	REV01	224	A	7/11/2019	8:16	320767.00	4567967.48	41°14’35.72118”N	071°08’20.28438”W	
SPI_PV	RWF	REV01	224	B	7/11/2019	8:17	320764.56	4567969.33	41°14’35.77918”N	071°08’20.39109”W	
SPI_PV	RWF	REV01	224	C	7/11/2019	8:18	320765.35	4567975.12	41°14’35.96727”N	071°08’20.36339”W	
SPI_PV	RWF	REV01	224	D	7/11/2019	8:19	320759.75	4567972.65	41°14’35.88275”N	071°08’20.60126”W	
SPI_PV	RWF	REV01	005	A	7/11/2019	8:38	320181.41	4567973.72	41°14’35.45529”N	071°08’45.43249”W	
SPI_PV	RWF	REV01	005	B	7/11/2019	8:39	320175.71	4567976.95	41°14’35.55522”N	071°08’45.68083”W	
SPI_PV	RWF	REV01	005	C	7/11/2019	8:40	320168.57	4567979.62	41°14’35.63627”N	071°08’45.99034”W	
SPI_PV	RWF	REV01	005	D	7/11/2019	8:42	320164.91	4567980.81	41°14’35.67174”N	071°08’46.14873”W	
SPI_PV	RWF	REV01	004	A	7/11/2019	9:56	319048.35	4567966.10	41°14’34.29838”N	071°09’34.07062”W	
SPI_PV	RWF	REV01	004	B	7/11/2019	9:58	319050.26	4567970.32	41°14’34.43687”N	071°09’33.99283”W	
SPI_PV	RWF	REV01	004	C	7/11/2019	9:59	319047.52	4567970.34	41°14’34.43509”N	071°09’34.11062”W	
SPI_PV	RWF	REV01	004	D	7/11/2019	10:00	319046.01	4567977.95	41°14’34.68055”N	071°09’34.18342”W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWF	REV01	002	A	7/11/2019	10:55	320824.50	4569821.11	41°15'35.83498"N	071°08'19.77566"W	
SPI_PV	RWF	REV01	002	B	7/11/2019	10:56	320819.29	4569820.45	41°15'35.80930"N	071°08'19.99858"W	
SPI_PV	RWF	REV01	002	C	7/11/2019	10:58	320813.90	4569819.15	41°15'35.76306"N	071°08'20.22859"W	
SPI_PV	RWF	REV01	002	D	7/11/2019	10:59	320810.05	4569818.67	41°15'35.74441"N	071°08'20.39374"W	
SPI_PV	RWF	REV01	223	A	7/11/2019	11:38	321477.13	4569829.51	41°15'36.62715"N	071°07'51.75725"W	
SPI_PV	RWF	REV01	223	B	7/11/2019	11:39	321479.62	4569832.02	41°15'36.71049"N	071°07'51.65315"W	
SPI_PV	RWF	REV01	223	C	7/11/2019	11:41	321470.79	4569833.77	41°15'36.76017"N	071°07'52.03427"W	
SPI_PV	RWF	REV01	223	D	7/11/2019	11:42	321466.55	4569835.34	41°15'36.80767"N	071°07'52.21789"W	
SPI_PV	RWF	REV01	003	A	7/11/2019	12:33	322133.77	4569823.17	41°15'36.94291"N	071°07'23.55124"W	
SPI_PV	RWF	REV01	003	B	7/11/2019	12:34	322134.69	4569826.24	41°15'37.04304"N	071°07'23.51481"W	
SPI_PV	RWF	REV01	003	C	7/11/2019	12:35	322131.24	4569826.83	41°15'37.05939"N	071°07'23.66356"W	
SPI_PV	RWF	REV01	003	D	7/11/2019	12:37	322121.05	4569827.07	41°15'37.05921"N	071°07'24.10174"W	
SPI_PV	RWF	REV01	001	A	7/11/2019	13:57	321721.26	4571684.42	41°16'36.93095"N	071°07'43.22601"W	
SPI_PV	RWF	REV01	001	B	7/11/2019	13:58	321717.72	4571684.21	41°16'36.92129"N	071°07'43.37800"W	
SPI_PV	RWF	REV01	001	C	7/11/2019	13:59	321714.66	4571688.24	41°16'37.04936"N	071°07'43.51357"W	
SPI_PV	RWF	REV01	001	D	7/11/2019	14:00	321712.61	4571689.43	41°16'37.08642"N	071°07'43.60321"W	
SPI_PV	RWF	REV01	232	A	7/11/2019	14:52	319328.68	4564255.53	41°12'34.28151"N	071°09'18.08446"W	
SPI_PV	RWF	REV01	232	B	7/11/2019	14:53	319336.80	4564256.28	41°12'34.31255"N	071°09'17.73652"W	
SPI_PV	RWF	REV01	232	C	7/11/2019	14:55	319333.14	4564252.96	41°12'34.20177"N	071°09'17.89030"W	
SPI_PV	RWF	REV01	232	D	7/11/2019	14:56	319336.51	4564258.34	41°12'34.37911"N	071°09'17.75116"W	
SPI_PV	RWEC-OCS	REV01	414	A	7/11/2019	15:18	320931.68	4564406.05	41°12'40.44156"N	071°08'09.45588"W	
SPI_PV	RWEC-OCS	REV01	414	B	7/11/2019	15:19	320929.49	4564410.53	41°12'40.58502"N	071°08'09.55421"W	
SPI_PV	RWEC-OCS	REV01	414	C	7/11/2019	15:21	320925.63	4564415.52	41°12'40.74353"N	071°08'09.72525"W	
SPI_PV	RWEC-OCS	REV01	414	D	7/11/2019	15:22	320924.06	4564418.13	41°12'40.82684"N	071°08'09.79561"W	
SPI_PV	RWEC-OCS	REV01	415	A	7/11/2019	16:08	319423.25	4565281.80	41°13'07.61450"N	071°09'15.11770"W	
SPI_PV	RWEC-OCS	REV01	415	B	7/11/2019	16:09	319419.69	4565281.67	41°13'07.60732"N	071°09'15.27037"W	
SPI_PV	RWEC-OCS	REV01	415	C	7/11/2019	16:10	319419.21	4565284.99	41°13'07.71451"N	071°09'15.29454"W	
SPI_PV	RWEC-OCS	REV01	415	D	7/11/2019	16:12	319420.75	4565281.76	41°13'07.61114"N	071°09'15.22474"W	
SPI_PV	RWEC-OCS	REV01	416	A	7/11/2019	16:34	317470.32	4565254.73	41°13'05.16023"N	071°10'38.90220"W	
SPI_PV	RWEC-OCS	REV01	416	B	7/11/2019	16:36	317470.77	4565257.65	41°13'05.25509"N	071°10'38.88604"W	
SPI_PV	RWEC-OCS	REV01	416	C	7/11/2019	16:37	317467.17	4565257.84	41°13'05.25843"N	071°10'39.04073"W	
SPI_PV	RWEC-OCS	REV01	416	D	7/11/2019	16:39	317464.89	4565258.95	41°13'05.29229"N	071°10'39.13985"W	
SPI_PV	RWEC-OCS	REV01	417	A	7/11/2019	18:11	315534.59	4565182.17	41°13'01.22905"N	071°12'01.89656"W	
SPI_PV	RWEC-OCS	REV01	417	B	7/11/2019	18:12	315538.51	4565181.16	41°13'01.19944"N	071°12'01.72713"W	
SPI_PV	RWEC-OCS	REV01	417	C	7/11/2019	18:13	315537.20	4565188.26	41°13'01.42824"N	071°12'01.79116"W	
SPI_PV	RWEC-OCS	REV01	417	D	7/11/2019	18:15	315529.65	4565189.83	41°13'01.47318"N	071°12'02.11682"W	
SPI_PV	RWEC-OCS	REV01	418	A	7/11/2019	18:36	313668.38	4565630.31	41°13'14.21160"N	071°13'22.47555"W	
SPI_PV	RWEC-OCS	REV01	418	B	7/11/2019	18:37	313670.12	4565626.51	41°13'14.08994"N	071°13'22.39699"W	
SPI_PV	RWEC-OCS	REV01	418	C	7/11/2019	18:39	313667.88	4565627.61	41°13'14.12364"N	071°13'22.49436"W	
SPI_PV	RWEC-OCS	REV01	418	D	7/11/2019	18:40	313666.17	4565626.21	41°13'14.07684"N	071°13'22.56621"W	
SPI_PV	RWEC-OCS	REV01	419	A	7/11/2019	19:36	312955.89	4566690.24	41°13'47.96543"N	071°13'54.22160"W	
SPI_PV	RWEC-OCS	REV01	419	B	7/11/2019	19:37	312964.11	4566682.26	41°13'47.71401"N	071°13'53.85994"W	
SPI_PV	RWEC-OCS	REV01	419	C	7/11/2019	19:39	312962.69	4566684.96	41°13'47.80025"N	071°13'53.92357"W	
SPI_PV	RWEC-OCS	REV01	419	D	7/11/2019	19:40	312957.86	4566695.92	41°13'48.15128"N	071°13'54.14292"W	
SPI_PV	RWEC-OCS	REV01	411	A	7/11/2019	20:08	313216.85	4564751.06	41°12'45.34577"N	071°13'40.88639"W	
SPI_PV	RWEC-OCS	REV01	411	B	7/11/2019	20:10	313214.87	4564750.95	41°12'45.34058"N	071°13'40.97119"W	
SPI_PV	RWEC-OCS	REV01	411	C	7/11/2019	20:11	313212.20	4564751.66	41°12'45.36149"N	071°13'41.08673"W	
SPI_PV	RWEC-OCS	REV01	411	D	7/11/2019	20:13	313215.09	4564753.36	41°12'45.41880"N	071°13'40.96433"W	
SPI_PV	RWEC-OCS	REV01	410	A	7/11/2019	21:28	313496.49	4562810.51	41°11'42.69631"N	071°13'26.75636"W	
SPI_PV	RWEC-OCS	REV01	410	B	7/11/2019	21:29	313491.93	4562810.20	41°11'42.68251"N	071°13'26.95140"W	
SPI_PV	RWEC-OCS	REV01	410	C	7/11/2019	21:30	313492.12	4562812.93	41°11'42.77105"N	071°13'26.94660"W	
SPI_PV	RWEC-OCS	REV01	410	D	7/11/2019	21:31	313499.42	4562822.76	41°11'43.09560"N	071°13'26.64424"W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWEC-OCS	REV01	409	A	7/11/2019	21:51	314169.59	4561403.08	41°10’57.64644”N	071°12’56.34174”W	
SPI_PV	RWEC-OCS	REV01	409	B	7/11/2019	21:53	314166.61	4561408.12	41°10’57.80712”N	071°12’56.47508”W	
SPI_PV	RWEC-OCS	REV01	409	C	7/11/2019	21:54	314164.87	4561408.74	41°10’57.82605”N	071°12’56.55070”W	
SPI_PV	RWEC-OCS	REV01	409	D	7/11/2019	21:55	314162.52	4561418.02	41°10’58.12476”N	071°12’56.66148”W	
SPI_PV	RWEC-OCS	REV01	408	A	7/11/2019	22:29	314912.68	4560181.61	41°10’18.67756”N	071°12’23.13999”W	
SPI_PV	RWEC-OCS	REV01	408	B	7/11/2019	22:30	314913.78	4560187.77	41°10’18.87804”N	071°12’23.09959”W	
SPI_PV	RWEC-OCS	REV01	408	C	7/11/2019	22:31	314913.76	4560192.35	41°10’19.02645”N	071°12’23.10559”W	
SPI_PV	RWEC-OCS	REV01	408	D	7/11/2019	22:33	314912.47	4560197.15	41°10’19.18085”N	071°12’23.16608”W	
SPI_PV	RWEC-OCS	REV01	407	A	7/11/2019	22:52	316588.86	4559401.63	41°09’54.77354”N	071°11’10.41538”W	
SPI_PV	RWEC-OCS	REV01	407	B	7/11/2019	22:53	316588.60	4559400.85	41°09’54.74810”N	071°11’10.42568”W	
SPI_PV	RWEC-OCS	REV01	407	C	7/11/2019	22:54	316589.23	4559404.71	41°09’54.87375”N	071°11’10.40282”W	
SPI_PV	RWEC-OCS	REV01	407	D	7/11/2019	22:55	316588.76	4559406.09	41°09’54.91787”N	071°11’10.42441”W	
SPI_PV	RWEC-OCS	REV01	406	A	7/11/2019	23:35	318541.58	4559416.15	41°09’56.82562”N	071°09’46.69476”W	
SPI_PV	RWEC-OCS	REV01	406	B	7/11/2019	23:36	318539.39	4559423.55	41°09’57.06381”N	071°09’46.79634”W	
SPI_PV	RWEC-OCS	REV01	406	C	7/11/2019	23:38	318542.61	4559423.04	41°09’57.04995”N	071°09’46.65777”W	
SPI_PV	RWEC-OCS	REV01	406	D	7/11/2019	23:39	318541.85	4559428.06	41°09’57.21184”N	071°09’46.69568”W	
SPI_PV	RWEC-OCS	REV01	405	A	7/12/2019	0:02	320497.99	4559397.94	41°09’57.80335”N	071°08’22.77874”W	
SPI_PV	RWEC-OCS	REV01	405	B	7/12/2019	0:04	320497.64	4559401.13	41°09’57.90637”N	071°08’22.79709”W	
SPI_PV	RWEC-OCS	REV01	405	C	7/12/2019	0:05	320497.54	4559401.71	41°09’57.92512”N	071°08’22.80225”W	
SPI_PV	RWEC-OCS	REV01	405	D	7/12/2019	0:06	320498.28	4559407.97	41°09’58.12840”N	071°08’22.77714”W	
SPI_PV	RWEC-OCS	REV01	413	A	7/12/2019	0:53	322480.84	4563124.47	41°12’00.13836”N	071°07’01.63698”W	
SPI_PV	RWEC-OCS	REV01	413	B	7/12/2019	0:55	322477.41	4563135.88	41°12’00.50543”N	071°07’01.79586”W	
SPI_PV	RWEC-OCS	REV01	413	C	7/12/2019	0:56	322477.73	4563137.01	41°12’00.54249”N	071°07’01.78357”W	
SPI_PV	RWEC-OCS	REV01	413	D	7/12/2019	0:58	322467.46	4563140.64	41°12’00.65194”N	071°07’02.22795”W	
SPI_PV	RWEC-OCS	REV01	412	A	7/12/2019	1:41	322696.38	4561234.05	41°10’59.04686”N	071°06’50.41688”W	
SPI_PV	RWEC-OCS	REV01	412	B	7/12/2019	1:43	322688.16	4561235.37	41°10’59.08277”N	071°06’50.77087”W	
SPI_PV	RWEC-OCS	REV01	412	C	7/12/2019	1:44	322678.07	4561240.14	41°10’59.22946”N	071°06’51.20888”W	
SPI_PV	RWEC-OCS	REV01	412	D	7/12/2019	1:46	322671.11	4561244.96	41°10’59.38038”N	071°06’51.51231”W	
SPI_PV	RWEC-OCS	REV01	603	A	7/12/2019	2:34	322357.80	4559732.06	41°10’10.10552”N	071°07’03.37218”W	
SPI_PV	RWEC-OCS	REV01	603	B	7/12/2019	2:35	322352.72	4559750.27	41°10’10.69160”N	071°07’03.60906”W	
SPI_PV	RWEC-OCS	REV01	603	C	7/12/2019	2:41	322359.23	4559741.60	41°10’10.41589”N	071°07’03.32067”W	
SPI_PV	RWEC-OCS	REV01	603	D	7/12/2019	2:42	322352.08	4559747.88	41°10’10.61358”N	071°07’03.63366”W	
SPI_PV	RWEC-OCS	REV01	401	A	7/12/2019	10:21	326018.03	4555980.12	41°08’11.37201”N	071°04’22.56286”W	
SPI_PV	RWEC-OCS	REV01	401	B	7/12/2019	10:23	326023.33	4555970.85	41°08’11.07550”N	071°04’22.32621”W	*Departed site after B W.O.W.*
SPI_PV	RWEC-OCS	REV01	404	A	7/12/2019	16:12	322637.54	4559068.20	41°09’48.81239”N	071°06’50.68302”W	
SPI_PV	RWEC-OCS	REV01	404	B	7/12/2019	16:13	322646.32	4559075.57	41°09’49.05836”N	071°06’50.31436”W	
SPI_PV	RWEC-OCS	REV01	404	C	7/12/2019	16:14	322652.94	4559086.19	41°09’49.40756”N	071°06’50.04136”W	
SPI_PV	RWEC-OCS	REV01	404	D	7/12/2019	16:16	322652.45	4559095.54	41°09’49.71025”N	071°06’50.07242”W	
SPI_PV	RWEC-OCS	REV01	602	A	7/12/2019	16:35	322348.66	4558466.31	41°09’29.07968”N	071°07’02.44314”W	
SPI_PV	RWEC-OCS	REV01	602	B	7/12/2019	16:36	322357.08	4558470.81	41°09’29.23208”N	071°07’02.08664”W	
SPI_PV	RWEC-OCS	REV01	602	C	7/12/2019	16:38	322355.36	4558475.86	41°09’29.39437”N	071°07’02.16561”W	
SPI_PV	RWEC-OCS	REV01	602	D	7/12/2019	16:43	322339.82	4558476.19	41°09’29.39278”N	071°07’02.83215”W	
SPI_PV	RWEC-OCS	REV01	403	A	7/12/2019	17:35	322702.37	4557529.51	41°08’58.99965”N	071°06’46.30087”W	
SPI_PV	RWEC-OCS	REV01	403	B	7/12/2019	17:36	322705.95	4557530.18	41°08’59.02427”N	071°06’46.14819”W	
SPI_PV	RWEC-OCS	REV01	403	C	7/12/2019	17:37	322705.75	4557528.48	41°08’58.96913”N	071°06’46.15487”W	
SPI_PV	RWEC-OCS	REV01	403	D	7/12/2019	17:38	322705.95	4557531.29	41°08’59.06034”N	071°06’46.14952”W	
SPI_PV	RWEC-OCS	REV01	402	A	7/12/2019	17:59	324635.51	4557281.08	41°08’52.46141”N	071°05’23.16398”W	
SPI_PV	RWEC-OCS	REV01	402	B	7/12/2019	18:00	324638.18	4557284.00	41°08’52.55813”N	071°05’23.05286”W	
SPI_PV	RWEC-OCS	REV01	402	C	7/12/2019	18:01	324642.12	4557287.33	41°08’52.66915”N	071°05’22.88705”W	
SPI_PV	RWEC-OCS	REV01	402	D	7/12/2019	18:04	324641.06	4557288.14	41°08’52.69445”N	071°05’22.93343”W	
SPI_PV	RWEC-OCS	REV01	601	A	7/12/2019	18:24	325238.43	4556264.80	41°08’19.99475”N	071°04’56.27272”W	
SPI_PV	RWEC-OCS	REV01	601	B	7/12/2019	18:25	325228.97	4556255.23	41°08’19.67715”N	071°04’56.66874”W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWEC-OCS	REV01	601	C	7/12/2019	18:26	325242.78	4556243.88	41°08’19.32006”N	071°04’56.06507”W	
SPI_PV	RWEC-OCS	REV01	601	D	7/12/2019	18:28	325253.89	4556254.22	41°08’19.66391”N	071°04’55.59932”W	
SPI_PV	RWEC-OCS	REV01	401	C	7/12/2019	18:44	325996.87	4555986.27	41°08’11.55506”N	071°04’23.47597”W	*Returned to site for C/D later in the day to complete*
SPI_PV	RWEC-OCS	REV01	401	D	7/12/2019	18:45	326027.89	4555983.39	41°08’11.48545”N	071°04’22.14343”W	*Returned to site for C/D later in the day to complete*
SPI_PV	RWF	REV01	073W2	A	7/12/2019	19:19	323418.76	4556840.23	41°08’37.22484”N	071°06’14.87234”W	
SPI_PV	RWF	REV01	073W2	B	7/12/2019	19:20	323431.91	4556844.18	41°08’37.36316”N	071°06’14.31265”W	
SPI_PV	RWF	REV01	073W2	C	7/12/2019	19:22	323447.36	4556849.00	41°08’37.53148”N	071°06’13.65561”W	
SPI_PV	RWF	REV01	073W2	D	7/12/2019	19:23	323452.06	4556855.68	41°08’37.75155”N	071°06’13.46101”W	
SPI_PV	RWF	REV01	073W1	A	7/12/2019	19:37	323553.28	4556848.12	41°08’37.58580”N	071°06’09.11361”W	
SPI_PV	RWF	REV01	073W1	B	7/12/2019	19:39	323556.57	4556852.63	41°08’37.73451”N	071°06’08.97722”W	
SPI_PV	RWF	REV01	073W1	C	7/12/2019	19:40	323548.97	4556861.40	41°08’38.01288”N	071°06’09.31223”W	
SPI_PV	RWF	REV01	073W1	D	7/12/2019	19:41	323547.55	4556869.57	41°08’38.27641”N	071°06’09.38153”W	
SPI_PV	RWF	REV01	073E1	A	7/12/2019	19:51	323739.58	4556856.10	41°08’37.99008”N	071°06’01.13524”W	
SPI_PV	RWF	REV01	073E1	B	7/12/2019	19:52	323749.88	4556848.02	41°08’37.73639”N	071°06’00.68564”W	
SPI_PV	RWF	REV01	073E1	C	7/12/2019	19:54	323753.53	4556856.08	41°08’38.00044”N	071°06’00.53736”W	
SPI_PV	RWF	REV01	073E1	D	7/12/2019	19:55	323753.66	4556856.78	41°08’38.02323”N	071°06’00.53248”W	
SPI_PV	RWF	REV01	073E1	E	7/12/2019	20:05	323736.19	4556856.36	41°08’37.99603”N	071°06’01.28078”W	
SPI_PV	RWF	REV01	073E2	A	7/12/2019	20:14	323825.75	4556841.60	41°08’37.58752”N	071°05’57.42635”W	
SPI_PV	RWF	REV01	073E2	B	7/12/2019	20:16	323839.89	4556852.85	41°08’37.96337”N	071°05’56.83174”W	
SPI_PV	RWF	REV01	073E2	C	7/12/2019	20:17	323849.10	4556857.07	41°08’38.10710”N	071°05’56.44109”W	
SPI_PV	RWF	REV01	073E2	D	7/12/2019	20:18	323851.30	4556857.11	41°08’38.11030”N	071°05’56.34706”W	
SPI_PV	RWEC-OCS	REV01	420	A	7/12/2019	22:00	312898.56	4567677.03	41°14’19.89361”N	071°13’57.77078”W	
SPI_PV	RWEC-OCS	REV01	420	B	7/12/2019	22:01	312900.94	4567681.76	41°14’20.04866”N	071°13’57.67376”W	
SPI_PV	RWEC-OCS	REV01	420	C	7/12/2019	22:02	312900.74	4567680.15	41°14’19.99641”N	071°13’57.68042”W	
SPI_PV	RWEC-OCS	REV01	420	D	7/12/2019	22:04	312897.56	4567676.35	41°14’19.87056”N	071°13’57.81287”W	
SPI_PV	RWEC-OCS	REV01	456	A	7/12/2019	22:21	312333.60	4568798.50	41°14’55.76180”N	071°14’23.26460”W	
SPI_PV	RWEC-OCS	REV01	456	B	7/12/2019	22:22	312328.84	4568788.21	41°14’55.42425”N	071°14’23.45743”W	
SPI_PV	RWEC-OCS	REV01	456	C	7/12/2019	22:23	312334.86	4568789.27	41°14’55.46378”N	071°14’23.20018”W	
SPI_PV	RWEC-OCS	REV01	456	D	7/12/2019	22:25	312324.38	4568785.46	41°14’55.33143”N	071°14’23.64599”W	
SPI_PV	RWEC-OCS	REV01	457	A	7/12/2019	22:42	311839.35	4570632.89	41°15’54.78836”N	071°14’46.52228”W	
SPI_PV	RWEC-OCS	REV01	457	B	7/12/2019	22:43	311839.06	4570636.53	41°15’54.90611”N	071°14’46.53845”W	
SPI_PV	RWEC-OCS	REV01	457	C	7/12/2019	22:45	311836.62	4570634.88	41°15’54.85050”N	071°14’46.64169”W	
SPI_PV	RWEC-OCS	REV01	457	D	7/12/2019	22:46	311832.50	4570639.82	41°15’55.00727”N	071°14’46.82387”W	
SPI_PV	RWEC-OCS	REV01	458	A	7/12/2019	23:05	311366.26	4572462.08	41°16’53.66264”N	071°15’08.87732”W	
SPI_PV	RWEC-OCS	REV01	458	B	7/12/2019	23:06	311367.10	4572472.57	41°16’54.00337”N	071°15’08.85271”W	
SPI_PV	RWEC-OCS	REV01	458	C	7/12/2019	23:07	311369.21	4572484.30	41°16’54.38515”N	071°15’08.77512”W	
SPI_PV	RWEC-OCS	REV01	458	D	7/12/2019	23:10	311381.29	4572483.29	41°16’54.36239”N	071°15’08.25502”W	
SPI_PV	RWEC-OCS	REV01	459	A	7/12/2019	23:28	310880.12	4574301.12	41°17’52.84345”N	071°15’31.81580”W	
SPI_PV	RWEC-OCS	REV01	459	B	7/12/2019	23:29	310890.89	4574300.28	41°17’52.82516”N	071°15’31.35210”W	
SPI_PV	RWEC-OCS	REV01	459	C	7/12/2019	23:30	310899.94	4574301.40	41°17’52.86926”N	071°15’30.96422”W	
SPI_PV	RWEC-OCS	REV01	459	D	7/12/2019	23:32	310903.68	4574302.10	41°17’52.89482”N	071°15’30.80441”W	
SPI_PV	RWEC-OCS	REV01	460	A	7/13/2019	2:14	310361.80	4576135.10	41°18’51.83107”N	071°15’56.14375”W	
SPI_PV	RWEC-OCS	REV01	460	B	7/13/2019	2:15	310362.58	4576134.55	41°18’51.81400”N	071°15’56.10954”W	
SPI_PV	RWEC-OCS	REV01	460	C	7/13/2019	2:16	310357.03	4576150.33	41°18’52.32055”N	071°15’56.36579”W	
SPI_PV	RWEC-OCS	REV01	460	D	7/13/2019	2:18	310372.24	4576145.30	41°18’52.17072”N	071°15’55.70619”W	
SPI_PV	RWEC-OCS	REV01	461	A	7/13/2019	2:37	309346.22	4577743.33	41°19’43.07929”N	071°16’41.60541”W	
SPI_PV	RWEC-OCS	REV01	461	B	7/13/2019	2:38	309351.02	4577744.75	41°19’43.12953”N	071°16’41.40041”W	
SPI_PV	RWEC-OCS	REV01	461	C	7/13/2019	2:39	309348.23	4577744.81	41°19’43.12921”N	071°16’41.52055”W	
SPI_PV	RWEC-OCS	REV01	461	D	7/13/2019	2:40	309348.68	4577744.94	41°19’43.13382”N	071°16’41.50141”W	
SPI_PV	RWEC-OCS	REV01	462	A	7/13/2019	3:02	308337.56	4579363.65	41°20’34.71970”N	071°17’26.80328”W	
SPI_PV	RWEC-OCS	REV01	462	B	7/13/2019	3:03	308326.26	4579360.81	41°20’34.61800”N	071°17’27.28552”W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWEC-OCS	REV01	462	C	7/13/2019	3:04	308339.60	4579373.13	41°20'35.02859"N	071°17'26.72625"W	
SPI_PV	RWEC-OCS	REV01	462	D	7/13/2019	3:09	308337.68	4579356.35	41°20'34.48322"N	071°17'26.78970"W	
SPI_PV	RWEC-OCS	REV01	463	A	7/13/2019	3:27	307320.30	4580946.83	41°21'25.14371"N	071°18'12.34836"W	
SPI_PV	RWEC-OCS	REV01	463	B	7/13/2019	3:28	307313.67	4580945.79	41°21'25.10441"N	071°18'12.63233"W	
SPI_PV	RWEC-OCS	REV01	463	C	7/13/2019	3:30	307317.02	4580949.65	41°21'25.23239"N	071°18'12.49273"W	
SPI_PV	RWEC-OCS	REV01	463	D	7/13/2019	3:31	307314.53	4580953.34	41°21'25.34965"N	071°18'12.60433"W	
SPI_PV	RWEC-RI	REV01	464	A	7/13/2019	3:51	305963.70	4582278.97	41°22'07.13421"N	071°19'12.22043"W	
SPI_PV	RWEC-RI	REV01	464	B	7/13/2019	3:52	305964.12	4582281.61	41°22'07.21993"N	071°19'12.20552"W	
SPI_PV	RWEC-RI	REV01	464	C	7/13/2019	3:54	305965.39	4582293.95	41°22'07.62080"N	071°19'12.16507"W	
SPI_PV	RWEC-RI	REV01	464	D	7/13/2019	3:56	305952.30	4582294.69	41°22'07.63341"N	071°19'12.72903"W	
SPI_PV	RWEC-OCS	REV01	463	E	7/13/2019	5:58	307330.46	4580947.32	41°21'25.16829"N	071°18'11.91241"W	
SPI_PV	RWEC-OCS	REV01	463	F	7/13/2019	5:59	307329.86	4580952.91	41°21'25.34906"N	071°18'11.94460"W	
SPI_PV	RWEC-OCS	REV01	463	G	7/13/2019	6:01	307323.24	4580951.93	41°21'25.31155"N	071°18'12.22800"W	
SPI_PV	RWEC-OCS	REV01	463	H	7/13/2019	6:02	307327.12	4580963.92	41°21'25.70333"N	071°18'12.07488"W	
SPI_PV	RWEC-RI	REV01	433	A	7/13/2019	6:45	304758.07	4583490.33	41°22'45.33369"N	071°20'05.47922"W	
SPI_PV	RWEC-RI	REV01	433	B	7/13/2019	6:46	304752.42	4583491.17	41°22'45.35601"N	071°20'05.72344"W	
SPI_PV	RWEC-RI	REV01	433	C	7/13/2019	6:48	304747.15	4583493.09	41°22'45.41350"N	071°20'05.95229"W	
SPI_PV	RWEC-RI	REV01	433	D	7/13/2019	6:49	304745.73	4583498.36	41°22'45.58295"N	071°20'06.01951"W	
SPI_PV	RWEC-RI	REV01	432	A	7/13/2019	7:10	306591.40	4583117.68	41°22'34.85280"N	071°18'46.18544"W	
SPI_PV	RWEC-RI	REV01	432	B	7/13/2019	7:11	306592.40	4583116.76	41°22'34.82404"N	071°18'46.14145"W	
SPI_PV	RWEC-RI	REV01	432	C	7/13/2019	7:13	306594.66	4583120.99	41°22'34.96282"N	071°18'46.04904"W	
SPI_PV	RWEC-RI	REV01	432	D	7/13/2019	7:15	306591.76	4583123.93	41°22'35.05576"N	071°18'46.17707"W	
SPI_PV	RWEC-RI	REV01	431	A	7/13/2019	7:42	308535.02	4583100.36	41°22'35.96457"N	071°17'22.55778"W	
SPI_PV	RWEC-RI	REV01	431	B	7/13/2019	7:44	308536.79	4583099.75	41°22'35.94622"N	071°17'22.48117"W	
SPI_PV	RWEC-RI	REV01	431	C	7/13/2019	7:45	308537.15	4583107.80	41°22'36.20738"N	071°17'22.47461"W	
SPI_PV	RWEC-RI	REV01	431	D	7/13/2019	7:47	308546.80	4583115.73	41°22'36.47279"N	071°17'22.06878"W	
SPI_PV	RWEC-RI	REV01	430	A	7/13/2019	8:22	310428.44	4583442.34	41°22'48.65882"N	071°16'01.49280"W	
SPI_PV	RWEC-RI	REV01	430	B	7/13/2019	8:24	310423.59	4583444.62	41°22'48.72841"N	071°16'01.70409"W	
SPI_PV	RWEC-RI	REV01	430	C	7/13/2019	8:25	310421.62	4583445.39	41°22'48.75185"N	071°16'01.78965"W	
SPI_PV	RWEC-RI	REV01	430	D	7/13/2019	8:30	310435.47	4583433.66	41°22'48.38353"N	071°16'01.18043"W	
SPI_PV	RWEC-RI	REV01	434	A	7/13/2019	10:07	303363.24	4584870.00	41°23'28.81259"N	071°21'07.09226"W	
SPI_PV	RWEC-RI	REV01	434	B	7/13/2019	10:09	303357.08	4584865.03	41°23'28.64615"N	071°21'07.35131"W	
SPI_PV	RWEC-RI	REV01	434	C	7/13/2019	10:10	303354.72	4584857.87	41°23'28.41201"N	071°21'07.44461"W	
SPI_PV	RWEC-RI	REV01	434	D	7/13/2019	10:12	303351.64	4584857.93	41°23'28.41136"N	071°21'07.57738"W	
SPI_PV	RWEC-RI	REV01	611	A	7/13/2019	10:49	303521.61	4585210.36	41°23'39.97956"N	071°21'00.67575"W	
SPI_PV	RWEC-RI	REV01	611	B	7/13/2019	10:51	303516.36	4585209.96	41°23'39.96221"N	071°21'00.90104"W	
SPI_PV	RWEC-RI	REV01	611	C	7/13/2019	10:53	303509.51	4585207.25	41°23'39.86835"N	071°21'01.19262"W	
SPI_PV	RWEC-RI	REV01	611	D	7/13/2019	10:54	303502.43	4585202.02	41°23'39.69270"N	071°21'01.49135"W	
SPI_PV	RWEC-RI	REV01	435	A	7/13/2019	11:14	303224.96	4585209.93	41°23'39.70476"N	071°21'13.43909"W	
SPI_PV	RWEC-RI	REV01	435	B	7/13/2019	11:20	303229.93	4585205.08	41°23'39.55179"N	071°21'13.21958"W	
SPI_PV	RWEC-RI	REV01	435	C	7/13/2019	11:21	303232.51	4585209.94	41°23'39.71171"N	071°21'13.11434"W	
SPI_PV	RWEC-RI	REV01	435	D	7/13/2019	11:23	303236.03	4585220.78	41°23'40.06603"N	071°21'12.97550"W	
SPI_PV	RWEC-RI	REV01	436	A	7/13/2019	11:40	303064.61	4585852.78	41°24'00.39168"N	071°21'21.09081"W	
SPI_PV	RWEC-RI	REV01	436	B	7/13/2019	11:41	303067.04	4585851.73	41°24'00.35989"N	071°21'20.98500"W	
SPI_PV	RWEC-RI	REV01	436	C	7/13/2019	11:43	303075.88	4585858.41	41°24'00.58419"N	071°21'20.61264"W	
SPI_PV	RWEC-RI	REV01	436	D	7/13/2019	11:44	303084.54	4585861.68	41°24'00.69751"N	071°21'20.24368"W	
SPI_PV	RWEC-RI	REV01	437	A	7/13/2019	12:23	302975.30	4586245.93	41°24'13.05088"N	071°21'25.39449"W	
SPI_PV	RWEC-RI	REV01	437	B	7/13/2019	12:24	302973.94	4586250.46	41°24'13.19655"N	071°21'25.45829"W	
SPI_PV	RWEC-RI	REV01	437	C	7/13/2019	12:25	302968.74	4586248.32	41°24'13.12264"N	071°21'25.67974"W	
SPI_PV	RWEC-RI	REV01	437	D	7/13/2019	12:27	302968.55	4586253.27	41°24'13.28295"N	071°21'25.69345"W	
SPI_PV	RWEC-RI	REV01	438	A	7/13/2019	12:38	302888.23	4586563.73	41°24'23.27098"N	071°21'29.51395"W	
SPI_PV	RWEC-RI	REV01	438	B	7/13/2019	12:39	302890.99	4586571.52	41°24'23.52564"N	071°21'29.40443"W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWEC-RI	REV01	438	C	7/13/2019	12:40	302892.59	4586574.79	41°24'23.63315"N	071°21'29.33904"W	
SPI_PV	RWEC-RI	REV01	438	D	7/13/2019	12:41	302897.64	4586583.64	41°24'23.92431"N	071°21'29.13234"W	
SPI_PV	RWEC-RI	REV01	439	A	7/13/2019	12:51	302848.01	4586748.06	41°24'29.20765"N	071°21'31.46101"W	
SPI_PV	RWEC-RI	REV01	439	B	7/13/2019	12:52	302847.75	4586754.15	41°24'29.40470"N	071°21'31.47930"W	
SPI_PV	RWEC-RI	REV01	439	C	7/13/2019	12:53	302848.48	4586760.12	41°24'29.59884"N	071°21'31.45471"W	
SPI_PV	RWEC-RI	REV01	439	D	7/13/2019	12:54	302846.29	4586762.72	41°24'29.68110"N	071°21'31.55186"W	
SPI_PV	RWEC-RI	REV01	440	A	7/13/2019	13:15	302703.75	4587086.98	41°24'40.06114"N	071°21'38.06690"W	
SPI_PV	RWEC-RI	REV01	440	B	7/13/2019	13:17	302698.39	4587099.92	41°24'40.47584"N	071°21'38.31257"W	
SPI_PV	RWEC-RI	REV01	440	C	7/13/2019	13:18	302701.57	4587105.88	41°24'40.67149"N	071°21'38.18271"W	
SPI_PV	RWEC-RI	REV01	440	D	7/13/2019	13:19	302703.99	4587111.66	41°24'40.86117"N	071°21'38.08540"W	
SPI_PV	RWEC-RI	REV01	610	A	7/13/2019	13:40	302283.90	4587214.56	41°24'43.82354"N	071°21'56.28600"W	
SPI_PV	RWEC-RI	REV01	610	B	7/13/2019	13:41	302282.66	4587216.39	41°24'43.88165"N	071°21'56.34180"W	
SPI_PV	RWEC-RI	REV01	610	C	7/13/2019	13:42	302291.47	4587221.58	41°24'44.05753"N	071°21'55.96862"W	
SPI_PV	RWEC-RI	REV01	610	D	7/13/2019	13:43	302295.51	4587223.16	41°24'44.11237"N	071°21'55.79658"W	
SPI_PV	RWEC-RI	REV01	441	A	7/13/2019	14:46	301269.52	4587559.76	41°24'54.10717"N	071°22'40.35079"W	
SPI_PV	RWEC-RI	REV01	441	B	7/13/2019	14:48	301269.76	4587562.04	41°24'54.18118"N	071°22'40.34340"W	
SPI_PV	RWEC-RI	REV01	441	C	7/13/2019	14:49	301265.10	4587567.85	41°24'54.36547"N	071°22'40.55058"W	
SPI_PV	RWEC-RI	REV01	441	D	7/13/2019	14:50	301263.70	4587570.80	41°24'54.45976"N	071°22'40.61458"W	
SPI_PV	RWEC-RI	REV01	442	A	7/13/2019	15:20	299443.24	4587969.51	41°25'05.74983"N	071°23'59.44148"W	
SPI_PV	RWEC-RI	REV01	442	B	7/13/2019	15:21	299443.76	4587968.38	41°25'05.71375"N	071°23'59.41741"W	
SPI_PV	RWEC-RI	REV01	442	C	7/13/2019	15:22	299439.07	4587972.16	41°25'05.83195"N	071°23'59.62403"W	
SPI_PV	RWEC-RI	REV01	442	D	7/13/2019	15:23	299434.90	4587985.75	41°25'06.26853"N	071°23'59.81958"W	
SPI_PV	RWEC-RI	REV01	443	A	7/13/2019	16:07	298818.76	4589820.05	41°26'05.14279"N	071°24'28.53535"W	
SPI_PV	RWEC-RI	REV01	443	B	7/13/2019	16:08	298823.03	4589830.02	41°26'05.46971"N	071°24'28.36363"W	
SPI_PV	RWEC-RI	REV01	443	C	7/13/2019	16:09	298825.08	4589831.62	41°26'05.52333"N	071°24'28.27710"W	
SPI_PV	RWEC-RI	REV01	443	D	7/13/2019	16:10	298823.58	4589834.53	41°26'05.61638"N	071°24'28.34515"W	
SPI_PV	RWEC-RI	REV01	444	A	7/13/2019	16:29	298599.33	4590783.24	41°26'36.15087"N	071°24'39.13764"W	
SPI_PV	RWEC-RI	REV01	444	B	7/13/2019	16:30	298598.26	4590780.09	41°26'36.04776"N	071°24'39.18006"W	
SPI_PV	RWEC-RI	REV01	444	C	7/13/2019	16:32	298604.72	4590786.27	41°26'36.25385"N	071°24'38.90933"W	Outside of 25m Radius
SPI_PV	RWEC-RI	REV01	444	D	7/13/2019	16:36	298589.18	4590761.62	41°26'35.44100"N	071°24'39.54890"W	
SPI_PV	RWEC-RI	REV01	444	E	7/13/2019	16:37	298600.99	4590779.41	41°26'36.02812"N	071°24'39.06183"W	
SPI_PV	RWEC-RI	REV01	445	A	7/13/2019	16:59	298690.16	4591743.60	41°27'07.34687"N	071°24'36.37886"W	
SPI_PV	RWEC-RI	REV01	445	B	7/13/2019	17:00	298697.63	4591748.85	41°27'07.52365"N	071°24'36.06348"W	
SPI_PV	RWEC-RI	REV01	445	C	7/13/2019	17:01	298700.63	4591750.40	41°27'07.57667"N	071°24'35.93625"W	
SPI_PV	RWEC-RI	REV01	445	D	7/13/2019	17:02	298702.02	4591751.80	41°27'07.62308"N	071°24'35.87801"W	
SPI_PV	RWEC-RI	REV01	446	A	7/13/2019	17:20	298808.52	4592804.38	41°27'41.82134"N	071°24'32.55451"W	
SPI_PV	RWEC-RI	REV01	446	B	7/13/2019	17:21	298811.23	4592813.38	41°27'42.11519"N	071°24'32.44833"W	
SPI_PV	RWEC-RI	REV01	446	C	7/13/2019	17:23	298809.79	4592819.16	41°27'42.30115"N	071°24'32.51720"W	
SPI_PV	RWEC-RI	REV01	446	D	7/13/2019	17:24	298811.07	4592819.59	41°27'42.31629"N	071°24'32.46272"W	
SPI_PV	RWEC-RI	REV01	447	A	7/13/2019	17:36	298890.14	4593676.22	41°28'10.14101"N	071°24'30.08459"W	
SPI_PV	RWEC-RI	REV01	447	B	7/13/2019	17:38	298903.38	4593694.51	41°28'10.74542"N	071°24'29.53660"W	
SPI_PV	RWEC-RI	REV01	447	C	7/13/2019	17:39	298906.22	4593702.18	41°28'10.99645"N	071°24'29.42333"W	
SPI_PV	RWEC-RI	REV01	447	D	7/13/2019	17:40	298906.21	4593701.31	41°28'10.96836"N	071°24'29.42270"W	
SPI_PV	RWEC-RI	REV01	448	A	7/13/2019	17:59	299003.21	4594759.56	41°28'45.34146"N	071°24'26.51343"W	
SPI_PV	RWEC-RI	REV01	448	B	7/13/2019	18:00	299009.30	4594755.51	41°28'45.21556"N	071°24'26.24644"W	
SPI_PV	RWEC-RI	REV01	448	C	7/13/2019	18:01	299010.41	4594756.90	41°28'45.26163"N	071°24'26.20043"W	
SPI_PV	RWEC-RI	REV01	448	D	7/13/2019	18:03	299007.86	4594764.07	41°28'45.49170"N	071°24'26.31849"W	
SPI_PV	RWEC-RI	REV01	449	A	7/13/2019	18:14	298996.39	4595629.64	41°29'13.52437"N	071°24'27.85158"W	
SPI_PV	RWEC-RI	REV01	449	B	7/13/2019	18:15	298992.79	4595636.73	41°29'13.75078"N	071°24'28.01487"W	
SPI_PV	RWEC-RI	REV01	449	C	7/13/2019	18:16	298992.45	4595642.83	41°29'13.94799"N	071°24'28.03699"W	
SPI_PV	RWEC-RI	REV01	449	D	7/13/2019	18:17	298992.25	4595643.67	41°29'13.97500"N	071°24'28.04658"W	
SPI_PV	RWEC-RI	REV01	615	A	7/13/2019	18:58	298703.18	4595932.57	41°29'23.07386"N	071°24'40.84891"W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWEC-RI	REV01	615	B	7/13/2019	19:03	298697.01	4595919.76	41°29'22.65313"N	071°24'41.09921"W	
SPI_PV	RWEC-RI	REV01	615	C	7/13/2019	19:04	298705.00	4595928.28	41°29'22.93668"N	071°24'40.76516"W	
SPI_PV	RWEC-RI	REV01	615	D	7/13/2019	19:05	298700.97	4595931.82	41°29'23.04768"N	071°24'40.94300"W	
SPI_PV	RWEC-RI	REV01	614	A	7/13/2019	19:43	299044.51	4598234.77	41°30'37.96906"N	071°24'28.90598"W	
SPI_PV	RWEC-RI	REV01	614	B	7/13/2019	19:45	299053.67	4598240.60	41°30'38.16622"N	071°24'28.51798"W	
SPI_PV	RWEC-RI	REV01	614	C	7/13/2019	19:46	299057.54	4598245.51	41°30'38.32898"N	071°24'28.35702"W	
SPI_PV	RWEC-RI	REV01	614	D	7/13/2019	19:47	299059.49	4598249.85	41°30'38.47109"N	071°24'28.27843"W	
SPI_PV	RWEC-RI	REV01	451	A	7/13/2019	20:16	299776.00	4599392.03	41°31'16.12177"N	071°23'58.76265"W	
SPI_PV	RWEC-RI	REV01	451	B	7/13/2019	20:32	299763.69	4599412.97	41°31'16.78907"N	071°23'59.31846"W	
SPI_PV	RWEC-RI	REV01	451	C	7/13/2019	20:33	299768.05	4599405.61	41°31'16.55441"N	071°23'59.12144"W	
SPI_PV	RWEC-RI	REV01	451	D	7/13/2019	20:34	299767.10	4599395.97	41°31'16.24118"N	071°23'59.15109"W	
X	RWEC-RI	REV01	450	X	7/13/2019						Not safe to occupy with this vessel. Water too shallow and position to close to land to maneuver safely.
SPI_PV	RWEC-RI	REV01	604	A	7/14/2019	0:09	311296.88	4583405.01	41°22'48.18404"N	071°15'24.09045"W	
SPI_PV	RWEC-RI	REV01	604	B	7/14/2019	0:11	311300.02	4583403.84	41°22'48.14855"N	071°15'23.95397"W	
SPI_PV	RWEC-RI	REV01	604	C	7/14/2019	0:12	311298.50	4583399.53	41°22'48.00775"N	071°15'24.01464"W	
SPI_PV	RWEC-RI	REV01	604	D	7/14/2019	0:13	311307.55	4583405.12	41°22'48.19661"N	071°15'23.63148"W	
SPI_PV	RWEC-RI	REV01	429	A	7/14/2019	0:27	312292.03	4584025.06	41°23'09.11280"N	071°14'41.97001"W	
SPI_PV	RWEC-RI	REV01	429	B	7/14/2019	0:28	312296.52	4584027.52	41°23'09.19634"N	071°14'41.77949"W	
SPI_PV	RWEC-RI	REV01	429	C	7/14/2019	0:29	312299.32	4584028.85	41°23'09.24195"N	071°14'41.66048"W	
SPI_PV	RWEC-RI	REV01	429	D	7/14/2019	0:30	312304.76	4584033.98	41°23'09.41266"N	071°14'41.43248"W	
SPI_PV	RWEC-OCS	REV01	605	A	7/14/2019	1:02	312766.75	4582989.73	41°22'35.96360"N	071°14'20.39404"W	
SPI_PV	RWEC-OCS	REV01	605	B	7/14/2019	1:04	312773.30	4582997.07	41°22'36.20679"N	071°14'20.12053"W	
SPI_PV	RWEC-OCS	REV01	605	C	7/14/2019	1:06	312770.74	4583004.94	41°22'36.45973"N	071°14'20.23943"W	
SPI_PV	RWEC-OCS	REV01	605	D	7/14/2019	1:07	312778.37	4583007.10	41°22'36.53621"N	071°14'19.91347"W	
SPI_PV	RWEC-OCS	REV01	428	A	7/14/2019	1:19	313279.10	4582633.07	41°22'24.83542"N	071°13'57.95837"W	
SPI_PV	RWEC-OCS	REV01	428	B	7/14/2019	1:20	313279.79	4582635.23	41°22'24.90594"N	071°13'57.93088"W	
SPI_PV	RWEC-OCS	REV01	428	C	7/14/2019	1:22	313285.65	4582639.71	41°22'25.05606"N	071°13'57.68357"W	
SPI_PV	RWEC-OCS	REV01	428	D	7/14/2019	1:23	313287.93	4582650.87	41°22'25.41935"N	071°13'57.59792"W	
SPI_PV	RWEC-OCS	REV01	427	A	7/14/2019	2:05	313225.82	4580681.51	41°21'21.55443"N	071°13'58.08688"W	
SPI_PV	RWEC-OCS	REV01	427	B	7/14/2019	2:06	313235.12	4580673.78	41°21'21.31170"N	071°13'57.67867"W	
SPI_PV	RWEC-OCS	REV01	427	C	7/14/2019	2:07	313240.38	4580678.20	41°21'21.45938"N	071°13'57.45730"W	
SPI_PV	RWEC-OCS	REV01	427	D	7/14/2019	2:09	313239.01	4580679.69	41°21'21.50648"N	071°13'57.51790"W	
SPI_PV	RWEC-OCS	REV01	606	A	7/14/2019	2:39	312836.34	4580234.11	41°21'06.73193"N	071°14'14.34001"W	
SPI_PV	RWEC-OCS	REV01	606	B	7/14/2019	2:40	312836.18	4580236.22	41°21'06.80040"N	071°14'14.34914"W	
SPI_PV	RWEC-OCS	REV01	606	C	7/14/2019	2:42	312836.68	4580241.32	41°21'06.96600"N	071°14'14.33317"W	
SPI_PV	RWEC-OCS	REV01	606	D	7/14/2019	2:43	312842.00	4580238.91	41°21'06.89238"N	071°14'14.10197"W	
SPI_PV	RWEC-OCS	REV01	426	A	7/14/2019	3:15	313180.06	4578722.49	41°20'18.03809"N	071°13'57.88481"W	
SPI_PV	RWEC-OCS	REV01	426	B	7/14/2019	3:16	313179.32	4578724.70	41°20'18.10928"N	071°13'57.91906"W	
SPI_PV	RWEC-OCS	REV01	426	C	7/14/2019	3:17	313179.54	4578726.74	41°20'18.17545"N	071°13'57.91183"W	
SPI_PV	RWEC-OCS	REV01	426	D	7/14/2019	3:18	313183.34	4578727.52	41°20'18.20386"N	071°13'57.74961"W	
SPI_PV	RWEC-OCS	REV01	607	A	7/14/2019	3:35	312876.38	4578252.78	41°20'02.56466"N	071°14'10.42053"W	
SPI_PV	RWEC-OCS	REV01	607	B	7/14/2019	3:36	312876.90	4578255.30	41°20'02.64651"N	071°14'10.40066"W	
SPI_PV	RWEC-OCS	REV01	607	C	7/14/2019	3:37	312880.50	4578257.01	41°20'02.70520"N	071°14'10.24792"W	
SPI_PV	RWEC-OCS	REV01	607	D	7/14/2019	3:38	312883.21	4578256.41	41°20'02.68771"N	071°14'10.13079"W	
SPI_PV	RWEC-OCS	REV01	608	A	7/14/2019	4:33	313779.02	4577685.40	41°19'44.93207"N	071°13'30.98943"W	
SPI_PV	RWEC-OCS	REV01	608	B	7/14/2019	4:35	313779.25	4577693.10	41°19'45.18183"N	071°13'30.98802"W	
SPI_PV	RWEC-OCS	REV01	608	C	7/14/2019	4:36	313779.95	4577695.13	41°19'45.24805"N	071°13'30.96009"W	
SPI_PV	RWEC-OCS	REV01	608	D	7/14/2019	4:37	313779.76	4577696.34	41°19'45.28726"N	071°13'30.96936"W	
SPI_PV	RWEC-OCS	REV01	425	A	7/14/2019	4:56	313127.77	4576758.39	41°19'14.35157"N	071°13'57.95876"W	

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWEC-OCS	REV01	425	B	7/14/2019	4:57	313123.62	4576766.63	41°19'14.61503"N	071°13'58.14652"W	
SPI_PV	RWEC-OCS	REV01	425	C	7/14/2019	4:58	313126.73	4576775.82	41°19'14.91560"N	071°13'58.02298"W	
SPI_PV	RWEC-OCS	REV01	425	D	7/14/2019	4:59	313127.85	4576777.69	41°19'14.97714"N	071°13'57.97684"W	
SPI_PV	RWEC-OCS	REV01	607	E	7/14/2019	5:36	312883.54	4578246.76	41°20'02.37543"N	071°14'10.10592"W	
SPI_PV	RWEC-OCS	REV01	607	F	7/14/2019	5:37	312884.36	4578254.58	41°20'02.62952"N	071°14'10.07930"W	
SPI_PV	RWEC-OCS	REV01	607	G	7/14/2019	5:39	312884.51	4578258.54	41°20'02.75791"N	071°14'10.07736"W	
SPI_PV	RWEC-OCS	REV01	607	H	7/14/2019	5:41	312882.28	4578260.29	41°20'02.81265"N	071°14'10.17502"W	
SPI_PV	RWEC-OCS	REV01	608	E	7/14/2019	5:56	313784.33	4577685.55	41°19'44.94149"N	071°13'30.76115"W	
SPI_PV	RWEC-OCS	REV01	608	F	7/14/2019	5:58	313781.37	4577694.39	41°19'45.22546"N	071°13'30.89819"W	
SPI_PV	RWEC-OCS	REV01	609	A	7/14/2019	6:18	312956.02	4575781.02	41°18'42.53842"N	071°14'04.25879"W	
SPI_PV	RWEC-OCS	REV01	609	B	7/14/2019	6:20	312951.57	4575788.16	41°18'42.76608"N	071°14'04.45799"W	
SPI_PV	RWEC-OCS	REV01	609	C	7/14/2019	6:22	312949.09	4575799.42	41°18'43.12869"N	071°14'04.57710"W	
SPI_PV	RWEC-OCS	REV01	609	D	7/14/2019	6:23	312945.22	4575808.94	41°18'43.43387"N	071°14'04.75378"W	
SPI_PV	RWEC-OCS	REV01	424	A	7/14/2019	7:00	313088.73	4574812.69	41°18'11.27217"N	071°13'57.48466"W	
SPI_PV	RWEC-OCS	REV01	424	B	7/14/2019	7:02	313088.58	4574814.08	41°18'11.31687"N	071°13'57.49256"W	
SPI_PV	RWEC-OCS	REV01	424	C	7/14/2019	7:03	313088.23	4574817.19	41°18'11.41743"N	071°13'57.51096"W	
SPI_PV	RWEC-OCS	REV01	424	D	7/14/2019	7:04	313089.71	4574820.36	41°18'11.52154"N	071°13'57.45084"W	
SPI_PV	RWEC-OCS	REV01	423	A	7/14/2019	7:25	313026.89	4572850.28	41°17'07.63189"N	071°13'57.97222"W	
SPI_PV	RWEC-OCS	REV01	423	B	7/14/2019	7:27	313028.16	4572856.40	41°17'07.83120"N	071°13'57.92415"W	
SPI_PV	RWEC-OCS	REV01	423	C	7/14/2019	7:28	313027.43	4572859.01	41°17'07.91525"N	071°13'57.95835"W	
SPI_PV	RWEC-OCS	REV01	423	D	7/14/2019	7:30	313026.73	4572862.03	41°17'08.01240"N	071°13'57.99204"W	
SPI_PV	RWEC-OCS	REV01	422	A	7/14/2019	8:14	312961.26	4570898.17	41°16'04.32227"N	071°13'58.63419"W	
SPI_PV	RWEC-OCS	REV01	422	B	7/14/2019	8:15	312962.15	4570902.52	41°16'04.46378"N	071°13'58.60108"W	
SPI_PV	RWEC-OCS	REV01	422	C	7/14/2019	8:17	312963.11	4570905.93	41°16'04.57508"N	071°13'58.56363"W	
SPI_PV	RWEC-OCS	REV01	422	D	7/14/2019	8:18	312965.53	4570912.12	41°16'04.77784"N	071°13'58.46641"W	
SPI_PV	RWEC-OCS	REV01	421	A	7/14/2019	8:48	312922.92	4568950.07	41°15'01.16489"N	071°13'58.12968"W	
SPI_PV	RWEC-OCS	REV01	421	B	7/14/2019	8:50	312922.30	4568955.97	41°15'01.35563"N	071°13'58.16261"W	
SPI_PV	RWEC-OCS	REV01	421	C	7/14/2019	8:51	312922.56	4568953.85	41°15'01.28691"N	071°13'58.14922"W	
SPI_PV	RWEC-OCS	REV01	421	D	7/14/2019	8:53	312927.40	4568953.94	41°15'01.29388"N	071°13'57.94156"W	
SPI_PV	RWEC-OCS	REV01	421	E	7/14/2019	9:44	312946.76	4568943.89	41°15'00.98438"N	071°13'57.09934"W	
SPI_PV	RWEC-OCS	REV01	421	F	7/14/2019	9:46	312948.36	4568945.94	41°15'01.05224"N	071°13'57.03298"W	
SPI_PV	RWEC-RI	REV01	450	A	7/25/2019	13:32	299113.47	4597557.42	41.5045	-71.407	2.61
SPI_PV	RWEC-RI	REV01	450	B	7/25/2019	13:34	299112.64	4597562.10	41.5045	-71.407	2.62
SPI_PV	RWEC-RI	REV01	450	C	7/25/2019	13:35	299109.08	4597580.03	41.5047	-71.407	2.54
SPI_PV	RWEC-RI	REV01	450	D	7/25/2019	13:36	299109.32	4597592.43	41.5048	-71.407	2.42
SPI_PV	RWEC-RI	REV01	450	E	7/25/2019	14:00	299116.84	4597555.70	41.5045	-71.4069	2.55
SPI_PV	RWEC-RI	REV01	450	F	7/25/2019	14:01	299115.77	4597559.33	41.5045	-71.407	2.54
SPI_PV	RWEC-RI	REV01	450	G	7/25/2019	14:03	299118.15	4597557.39	41.5045	-71.4069	2.58
SPI_PV	RWEC-RI	REV01	450	H	7/25/2019	14:04	299119.90	4597556.18	41.5045	-71.4069	2.5
SPI_PV	RWEC-RI	REV01	452	A	7/25/2019	14:23	300092.13	4600579.51	41.5319	-71.3963	2.51
SPI_PV	RWEC-RI	REV01	452	B	7/25/2019	14:25	300090.34	4600583.72	41.532	-71.3963	2.37
SPI_PV	RWEC-RI	REV01	452	C	7/25/2019	14:26	300088.32	4600585.41	41.532	-71.3963	2.02
SPI_PV	RWEC-RI	REV01	452	D	7/25/2019	14:27	300096.90	4600587.91	41.532	-71.3962	2.61
SPI_PV	RWEC-RI	REV01	613	A	7/25/2019	14:37	299750.61	4601514.40	41.5402	-71.4007	2.64
SPI_PV	RWEC-RI	REV01	613	B	7/25/2019	14:39	299756.54	4601514.54	41.5403	-71.4006	2.64
SPI_PV	RWEC-RI	REV01	613	C	7/25/2019	14:40	299752.72	4601519.40	41.5403	-71.4006	2.51
SPI_PV	RWEC-RI	REV01	613	D	7/25/2019	14:41	299749.56	4601518.01	41.5403	-71.4007	2.52
SPI_PV	RWEC-RI	REV01	453	A	7/25/2019	14:52	300359.80	4602465.30	41.549	-71.3937	2.57
SPI_PV	RWEC-RI	REV01	453	B	7/25/2019	14:53	300365.04	4602455.40	41.5489	-71.3936	2.49
SPI_PV	RWEC-RI	REV01	453	C	7/25/2019	14:55	300353.38	4602467.35	41.549	-71.3938	2.55
SPI_PV	RWEC-RI	REV01	453	D	7/25/2019	14:56	300348.99	4602469.10	41.549	-71.3938	2.53
SPI_PV	RWEC-RI	REV01	612	A	7/25/2019	15:20	299507.02	4603189.51	41.5553	-71.4041	2.51

SampleType	Location	Survey_ID	StationID	Replicate	Date	Time	X_UTM_19N_m	Y_UTM_19n_m	Latitude_NAD83	Longitude_NAD83	Comments
SPI_PV	RWEC-RI	REV01	612	B	7/25/2019	15:21	299505.41	4603191.30	41.5553	-71.4042	2.55
SPI_PV	RWEC-RI	REV01	612	C	7/25/2019	15:22	299502.79	4603194.72	41.5553	-71.4042	2.52
SPI_PV	RWEC-RI	REV01	612	D	7/25/2019	15:24	299505.85	4603202.51	41.5554	-71.4042	2.6
SPI_PV	RWEC-RI	REV01	454	A	7/25/2019	15:34	300158.25	4604124.62	41.5638	-71.3967	2.51
SPI_PV	RWEC-RI	REV01	454	B	7/25/2019	15:35	300159.58	4604123.60	41.5638	-71.3966	2.57
SPI_PV	RWEC-RI	REV01	454	C	7/25/2019	15:37	300160.17	4604132.67	41.5639	-71.3966	2.48
SPI_PV	RWEC-RI	REV01	454	D	7/25/2019	15:38	300157.27	4604133.31	41.5639	-71.3967	2.51
SPI_PV	RWEC-RI	REV01	455	A	7/25/2019	15:49	298342.06	4604697.04	41.5685	-71.4186	2.57
SPI_PV	RWEC-RI	REV01	455	B	7/25/2019	15:50	298344.51	4604695.10	41.5685	-71.4186	2.6
SPI_PV	RWEC-RI	REV01	455	C	7/25/2019	15:52	298342.41	4604693.42	41.5685	-71.4186	2.55
SPI_PV	RWEC-RI	REV01	455	D	7/25/2019	15:53	298346.66	4604695.94	41.5685	-71.4186	2.57

ATTACHMENT B

SPI/PV FIELD LOG

StationID	Replicate	Date	Time	Frame	SPI_StopCollar_in	SPI_Weights_perSide_num	Comments
050	A1	07/04/2019	20:59:35	12	18	5	No Nav
050	B1	07/04/2019	21:01:04	13	17	5	No Nav; All stop until Nav issue is resolved. Nav gives all clear at 21:45. FC 016.
050	A	07/04/2019	21:54:53	17	17	5	
050	B	07/04/2019	21:55:57	18	17	5	
050	C	07/04/2019	21:57:53	19	17	5	
050	D	07/04/2019	21:58:55	20	17	5	
051	A	07/04/2019	22:26:03	21	17	5	
051	B	07/04/2019	22:27:15	22	17	5	
051	C	07/04/2019	22:28:08	23	17	5	
051	D	07/04/2019	22:29:14	24	17	5	
241	A	07/04/2019	22:57:00	27	17	5	
241	B	07/04/2019	22:59:09	28	17	5	
241	C	07/04/2019	23:00:04	29	17	5	
241	D	07/04/2019	23:02:05	30	17	5	Download, FC 030.
052	A	07/04/2019	23:34:05	31	17	5	
052	B	07/04/2019	23:35:13	32	17	5	
052	C	07/04/2019	23:36:18	33	17	5	
052	D	07/04/2019	23:37:36	34	17	5	Test shot, FC 034.
053	A	07/05/2019	0:24:00	36	17	5	No Nav
053	B	07/05/2019	0:27:00	37	17	5	
053	C	07/05/2019	0:29:00	38	17	5	
053	D	07/05/2019	0:31:00	39	17	5	
053	E	07/05/2019	0:32:00	40	17	5	
054	A	07/05/2019	0:55:00	41	17	5	
054	B	07/05/2019	0:56:00	42	17	5	
054	C	07/05/2019	0:57:00	43	17	5	
054	D	07/05/2019	0:59:00	44	17	5	Shot in WC on way up; FC 045.
242	A	07/05/2019	1:18:00	46	17	5	
242	B	07/05/2019	1:19:00	47	17	5	
242	C	07/05/2019	1:20:00	48	17	5	
242	D	07/05/2019	1:22:00	49	17	5	
055	A	07/05/2019	1:38:00	50	17	5	
055	B	07/05/2019	1:39:00	51	17	5	
055	C	07/05/2019	1:41:00	52	17	5	
055	D	07/05/2019	1:43:00	53	17	5	Download, FC 053.
056	A	07/05/2019	2:24:00	54	17	5	No SPI, over pen due to mech issue
056	B	07/05/2019	2:25:00	55	17	5	No SPI, over pen due to mech issue
056	C	07/05/2019	2:27:00	56	17	5	No SPI, over pen due to mech issue; Fish.
056	D	07/05/2019	2:28:00	57	17	5	No SPI, over pen due to mech issue. FC 027.
057	A	07/05/2019	2:51:00	58	17	5	
057	B	07/05/2019	2:52:00	59	17	5	
057	C	07/05/2019	2:54:00	60	17	5	
057	D	07/05/2019	2:55:00	61	17	5	Sensitive taxa? WC shot on way up, FC 062.
058	A	07/05/2019	3:15:00	63	17	5	
058	B	07/05/2019	3:16:00	64	17	5	

058	C	07/05/2019	3:18:00	65	17	5	Sensitive taxa? Clam shell.
058	D	07/05/2019	3:19:00	66	17	5	
222	A	07/05/2019	3:34:00	67	17	5	
222	B	07/05/2019	3:35:00	68	17	5	Sand dollar
222	C	07/05/2019	3:36:00	69	17	5	
222	D	07/05/2019	3:38:00	70	17	5	
059	A	07/05/2019	3:55:00	71	17	5	
059	B	07/05/2019	3:57:00	72	17	5	
059	C	07/05/2019	3:58:00	73	17	5	
059	D	07/05/2019	3:59:00	74	17	5	Skate; Download FC 075, shot in WC on way up.
056	E	07/05/2019	4:48:00	76	17	5	Over penetrated
056	F	07/05/2019	4:50:00	77	17	5	Over penetrated
056	G	07/05/2019	4:51:00	78	17	5	Over penetrated
056	H	07/05/2019	4:53:00	79	17	5	Over penetrated
057E1	A	07/05/2019	5:15:00	80	17	5	
057E1	B	07/05/2019	5:16:00	81	17	5	Hermit crab
057E1	C	07/05/2019	5:18:00	82	17	5	
057E1	D	07/05/2019	5:19:00	83	17	5	Shot in WC; FC 084, Adjust lasers.
057E2	A	07/05/2019	5:45:00	85	17	5	
057E2	B	07/05/2019	5:47:00	86	17	5	
057E2	C	07/05/2019	5:48:00	87	17	5	
057E2	D	07/05/2019	5:50:00	88	17	5	
057W1	A	07/05/2019	6:17:00	89	17	5	
057W1	B	07/05/2019	6:18:00	90	17	5	Hermit crab
057W1	C	07/05/2019	6:19:00	91	17	5	
057W1	D	07/05/2019	6:21:00	92	17	5	
057W2	A	07/05/2019	6:32:00	93	17	5	
057W2	B	07/05/2019	6:33:00	94	17	5	
057W2	C	07/05/2019	6:34:00	95	17	5	
057W2	D	07/05/2019	6:36:00	96	17	5	Shot in WC; Download, FC 097.
056	I	07/05/2019	7:16:00	98	14	0	
056	J	07/05/2019	7:18:00	99	14	0	
056	K	07/05/2019	7:19:00	100	14	0	Over penetrated. Starfish.
056	L	07/05/2019	7:21:00	101	14	0	Over penetrated. Shot in WC; Download, FC 102.
056	M	07/05/2019	7:53:00	103	10	0	No PV, Camera on deck due to boat leaving circle. Strobe bottle change while captain repositions.
056	N	07/05/2019	8:51:00	104	10	0	Starfish
056	O	07/05/2019	8:52:00	105	10	0	Shot in WC; Download, FC 106.
060	A	07/05/2019	17:03:53	107	17	5	9:00 TBT for grab sampling; 09:20-11:15 Grab ops at stn 056, 057. 12:00:00 Standby for equipment transfer to another vessel; 14:00:00 Arrived at stn 056 for re-attempt at sediment grab; 15:00 - 16:35 Grab Ops stn 057-060.
060	B	07/05/2019	17:05:00	108	17	5	
060	C	07/05/2019	17:06:15	109	17	5	
060	D	07/05/2019	17:17:00	110	17	5	Vessel reposition between C + D rep. Deck shot, FC 111. Lost PV weight on deploy.
220	A	07/05/2019	17:59:16	112	17	5	

220	B	07/05/2019	18:00:25	113	17	5	
220	C	07/05/2019	18:01:27	114	17	5	
220	D	07/05/2019	18:02:35	115	17	5	
061	A	07/05/2019	18:24:16	117	17	5	
061	B	07/05/2019	18:25:37	118	17	5	
061	C	07/05/2019	18:26:45	119	17	5	
061	D	07/05/2019	18:27:56	120	17	5	Download, FC 120.
243	A	07/05/2019	19:02:42	121	17	5	
243	B	07/05/2019	19:03:54	122	17	5	
243	C	07/05/2019	19:05:04	123	17	5	
243	D	07/05/2019	19:06:08	124	17	5	
062	A	07/05/2019	19:27:57	125	17	5	
062	B	07/05/2019	19:29:20	126	17	5	
062	C	07/05/2019	19:30:54	127	17	5	
062	D	07/05/2019	19:32:11	128	17	5	
220W2	A	07/05/2019	20:36:27	129	17	5	
220W2	B	07/05/2019	20:37:42	130	17	5	
220W2	C	07/05/2019	20:39:12	131	17	5	
220W2	D	07/05/2019	20:40:25	132	17	5	
220W1	A	07/05/2019	21:30:14	133	17	5	
220W1	B	07/05/2019	21:31:09	134	17	5	
220W1	C	07/05/2019	21:32:28	135	17	5	
220W1	D	07/05/2019	21:33:43	136	17	5	
220E1	A	07/05/2019	21:59:05	137	17	5	
220E1	B	07/05/2019	22:07:45	138	17	5	
220E1	C	07/05/2019	22:09:07	139	17	5	
220E1	D	07/05/2019	22:10:28	140	17	5	
220E2	A	07/05/2019	22:32:32	141	17	5	
220E2	B	07/05/2019	22:33:52	142	17	5	
220E2	C	07/05/2019	22:35:00	143	17	5	
220E2	D	07/05/2019	22:36:09	144	17	5	Download, FC 144.
063	A	07/05/2019	23:11:47	145	17	5	
063	B	07/05/2019	23:13:03	146	17	5	
063	C	07/05/2019	23:14:14	147	17	5	
063	D	07/05/2019	23:15:25	148	17	5	
064	A	07/06/2019	0:14:59	149	17	5	
064	B	07/06/2019	0:17:12	150	17	5	
064	C	07/06/2019	0:18:35	151	17	5	
064	D	07/06/2019	0:20:14	152	17	5	
244	A	07/06/2019	0:38:29	153	17	5	
244	B	07/06/2019	0:39:52	154	17	5	
244	C	07/06/2019	0:41:21	155	17	5	
244	D	07/06/2019	0:42:35	156	17	5	
065	A	07/06/2019	1:00:07	157	17	5	
065	B	07/06/2019	1:01:48	158	17	5	
065	C	07/06/2019	1:03:07	159	17	5	

065	D	07/06/2019	1:04:32	160	17	5	Deck shot, FC 161. Grab ops 1:14 at stn 065, 1:34: at stn 066.
066	A	07/06/2019	2:04:06	161	17	5	
066	B	07/06/2019	2:05:40	162	17	5	
066	C	07/06/2019	2:07:52	163	17	5	
066	D	07/06/2019	2:09:40	164	17	5	Deck shot; Download, FC 166.
067	A	07/06/2019	2:51:41	166	17	5	
067	B	07/06/2019	2:52:58	167	17	5	Cloudy PV
067	C	07/06/2019	2:54:19	168	17	5	
067	D	07/06/2019	2:55:40	169	17	5	Cloudy PV. Shot in WC, FC 171.
245	A	07/06/2019	3:38:52	172	17	5	03:02 Grab ops at stn 067.
245	B	07/06/2019	3:40:09	173	17	5	
245	C	07/06/2019	3:41:40	174	17	5	
245	D	07/06/2019	3:43:23	175	17	5	Sensitive taxa?
068	A	07/06/2019	4:06:59	176	17	5	
068	B	07/06/2019	4:08:53	177	17	5	
068	C	07/06/2019	4:10:15	178	17	5	
068	D	07/06/2019	4:11:26	179	17	5	Hermit crab. Shot in WC, FC 180.
069	A	07/06/2019	5:35:36	181	17	5	Hard bottom station 069. Grab Ops 4:15 at stn 068, 4:40 at stn 069.
069	B	07/06/2019	5:37:00	182	17	5	
069	C	07/06/2019	5:38:12	183	17	5	
069	D	07/06/2019	5:39:42	184	17	5	
218	A	07/06/2019	6:25:32	185	17	5	Squid eggs
218	B	07/06/2019	6:26:54	186	17	5	Reposition vessel
218	C	07/06/2019	6:32:16	187	17	5	Sea whips
218	D	07/06/2019	6:33:56	188	17	5	Download, FC 188.
218E1	A	07/06/2019	7:21:23	189	17	5	Starfish
218E1	B	07/06/2019	7:23:07	190	17	5	Hard bottom
218E1	C	07/06/2019	7:24:27	191	17	5	Sea whips
218E1	D	07/06/2019	7:26:06	192	17	5	
218E2	A	07/06/2019	7:40:35	193	17	5	Sea whips
218E2	B	07/06/2019	7:42:04	194	17	5	Hard coral?
218E2	C	07/06/2019	7:43:26	195	17	5	
218E2	D	07/06/2019	7:44:50	196	17	5	
218W1	A	07/06/2019	8:38:14	197	17	5	Starfish, sea whips, hard coral?
218W1	B	07/06/2019	8:56:07	198	17	5	Starfish, sea whips, hard coral?
218W1	C	07/06/2019	8:57:47		17	5	No SPI
218W1	D	07/06/2019	8:59:26	199	17	5	Squid eggs, delays for relocating vessel
218W2	A	07/06/2019	9:24:04	200	17	5	
218W2	B	07/06/2019	9:25:21	201	17	5	
218W2	C	07/06/2019	9:26:50	202	17	5	
218W2	D	07/06/2019	9:28:34	203	17	5	Download, FC 203.
219	A	07/06/2019	10:24:40	204	17	5	
219	B	07/06/2019	10:34:55	205	17	5	Relocating vessel
219	C	07/06/2019	10:36:26		17	5	No SPI
219	D	07/06/2019	10:38:11	206	17	5	Hard bottom
081	A	07/06/2019	11:12:59	207	17	5	

081	B	07/06/2019	11:14:20	208	17	5	
081	C	07/06/2019	11:24:53	209	17	5	
081	D	07/06/2019	11:26:25	210	17	5	11:33 grab obs at stn 081; 12:20 PV strobe battery change, standby for A-Frame maintenance; 12:50 Backup images to HD, standby for A-Frame maintenance; 13:00 Maintenance resolved. Continue sediment grab ops at 081. FC 213.
080	A	07/06/2019	14:04:57	214	17	5	
080	B	07/06/2019	14:25:15	215	17	5	
080	C	07/06/2019	14:26:28	216	17	5	
080	D	07/06/2019	14:30:05	217	17	5	Delay b/w A + B for vessel repositioning. Deck shot, FC 218.
217	A	07/06/2019	15:02:13	219	17	5	
217	B	07/06/2019	15:03:20	220	17	5	
217	C	07/06/2019	15:04:17	221	17	5	
217	D	07/06/2019	15:05:26	222	17	5	Deck shot, FC 223.
216	A	07/06/2019	15:27:15	224	17	5	
216	B	07/06/2019	15:28:15	225	17	5	
216	C	07/06/2019	15:39:35	226	17	5	
216	D	07/06/2019	15:44:04	227	17	5	Delay between B + C for repositioning, and C + D. Deck shot, FC 228.
079	A	07/06/2019	16:11:35	229	17	5	
079	B	07/06/2019	16:12:34	230	17	5	
079	C	07/06/2019	16:13:45	231	17	5	
079	D	07/06/2019	16:15:00	232	17	5	Deck shot and download, FC 233. Vessel positioning delays.
067	E	07/06/2019	17:23:52	234	17	5	Gaps between reps due to vessel position delays.
067	F	07/06/2019	17:53:35	235	17	5	Gaps between reps due to vessel position delays.
067	G	07/06/2019	17:54:55	236	17	5	Gaps between reps due to vessel position delays.
067	H	07/06/2019	17:57:00	237	17	5	Gaps between reps due to vessel position delays. Deck shots, FC 240.
215	A	07/06/2019	18:18:25	241	17	5	
215	B	07/06/2019	18:19:33	242	17	5	
215	C	07/06/2019	18:20:52	243	17	5	
215	D	07/06/2019	18:21:59	244	17	5	
249	A	07/06/2019	19:03:07	245	17	5	
249	B	07/06/2019	19:04:06	246	17	5	
249	C	07/06/2019	19:05:17	247	17	5	
249	D	07/06/2019	19:06:21	248	17	5	
078	A	07/06/2019	19:51:52	249	17	5	
078	B	07/06/2019	19:52:57	250	17	5	
078	C	07/06/2019	19:54:03	251	17	5	
078	D	07/06/2019	19:55:17	252	17	5	
077	A	07/06/2019	21:00:17	253	17	5	
077	B	07/06/2019	21:01:19	254	17	5	
077	C	07/06/2019	21:02:25	255	17	5	
077	D	07/06/2019	21:03:26	256	17	5	Download, FC 258. Adjust lasers.
076	A	07/06/2019	21:45:35	259	17	5	Low Pen stn 076.
076	B	07/06/2019	21:46:43	260	17	5	
076	C	07/06/2019	22:02:15	261	17	5	Hard bottom
076	D	07/06/2019	22:03:20	262	17	5	Line caught in shiv after rep B. All stop. Line removed and camera recovered. All okay. Proceed with ops at 22:00.

248	A	07/06/2019	22:17:30	273	17	5	
248	B	07/06/2019	22:18:32	274	17	5	
248	C	07/06/2019	22:19:43	275	17	5	
248	D	07/06/2019	22:20:51	276	17	5	
214	A	07/06/2019	22:43:43	277	17	5	
214	B	07/06/2019	22:44:52	278	17	5	
214	C	07/06/2019	22:46:02	279	17	5	
214	D	07/06/2019	22:47:12	280	17	5	Hard bottom, crab.
075	A	07/06/2019	23:26:50	281	17	5	
075	B	07/06/2019	23:27:58	282	17	5	Sensitive taxa, hard bottom?
075	C	07/06/2019	23:29:04	283	17	5	
075	D	07/06/2019	23:30:17	284	17	5	23:55 grab ops at stn 074.
074	A	07/07/2019	0:14:22	285	17	5	
074	B	07/07/2019	0:15:54	286	17	5	
074	C	07/07/2019	0:17:22	287	17	5	
074	D	07/07/2019	0:22:17	288	17	5	
247	A	07/07/2019	0:37:38	289	17	5	
247	B	07/07/2019	0:38:57	290	17	5	
247	C	07/07/2019	0:40:23	291	17	5	
247	D	07/07/2019	0:42:04	292	17	5	Download, FC 294. Deck shots.
073	A	07/07/2019	1:26:13	295	17	5	Hard bottom stn 073.
073	B	07/07/2019	1:27:39	296	17	5	
073	C	07/07/2019	1:28:42	297	17	5	
073	D	07/07/2019	1:30:02	298	17	5	Deck shots, FC 301.
072	A	07/07/2019	2:17:36	302	17	5	Grab ops 1:35 at stn 073, 1:58 at stn 072.
072	B	07/07/2019	2:19:03	303	17	5	
072	C	07/07/2019	2:20:24	304	17	5	
072	D	07/07/2019	2:21:45	305	17	5	Hard bottom, stn 072?
246	A	07/07/2019	2:34:56	306	17	5	
246	B	07/07/2019	2:36:26	307	17	5	
246	C	07/07/2019	2:37:40	308	17	5	
246	D	07/07/2019	2:39:00	309	17	5	
083	A	07/07/2019	3:08:03	311	17	5	Rep taken w/o nav at stn 083. Hard bottom stn 083?
083	B	07/07/2019	3:09:15	312	17	5	
083	C	07/07/2019	3:10:30	313	17	5	
083	D	07/07/2019	3:11:42	314	17	5	
206	A	07/07/2019	3:38:31	315	17	5	3:16 grab ops at stn 083.
206	B	07/07/2019	3:39:55	316	17	5	
206	C	07/07/2019	3:41:05	317	17	5	
206	D	07/07/2019	3:42:36	318	17	5	Download, FC 320. WC + deck shot.
084	A	07/07/2019	4:18:42	321	17	5	
084	B	07/07/2019	4:20:42	322	17	5	
084	C	07/07/2019	4:26:06	323	17	5	
084	D	07/07/2019	4:27:34	324	17	5	4:34 grab ops at stn 084.
250	A	07/07/2019	5:16:37	325	17	5	
250	B	07/07/2019	5:23:46	326	17	5	

250	C	07/07/2019	5:25:22	327	17	5	
250	D	07/07/2019	5:27:40	328	17	5	Deck shot, FC 329.
085	A	07/07/2019	5:52:54	330	17	5	
085	B	07/07/2019	5:54:52	331	17	5	
085	C	07/07/2019	5:59:55	332	17	5	
085	D	07/07/2019	6:02:17	333	17	5	6:08 grab ops at stn 085.
205	A	07/07/2019	6:48:38	334	17	5	
205	B	07/07/2019	6:51:37	335	17	5	
205	C	07/07/2019	6:53:12	336	17	5	
205	D	07/07/2019	6:57:47	337	17	5	
086	A	07/07/2019	7:28:55	338	17	5	
086	B	07/07/2019	8:17:45	339	17	5	
086	C	07/07/2019	8:30:33	340	17	5	
086	D	07/07/2019	8:32:34	341	17	5	Download, FC 341.
087	A	07/07/2019	10:54:46	342	17	5	Grab ops 8:38 at stn 086, 9:30 at stn 087. Delays for vessel positioning.
087	B	07/07/2019	10:56:08	343	17	5	
087	C	07/07/2019	10:57:38	344	17	5	
087	D	07/07/2019	10:59:02	345	17	5	Deck shot, FC 346.
207	A	07/07/2019	11:34:40	347	17	5	
207	B	07/07/2019	11:36:01	348	17	5	
207	C	07/07/2019	11:37:18	349	17	5	
207	D	07/07/2019	11:38:50	350	17	5	Replace strobe battery, FC 352.
208	A	07/07/2019	12:30:31	353	17	5	
208	B	07/07/2019	12:31:51	354	17	5	
208	C	07/07/2019	12:33:08	355	17	5	
208	D	07/07/2019	12:34:18	356	17	5	
208	E	07/07/2019	12:44:26	357	17	5	Rep C out of watch circle, vessel position delay b/w D + E.
088	A	07/07/2019	13:16:21	358	17	5	
088	B	07/07/2019	13:17:28	359	17	5	
088	C	07/07/2019	13:18:24	360	17	5	
088	D	07/07/2019	13:27:45	361	17	5	Vessel position delay b/w C + D. Download, FC 365.
089	A	07/07/2019	14:22:18	366	17	5	
089	B	07/07/2019	14:23:30	367	17	5	
089	C	07/07/2019	14:24:48	368	17	5	
089	D	07/07/2019	14:25:56	369	17	5	
210	A	07/07/2019	14:50:54	371	17	5	
210	B	07/07/2019	14:52:07	372	17	5	
210	C	07/07/2019	14:53:19	373	17	5	
210	D	07/07/2019	14:54:32	374	17	5	
090	A	07/07/2019	15:18:20	375	17	5	
090	B	07/07/2019	15:19:21	376	17	5	
090	C	07/07/2019	15:20:23	377	17	5	
090	D	07/07/2019	15:21:27	378	17	5	
091	A	07/07/2019	16:15:10	379	17	5	
091	B	07/07/2019	16:16:19	380	17	5	
091	C	07/07/2019	16:17:27	381	17	5	

091	D	07/07/2019	16:18:48	382	17	5	Deck shot, FC 383.
092	A	07/07/2019	16:49:32	384	17	5	
092	B	07/07/2019	16:50:44	385	17	5	
092	C	07/07/2019	16:52:03	386	17	5	
092	D	07/07/2019	16:53:28	387	17	5	Download, deck shot, FC 388.
093	A	07/07/2019	17:29:56	389	17	5	
093	B	07/07/2019	17:30:08	390	17	5	
093	C	07/07/2019	17:31:20	391	17	5	
093	D	07/07/2019	17:32:32	392	17	5	
262	A	07/07/2019	17:51:10	393	17	5	
262	B	07/07/2019	17:52:30	394	17	5	
262	C	07/07/2019	17:53:39	395	17	5	
262	D	07/07/2019	17:54:47	396	17	5	
094	A	07/07/2019	18:13:35	398	17	5	
094	B	07/07/2019	18:14:43	399	17	5	
094	C	07/07/2019	18:15:59	400	17	5	
094	D	07/07/2019	18:17:03	401	17	5	
095	A	07/07/2019	18:51:44	402	17	5	
095	B	07/07/2019	18:53:07	403	17	5	
095	C	07/07/2019	18:54:19	404	17	5	
095	D	07/07/2019	18:55:33	405	17	5	Deck shot, FC 406.
124	A	07/07/2019	19:13:25	407	17	5	
124	B	07/07/2019	19:14:34	408	17	5	
124	C	07/07/2019	19:15:40	409	17	5	
124	D	07/07/2019	19:16:49	410	17	5	Download, deck shots, FC 412.
125	A	07/07/2019	19:53:38	413	17	5	
125	B	07/07/2019	19:55:55	414	17	5	
125	C	07/07/2019	19:57:15	415	17	5	
125	D	07/07/2019	19:58:20	416	17	5	
126	A	07/07/2019	20:18:13	418	17	5	
126	B	07/07/2019	20:19:22	419	17	5	
126	C	07/07/2019	20:20:33	420	17	5	
126	D	07/07/2019	20:21:44	421	17	5	
129	A	07/07/2019	21:01:13	422	17	5	
129	B	07/07/2019	21:02:22	423	17	5	
129	C	07/07/2019	21:03:32	424	17	5	
129	D	07/07/2019	21:04:40	425	17	5	
128	A	07/07/2019	21:18:49	426	17	5	
128	B	07/07/2019	21:19:55	427	17	5	
128	C	07/07/2019	21:21:15	428	17	5	
128	D	07/07/2019	21:22:47	429	17	5	
212	A	07/07/2019	21:46:55	431	17	5	
212	B	07/07/2019	21:48:02	432	17	5	
212	C	07/07/2019	21:49:21	433	17	5	
212	D	07/07/2019	21:50:27	434	17	5	
127	A	07/07/2019	22:04:34	435	17	5	

127	B	07/07/2019	22:05:45	436	17	5	
127	C	07/07/2019	22:06:47	437	17	5	
127	D	07/07/2019	22:07:52	438	17	5	Download, FC 438. Backup to HD.
106	A	07/07/2019	22:48:50	439	17	5	
106	B	07/07/2019	22:50:00	440	17	5	
106	C	07/07/2019	22:51:08	441	17	5	
106	D	07/07/2019	22:52:10	442	17	5	
105	A	07/07/2019	23:08:22	445	17	5	
105	B	07/07/2019	23:09:29	446	17	5	
105	C	07/07/2019	23:10:40	447	17	5	
105	D	07/07/2019	23:11:46	448	17	5	
104	A	07/07/2019	23:51:17	449	17	5	
104	B	07/07/2019	23:52:26	450	17	5	
104	C	07/07/2019	23:53:39	451	17	5	
104	D	07/07/2019	23:54:52	452	17	5	Deck shot, FC 453.
259	A	07/08/2019	0:13:10	456	17	5	
259	B	07/08/2019	0:15:09	457	17	5	
259	C	07/08/2019	0:16:39	458	17	5	
259	D	07/08/2019	0:18:39	459	17	5	
103	A	07/08/2019	0:34:35	460	17	5	
103	B	07/08/2019	0:35:49	461	17	5	
103	C	07/08/2019	0:37:07	462	17	5	
103	D	07/08/2019	0:38:26	463	17	5	Download, deck shot, FC 464.
102	A	07/08/2019	1:27:19	465	17	5	Grab ops 00:43 at stn 103, 1:18 at stn 102.
102	B	07/08/2019	1:28:37	466	17	5	
102	C	07/08/2019	1:29:50	467	17	5	
102	D	07/08/2019	1:31:09	468	17	5	
211	A	07/08/2019	1:48:05	471	17	5	
211	B	07/08/2019	1:49:12	472	17	5	
211	C	07/08/2019	1:50:27	473	17	5	
211	D	07/08/2019	1:51:40	474	17	5	
101	A	07/08/2019	2:08:30	475	17	5	
101	B	07/08/2019	2:09:49	476	17	5	
101	C	07/08/2019	2:11:02	477	17	5	
101	D	07/08/2019	2:12:14	478	17	5	
100	A	07/08/2019	2:46:22	479	17	5	Grab ops 2:18 at stn 101, 2:35 at stn 100.
100	B	07/08/2019	2:47:32	480	17	5	
100	C	07/08/2019	2:48:49	481	17	5	
100	D	07/08/2019	2:49:58	482	17	5	Deck shot, FC 483.
254	A	07/08/2019	3:05:59	484	17	5	
254	B	07/08/2019	3:07:02	485	17	5	
254	C	07/08/2019	3:08:12	486	17	5	
254	D	07/08/2019	3:09:27	487	17	5	Download, deck shot, FC 489.
099	A	07/08/2019	3:45:29	490	17	5	
099	B	07/08/2019	3:46:33	491	17	5	
099	C	07/08/2019	3:47:45	492	17	5	

099	D	07/08/2019	3:48:52	493	17	5	Deck shot, FC 494.
098	A	07/08/2019	4:31:17	495	17	5	
098	B	07/08/2019	4:32:31	496	17	5	
098	C	07/08/2019	4:33:43	497	17	5	
098	D	07/08/2019	4:35:06	498	17	5	Deck shot, FC 500.
209	A	07/08/2019	4:52:17	501	17	5	
209	B	07/08/2019	4:53:25	502	17	5	
209	C	07/08/2019	4:54:39	503	17	5	
209	D	07/08/2019	4:55:56	504	17	5	Deck shot, FC 505.
097	A	07/08/2019	5:17:22	505	17	5	
097	B	07/08/2019	5:18:42	506	17	5	
097	C	07/08/2019	5:19:52	507	17	5	
097	D	07/08/2019	5:21:10	508	17	5	
096	A	07/08/2019	5:52:32	510	17	5	Grab ops 5:25 at stn 097, 5:43 at stn 096.
096	B	07/08/2019	5:53:51	511	17	5	
096	C	07/08/2019	5:55:11	512	17	5	
096	D	07/08/2019	5:56:23	513	17	5	Download, FC 513.
251	A	07/08/2019	6:36:46	514	17	5	
251	B	07/08/2019	6:38:21	515	17	5	
251	C	07/08/2019	6:39:34	516	17	5	
251	D	07/08/2019	6:41:23	517	17	5	
111	A	07/08/2019	7:23:35	518	17	5	
111	B	07/08/2019	7:25:05	519	17	5	
111	C	07/08/2019	7:30:14	520	17	5	
111	D	07/08/2019	7:31:32	521	17	5	Deck shot, FC 522.
112	A	07/08/2019	8:40:32	523	17	5	Grab ops 7:37 at stn 111, 8:15 at stn 112.
112	B	07/08/2019	8:41:37	524	17	5	No PV
112	C	07/08/2019	8:42:55	525	17	5	
112	D	07/08/2019	8:44:16	526	17	5	Fish
260	A	07/08/2019	9:21:21	527	17	5	
260	B	07/08/2019	9:28:13	528	17	5	
260	C	07/08/2019	9:29:36	529	17	5	Fish
260	D	07/08/2019	9:31:05	530	17	5	
113	A	07/08/2019	9:55:17	531	17	5	
113	B	07/08/2019	9:56:39	532	17	5	
113	C	07/08/2019	9:58:05	533	17	5	
113	D	07/08/2019	9:59:16	534	17	5	Download, FC 534.
114	A	07/08/2019	11:08:58	535	17	5	Grab ops 10:03 at stn 113, 10:57 at stn 114.
114	B	07/08/2019	11:10:19	536	17	5	
114	C	07/08/2019	11:11:39	537	17	5	
114	D	07/08/2019	11:13:00	538	17	5	
115	A	07/08/2019	11:43:12	539	17	5	
115	B	07/08/2019	11:44:23	540	17	5	
115	C	07/08/2019	11:45:55	541	17	5	
115	D	07/08/2019	11:47:19	542	17	5	Deck shot, FC 543.

123	A	07/08/2019	12:56:48	544	17	5	11:52 grab ops at stn 115, strobe change. All hands safety meeting held at 12:00. Delay for sed camera test.
123	B	07/08/2019	12:58:03	545	17	5	
123	C	07/08/2019	12:59:13	546	17	5	
123	D	07/08/2019	13:00:19	547	17	5	
122	A	07/08/2019	13:28:25	548	17	5	
122	B	07/08/2019	13:29:33	549	17	5	
122	C	07/08/2019	13:30:45	550	17	5	
122	D	07/08/2019	13:32:00	551	17	5	
121	A	07/08/2019	14:11:43	552	17	5	
121	B	07/08/2019	14:12:48	553	17	5	
121	C	07/08/2019	14:14:02	554	17	5	
121	D	07/08/2019	14:15:12	555	17	5	Deck shot, FC 556.
253	A	07/08/2019	14:34:27	557	17	5	
253	B	07/08/2019	14:35:34	558	17	5	
253	C	07/08/2019	14:36:46	559	17	5	
253	D	07/08/2019	14:37:52	560	17	5	
120	A	07/08/2019	14:57:53	561	17	5	
120	B	07/08/2019	14:59:07	562	17	5	
120	C	07/08/2019	15:00:07	563	17	5	
120	D	07/08/2019	15:01:17	564	17	5	Download, FC 564.
213	A	07/08/2019	15:47:58	565	17	5	
213	B	07/08/2019	15:49:18	566	17	5	
213	C	07/08/2019	15:50:27	567	17	5	
213	D	07/08/2019	15:51:35	568	17	5	
119	A	07/08/2019	16:09:00	569	17	5	
119	B	07/08/2019	16:10:08	570	17	5	
119	C	07/08/2019	16:11:23	571	17	5	
119	D	07/08/2019	16:12:39	572	17	5	
118	A	07/08/2019	16:49:22	573	17	5	
118	B	07/08/2019	16:50:34	574	17	5	
118	C	07/08/2019	16:51:44	575	17	5	
118	D	07/08/2019	16:52:53	576	17	5	
261	A	07/08/2019	17:23:26	577	17	5	
261	B	07/08/2019	17:24:36	578	17	5	
261	C	07/08/2019	17:25:47	579	17	5	
261	D	07/08/2019	17:26:53	580	17	5	
117	A	07/08/2019	17:42:06	581	17	5	
117	B	07/08/2019	17:43:17	582	17	5	
117	C	07/08/2019	17:44:28	583	17	5	
117	D	07/08/2019	17:45:41	584	17	5	Download, FC 584.
116	A	07/08/2019	18:25:17	585	17	5	
116	B	07/08/2019	18:26:16	586	17	5	
116	C	07/08/2019	18:27:14	587	17	5	
116	D	07/08/2019	18:28:13	588	17	5	
108	A	07/08/2019	18:50:17	589	17	5	Sensitive taxa?

108	B	07/08/2019	18:51:20	590	17	5	
108	C	07/08/2019	18:52:26	591	17	5	
108	D	07/08/2019	18:53:34	592	17	5	
109	A	07/08/2019	19:36:20	593	17	5	
109	B	07/08/2019	19:37:28	594	17	5	
109	C	07/08/2019	19:38:36	595	17	5	
109	D	07/08/2019	19:39:40	596	17	5	
110	A	07/08/2019	19:54:18	597	17	5	
110	B	07/08/2019	19:55:24	598	17	5	
110	C	07/08/2019	19:56:37	599	17	5	
110	D	07/08/2019	19:57:39	600	17	5	
107	A	07/08/2019	20:46:15	601	17	5	
107	B	07/08/2019	20:47:25	602	17	5	
107	C	07/08/2019	20:48:29	603	17	5	
107	D	07/08/2019	20:49:38	604	17	5	
252	A	07/08/2019	21:06:44	605	17	5	
252	B	07/08/2019	21:07:53	606	17	5	
252	C	07/08/2019	21:08:57	607	17	5	
252	D	07/08/2019	21:10:13	608	17	5	Download, FC 608. ~ 1 hr transit.
203	A	07/08/2019	22:40:52	609	17	5	Hard bottom, stn 203.
203	B	07/08/2019	22:42:04	610	17	5	
203	C	07/08/2019	22:43:16	611	17	5	
203	D	07/08/2019	22:44:23	612	17	5	
202	A	07/08/2019	23:00:27	613	17	5	
202	B	07/08/2019	23:01:42	614	17	5	
202	C	07/08/2019	23:02:50	615	17	5	
202	D	07/08/2019	23:04:03	616	17	5	
256	A	07/08/2019	23:16:20	617	17	5	
256	B	07/08/2019	23:17:28	618	17	5	
256	C	07/08/2019	23:18:38	619	17	5	
256	D	07/08/2019	23:19:50	620	17	5	
144	A	07/08/2019	23:33:03	621	17	5	Hard bottom, stn 144?
144	B	07/08/2019	23:34:16	622	17	5	
144	C	07/08/2019	23:35:20	623	17	5	
144	D	07/08/2019	23:36:33	624	17	5	
201	A	07/09/2019	0:11:27	625	17	5	Hard bottom, stn 201.
201	B	07/09/2019	0:12:33	626	17	5	
201	C	07/09/2019	0:14:09		17	5	No SPI
201	D	07/09/2019	0:15:42	627	17	5	Download, FC 627.
201	E	07/09/2019	0:56:07	628	17	5	
201	F	07/09/2019	0:57:24	629	17	5	Deck shot, FC 630.
255	A	07/09/2019	1:13:22	631	17	5	
255	B	07/09/2019	1:14:32	632	17	5	
255	C	07/09/2019	1:16:03	633	17	5	
255	D	07/09/2019	1:17:22	634	17	5	
143	A	07/09/2019	1:31:36	635	17	5	

143	B	07/09/2019	1:32:55	636	17	5	
143	C	07/09/2019	1:37:56	637	17	5	
143	D	07/09/2019	1:39:53	638	17	5	
142	A	07/09/2019	2:10:25	639	17	5	Grab ops 1:43 at stn 143, 1:58 at stn 142. Hard bottom, stn 142?
142	B	07/09/2019	2:11:55	640	17	5	
142	C	07/09/2019	2:13:25	641	17	5	
142	D	07/09/2019	2:14:47	642	17	5	Deck shot, FC 643.
258	A	07/09/2019	2:29:50	644	17	5	Hard bottom, stn 258?
258	B	07/09/2019	2:31:00	645	17	5	
258	C	07/09/2019	2:32:20	646	17	5	Sea whip?
258	D	07/09/2019	2:33:38	647	17	5	
141	A	07/09/2019	2:49:11	648	17	5	Hard bottom, stn 141?
141	B	07/09/2019	2:50:30	649	17	5	
141	C	07/09/2019	2:51:47	650	17	5	
141	D	07/09/2019	2:53:03	651	17	5	Download, FC 651.
136	A	07/09/2019	3:45:33	652	17	5	Grab ops 2:57 at stn 141, 3:32 at stn 136. Hard bottom, stn 136?
136	B	07/09/2019	3:46:55	653	17	5	
136	C	07/09/2019	3:48:13	654	17	5	
136	D	07/09/2019	3:49:30	655	17	5	
257	A	07/09/2019	4:02:32	656	17	5	
257	B	07/09/2019	4:03:34	657	17	5	
257	C	07/09/2019	4:04:44	658	17	5	
257	D	07/09/2019	4:06:12	659	17	5	
137	A	07/09/2019	4:18:14	660	17	5	Hard bottom, stn 137.
137	B	07/09/2019	4:19:30	661	17	5	
137	C	07/09/2019	4:20:52	662	17	5	
137	D	07/09/2019	4:22:08	663	17	5	
138	A	07/09/2019	5:32:54	664	17	5	Grab ops 4:26 at stn 137, 5:13 at stn 138. No SPI, rep A. Hard bottom stn, 318.
138	B	07/09/2019	5:34:08	665	17	5	
138	C	07/09/2019	5:35:12	666	17	5	
138	D	07/09/2019	5:36:30	667	17	5	
204	A	07/09/2019	5:51:01	668	17	5	
204	B	07/09/2019	5:52:12	669	17	5	
204	C	07/09/2019	5:53:32	670	17	5	
204	D	07/09/2019	5:54:49	671	17	5	
139	A	07/09/2019	6:11:26	672	17	5	Hard bottom, stn 139?
139	B	07/09/2019	6:12:35	673	17	5	Sea whip?
139	C	07/09/2019	6:13:41	674	17	5	
139	D	07/09/2019	6:14:50	675	17	5	
140	A	07/09/2019	6:58:16	676	17	5	Grab ops 6:18 at stn 139, 6:49 at stn 140.
140	B	07/09/2019	6:59:34	677	17	5	
140	C	07/09/2019	7:00:42	678	17	5	
140	D	07/09/2019	7:02:08	679	17	5	Download, FC 679.
070	A	07/09/2019	10:37:55	680	17	5	Grab ops 8:06-10:22 stns 050-055, 070.
070	B	07/09/2019	10:39:27	681	17	5	
070	C	07/09/2019	10:41:02	682	17	5	

070	D	07/09/2019	10:42:16	683	17	5	Download, 683. Bad PV rep D.
040	A	07/09/2019	13:51:48	684	17	5	10:50 Water change, strobe battery change, camera memory card wipe, backup to HD; complete at 12:50. 13:30 on stn for sed ops.
040	B	07/09/2019	13:52:56	685	17	5	
040	C	07/09/2019	13:54:02	686	17	5	
040	D	07/09/2019	13:55:09	687	17	5	
041	A	07/09/2019	14:27:39	688	17	5	
041	B	07/09/2019	14:28:48	689	17	5	
041	C	07/09/2019	14:29:55	690	17	5	
041	D	07/09/2019	14:31:07	691	17	5	Deck shot, FC 692.
042	A	07/09/2019	14:49:01	693	17	5	
042	B	07/09/2019	14:50:05	694	17	5	
042	C	07/09/2019	14:51:16	695	17	5	
042	D	07/09/2019	14:52:27	696	17	5	
240	A	07/09/2019	15:18:15	697	17	5	
240	B	07/09/2019	15:19:34	698	17	5	
240	C	07/09/2019	15:20:35	699	17	5	
240	D	07/09/2019	15:21:43	700	17	5	Download FC 030
043	A	07/09/2019	15:39:07	701	17	5	
043	B	07/09/2019	15:40:12	702	17	5	
043	C	07/09/2019	15:41:18	703	17	5	
043	D	07/09/2019	15:42:31	704	17	5	Download, FC 704.
044	A	07/09/2019	16:55:24	705	17	5	
044	B	07/09/2019	16:56:33	706	17	5	
044	C	07/09/2019	16:57:47	707	17	5	
044	D	07/09/2019	16:58:54	708	17	5	Sed camera repairs delays, FC 708.
045	A	07/09/2019	17:54:55	709	17	5	
045	B	07/09/2019	17:56:02	710	17	5	
045	C	07/09/2019	17:57:12	711	17	5	
045	D	07/09/2019	17:58:25	712	17	5	
034	A	07/09/2019	18:45:44	713	17	5	
034	B	07/09/2019	18:46:57	714	17	5	
034	C	07/09/2019	18:48:03	715	17	5	
034	D	07/09/2019	18:49:12	716	17	5	
033	A	07/09/2019	19:28:43	717	17	5	
033	B	07/09/2019	19:29:57	718	17	5	
033	C	07/09/2019	19:31:04	719	17	5	
033	D	07/09/2019	19:32:16	720	17	5	Deck shot, FC 721.
235	A	07/09/2019	19:45:15	722	17	5	
235	B	07/09/2019	19:46:39	723	17	5	
235	C	07/09/2019	19:47:51	724	17	5	
235	D	07/09/2019	19:49:06	725	17	5	
032	A	07/09/2019	20:02:19	726	17	5	
032	B	07/09/2019	20:03:27	727	17	5	
032	C	07/09/2019	20:04:43	728	17	5	
032	D	07/09/2019	20:05:56	729	17	5	

031	A	07/09/2019	20:49:00	731	17	5	
031	B	07/09/2019	20:50:11	732	17	5	
031	C	07/09/2019	20:51:24	733	17	5	
031	D	07/09/2019	20:52:33	734	17	5	Deck shot, FC 735.
021	A	07/09/2019	21:18:36	736	17	5	
021	B	07/09/2019	21:19:52	737	17	5	
021	C	07/09/2019	21:21:03	738	17	5	
021	D	07/09/2019	21:22:16	739	17	5	
022	A	07/09/2019	22:19:13	740	17	5	
022	B	07/09/2019	22:20:45	741	17	5	
022	C	07/09/2019	22:21:55	742	17	5	
022	D	07/09/2019	22:23:10	743	17	5	Deck shot, FC 744.
231	A	07/09/2019	22:34:47	745	17	5	
231	B	07/09/2019	22:35:57	746	17	5	
231	C	07/09/2019	22:37:07	747	17	5	
231	D	07/09/2019	22:38:14	748	17	5	
023	A	07/09/2019	22:49:38	749	17	5	Bad PV (cloudy), stn 023.
023	B	07/09/2019	22:50:44	750	17	5	
023	C	07/09/2019	22:52:00	751	17	5	
023	D	07/09/2019	22:53:17	752	17	5	Download, FC 752.
024	A	07/09/2019	23:30:18	753	17	5	
024	B	07/09/2019	23:31:23	754	17	5	
024	C	07/09/2019	23:32:38	755	17	5	
024	D	07/09/2019	23:33:50	756	17	5	
023	E	07/09/2019	23:53:54	757	17	5	
023	F	07/09/2019	23:55:12	758	17	5	
023	G	07/09/2019	23:56:29	759	17	5	
023	H	07/09/2019	23:57:57	760	17	5	
082	A	07/10/2019	0:54:08	761	17	5	
082	B	07/10/2019	0:55:19	762	17	5	
082	C	07/10/2019	1:01:01	763	17	5	
082	D	07/10/2019	1:02:16	764	17	5	
071	A	07/10/2019	1:37:23	765	17	5	Grab ops 1:06 at stn 082, 1:24 at stn 071.
071	B	07/10/2019	1:38:37	766	17	5	
071	C	07/10/2019	1:39:45	767	17	5	
071	D	07/10/2019	1:40:59	768	17	5	Download, FC 768.
239	A	07/10/2019	3:05:07	770	17	5	Clean inside of lens port on PV head to remove shadow in images.
239	B	07/10/2019	3:06:11	771	17	5	
239	C	07/10/2019	3:07:16	772	17	5	
239	D	07/10/2019	3:08:29	773	17	5	Deck shot, FC 773. Cloudy PV, stn 239.
046	A	07/10/2019	3:25:52	774	17	5	
046	B	07/10/2019	3:27:16	775	17	5	Fish
046	C	07/10/2019	3:28:38	776	17	5	
046	D	07/10/2019	3:29:58	777	17	5	Shot in WC, FC 778.
047	A	07/10/2019	4:06:10	779	17	5	Grab ops 3:33 at stn 046, 3:58 at stn 047.
047	B	07/10/2019	4:07:18	780	17	5	

047	C	07/10/2019	4:08:27	781	17	5	
047	D	07/10/2019	4:09:30	782	17	5	Deck shot, FC 783.
048	A	07/10/2019	4:24:17	784	17	5	
048	B	07/10/2019	4:25:38	785	17	5	
048	C	07/10/2019	4:26:44	786	17	5	
048	D	07/10/2019	4:27:55	787	17	5	
238	A	07/10/2019	4:55:32	789	17	5	Grab ops at stn 048.
238	B	07/10/2019	4:56:40	790	17	5	
238	C	07/10/2019	4:57:45	791	17	5	
238	D	07/10/2019	4:59:04	792	17	5	Download, deck shot, FC 792.
049	A	07/10/2019	5:38:36	793	17	5	
049	B	07/10/2019	5:39:50	794	17	5	
049	C	07/10/2019	5:41:05	795	17	5	
049	D	07/10/2019	5:43:10	796	17	5	5:46 grab obs at stn 049.
239	E	07/10/2019	6:23:00	797	17	5	
239	F	07/10/2019	6:25:02	798	17	5	
239	G	07/10/2019	6:26:44	799	17	5	
239	H	07/10/2019	6:32:33	800	17	5	
039	A	07/10/2019	7:05:09	801	17	5	
039	B	07/10/2019	7:06:23	802	17	5	
039	C	07/10/2019	7:07:40	803	17	5	
039	D	07/10/2019	7:08:53	804	17	5	
038	A	07/10/2019	7:42:11	805	17	5	Grab ops 7:14 at stn 039, 7:31 at stn 038.
038	B	07/10/2019	7:43:27	806	17	5	
038	C	07/10/2019	7:44:41	807	17	5	
038	D	07/10/2019	7:46:06	808	17	5	Transit to avoid Discovery.
236	A	07/10/2019	8:23:19	809	17	5	Cloudy PV, stn 236.
236	B	07/10/2019	8:25:05	810	17	5	
236	C	07/10/2019	8:26:37	811	17	5	
236	D	07/10/2019	8:28:02	812	17	5	Download, FC 812.
236	E	07/10/2019	8:59:05	813	17	5	
236	F	07/10/2019	9:00:49	814	17	5	
236	G	07/10/2019	9:02:21	815	17	5	
236	H	07/10/2019	9:03:51	816	17	5	
035	A	07/10/2019	9:25:37	817	17	5	Cloudy PV, stn 035.
035	B	07/10/2019	9:26:53	818	17	5	
035	C	07/10/2019	9:28:36	819	17	5	
035	D	07/10/2019	9:30:06	820	17	5	
036	A	07/10/2019	10:13:48	821	17	5	Grab ops 9:34 at stn 035, 10:03 at stn 036.
036	B	07/10/2019	10:15:09	822	17	5	
036	C	07/10/2019	10:16:21	823	17	5	
036	D	07/10/2019	10:17:41	824	17	5	Transit to avoid Discovery.
012	A	07/10/2019	10:53:35	825	17	5	
012	B	07/10/2019	10:54:57	826	17	5	
012	C	07/10/2019	10:56:16	827	17	5	
012	D	07/10/2019	10:57:29	828	17	5	Download, FC 828.

227	A	07/10/2019	11:29:57	829	17	5	11:04 grab ops at stn 012.
227	B	07/10/2019	11:31:32	830	17	5	
227	C	07/10/2019	11:33:14	831	17	5	
227	D	07/10/2019	11:34:53	832	17	5	
013	A	07/10/2019	11:58:49	833	17	5	
013	B	07/10/2019	12:00:34	834	17	5	
013	C	07/10/2019	12:02:08	835	17	5	
013	D	07/10/2019	12:03:29	836	17	5	Grab ops stn 013, strobe battery change + Download, FC 837.
014	A	07/10/2019	13:10:15	838	17	5	
014	B	07/10/2019	13:11:28	839	17	5	
014	C	07/10/2019	13:12:57	840	17	5	
014	D	07/10/2019	13:14:22	841	17	5	
228	A	07/10/2019	13:32:27	842	17	5	
228	B	07/10/2019	13:33:53	843	17	5	
228	C	07/10/2019	13:35:16	844	17	5	
228	D	07/10/2019	13:36:40	845	17	5	Deck shot, FC 846.
015	A	07/10/2019	14:02:35	847	17	5	
015	B	07/10/2019	14:03:59	848	17	5	
015	C	07/10/2019	14:05:27	849	17	5	
015	D	07/10/2019	14:06:48	850	17	5	Deck shot FC 851.
016	A	07/10/2019	15:01:37	852	17	5	
016	B	07/10/2019	15:03:01	853	17	5	
016	C	07/10/2019	15:04:42	854	17	5	
016	D	07/10/2019	15:06:03	855	17	5	
229	A	07/10/2019	15:23:55	857	17	5	
229	B	07/10/2019	15:25:04	858	17	5	
229	C	07/10/2019	15:26:18	859	17	5	
229	D	07/10/2019	15:27:42	860	17	5	FC 860, Delay for Discovery.
017	A	07/10/2019	16:19:35	861	17	5	
017	B	07/10/2019	16:20:58	862	17	5	
017	C	07/10/2019	16:22:22	863	17	5	
017	D	07/10/2019	16:23:48	864	17	5	Download, FC 864. Delay for sed grab.
018	A	07/10/2019	17:39:09	865	17	5	
018	B	07/10/2019	17:40:31	866	17	5	
018	C	07/10/2019	17:41:54	867	17	5	
018	D	07/10/2019	17:43:06	868	17	5	
230	A	07/10/2019	17:57:17	869	17	5	
230	B	07/10/2019	17:58:34	870	17	5	
230	C	07/10/2019	17:59:48	871	17	5	
230	D	07/10/2019	18:01:07	872	17	5	
019	A	07/10/2019	18:15:54	875	17	5	
019	B	07/10/2019	18:17:20	876	17	5	
019	C	07/10/2019	18:18:34	877	17	5	
019	D	07/10/2019	18:20:02	878	17	5	Deck shot, FC 879.
020	A	07/10/2019	18:53:35	880	17	5	
020	B	07/10/2019	18:55:12	881	17	5	

020	C	07/10/2019	18:56:21	882	17	5	
020	D	07/10/2019	18:57:44	883	17	5	Deck shot, FC 884.
011	A	07/10/2019	19:14:22	885	17	5	
011	B	07/10/2019	19:15:33	886	17	5	
011	C	07/10/2019	19:16:47	887	17	5	
011	D	07/10/2019	19:18:00	888	17	5	Download, FC 888.
010	A	07/10/2019	19:58:53	889	17	5	
010	B	07/10/2019	20:00:13	890	17	5	
010	C	07/10/2019	20:01:32	891	17	5	
010	D	07/10/2019	20:02:50	892	17	5	
226	A	07/10/2019	20:15:08	893	17	5	
226	B	07/10/2019	20:16:30	894	17	5	
226	C	07/10/2019	20:17:58	895	17	5	
226	D	07/10/2019	20:19:20	896	17	5	FC 897, Transit to avoid Discovery.
505	A	07/10/2019	21:05:57	898	17	5	
505	B	07/10/2019	21:07:18	899	17	5	
505	C	07/10/2019	21:08:40	900	17	5	
505	D	07/10/2019	21:09:58	901	17	5	
504	A	07/10/2019	21:26:16	902	17	5	
504	B	07/10/2019	21:27:32	903	17	5	
504	C	07/10/2019	21:28:54	904	17	5	
504	D	07/10/2019	21:30:16	905	17	5	Deck shot, FC 906.
503	A	07/10/2019	21:47:22	907	17	5	
503	B	07/10/2019	21:48:43	908	17	5	
503	C	07/10/2019	21:50:06	909	17	5	
503	D	07/10/2019	21:51:23	910	17	5	Deck shot, FC 911.
502	A	07/10/2019	22:07:54	912	17	5	
502	B	07/10/2019	22:09:17	913	17	5	
502	C	07/10/2019	22:10:30	914	17	5	
502	D	07/10/2019	22:11:58	915	17	5	
501	A	07/10/2019	22:28:07	916	17	5	
501	B	07/10/2019	22:29:27	917	17	5	
501	C	07/10/2019	22:30:45	918	17	5	
501	D	07/10/2019	22:31:56	919	17	5	
501	E	07/10/2019	22:33:23	920	17	5	Download, FC 921. Transit back to lease block.
035	E	07/10/2019	23:24:31	922	17	5	
035	F	07/10/2019	23:26:00	923	17	5	
035	G	07/10/2019	23:27:27	924	17	5	
035	H	07/10/2019	23:28:50	925	17	5	
237	A	07/10/2019	23:48:30	928	17	5	
237	B	07/10/2019	23:49:53	929	17	5	
237	C	07/10/2019	23:51:12	930	17	5	
237	D	07/10/2019	23:52:30	931	17	5	
037	A	07/11/2019	0:08:12	932	17	5	
037	B	07/11/2019	0:10:03	933	17	5	
037	C	07/11/2019	0:11:16	934	17	5	

037	D	07/11/2019	0:12:32	935	17	5	
025	A	07/11/2019	0:57:02	936	17	5	Grab ops 00:16 at stn 037, 00:40 at stn 025.
025	B	07/11/2019	0:58:33	937	17	5	
025	C	07/11/2019	1:00:01	938	17	5	
025	D	07/11/2019	1:01:33	939	17	5	Cobbles and Sea whips, stn 025?
221	A	07/11/2019	1:19:11	940	17	5	
221	B	07/11/2019	1:20:27	941	17	5	
221	C	07/11/2019	1:21:52	942	17	5	
221	D	07/11/2019	1:23:37	943	17	5	Download, FC 943.
233	A	07/11/2019	1:53:48	944	17	5	
233	B	07/11/2019	1:55:09	945	17	5	
233	C	07/11/2019	1:56:41	946	17	5	
233	D	07/11/2019	1:58:07	947	17	5	
026	A	07/11/2019	2:13:00	948	17	5	
026	B	07/11/2019	2:14:27	949	17	5	
026	C	07/11/2019	2:15:49	950	17	5	
026	D	07/11/2019	2:17:07	951	17	5	Deck shot, FC 952.
027	A	07/11/2019	2:52:29	953	17	5	Grab ops 2:20 at stn 026, 2:43 at stn 027.
027	B	07/11/2019	2:53:48	954	17	5	
027	C	07/11/2019	2:55:14	955	17	5	
027	D	07/11/2019	2:56:42	956	17	5	Deck shot, FC 957.
234	A	07/11/2019	3:14:21	958	17	5	
234	B	07/11/2019	3:15:41	959	17	5	
234	C	07/11/2019	3:17:01	960	17	5	
234	D	07/11/2019	3:18:34	961	17	5	
028	A	07/11/2019	3:31:44	962	17	5	
028	B	07/11/2019	3:33:06	963	17	5	
028	C	07/11/2019	3:34:27	964	17	5	
028	D	07/11/2019	3:35:50	965	17	5	No PV. Download, FC 965.
029	A	07/11/2019	4:21:12	966	17	5	Grab ops 3:38 at stn 028, 4:08 at stn 029.
029	B	07/11/2019	4:22:28	967	17	5	
029	C	07/11/2019	4:23:52	968	17	5	
029	D	07/11/2019	4:25:05	969	17	5	Deck shot, FC 970.
030	A	07/11/2019	4:42:27	971	17	5	
030	B	07/11/2019	4:43:51	972	17	5	
030	C	07/11/2019	4:45:12	973	17	5	
030	D	07/11/2019	4:46:28	974	17	5	
009	A	07/11/2019	5:30:11	976	17	5	Grab ops 4:50 at stn 030, 5:20 at stn 009.
009	B	07/11/2019	5:31:33	977	17	5	
009	C	07/11/2019	5:33:11	978	17	5	
009	D	07/11/2019	5:34:41	979	17	5	Deck shot, FC 980.
008	A	07/11/2019	5:54:52	980	17	5	
008	B	07/11/2019	5:56:24	981	17	5	
008	C	07/11/2019	5:57:39	982	17	5	
008	D	07/11/2019	5:59:05	983	17	5	Deck shot, FC 984.
225	A	07/11/2019	6:27:11	984	17	5	6:03 grab obs at stn 008.

225	B	07/11/2019	6:28:36	985	17	5	
225	C	07/11/2019	6:30:02	986	17	5	
225	D	07/11/2019	6:31:16	987	17	5	Download, deck shot, FC 988.
007	A	07/11/2019	7:09:26	989	17	5	
007	B	07/11/2019	7:10:49	990	17	5	
007	C	07/11/2019	7:12:17	991	17	5	
007	D	07/11/2019	7:13:35	992	17	5	Deck shot, FC 993.
006	A	07/11/2019	7:46:04	994	17	5	Grab ops 7:20 at stn 007, 7:36 at stn 006.
006	B	07/11/2019	7:52:49	995	17	5	
006	C	07/11/2019	7:54:14	996	17	5	
006	D	07/11/2019	7:55:40	997	17	5	
224	A	07/11/2019	8:15:59	998	17	5	
224	B	07/11/2019	8:17:16	999	17	5	
224	C	07/11/2019	8:18:39	0	17	5	Fram count reset, FC 001.
224	D	07/11/2019	8:19:58	1	17	5	
005	A	07/11/2019	8:38:04	2	17	5	
005	B	07/11/2019	8:39:26	3	17	5	
005	C	07/11/2019	8:40:51	4	17	5	
005	D	07/11/2019	8:42:08	5	17	5	
004	A	07/11/2019	9:56:59	6	17	5	Grab ops 8:45 at stn 005, 9:45 at stn 004.
004	B	07/11/2019	9:58:17	7	17	5	
004	C	07/11/2019	9:59:37	8	17	5	
004	D	07/11/2019	10:00:56	9	17	5	
002	A	07/11/2019	10:55:16	10	17	5	
002	B	07/11/2019	10:56:40	11	17	5	
002	C	07/11/2019	10:58:03	12	17	5	
002	D	07/11/2019	10:59:19	13	17	5	Download, FC 013.
223	A	07/11/2019	11:38:05	14	17	5	11:03 grab ops at stn 002.
223	B	07/11/2019	11:39:51	15	17	5	
223	C	07/11/2019	11:41:21	16	17	5	
223	D	07/11/2019	11:42:48	17	17	5	FC 017, strobe battery change.
003	A	07/11/2019	12:33:40	18	17	5	
003	B	07/11/2019	12:34:48	19	17	5	
003	C	07/11/2019	12:36:16	20	17	5	
003	D	07/11/2019	12:37:42	21	17	5	Delays for sed grab, FC 022. Backup of data.
001	A	07/11/2019	13:57:43	23	17	5	
001	B	07/11/2019	13:59:00	24	17	5	
001	C	07/11/2019	14:00:11	25	17	5	
001	D	07/11/2019	14:01:17	26	17	5	Long transit, FC 026.
232	A	07/11/2019	14:52:57	27	17	5	
232	B	07/11/2019	14:54:20	28	17	5	
232	C	07/11/2019	14:55:35	29	17	5	
232	D	07/11/2019	14:56:55		17	5	No SPI.
414	A	07/11/2019	15:19:00	30	17	5	
414	B	07/11/2019	15:20:13	31	17	5	
414	C	07/11/2019	15:21:34	32	17	5	

414	D	07/11/2019	15:23:01	33	17	5	Download, FC 033.
415	A	07/11/2019	16:08:38	34	17	5	
415	B	07/11/2019	16:09:53	35	17	5	
415	C	07/11/2019	16:11:16	36	17	5	
415	D	07/11/2019	16:12:44	37	17	5	
416	A	07/11/2019	16:35:09	38	17	5	
416	B	07/11/2019	16:36:58	39	17	5	
416	C	07/11/2019	16:38:15	40	17	5	
416	D	07/11/2019	16:39:37	41	17	5	Deck shot, FC 043. Sed grab delays.
417	A	07/11/2019	18:11:30	44	17	5	
417	B	07/11/2019	18:12:52	45	17	5	
417	C	07/11/2019	18:14:07	46	17	5	
417	D	07/11/2019	18:15:25	47	17	5	
418	A	07/11/2019	18:36:23	48	17	5	
418	B	07/11/2019	18:38:00	49	17	5	
418	C	07/11/2019	18:39:24	50	17	5	
418	D	07/11/2019	18:40:31	51	17	5	Download, deck shot, FC 052.
419	A	07/11/2019	19:37:03	53	17	5	
419	B	07/11/2019	19:38:17	54	17	5	
419	C	07/11/2019	19:39:37	55	17	5	
419	D	07/11/2019	19:40:51	56	17	5	Deck shots, FC 058.
411	A	07/11/2019	20:09:17	59	17	5	
411	B	07/11/2019	20:10:40	60	17	5	
411	C	07/11/2019	20:12:01	61	17	5	
411	D	07/11/2019	20:13:18	62	17	5	
410	A	07/11/2019	21:28:03	63	17	5	
410	B	07/11/2019	21:29:15	64	17	5	
410	C	07/11/2019	21:30:31	65	17	5	
410	D	07/11/2019	21:31:50	66	17	5	
409	A	07/11/2019	21:52:15	67	17	5	
409	B	07/11/2019	21:53:31	68	17	5	
409	C	07/11/2019	21:54:45	69	17	5	
409	D	07/11/2019	21:56:03	70	17	5	Download, deck shot, FC 071.
408	A	07/11/2019	22:29:52	72	17	5	
408	B	07/11/2019	22:31:05	73	17	5	
408	C	07/11/2019	22:32:16	74	17	5	
408	D	07/11/2019	22:33:27	75	17	5	Deck shot, FC 076.
407	A	07/11/2019	22:52:25	77	17	5	
407	B	07/11/2019	22:53:47	78	17	5	
407	C	07/11/2019	22:55:03	79	17	5	
407	D	07/11/2019	22:56:20	80	17	5	Deck shot, FC 081.
406	A	07/11/2019	23:35:56	82	17	5	
406	B	07/11/2019	23:37:11	83	17	5	
406	C	07/11/2019	23:38:33	84	17	5	
406	D	07/11/2019	23:39:45	85	17	5	Deck shot, FC 086.
405	A	07/12/2019	0:02:46	88	17	5	

405	B	07/12/2019	0:04:07	89	17	5	
405	C	07/12/2019	0:05:37	90	17	5	
405	D	07/12/2019	0:06:51	91	17	5	Deck shot, FC 092.
413	A	07/12/2019	0:53:21	93	17	5	Grab ops 00:10 at stn 405, 00:42 at stn 413.
413	B	07/12/2019	0:55:01	94	17	5	
413	C	07/12/2019	0:56:40	95	17	5	
413	D	07/12/2019	0:58:20	96	17	5	Download, deck shot, FC 097.
412	A	07/12/2019	1:41:33	98	17	5	
412	B	07/12/2019	1:43:27	99	17	5	
412	C	07/12/2019	1:44:48	100	17	5	
412	D	07/12/2019	1:46:20	101	17	5	Deck shot, FC 102.
603	A	07/12/2019	2:34:02	103	17	5	Grab ops 1:50 at stn 412, 2:25 at stn 603.
603	B	07/12/2019	2:35:42	104	17	5	
603	C	07/12/2019	2:41:05	105	17	5	
603	D	07/12/2019	2:42:35	106	17	5	Weather delays 3:10-10:30, 13:50 ops resumed; sed grabs only.
401	A	07/12/2019	10:21:39	108	17	5	
401	B	07/12/2019	10:22:56	109	17	5	
404	A	07/12/2019	16:12:51	117	17	5	Grab ops at stn 401.
404	B	07/12/2019	16:14:03	118	17	5	
404	C	07/12/2019	16:15:20	119	17	5	
404	D	07/12/2019	16:16:34	120	17	5	
602	A	07/12/2019	16:35:56	121	17	5	
602	B	07/12/2019	16:37:06	122	17	5	
602	C	07/12/2019	16:38:24	123	17	5	
602	D	07/12/2019	16:44:03	124	17	5	Download, FC 125.
403	A	07/12/2019	17:35:46	126	17	5	
403	B	07/12/2019	17:36:48	127	17	5	
403	C	07/12/2019	17:37:59	128	17	5	
403	D	07/12/2019	17:39:06	129	17	5	
402	A	07/12/2019	17:59:24	132	17	5	
402	B	07/12/2019	18:00:45	133	17	5	
402	C	07/12/2019	18:01:55	134	17	5	
402	D	07/12/2019	18:03:07	135	17	5	
601	A	07/12/2019	18:24:57	138	17	5	
601	B	07/12/2019	18:26:06	139	17	5	
601	C	07/12/2019	18:27:16	140	17	5	
601	D	07/12/2019	18:28:31	141	17	5	FC 142.
401	C	07/12/2019	18:44:48	143	17	5	
401	D	07/12/2019	18:46:06	144	17	5	FC 146.
073W2	A	07/12/2019	19:19:39	147	17	5	
073W2	B	07/12/2019	19:21:08	148	17	5	
073W2	C	07/12/2019	19:22:22	149	17	5	
073W2	D	07/12/2019	19:23:47	150	17	5	
073W1	A	07/12/2019	19:38:07	153	17	5	
073W1	B	07/12/2019	19:39:22	154	17	5	
073W1	C	07/12/2019	19:40:40	155	17	5	

073W1	D	07/12/2019	19:42:00	156	17	5	No SPI. Left against freeboard.
073E1	A	07/12/2019	19:52:06	157	17	5	
073E1	B	07/12/2019	19:53:14	158	17	5	
073E1	C	07/12/2019	19:54:30	159	17	5	
073E1	D	07/12/2019	19:55:44	160	17	5	
073E1	E	07/12/2019	20:06:15	161	17	5	Left against freeboard.
073E2	A	07/12/2019	20:15:09	162	17	5	
073E2	B	07/12/2019	20:16:26	163	17	5	
073E2	C	07/12/2019	20:17:40	164	17	5	
073E2	D	07/12/2019	20:18:47	165	17	5	Download, FC 166.
420	A	07/12/2019	22:00:34	168	17	5	
420	B	07/12/2019	22:01:47	169	17	5	
420	C	07/12/2019	22:02:57	170	17	5	
420	D	07/12/2019	22:04:28	171	17	5	
456	A	07/12/2019	22:21:46	173	17	5	
456	B	07/12/2019	22:22:54	174	17	5	
456	C	07/12/2019	22:24:11	175	17	5	
456	D	07/12/2019	22:25:24	176	17	5	
457	A	07/12/2019	22:42:47	178	17	5	
457	B	07/12/2019	22:44:11	179	17	5	
457	C	07/12/2019	22:45:26	180	17	5	
457	D	07/12/2019	22:46:40	181	17	5	
458	A	07/12/2019	23:05:20	182	17	5	
458	B	07/12/2019	23:06:32	183	17	5	
458	C	07/12/2019	23:07:44	184	17	5	
458	D	07/12/2019	23:10:59	185	17	5	
459	A	07/12/2019	23:28:59	187	17	5	
459	B	07/12/2019	23:30:07	188	17	5	
459	C	07/12/2019	23:31:14	189	17	5	
459	D	07/12/2019	23:32:30	190	17	5	Download, FC 190.
460	A	07/13/2019	2:13:56	191	17	5	Grab ops 00:16-1:50 at stns 420, 456-459.
460	B	07/13/2019	2:15:16	193	17	5	
460	C	07/13/2019	2:16:45	194	17	5	
460	D	07/13/2019	2:18:16	195	17	5	WC shot, FC 195.
461	A	07/13/2019	2:37:06	196	17	5	
461	B	07/13/2019	2:38:25	197	17	5	
461	C	07/13/2019	2:39:38	198	17	5	
461	D	07/13/2019	2:40:51	199	17	5	
462	A	07/13/2019	3:02:06	200	17	5	
462	B	07/13/2019	3:03:33	201	17	5	
462	C	07/13/2019	3:04:55	202	17	5	
462	D	07/13/2019	3:09:37	203	17	5	Deck shot, FC 204.
463	A	07/13/2019	3:27:19	205	17	5	
463	B	07/13/2019	3:28:48	206	17	5	Cloudy PV
463	C	07/13/2019	3:30:16	207	17	5	Cloudy PV
463	D	07/13/2019	3:31:41	208	17	5	Deck shot, 209.

464	A	07/13/2019	3:51:06	210	17	5	
464	B	07/13/2019	3:52:43	211	17	5	
464	C	07/13/2019	3:54:19	212	17	5	
464	D	07/13/2019	3:56:06	213	17	5	Download, FC 213.
463	E	07/13/2019	5:58:31	214	17	5	Grab ops 4:55-5:41 at stns 460-463.
463	F	07/13/2019	5:59:50	215	17	5	
463	G	07/13/2019	6:01:10	216	17	5	
463	H	07/13/2019	6:02:38	217	17	5	
433	A	07/13/2019	6:45:24	218	17	5	6:15 grab ops at stn 464.
433	B	07/13/2019	6:46:40	219	17	5	
433	C	07/13/2019	6:48:06	220	17	5	
433	D	07/13/2019	6:49:33	221	17	5	Deck shot, FC 222.
432	A	07/13/2019	7:10:12	223	17	5	
432	B	07/13/2019	7:11:33	224	17	5	Cloudy PV
432	C	07/13/2019	7:13:11	225	17	5	
432	D	07/13/2019	7:15:05	226	17	5	Deck shot, FC 227.
431	A	07/13/2019	7:42:57	228	17	5	
431	B	07/13/2019	7:44:27	229	17	5	Cloudy PV
431	C	07/13/2019	7:45:57	231	17	5	
431	D	07/13/2019	7:47:37	232	17	5	WC shot, FC 232. Fishing boat near location.
430	A	07/13/2019	8:22:41	233	17	5	
430	B	07/13/2019	8:24:13	234	17	5	
430	C	07/13/2019	8:25:54	236	17	5	
430	D	07/13/2019	8:30:05	237	17	5	Download, deck + WC shots, FC 239.
434	A	07/13/2019	10:07:30	240	17	5	
434	B	07/13/2019	10:09:32	241	17	5	
434	C	07/13/2019	10:10:57	242	17	5	
434	D	07/13/2019	10:12:20	243	17	5	
611	A	07/13/2019	10:49:42	245	17	5	10:16 grab ops at stn 434.
611	B	07/13/2019	10:51:21	246	17	5	
611	C	07/13/2019	10:53:03	247	17	5	
611	D	07/13/2019	10:54:25	248	17	5	
435	A	07/13/2019	11:14:35	249	17	5	10:58 grab ops at stn 611.
435	B	07/13/2019	11:20:20	250	17	5	
435	C	07/13/2019	11:21:37	251	17	5	
435	D	07/13/2019	11:23:10	252	17	5	
436	A	07/13/2019	11:40:25	253	17	5	
436	B	07/13/2019	11:41:54	254	17	5	
436	C	07/13/2019	11:43:28	255	17	5	
436	D	07/13/2019	11:44:58	256	17	5	
437	A	07/13/2019	12:23:47	257	17	5	
437	B	07/13/2019	12:24:58	258	17	5	
437	C	07/13/2019	12:26:09	259	17	5	
437	D	07/13/2019	12:27:25	260	17	5	
438	A	07/13/2019	12:38:28	262	17	5	
438	B	07/13/2019	12:39:42	263	17	5	

438	C	07/13/2019	12:40:54	264	17	5	
438	D	07/13/2019	12:42:06	265	17	5	
439	A	07/13/2019	12:51:31	266	17	5	
439	B	07/13/2019	12:52:40	267	17	5	
439	C	07/13/2019	12:54:01	268	17	5	
439	D	07/13/2019	12:55:07	269	17	5	Download, FC 270.
440	A	07/13/2019	13:16:11	271	17	5	
440	B	07/13/2019	13:17:24	272	17	5	
440	C	07/13/2019	13:18:40	273	17	5	
440	D	07/13/2019	13:19:50	274	17	5	
610	A	07/13/2019	13:40:35	275	17	5	
610	B	07/13/2019	13:41:48	276	17	5	
610	C	07/13/2019	13:42:55	277	17	5	
610	D	07/13/2019	13:44:05	278	17	5	
441	A	07/13/2019	14:47:10	279	17	5	
441	B	07/13/2019	14:48:28	280	17	5	
441	C	07/13/2019	14:49:49	281	17	5	
441	D	07/13/2019	14:51:01	282	17	5	
442	A	07/13/2019	15:20:35	285	17	5	
442	B	07/13/2019	15:21:43	286	17	5	
442	C	07/13/2019	15:23:01	287	17	5	
442	D	07/13/2019	15:24:12	288	17	5	
443	A	07/13/2019	16:07:19	290	17	5	
443	B	07/13/2019	16:08:31	291	17	5	
443	C	07/13/2019	16:09:45	292	17	5	
443	D	07/13/2019	16:10:58	293	17	5	Download, FC 294.
444	A	07/13/2019	16:29:41	295	17	5	
444	B	07/13/2019	16:30:49	296	17	5	
444	C	07/13/2019	16:32:09	297	17	5	Out of watch.
444	D	07/13/2019	16:36:40	298	17	5	
444	E	07/13/2019	16:37:53	299	17	5	
445	A	07/13/2019	16:59:34	301	17	5	
445	B	07/13/2019	17:00:41	302	17	5	
445	C	07/13/2019	17:01:52	303	17	5	Cloudy PV
445	D	07/13/2019	17:03:07	304	17	5	Cloudy PV
446	A	07/13/2019	17:21:13	307	17	5	
446	B	07/13/2019	17:22:14	308	17	5	
446	C	07/13/2019	17:23:35	309	17	5	
446	D	07/13/2019	17:24:53	310	17	5	
447	A	07/13/2019	17:37:07	312	17	5	
447	B	07/13/2019	17:38:25	313	17	5	
447	C	07/13/2019	17:39:39	314	17	5	
447	D	07/13/2019	17:40:50	315	17	5	
448	A	07/13/2019	17:59:52	316	17	5	
448	B	07/13/2019	18:01:05	317	17	5	
448	C	07/13/2019	18:02:07	318	17	5	

448	D	07/13/2019	18:03:24	319	17	5	
449	A	07/13/2019	18:14:43	321	17	5	
449	B	07/13/2019	18:15:57	322	17	5	
449	C	07/13/2019	18:17:06	323	17	5	
449	D	07/13/2019	18:18:17	324	17	5	Download, FC 324.
615	A	07/13/2019	18:59:10	325	17	5	
615	B	07/13/2019	19:03:31	326	17	5	
615	C	07/13/2019	19:04:49	327	17	5	
615	D	07/13/2019	19:06:00	328	17	5	Too shallow for 450 sampling, FC 330.
614	A	07/13/2019	19:44:14	331	17	5	
614	B	07/13/2019	19:45:26	332	17	5	
614	C	07/13/2019	19:46:40	333	17	5	
614	D	07/13/2019	19:47:53	334	17	5	
451	A	07/13/2019	20:16:52	337	17	5	
451	B	07/13/2019	20:32:32	338	17	5	
451	C	07/13/2019	20:33:54	339	17	5	
451	D	07/13/2019	20:35:12	340	17	5	Download, backup, FC 341. Strobe battery change.
604	A	07/14/2019	0:09:46	342	17	5	
604	B	07/14/2019	0:11:00	343	17	5	
604	C	07/14/2019	0:12:23	344	17	5	
604	D	07/14/2019	0:13:56	345	17	5	
429	A	07/14/2019	0:26:55	346	17	5	
429	B	07/14/2019	0:28:03	347	17	5	
429	C	07/14/2019	0:29:11	348	17	5	
429	D	07/14/2019	0:30:38	349	17	5	Grab obs 00:34 at stn 429, 00:53 at stn 605.
605	A	07/14/2019	1:02:49	350	17	5	
605	B	07/14/2019	1:04:23	351	17	5	
605	C	07/14/2019	1:06:06	352	17	5	
605	D	07/14/2019	1:07:22	353	17	5	
428	A	07/14/2019	1:19:22	354	17	5	
428	B	07/14/2019	1:20:34	355	17	5	
428	C	07/14/2019	1:22:00	356	17	5	
428	D	07/14/2019	1:23:38	357	17	5	Deck shot, FC 358.
427	A	07/14/2019	2:04:59	359	17	5	Grab ops 1:26 at stn 428, 1:50 at stn 427.
427	B	07/14/2019	2:06:21	360	17	5	
427	C	07/14/2019	2:07:53	361	17	5	
427	D	07/14/2019	2:09:36	362	17	5	Download, FC 362.
606	A	07/14/2019	2:39:09	363	17	5	
606	B	07/14/2019	2:40:47	364	17	5	
606	C	07/14/2019	2:42:09	365	17	5	
606	D	07/14/2019	2:43:30	366	17	5	
426	A	07/14/2019	3:15:09	367	17	5	Grab ops 2:46 at stn 606, 3:05 at stn 426.
426	B	07/14/2019	3:16:20	368	17	5	
426	C	07/14/2019	3:17:22	369	17	5	
426	D	07/14/2019	3:18:46	370	17	5	Deck shot, FC 371.
607	A	07/14/2019	3:35:30	372	17	5	

607	B	07/14/2019	3:36:39	373	17	5	
607	C	07/14/2019	3:37:45	374	17	5	
607	D	07/14/2019	3:38:52	375	17	5	Deck shot, FC 376.
608	A	07/14/2019	4:33:42	377	17	5	Grab ops 3:42 at stn 607, 4:22 at stn 608.
608	B	07/14/2019	4:34:57	378	17	5	
608	C	07/14/2019	4:36:20	379	17	5	Cloudy PV
608	D	07/14/2019	4:37:51	380	17	5	Cloudy PV
425	A	07/14/2019	4:56:07	381	17	5	
425	B	07/14/2019	4:57:27	382	17	5	
425	C	07/14/2019	4:58:46	383	17	5	
425	D	07/14/2019	4:59:56	384	17	5	Download, FC 384.
607	E	07/14/2019	5:35:57	385	17	5	5:03 grab obs at stn 425.
607	F	07/14/2019	5:37:35	386	17	5	
607	G	07/14/2019	5:39:30	387	17	5	Cloudy PV
607	H	07/14/2019	5:41:18	388	17	5	Cloudy PV
608	E	07/14/2019	5:56:24	389	17	5	
608	F	07/14/2019	5:58:07	390	17	5	Deck shot, FC 391.
609	A	07/14/2019	6:18:40	392	17	5	
609	B	07/14/2019	6:20:27	393	17	5	
609	C	07/14/2019	6:22:05	394	17	5	
609	D	07/14/2019	6:23:45	395	17	5	
424	A	07/14/2019	7:00:49	396	17	5	Grab obs 6:27 at stn 609, 6:45 at stn 424.
424	B	07/14/2019	7:02:18	397	17	5	
424	C	07/14/2019	7:03:41	398	17	5	
424	D	07/14/2019	7:04:49	399	17	5	
423	A	07/14/2019	7:25:39	400	17	5	
423	B	07/14/2019	7:27:17	401	17	5	
423	C	07/14/2019	7:28:45	402	17	5	
423	D	07/14/2019	7:30:19	403	17	5	
422	A	07/14/2019	8:14:07	404	17	5	Grab obs 7:35 at stn 423, 8:05 at stn 422.
422	B	07/14/2019	8:15:45	405	17	5	
422	C	07/14/2019	8:17:07	406	17	5	
422	D	07/14/2019	8:18:40	407	17	5	Deck shot, FC 408.
421	A	07/14/2019	8:48:23	409	17	5	
421	B	07/14/2019	8:50:02	410	17	5	
421	C	07/14/2019	8:51:38	411	17	5	
421	D	07/14/2019	8:53:08	412	17	5	Download, FC 412.
421	E	07/14/2019	9:44:38	415	17	5	8:57 grab obs at stn 421.
421	F	07/14/2019	9:45:19	416	17	5	Download, deck shots, FC 416. 10:00 begin transit to New Bedford.
450	A	07/25/2019	13:32:58	6	17	5	
450	B	07/25/2019	13:34:13	7	17	5	
450	C	07/25/2019	13:35:28	8	17	5	
450	D	07/25/2019	13:36:45	9	17	5	No SPI, bad PV. Download, FC 009, change stops.
450	E	07/25/2019	14:00:28	10	15	5	
450	F	07/25/2019	14:01:44	11	15	5	
450	G	07/25/2019	14:03:07	12	15	5	

450	H	07/25/2019	14:04:28	13	15	5	
452	A	07/25/2019	14:23:47	14	15	5	
452	B	07/25/2019	14:25:00	15	15	5	
452	C	07/25/2019	14:26:27	16	15	5	
452	D	07/25/2019	14:27:53	17	15	5	
613	A	07/25/2019	14:37:49	18	15	5	Turbid PV, stn 613.
613	B	07/25/2019	14:39:04	19	15	5	
613	C	07/25/2019	14:40:18	20	15	5	
613	D	07/25/2019	14:41:33	21	15	5	
453	A	07/25/2019	14:52:15	22	15	5	Turbid PV, stn 453.
453	B	07/25/2019	14:53:45	23	15	5	
453	C	07/25/2019	14:55:16	24	15	5	
453	D	07/25/2019	14:56:40	25	15	5	Download, FC 025. PV f-stop to f16.
612	A	07/25/2019	15:20:31	26	15	5	
612	B	07/25/2019	15:21:47	27	15	5	
612	C	07/25/2019	15:22:55	28	15	5	
612	D	07/25/2019	15:24:10	29	15	5	
454	A	07/25/2019	15:34:34	30	15	5	Turbid PV, stn 454.
454	B	07/25/2019	15:35:51	31	15	5	
454	C	07/25/2019	15:37:03	32	15	5	
454	D	07/25/2019	15:38:23	33	15	5	
455	A	07/25/2019	15:49:52	34	15	5	Turbid PV, stn 455.
455	B	07/25/2019	15:50:55	35	15	5	
455	C	07/25/2019	15:52:02	36	15	5	
455	D	07/25/2019	15:53:00	37	15	5	Download, FC 037.

ATTACHMENT C

SEDIMENT PROFILE IMAGE ANALYSIS RESULTS

Notes:

IND=Indeterminate

Grain Size: “/” indicates layer of one phi size range over another.

Successional Stage: “on” indicates one Stage is found on top of another Stage (i.e., 1 on 3); “->” indicates one Stage is progressing to another Stage (i.e., 2 -> 3).

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	001	A	7/11/2019	13:57:50	17	5	14.60	4 to 3	>4	-4	>4 to -4	3.51	3.13	3.74	No	0.61	IND	No	No
RWF	001	B	7/11/2019	13:59:08	17	5	14.60	-4 to -5/4 to 3	>4	-5	>4 to -5	2.21	1.28	2.91	No	1.62	IND	No	No
RWF	001	D	7/11/2019	14:01:25	17	5	14.60	4 to 3	>4	-5	>4 to -5	5.11	4.40	5.76	No	1.35	IND	No	No
RWF	002	A	7/11/2019	10:55:45	17	5	14.60	3 to 2	>4	2	>4 to 2	12.72	12.15	13.35	No	1.20	5.06	No	No
RWF	002	B	7/11/2019	10:57:09	17	5	14.60	3 to 2	>4	2	>4 to 2	10.94	10.72	11.46	No	0.74	5.03	No	No
RWF	002	C	7/11/2019	10:58:32	17	5	14.60	3 to 2/4 to 3	>4	1	>4 to 1	13.34	13.06	13.57	No	0.51	4.23	No	No
RWF	003	A	7/11/2019	12:33:47	17	5	14.60	3 to 2	>4	1	>4 to 1	12.52	12.02	12.81	No	0.79	3.37	No	No
RWF	003	C	7/11/2019	12:36:24	17	5	14.60	3 to 2	>4	0	>4 to 0	11.98	11.62	12.24	No	0.61	3.23	No	No
RWF	003	D	7/11/2019	12:37:50	17	5	14.60	3 to 2	>4	0	>4 to 0	13.95	13.44	14.24	No	0.80	5.20	No	No
RWF	004	A	7/11/2019	9:57:28	17	5	14.60	1 to 0	4	-2	4 to -2	7.57	5.86	9.14	No	3.28	IND	No	No
RWF	004	B	7/11/2019	9:58:47	17	5	14.60	1 to 0	4	-1	4 to -1	6.80	5.36	7.80	No	2.43	IND	No	No
RWF	004	C	7/11/2019	10:00:06	17	5	14.60	1 to 0	4	-2	4 to -2	1.52	1.19	1.73	No	0.54	IND	No	No
RWF	005	A	7/11/2019	8:38:33	17	5	14.60	4 to 3	>4	1	>4 to 1	13.29	12.47	13.83	No	1.36	3.13	No	No
RWF	005	B	7/11/2019	8:39:55	17	5	14.60	4 to 3	>4	1	>4 to 1	14.48	14.05	14.88	No	0.83	5.03	No	No
RWF	005	D	7/11/2019	8:42:38	17	5	14.60	4 to 3	>4	0	>4 to 0	15.41	13.78	15.89	No	2.12	4.75	No	No
RWF	006	A	7/11/2019	7:46:34	17	5	14.60	3 to 2/4 to 3	>4	-1	>4 to -1	12.43	12.06	12.78	No	0.73	5.29	No	No
RWF	006	B	7/11/2019	7:53:17	17	5	14.60	3 to 2/4 to 3	>4	1	>4 to 1	12.19	11.99	12.39	No	0.41	4.62	No	No
RWF	006	C	7/11/2019	7:54:45	17	5	14.60	3 to 2/4 to 3	>4	-1	>4 to -1	13.45	12.61	13.92	No	1.31	4.50	No	No
RWF	007	A	7/11/2019	7:09:55	17	5	14.60	3 to 2	>4	-1	>4 to -1	10.12	9.82	10.45	No	0.63	4.57	No	No
RWF	007	C	7/11/2019	7:12:44	17	5	14.60	3 to 2	>4	-4	>4 to -4	10.46	9.89	10.91	No	1.02	5.08	No	No
RWF	007	D	7/11/2019	7:14:04	17	5	14.60	3 to 2	>4	-2	>4 to -2	9.61	7.86	10.41	No	2.55	IND	No	No
RWF	008	A	7/11/2019	5:55:22	17	5	14.60	3 to 2	>4	0	>4 to 0	9.73	8.60	10.80	No	2.20	5.26	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	008	B	7/11/2019	5:56:54	17	5	14.60	3 to 2	>4	0	>4 to 0	10.00	9.41	10.53	No	1.13	10.00	Yes	No
RWF	008	C	7/11/2019	5:58:09	17	5	14.60	3 to 2	>4	0	>4 to 0	9.79	9.32	10.52	No	1.20	3.78	No	No
RWF	009	A	7/11/2019	5:30:41	17	5	14.60	3 to 2	>4	1	>4 to 1	5.15	4.78	5.45	No	0.67	3.86	No	No
RWF	009	B	7/11/2019	5:32:03	17	5	14.60	3 to 2	>4	-1	>4 to -1	5.15	4.61	5.85	No	1.25	IND	No	No
RWF	009	C	7/11/2019	5:33:41	17	5	14.60	3 to 2	>4	-1	>4 to -1	7.64	7.23	8.02	No	0.79	5.07	No	No
RWF	010	A	7/10/2019	19:58:57	17	5	14.60	3 to 2/4 to 3	>4	1	>4 to 1	13.62	13.11	14.14	No	1.03	6.34	No	No
RWF	010	B	7/10/2019	20:00:19	17	5	14.60	3 to 2/4 to 3	>4	1	>4 to 1	12.93	12.62	13.46	No	0.84	5.11	No	No
RWF	010	C	7/10/2019	20:01:38	17	5	14.60	3 to 2/4 to 3	>4	0	>4 to 0	14.98	14.62	15.28	No	0.66	5.74	No	No
RWF	011	A	7/10/2019	19:14:29	17	5	14.60	4 to 3	>4	2	>4 to 2	16.32	16.07	16.57	No	0.50	4.91	No	No
RWF	011	B	7/10/2019	19:15:39	17	5	14.60	4 to 3	>4	1	>4 to 1	17.11	16.46	17.44	No	0.98	3.42	No	No
RWF	011	D	7/10/2019	19:18:05	17	5	14.60	4 to 3	>4	-1	>4 to -1	17.05	16.62	17.33	No	0.71	4.14	No	No
RWF	012	A	7/10/2019	10:54:04	17	5	14.60	2 to 1	4	-1	4 to -1	5.99	5.14	6.56	No	1.42	4.50	No	No
RWF	012	B	7/10/2019	10:55:24	17	5	14.60	2 to 1/3 to 2	4	1	4 to 1	7.75	7.43	8.57	No	1.15	3.70	No	No
RWF	012	C	7/10/2019	10:56:45	17	5	14.60	2 to 1	4	-1	4 to -1	6.68	6.36	6.96	No	0.59	4.25	No	No
RWF	013	A	7/10/2019	11:59:19	17	5	14.60	4 to 3	>4	2	>4 to 2	16.69	15.68	17.92	No	2.25	3.02	No	No
RWF	013	B	7/10/2019	12:01:03	17	5	14.60	4 to 3	>4	2	>4 to 2	20.58	20.06	21.03	No	0.97	3.44	No	No
RWF	013	C	7/10/2019	12:02:38	17	5	14.60	4 to 3	>4	0	>4 to 0	19.52	19.25	19.82	No	0.57	4.41	No	No
RWF	014	A	7/10/2019	13:10:21	17	5	14.60	3 to 2	4	-1	4 to -1	4.35	4.14	4.59	No	0.45	IND	No	No
RWF	014	C	7/10/2019	13:13:04	17	5	14.60	3 to 2	4	1	4 to 1	4.75	4.34	5.11	No	0.77	IND	No	No
RWF	014	D	7/10/2019	13:14:28	17	5	14.60	3 to 2	4	-1	4 to -1	5.04	4.96	5.20	No	0.24	IND	No	No
RWF	015	A	7/10/2019	14:02:42	17	5	14.60	3 to 2	4	-1	4 to -1	2.92	2.48	3.22	No	0.74	IND	No	No
RWF	015	B	7/10/2019	14:04:05	17	5	14.60	3 to 2	4	-2	4 to -2	4.84	4.43	5.14	No	0.71	IND	No	No
RWF	015	C	7/10/2019	14:05:34	17	5	14.60	3 to 2	4	-1	4 to -1	5.67	5.39	6.18	No	0.79	4.18	No	No
RWF	016	A	7/10/2019	15:01:41	17	5	14.60	3 to 2	4	-3	4 to -3	4.70	4.25	5.17	No	0.92	IND	No	No
RWF	016	B	7/10/2019	15:03:07	17	5	14.60	3 to 2	4	-1	4 to -1	4.08	3.44	4.46	No	1.02	IND	No	No
RWF	016	C	7/10/2019	15:04:47	17	5	14.60	3 to 2	4	2	4 to 2	3.93	3.38	4.36	No	0.98	IND	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	017	A	7/10/2019	16:19:41	17	5	14.60	3 to 2/4 to 3	>4	0	>4 to 0	17.69	17.43	17.95	No	0.53	5.38	No	No
RWF	017	C	7/10/2019	16:22:28	17	5	14.60	3 to 2/4 to 3	>4	-1	>4 to -1	14.27	13.88	14.77	No	0.89	5.12	No	No
RWF	017	D	7/10/2019	16:23:54	17	5	14.60	3 to 2/4 to 3	>4	-1	>4 to -1	18.01	17.86	18.24	No	0.38	5.64	No	No
RWF	018	B	7/10/2019	17:40:37	17	5	14.60	3 to 2/4 to 3	>4	0	>4 to 0	16.50	16.21	16.86	No	0.65	3.90	No	No
RWF	018	C	7/10/2019	17:42:01	17	5	14.60	3 to 2/4 to 3	>4	0	>4 to 0	15.75	15.30	16.40	No	1.10	6.67	No	No
RWF	018	D	7/10/2019	17:43:12	17	5	14.60	3 to 2/4 to 3	>4	-1	>4 to -1	19.07	18.43	19.63	No	1.20	5.98	No	No
RWF	019	A	7/10/2019	18:16:00	17	5	14.60	3 to 2	4	-2	4 to -2	4.03	3.72	4.39	No	0.68	3.03	No	No
RWF	019	B	7/10/2019	18:17:25	17	5	14.60	3 to 2	4	-1	4 to -1	5.72	5.49	5.93	No	0.43	3.21	No	No
RWF	019	C	7/10/2019	18:18:41	17	5	14.60	3 to 2	4	1	4 to 1	5.24	4.63	6.15	No	1.51	3.40	No	No
RWF	020	A	7/10/2019	18:53:40	17	5	14.60	3 to 2	4	0	4 to 0	4.66	3.93	5.31	No	1.38	IND	No	No
RWF	020	B	7/10/2019	18:55:18	17	5	14.60	3 to 2	4	-2	4 to -2	4.78	4.54	4.98	No	0.44	IND	No	No
RWF	020	C	7/10/2019	18:56:27	17	5	14.60	3 to 2	4	0	4 to 0	5.15	4.70	5.47	No	0.77	IND	No	No
RWF	021	A	7/9/2019	21:18:41	17	5	14.60	4 to 3	>4	0	>4 to 0	15.27	14.15	15.97	No	1.82	4.68	No	No
RWF	021	B	7/9/2019	21:19:56	17	5	14.60	4 to 3	>4	1	>4 to 1	14.68	14.26	15.08	No	0.82	2.64	No	No
RWF	021	D	7/9/2019	21:22:21	17	5	14.60	4 to 3	>4	1	>4 to 1	12.08	11.76	12.31	No	0.56	2.49	No	No
RWF	022	A	7/9/2019	22:19:18	17	5	14.60	2 to 1	4	0	4 to 0	5.66	5.26	6.13	No	0.87	IND	No	No
RWF	022	B	7/9/2019	22:20:49	17	5	14.60	2 to 1	>4	-1	>4 to -1	3.85	3.57	4.59	No	1.03	IND	No	No
RWF	022	C	7/9/2019	22:22:00	17	5	14.60	2 to 1	4	0	4 to 0	6.02	4.99	6.64	No	1.66	IND	No	No
RWF	023	E	7/9/2019	23:53:58	17	5	14.60	4 to 3	>4	-1	>4 to -1	16.13	15.93	16.32	No	0.40	2.36	No	No
RWF	023	F	7/9/2019	23:55:16	17	5	14.60	4 to 3	>4	0	>4 to 0	14.80	14.39	15.21	No	0.82	1.32	No	No
RWF	023	G	7/9/2019	23:56:33	17	5	14.60	4 to 3	>4	-1	>4 to -1	17.33	17.14	17.53	No	0.39	2.08	No	No
RWF	024	A	7/9/2019	23:30:23	17	5	14.60	-1 to -2/4 to 3	>4	-3	>4 to -3	7.09	5.86	8.09	No	2.23	IND	No	No
RWF	024	B	7/9/2019	23:31:27	17	5	14.60	-1 to -2	>4	-2	>4 to -2	10.34	9.81	10.83	No	1.02	IND	No	No
RWF	024	C	7/9/2019	23:32:42	17	5	14.60	-1 to -2	4	-1	4 to -1	10.34	7.76	11.53	No	3.77	IND	No	No
RWF	025	A	7/11/2019	0:57:27	17	5	14.60	1 to 0	3	-2	3 to -2	6.66	6.28	6.96	No	0.68	IND	No	No
RWF	025	C	7/11/2019	1:00:31	17	5	14.60	1 to 0	3	-1	3 to -1	2.45	2.07	2.86	No	0.80	IND	No	No
RWF	025	D	7/11/2019	1:02:03	17	5	14.60	2 to 1	4	-5	4 to -5	0.00	0.00	0.00	No	IND	IND	No	No
RWF	026	A	7/11/2019	2:13:30	17	5	14.60	3 to 2	>4	-2	>4 to -2	4.12	3.68	4.51	No	0.84	3.26	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	026	B	7/11/2019	2:14:57	17	5	14.60	3 to 2	4	-2	4 to -2	4.93	4.29	5.14	No	0.85	IND	No	No
RWF	026	C	7/11/2019	2:16:19	17	5	14.60	3 to 2	>4	-2	>4 to -2	4.16	3.84	4.44	No	0.59	2.96	No	No
RWF	027	A	7/11/2019	2:52:59	17	5	14.60	3 to 2/4 to 3	>4	-1	>4 to -1	8.76	7.93	9.27	No	1.35	3.82	No	No
RWF	027	B	7/11/2019	2:54:17	17	5	14.60	3 to 2/4 to 3	>4	-1	>4 to -1	8.39	7.91	8.69	No	0.77	4.51	No	No
RWF	027	C	7/11/2019	2:55:41	17	5	14.60	3 to 2/4 to 3	>4	0	>4 to 0	9.79	9.08	10.55	No	1.48	3.38	No	No
RWF	028	A	7/11/2019	3:32:14	17	5	14.60	2 to 1/3 to 2	4	0	4 to 0	7.13	6.72	7.36	No	0.64	4.11	No	No
RWF	028	B	7/11/2019	3:33:36	17	5	14.60	2 to 1/3 to 2	3	1	3 to 1	4.88	4.71	5.12	No	0.41	4.17	No	No
RWF	028	C	7/11/2019	3:34:57	17	5	14.60	2 to 1/3 to 2	4	-1	4 to -1	5.00	4.42	5.51	No	1.09	3.82	No	No
RWF	029	A	7/11/2019	4:21:42	17	5	14.60	1 to 0/2 to 1	4	-3	4 to -3	6.02	5.28	6.44	No	1.16	IND	No	No
RWF	029	C	7/11/2019	4:24:22	17	5	14.60	2 to 1	>4	-2	>4 to -2	2.55	1.49	3.23	No	1.74	IND	No	No
RWF	029	D	7/11/2019	4:25:35	17	5	14.60	2 to 1	4	-1	4 to -1	5.54	4.65	6.38	No	1.73	IND	No	No
RWF	030	A	7/11/2019	4:42:57	17	5	14.60	3 to 2	4	-1	4 to -1	4.87	4.47	5.23	No	0.75	IND	No	No
RWF	030	B	7/11/2019	4:44:20	17	5	14.60	3 to 2	4	-2	4 to -2	4.29	4.08	4.49	No	0.41	4.06	Yes	No
RWF	030	C	7/11/2019	4:45:41	17	5	14.60	3 to 2	4	0	4 to 0	4.27	4.08	4.40	No	0.32	IND	No	No
RWF	031	A	7/9/2019	20:49:06	17	5	14.60	2 to 1	4	-2	4 to -2	5.00	4.57	5.34	No	0.76	IND	No	No
RWF	031	B	7/9/2019	20:50:16	17	5	14.60	2 to 1	4	-3	4 to -3	4.62	3.95	5.09	No	1.15	IND	No	No
RWF	031	D	7/9/2019	20:52:38	17	5	14.60	2 to 1	4	-2	4 to -2	5.30	4.88	5.61	No	0.74	IND	No	No
RWF	032	A	7/9/2019	20:02:24	17	5	14.60	3 to 2	4	0	4 to 0	5.18	4.88	5.55	No	0.67	IND	No	No
RWF	032	B	7/9/2019	20:03:32	17	5	14.60	3 to 2	4	-2	4 to -2	3.54	3.15	3.84	No	0.69	IND	No	No
RWF	032	C	7/9/2019	20:04:47	17	5	14.60	3 to 2	4	-1	4 to -1	4.04	3.46	4.74	No	1.28	3.23	No	No
RWF	033	A	7/9/2019	19:28:46	17	5	14.60	1 to 0/2 to 1	3	-1	3 to -1	8.18	6.74	8.98	No	2.24	IND	No	No
RWF	033	B	7/9/2019	19:30:01	17	5	14.60	1 to 0/2 to 1	3	-1	3 to -1	4.99	3.15	7.23	No	4.08	IND	No	No
RWF	033	C	7/9/2019	19:31:09	17	5	14.60	1 to 0/2 to 1	3	0	3 to 0	8.02	6.90	8.69	No	1.79	IND	No	No
RWF	034	A	7/9/2019	18:45:49	17	5	14.60	3 to 2	4	0	4 to 0	4.61	4.27	4.82	No	0.55	1.75	No	No
RWF	034	B	7/9/2019	18:47:01	17	5	14.60	2 to 1	3	-1	3 to -1	5.97	4.48	7.21	No	2.73	IND	No	No
RWF	034	C	7/9/2019	18:48:08	17	5	14.60	2 to 1	>4	-2	>4 to -2	6.38	5.26	7.60	No	2.34	IND	No	No
RWF	035	E	7/10/2019	23:24:37	17	5	14.60	3 to 2	>4	-1	>4 to -1	3.81	2.98	5.17	No	2.19	3.09	Yes	No
RWF	035	F	7/10/2019	23:26:06	17	5	14.60	3 to 2	>4	0	>4 to 0	9.23	7.53	9.87	No	2.34	3.33	No	No
RWF	035	G	7/10/2019	23:27:33	17	5	14.60	3 to 2	>4	-1	>4 to -1	4.49	3.82	5.04	No	1.22	2.39	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	036	A	7/10/2019	10:14:19	17	5	14.60	3 to 2	4	0	4 to 0	4.97	4.56	5.15	No	0.59	IND	No	No
RWF	036	C	7/10/2019	10:16:50	17	5	14.60	3 to 2	4	-1	4 to -1	5.43	4.60	6.18	No	1.58	IND	No	No
RWF	036	D	7/10/2019	10:18:10	17	5	14.60	3 to 2	4	-2	4 to -2	5.79	5.39	6.11	No	0.72	IND	No	No
RWF	037	A	7/11/2019	0:08:39	17	5	14.60	3 to 2	3	-2	3 to -2	3.09	1.88	4.17	No	2.28	IND	No	No
RWF	037	B	7/11/2019	0:10:33	17	5	14.60	3 to 2	3	-1	3 to -1	4.44	4.26	4.67	No	0.42	IND	No	No
RWF	037	C	7/11/2019	0:11:46	17	5	14.60	3 to 2	3	-1	3 to -1	4.44	3.64	5.01	No	1.38	IND	No	No
RWF	038	A	7/10/2019	7:42:39	17	5	14.60	2 to 1	4	-1	4 to -1	4.84	4.34	5.05	No	0.71	2.94	No	No
RWF	038	B	7/10/2019	7:43:55	17	5	14.60	2 to 1	4	1	4 to 1	5.20	4.24	5.61	No	1.36	2.68	No	No
RWF	038	C	7/10/2019	7:45:11	17	5	14.60	2 to 1	4	0	4 to 0	4.68	3.85	5.77	No	1.92	2.43	No	No
RWF	039	A	7/10/2019	7:05:39	17	5	14.60	3 to 2	>4	-2	>4 to -2	4.53	4.23	4.78	No	0.55	2.30	No	No
RWF	039	B	7/10/2019	7:06:52	17	5	14.60	3 to 2	>4	-1	>4 to -1	4.05	3.77	4.32	No	0.55	2.64	No	No
RWF	039	C	7/10/2019	7:08:10	17	5	14.60	3 to 2/4 to 3	>4	-2	>4 to -2	5.11	4.59	6.03	No	1.44	2.53	No	No
RWF	040	A	7/9/2019	13:51:52	17	5	14.60	2 to 1	3	-3	3 to -3	6.75	6.28	7.63	No	1.35	IND	No	No
RWF	040	B	7/9/2019	13:53:01	17	5	14.60	2 to 1	3	-2	3 to -2	6.14	5.78	6.32	No	0.54	IND	No	No
RWF	040	C	7/9/2019	13:54:06	17	5	14.60	2 to 1	3	-2	3 to -2	5.34	5.14	5.54	No	0.41	IND	No	No
RWF	041	A	7/9/2019	14:27:44	17	5	14.60	3 to 2	4	-1	4 to -1	5.49	5.00	5.95	No	0.95	IND	No	No
RWF	041	B	7/9/2019	14:28:53	17	5	14.60	3 to 2	4	-2	4 to -2	6.05	5.22	6.72	No	1.49	IND	No	No
RWF	041	C	7/9/2019	14:30:00	17	5	14.60	3 to 2	4	-2	4 to -2	5.44	4.89	5.66	No	0.77	IND	No	No
RWF	042	A	7/9/2019	14:49:07	17	5	14.60	3 to 2/4 to 3	>4	-2	>4 to -2	5.42	4.76	5.95	No	1.19	1.78	No	No
RWF	042	B	7/9/2019	14:50:11	17	5	14.60	3 to 2	>4	-2	>4 to -2	5.76	5.19	6.26	No	1.07	3.29	No	No
RWF	042	C	7/9/2019	14:51:21	17	5	14.60	3 to 2	>4	-1	>4 to -1	5.37	5.26	5.51	No	0.25	1.81	No	No
RWF	043	A	7/9/2019	15:39:11	17	5	14.60	4 to 3	>4	2	>4 to 2	17.13	16.64	17.52	No	0.88	1.27	No	No
RWF	043	B	7/9/2019	15:40:18	17	5	14.60	4 to 3/>4	>4	-1	>4 to -1	9.56	9.38	9.81	No	0.43	1.23	No	No
RWF	043	C	7/9/2019	15:41:28	17	5	14.60	4 to 3	>4	-1	>4 to -1	7.31	7.03	7.76	No	0.73	0.89	No	No
RWF	044	A	7/9/2019	16:55:29	17	5	14.60	3 to 2	4	0	4 to 0	6.58	5.17	7.66	No	2.49	IND	No	No
RWF	044	B	7/9/2019	16:56:39	17	5	14.60	3 to 2	4	-2	4 to -2	5.47	4.66	5.93	No	1.26	IND	No	No
RWF	044	C	7/9/2019	16:57:52	17	5	14.60	3 to 2	4	-2	4 to -2	6.05	5.60	6.29	No	0.69	IND	No	No
RWF	045	A	7/9/2019	17:55:00	17	5	14.60	3 to 2	>4	-1	>4 to -1	6.40	6.09	6.67	No	0.58	2.21	No	No
RWF	045	B	7/9/2019	17:56:07	17	5	14.60	3 to 2	4	0	4 to 0	6.55	6.33	6.76	No	0.43	2.23	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	045	C	7/9/2019	17:57:16	17	5	14.60	3 to 2	>4	0	>4 to 0	6.13	5.67	6.62	No	0.95	1.87	No	No
RWF	046	A	7/10/2019	3:26:20	17	5	14.60	3 to 2	4	-2	4 to -2	5.08	4.63	5.43	No	0.80	IND	No	No
RWF	046	B	7/10/2019	3:27:47	17	5	14.60	3 to 2	4	-2	4 to -2	4.09	1.78	5.34	No	3.55	IND	No	No
RWF	046	C	7/10/2019	3:29:08	17	5	14.60	3 to 2/4 to 3	>4	0	>4 to 0	18.17	17.61	18.62	No	1.01	3.17	No	No
RWF	047	A	7/10/2019	4:06:40	17	5	14.60	2 to 1	4	0	4 to 0	5.46	5.03	5.80	No	0.76	IND	No	No
RWF	047	C	7/10/2019	4:08:57	17	5	14.60	2 to 1	4	0	4 to 0	5.89	5.21	7.15	No	1.94	IND	No	No
RWF	047	D	7/10/2019	4:10:00	17	5	14.60	2 to 1	4	0	4 to 0	6.96	6.50	7.48	No	0.97	IND	No	No
RWF	048	A	7/10/2019	4:24:46	17	5	14.60	3 to 2	4	0	4 to 0	6.07	5.95	6.29	No	0.34	IND	No	No
RWF	048	B	7/10/2019	4:26:08	17	5	14.60	3 to 2	4	-2	4 to -2	4.07	3.56	4.34	No	0.78	IND	No	No
RWF	048	C	7/10/2019	4:27:13	17	5	14.60	3 to 2	4	-1	4 to -1	4.22	4.09	4.34	No	0.25	IND	No	No
RWF	049	A	7/10/2019	5:39:04	17	5	14.60	2 to 1	>4	-1	>4 to -1	4.02	3.45	4.69	No	1.24	IND	No	No
RWF	049	B	7/10/2019	5:40:18	17	5	14.60	2 to 1	4	-2	4 to -2	5.48	5.18	5.75	No	0.57	IND	No	No
RWF	049	C	7/10/2019	5:41:33	17	5	14.60	2 to 1	>4	-2	>4 to -2	4.19	3.60	4.68	No	1.08	IND	No	No
RWF	050	A	7/4/2019	21:55:03	18	5	14.60	3 to 2	4	-1	4 to -1	6.02	4.70	6.69	No	1.99	IND	No	No
RWF	050	B	7/4/2019	21:56:07	17	5	14.60	3 to 2/>4	>4	-2	>4 to -2	11.26	10.69	11.89	No	1.20	1.88	No	No
RWF	050	C	7/4/2019	21:58:04	17	5	14.60	3 to 2	4	-1	4 to -1	5.96	5.72	6.17	No	0.46	2.67	No	No
RWF	051	A	7/4/2019	22:26:10	17	5	14.60	3 to 2	4	-3	4 to -3	5.39	5.20	5.54	No	0.34	IND	No	No
RWF	051	B	7/4/2019	22:27:27	17	5	14.60	3 to 2	>4	-1	>4 to -1	5.93	5.09	6.50	No	1.41	IND	No	No
RWF	051	C	7/4/2019	22:28:21	17	5	14.60	3 to 2	4	-2	4 to -2	6.15	5.75	6.30	No	0.55	IND	No	No
RWF	052	A	7/4/2019	23:34:17	17	5	14.60	3 to 2	4	-2	4 to -2	5.97	5.26	6.61	No	1.36	IND	No	No
RWF	052	B	7/4/2019	23:35:24	17	5	14.60	3 to 2	4	-2	4 to -2	7.06	6.40	7.55	No	1.16	IND	No	No
RWF	052	D	7/4/2019	23:37:48	17	5	14.60	3 to 2	4	-3	4 to -3	6.06	5.14	6.63	No	1.49	IND	No	No
RWF	053	B	7/5/2019	0:26:38	17	5	14.60	1 to 0/0 to -1	3	-3	3 to -3	11.27	10.03	11.91	No	1.88	IND	No	No
RWF	053	C	7/5/2019	0:30:02	17	5	14.60	1 to 0/0 to -1	3	-3	3 to -3	7.08	6.39	8.30	No	1.91	IND	No	No
RWF	053	D	7/5/2019	0:31:37	17	5	14.60	0 to -1/1 to 0	3	-2	3 to -2	7.02	3.70	9.90	No	6.20	IND	No	No
RWF	054	A	7/5/2019	0:55:51	17	5	14.60	3 to 2	4	-1	4 to -1	6.82	5.92	7.47	No	1.55	IND	No	No
RWF	054	B	7/5/2019	0:57:06	17	5	14.60	3 to 2	4	-1	4 to -1	5.42	4.97	5.79	No	0.81	IND	No	No
RWF	054	D	7/5/2019	0:59:56	17	5	14.60	3 to 2	4	0	4 to 0	6.50	6.15	6.83	No	0.68	IND	No	No
RWF	055	A	7/5/2019	1:38:55	17	5	14.60	3 to 2	>4	-1	>4 to -1	6.21	5.92	6.47	No	0.55	IND	No	No
RWF	055	C	7/5/2019	1:41:43	17	5	14.60	3 to 2	4	-2	4 to -2	4.74	4.26	4.96	No	0.70	IND	No	No
RWF	055	D	7/5/2019	1:43:39	17	5	14.60	3 to 2	4	-1	4 to -1	7.69	4.37	9.47	No	5.10	7.47	No	No
RWF	056	I	7/5/2019	7:16:56	14	0	14.60	4 to 3/>4	>4	2	>4 to 2	21.90	21.90	21.90	Yes	IND	IND	No	No
RWF	056	M	7/5/2019	7:53:44	10	0	14.60	4 to 3/>4	>4	-1	>4 to -1	11.36	11.12	11.58	No	0.46	1.84	No	No
RWF	056	N	7/5/2019	8:51:31	10	0	14.60	4 to 3/>4	>4	1	>4 to 1	8.79	8.52	9.09	No	0.57	2.54	No	No
RWF	057	B	7/5/2019	2:53:19	17	5	14.60	3 to 2	>4	-1	>4 to -1	4.62	4.32	4.79	No	0.47	IND	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	057	C	7/5/2019	2:54:35	17	5	14.60	3 to 2	>4	-2	>4 to -2	5.77	4.83	6.52	No	1.69	IND	No	No
RWF	057	D	7/5/2019	2:55:55	17	5	14.60	3 to 2	>4	-1	>4 to -1	4.73	3.98	5.11	No	1.12	IND	No	No
RWF	057E1	B	7/5/2019	5:17:06	17	5	14.60	3 to 2	>4	0	>4 to 0	5.03	4.82	5.34	No	0.51	IND	No	No
RWF	057E1	C	7/5/2019	5:18:46	17	5	14.60	3 to 2	>4	0	>4 to 0	5.13	4.56	5.46	No	0.90	IND	No	No
RWF	057E1	D	7/5/2019	5:20:24	17	5	14.60	3 to 2	>4	-1	>4 to -1	4.84	4.29	5.57	No	1.28	IND	No	No
RWF	057E2	A	7/5/2019	5:46:04	17	5	14.60	3 to 2	4	-1	4 to -1	7.19	6.80	7.36	No	0.56	IND	No	No
RWF	057E2	B	7/5/2019	5:47:44	17	5	14.60	3 to 2	4	1	4 to 1	6.19	5.70	6.41	No	0.71	IND	No	No
RWF	057E2	C	7/5/2019	5:49:06	17	5	14.60	3 to 2	>4	-1	>4 to -1	5.14	4.88	5.29	No	0.42	IND	No	No
RWF	057W1	A	7/5/2019	6:17:36	17	5	14.60	3 to 2	>4	-1	>4 to -1	6.07	5.81	6.28	No	0.47	IND	No	No
RWF	057W1	B	7/5/2019	6:19:01	17	5	14.60	3 to 2	>4	0	>4 to 0	4.83	4.53	5.11	No	0.59	IND	No	No
RWF	057W1	C	7/5/2019	6:20:17	17	5	14.60	3 to 2	>4	-2	>4 to -2	4.50	3.93	5.11	No	1.18	IND	No	No
RWF	057W2	A	7/5/2019	6:32:30	17	5	14.60	3 to 2	>4	-1	>4 to -1	3.98	3.53	4.52	No	0.99	IND	No	No
RWF	057W2	B	7/5/2019	6:33:51	17	5	14.60	3 to 2	4	-1	4 to -1	3.61	3.14	3.97	No	0.83	IND	No	No
RWF	057W2	D	7/5/2019	6:36:52	17	5	14.60	3 to 2	4	0	4 to 0	5.11	4.89	5.48	No	0.59	IND	No	No
RWF	058	A	7/5/2019	3:15:52	17	5	14.60	1 to 0/2 to 1	4	-2	4 to -2	8.30	7.23	9.18	No	1.96	IND	No	No
RWF	058	B	7/5/2019	3:17:15	17	5	14.60	1 to 0/2 to 1	>4	-3	>4 to -3	6.33	5.17	7.80	No	2.62	IND	No	No
RWF	058	C	7/5/2019	3:18:35	17	5	14.60	1 to 0/2 to 1	4	-2	4 to -2	3.34	2.93	3.53	No	0.59	IND	No	No
RWF	059	A	7/5/2019	3:56:16	17	5	14.60	2 to 1	4	-2	4 to -2	6.49	4.55	7.42	No	2.87	IND	No	No
RWF	059	B	7/5/2019	3:57:26	17	5	14.60	2 to 1	4	-3	4 to -3	5.38	5.00	5.85	No	0.85	IND	No	No
RWF	059	C	7/5/2019	3:58:42	17	5	14.60	2 to 1	4	-2	4 to -2	5.50	5.19	5.97	No	0.78	IND	No	No
RWF	060	A	7/5/2019	17:04:01	17	5	14.60	0 to -1/1 to 0	4	-2	4 to -2	11.10	10.73	11.41	No	0.67	IND	No	No
RWF	060	B	7/5/2019	17:05:10	17	5	14.60	0 to -1	4	-3	4 to -3	6.00	5.43	6.91	No	1.48	IND	No	No
RWF	060	D	7/5/2019	17:17:07	17	5	14.60	2 to 1	>4	-5	>4 to -5	4.21	2.55	5.58	No	3.03	IND	No	No
RWF	061	A	7/5/2019	18:24:27	17	5	14.60	3 to 2	>4	-1	>4 to -1	4.98	4.34	5.21	No	0.86	IND	No	No
RWF	061	B	7/5/2019	18:25:48	17	5	14.60	3 to 2	>4	0	>4 to 0	5.62	5.38	5.79	No	0.41	IND	No	No
RWF	061	C	7/5/2019	18:26:55	17	5	14.60	3 to 2	>4	-1	>4 to -1	4.17	3.88	4.59	No	0.71	IND	No	No
RWF	062	A	7/5/2019	19:28:06	17	5	14.60	3 to 2/>4	>4	-1	>4 to -1	9.05	8.61	9.68	No	1.07	3.00	No	No
RWF	062	C	7/5/2019	19:31:03	17	5	14.60	3 to 2/4 to 3	>4	-2	>4 to -2	11.22	10.99	11.41	No	0.42	2.31	No	No
RWF	062	D	7/5/2019	19:32:21	17	5	14.60	4 to 3	>4	-2	>4 to -2	4.79	4.49	5.02	No	0.53	2.05	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	063	A	7/5/2019	23:11:56	17	5	14.60	2 to 1	4	-2	4 to -2	4.79	3.38	5.60	No	2.22	IND	No	No
RWF	063	B	7/5/2019	23:13:13	17	5	14.60	2 to 1	4	-2	4 to -2	9.10	7.89	9.56	No	1.67	IND	No	No
RWF	063	C	7/5/2019	23:14:24	17	5	14.60	2 to 1	4	-1	4 to -1	5.67	4.89	6.18	No	1.30	IND	No	No
RWF	064	A	7/6/2019	0:15:28	17	5	14.60	2 to 1	4	-2	4 to -2	7.54	6.69	8.02	No	1.33	IND	No	No
RWF	064	B	7/6/2019	0:17:42	17	5	14.60	2 to 1	4	0	4 to 0	7.71	6.45	8.33	No	1.89	IND	No	No
RWF	064	D	7/6/2019	0:20:43	17	5	14.60	2 to 1	4	-1	4 to -1	4.72	4.08	4.99	No	0.91	IND	No	No
RWF	065	A	7/6/2019	1:00:36	17	5	14.60	2 to 1	4	0	4 to 0	5.88	5.54	6.08	No	0.54	IND	No	No
RWF	065	B	7/6/2019	1:02:16	17	5	14.60	2 to 1	4	-2	4 to -2	5.02	4.64	5.54	No	0.91	IND	No	No
RWF	065	C	7/6/2019	1:03:36	17	5	14.60	2 to 1	4	-1	4 to -1	5.26	4.30	6.90	No	2.60	IND	No	No
RWF	066	A	7/6/2019	2:04:36	17	5	14.60	2 to 1	4	-2	4 to -2	4.41	4.16	4.81	No	0.65	IND	No	No
RWF	066	B	7/6/2019	2:06:09	17	5	14.60	2 to 1	4	-1	4 to -1	3.55	2.62	4.51	No	1.89	IND	No	No
RWF	066	C	7/6/2019	2:08:20	17	5	14.60	2 to 1	4	-2	4 to -2	7.65	6.89	8.34	No	1.45	IND	No	No
RWF	067	E	7/6/2019	17:24:02	17	5	14.60	2 to 1/>4	>4	-1	>4 to -1	8.16	7.90	8.41	No	0.51	2.41	No	No
RWF	067	F	7/6/2019	17:53:45	17	5	14.60	3 to 2/>4	>4	-1	>4 to -1	15.35	14.97	15.95	No	0.97	2.81	No	No
RWF	067	G	7/6/2019	17:55:05	17	5	14.60	3 to 2/>4	>4	-1	>4 to -1	17.46	17.09	17.66	No	0.57	3.10	No	No
RWF	068	A	7/6/2019	4:07:29	17	5	14.60	3 to 2	4	0	4 to 0	5.38	4.87	6.04	No	1.17	IND	No	No
RWF	068	B	7/6/2019	4:09:21	17	5	14.60	3 to 2	4	-1	4 to -1	5.37	5.08	5.75	No	0.66	IND	No	No
RWF	068	D	7/6/2019	4:11:56	17	5	14.60	3 to 2	4	1	4 to 1	5.17	4.74	5.39	No	0.65	IND	No	No
RWF	069	A	7/6/2019	5:36:04	17	5	14.60	-1 to -2/1 to 0	>4	-5	>4 to -5	4.84	4.51	5.42	No	0.91	IND	No	No
RWF	069	B	7/6/2019	5:37:29	17	5	14.60	0 to -1/2 to 1/-3 to -4	3	-4	3 to -4	4.83	3.27	6.66	No	3.39	IND	No	No
RWF	069	D	7/6/2019	5:40:10	17	5	14.60	2 to 1/-4 to -5	3	-4	3 to -4	3.95	3.48	4.46	No	0.98	IND	No	No
RWF	070	A	7/9/2019	10:38:23	17	5	14.60	3 to 2	>4	0	>4 to 0	5.06	3.49	6.80	No	3.30	IND	No	No
RWF	070	B	7/9/2019	10:39:55	17	5	14.60	3 to 2	4	-2	4 to -2	4.85	4.68	5.15	No	0.47	IND	No	No
RWF	070	C	7/9/2019	10:41:29	17	5	14.60	3 to 2	4	0	4 to 0	3.81	2.69	5.15	No	2.45	IND	No	No
RWF	071	A	7/10/2019	1:37:52	17	5	14.60	1 to 0/2 to 1	4	-3	4 to -3	3.26	2.86	3.72	No	0.86	IND	No	No
RWF	071	B	7/10/2019	1:39:07	17	5	14.60	2 to 1	>4	-2	>4 to -2	2.84	2.58	3.31	No	0.73	IND	No	No
RWF	071	D	7/10/2019	1:41:29	17	5	14.60	1 to 0/2 to 1	4	-3	4 to -3	4.83	4.26	5.17	No	0.91	IND	No	No
RWF	072	A	7/7/2019	2:18:05	17	5	14.60	-3 to -4/0 to -1	>4	-5	>4 to -5	3.76	3.30	4.14	No	0.84	IND	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	072	B	7/7/2019	2:19:32	17	5	14.60	0 to -1/1 to 0	4	-4	4 to -4	4.38	2.92	6.01	No	3.09	IND	No	No
RWF	072	D	7/7/2019	2:22:15	17	5	14.60	0 to -1/1 to 0	4	-4	4 to -4	8.66	8.08	9.07	No	0.99	IND	No	No
RWF	073	A	7/7/2019	1:26:43	17	5	14.60	IND	>4	-5	>4 to -5	0.00	0.00	0.00	No	IND	IND	No	No
RWF	073	C	7/7/2019	1:29:11	17	5	14.60	3 to 2	>4	-5	>4 to -5	2.86	2.44	3.29	No	0.85	IND	No	No
RWF	073	D	7/7/2019	1:30:31	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	IND
RWF	073E1	A	7/12/2019	19:52:15	17	5	14.60	IND	>4	-5	>4 to -5	0.00	0.00	0.00	No	IND	IND	No	IND
RWF	073E1	C	7/12/2019	19:54:35	17	5	14.60	3 to 2	4	-4	4 to -4	0.36	0.00	1.09	No	1.09	IND	No	No
RWF	073E1	D	7/12/2019	19:55:52	17	5	14.60	IND	>4	-5	>4 to -5	0.00	0.00	0.00	No	IND	IND	No	IND
RWF	073E2	A	7/12/2019	20:15:18	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	IND
RWF	073E2	B	7/12/2019	20:16:34	17	5	14.60	IND	>4	-4	>4 to -4	0.44	0.00	1.79	No	1.79	IND	No	IND
RWF	073E2	D	7/12/2019	20:18:54	17	5	14.60	IND	4	-4	4 to -4	0.00	0.00	0.00	No	IND	IND	No	IND
RWF	073W1	A	7/12/2019	19:38:14	17	5	14.60	3 to 2	4	-2	4 to -2	0.31	0.00	1.15	No	1.15	IND	No	IND
RWF	073W1	B	7/12/2019	19:39:30	17	5	14.60	3 to 2	4	-1	4 to -1	2.30	1.85	2.75	No	0.89	IND	No	No
RWF	073W1	C	7/12/2019	19:40:48	17	5	14.60	3 to 2	4	-2	4 to -2	0.27	0.00	0.63	No	0.63	IND	No	IND
RWF	073W2	B	7/12/2019	19:21:16	17	5	14.60	2 to 1	4	-2	4 to -2	3.42	3.26	3.71	No	0.46	IND	No	No
RWF	073W2	C	7/12/2019	19:22:30	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	IND
RWF	073W2	D	7/12/2019	19:23:56	17	5	14.60	3 to 2	4	-2	4 to -2	1.56	0.77	2.15	No	1.38	IND	No	No
RWF	074	A	7/7/2019	0:14:52	17	5	14.60	2 to 1/3 to 2	>4	0	>4 to 0	7.29	6.50	7.99	No	1.49	IND	No	No
RWF	074	B	7/7/2019	0:16:23	17	5	14.60	2 to 1/3 to 2	>4	-1	>4 to -1	5.95	5.23	6.89	No	1.65	IND	No	No
RWF	074	C	7/7/2019	0:17:49	17	5	14.60	2 to 1/3 to 2	>4	0	>4 to 0	6.74	5.73	7.37	No	1.64	IND	No	No
RWF	075	A	7/6/2019	23:26:57	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	IND
RWF	075	C	7/6/2019	23:29:13	17	5	14.60	3 to 2	>4	0	>4 to 0	5.80	5.01	6.09	No	1.08	IND	No	No
RWF	075	D	7/6/2019	23:30:26	17	5	14.60	3 to 2	>4	-1	>4 to -1	4.95	4.46	5.54	No	1.08	IND	No	No
RWF	076	A	7/6/2019	21:45:46	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	IND
RWF	076	C	7/6/2019	22:02:26	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	IND
RWF	076	D	7/6/2019	22:03:27	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	IND
RWF	077	A	7/6/2019	21:00:28	17	5	14.60	3 to 2	>4	0	>4 to 0	3.58	2.74	4.61	No	1.88	IND	No	No
RWF	077	B	7/6/2019	21:01:30	17	5	14.60	3 to 2	>4	-2	>4 to -2	4.28	3.93	4.45	No	0.52	IND	No	No
RWF	077	C	7/6/2019	21:02:36	17	5	14.60	3 to 2	>4	0	>4 to 0	4.10	3.79	4.49	No	0.70	IND	No	No
RWF	078	A	7/6/2019	19:52:02	17	5	14.60	3 to 2	>4	-1	>4 to -1	4.28	3.19	4.81	No	1.62	IND	No	No
RWF	078	C	7/6/2019	19:54:13	17	5	14.60	2 to 1/-1 to -2	4	-3	4 to -3	7.03	6.31	7.36	No	1.05	IND	No	No
RWF	078	D	7/6/2019	19:55:28	17	5	14.60	2 to 1/-1 to -2	4	-3	4 to -3	3.81	3.20	4.64	No	1.45	IND	No	No
RWF	079	A	7/6/2019	16:11:46	17	5	14.60	2 to 1/3 to 2	4	0	4 to 0	3.89	3.42	4.64	No	1.22	IND	No	No
RWF	079	B	7/6/2019	16:12:45	17	5	14.60	2 to 1/3 to 2	4	0	4 to 0	3.44	2.53	4.51	No	1.98	IND	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	079	C	7/6/2019	16:13:56	17	5	14.60	2 to 1/3 to 2	4	-1	4 to -1	4.53	4.30	4.85	No	0.55	IND	No	No
RWF	080	A	7/6/2019	14:05:06	17	5	14.60	3 to 2	>4	0	>4 to 0	4.53	3.69	5.03	No	1.33	IND	No	No
RWF	080	B	7/6/2019	14:25:26	17	5	14.60	3 to 2	>4	0	>4 to 0	6.23	5.83	6.53	No	0.70	IND	No	No
RWF	080	D	7/6/2019	14:30:16	17	5	14.60	3 to 2	>4	0	>4 to 0	5.32	4.93	5.74	No	0.81	IND	No	No
RWF	081	A	7/6/2019	11:13:25	17	5	14.60	1 to 0	3	-4	3 to -4	0.00	0.00	0.00	No	IND	IND	No	IND
RWF	081	B	7/6/2019	11:14:48	17	5	14.60	1 to 0	4	-4	4 to -4	1.95	1.00	2.37	No	1.38	IND	No	No
RWF	081	C	7/6/2019	11:25:20	17	5	14.60	1 to 0	4	-3	4 to -3	4.15	2.01	5.77	No	3.77	IND	No	No
RWF	082	A	7/10/2019	0:54:38	17	5	14.60	2 to 1	4	-2	4 to -2	4.28	3.62	5.02	No	1.40	IND	No	No
RWF	082	B	7/10/2019	0:55:49	17	5	14.60	2 to 1	4	0	4 to 0	8.09	7.36	8.66	No	1.30	IND	No	No
RWF	082	C	7/10/2019	1:01:31	17	5	14.60	2 to 1	4	-1	4 to -1	3.20	2.88	3.51	No	0.63	IND	No	No
RWF	083	A	7/7/2019	3:08:32	17	5	14.60	0 to -1/2 to 1	4	-3	4 to -3	4.14	3.26	4.70	No	1.44	IND	No	No
RWF	083	C	7/7/2019	3:10:58	17	5	14.60	-4 to -5/-1 to -2	>4	-5	>4 to -5	2.63	1.53	3.88	No	2.35	IND	No	No
RWF	083	D	7/7/2019	3:12:11	17	5	14.60	1 to 0	3	-4	3 to -4	3.98	3.68	4.26	No	0.58	IND	No	No
RWF	084	A	7/7/2019	4:19:12	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	IND
RWF	084	B	7/7/2019	4:21:09	17	5	14.60	3 to 2	4	-1	4 to -1	2.79	1.94	3.76	No	1.82	IND	No	No
RWF	084	D	7/7/2019	4:28:03	17	5	14.60	3 to 2	4	-2	4 to -2	2.58	1.82	3.34	No	1.51	IND	No	No
RWF	085	A	7/7/2019	5:53:20	17	5	14.60	3 to 2	4	-2	4 to -2	4.01	3.59	4.68	No	1.09	IND	No	No
RWF	085	B	7/7/2019	5:55:18	17	5	14.60	3 to 2	4	-2	4 to -2	6.13	5.66	6.38	No	0.73	IND	No	No
RWF	085	C	7/7/2019	6:00:24	17	5	14.60	3 to 2	4	-2	4 to -2	6.29	5.53	6.82	No	1.29	IND	No	No
RWF	086	A	7/7/2019	7:29:24	17	5	14.60	2 to 1	>4	-2	>4 to -2	3.22	2.36	3.84	No	1.48	IND	No	No
RWF	086	B	7/7/2019	8:18:11	17	5	14.60	2 to 1/3 to 2	4	-2	4 to -2	7.04	6.62	7.44	No	0.82	IND	No	No
RWF	086	D	7/7/2019	8:33:03	17	5	14.60	2 to 1/3 to 2	4	-2	4 to -2	5.85	5.54	6.37	No	0.84	IND	No	No
RWF	087	A	7/7/2019	10:55:15	17	5	14.60	3 to 2/-1 to -2	4	-3	4 to -3	5.88	5.51	6.56	No	1.05	IND	No	No
RWF	087	B	7/7/2019	10:56:35	17	5	14.60	-1 to -2/3 to 2	>4	-3	>4 to -3	4.17	3.45	6.18	No	2.73	3.06	No	No
RWF	087	C	7/7/2019	10:58:03	17	5	14.60	-1 to -2/3 to 2	4	-3	4 to -3	7.53	6.54	7.94	No	1.41	IND	No	No
RWF	088	A	7/7/2019	13:16:30	17	5	14.60	2 to 1	4	-1	4 to -1	4.76	4.24	5.16	No	0.91	IND	No	No
RWF	088	B	7/7/2019	13:17:38	17	5	14.60	2 to 1	4	-2	4 to -2	4.08	2.98	4.76	No	1.78	IND	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	088	C	7/7/2019	13:18:34	17	5	14.60	2 to 1/>4	>4	-1	>4 to -1	11.95	9.89	12.72	No	2.83	7.00	No	No
RWF	089	B	7/7/2019	14:23:40	17	5	14.60	0 to -1/3 to 2	4	-2	4 to -2	10.14	8.59	12.01	No	3.42	IND	No	No
RWF	089	C	7/7/2019	14:24:57	17	5	14.60	0 to -1/3 to 2	4	-2	4 to -2	5.31	2.43	7.86	No	5.43	IND	No	No
RWF	089	D	7/7/2019	14:26:05	17	5	14.60	-1 to -2/3 to 2	4	-2	4 to -2	8.16	5.82	9.33	No	3.51	IND	No	No
RWF	090	A	7/7/2019	15:18:28	17	5	14.60	2 to 1	4	-2	4 to -2	5.15	3.49	6.09	No	2.60	IND	No	No
RWF	090	B	7/7/2019	15:19:30	17	5	14.60	1 to 0/2 to 1	4	-2	4 to -2	6.57	5.38	7.01	No	1.64	IND	No	No
RWF	090	C	7/7/2019	15:20:32	17	5	14.60	1 to 0/2 to 1	>4	-2	>4 to -2	6.08	5.75	6.38	No	0.63	IND	No	No
RWF	091	A	7/7/2019	16:15:20	17	5	14.60	3 to 2	>4	0	>4 to 0	5.75	5.22	6.32	No	1.10	IND	No	No
RWF	091	B	7/7/2019	16:16:29	17	5	14.60	3 to 2	>4	0	>4 to 0	4.93	4.50	5.24	No	0.74	IND	No	No
RWF	091	C	7/7/2019	16:17:36	17	5	14.60	3 to 2	>4	-1	>4 to -1	4.39	3.67	4.81	No	1.14	IND	No	No
RWF	092	A	7/7/2019	16:49:41	17	5	14.60	3 to 2	>4	1	>4 to 1	5.45	5.08	5.66	No	0.59	IND	No	No
RWF	092	B	7/7/2019	16:50:54	17	5	14.60	3 to 2	>4	0	>4 to 0	4.67	4.42	4.91	No	0.48	IND	No	No
RWF	092	C	7/7/2019	16:52:12	17	5	14.60	3 to 2	>4	0	>4 to 0	4.25	4.01	4.50	No	0.49	IND	No	No
RWF	093	A	7/7/2019	17:29:03	17	5	14.60	3 to 2	>4	-1	>4 to -1	6.42	5.76	6.70	No	0.95	IND	No	No
RWF	093	B	7/7/2019	17:30:13	17	5	14.60	3 to 2	>4	-1	>4 to -1	4.75	4.58	4.88	No	0.30	IND	No	No
RWF	093	C	7/7/2019	17:31:29	17	5	14.60	3 to 2	>4	-1	>4 to -1	4.75	4.32	5.07	No	0.74	IND	No	No
RWF	094	A	7/7/2019	18:13:44	17	5	14.60	3 to 2	>4	-1	>4 to -1	6.06	5.43	6.28	No	0.85	IND	No	No
RWF	094	B	7/7/2019	18:14:50	17	5	14.60	3 to 2	>4	-1	>4 to -1	4.94	4.59	5.47	No	0.88	IND	No	No
RWF	094	C	7/7/2019	18:16:09	17	5	14.60	3 to 2	>4	-1	>4 to -1	4.47	3.30	7.27	No	3.97	IND	No	No
RWF	095	A	7/7/2019	18:51:52	17	5	14.60	2 to 1	3	-2	3 to -2	6.56	5.55	7.19	No	1.64	IND	No	No
RWF	095	B	7/7/2019	18:53:16	17	5	14.60	2 to 1/3 to 2	3	-2	3 to -2	5.69	4.89	6.16	No	1.27	IND	No	No
RWF	095	D	7/7/2019	18:55:42	17	5	14.60	2 to 1/1 to 0	3	-2	3 to -2	8.61	8.29	8.90	No	0.61	IND	No	No
RWF	096	A	7/8/2019	5:53:01	17	5	14.60	3 to 2	4	0	4 to 0	5.55	4.57	6.08	No	1.51	IND	No	No
RWF	096	B	7/8/2019	5:54:18	17	5	14.60	3 to 2	4	1	4 to 1	5.26	4.89	5.70	No	0.81	IND	No	No
RWF	096	C	7/8/2019	5:55:39	17	5	14.60	3 to 2	4	1	4 to 1	4.72	4.48	5.08	No	0.60	IND	No	No
RWF	097	A	7/8/2019	5:17:51	17	5	14.60	2 to 1	3	-2	3 to -2	5.76	4.94	6.52	No	1.58	IND	No	No
RWF	097	B	7/8/2019	5:19:10	17	5	14.60	2 to 1	3	-1	3 to -1	6.17	5.25	6.49	No	1.23	IND	No	No
RWF	097	C	7/8/2019	5:20:21	17	5	14.60	2 to 1	3	-3	3 to -3	6.54	5.78	7.07	No	1.28	IND	No	No
RWF	098	A	7/8/2019	4:31:46	17	5	14.60	2 to 1	4	-1	4 to -1	7.42	6.84	7.89	No	1.05	IND	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	098	B	7/8/2019	4:33:01	17	5	14.60	2 to 1	4	-2	4 to -2	8.71	8.34	8.94	No	0.60	IND	No	No
RWF	098	C	7/8/2019	4:34:12	17	5	14.60	2 to 1	>4	-2	>4 to -2	6.85	5.75	7.49	No	1.74	IND	No	No
RWF	099	A	7/8/2019	3:45:58	17	5	14.60	2 to 1	3	-1	3 to -1	4.89	4.61	5.42	No	0.81	IND	No	No
RWF	099	B	7/8/2019	3:47:02	17	5	14.60	2 to 1	3	0	3 to 0	6.06	5.54	6.94	No	1.40	IND	No	No
RWF	099	C	7/8/2019	3:48:14	17	5	14.60	2 to 1	3	0	3 to 0	6.52	5.63	7.02	No	1.39	IND	No	No
RWF	100	A	7/8/2019	2:46:50	17	5	14.60	3 to 2	4	-1	4 to -1	4.73	4.31	5.00	No	0.69	IND	No	No
RWF	100	C	7/8/2019	2:49:18	17	5	14.60	3 to 2	4	-1	4 to -1	4.50	3.58	5.50	No	1.92	IND	No	No
RWF	100	D	7/8/2019	2:50:27	17	5	14.60	1 to 0/3 to 2	3	-1	3 to -1	7.53	6.54	8.36	No	1.82	IND	No	No
RWF	101	B	7/8/2019	2:10:20	17	5	14.60	2 to 1	4	-1	4 to -1	6.22	5.58	6.75	No	1.18	IND	No	No
RWF	101	C	7/8/2019	2:11:32	17	5	14.60	2 to 1/1 to 0	>4	-2	>4 to -2	4.82	2.50	7.01	No	4.51	IND	No	No
RWF	101	D	7/8/2019	2:12:43	17	5	14.60	2 to 1/1 to 0	>4	-2	>4 to -2	5.96	4.53	6.54	No	2.01	IND	No	No
RWF	102	A	7/8/2019	1:27:47	17	5	14.60	3 to 2	4	0	4 to 0	4.25	3.90	4.62	No	0.73	IND	No	No
RWF	102	B	7/8/2019	1:29:07	17	5	14.60	3 to 2	4	-1	4 to -1	4.47	3.24	5.70	No	2.46	IND	No	No
RWF	102	C	7/8/2019	1:30:18	17	5	14.60	3 to 2	4	-1	4 to -1	4.31	3.93	4.49	No	0.55	IND	No	No
RWF	103	A	7/8/2019	0:35:04	17	5	14.60	3 to 2	>4	-2	>4 to -2	4.88	4.50	5.37	No	0.88	IND	No	No
RWF	103	B	7/8/2019	0:36:19	17	5	14.60	3 to 2	>4	-2	>4 to -2	4.32	2.42	5.41	No	2.98	IND	No	No
RWF	103	C	7/8/2019	0:37:36	17	5	14.60	3 to 2	>4	-1	>4 to -1	5.97	5.53	6.58	No	1.05	IND	No	No
RWF	104	B	7/7/2019	23:52:35	17	5	14.60	0 to -1/2 to 1	>4	-2	>4 to -2	3.31	2.35	4.25	No	1.90	IND	No	No
RWF	104	C	7/7/2019	23:53:47	17	5	14.60	1 to 0/3 to 2	>4	-2	>4 to -2	8.62	7.76	9.72	No	1.96	IND	No	No
RWF	104	D	7/7/2019	23:55:00	17	5	14.60	0 to -1/3 to 2	>4	-2	>4 to -2	3.77	3.37	4.11	No	0.74	IND	No	No
RWF	105	A	7/7/2019	23:08:30	17	5	14.60	3 to 2	4	0	4 to 0	6.08	5.49	6.53	No	1.04	IND	No	No
RWF	105	B	7/7/2019	23:09:38	17	5	14.60	3 to 2	4	0	4 to 0	7.43	7.23	7.54	No	0.31	IND	No	No
RWF	105	C	7/7/2019	23:10:47	17	5	14.60	3 to 2	4	-1	4 to -1	5.35	4.34	5.74	No	1.40	IND	No	No
RWF	106	A	7/7/2019	22:48:58	17	5	14.60	0 to -1/1 to 0	3	-2	3 to -2	6.34	5.73	6.72	No	0.98	IND	No	No
RWF	106	B	7/7/2019	22:50:09	17	5	14.60	1 to 0	>4	-1	>4 to -1	6.07	4.20	8.40	No	4.20	IND	No	No
RWF	106	C	7/7/2019	22:51:16	17	5	14.60	1 to 0/2 to 1	>4	-2	>4 to -2	5.22	4.67	6.43	No	1.76	IND	No	No
RWF	107	A	7/8/2019	20:46:23	17	5	14.60	1 to 0/0 to -1	4	-3	4 to -3	4.49	4.24	4.89	No	0.64	IND	No	No
RWF	107	B	7/8/2019	20:47:32	17	5	14.60	1 to 0	4	-2	4 to -2	11.19	8.40	13.56	No	5.16	IND	No	No
RWF	107	C	7/8/2019	20:48:35	17	5	14.60	0 to -1	>4	-3	>4 to -3	8.38	7.88	8.81	No	0.93	IND	No	No
RWF	108	A	7/8/2019	18:50:24	17	5	14.60	1 to 0	3	-1	3 to -1	4.32	3.62	4.81	No	1.18	IND	No	No
RWF	108	B	7/8/2019	18:51:28	17	5	14.60	1 to 0	3	-1	3 to -1	5.54	3.03	7.69	No	4.66	IND	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	108	C	7/8/2019	18:52:33	17	5	14.60	1 to 0/2 to 1	3	-1	3 to -1	7.58	5.54	8.72	No	3.18	IND	No	No
RWF	109	A	7/8/2019	19:36:27	17	5	14.60	1 to 0/2 to 1	4	-2	4 to -2	5.73	3.22	7.49	No	4.27	IND	No	No
RWF	109	B	7/8/2019	19:37:35	17	5	14.60	1 to 0/2 to 1	>4	-2	>4 to -2	5.65	3.33	8.07	No	4.74	IND	No	No
RWF	109	C	7/8/2019	19:38:45	17	5	14.60	1 to 0/2 to 1	4	-1	4 to -1	6.25	5.37	6.65	No	1.28	IND	No	No
RWF	110	A	7/8/2019	19:54:26	17	5	14.60	3 to 2	>4	0	>4 to 0	6.47	6.23	7.26	No	1.03	IND	No	No
RWF	110	B	7/8/2019	19:55:32	17	5	14.60	3 to 2	4	0	4 to 0	5.10	5.68	6.01	No	0.33	IND	No	No
RWF	110	C	7/8/2019	19:56:44	17	5	14.60	3 to 2	>4	0	>4 to 0	5.29	5.04	5.68	No	0.64	IND	No	No
RWF	111	A	7/8/2019	7:24:05	17	5	14.60	1 to 0/2 to 1	4	-2	4 to -2	9.80	9.15	10.19	No	1.03	IND	No	No
RWF	111	B	7/8/2019	7:25:36	17	5	14.60	1 to 0/3 to 2	4	-2	4 to -2	7.82	6.77	8.71	No	1.94	IND	No	No
RWF	111	C	7/8/2019	7:30:44	17	5	14.60	1 to 0/3 to 2	4	-2	4 to -2	4.36	3.71	6.02	No	2.31	IND	No	No
RWF	112	A	7/8/2019	8:41:01	17	5	14.60	2 to 1	>4	-1	>4 to -1	6.23	4.61	7.22	No	2.61	IND	No	No
RWF	112	C	7/8/2019	8:43:25	17	5	14.60	2 to 1	>4	-2	>4 to -2	5.48	5.30	5.76	No	0.46	IND	No	No
RWF	112	D	7/8/2019	8:44:46	17	5	14.60	2 to 1	4	-2	4 to -2	5.61	5.22	6.00	No	0.77	IND	No	No
RWF	113	A	7/8/2019	9:55:45	17	5	14.60	2 to 1	>4	-1	>4 to -1	4.00	3.52	4.59	No	1.07	IND	No	No
RWF	113	B	7/8/2019	9:57:08	17	5	14.60	2 to 1	>4	0	>4 to 0	5.29	4.59	5.89	No	1.30	IND	No	No
RWF	113	C	7/8/2019	9:58:33	17	5	14.60	2 to 1	>4	0	>4 to 0	6.68	6.01	7.28	No	1.26	IND	No	No
RWF	114	A	7/8/2019	11:09:27	17	5	14.60	0 to -1	>4	-2	>4 to -2	4.44	3.03	5.26	No	2.23	IND	No	No
RWF	114	C	7/8/2019	11:12:09	17	5	14.60	0 to -1	>4	-1	>4 to -1	6.88	5.60	7.90	No	2.30	IND	No	No
RWF	114	D	7/8/2019	11:13:27	17	5	14.60	0 to -1	>4	-3	>4 to -3	4.05	3.65	4.38	No	0.74	IND	No	No
RWF	115	A	7/8/2019	11:43:41	17	5	14.60	1 to 0	>4	-1	>4 to -1	4.18	3.16	4.93	No	1.77	IND	No	No
RWF	115	B	7/8/2019	11:44:52	17	5	14.60	1 to 0	>4	-1	>4 to -1	9.15	7.64	9.99	No	2.35	IND	No	No
RWF	115	C	7/8/2019	11:46:24	17	5	14.60	0 to -1/1 to 0	>4	-2	>4 to -2	7.31	6.49	8.42	No	1.93	IND	No	No
RWF	116	A	7/8/2019	18:25:25	17	5	14.60	0 to -1/1 to 0	>4	-2	>4 to -2	11.87	11.00	12.12	No	1.12	IND	No	No
RWF	116	B	7/8/2019	18:26:24	17	5	14.60	0 to -1/1 to 0	>4	-2	>4 to -2	6.57	5.64	7.74	No	2.11	IND	No	No
RWF	116	C	7/8/2019	18:27:22	17	5	14.60	0 to -1	>4	-2	>4 to -2	3.43	3.03	3.96	No	0.93	IND	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	117	A	7/8/2019	17:42:13	17	5	14.60	0 to -1	>4	-2	>4 to -2	11.43	10.00	13.15	No	3.15	IND	No	No
RWF	117	B	7/8/2019	17:43:25	17	5	14.60	0 to -1	>4	-2	>4 to -2	5.38	2.52	7.82	No	5.30	IND	No	No
RWF	117	C	7/8/2019	17:44:35	17	5	14.60	0 to -1	>4	-1	>4 to -1	3.22	2.69	3.93	No	1.25	IND	No	No
RWF	118	A	7/8/2019	16:49:30	17	5	14.60	1 to 0/2 to 1	>4	-1	>4 to -1	6.51	4.43	8.38	No	3.95	IND	No	No
RWF	118	B	7/8/2019	16:50:42	17	5	14.60	1 to 0/2 to 1	>4	-1	>4 to -1	6.57	6.31	6.84	No	0.53	IND	No	No
RWF	118	C	7/8/2019	16:51:52	17	5	14.60	1 to 0/2 to 1	>4	-1	>4 to -1	5.75	5.27	7.00	No	1.73	IND	No	No
RWF	119	B	7/8/2019	16:10:16	17	5	14.60	1 to 0	>4	-2	>4 to -2	8.37	7.05	8.99	No	1.93	IND	No	No
RWF	119	C	7/8/2019	16:11:30	17	5	14.60	0 to -1/1 to 0	>4	-1	>4 to -1	6.39	4.52	7.69	No	3.16	IND	No	No
RWF	119	D	7/8/2019	16:12:47	17	5	14.60	0 to -1/1 to 0	>4	-2	>4 to -2	4.25	3.69	4.70	No	1.01	IND	No	No
RWF	120	A	7/8/2019	14:58:02	17	5	14.60	2 to 1	>4	-3	>4 to -3	6.53	6.09	7.30	No	1.21	IND	No	No
RWF	120	B	7/8/2019	14:59:15	17	5	14.60	1 to 0/2 to 1	>4	-2	>4 to -2	4.57	2.99	6.15	No	3.17	IND	No	No
RWF	120	C	7/8/2019	15:00:16	17	5	14.60	1 to 0/2 to 1	>4	-1	>4 to -1	7.90	7.03	8.86	No	1.82	IND	No	No
RWF	121	A	7/8/2019	14:11:50	17	5	14.60	2 to 1	>4	-2	>4 to -2	4.13	3.41	4.42	No	1.02	IND	No	No
RWF	121	B	7/8/2019	14:12:57	17	5	14.60	1 to 0/2 to 1	>4	-2	>4 to -2	10.57	10.33	10.85	No	0.52	IND	No	No
RWF	121	C	7/8/2019	14:14:11	17	5	14.60	0 to -1/2 to 1	>4	-2	>4 to -2	3.76	3.17	4.50	No	1.33	IND	No	No
RWF	122	A	7/8/2019	13:28:33	17	5	14.60	2 to 1	>4	-1	>4 to -1	2.95	2.52	3.63	No	1.11	IND	No	No
RWF	122	B	7/8/2019	13:29:41	17	5	14.60	1 to 0/2 to 1	>4	-1	>4 to -1	5.68	5.43	5.85	No	0.42	IND	No	No
RWF	122	C	7/8/2019	13:30:54	17	5	14.60	1 to 0/2 to 1	>4	-1	>4 to -1	5.24	4.83	5.74	No	0.91	IND	No	No
RWF	123	A	7/8/2019	12:56:57	17	5	14.60	2 to 1	>4	0	>4 to 0	4.02	3.40	4.99	No	1.59	IND	No	No
RWF	123	B	7/8/2019	12:58:12	17	5	14.60	2 to 1	>4	-1	>4 to -1	5.39	2.77	7.59	No	4.82	IND	No	No
RWF	123	C	7/8/2019	12:59:21	17	5	14.60	2 to 1	>4	-2	>4 to -2	6.58	5.31	7.18	No	1.87	IND	No	No
RWF	124	A	7/7/2019	19:13:27	17	5	14.60	3 to 2	>4	0	>4 to 0	6.79	6.62	7.05	No	0.43	IND	No	No
RWF	124	C	7/7/2019	19:15:49	17	5	14.60	3 to 2	>4	1	>4 to 1	5.02	4.54	5.66	No	1.12	IND	No	No
RWF	124	D	7/7/2019	19:16:58	17	5	14.60	3 to 2	>4	1	>4 to 1	5.00	4.78	5.25	No	0.47	IND	No	No
RWF	125	A	7/7/2019	19:53:48	17	5	14.60	1 to 0/2 to 1	>4	0	>4 to 0	6.26	4.91	6.89	No	1.97	IND	No	No
RWF	125	B	7/7/2019	19:55:02	17	5	14.60	2 to 1	>4	-1	>4 to -1	3.91	3.49	4.11	No	0.62	IND	No	No
RWF	125	C	7/7/2019	19:56:24	17	5	14.60	1 to 0/2 to 1	>4	0	>4 to 0	8.06	7.55	8.55	No	1.00	IND	No	No
RWF	126	A	7/7/2019	20:18:22	17	5	14.60	1 to 0/2 to 1	>4	-1	>4 to -1	8.19	6.54	8.83	No	2.29	IND	No	No
RWF	126	B	7/7/2019	20:19:31	17	5	14.60	2 to 1	>4	-1	>4 to -1	4.09	3.10	4.89	No	1.79	IND	No	No
RWF	126	C	7/7/2019	20:20:42	17	5	14.60	2 to 1	>4	0	>4 to 0	5.47	4.84	5.77	No	0.94	IND	No	No
RWF	127	A	7/7/2019	22:04:42	17	5	14.60	1 to 0	>4	-2	>4 to -2	2.98	2.64	3.25	No	0.61	IND	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	127	B	7/7/2019	22:05:54	17	5	14.60	1 to 0	>4	-1	>4 to -1	2.19	0.82	2.88	No	2.07	IND	No	No
RWF	127	C	7/7/2019	22:06:57	17	5	14.60	0 to -1	>4	-2	>4 to -2	3.07	2.73	3.51	No	0.78	IND	No	No
RWF	128	A	7/7/2019	21:18:58	17	5	14.60	0 to -1/1 to 0	>4	-1	>4 to -1	8.97	6.41	10.03	No	3.62	IND	No	No
RWF	128	C	7/7/2019	21:21:23	17	5	14.60	0 to -1/1 to 0	>4	-3	>4 to -3	5.07	3.54	6.12	No	2.58	IND	No	No
RWF	128	D	7/7/2019	21:22:54	17	5	14.60	0 to -1/1 to 0	>4	-2	>4 to -2	10.15	9.65	10.78	No	1.14	IND	No	No
RWF	129	B	7/7/2019	21:02:30	17	5	14.60	0 to -1	>4	-3	>4 to -3	3.45	2.72	4.50	No	1.78	IND	No	No
RWF	129	C	7/7/2019	21:03:40	17	5	14.60	0 to -1/1 to 0	>4	-2	>4 to -2	9.58	8.10	11.19	No	3.09	IND	No	No
RWF	129	D	7/7/2019	21:04:49	17	5	14.60	0 to -1/1 to 0	>4	-1	>4 to -1	4.79	1.95	6.84	No	4.89	IND	No	No
RWF	136	A	7/9/2019	3:46:03	17	5	14.60	-1 to -2/1 to 0	>4	-4	>4 to -4	5.32	3.09	6.54	No	3.45	IND	No	No
RWF	136	B	7/9/2019	3:47:25	17	5	14.60	0 to -1/1 to 0	>4	-3	>4 to -3	5.58	2.85	6.58	No	3.73	IND	No	No
RWF	136	C	7/9/2019	3:48:41	17	5	14.60	-3 to -4/2 to 1	>4	-5	>4 to -5	3.71	2.92	4.81	No	1.89	IND	No	No
RWF	137	A	7/9/2019	4:18:43	17	5	14.60	-3 to -4/1 to 0	>4	-4	>4 to -4	7.63	5.73	9.22	No	3.49	IND	No	No
RWF	137	B	7/9/2019	4:20:00	17	5	14.60	0 to -1/1 to 0	>4	-3	>4 to -3	7.39	4.21	9.48	No	5.27	IND	No	No
RWF	137	D	7/9/2019	4:22:38	17	5	14.60	-3 to -4/0 to -1	>4	-6	>4 to -6	5.59	4.16	6.32	No	2.16	IND	No	No
RWF	138	B	7/9/2019	5:34:38	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	IND
RWF	138	C	7/9/2019	5:35:43	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	IND
RWF	138	D	7/9/2019	5:37:00	17	5	14.60	0 to -1/1 to 0	>4	-3	>4 to -3	4.54	3.52	5.62	No	2.11	IND	No	No
RWF	139	B	7/9/2019	6:13:03	17	5	14.60	1 to 0	>4	-3	>4 to -3	4.18	3.86	4.43	No	0.57	IND	No	No
RWF	139	C	7/9/2019	6:14:10	17	5	14.60	0 to -1/1 to 0	>4	-4	>4 to -4	2.03	1.25	3.01	No	1.77	IND	No	No
RWF	139	D	7/9/2019	6:15:19	17	5	14.60	0 to -1/1 to 0	>4	-5	>4 to -5	2.28	1.24	3.39	No	2.15	IND	No	No
RWF	140	A	7/9/2019	6:58:45	17	5	14.60	3 to 2	>4	1	>4 to 1	5.52	4.32	6.31	No	1.99	IND	No	No
RWF	140	B	7/9/2019	7:00:03	17	5	14.60	3 to 2	>4	0	>4 to 0	4.44	4.00	4.95	No	0.94	IND	No	No
RWF	140	D	7/9/2019	7:02:37	17	5	14.60	3 to 2	>4	1	>4 to 1	4.64	4.34	4.83	No	0.49	IND	No	No
RWF	141	A	7/9/2019	2:49:39	17	5	14.60	-2 to -3/1 to 0	>4	-4	>4 to -4	4.48	3.42	5.96	No	2.54	IND	No	No
RWF	141	C	7/9/2019	2:52:17	17	5	14.60	-2 to -3/1 to 0	>4	-5	>4 to -5	3.20	2.31	4.19	No	1.88	IND	No	No
RWF	141	D	7/9/2019	2:53:32	17	5	14.60	0 to -1/1 to 0	>4	-3	>4 to -3	4.46	2.64	5.76	No	3.12	IND	No	No
RWF	142	A	7/9/2019	2:10:54	17	5	14.60	0 to -1	>4	-2	>4 to -2	6.68	6.07	7.33	No	1.26	IND	No	No
RWF	142	B	7/9/2019	2:12:25	17	5	14.60	-2 to -3/1 to 0	>4	-4	>4 to -4	3.96	3.43	4.48	No	1.05	IND	No	No
RWF	142	D	7/9/2019	2:15:17	17	5	14.60	0 to -1	>4	-3	>4 to -3	7.34	6.68	7.99	No	1.31	IND	No	No
RWF	143	A	7/9/2019	1:32:03	17	5	14.60	3 to 2	>4	1	>4 to 1	4.74	4.51	5.03	No	0.51	IND	No	No
RWF	143	B	7/9/2019	1:33:23	17	5	14.60	1 to 0	>4	-2	>4 to -2	1.11	0.00	2.85	No	2.85	IND	No	No
RWF	143	C	7/9/2019	1:38:24	17	5	14.60	3 to 2	>4	1	>4 to 1	5.31	4.61	5.65	No	1.04	IND	No	No
RWF	144	A	7/8/2019	23:33:09	17	5	14.60	1 to 0	>4	-4	>4 to -4	2.87	0.00	5.77	No	5.77	IND	No	No
RWF	144	B	7/8/2019	23:34:24	17	5	14.60	0 to -1	>4	-4	>4 to -4	2.25	1.07	3.01	No	1.94	IND	No	No
RWF	144	C	7/8/2019	23:35:27	17	5	14.60	-2 to -3/1 to 0	>4	-4	>4 to -4	2.61	1.80	3.04	No	1.24	IND	No	No
RWF	201	A	7/9/2019	0:11:57	17	5	14.60	IND	IND	-6	IND to -6	0.00	0.00	0.00	No	IND	IND	No	IND

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	201	B	7/9/2019	0:12:58	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	IND
RWF	201	E	7/9/2019	0:56:35	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	IND
RWF	202	A	7/8/2019	23:00:33	17	5	14.60	-1 to -2/2 to 1	>4	-3	>4 to -3	11.25	11.03	11.47	No	0.43	IND	No	No
RWF	202	B	7/8/2019	23:01:48	17	5	14.60	-1 to -2	>4	-5	>4 to -5	4.76	3.84	5.15	No	1.31	IND	No	No
RWF	202	C	7/8/2019	23:03:02	17	5	14.60	-1 to -2	>4	-4	>4 to -4	3.42	2.81	4.19	No	1.39	IND	No	No
RWF	203	B	7/8/2019	22:42:12	17	5	14.60	3 to 2	>4	-7	>4 to -7	1.42	0.00	3.28	No	3.28	IND	No	No
RWF	203	C	7/8/2019	22:43:23	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	IND
RWF	203	D	7/8/2019	22:44:30	17	5	14.60	3 to 2	>4	0	>4 to 0	2.20	1.34	2.50	No	1.17	IND	No	No
RWF	204	A	7/9/2019	5:51:30	17	5	14.60	3 to 2	>4	1	>4 to 1	5.82	5.08	6.34	No	1.26	IND	No	No
RWF	204	B	7/9/2019	5:52:41	17	5	14.60	3 to 2	>4	0	>4 to 0	5.31	4.06	5.86	No	1.80	IND	No	No
RWF	204	C	7/9/2019	5:54:01	17	5	14.60	3 to 2	>4	0	>4 to 0	6.01	5.52	6.43	No	0.92	IND	No	No
RWF	205	A	7/7/2019	6:49:08	17	5	14.60	2 to 1/3 to 2	>4	0	>4 to 0	6.83	6.22	7.62	No	1.41	IND	No	No
RWF	205	B	7/7/2019	6:52:07	17	5	14.60	2 to 1/3 to 2	>4	0	>4 to 0	5.50	5.22	5.82	No	0.60	IND	No	No
RWF	205	C	7/7/2019	6:53:41	17	5	14.60	2 to 1/3 to 2	>4	0	>4 to 0	4.77	4.00	5.81	No	1.81	IND	No	No
RWF	206	A	7/7/2019	3:39:01	17	5	14.60	0 to -1/1 to 0	>4	-1	>4 to -1	4.12	2.25	5.54	No	3.29	IND	No	No
RWF	206	B	7/7/2019	3:40:25	17	5	14.60	0 to -1/1 to 0	>4	-3	>4 to -3	3.39	3.16	3.84	No	0.68	IND	No	No
RWF	206	C	7/7/2019	3:41:35	17	5	14.60	0 to -1/1 to 0	>4	-3	>4 to -3	7.00	5.68	7.77	No	2.09	IND	No	No
RWF	207	B	7/7/2019	11:36:30	17	5	14.60	2 to 1	>4	1	>4 to 1	2.60	1.56	3.91	No	2.35	IND	No	No
RWF	207	C	7/7/2019	11:37:47	17	5	14.60	2 to 1	>4	1	>4 to 1	0.78	0.00	1.54	No	1.54	IND	No	No
RWF	207	D	7/7/2019	11:39:00	17	5	14.60	2 to 1	>4	1	>4 to 1	1.96	1.62	2.10	No	0.48	IND	No	No
RWF	208	A	7/7/2019	12:30:40	17	5	14.60	3 to 2	>4	-3	>4 to -3	3.41	2.65	4.33	No	1.68	IND	No	No
RWF	208	B	7/7/2019	12:32:01	17	5	14.60	2 to 1	>4	-1	>4 to -1	2.51	2.17	2.91	No	0.74	IND	No	No
RWF	208	E	7/7/2019	12:44:35	17	5	14.60	2 to 1	>4	-4	>4 to -4	0.33	0.00	1.41	No	1.41	IND	No	No
RWF	209	A	7/8/2019	4:52:46	17	5	14.60	2 to 1	>4	-1	>4 to -1	2.62	2.16	2.97	No	0.81	IND	No	No
RWF	209	B	7/8/2019	4:53:55	17	5	14.60	2 to 1	>4	-1	>4 to -1	2.26	1.39	2.78	No	1.39	IND	No	No
RWF	209	C	7/8/2019	4:55:09	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	210	A	7/7/2019	14:51:04	17	5	14.60	0 to -1/2 to 1	>4	-3	>4 to -3	1.90	1.19	2.37	No	1.19	IND	No	No
RWF	210	C	7/7/2019	14:53:28	17	5	14.60	0 to -1/2 to 1	>4	-1	>4 to -1	5.06	4.57	5.51	No	0.95	IND	No	No
RWF	210	D	7/7/2019	14:54:41	17	5	14.60	1 to 0/2 to 1	>4	0	>4 to 0	5.64	4.97	6.18	No	1.21	IND	No	No
RWF	211	A	7/8/2019	1:48:34	17	5	14.60	0 to -1/1 to 0	>4	-3	>4 to -3	2.72	2.06	3.47	No	1.41	IND	No	No
RWF	211	C	7/8/2019	1:50:57	17	5	14.60	0 to -1	>4	-2	>4 to -2	3.13	1.20	5.35	No	4.15	IND	No	No
RWF	211	D	7/8/2019	1:52:10	17	5	14.60	0 to -1	>4	-3	>4 to -3	1.52	0.76	2.21	No	1.46	IND	No	No
RWF	212	B	7/7/2019	21:48:10	17	5	14.60	1 to 0/2 to 1	>4	-1	>4 to -1	4.39	3.87	5.02	No	1.15	IND	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	212	C	7/7/2019	21:49:29	17	5	14.60	1 to 0	>4	-1	>4 to -1	10.27	9.35	11.13	No	1.77	IND	No	No
RWF	212	D	7/7/2019	21:50:37	17	5	14.60	1 to 0/2 to 1	>4	-1	>4 to -1	6.11	5.18	7.08	No	1.89	IND	No	No
RWF	213	A	7/8/2019	15:48:06	17	5	14.60	1 to 0/2 to 1	>4	-1	>4 to -1	0.71	0.00	1.83	No	1.83	IND	No	No
RWF	213	C	7/8/2019	15:50:35	17	5	14.60	1 to 0/2 to 1	>4	-1	>4 to -1	4.53	2.40	6.95	No	4.55	IND	No	No
RWF	213	D	7/8/2019	15:51:43	17	5	14.60	1 to 0/2 to 1	>4	-1	>4 to -1	2.27	1.24	3.46	No	2.22	IND	No	No
RWF	214	A	7/6/2019	22:43:53	17	5	14.60	-3 to -4/0 to -1	>4	-3	>4 to -3	7.49	6.84	7.96	No	1.12	IND	No	No
RWF	214	C	7/6/2019	22:46:12	17	5	14.60	-3 to -4/0 to -1	>4	-5	>4 to -5	2.79	2.17	3.56	No	1.39	IND	No	No
RWF	214	D	7/6/2019	22:47:23	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	215	A	7/6/2019	18:18:34	17	5	14.60	3 to 2	>4	1	>4 to 1	2.85	2.43	3.26	No	0.84	IND	No	No
RWF	215	B	7/6/2019	18:19:43	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	215	C	7/6/2019	18:21:03	17	5	14.60	3 to 2	>4	2	>4 to 2	0.00	0.00	0.00	No	IND	IND	No	No
RWF	216	A	7/6/2019	15:27:26	17	5	14.60	0 to -1	>4	-5	>4 to -5	2.35	0.67	3.55	No	2.88	IND	No	No
RWF	216	B	7/6/2019	15:28:26	17	5	14.60	0 to -1	>4	-1	>4 to -1	2.77	2.02	3.66	No	1.64	IND	No	No
RWF	216	C	7/6/2019	15:39:45	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	217	A	7/6/2019	15:02:22	17	5	14.60	1 to 0	>4	-6	>4 to -6	0.93	0.70	1.18	No	0.49	IND	No	No
RWF	217	C	7/6/2019	15:04:28	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	217	D	7/6/2019	15:05:36	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	218	A	7/6/2019	6:25:58	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	218	C	7/6/2019	6:32:43	17	5	14.60	3 to 2	>4	-4	>4 to -4	0.38	0.00	0.87	No	0.87	IND	No	No
RWF	218	D	7/6/2019	6:34:24	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	218E1	A	7/6/2019	7:21:51	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	218E1	C	7/6/2019	7:24:58	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	218E1	D	7/6/2019	7:26:34	17	5	14.60	3 to 2	>4	0	>4 to 0	0.34	0.00	1.00	No	1.00	IND	No	No
RWF	218E2	A	7/6/2019	7:41:03	17	5	14.60	0 to -1/2 to 1	>4	-4	>4 to -4	3.15	2.88	3.46	No	0.58	IND	No	No
RWF	218E2	B	7/6/2019	7:42:32	17	5	14.60	2 to 1	>4	-6	>4 to -6	1.20	0.00	2.19	No	2.19	IND	No	No
RWF	218E2	C	7/6/2019	7:43:54	17	5	14.60	0 to -1/1 to 0	>4	0	>4 to 0	3.95	3.37	4.41	No	1.03	IND	No	No
RWF	218W1	A	7/6/2019	8:38:40	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	218W1	B	7/6/2019	8:56:33	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	218W1	C	7/6/2019	8:58:15	17	5	14.60	2 to 1	>4	-2	>4 to -2	0.30	0.00	0.91	No	0.91	IND	No	No
RWF	218W2	A	7/6/2019	9:24:34	17	5	14.60	0 to -1/1 to 0	>4	-1	>4 to -1	6.23	5.65	6.59	No	0.95	IND	No	No
RWF	218W2	C	7/6/2019	9:27:13	17	5	14.60	1 to 0	>4	0	>4 to 0	1.82	1.40	2.14	No	0.74	IND	No	No
RWF	218W2	D	7/6/2019	9:29:00	17	5	14.60	1 to 0/2 to 1	>4	-3	>4 to -3	4.85	3.24	6.03	No	2.79	IND	No	No
RWF	219	A	7/6/2019	10:25:09	17	5	14.60	0 to -1	>4	-2	>4 to -2	5.24	4.89	5.59	No	0.71	IND	No	No
RWF	219	B	7/6/2019	10:35:20	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	219	D	7/6/2019	10:38:38	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	220	B	7/5/2019	18:00:36	17	5	14.60	-3 to -4/3 to 2	>4	-5	>4 to -5	1.84	0.70	2.93	No	2.23	IND	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	220	C	7/5/2019	18:01:38	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	220	D	7/5/2019	18:02:46	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	220E1	B	7/5/2019	22:07:54	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	220E1	C	7/5/2019	22:09:18	17	5	14.60	3 to 2	>4	1	>4 to 1	0.18	0.00	0.51	No	0.51	IND	No	No
RWF	220E1	D	7/5/2019	22:10:38	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	220E2	B	7/5/2019	22:34:03	17	5	14.60	0 to -1/1 to 0	>4	0	>4 to 0	4.41	3.86	5.56	No	1.70	IND	No	No
RWF	220E2	C	7/5/2019	22:35:10	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	220E2	D	7/5/2019	22:36:20	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	220W1	A	7/5/2019	21:31:16	17	5	14.60	1 to 0	>4	0	>4 to 0	6.02	4.57	7.91	No	3.34	IND	No	No
RWF	220W1	B	7/5/2019	21:32:37	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	220W1	C	7/5/2019	21:33:53	17	5	14.60	2 to 1	>4	0	>4 to 0	1.41	0.74	2.21	No	1.46	IND	No	No
RWF	220W2	C	7/5/2019	20:39:20	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	220W2	D	7/5/2019	20:40:35	17	5	14.60	IND	>4	IND	>4 to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	221	A	7/11/2019	1:19:41	17	5	14.60	3 to 2	>4	1	>4 to 1	4.92	4.57	5.30	No	0.73	IND	No	No
RWF	221	B	7/11/2019	1:20:58	17	5	14.60	3 to 2	>4	1	>4 to 1	4.80	4.32	5.57	No	1.26	IND	No	No
RWF	221	C	7/11/2019	1:22:23	17	5	14.60	3 to 2	>4	1	>4 to 1	4.55	4.09	5.18	No	1.09	IND	No	No
RWF	222	A	7/5/2019	3:34:53	17	5	14.60	3 to 2	>4	0	>4 to 0	5.49	5.10	6.03	No	0.93	IND	No	No
RWF	222	B	7/5/2019	3:36:03	17	5	14.60	3 to 2	>4	1	>4 to 1	5.38	5.08	5.55	No	0.46	IND	No	No
RWF	222	C	7/5/2019	3:37:20	17	5	14.60	3 to 2	>4	1	>4 to 1	5.57	5.07	6.07	No	1.00	IND	No	No
RWF	223	A	7/11/2019	11:38:35	17	5	14.60	4 to 3	>4	2	>4 to 2	14.65	14.03	15.04	No	1.01	2.89	No	No
RWF	223	C	7/11/2019	11:41:48	17	5	14.60	4 to 3	>4	2	>4 to 2	6.43	11.27	13.01	No	1.74	4.18	No	No
RWF	223	D	7/11/2019	11:43:17	17	5	14.60	4 to 3	>4	2	>4 to 2	14.40	14.08	14.66	No	0.58	3.35	No	No
RWF	224	A	7/11/2019	8:16:30	17	5	14.60	0 to -1	>4	-2	>4 to -2	6.07	5.34	6.40	No	1.06	IND	No	No
RWF	224	B	7/11/2019	8:17:46	17	5	14.60	0 to -1	>4	-2	>4 to -2	6.78	5.03	8.33	No	3.31	IND	No	No
RWF	224	C	7/11/2019	8:19:08	17	5	14.60	0 to -1	>4	-1	>4 to -1	8.40	7.18	9.21	No	2.03	IND	No	No
RWF	225	A	7/11/2019	6:27:41	17	5	14.60	4 to 3	>4	1	>4 to 1	9.34	8.81	9.61	No	0.80	3.53	No	No
RWF	225	B	7/11/2019	6:29:06	17	5	14.60	4 to 3	>4	1	>4 to 1	9.50	9.12	9.77	No	0.66	3.18	No	No
RWF	225	C	7/11/2019	6:30:31	17	5	14.60	4 to 3	>4	1	>4 to 1	7.59	7.20	8.45	No	1.24	3.01	Yes	No
RWF	226	A	7/10/2019	20:15:14	17	5	14.60	4 to 3	>4	1	>4 to 1	12.34	11.08	14.60	No	3.51	5.19	Yes	No
RWF	226	C	7/10/2019	20:18:03	17	5	14.60	4 to 3	>4	1	>4 to 1	11.21	10.72	11.77	No	1.05	4.03	No	No
RWF	226	D	7/10/2019	20:19:24	17	5	14.60	4 to 3	>4	1	>4 to 1	11.45	11.15	11.61	No	0.47	3.74	No	No
RWF	227	A	7/10/2019	11:30:26	17	5	14.60	4 to 3	>4	2	>4 to 2	13.85	13.70	14.01	No	0.31	2.29	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	227	B	7/10/2019	11:32:00	17	5	14.60	4 to 3	>4	2	>4 to 2	20.04	19.66	20.83	No	1.17	0.67	No	No
RWF	227	D	7/10/2019	11:35:22	17	5	14.60	4 to 3	>4	2	>4 to 2	20.89	19.56	21.26	No	1.70	2.21	No	No
RWF	228	A	7/10/2019	13:32:33	17	5	14.60	3 to 2	>4	1	>4 to 1	5.19	4.86	5.37	No	0.51	IND	No	No
RWF	228	B	7/10/2019	13:34:00	17	5	14.60	3 to 2	>4	1	>4 to 1	4.71	4.15	5.08	No	0.93	2.77	Yes	No
RWF	228	C	7/10/2019	13:35:23	17	5	14.60	3 to 2	>4	1	>4 to 1	3.87	3.32	4.51	No	1.19	IND	No	No
RWF	229	A	7/10/2019	15:24:01	17	5	14.60	3 to 2	>4	2	>4 to 2	5.98	5.69	6.54	No	0.85	2.22	No	No
RWF	229	B	7/10/2019	15:25:10	17	5	14.60	3 to 2	>4	2	>4 to 2	4.12	3.41	4.39	No	0.98	2.61	No	No
RWF	229	C	7/10/2019	15:26:24	17	5	14.60	3 to 2	>4	2	>4 to 2	4.89	4.37	5.47	No	1.10	2.81	No	No
RWF	230	A	7/10/2019	17:57:23	17	5	14.60	3 to 2/4 to 3	>4	2	>4 to 2	9.97	9.65	10.31	No	0.65	3.38	No	No
RWF	230	B	7/10/2019	17:58:41	17	5	14.60	3 to 2/4 to 3	>4	2	>4 to 2	8.37	7.83	8.72	No	0.89	2.96	No	No
RWF	230	C	7/10/2019	17:59:54	17	5	14.60	3 to 2/4 to 3	>4	2	>4 to 2	8.86	8.56	9.23	No	0.66	3.12	No	No
RWF	231	A	7/9/2019	22:34:53	17	5	14.60	2 to 1/3 to 2	>4	1	>4 to 1	4.57	4.28	5.08	No	0.80	IND	No	No
RWF	231	B	7/9/2019	22:36:03	17	5	14.60	2 to 1/3 to 2	>4	1	>4 to 1	6.16	5.28	6.88	No	1.60	3.64	No	No
RWF	231	C	7/9/2019	22:37:13	17	5	14.60	2 to 1/3 to 2	>4	1	>4 to 1	4.97	5.07	6.38	No	1.31	2.78	No	No
RWF	232	A	7/11/2019	14:53:05	17	5	14.60	IND	IND	-5	IND to -5	0.00	0.00	0.00	No	IND	IND	No	No
RWF	232	B	7/11/2019	14:54:27	17	5	14.60	2 to 1	>4	-3	>4 to -3	2.74	1.62	3.40	No	1.78	IND	No	No
RWF	232	C	7/11/2019	14:55:43	17	5	14.60	2 to 1	>4	-5	>4 to -5	2.01	1.14	2.92	No	1.77	IND	No	No
RWF	233	A	7/11/2019	1:54:18	17	5	14.60	3 to 2	>4	0	>4 to 0	4.39	3.91	4.63	No	0.73	IND	No	No
RWF	233	B	7/11/2019	1:55:39	17	5	14.60	3 to 2	>4	1	>4 to 1	4.02	3.86	4.20	No	0.34	IND	No	No
RWF	233	C	7/11/2019	1:57:11	17	5	14.60	3 to 2	>4	1	>4 to 1	4.19	3.64	4.51	No	0.87	IND	No	No
RWF	234	A	7/11/2019	3:14:50	17	5	14.60	3 to 2	>4	1	>4 to 1	7.40	5.76	8.26	No	2.51	6.56	No	No
RWF	234	B	7/11/2019	3:16:11	17	5	14.60	3 to 2/4 to 3	>4	2	>4 to 2	9.79	9.22	10.11	No	0.89	2.56	No	No
RWF	234	D	7/11/2019	3:19:03	17	5	14.60	3 to 2/4 to 3	>4	1	>4 to 1	5.61	5.28	6.11	No	0.82	2.97	No	No
RWF	235	A	7/9/2019	19:45:20	17	5	14.60	0 to -1	>4	0	>4 to 0	4.94	3.66	5.88	No	2.23	IND	No	No
RWF	235	B	7/9/2019	19:46:44	17	5	14.60	0 to -1	>4	0	>4 to 0	7.36	7.16	7.62	No	0.46	IND	No	No
RWF	235	C	7/9/2019	19:47:55	17	5	14.60	0 to -1	>4	0	>4 to 0	8.22	7.88	8.38	No	0.50	IND	No	No
RWF	236	A	7/10/2019	8:23:47	17	5	14.60	3 to 2	>4	1	>4 to 1	6.65	6.26	6.88	No	0.63	1.44	No	No
RWF	236	E	7/10/2019	8:59:36	17	5	14.60	3 to 2	>4	2	>4 to 2	8.47	8.01	8.91	No	0.90	1.41	No	No
RWF	236	F	7/10/2019	9:01:19	17	5	14.60	3 to 2	>4	2	>4 to 2	5.84	5.29	6.83	No	1.54	1.93	No	No
RWF	237	A	7/10/2019	23:48:36	17	5	14.60	2 to 1	>4	1	>4 to 1	4.96	4.54	5.80	No	1.26	IND	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	237	B	7/10/2019	23:49:59	17	5	14.60	2 to 1	>4	1	>4 to 1	6.41	4.64	8.09	No	3.45	IND	No	No
RWF	237	D	7/10/2019	23:52:35	17	5	14.60	2 to 1	>4	1	>4 to 1	6.17	4.54	7.15	No	2.62	IND	No	No
RWF	238	A	7/10/2019	4:56:03	17	5	14.60	3 to 2	>4	2	>4 to 2	5.23	4.92	5.69	No	0.77	2.81	No	No
RWF	238	B	7/10/2019	4:57:10	17	5	14.60	3 to 2/>4	>4	1	>4 to 1	5.64	4.57	6.66	No	2.09	3.17	No	No
RWF	238	C	7/10/2019	4:58:16	17	5	14.60	3 to 2	>4	1	>4 to 1	5.12	4.95	5.31	No	0.36	3.02	No	No
RWF	239	E	7/10/2019	6:23:29	17	5	14.60	2 to 1	>4	1	>4 to 1	6.98	5.81	7.57	No	1.76	IND	No	No
RWF	239	G	7/10/2019	6:27:14	17	5	14.60	3 to 2	>4	1	>4 to 1	3.81	3.28	4.38	No	1.10	IND	No	No
RWF	239	H	7/10/2019	6:33:02	17	5	14.60	3 to 2	>4	1	>4 to 1	1.05	0.51	2.47	No	1.96	IND	No	No
RWF	240	A	7/9/2019	15:18:20	17	5	14.60	3 to 2	>4	1	>4 to 1	4.73	4.21	5.09	No	0.88	2.06	No	No
RWF	240	B	7/9/2019	15:19:30	17	5	14.60	3 to 2	>4	0	>4 to 0	6.68	5.68	7.65	No	1.97	2.34	No	No
RWF	240	C	7/9/2019	15:20:40	17	5	14.60	3 to 2	>4	1	>4 to 1	6.15	5.82	6.38	No	0.56	2.60	No	No
RWF	241	A	7/4/2019	22:58:09	17	5	14.60	3 to 2	>4	2	>4 to 2	5.67	5.33	5.90	No	0.57	IND	No	No
RWF	241	B	7/4/2019	22:59:21	17	5	14.60	3 to 2	>4	2	>4 to 2	5.27	4.75	5.94	No	1.19	IND	No	No
RWF	241	C	7/4/2019	23:00:16	17	5	14.60	3 to 2	>4	2	>4 to 2	6.03	5.76	6.23	No	0.47	IND	No	No
RWF	242	A	7/5/2019	1:18:50	17	5	14.60	1 to 0	>4	1	>4 to 1	8.07	7.19	8.37	No	1.18	IND	No	No
RWF	242	B	7/5/2019	1:20:06	17	5	14.60	1 to 0/2 to 1	>4	1	>4 to 1	4.19	3.86	4.46	No	0.59	IND	No	No
RWF	242	C	7/5/2019	1:21:22	17	5	14.60	1 to 0/2 to 1	>4	1	>4 to 1	5.88	5.58	6.09	No	0.51	IND	No	No
RWF	243	A	7/5/2019	19:02:51	17	5	14.60	3 to 2	>4	1	>4 to 1	4.54	3.41	5.77	No	2.36	2.60	No	No
RWF	243	C	7/5/2019	19:05:15	17	5	14.60	3 to 2/>4	>4	0	>4 to 0	15.57	15.36	15.86	No	0.50	2.31	No	No
RWF	243	D	7/5/2019	19:06:18	17	5	14.60	3 to 2/>4	>4	0	>4 to 0	2.78	11.95	12.65	No	0.70	1.29	No	No
RWF	244	A	7/6/2019	0:38:59	17	5	14.60	3 to 2	>4	0	>4 to 0	5.91	5.76	6.10	No	0.35	2.39	No	No
RWF	244	B	7/6/2019	0:40:22	17	5	14.60	3 to 2	>4	0	>4 to 0	4.63	3.69	5.88	No	2.19	1.97	No	No
RWF	244	C	7/6/2019	0:41:51	17	5	14.60	3 to 2	>4	0	>4 to 0	5.36	4.62	5.79	No	1.17	2.52	No	No
RWF	245	A	7/6/2019	3:39:20	17	5	14.60	3 to 2	>4	1	>4 to 1	4.43	4.23	4.60	No	0.37	2.07	No	No
RWF	245	B	7/6/2019	3:40:36	17	5	14.60	3 to 2	>4	1	>4 to 1	4.98	4.73	5.25	No	0.52	1.67	No	No
RWF	245	D	7/6/2019	3:43:52	17	5	14.60	3 to 2	>4	-4	>4 to -4	3.59	3.24	3.99	No	0.74	IND	No	No
RWF	246	A	7/7/2019	2:35:25	17	5	14.60	3 to 2	>4	0	>4 to 0	6.12	5.62	7.70	No	2.08	IND	No	No
RWF	246	B	7/7/2019	2:36:56	17	5	14.60	3 to 2	>4	1	>4 to 1	5.55	5.17	5.77	No	0.59	IND	No	No
RWF	246	C	7/7/2019	2:38:09	17	5	14.60	3 to 2	>4	0	>4 to 0	4.24	3.68	4.53	No	0.85	IND	No	No
RWF	247	A	7/7/2019	0:38:07	17	5	14.60	0 to -1/1 to 0	>4	-3	>4 to -3	6.91	6.17	7.38	No	1.20	IND	No	No
RWF	247	B	7/7/2019	0:39:27	17	5	14.60	0 to -1/1 to 0	>4	-2	>4 to -2	4.62	3.61	5.30	No	1.69	IND	No	No
RWF	247	C	7/7/2019	0:40:52	17	5	14.60	0 to -1	>4	-5	>4 to -5	1.90	0.34	3.02	No	2.68	IND	No	No
RWF	248	A	7/6/2019	22:17:38	17	5	14.60	0 to -1/2 to 1	>4	-2	>4 to -2	3.49	3.02	3.92	No	0.89	IND	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	248	C	7/6/2019	22:19:54	17	5	14.60	0 to -1/2 to 1	>4	-1	>4 to -1	4.11	2.34	5.64	No	3.30	IND	No	No
RWF	248	D	7/6/2019	22:21:01	17	5	14.60	0 to -1	>4	-4	>4 to -4	3.18	1.30	4.85	No	3.55	IND	No	No
RWF	249	A	7/6/2019	19:03:17	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	249	B	7/6/2019	19:04:15	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	249	C	7/6/2019	19:05:29	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	No
RWF	250	A	7/7/2019	5:17:03	17	5	14.60	3 to 2	>4	1	>4 to 1	5.87	5.47	6.39	No	0.91	IND	No	No
RWF	250	B	7/7/2019	5:24:15	17	5	14.60	3 to 2	>4	1	>4 to 1	13.58	12.87	14.04	No	1.17	8.08	No	No
RWF	250	C	7/7/2019	5:25:50	17	5	14.60	3 to 2	>4	1	>4 to 1	5.17	4.85	5.43	No	0.58	IND	No	No
RWF	251	A	7/8/2019	6:37:16	17	5	14.60	0 to -1/2 to 1	>4	-3	>4 to -3	7.55	5.64	9.51	No	3.87	IND	No	No
RWF	251	B	7/8/2019	6:38:50	17	5	14.60	0 to -1/2 to 1	>4	0	>4 to 0	8.62	6.01	10.25	No	4.24	IND	No	No
RWF	251	C	7/8/2019	6:40:02	17	5	14.60	3 to 2	>4	0	>4 to 0	5.98	5.48	6.64	No	1.16	IND	No	No
RWF	252	A	7/8/2019	21:06:52	17	5	14.60	1 to 0	>4	0	>4 to 0	6.34	5.92	7.08	No	1.16	IND	No	No
RWF	252	B	7/8/2019	21:08:00	17	5	14.60	2 to 1	>4	1	>4 to 1	2.26	1.92	2.59	No	0.66	IND	No	No
RWF	252	C	7/8/2019	21:09:06	17	5	14.60	1 to 0	>4	1	>4 to 1	4.56	3.21	5.30	No	2.09	IND	No	No
RWF	253	A	7/8/2019	14:34:34	17	5	14.60	1 to 0	>4	-1	>4 to -1	5.12	4.87	5.41	No	0.54	IND	No	No
RWF	253	C	7/8/2019	14:36:55	17	5	14.60	1 to 0	>4	0	>4 to 0	9.78	8.39	10.95	No	2.56	IND	No	No
RWF	253	D	7/8/2019	14:38:00	17	5	14.60	1 to 0	>4	0	>4 to 0	9.64	8.39	11.04	No	2.65	IND	No	No
RWF	254	A	7/8/2019	3:06:28	17	5	14.60	1 to 0	>4	-1	>4 to -1	3.78	1.54	5.45	No	3.91	IND	No	No
RWF	254	B	7/8/2019	3:07:32	17	5	14.60	1 to 0	>4	0	>4 to 0	5.08	2.22	7.18	No	4.96	IND	No	No
RWF	254	C	7/8/2019	3:08:41	17	5	14.60	1 to 0	>4	0	>4 to 0	6.16	4.56	7.31	No	2.75	IND	No	No
RWF	255	A	7/9/2019	1:13:53	17	5	14.60	1 to 0	>4	0	>4 to 0	5.76	5.10	6.12	No	1.02	IND	No	No
RWF	255	B	7/9/2019	1:15:02	17	5	14.60	2 to 1	>4	1	>4 to 1	3.20	2.78	3.86	No	1.08	IND	No	No
RWF	255	C	7/9/2019	1:16:34	17	5	14.60	2 to 1	>4	1	>4 to 1	6.19	5.26	6.57	No	1.30	IND	No	No
RWF	256	A	7/8/2019	23:16:27	17	5	14.60	0 to -1	>4	-2	>4 to -2	9.52	8.22	10.23	No	2.01	IND	No	No
RWF	256	B	7/8/2019	23:17:35	17	5	14.60	0 to -1	>4	-4	>4 to -4	10.19	9.80	10.65	No	0.85	IND	No	No
RWF	256	C	7/8/2019	23:18:46	17	5	14.60	0 to -1/1 to 0	>4	-2	>4 to -2	5.38	4.79	5.69	No	0.90	IND	No	No
RWF	257	A	7/9/2019	4:02:59	17	5	14.60	0 to -1	>4	-3	>4 to -3	3.65	0.00	7.76	No	7.76	IND	No	No
RWF	257	B	7/9/2019	4:04:04	17	5	14.60	0 to -1	>4	-2	>4 to -2	3.95	2.71	4.54	No	1.83	IND	No	No
RWF	257	C	7/9/2019	4:05:13	17	5	14.60	0 to -1/1 to 0	>4	-2	>4 to -2	9.52	9.06	10.28	No	1.22	IND	No	No
RWF	258	A	7/9/2019	2:30:20	17	5	14.60	1 to 0	>4	-2	>4 to -2	4.66	4.13	5.24	No	1.11	IND	No	No
RWF	258	B	7/9/2019	2:31:29	17	5	14.60	0 to -1	>4	-2	>4 to -2	3.69	3.16	3.96	No	0.80	IND	No	No
RWF	258	C	7/9/2019	2:32:48	17	5	14.60	-2 to -3/1 to 0	>4	-3	>4 to -3	6.65	5.50	7.62	No	2.12	IND	No	No
RWF	259	A	7/8/2019	0:13:38	17	5	14.60	2 to 1	>4	0	>4 to 0	7.44	6.75	7.99	No	1.24	IND	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWF	259	B	7/8/2019	0:15:39	17	5	14.60	2 to 1	>4	0	>4 to 0	5.20	4.95	5.50	No	0.55	IND	No	No
RWF	259	C	7/8/2019	0:17:09	17	5	14.60	2 to 1	>4	0	>4 to 0	9.42	9.18	9.61	No	0.43	IND	No	No
RWF	260	A	7/8/2019	9:21:49	17	5	14.60	3 to 2	>4	1	>4 to 1	5.30	4.83	5.96	No	1.13	IND	No	No
RWF	260	B	7/8/2019	9:28:42	17	5	14.60	3 to 2	>4	1	>4 to 1	4.36	1.35	5.29	No	3.94	IND	No	No
RWF	260	C	7/8/2019	9:30:05	17	5	14.60	3 to 2	>4	1	>4 to 1	5.68	5.45	5.95	No	0.50	IND	No	No
RWF	261	A	7/8/2019	17:23:34	17	5	14.60	0 to -1	>4	-1	>4 to -1	6.55	4.35	8.70	No	4.35	IND	No	No
RWF	261	B	7/8/2019	17:24:44	17	5	14.60	0 to -1	>4	-1	>4 to -1	6.94	5.22	8.81	No	3.58	IND	No	No
RWF	261	D	7/8/2019	17:27:00	17	5	14.60	0 to -1	>4	-1	>4 to -1	11.57	9.53	12.91	No	3.38	IND	No	No
RWF	262	A	7/7/2019	17:51:19	17	5	14.60	3 to 2	>4	1	>4 to 1	4.35	4.05	4.52	No	0.47	IND	No	No
RWF	262	B	7/7/2019	17:52:39	17	5	14.60	3 to 2	>4	1	>4 to 1	6.00	5.52	6.30	No	0.78	IND	No	No
RWF	262	D	7/7/2019	17:54:56	17	5	14.60	3 to 2	>4	1	>4 to 1	5.81	5.09	6.20	No	1.11	IND	No	No
RWEC-OCS	401	A	7/12/2019	10:22:08	17	5	14.60	3 to 2	>4	1	>4 to 1	4.21	3.91	4.51	No	0.60	IND	No	No
RWEC-OCS	401	B	7/12/2019	10:23:26	17	5	14.60	3 to 2	>4	1	>4 to 1	3.85	2.35	5.42	No	3.07	IND	No	No
RWEC-OCS	401	C	7/12/2019	18:44:55	17	5	14.60	3 to 2	>4	1	>4 to 1	3.82	3.64	3.98	No	0.34	IND	No	No
RWEC-OCS	402	A	7/12/2019	17:59:32	17	5	14.60	2 to 1	>4	0	>4 to 0	1.95	1.14	2.97	No	1.84	IND	No	No
RWEC-OCS	402	B	7/12/2019	18:00:54	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	IND
RWEC-OCS	402	C	7/12/2019	18:02:03	17	5	14.60	2 to 1	>4	0	>4 to 0	1.37	0.42	2.49	No	2.07	IND	No	No
RWEC-OCS	403	A	7/12/2019	17:35:54	17	5	14.60	1 to 0	>4	-1	>4 to -1	5.93	4.91	6.65	No	1.74	IND	No	No
RWEC-OCS	403	B	7/12/2019	17:36:56	17	5	14.60	1 to 0	>4	-1	>4 to -1	8.41	8.11	8.76	No	0.65	IND	No	No
RWEC-OCS	403	C	7/12/2019	17:38:08	17	5	14.60	1 to 0	>4	-1	>4 to -1	5.40	4.86	5.70	No	0.83	IND	No	No
RWEC-OCS	404	A	7/12/2019	16:12:58	17	5	14.60	3 to 2/>4	>4	0	>4 to 0	16.07	15.77	16.28	No	0.52	0.75	No	No
RWEC-OCS	404	B	7/12/2019	16:14:12	17	5	14.60	2 to 1/>4	>4	0	>4 to 0	14.40	14.14	14.59	No	0.45	2.01	No	No
RWEC-OCS	404	D	7/12/2019	16:16:42	17	5	14.60	2 to 1/>4	>4	0	>4 to 0	15.86	12.30	17.39	No	5.09	5.84	No	No
RWEC-OCS	405	A	7/12/2019	0:03:16	17	5	14.60	2 to 1	>4	0	>4 to 0	5.04	4.65	5.34	No	0.70	IND	No	No
RWEC-OCS	405	B	7/12/2019	0:04:37	17	5	14.60	2 to 1	>4	0	>4 to 0	4.89	3.56	5.70	No	2.14	IND	No	No
RWEC-OCS	405	D	7/12/2019	0:07:20	17	5	14.60	2 to 1	>4	0	>4 to 0	4.89	4.96	5.59	No	0.64	IND	No	No
RWEC-OCS	406	A	7/11/2019	23:36:03	17	5	14.60	4 to 3	>4	1	>4 to 1	5.71	5.01	6.07	No	1.05	3.27	No	No
RWEC-OCS	406	B	7/11/2019	23:37:17	17	5	14.60	4 to 3	>4	1	>4 to 1	4.49	3.45	5.02	No	1.57	3.08	No	No
RWEC-OCS	406	D	7/11/2019	23:39:53	17	5	14.60	4 to 3	>4	1	>4 to 1	5.72	5.26	6.24	No	0.98	2.48	No	No
RWEC-OCS	407	A	7/11/2019	22:52:31	17	5	14.60	3 to 2	>4	0	>4 to 0	4.92	4.72	5.24	No	0.52	IND	No	No
RWEC-OCS	407	B	7/11/2019	22:53:56	17	5	14.60	3 to 2	>4	0	>4 to 0	4.61	4.29	4.85	No	0.55	IND	No	No
RWEC-OCS	407	C	7/11/2019	22:55:09	17	5	14.60	3 to 2	>4	0	>4 to 0	3.48	3.02	3.90	No	0.88	IND	No	No
RWEC-OCS	408	A	7/11/2019	22:29:58	17	5	14.60	2 to 1	>4	0	>4 to 0	3.62	3.23	4.07	No	0.84	IND	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWEC-OCS	408	B	7/11/2019	22:31:12	17	5	14.60	2 to 1	>4	0	>4 to 0	3.62	4.35	4.89	No	0.54	IND	No	No
RWEC-OCS	408	C	7/11/2019	22:32:23	17	5	14.60	2 to 1	>4	0	>4 to 0	5.13	5.01	5.31	No	0.30	IND	No	No
RWEC-OCS	409	A	7/11/2019	21:52:22	17	5	14.60	2 to 1	>4	0	>4 to 0	4.91	4.40	5.62	No	1.22	IND	No	No
RWEC-OCS	409	B	7/11/2019	21:53:38	17	5	14.60	2 to 1	>4	-1	>4 to -1	4.76	4.50	5.00	No	0.51	IND	No	No
RWEC-OCS	409	C	7/11/2019	21:54:52	17	5	14.60	2 to 1	>4	-1	>4 to -1	4.53	4.22	4.70	No	0.48	IND	No	No
RWEC-OCS	410	A	7/11/2019	21:28:12	17	5	14.60	4 to 3	>4	1	>4 to 1	11.41	11.00	11.97	No	0.97	3.84	No	No
RWEC-OCS	410	B	7/11/2019	21:29:22	17	5	14.60	4 to 3	>4	1	>4 to 1	15.58	15.31	15.85	No	0.55	3.86	No	No
RWEC-OCS	410	C	7/11/2019	21:30:38	17	5	14.60	4 to 3	>4	1	>4 to 1	11.10	10.53	11.50	No	0.98	3.45	No	No
RWEC-OCS	411	A	7/11/2019	20:09:25	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	IND
RWEC-OCS	411	B	7/11/2019	20:10:47	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	IND
RWEC-OCS	411	C	7/11/2019	20:12:08	17	5	14.60	IND	IND	IND	IND to IND	0.00	0.00	0.00	No	IND	IND	No	IND
RWEC-OCS	412	A	7/12/2019	1:42:04	17	5	14.60	3 to 2/4 to 3	>4	1	>4 to 1	6.31	5.35	7.38	No	2.03	2.28	No	No
RWEC-OCS	412	B	7/12/2019	1:43:58	17	5	14.60	3 to 2	>4	1	>4 to 1	4.35	3.97	4.69	No	0.73	IND	No	No
RWEC-OCS	412	C	7/12/2019	1:45:17	17	5	14.60	3 to 2	>4	1	>4 to 1	4.55	4.03	5.32	No	1.30	2.35	No	No
RWEC-OCS	413	A	7/12/2019	0:53:50	17	5	14.60	3 to 2	>4	1	>4 to 1	3.25	0.00	6.18	No	6.18	IND	No	No
RWEC-OCS	413	B	7/12/2019	0:55:31	17	5	14.60	3 to 2/4 to 3	>4	1	>4 to 1	6.01	5.58	6.39	No	0.81	2.92	No	No
RWEC-OCS	413	D	7/12/2019	0:58:49	17	5	14.60	3 to 2/4 to 3	>4	1	>4 to 1	4.17	6.05	7.58	No	1.53	4.02	No	No
RWEC-OCS	414	A	7/11/2019	15:19:07	17	5	14.60	2 to 1	>4	0	>4 to 0	5.50	4.74	5.90	No	1.16	IND	No	No
RWEC-OCS	414	B	7/11/2019	15:20:20	17	5	14.60	2 to 1	>4	0	>4 to 0	5.55	5.11	5.92	No	0.80	IND	No	No
RWEC-OCS	414	C	7/11/2019	15:21:41	17	5	14.60	2 to 1	>4	0	>4 to 0	4.07	3.30	4.63	No	1.33	IND	No	No
RWEC-OCS	415	A	7/11/2019	16:08:45	17	5	14.60	2 to 1	>4	0	>4 to 0	0.00	0.00	0.00	No	IND	IND	No	IND
RWEC-OCS	415	B	7/11/2019	16:10:00	17	5	14.60	IND	IND	0	IND to 0	0.00	0.00	0.00	No	IND	IND	No	IND
RWEC-OCS	415	C	7/11/2019	16:11:24	17	5	14.60	2 to 1	>4	0	>4 to 0	0.52	0.00	0.91	No	0.91	IND	No	No
RWEC-OCS	416	A	7/11/2019	16:35:15	17	5	14.60	3 to 2	>4	1	>4 to 1	2.27	0.37	3.33	No	2.96	IND	No	No
RWEC-OCS	416	C	7/11/2019	16:38:23	17	5	14.60	3 to 2	>4	1	>4 to 1	6.05	5.43	6.64	No	1.20	2.48	No	No
RWEC-OCS	416	D	7/11/2019	16:39:45	17	5	14.60	3 to 2	>4	1	>4 to 1	5.69	4.78	6.65	No	1.87	3.66	No	No
RWEC-OCS	417	A	7/11/2019	18:11:38	17	5	14.60	4 to 3	>4	1	>4 to 1	14.34	13.99	14.64	No	0.65	2.64	No	No
RWEC-OCS	417	C	7/11/2019	18:14:15	17	5	14.60	4 to 3	>4	1	>4 to 1	12.64	12.47	12.89	No	0.42	2.92	No	No
RWEC-OCS	417	D	7/11/2019	18:15:32	17	5	14.60	4 to 3	>4	1	>4 to 1	13.70	13.01	13.96	No	0.96	2.22	No	No
RWEC-OCS	418	A	7/11/2019	18:36:30	17	5	14.60	IND	IND	-4	IND to -4	0.00	0.00	0.00	No	IND	IND	No	No
RWEC-OCS	418	B	7/11/2019	18:38:09	17	5	14.60	>4	>4	-6	>4 to -6	2.69	2.11	4.59	No	2.47	IND	No	No
RWEC-OCS	418	D	7/11/2019	18:40:38	17	5	14.60	>4	>4	-5	>4 to -5	2.20	0.80	2.97	No	2.18	IND	No	No
RWEC-OCS	419	A	7/11/2019	19:37:10	17	5	14.60	IND	IND	-4	IND to -4	0.00	0.00	0.00	No	IND	IND	No	No
RWEC-OCS	419	B	7/11/2019	19:38:24	17	5	14.60	>4	>4	-5	>4 to -5	0.46	0.00	1.10	No	1.10	IND	No	No
RWEC-OCS	419	C	7/11/2019	19:39:44	17	5	14.60	4 to 3	>4	-5	>4 to -5	2.38	1.79	2.88	No	1.09	IND	No	No
RWEC-OCS	420	A	7/12/2019	22:00:42	17	5	14.60	2 to 1/3 to 2	>4	-2	>4 to -2	5.38	4.53	5.64	No	1.11	IND	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWEC-OCS	420	B	7/12/2019	22:01:54	17	5	14.60	3 to 2	>4	-2	>4 to -2	3.42	2.46	4.17	No	1.71	IND	No	No
RWEC-OCS	420	C	7/12/2019	22:03:07	17	5	14.60	3 to 2	>4	0	>4 to 0	3.64	2.59	4.22	No	1.63	IND	No	No
RWEC-OCS	421	D	7/14/2019	8:53:37	17	5	14.60	4 to 3/>4	>4	1	>4 to 1	20.31	19.99	20.59	No	0.61	3.35	No	No
RWEC-OCS	421	E	7/14/2019	9:45:09	17	5	14.60	4 to 3/>4	>4	1	>4 to 1	10.70	9.82	12.79	No	2.97	1.62	No	No
RWEC-OCS	421	F	7/14/2019	9:46:49	17	5	14.60	4 to 3/>4	>4	1	>4 to 1	13.26	12.99	13.47	No	0.49	2.09	No	No
RWEC-OCS	422	B	7/14/2019	8:16:16	17	5	14.60	3 to 2	>4	-1	>4 to -1	5.53	5.13	6.08	No	0.95	2.85	No	No
RWEC-OCS	422	C	7/14/2019	8:17:35	17	5	14.60	3 to 2	>4	-1	>4 to -1	4.12	3.73	4.30	No	0.57	2.42	No	No
RWEC-OCS	422	D	7/14/2019	8:19:10	17	5	14.60	3 to 2	>4	-2	>4 to -2	5.20	4.94	5.45	No	0.51	3.01	No	No
RWEC-OCS	423	A	7/14/2019	7:26:09	17	5	14.60	1 to 0	>4	-1	>4 to -1	4.64	4.28	5.17	No	0.89	IND	No	No
RWEC-OCS	423	C	7/14/2019	7:29:15	17	5	14.60	1 to 0	>4	-1	>4 to -1	6.08	4.96	6.63	No	1.67	IND	No	No
RWEC-OCS	423	D	7/14/2019	7:30:50	17	5	14.60	1 to 0	>4	-1	>4 to -1	4.80	2.96	6.95	No	3.99	IND	No	No
RWEC-OCS	424	A	7/14/2019	7:01:19	17	5	14.60	1 to 0	>4	-1	>4 to -1	9.48	7.34	10.80	No	3.47	IND	No	No
RWEC-OCS	424	C	7/14/2019	7:04:11	17	5	14.60	1 to 0	>4	-1	>4 to -1	6.87	4.86	8.11	No	3.25	IND	No	No
RWEC-OCS	424	D	7/14/2019	7:05:19	17	5	14.60	1 to 0	>4	-1	>4 to -1	6.95	5.42	7.90	No	2.47	IND	No	No
RWEC-OCS	425	A	7/14/2019	4:56:37	17	5	14.60	2 to 1	>4	0	>4 to 0	5.14	4.21	5.96	No	1.76	IND	No	No
RWEC-OCS	425	B	7/14/2019	4:57:56	17	5	14.60	2 to 1	>4	0	>4 to 0	5.97	5.60	6.34	No	0.74	IND	No	No
RWEC-OCS	425	C	7/14/2019	4:59:16	17	5	14.60	1 to 0	>4	0	>4 to 0	4.86	3.95	6.16	No	2.21	IND	No	No
RWEC-OCS	426	A	7/14/2019	3:15:40	17	5	14.60	2 to 1/3 to 2	>4	1	>4 to 1	5.44	3.71	5.89	No	2.18	IND	No	No
RWEC-OCS	426	B	7/14/2019	3:16:49	17	5	14.60	3 to 2	>4	1	>4 to 1	4.33	4.07	4.91	No	0.84	IND	No	No
RWEC-OCS	426	C	7/14/2019	3:18:02	17	5	14.60	3 to 2	>4	0	>4 to 0	4.39	4.00	5.34	No	1.34	IND	No	No
RWEC-OCS	427	A	7/14/2019	2:05:29	17	5	14.60	2 to 1	>4	0	>4 to 0	4.93	4.58	5.19	No	0.61	IND	No	No
RWEC-OCS	427	B	7/14/2019	2:06:51	17	5	14.60	2 to 1	>4	0	>4 to 0	4.82	4.32	5.16	No	0.84	IND	No	No
RWEC-OCS	427	C	7/14/2019	2:08:23	17	5	14.60	2 to 1	>4	-1	>4 to -1	3.49	3.27	3.64	No	0.36	IND	No	No
RWEC-OCS	428	A	7/14/2019	1:19:52	17	5	14.60	2 to 1	>4	0	>4 to 0	5.45	4.74	6.67	No	1.93	IND	No	No
RWEC-OCS	428	B	7/14/2019	1:21:08	17	5	14.60	2 to 1	>4	0	>4 to 0	4.75	4.27	5.21	No	0.94	IND	No	No
RWEC-OCS	428	C	7/14/2019	1:22:29	17	5	14.60	1 to 0/2 to 1	>4	0	>4 to 0	4.61	4.19	4.88	No	0.69	IND	No	No
RWEC-RI	429	A	7/14/2019	0:27:24	17	5	14.60	1 to 0/2 to 1	>4	0	>4 to 0	6.17	5.67	6.46	No	0.79	IND	No	No
RWEC-RI	429	B	7/14/2019	0:28:33	17	5	14.60	1 to 0/2 to 1	>4	-3	>4 to -3	4.38	4.12	4.73	No	0.60	IND	No	No
RWEC-RI	429	C	7/14/2019	0:29:40	17	5	14.60	1 to 0/2 to 1	>4	0	>4 to 0	5.63	4.96	5.95	No	0.99	IND	No	No
RWEC-RI	430	A	7/13/2019	8:23:11	17	5	14.60	3 to 2	>4	0	>4 to 0	4.43	4.27	4.61	No	0.34	IND	No	No
RWEC-RI	430	B	7/13/2019	8:24:43	17	5	14.60	3 to 2	>4	0	>4 to 0	5.33	5.26	5.46	No	0.20	IND	No	No
RWEC-RI	430	C	7/13/2019	8:26:23	17	5	14.60	3 to 2	>4	0	>4 to 0	4.10	3.78	4.33	No	0.55	IND	No	No
RWEC-RI	431	A	7/13/2019	7:43:27	17	5	14.60	4 to 3	>4	1	>4 to 1	12.39	12.01	12.68	No	0.67	1.34	No	No
RWEC-RI	431	C	7/13/2019	7:46:27	17	5	14.60	4 to 3	>4	1	>4 to 1	13.61	13.31	13.86	No	0.55	2.12	No	No
RWEC-RI	431	D	7/13/2019	7:48:08	17	5	14.60	4 to 3	>4	1	>4 to 1	14.19	13.96	14.45	No	0.49	1.92	No	No
RWEC-RI	432	A	7/13/2019	7:10:43	17	5	14.60	4 to 3	>4	0	>4 to 0	14.02	13.78	14.40	No	0.61	2.05	No	No
RWEC-RI	432	C	7/13/2019	7:13:41	17	5	14.60	4 to 3	>4	0	>4 to 0	14.56	14.03	14.88	No	0.85	1.98	No	No
RWEC-RI	432	D	7/13/2019	7:15:34	17	5	14.60	4 to 3	>4	0	>4 to 0	12.76	11.98	15.01	No	3.03	2.22	No	No
RWEC-RI	433	A	7/13/2019	6:45:55	17	5	14.60	4 to 3/>4	>4	0	>4 to 0	14.63	14.34	14.83	No	0.49	1.45	No	No
RWEC-RI	433	B	7/13/2019	6:47:11	17	5	14.60	4 to 3/>4	>4	1	>4 to 1	13.60	12.54	14.24	No	1.70	1.57	No	No
RWEC-RI	433	C	7/13/2019	6:48:35	17	5	14.60	4 to 3/>4	>4	1	>4 to 1	15.97	15.43	16.48	No	1.05	1.88	No	No
RWEC-RI	434	A	7/13/2019	10:08:00	17	5	14.60	3 to 2	>4	1	>4 to 1	6.72	6.09	7.51	No	1.42	1.81	No	No

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RWEC-RI	434	B	7/13/2019	10:10:02	17	5	14.60	3 to 2	>4	-3	>4 to -3	4.92	4.70	5.23	No	0.52	1.95	No	No
RWEC-RI	434	C	7/13/2019	10:11:26	17	5	14.60	3 to 2	>4	-1	>4 to -1	5.62	5.20	5.91	No	0.70	2.15	No	No
RWEC-RI	435	A	7/13/2019	11:15:04	17	5	14.60	3 to 2	>4	0	>4 to 0	5.86	5.35	6.35	No	0.99	2.54	No	No
RWEC-RI	435	B	7/13/2019	11:20:49	17	5	14.60	3 to 2	>4	0	>4 to 0	6.32	5.97	6.83	No	0.85	2.76	No	No
RWEC-RI	435	D	7/13/2019	11:23:39	17	5	14.60	3 to 2	>4	0	>4 to 0	5.77	4.59	6.59	No	2.00	2.23	No	No
RWEC-RI	436	A	7/13/2019	11:40:53	17	5	14.60	3 to 2/4 to 3	>4	-2	>4 to -2	8.93	8.54	9.18	No	0.63	3.09	No	No
RWEC-RI	436	C	7/13/2019	11:43:57	17	5	14.60	3 to 2/4 to 3	>4	0	>4 to 0	8.90	8.46	9.63	No	1.17	3.06	No	No
RWEC-RI	436	D	7/13/2019	11:45:27	17	5	14.60	3 to 2/4 to 3	>4	-1	>4 to -1	6.84	6.33	7.53	No	1.20	2.71	No	No
RWEC-RI	437	A	7/13/2019	12:23:57	17	5	14.60	3 to 2/4 to 3	>4	0	>4 to 0	8.65	8.18	9.18	No	1.00	3.48	No	No
RWEC-RI	437	B	7/13/2019	12:25:06	17	5	14.60	3 to 2/4 to 3	>4	0	>4 to 0	9.00	8.36	10.93	No	2.57	3.35	No	No
RWEC-RI	437	C	7/13/2019	12:26:18	17	5	14.60	3 to 2/4 to 3	>4	0	>4 to 0	9.74	9.01	11.05	No	2.04	2.64	No	No
RWEC-RI	438	A	7/13/2019	12:38:37	17	5	14.60	1 to 0/>4	>4	-1	>4 to -1	3.98	3.47	4.36	No	0.89	IND	No	No
RWEC-RI	438	C	7/13/2019	12:41:04	17	5	14.60	1 to 0	>4	-1	>4 to -1	8.05	7.62	8.35	No	0.73	IND	No	No
RWEC-RI	438	D	7/13/2019	12:42:15	17	5	14.60	1 to 0/>4	>4	-1	>4 to -1	3.87	3.30	5.55	No	2.25	IND	No	No
RWEC-RI	439	A	7/13/2019	12:51:40	17	5	14.60	3 to 2/4 to 3	>4	0	>4 to 0	9.41	8.01	10.66	No	2.66	3.38	No	No
RWEC-RI	439	B	7/13/2019	12:52:49	17	5	14.60	3 to 2/1 to 0	>4	0	>4 to 0	6.20	5.75	6.43	No	0.68	2.16	No	No
RWEC-RI	439	C	7/13/2019	12:54:10	17	5	14.60	3 to 2/1 to 0	>4	-1	>4 to -1	6.34	5.51	6.93	No	1.42	3.21	No	No
RWEC-RI	440	B	7/13/2019	13:17:33	17	5	14.60	3 to 2/4 to 3	>4	0	>4 to 0	15.01	14.51	15.91	No	1.40	2.51	No	No
RWEC-RI	440	C	7/13/2019	13:18:48	17	5	14.60	4 to 3/>4	>4	1	>4 to 1	19.82	19.16	20.28	No	1.11	2.52	No	No
RWEC-RI	440	D	7/13/2019	13:20:00	17	5	14.60	4 to 3/>4	>4	2	>4 to 2	19.18	18.46	19.65	No	1.19	0.96	No	No
RWEC-RI	441	A	7/13/2019	14:47:19	17	5	14.60	4 to 3	>4	1	>4 to 1	17.43	16.66	18.19	No	1.53	2.76	No	No
RWEC-RI	441	B	7/13/2019	14:48:37	17	5	14.60	4 to 3	>4	1	>4 to 1	18.35	17.74	18.68	No	0.94	2.04	No	No
RWEC-RI	441	C	7/13/2019	14:49:58	17	5	14.60	4 to 3	>4	1	>4 to 1	14.46	13.95	14.74	No	0.79	2.10	No	No
RWEC-RI	442	A	7/13/2019	15:20:44	17	5	14.60	4 to 3/>4	>4	2	>4 to 2	14.18	12.82	16.37	No	3.54	1.98	No	No
RWEC-RI	442	C	7/13/2019	15:23:10	17	5	14.60	4 to 3/>4	>4	2	>4 to 2	13.12	12.06	13.85	No	1.79	1.71	No	No
RWEC-RI	442	D	7/13/2019	15:24:22	17	5	14.60	4 to 3/>4	>4	2	>4 to 2	16.74	15.46	17.51	No	2.05	1.62	No	No
RWEC-RI	443	A	7/13/2019	16:07:25	17	5	14.60	4 to 3	>4	1	>4 to 1	9.76	8.94	11.22	No	2.28	1.93	No	No
RWEC-RI	443	B	7/13/2019	16:08:40	17	5	14.60	4 to 3	>4	1	>4 to 1	9.61	8.95	9.97	No	1.01	2.03	No	No
RWEC-RI	443	C	7/13/2019	16:09:55	17	5	14.60	4 to 3	>4	1	>4 to 1	10.67	9.64	10.98	No	1.34	2.00	No	No
RWEC-RI	444	A	7/13/2019	16:29:50	17	5	14.60	4 to 3	>4	1	>4 to 1	11.85	11.54	12.23	No	0.69	2.39	No	No
RWEC-RI	444	B	7/13/2019	16:30:58	17	5	14.60	4 to 3	>4	1	>4 to 1	11.05	10.61	11.39	No	0.78	1.99	No	No
RWEC-RI	444	D	7/13/2019	16:36:48	17	5	14.60	4 to 3	>4	1	>4 to 1	9.48	9.19	9.88	No	0.69	2.39	No	No
RWEC-RI	445	A	7/13/2019	16:59:42	17	5	14.60	4 to 3	>4	0	>4 to 0	8.61	8.32	8.85	No	0.52	1.93	No	No
RWEC-RI	445	B	7/13/2019	17:00:50	17	5	14.60	4 to 3	>4	-1	>4 to -1	8.82	8.40	9.31	No	0.91	2.01	No	No
RWEC-RI	445	C	7/13/2019	17:02:01	17	5	14.60	4 to 3	>4	0	>4 to 0	7.73	6.76	8.54	No	1.79	1.59	No	No
RWEC-RI	446	A	7/13/2019	17:21:22	17	5	14.60	4 to 3/>4	>4	0	>4 to 0	9.54	9.41	9.80	No	0.39	2.00	No	No
RWEC-RI	446	B	7/13/2019	17:22:23	17	5	14.60	2 to 1/>4	>4	0	>4 to 0	8.86	8.06	9.42	No	1.35	1.55	No	No
RWEC-RI	446	C	7/13/2019	17:23:44	17	5	14.60	4 to 3/>4	>4	-1	>4 to -1	10.22	9.67	10.64	No	0.97	1.02	No	No
RWEC-RI	447	B	7/13/2019	17:38:33	17	5	14.60	4 to 3/>4	>4	-1	>4 to -1	10.41	9.80	10.83	No	1.03	1.14	No	No
RWEC-RI	447	C	7/13/2019	17:39:48	17	5	14.60	4 to 3/>4	>4	-4	>4 to -4	9.52	9.05	9.90	No	0.84	1.70	No	No
RWEC-RI	447	D	7/13/2019	17:41:04	17	5	14.60	4 to 3/>4	>4	-1	>4 to -1	7.99	7.72	8.34	No	0.62	0.82	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWEC-RI	448	A	7/13/2019	18:00:00	17	5	14.60	>4	>4	1	>4 to 1	6.94	6.39	7.36	No	0.96	1.08	No	No
RWEC-RI	448	B	7/13/2019	18:01:15	17	5	14.60	>4	>4	1	>4 to 1	9.08	8.08	10.02	No	1.94	IND	No	No
RWEC-RI	448	D	7/13/2019	18:03:33	17	5	14.60	>4	>4	1	>4 to 1	8.68	8.35	9.14	No	0.79	0.88	No	No
RWEC-RI	449	A	7/13/2019	18:14:52	17	5	14.60	>4	>4	1	>4 to 1	13.58	13.06	14.47	No	1.41	1.08	No	No
RWEC-RI	449	B	7/13/2019	18:16:06	17	5	14.60	>4	>4	1	>4 to 1	17.97	16.50	18.96	No	2.46	IND	No	No
RWEC-RI	449	C	7/13/2019	18:17:16	17	5	14.60	>4	>4	1	>4 to 1	13.70	13.29	14.06	No	0.77	0.88	No	No
RWEC-RI	450	B	7/25/2019	13:34:29	17	5	14.60	>4	>4	1	>4 to 1	11.29	7.51	14.45	No	6.93	IND	No	No
RWEC-RI	450	F	7/25/2019	14:02:00	15	5	14.60	>4	>4	2	>4 to 2	12.46	11.49	13.23	No	1.74	IND	No	No
RWEC-RI	450	G	7/25/2019	14:03:23	15	5	14.60	>4	>4	2	>4 to 2	11.58	10.89	12.12	No	1.23	IND	No	No
RWEC-RI	451	A	7/13/2019	20:16:50	17	5	14.60	4 to 3/>4	>4	1	>4 to 1	15.95	15.49	16.26	No	0.77	1.28	No	No
RWEC-RI	451	C	7/13/2019	20:34:02	17	5	14.60	4 to 3/>4	>4	0	>4 to 0	9.26	7.57	9.91	No	2.34	0.97	No	No
RWEC-RI	451	D	7/13/2019	20:35:21	17	5	14.60	4 to 3/>4	>4	1	>4 to 1	9.64	9.18	9.96	No	0.78	0.92	No	No
RWEC-RI	452	A	7/25/2019	14:24:03	15	5	14.60	3 to 2/>4	>4	0	>4 to 0	2.72	2.37	3.12	No	0.75	0.00	No	No
RWEC-RI	452	B	7/25/2019	14:25:17	15	5	14.60	3 to 2	>4	0	>4 to 0	3.22	2.85	3.64	No	0.79	0.00	No	No
RWEC-RI	452	D	7/25/2019	14:28:08	15	5	14.60	3 to 2	>4	-1	>4 to -1	3.22	2.59	3.85	No	1.26	0.00	No	No
RWEC-RI	453	A	7/25/2019	14:52:32	15	5	14.60	3 to 2	>4	1	>4 to 1	3.39	3.21	3.54	No	0.32	1.10	No	No
RWEC-RI	453	C	7/25/2019	14:55:33	15	5	14.60	3 to 2	>4	1	>4 to 1	1.40	0.54	2.25	No	1.71	IND	No	No
RWEC-RI	453	D	7/25/2019	14:56:57	15	5	14.60	3 to 2	>4	1	>4 to 1	0.81	0.42	1.04	No	0.63	IND	No	No
RWEC-RI	454	A	7/25/2019	15:34:50	15	5	14.60	4 to 3/>4	>4	2	>4 to 2	10.51	9.96	10.83	No	0.86	2.05	No	No
RWEC-RI	454	B	7/25/2019	15:36:08	15	5	14.60	4 to 3/>4	>4	2	>4 to 2	15.16	14.78	15.73	No	0.95	1.99	No	No
RWEC-RI	454	C	7/25/2019	15:37:20	15	5	14.60	4 to 3/>4	>4	2	>4 to 2	14.10	13.46	14.54	No	1.08	1.85	No	No
RWEC-RI	455	A	7/25/2019	15:50:07	15	5	14.60	4 to 3	>4	2	>4 to 2	7.43	6.78	7.87	No	1.09	2.94	No	No
RWEC-RI	455	B	7/25/2019	15:51:12	15	5	14.60	4 to 3	>4	2	>4 to 2	11.95	11.42	12.56	No	1.14	2.72	No	No
RWEC-RI	455	C	7/25/2019	15:52:19	15	5	14.60	>4	>4	2	>4 to 2	7.28	6.71	8.25	No	1.54	0.95	No	No
RWEC-OCS	456	A	7/12/2019	22:21:54	17	5	14.60	3 to 2	>4	1	>4 to 1	3.97	3.19	4.77	No	1.58	IND	No	No
RWEC-OCS	456	B	7/12/2019	22:23:02	17	5	14.60	3 to 2	>4	1	>4 to 1	5.51	4.86	5.91	No	1.05	IND	No	No
RWEC-OCS	456	C	7/12/2019	22:24:19	17	5	14.60	3 to 2	>4	1	>4 to 1	4.66	4.25	5.11	No	0.86	IND	No	No
RWEC-OCS	457	A	7/12/2019	22:42:55	17	5	14.60	3 to 2	>4	0	>4 to 0	8.13	7.80	8.42	No	0.61	6.93	No	No
RWEC-OCS	457	B	7/12/2019	22:44:20	17	5	14.60	3 to 2	>4	-1	>4 to -1	10.87	10.39	11.26	No	0.88	8.16	Yes	No
RWEC-OCS	457	C	7/12/2019	22:45:34	17	5	14.60	3 to 2	>4	-1	>4 to -1	9.22	8.38	9.93	No	1.54	5.66	No	No
RWEC-OCS	458	A	7/12/2019	23:05:27	17	5	14.60	2 to 1	>4	-4	>4 to -4	1.31	0.23	2.86	No	2.64	IND	No	No
RWEC-OCS	458	B	7/12/2019	23:06:39	17	5	14.60	2 to 1	>4	-2	>4 to -2	3.08	1.46	4.19	No	2.73	IND	No	No
RWEC-OCS	458	C	7/12/2019	23:07:51	17	5	14.60	2 to 1	>4	-2	>4 to -2	5.26	4.59	5.58	No	1.00	IND	No	No
RWEC-OCS	459	A	7/12/2019	23:29:07	17	5	14.60	2 to 1	>4	0	>4 to 0	5.16	4.45	5.42	No	0.97	IND	No	No
RWEC-OCS	459	B	7/12/2019	23:30:15	17	5	14.60	2 to 1	>4	-2	>4 to -2	5.24	4.64	5.78	No	1.15	IND	No	No
RWEC-OCS	459	C	7/12/2019	23:31:22	17	5	14.60	2 to 1	>4	-1	>4 to -1	5.17	4.78	5.40	No	0.62	IND	No	No
RWEC-OCS	460	A	7/13/2019	2:14:26	17	5	14.60	4 to 3	>4	2	>4 to 2	8.70	8.51	8.94	No	0.43	7.41	Yes	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWEC-OCS	460	C	7/13/2019	2:17:15	17	5	14.60	4 to 3	>4	2	>4 to 2	6.45	5.42	7.01	No	1.59	5.67	No	No
RWEC-OCS	460	D	7/13/2019	2:18:44	17	5	14.60	4 to 3	>4	2	>4 to 2	6.85	6.28	7.51	No	1.23	5.94	No	No
RWEC-OCS	461	A	7/13/2019	2:37:35	17	5	14.60	2 to 1	>4	1	>4 to 1	5.89	5.56	6.29	No	0.73	IND	No	No
RWEC-OCS	461	B	7/13/2019	2:38:54	17	5	14.60	2 to 1	>4	1	>4 to 1	5.75	4.77	6.43	No	1.67	IND	No	No
RWEC-OCS	461	C	7/13/2019	2:40:08	17	5	14.60	2 to 1	>4	0	>4 to 0	5.95	4.85	6.38	No	1.53	IND	No	No
RWEC-OCS	462	A	7/13/2019	3:02:37	17	5	14.60	2 to 1	>4	0	>4 to 0	6.85	6.09	7.16	No	1.07	IND	No	No
RWEC-OCS	462	B	7/13/2019	3:04:03	17	5	14.60	2 to 1	>4	0	>4 to 0	5.80	5.38	6.31	No	0.93	IND	No	No
RWEC-OCS	462	C	7/13/2019	3:05:25	17	5	14.60	2 to 1	>4	0	>4 to 0	6.41	6.02	6.82	No	0.80	IND	No	No
RWEC-OCS	463	A	7/13/2019	3:27:49	17	5	14.60	4 to 3	>4	2	>4 to 2	11.58	10.53	13.84	No	3.31	5.94	No	No
RWEC-OCS	463	F	7/13/2019	6:00:19	17	5	14.60	4 to 3	>4	2	>4 to 2	12.67	11.68	13.56	No	1.89	4.10	No	No
RWEC-OCS	463	G	7/13/2019	6:01:40	17	5	14.60	4 to 3	>4	2	>4 to 2	12.64	10.13	13.90	No	3.77	4.04	No	No
RWEC-RI	464	A	7/13/2019	3:51:34	17	5	14.60	4 to 3	>4	1	>4 to 1	8.47	8.07	8.73	No	0.66	4.31	No	No
RWEC-RI	464	C	7/13/2019	3:54:48	17	5	14.60	4 to 3	>4	2	>4 to 2	10.83	10.51	11.23	No	0.72	4.32	No	No
RWEC-RI	464	D	7/13/2019	3:56:37	17	5	14.60	4 to 3/>4	>4	2	>4 to 2	18.51	18.09	18.73	No	0.65	2.97	No	No
Reference Area	501	A	7/10/2019	22:28:13	17	5	14.60	2 to 1	>4	1	>4 to 1	4.03	3.04	4.90	No	1.86	IND	No	No
Reference Area	501	B	7/10/2019	22:29:32	17	5	14.60	2 to 1	>4	1	>4 to 1	8.74	7.37	9.39	No	2.01	IND	No	No
Reference Area	501	C	7/10/2019	22:30:51	17	5	14.60	2 to 1	>4	1	>4 to 1	4.53	4.07	4.86	No	0.80	IND	No	No
Reference Area	502	A	7/10/2019	22:08:01	17	5	14.60	2 to 1	>4	1	>4 to 1	4.49	4.23	4.69	No	0.46	IND	No	No
Reference Area	502	B	7/10/2019	22:09:23	17	5	14.60	2 to 1	>4	1	>4 to 1	3.48	3.07	3.73	No	0.66	IND	No	No
Reference Area	502	D	7/10/2019	22:12:05	17	5	14.60	2 to 1	>4	1	>4 to 1	2.89	2.09	4.07	No	1.97	IND	No	No
Reference Area	503	A	7/10/2019	21:47:28	17	5	14.60	1 to 0	>4	-3	>4 to -3	8.76	6.86	9.62	No	2.76	IND	No	No
Reference Area	503	B	7/10/2019	21:48:49	17	5	14.60	2 to 1/>4	>4	-1	>4 to -1	9.69	9.51	10.06	No	0.54	IND	No	No
Reference Area	503	C	7/10/2019	21:50:12	17	5	14.60	3 to 2/4 to 3	>4	-1	>4 to -1	8.09	7.69	8.54	No	0.86	3.51	No	No
Reference Area	504	A	7/10/2019	21:26:22	17	5	14.60	3 to 2	>4	1	>4 to 1	6.01	5.90	6.18	No	0.28	2.27	No	No
Reference Area	504	B	7/10/2019	21:27:38	17	5	14.60	3 to 2	>4	1	>4 to 1	7.83	7.54	7.97	No	0.43	2.53	No	No
Reference Area	504	C	7/10/2019	21:29:00	17	5	14.60	3 to 2	>4	1	>4 to 1	5.01	4.87	5.13	No	0.26	2.66	No	No
Reference Area	505	A	7/10/2019	21:05:59	17	5	14.60	3 to 2	>4	2	>4 to 2	5.11	3.37	6.12	No	2.74	3.36	No	No
Reference Area	505	B	7/10/2019	21:07:24	17	5	14.60	3 to 2/4 to 3	>4	2	>4 to 2	5.50	5.17	5.96	No	0.79	3.42	No	No
Reference Area	505	C	7/10/2019	21:08:45	17	5	14.60	3 to 2	>4	1	>4 to 1	5.33	4.03	7.74	No	3.71	IND	No	No
RWEC-OCS	601	A	7/12/2019	18:25:05	17	5	14.60	2 to 1	>4	0	>4 to 0	5.83	5.58	6.07	No	0.49	IND	No	No
RWEC-OCS	601	B	7/12/2019	18:26:14	17	5	14.60	2 to 1	>4	0	>4 to 0	5.40	5.11	5.67	No	0.56	IND	No	No
RWEC-OCS	601	C	7/12/2019	18:27:26	17	5	14.60	2 to 1	>4	0	>4 to 0	5.77	5.30	6.12	No	0.83	IND	No	No
RWEC-OCS	602	A	7/12/2019	16:36:04	17	5	14.60	2 to 1	>4	1	>4 to 1	5.77	4.75	6.24	No	1.49	IND	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWEC-OCS	602	B	7/12/2019	16:37:15	17	5	14.60	2 to 1	>4	1	>4 to 1	4.56	3.96	4.73	No	0.77	IND	No	No
RWEC-OCS	602	C	7/12/2019	16:38:31	17	5	14.60	2 to 1	>4	1	>4 to 1	7.83	6.28	8.50	No	2.21	6.66	Yes	No
RWEC-OCS	603	A	7/12/2019	2:34:33	17	5	14.60	3 to 2	>4	1	>4 to 1	4.26	3.70	4.53	No	0.82	IND	No	No
RWEC-OCS	603	B	7/12/2019	2:36:11	17	5	14.60	3 to 2	>4	1	>4 to 1	3.86	3.58	4.37	No	0.79	IND	No	No
RWEC-OCS	603	C	7/12/2019	2:41:35	17	5	14.60	3 to 2	>4	1	>4 to 1	4.57	4.39	4.75	No	0.35	IND	No	No
RWEC-RI	604	A	7/14/2019	0:10:17	17	5	14.60	3 to 2	>4	1	>4 to 1	4.44	3.49	4.97	No	1.48	IND	No	No
RWEC-RI	604	B	7/14/2019	0:11:31	17	5	14.60	3 to 2	>4	1	>4 to 1	4.59	4.14	5.20	No	1.07	IND	No	No
RWEC-RI	604	C	7/14/2019	0:12:52	17	5	14.60	3 to 2	>4	1	>4 to 1	4.80	4.66	4.99	No	0.33	IND	No	No
RWEC-OCS	605	A	7/14/2019	1:03:18	17	5	14.60	1 to 0	>4	-1	>4 to -1	5.76	5.31	6.15	No	0.84	IND	No	No
RWEC-OCS	605	B	7/14/2019	1:04:53	17	5	14.60	1 to 0	>4	0	>4 to 0	5.96	5.46	6.61	No	1.15	IND	No	No
RWEC-OCS	605	C	7/14/2019	1:06:35	17	5	14.60	1 to 0	>4	-1	>4 to -1	4.92	3.84	6.08	No	2.23	IND	No	No
RWEC-OCS	606	A	7/14/2019	2:39:17	17	5	14.60	0 to -1	>4	-1	>4 to -1	6.22	5.00	7.21	No	2.20	IND	No	No
RWEC-OCS	606	B	7/14/2019	2:41:18	17	5	14.60	0 to -1	>4	-1	>4 to -1	2.07	0.55	3.84	No	3.28	IND	No	No
RWEC-OCS	606	C	7/14/2019	2:42:40	17	5	14.60	0 to -1/1 to 0	>4	-1	>4 to -1	2.03	1.54	2.36	No	0.81	IND	No	No
RWEC-OCS	607	B	7/14/2019	3:37:08	17	5	14.60	4 to 3	>4	1	>4 to 1	14.10	13.82	14.33	No	0.51	2.32	No	No
RWEC-OCS	607	E	7/14/2019	5:36:27	17	5	14.60	4 to 3	>4	1	>4 to 1	14.24	13.87	14.48	No	0.61	3.26	No	No
RWEC-OCS	607	F	7/14/2019	5:38:05	17	5	14.60	4 to 3	>4	1	>4 to 1	10.56	9.79	11.82	No	2.03	3.66	No	No
RWEC-OCS	608	B	7/14/2019	4:35:26	17	5	14.60	4 to 3	>4	2	>4 to 2	12.63	12.39	12.94	No	0.55	3.24	No	No
RWEC-OCS	608	C	7/14/2019	4:36:48	17	5	14.60	4 to 3	>4	2	>4 to 2	15.54	15.36	15.70	No	0.34	2.24	No	No
RWEC-OCS	608	F	7/14/2019	5:58:37	17	5	14.60	4 to 3	>4	2	>4 to 2	11.89	11.54	12.22	No	0.68	3.16	No	No
RWEC-OCS	609	A	7/14/2019	6:19:10	17	5	14.60	2 to 1	>4	0	>4 to 0	6.07	5.39	6.94	No	1.55	IND	No	No
RWEC-OCS	609	B	7/14/2019	6:20:57	17	5	14.60	2 to 1	>4	0	>4 to 0	6.18	5.76	6.66	No	0.90	IND	No	No
RWEC-OCS	609	C	7/14/2019	6:22:35	17	5	14.60	2 to 1	>4	0	>4 to 0	5.01	4.40	5.62	No	1.22	IND	No	No
RWEC-RI	610	A	7/13/2019	13:40:44	17	5	14.60	3 to 2	>4	0	>4 to 0	5.14	3.58	6.15	No	2.58	IND	No	No
RWEC-RI	610	B	7/13/2019	13:41:58	17	5	14.60	3 to 2	>4	0	>4 to 0	4.69	4.06	5.18	No	1.12	IND	No	No
RWEC-RI	610	C	7/13/2019	13:43:04	17	5	14.60	3 to 2	>4	0	>4 to 0	5.45	4.57	5.95	No	1.38	IND	No	No
RWEC-RI	611	A	7/13/2019	10:50:09	17	5	14.60	3 to 2	>4	0	>4 to 0	5.45	5.01	5.68	No	0.67	IND	No	No
RWEC-RI	611	B	7/13/2019	10:51:49	17	5	14.60	3 to 2	>4	0	>4 to 0	6.20	5.80	6.76	No	0.95	4.62	No	No
RWEC-RI	611	C	7/13/2019	10:53:30	17	5	14.60	3 to 2	>4	0	>4 to 0	4.15	3.03	6.25	No	3.22	IND	No	No
RWEC-RI	612	A	7/25/2019	15:20:47	15	5	14.60	4 to 3	>4	2	>4 to 2	9.16	8.84	9.42	No	0.58	2.23	No	No
RWEC-RI	612	B	7/25/2019	15:22:04	15	5	14.60	4 to 3	>4	2	>4 to 2	13.34	12.74	13.90	No	1.16	1.88	No	No
RWEC-RI	612	C	7/25/2019	15:23:12	15	5	14.60	4 to 3	>4	2	>4 to 2	12.48	11.95	13.48	No	1.53	2.18	No	No
RWEC-RI	613	A	7/25/2019	14:38:03	15	5	14.60	2 to 1	>4	-1	>4 to -1	1.40	0.89	1.83	No	0.94	IND	No	No
RWEC-RI	613	B	7/25/2019	14:39:21	15	5	14.60	2 to 1	>4	-1	>4 to -1	2.75	1.22	3.31	No	2.09	IND	No	No
RWEC-RI	613	D	7/25/2019	14:41:49	15	5	14.60	2 to 1	>4	-1	>4 to -1	2.42	1.97	2.84	No	0.87	IND	No	No
RWEC-RI	614	A	7/13/2019	19:44:23	17	5	14.60	>4	>4	-5	>4 to -5	9.79	9.39	10.15	No	0.76	1.76	No	No

Area	StationID	Replicate	Date	Time	Stop Collar Setting (in)	# of Weights (per side)	Image Width (cm)	Grain Size Major Mode (phi)	Grain Size Minimum (phi)	Grain Size Maximum (phi)	Grain Size Range (phi)	Penetration Mean (cm)	Penetration Minimum (cm)	Penetration Maximum (cm)	Over-penetration?	Boundary Roughness (cm)	aRPD Mean (cm)	aRPD > Pen	Methane Present?
RWEC-RI	614	B	7/13/2019	19:45:35	17	5	14.60	>4	>4	-4	>4 to -4	10.54	10.24	10.89	No	0.65	2.41	No	No
RWEC-RI	614	C	7/13/2019	19:46:49	17	5	14.60	>4	>4	-4	>4 to -4	7.76	7.43	8.24	No	0.81	2.37	No	No
RWEC-RI	615	A	7/13/2019	18:59:20	17	5	14.60	>4	>4	0	>4 to 0	16.77	16.02	17.51	No	1.49	2.15	No	No
RWEC-RI	615	B	7/13/2019	19:03:40	17	5	14.60	>4	>4	0	>4 to 0	14.22	13.76	14.72	No	0.96	0.80	No	No
RWEC-RI	615	D	7/13/2019	19:06:09	17	5	14.60	>4	>4	0	>4 to 0	16.21	14.96	17.04	No	2.08	1.71	No	No

Area	StationID	Replicate	Date	Time	Low DO Present?	Sediment Oxygen Demand	Beggiatoa Present?	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern	Invasive Taxa Present?	Type of Invasive Taxa	Tubes Present?	Epifauna	Voids Present?	Successional Stage
RWF	001	A	7/11/2019	13:57:50	No	Low	No	No	None	None	No	None	No	Barnacles, Bryozoan	No	IND
RWF	001	B	7/11/2019	13:59:08	No	Low	No	No	None	None	No	None	No	Barnacles, Bryozoan	No	IND
RWF	001	D	7/11/2019	14:01:25	No	Low	No	No	None	None	No	None	No	Barnacles, Bryozoan	No	2
RWF	002	A	7/11/2019	10:55:45	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 on 3
RWF	002	B	7/11/2019	10:57:09	No	Low	No	No	None	None	No	None	Yes	Hydroid	No	2 on 3
RWF	002	C	7/11/2019	10:58:32	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWF	003	A	7/11/2019	12:33:47	No	Low	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWF	003	C	7/11/2019	12:36:24	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWF	003	D	7/11/2019	12:37:50	No	Low	No	No	None	None	No	None	Yes	Caprellid Amphipoda	Yes	2 on 3
RWF	004	A	7/11/2019	9:57:28	No	Low	No	No	None	None	No	None	Yes	None	Yes	2
RWF	004	B	7/11/2019	9:58:47	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	004	C	7/11/2019	10:00:06	No	Low	No	No	None	None	No	None	No	None	No	IND
RWF	005	A	7/11/2019	8:38:33	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWF	005	B	7/11/2019	8:39:55	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	Yes	2 on 3
RWF	005	D	7/11/2019	8:42:38	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	Yes	2 on 3
RWF	006	A	7/11/2019	7:46:34	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWF	006	B	7/11/2019	7:53:17	No	Low	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWF	006	C	7/11/2019	7:54:45	No	Low	No	No	None	None	No	None	Yes	Shrimp	Yes	2 on 3
RWF	007	A	7/11/2019	7:09:55	No	Low	No	No	None	None	No	None	Yes	Shrimp	Yes	2 on 3
RWF	007	C	7/11/2019	7:12:44	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWF	007	D	7/11/2019	7:14:04	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWF	008	A	7/11/2019	5:55:22	No	Low	No	No	None	None	No	None	Yes	Hydroids, Shrimp	Yes	3

Area	StationID	Replicate	Date	Time	Low DO Present?	Sediment Oxygen Demand	Beggiatoa Present?	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern	Invasive Taxa Present?	Type of Invasive Taxa	Tubes Present?	Epifauna	Voids Present?	Successional Stage
RWF	008	B	7/11/2019	5:56:54	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	008	C	7/11/2019	5:58:09	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	009	A	7/11/2019	5:30:41	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	009	B	7/11/2019	5:32:03	No	Low	No	No	None	None	No	None	No	None	No	2 -> 3
RWF	009	C	7/11/2019	5:33:41	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	Yes	2 -> 3
RWF	010	A	7/10/2019	19:58:57	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWF	010	B	7/10/2019	20:00:19	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWF	010	C	7/10/2019	20:01:38	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	Yes	2 on 3
RWF	011	A	7/10/2019	19:14:29	No	Low	No	No	None	None	No	None	Yes	Caprellid Amphipoda	Yes	2 on 3
RWF	011	B	7/10/2019	19:15:39	No	Low	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWF	011	D	7/10/2019	19:18:05	No	Low	No	No	None	None	No	None	Yes	Caprellid Amphipoda	Yes	2 on 3
RWF	012	A	7/10/2019	10:54:04	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	012	B	7/10/2019	10:55:24	No	Low	No	No	None	None	No	None	Yes	Shrimp	No	2
RWF	012	C	7/10/2019	10:56:45	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	013	A	7/10/2019	11:59:19	No	Medium	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWF	013	B	7/10/2019	12:01:03	No	Medium	No	No	None	None	No	None	IND	None	Yes	3
RWF	013	C	7/10/2019	12:02:38	No	Medium	No	No	None	None	No	None	No	Podocerid Amphipoda	Yes	2 on 3
RWF	014	A	7/10/2019	13:10:21	No	Low	No	No	None	None	No	None	No	None	No	IND
RWF	014	C	7/10/2019	13:13:04	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	Yes	2 on 3
RWF	014	D	7/10/2019	13:14:28	No	Low	No	No	None	None	No	None	No	None	No	IND
RWF	015	A	7/10/2019	14:02:42	No	Low	No	No	None	None	No	None	No	None	No	2
RWF	015	B	7/10/2019	14:04:05	No	Low	No	No	None	None	No	None	No	None	No	2
RWF	015	C	7/10/2019	14:05:34	No	Low	No	No	None	None	No	None	No	None	No	2
RWF	016	A	7/10/2019	15:01:41	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	016	B	7/10/2019	15:03:07	No	Low	No	No	None	None	No	None	IND	Caprellid Amphipoda, Podocerid Amphipoda	No	2
RWF	016	C	7/10/2019	15:04:47	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2

Area	StationID	Replicate	Date	Time	Low DO Present?	Sediment Oxygen Demand	Beggiatoa Present?	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern	Invasive Taxa Present?	Type of Invasive Taxa	Tubes Present?	Epifauna	Voids Present?	Successional Stage
RWF	017	A	7/10/2019	16:19:41	No	Low	No	No	None	None	No	None	Yes	Caprellid Amphipoda, Podocerid Amphipoda	Yes	2 on 3
RWF	017	C	7/10/2019	16:22:28	No	Low	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWF	017	D	7/10/2019	16:23:54	No	Low	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWF	018	B	7/10/2019	17:40:37	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 on 3
RWF	018	C	7/10/2019	17:42:01	No	Low	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWF	018	D	7/10/2019	17:43:12	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	Yes	2 on 3
RWF	019	A	7/10/2019	18:16:00	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	019	B	7/10/2019	18:17:25	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	019	C	7/10/2019	18:18:41	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	020	A	7/10/2019	18:53:40	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	020	B	7/10/2019	18:55:18	No	Low	No	No	None	None	No	None	Yes	Caprellid Amphipoda, Podocerid Amphipoda	No	2 -> 3
RWF	020	C	7/10/2019	18:56:27	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	021	A	7/9/2019	21:18:41	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	021	B	7/9/2019	21:19:56	No	Low	No	No	None	None	No	None	Yes	None	Yes	2 -> 3
RWF	021	D	7/9/2019	21:22:21	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	022	A	7/9/2019	22:19:18	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	022	B	7/9/2019	22:20:49	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	022	C	7/9/2019	22:22:00	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	023	E	7/9/2019	23:53:58	No	Low	No	No	None	None	No	None	No	None	Yes	2 -> 3
RWF	023	F	7/9/2019	23:55:16	No	Low	No	No	None	None	No	None	Yes	None	No	1 on 3
RWF	023	G	7/9/2019	23:56:33	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	024	A	7/9/2019	23:30:23	No	None	No	No	None	None	No	None	No	None	No	IND
RWF	024	B	7/9/2019	23:31:27	No	None	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	024	C	7/9/2019	23:32:42	No	None	No	No	None	None	No	None	No	None	No	IND
RWF	025	A	7/11/2019	0:57:27	No	None	No	No	None	None	No	None	No	None	No	IND
RWF	025	C	7/11/2019	1:00:31	No	None	No	No	None	None	No	None	No	None	No	IND
RWF	025	D	7/11/2019	1:02:03	No	None	No	No	None	None	No	None	No	Caprellid Amphipoda, Podocerid Amphipoda	No	2
RWF	026	A	7/11/2019	2:13:30	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3

Area	StationID	Replicate	Date	Time	Low DO Present?	Sediment Oxygen Demand	Beggiatoa Present?	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern	Invasive Taxa Present?	Type of Invasive Taxa	Tubes Present?	Epifauna	Voids Present?	Successional Stage
RWF	026	B	7/11/2019	2:14:57	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	026	C	7/11/2019	2:16:19	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	027	A	7/11/2019	2:52:59	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	027	B	7/11/2019	2:54:17	No	Low	No	No	None	None	No	None	Yes	Caprellid Amphipoda, Podocerid Amphipoda	No	2 -> 3
RWF	027	C	7/11/2019	2:55:41	No	Low	No	No	None	None	No	None	No	Crab	No	2 -> 3
RWF	028	A	7/11/2019	3:32:14	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	028	B	7/11/2019	3:33:36	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	028	C	7/11/2019	3:34:57	No	Low	No	No	None	None	No	None	No	None	No	2 -> 3
RWF	029	A	7/11/2019	4:21:42	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	029	C	7/11/2019	4:24:22	No	Low	No	No	None	None	No	None	No	None	No	IND
RWF	029	D	7/11/2019	4:25:35	No	Low	No	No	None	None	No	None	No	Caprellid Amphipoda, Podocerid Amphipoda, Shrimp	No	2
RWF	030	A	7/11/2019	4:42:57	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	030	B	7/11/2019	4:44:20	No	Low	No	No	None	None	No	None	No	Crab, Podocerid Amphipoda	No	2 -> 3
RWF	030	C	7/11/2019	4:45:41	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	031	A	7/9/2019	20:49:06	No	Low	No	No	None	None	No	None	No	None	No	IND
RWF	031	B	7/9/2019	20:50:16	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	031	D	7/9/2019	20:52:38	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	032	A	7/9/2019	20:02:24	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Shrimp	No	2 -> 3
RWF	032	B	7/9/2019	20:03:32	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	032	C	7/9/2019	20:04:47	No	Low	No	No	None	None	No	None	Yes	Shrimp	No	2 -> 3
RWF	033	A	7/9/2019	19:28:46	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	033	B	7/9/2019	19:30:01	No	Low	No	No	None	None	No	None	Yes	Crab	No	2 -> 3
RWF	033	C	7/9/2019	19:31:09	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	034	A	7/9/2019	18:45:49	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	034	B	7/9/2019	18:47:01	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	034	C	7/9/2019	18:48:08	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	035	E	7/10/2019	23:24:37	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	035	F	7/10/2019	23:26:06	No	Low	No	No	None	None	No	None	No	None	No	IND
RWF	035	G	7/10/2019	23:27:33	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3

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RWF	036	A	7/10/2019	10:14:19	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	036	C	7/10/2019	10:16:50	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	036	D	7/10/2019	10:18:10	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	037	A	7/11/2019	0:08:39	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Shrimp	No	2 -> 3
RWF	037	B	7/11/2019	0:10:33	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	037	C	7/11/2019	0:11:46	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	038	A	7/10/2019	7:42:39	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	038	B	7/10/2019	7:43:55	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Shrimp	No	2 -> 3
RWF	038	C	7/10/2019	7:45:11	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	039	A	7/10/2019	7:05:39	No	Low	No	No	None	None	No	None	No	None	No	2 -> 3
RWF	039	B	7/10/2019	7:06:52	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	039	C	7/10/2019	7:08:10	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda, Shrimp	No	2 -> 3
RWF	040	A	7/9/2019	13:51:52	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	040	B	7/9/2019	13:53:01	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	040	C	7/9/2019	13:54:06	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	041	A	7/9/2019	14:27:44	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	041	B	7/9/2019	14:28:53	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	041	C	7/9/2019	14:30:00	No	Low	No	No	None	None	No	None	No	Caprellid Amphipoda	No	2
RWF	042	A	7/9/2019	14:49:07	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 on 3
RWF	042	B	7/9/2019	14:50:11	No	Low	No	No	None	None	No	None	Yes	Ampelisca Amphipoda	No	2
RWF	042	C	7/9/2019	14:51:21	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	043	A	7/9/2019	15:39:11	No	Medium	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	043	B	7/9/2019	15:40:18	No	Medium	No	No	None	None	No	None	No	Caprellid Amphipoda, Podocerid Amphipoda	No	2
RWF	043	C	7/9/2019	15:41:28	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	044	A	7/9/2019	16:55:29	No	Low	No	No	None	None	No	None	No	Caprellid Amphipoda, Podocerid Amphipoda	No	2 -> 3
RWF	044	B	7/9/2019	16:56:39	No	Low	No	No	None	None	No	None	No	None	No	2 -> 3
RWF	044	C	7/9/2019	16:57:52	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	045	A	7/9/2019	17:55:00	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	045	B	7/9/2019	17:56:07	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3

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RWF	045	C	7/9/2019	17:57:16	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	046	A	7/10/2019	3:26:20	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	046	B	7/10/2019	3:27:47	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	046	C	7/10/2019	3:29:08	No	Medium	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	047	A	7/10/2019	4:06:40	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	047	C	7/10/2019	4:08:57	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	047	D	7/10/2019	4:10:00	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	048	A	7/10/2019	4:24:46	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	048	B	7/10/2019	4:26:08	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	048	C	7/10/2019	4:27:13	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	049	A	7/10/2019	5:39:04	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	049	B	7/10/2019	5:40:18	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	049	C	7/10/2019	5:41:33	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	050	A	7/4/2019	21:55:03	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	050	B	7/4/2019	21:56:07	No	Medium	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWF	050	C	7/4/2019	21:58:04	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	051	A	7/4/2019	22:26:10	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	051	B	7/4/2019	22:27:27	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	051	C	7/4/2019	22:28:21	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	052	A	7/4/2019	23:34:17	No	Low	No	No	None	None	No	None	No	None	No	2 -> 3
RWF	052	B	7/4/2019	23:35:24	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 on 3
RWF	052	D	7/4/2019	23:37:48	No	Low	No	No	None	None	No	None	No	None	No	IND
RWF	053	B	7/5/2019	0:26:38	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	053	C	7/5/2019	0:30:02	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	053	D	7/5/2019	0:31:37	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	054	A	7/5/2019	0:55:51	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	054	B	7/5/2019	0:57:06	No	Low	No	No	None	None	No	None	Yes	Hermit Crab	No	2 -> 3
RWF	054	D	7/5/2019	0:59:56	No	Low	No	No	None	None	No	None	No	Crab, Podocerid Amphipoda	No	2 on 3
RWF	055	A	7/5/2019	1:38:55	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	055	C	7/5/2019	1:41:43	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	055	D	7/5/2019	1:43:39	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	056	I	7/5/2019	7:16:56	No	Medium	No	No	None	None	No	None	IND	IND	Yes	3
RWF	056	M	7/5/2019	7:53:44	No	Medium	No	No	None	None	No	None	Yes	None	No	2
RWF	056	N	7/5/2019	8:51:31	No	Medium	No	No	None	None	No	None	Yes	None	No	2
RWF	057	B	7/5/2019	2:53:19	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3

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RWF	057	C	7/5/2019	2:54:35	No	Low	No	No	None	None	No	None	No	Gastropod, Podocerid Amphipoda	No	2 -> 3
RWF	057	D	7/5/2019	2:55:55	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Shrimp	No	2 -> 3
RWF	057E1	B	7/5/2019	5:17:06	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	057E1	C	7/5/2019	5:18:46	No	Low	No	No	None	None	No	None	Yes	Crab, Podocerid Amphipoda	No	2
RWF	057E1	D	7/5/2019	5:20:24	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	057E2	A	7/5/2019	5:46:04	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	057E2	B	7/5/2019	5:47:44	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Shrimp	No	2
RWF	057E2	C	7/5/2019	5:49:06	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	057W1	A	7/5/2019	6:17:36	No	Low	No	No	None	None	No	None	Yes	None	No	1
RWF	057W1	B	7/5/2019	6:19:01	No	Low	No	No	None	None	No	None	Yes	Shrimp	No	1
RWF	057W1	C	7/5/2019	6:20:17	No	Low	No	No	None	None	No	None	Yes	None	No	1
RWF	057W2	A	7/5/2019	6:32:30	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	057W2	B	7/5/2019	6:33:51	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	057W2	D	7/5/2019	6:36:52	No	Low	No	No	None	None	No	None	Yes	Crab, Hermit Crab, Tunicates	No	2 -> 3
RWF	058	A	7/5/2019	3:15:52	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	058	B	7/5/2019	3:17:15	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	058	C	7/5/2019	3:18:35	No	Low	No	No	None	None	No	None	Yes	Gastropod, Hermit Crab	No	2
RWF	059	A	7/5/2019	3:56:16	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	059	B	7/5/2019	3:57:26	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	059	C	7/5/2019	3:58:42	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	060	A	7/5/2019	17:04:01	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	060	B	7/5/2019	17:05:10	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	060	D	7/5/2019	17:17:07	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	061	A	7/5/2019	18:24:27	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Shrimp	No	2 -> 3
RWF	061	B	7/5/2019	18:25:48	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	061	C	7/5/2019	18:26:55	No	Low	No	No	None	None	No	None	Yes	Crab, Podocerid Amphipoda, Shrimp	No	2
RWF	062	A	7/5/2019	19:28:06	No	Medium	No	No	None	None	No	None	Yes	Podocerid Amphipoda, Shrimp	No	2 -> 3
RWF	062	C	7/5/2019	19:31:03	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	062	D	7/5/2019	19:32:21	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3

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RWF	063	A	7/5/2019	23:11:56	No	Low	No	No	None	None	No	None	Yes	Corymorpha, Podocerid Amphipoda, IND	No	2
RWF	063	B	7/5/2019	23:13:13	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	063	C	7/5/2019	23:14:24	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	064	A	7/6/2019	0:15:28	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	064	B	7/6/2019	0:17:42	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Shrimp	No	2
RWF	064	D	7/6/2019	0:20:43	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	065	A	7/6/2019	1:00:36	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda, Shrimp	No	2 -> 3
RWF	065	B	7/6/2019	1:02:16	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	065	C	7/6/2019	1:03:36	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	066	A	7/6/2019	2:04:36	No	Low	No	No	None	None	No	None	Yes	Gastropod	No	2
RWF	066	B	7/6/2019	2:06:09	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	066	C	7/6/2019	2:08:20	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	067	E	7/6/2019	17:24:02	No	Medium	No	No	None	None	No	None	No	Podocerid Amphipoda	Yes	2 -> 3
RWF	067	F	7/6/2019	17:53:45	No	Medium	No	No	None	None	No	None	Yes	None	Yes	2
RWF	067	G	7/6/2019	17:55:05	No	Medium	No	No	None	None	No	None	Yes	None	No	2
RWF	068	A	7/6/2019	4:07:29	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Shrimp	No	2 -> 3
RWF	068	B	7/6/2019	4:09:21	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	068	D	7/6/2019	4:11:56	No	Low	No	No	None	None	No	None	No	Hermit Crab, Hydroid, Podocerid Amphipoda	No	2
RWF	069	A	7/6/2019	5:36:04	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	069	B	7/6/2019	5:37:29	No	Low	No	No	None	None	No	None	Yes	None	No	1
RWF	069	D	7/6/2019	5:40:10	No	Low	No	No	None	None	No	None	No	Barnacle, Hydroid, Podocerid Amphipoda	No	2 -> 3
RWF	070	A	7/9/2019	10:38:23	No	Low	No	No	None	None	No	None	Yes	Crab, Podocerid Amphipoda	No	2 -> 3
RWF	070	B	7/9/2019	10:39:55	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	070	C	7/9/2019	10:41:29	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	071	A	7/10/2019	1:37:52	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Unidentified Crustacean	No	2 -> 3
RWF	071	B	7/10/2019	1:39:07	No	Low	No	No	None	None	No	None	No	None	No	IND
RWF	071	D	7/10/2019	1:41:29	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	072	A	7/7/2019	2:18:05	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2

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RWF	072	B	7/7/2019	2:19:32	No	Low	No	No	None	None	No	None	No	Amphipoda, Podocerid Amphipoda	No	2
RWF	072	D	7/7/2019	2:22:15	No	Low	No	No	None	None	No	None	No	None	No	2
RWF	073	A	7/7/2019	1:26:43	No	Low	No	No	None	None	No	None	No	Barnacle, Bryozoan, IND	IND	IND
RWF	073	C	7/7/2019	1:29:11	No	Low	No	No	None	None	No	None	No	Barnacle, Bryozoan	IND	IND
RWF	073	D	7/7/2019	1:30:31	IND	IND	No	No	None	None	IND	None	IND	Barnacles	IND	IND
RWF	073E1	A	7/12/2019	19:52:15	No	IND	No	No	None	None	IND	None	No	Barnacles, IND	IND	IND
RWF	073E1	C	7/12/2019	19:54:35	No	Low	No	IND	IND	None	No	None	No	Barnacles	IND	IND
RWF	073E1	D	7/12/2019	19:55:52	No	IND	No	No	None	None	No	None	No	Barnacles, Bryozoan	IND	IND
RWF	073E2	A	7/12/2019	20:15:18	IND	IND	IND	No	None	None	IND	None	IND	Barnacles	IND	IND
RWF	073E2	B	7/12/2019	20:16:34	No	IND	No	No	None	None	No	None	No	Barnacles	IND	IND
RWF	073E2	D	7/12/2019	20:18:54	IND	IND	No	No	None	None	No	None	No	Barnacles, Shrimp	IND	IND
RWF	073W1	A	7/12/2019	19:38:14	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	073W1	B	7/12/2019	19:39:30	No	Low	No	No	None	None	No	None	No	Bryozoan, Halipteris Sea Pen, Podocerid Amphipoda	No	2 -> 3
RWF	073W1	C	7/12/2019	19:40:48	No	Low	No	No	None	None	No	None	No	None	No	IND
RWF	073W2	B	7/12/2019	19:21:16	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	073W2	C	7/12/2019	19:22:30	No	Low	No	No	None	None	No	None	No	Halipteris Sea Pen	IND	IND
RWF	073W2	D	7/12/2019	19:23:56	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	074	A	7/7/2019	0:14:52	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	074	B	7/7/2019	0:16:23	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Shrimp	No	2 -> 3
RWF	074	C	7/7/2019	0:17:49	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	075	A	7/6/2019	23:26:57	IND	IND	No	No	None	None	No	None	Yes	None	IND	2 -> 3
RWF	075	C	7/6/2019	23:29:13	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	075	D	7/6/2019	23:30:26	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	076	A	7/6/2019	21:45:46	IND	IND	No	No	None	None	IND	None	IND	Shrimp	No	IND
RWF	076	C	7/6/2019	22:02:26	IND	IND	No	No	None	None	No	None	No	Barnacles, Bryozoan	No	IND
RWF	076	D	7/6/2019	22:03:27	IND	IND	No	No	None	None	No	None	No	Barnacles, Bryozoan, Hydroids	No	IND
RWF	077	A	7/6/2019	21:00:28	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	077	B	7/6/2019	21:01:30	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	077	C	7/6/2019	21:02:36	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	078	A	7/6/2019	19:52:02	No	Low	No	No	None	None	No	None	No	None	No	2 -> 3
RWF	078	C	7/6/2019	19:54:13	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	078	D	7/6/2019	19:55:28	No	Low	No	No	None	None	No	None	No	None	No	IND
RWF	079	A	7/6/2019	16:11:46	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	079	B	7/6/2019	16:12:45	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3

Area	StationID	Replicate	Date	Time	Low DO Present?	Sediment Oxygen Demand	Beggiatoa Present?	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern	Invasive Taxa Present?	Type of Invasive Taxa	Tubes Present?	Epifauna	Voids Present?	Successional Stage
RWF	079	C	7/6/2019	16:13:56	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	080	A	7/6/2019	14:05:06	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	080	B	7/6/2019	14:25:26	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	080	D	7/6/2019	14:30:16	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	081	A	7/6/2019	11:13:25	No	IND	No	No	None	None	No	None	No	Halipteris Sea Pen	No	IND
RWF	081	B	7/6/2019	11:14:48	No	Low	No	No	None	None	No	None	No	Bryozoan, Caprellid Amphipoda, Halipteris Sea Pen	No	IND
RWF	081	C	7/6/2019	11:25:20	No	Low	No	No	None	None	No	None	No	Caprellid Amphipoda, Halipteris Sea Pen	No	IND
RWF	082	A	7/10/2019	0:54:38	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	082	B	7/10/2019	0:55:49	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	082	C	7/10/2019	1:01:31	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	083	A	7/7/2019	3:08:32	No	Low	No	No	None	None	No	None	No	None	No	IND
RWF	083	C	7/7/2019	3:10:58	No	Low	No	No	None	None	No	None	No	Bryozoan	No	IND
RWF	083	D	7/7/2019	3:12:11	No	Low	No	No	None	None	No	None	No	Barnacles, Bryozoan, Podocerid Amphipoda	No	2 -> 3
RWF	084	A	7/7/2019	4:19:12	No	IND	No	No	None	None	No	None	No	Barnacles, Shrimp	No	IND
RWF	084	B	7/7/2019	4:21:09	No	Low	No	No	None	None	No	None	Yes	Bryozoan, Halipteris Sea Pen, Podocerid Amphipoda	No	2 -> 3
RWF	084	D	7/7/2019	4:28:03	No	Low	No	No	None	None	No	None	No	Barnacles, Bryozoan, Podocerid Amphipoda	No	2 -> 3
RWF	085	A	7/7/2019	5:53:20	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	085	B	7/7/2019	5:55:18	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	085	C	7/7/2019	6:00:24	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	086	A	7/7/2019	7:29:24	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	086	B	7/7/2019	8:18:11	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	086	D	7/7/2019	8:33:03	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	087	A	7/7/2019	10:55:15	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	087	B	7/7/2019	10:56:35	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	087	C	7/7/2019	10:58:03	No	Low	No	No	None	None	No	None	No	None	No	IND
RWF	088	A	7/7/2019	13:16:30	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	088	B	7/7/2019	13:17:38	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3

Area	StationID	Replicate	Date	Time	Low DO Present?	Sediment Oxygen Demand	Beggiatoa Present?	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern	Invasive Taxa Present?	Type of Invasive Taxa	Tubes Present?	Epifauna	Voids Present?	Successional Stage
RWF	088	C	7/7/2019	13:18:34	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWF	089	B	7/7/2019	14:23:40	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	089	C	7/7/2019	14:24:57	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	089	D	7/7/2019	14:26:05	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	090	A	7/7/2019	15:18:28	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	090	B	7/7/2019	15:19:30	No	Low	No	No	None	None	No	None	No	None	No	IND
RWF	090	C	7/7/2019	15:20:32	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	091	A	7/7/2019	16:15:20	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	091	B	7/7/2019	16:16:29	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	091	C	7/7/2019	16:17:36	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	092	A	7/7/2019	16:49:41	No	Low	No	No	None	None	No	None	No	Amphipoda, Podocerid Amphipoda	No	2 -> 3
RWF	092	B	7/7/2019	16:50:54	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	092	C	7/7/2019	16:52:12	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	093	A	7/7/2019	17:29:03	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	093	B	7/7/2019	17:30:13	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	093	C	7/7/2019	17:31:29	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	094	A	7/7/2019	18:13:44	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	094	B	7/7/2019	18:14:50	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	094	C	7/7/2019	18:16:09	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	095	A	7/7/2019	18:51:52	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	095	B	7/7/2019	18:53:16	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	095	D	7/7/2019	18:55:42	No	Low	No	No	None	None	No	None	No	Caprellid Amphipoda, Podocerid Amphipoda	No	2 -> 3
RWF	096	A	7/8/2019	5:53:01	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	096	B	7/8/2019	5:54:18	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	096	C	7/8/2019	5:55:39	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	097	A	7/8/2019	5:17:51	No	Low	No	No	None	None	No	None	Yes	Amphipoda, Podocerid Amphipoda	No	2 -> 3
RWF	097	B	7/8/2019	5:19:10	No	Low	No	No	None	None	No	None	Yes	Amphipoda, Podocerid Amphipoda	No	2 -> 3
RWF	097	C	7/8/2019	5:20:21	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	098	A	7/8/2019	4:31:46	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3

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RWF	098	B	7/8/2019	4:33:01	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	098	C	7/8/2019	4:34:12	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	099	A	7/8/2019	3:45:58	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	099	B	7/8/2019	3:47:02	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	099	C	7/8/2019	3:48:14	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	100	A	7/8/2019	2:46:50	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	100	C	7/8/2019	2:49:18	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	100	D	7/8/2019	2:50:27	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	101	B	7/8/2019	2:10:20	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	101	C	7/8/2019	2:11:32	No	Low	No	No	None	None	No	None	No	Amphipoda, Podocerid Amphipoda	No	2 -> 3
RWF	101	D	7/8/2019	2:12:43	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	102	A	7/8/2019	1:27:47	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	102	B	7/8/2019	1:29:07	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	102	C	7/8/2019	1:30:18	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	103	A	7/8/2019	0:35:04	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	103	B	7/8/2019	0:36:19	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Shrimp	No	2 -> 3
RWF	103	C	7/8/2019	0:37:36	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	104	B	7/7/2019	23:52:35	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	104	C	7/7/2019	23:53:47	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	104	D	7/7/2019	23:55:00	No	Low	No	No	None	None	No	None	No	Hermit Crab, Podocerid Amphipoda	No	2 -> 3
RWF	105	A	7/7/2019	23:08:30	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	105	B	7/7/2019	23:09:38	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	105	C	7/7/2019	23:10:47	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	106	A	7/7/2019	22:48:58	No	Low	No	No	None	None	No	None	Yes	Caprellid Amphipoda, Podocerid Amphipoda	No	2 -> 3
RWF	106	B	7/7/2019	22:50:09	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	106	C	7/7/2019	22:51:16	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	107	A	7/8/2019	20:46:23	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	107	B	7/8/2019	20:47:32	No	Low	No	No	None	None	No	None	No	None	No	IND
RWF	107	C	7/8/2019	20:48:35	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	108	A	7/8/2019	18:50:24	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	108	B	7/8/2019	18:51:28	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3

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RWF	108	C	7/8/2019	18:52:33	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	109	A	7/8/2019	19:36:27	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	109	B	7/8/2019	19:37:35	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	109	C	7/8/2019	19:38:45	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	110	A	7/8/2019	19:54:26	No	Low	No	No	None	None	No	None	No	Amphipoda, Podocerid Amphipoda	No	2 -> 3
RWF	110	B	7/8/2019	19:55:32	No	Low	No	No	None	None	No	None	No	Amphipoda, Podocerid Amphipoda	No	2 -> 3
RWF	110	C	7/8/2019	19:56:44	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	111	A	7/8/2019	7:24:05	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	111	B	7/8/2019	7:25:36	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	111	C	7/8/2019	7:30:44	No	Low	No	No	None	None	No	None	No	Barnacles, Podocerid Amphipoda	No	2 -> 3
RWF	112	A	7/8/2019	8:41:01	No	Low	No	No	None	None	No	None	No	Bryozoan, Halipteris Sea Pen, Podocerid Amphipoda	No	2 -> 3
RWF	112	C	7/8/2019	8:43:25	No	Low	No	No	None	None	No	None	Yes	Amphipoda, Caprellid Amphipoda, Podocerid Amphipoda	No	2 -> 3
RWF	112	D	7/8/2019	8:44:46	No	Low	No	No	None	None	No	None	No	Caprellid Amphipoda, Podocerid Amphipoda	No	2 -> 3
RWF	113	A	7/8/2019	9:55:45	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	113	B	7/8/2019	9:57:08	No	Low	No	No	None	None	No	None	Yes	caprellid Amphipoda, Podocerid Amphipoda	No	2
RWF	113	C	7/8/2019	9:58:33	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	114	A	7/8/2019	11:09:27	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	114	C	7/8/2019	11:12:09	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	114	D	7/8/2019	11:13:27	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	115	A	7/8/2019	11:43:41	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	115	B	7/8/2019	11:44:52	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	115	C	7/8/2019	11:46:24	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	116	A	7/8/2019	18:25:25	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	116	B	7/8/2019	18:26:24	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	116	C	7/8/2019	18:27:22	No	None	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2

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RWF	117	A	7/8/2019	17:42:13	No	None	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	117	B	7/8/2019	17:43:25	No	None	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	117	C	7/8/2019	17:44:35	No	None	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	118	A	7/8/2019	16:49:30	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	118	B	7/8/2019	16:50:42	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	118	C	7/8/2019	16:51:52	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	119	B	7/8/2019	16:10:16	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	119	C	7/8/2019	16:11:30	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	119	D	7/8/2019	16:12:47	No	Low	No	No	None	None	No	None	Yes	Halipteris Sea Pen, Podocerid Amphipoda	No	2
RWF	120	A	7/8/2019	14:58:02	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	120	B	7/8/2019	14:59:15	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	120	C	7/8/2019	15:00:16	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	121	A	7/8/2019	14:11:50	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	121	B	7/8/2019	14:12:57	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	121	C	7/8/2019	14:14:11	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	122	A	7/8/2019	13:28:33	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	122	B	7/8/2019	13:29:41	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	122	C	7/8/2019	13:30:54	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	123	A	7/8/2019	12:56:57	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	123	B	7/8/2019	12:58:12	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	123	C	7/8/2019	12:59:21	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	124	A	7/7/2019	19:13:27	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	124	C	7/7/2019	19:15:49	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	124	D	7/7/2019	19:16:58	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	125	A	7/7/2019	19:53:48	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	125	B	7/7/2019	19:55:02	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	125	C	7/7/2019	19:56:24	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2 -> 3
RWF	126	A	7/7/2019	20:18:22	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Shrimp	No	2 -> 3
RWF	126	B	7/7/2019	20:19:31	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	126	C	7/7/2019	20:20:42	No	Low	No	No	None	None	No	None	No	Hermit Crab, Podocerid Amphipoda	No	2
RWF	127	A	7/7/2019	22:04:42	No	None	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2

Area	StationID	Replicate	Date	Time	Low DO Present?	Sediment Oxygen Demand	Beggiatoa Present?	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern	Invasive Taxa Present?	Type of Invasive Taxa	Tubes Present?	Epifauna	Voids Present?	Successional Stage
RWF	127	B	7/7/2019	22:05:54	No	None	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	127	C	7/7/2019	22:06:57	No	None	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	128	A	7/7/2019	21:18:58	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	128	C	7/7/2019	21:21:23	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	128	D	7/7/2019	21:22:54	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	129	B	7/7/2019	21:02:30	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	129	C	7/7/2019	21:03:40	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	129	D	7/7/2019	21:04:49	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	136	A	7/9/2019	3:46:03	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	136	B	7/9/2019	3:47:25	No	Low	No	No	None	None	No	None	IND	None	No	2
RWF	136	C	7/9/2019	3:48:41	No	None	No	No	None	None	No	None	Yes	None	No	2
RWF	137	A	7/9/2019	4:18:43	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	137	B	7/9/2019	4:20:00	No	None	No	No	None	None	No	None	Yes	Barnacles	No	2
RWF	137	D	7/9/2019	4:22:38	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	138	B	7/9/2019	5:34:38	No	IND	No	No	None	None	No	None	IND	Barnacles, Sea Star	IND	IND
RWF	138	C	7/9/2019	5:35:43	No	IND	No	No	None	None	No	None	IND	Barnacles	IND	IND
RWF	138	D	7/9/2019	5:37:00	No	None	No	No	None	None	No	None	Yes	None	No	2
RWF	139	B	7/9/2019	6:13:03	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	139	C	7/9/2019	6:14:10	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	139	D	7/9/2019	6:15:19	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	140	A	7/9/2019	6:58:45	No	Low	No	No	None	None	No	None	Yes	Ampelisca Amphipoda, Podocerid Amphipoda	No	2
RWF	140	B	7/9/2019	7:00:03	No	Low	No	No	None	None	No	None	Yes	Ampelisca Amphipoda, Podocerid Amphipoda	No	2
RWF	140	D	7/9/2019	7:02:37	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	141	A	7/9/2019	2:49:39	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	141	C	7/9/2019	2:52:17	No	Low	No	No	None	None	No	None	Yes	Shrimp	No	2
RWF	141	D	7/9/2019	2:53:32	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	142	A	7/9/2019	2:10:54	No	None	No	No	None	None	No	None	No	None	No	1 -> 2
RWF	142	B	7/9/2019	2:12:25	No	None	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	142	D	7/9/2019	2:15:17	No	None	No	No	None	None	No	None	No	None	No	2
RWF	143	A	7/9/2019	1:32:03	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	143	B	7/9/2019	1:33:23	No	None	No	No	None	None	No	None	IND	None	No	IND
RWF	143	C	7/9/2019	1:38:24	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	144	A	7/8/2019	23:33:09	No	None	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	144	B	7/8/2019	23:34:24	No	None	No	No	None	None	No	None	No	None	No	2
RWF	144	C	7/8/2019	23:35:27	No	None	No	No	None	None	No	None	Yes	None	No	2
RWF	201	A	7/9/2019	0:11:57	No	IND	No	No	None	None	No	None	IND	Barnacles	IND	IND

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RWF	201	B	7/9/2019	0:12:58	No	IND	No	No	None	None	No	None	IND	Barnacles	IND	IND
RWF	201	E	7/9/2019	0:56:35	No	IND	No	No	None	None	No	None	IND	Barnacles, Shrimp	IND	IND
RWF	202	A	7/8/2019	23:00:33	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	202	B	7/8/2019	23:01:48	No	None	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	202	C	7/8/2019	23:03:02	No	None	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	203	B	7/8/2019	22:42:12	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	203	C	7/8/2019	22:43:23	No	IND	No	No	None	None	No	None	No	Podocerid Amphipoda	IND	2
RWF	203	D	7/8/2019	22:44:30	No	Low	No	No	None	None	No	None	No	Barnacles, Podocerid Amphipoda	No	2
RWF	204	A	7/9/2019	5:51:30	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	204	B	7/9/2019	5:52:41	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	204	C	7/9/2019	5:54:01	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	205	A	7/7/2019	6:49:08	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Shrimp	No	2
RWF	205	B	7/7/2019	6:52:07	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	205	C	7/7/2019	6:53:41	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	206	A	7/7/2019	3:39:01	No	Low	No	No	None	None	No	None	No	None	No	2 -> 3
RWF	206	B	7/7/2019	3:40:25	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	206	C	7/7/2019	3:41:35	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	207	B	7/7/2019	11:36:30	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	207	C	7/7/2019	11:37:47	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	207	D	7/7/2019	11:39:00	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	208	A	7/7/2019	12:30:40	No	Low	No	No	None	None	No	None	Yes	None	IND	2
RWF	208	B	7/7/2019	12:32:01	No	Low	No	No	None	None	No	None	No	None	No	2
RWF	208	E	7/7/2019	12:44:35	No	Low	No	No	None	None	No	None	Yes	Polymastia spp. Sponge	IND	IND
RWF	209	A	7/8/2019	4:52:46	No	Low	No	No	None	None	No	None	Yes	Halipteris Sea Pen, Podocerid Amphipoda	No	2
RWF	209	B	7/8/2019	4:53:55	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	209	C	7/8/2019	4:55:09	No	IND	No	No	None	None	No	None	IND	Halipteris Sea Pen	IND	2
RWF	210	A	7/7/2019	14:51:04	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	210	C	7/7/2019	14:53:28	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	210	D	7/7/2019	14:54:41	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	211	A	7/8/2019	1:48:34	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	211	C	7/8/2019	1:50:57	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	211	D	7/8/2019	1:52:10	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	212	B	7/7/2019	21:48:10	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2

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RWF	212	C	7/7/2019	21:49:29	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	212	D	7/7/2019	21:50:37	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	213	A	7/8/2019	15:48:06	No	Low	No	No	None	None	No	None	No	None	No	IND
RWF	213	C	7/8/2019	15:50:35	No	Low	No	No	None	None	No	None	Yes	Halipteris Sea Pen	No	2
RWF	213	D	7/8/2019	15:51:43	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	214	A	7/6/2019	22:43:53	No	None	No	No	None	None	No	None	No	None	No	IND
RWF	214	C	7/6/2019	22:46:12	No	None	No	No	None	None	No	None	No	Podocerid Amphipoda	No	IND
RWF	214	D	7/6/2019	22:47:23	No	IND	No	No	None	None	No	None	IND	Barnacles, Shrimp	IND	IND
RWF	215	A	7/6/2019	18:18:34	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	215	B	7/6/2019	18:19:43	No	IND	No	IND	IND	None	No	None	IND	Anemone	IND	IND
RWF	215	C	7/6/2019	18:21:03	No	IND	No	IND	IND	None	No	None	IND	Polymastia spp. Sponge	IND	IND
RWF	216	A	7/6/2019	15:27:26	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	216	B	7/6/2019	15:28:26	No	Low	No	No	None	None	No	None	Yes	None	No	1
RWF	216	C	7/6/2019	15:39:45	No	IND	No	IND	IND	None	No	None	IND	Halipteris Sea Pen	IND	IND
RWF	217	A	7/6/2019	15:02:22	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	217	C	7/6/2019	15:04:28	No	IND	No	IND	IND	None	No	None	IND	None	IND	IND
RWF	217	D	7/6/2019	15:05:36	No	IND	No	IND	IND	None	No	None	IND	None	IND	IND
RWF	218	A	7/6/2019	6:25:58	No	IND	No	IND	IND	None	No	None	IND	Barnacles, Polymastia spp. Sponge	IND	IND
RWF	218	C	7/6/2019	6:32:43	No	Low	No	No	None	None	No	None	IND	None	No	IND
RWF	218	D	7/6/2019	6:34:24	No	IND	No	IND	IND	None	No	None	IND	None	IND	IND
RWF	218E1	A	7/6/2019	7:21:51	No	IND	No	IND	IND	None	No	None	IND	None	IND	IND
RWF	218E1	C	7/6/2019	7:24:58	No	IND	No	IND	IND	None	No	None	IND	Halipteris Sea Pen	IND	IND
RWF	218E1	D	7/6/2019	7:26:34	No	Low	No	No	None	None	No	None	Yes	Gastropod, Halipteris Sea Pen	No	2
RWF	218E2	A	7/6/2019	7:41:03	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	218E2	B	7/6/2019	7:42:32	No	Low	No	No	None	None	No	None	No	Barnacles, Caprellid Amphipoda, Podocerid Amphipoda	No	2
RWF	218E2	C	7/6/2019	7:43:54	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	218W1	A	7/6/2019	8:38:40	No	IND	No	IND	IND	None	No	None	IND	Halipteris Sea Pen	IND	IND
RWF	218W1	B	7/6/2019	8:56:33	No	IND	No	IND	IND	None	No	None	IND	Halipteris Sea Pen	IND	IND
RWF	218W1	C	7/6/2019	8:58:15	No	Low	No	No	None	None	No	None	Yes	None	IND	2
RWF	218W2	A	7/6/2019	9:24:34	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	218W2	C	7/6/2019	9:27:13	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	218W2	D	7/6/2019	9:29:00	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	219	A	7/6/2019	10:25:09	No	Low	No	No	None	None	No	None	No	None	No	2
RWF	219	B	7/6/2019	10:35:20	No	IND	No	IND	IND	None	No	None	IND	Halipteris Sea Pen	IND	IND
RWF	219	D	7/6/2019	10:38:38	No	IND	No	IND	IND	None	No	None	IND	None	IND	IND
RWF	220	B	7/5/2019	18:00:36	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	IND

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RWF	220	C	7/5/2019	18:01:38	No	IND	No	IND	IND	None	No	None	IND	barnacles	IND	IND
RWF	220	D	7/5/2019	18:02:46	No	IND	No	IND	IND	None	No	None	IND	barnacles	IND	IND
RWF	220E1	B	7/5/2019	22:07:54	No	IND	No	IND	IND	None	No	None	IND	barnacles	IND	IND
RWF	220E1	C	7/5/2019	22:09:18	No	Low	No	No	None	None	No	None	Yes	Shrimp	IND	IND
RWF	220E1	D	7/5/2019	22:10:38	No	IND	No	IND	IND	None	No	None	IND	Barnacles, Halipteris Sea Pen, Shrimp	IND	IND
RWF	220E2	B	7/5/2019	22:34:03	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	220E2	C	7/5/2019	22:35:10	No	IND	No	IND	IND	None	No	None	IND	None	IND	IND
RWF	220E2	D	7/5/2019	22:36:20	No	IND	No	IND	IND	None	No	None	IND	None	IND	IND
RWF	220W1	A	7/5/2019	21:31:16	No	Low	No	No	None	None	No	None	Yes	None	Yes	2
RWF	220W1	B	7/5/2019	21:32:37	No	IND	No	IND	IND	None	No	None	IND	None	IND	IND
RWF	220W1	C	7/5/2019	21:33:53	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	220W2	C	7/5/2019	20:39:20	No	IND	No	IND	IND	None	No	None	IND	Podocerid Amphipoda	IND	2
RWF	220W2	D	7/5/2019	20:40:35	No	IND	No	IND	IND	None	No	None	IND	None	IND	IND
RWF	221	A	7/11/2019	1:19:41	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	221	B	7/11/2019	1:20:58	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	221	C	7/11/2019	1:22:23	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	222	A	7/5/2019	3:34:53	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	222	B	7/5/2019	3:36:03	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda, Shrimp	No	2
RWF	222	C	7/5/2019	3:37:20	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	223	A	7/11/2019	11:38:35	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	223	C	7/11/2019	11:41:48	No	Low	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWF	223	D	7/11/2019	11:43:17	No	Low	No	No	None	None	No	None	Yes	Ampelisca Amphipoda	No	2 on 3
RWF	224	A	7/11/2019	8:16:30	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	224	B	7/11/2019	8:17:46	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	224	C	7/11/2019	8:19:08	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	225	A	7/11/2019	6:27:41	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	225	B	7/11/2019	6:29:06	No	Low	No	No	None	None	No	None	Yes	Ampelisca Amphipoda, Podocerid Amphipoda	Yes	2 on 3
RWF	225	C	7/11/2019	6:30:31	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	226	A	7/10/2019	20:15:14	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda, Shrimp	No	2 on 3
RWF	226	C	7/10/2019	20:18:03	No	Low	No	No	None	None	No	None	Yes	Shrimp	No	2 on 3
RWF	226	D	7/10/2019	20:19:24	No	Low	No	No	None	None	No	None	IND	None	Yes	2 on 3
RWF	227	A	7/10/2019	11:30:26	No	Medium	No	No	None	None	No	None	Yes	None	Yes	1 on 3

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RWF	227	B	7/10/2019	11:32:00	No	Medium	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	1 on 3
RWF	227	D	7/10/2019	11:35:22	No	Medium	No	No	None	None	No	None	IND	None	Yes	2 on 3
RWF	228	A	7/10/2019	13:32:33	No	Low	No	No	None	None	No	None	No	None	No	2
RWF	228	B	7/10/2019	13:34:00	No	Low	No	No	None	None	No	None	No	None	No	2
RWF	228	C	7/10/2019	13:35:23	No	Low	No	No	None	None	No	None	No	Shrimp	No	2
RWF	229	A	7/10/2019	15:24:01	No	Low	No	No	None	None	No	None	No	None	No	2 -> 3
RWF	229	B	7/10/2019	15:25:10	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Shrimp	No	2
RWF	229	C	7/10/2019	15:26:24	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	230	A	7/10/2019	17:57:23	No	Medium	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	230	B	7/10/2019	17:58:41	No	Medium	No	No	None	Sea scallop	No	None	Yes	Ampelisca Amphipoda, Podocerid Amphipoda, Sea Scallop	No	2 -> 3
RWF	230	C	7/10/2019	17:59:54	No	Medium	No	No	None	Sea scallop	No	None	Yes	Ampelisca Amphipoda, Sea Scallop, Shrimp	No	2 -> 3
RWF	231	A	7/9/2019	22:34:53	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda, Shrimp	No	2
RWF	231	B	7/9/2019	22:36:03	No	Low	No	No	None	None	No	None	Yes	Shrimp	No	2
RWF	231	C	7/9/2019	22:37:13	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	232	A	7/11/2019	14:53:05	No	IND	No	No	None	None	No	None	IND	Barnacles, Sea Star	IND	IND
RWF	232	B	7/11/2019	14:54:27	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	IND	2
RWF	232	C	7/11/2019	14:55:43	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	233	A	7/11/2019	1:54:18	No	Low	No	No	None	None	No	None	No	None	No	2
RWF	233	B	7/11/2019	1:55:39	No	Low	No	No	None	None	No	None	Yes	Jonah Crab	No	2
RWF	233	C	7/11/2019	1:57:11	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	234	A	7/11/2019	3:14:50	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	234	B	7/11/2019	3:16:11	No	Medium	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	234	D	7/11/2019	3:19:03	No	Medium	No	No	None	None	No	None	Yes	Shrimp	No	2
RWF	235	A	7/9/2019	19:45:20	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	235	B	7/9/2019	19:46:44	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	235	C	7/9/2019	19:47:55	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	236	A	7/10/2019	8:23:47	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	236	E	7/10/2019	8:59:36	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	236	F	7/10/2019	9:01:19	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	237	A	7/10/2019	23:48:36	No	Low	No	No	None	None	No	None	Yes	Halipteris Sea Pen, Podocerid Amphipoda	No	2

Area	StationID	Replicate	Date	Time	Low DO Present?	Sediment Oxygen Demand	Beggiatoa Present?	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern	Invasive Taxa Present?	Type of Invasive Taxa	Tubes Present?	Epifauna	Voids Present?	Successional Stage
RWF	237	B	7/10/2019	23:49:59	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	237	D	7/10/2019	23:52:35	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda, Shrimp	No	2
RWF	238	A	7/10/2019	4:56:03	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Shrimp	No	2 -> 3
RWF	238	B	7/10/2019	4:57:10	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	238	C	7/10/2019	4:58:16	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	239	E	7/10/2019	6:23:29	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	239	G	7/10/2019	6:27:14	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	239	H	7/10/2019	6:33:02	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	240	A	7/9/2019	15:18:20	No	Low	No	No	None	None	No	None	IND	None	No	2
RWF	240	B	7/9/2019	15:19:30	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Shrimp	No	2 -> 3
RWF	240	C	7/9/2019	15:20:40	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	241	A	7/4/2019	22:58:09	No	Low	No	No	None	None	No	None	No	None	No	2
RWF	241	B	7/4/2019	22:59:21	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWF	241	C	7/4/2019	23:00:16	No	Low	No	No	None	None	No	None	Yes	Jonah Crab, Podocerid Amphipoda	No	2
RWF	242	A	7/5/2019	1:18:50	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	242	B	7/5/2019	1:20:06	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	242	C	7/5/2019	1:21:22	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	243	A	7/5/2019	19:02:51	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	243	C	7/5/2019	19:05:15	No	High	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	243	D	7/5/2019	19:06:18	No	High	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2 -> 3
RWF	244	A	7/6/2019	0:38:59	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	244	B	7/6/2019	0:40:22	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	244	C	7/6/2019	0:41:51	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	245	A	7/6/2019	3:39:20	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	245	B	7/6/2019	3:40:36	No	Low	No	No	None	None	No	None	Yes	Shrimp	No	2
RWF	245	D	7/6/2019	3:43:52	No	Low	No	No	None	None	No	None	No	Barnacles	No	2
RWF	246	A	7/7/2019	2:35:25	No	Low	No	No	None	None	No	None	Yes	Caprellid Amphipoda, Podocerid Amphipoda	No	2
RWF	246	B	7/7/2019	2:36:56	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	246	C	7/7/2019	2:38:09	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	247	A	7/7/2019	0:38:07	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	247	B	7/7/2019	0:39:27	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	247	C	7/7/2019	0:40:52	No	Low	No	No	None	None	No	None	No	Shrimp	No	2
RWF	248	A	7/6/2019	22:17:38	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2

Area	StationID	Replicate	Date	Time	Low DO Present?	Sediment Oxygen Demand	Beggiatoa Present?	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern	Invasive Taxa Present?	Type of Invasive Taxa	Tubes Present?	Epifauna	Voids Present?	Successional Stage
RWF	248	C	7/6/2019	22:19:54	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	248	D	7/6/2019	22:21:01	No	Low	No	No	None	None	No	None	Yes	None	No	IND
RWF	249	A	7/6/2019	19:03:17	No	IND	No	IND	IND	None	No	None	IND	Barnacles	No	IND
RWF	249	B	7/6/2019	19:04:15	No	IND	No	IND	IND	None	No	None	IND	Barnacles	No	IND
RWF	249	C	7/6/2019	19:05:29	No	IND	No	Yes	Non-Reef Building Hard Coral	None	No	None	IND	Barnacles, Northern Star Coral	No	IND
RWF	250	A	7/7/2019	5:17:03	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWF	250	B	7/7/2019	5:24:15	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	250	C	7/7/2019	5:25:50	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	251	A	7/8/2019	6:37:16	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	251	B	7/8/2019	6:38:50	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	251	C	7/8/2019	6:40:02	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	252	A	7/8/2019	21:06:52	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	252	B	7/8/2019	21:08:00	No	Low	No	No	None	None	No	None	Yes	Halipteris Sea Pen, Podocerid Amphipoda, Shrimp	No	2
RWF	252	C	7/8/2019	21:09:06	No	Low	No	No	None	None	No	None	No	None	No	2
RWF	253	A	7/8/2019	14:34:34	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	253	C	7/8/2019	14:36:55	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	253	D	7/8/2019	14:38:00	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	254	A	7/8/2019	3:06:28	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	254	B	7/8/2019	3:07:32	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	254	C	7/8/2019	3:08:41	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	255	A	7/9/2019	1:13:53	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	255	B	7/9/2019	1:15:02	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	255	C	7/9/2019	1:16:34	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	256	A	7/8/2019	23:16:27	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2
RWF	256	B	7/8/2019	23:17:35	No	Low	No	No	None	None	No	None	No	None	No	2
RWF	256	C	7/8/2019	23:18:46	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	257	A	7/9/2019	4:02:59	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	257	B	7/9/2019	4:04:04	No	Low	No	No	None	None	No	None	Yes	None	No	1
RWF	257	C	7/9/2019	4:05:13	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	1
RWF	258	A	7/9/2019	2:30:20	No	Low	No	No	None	None	No	None	IND	None	No	2
RWF	258	B	7/9/2019	2:31:29	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	258	C	7/9/2019	2:32:48	No	Low	No	No	None	None	No	None	Yes	Caprellid Amphipoda, Podocerid Amphipoda	No	2
RWF	259	A	7/8/2019	0:13:38	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2

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RWF	259	B	7/8/2019	0:15:39	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	259	C	7/8/2019	0:17:09	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWF	260	A	7/8/2019	9:21:49	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	260	B	7/8/2019	9:28:42	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWF	260	C	7/8/2019	9:30:05	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	261	A	7/8/2019	17:23:34	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	261	B	7/8/2019	17:24:44	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWF	261	D	7/8/2019	17:27:00	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	262	A	7/7/2019	17:51:19	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Shrimp	No	2 -> 3
RWF	262	B	7/7/2019	17:52:39	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWF	262	D	7/7/2019	17:54:56	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	401	A	7/12/2019	10:22:08	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWEC-OCS	401	B	7/12/2019	10:23:26	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	401	C	7/12/2019	18:44:55	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	402	A	7/12/2019	17:59:32	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	402	B	7/12/2019	18:00:54	IND	IND	No	No	None	None	No	None	IND	Podocerid Amphipoda	IND	2
RWEC-OCS	402	C	7/12/2019	18:02:03	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	403	A	7/12/2019	17:35:54	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWEC-OCS	403	B	7/12/2019	17:36:56	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWEC-OCS	403	C	7/12/2019	17:38:08	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	404	A	7/12/2019	16:12:58	No	High	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWEC-OCS	404	B	7/12/2019	16:14:12	No	High	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	404	D	7/12/2019	16:16:42	No	High	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWEC-OCS	405	A	7/12/2019	0:03:16	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	405	B	7/12/2019	0:04:37	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWEC-OCS	405	D	7/12/2019	0:07:20	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWEC-OCS	406	A	7/11/2019	23:36:03	No	Medium	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 on 3
RWEC-OCS	406	B	7/11/2019	23:37:17	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	406	D	7/11/2019	23:39:53	No	Medium	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 on 3
RWEC-OCS	407	A	7/11/2019	22:52:31	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWEC-OCS	407	B	7/11/2019	22:53:56	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWEC-OCS	407	C	7/11/2019	22:55:09	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	408	A	7/11/2019	22:29:58	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2

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RWEC-OCS	408	B	7/11/2019	22:31:12	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWEC-OCS	408	C	7/11/2019	22:32:23	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWEC-OCS	409	A	7/11/2019	21:52:22	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWEC-OCS	409	B	7/11/2019	21:53:38	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWEC-OCS	409	C	7/11/2019	21:54:52	No	Low	No	No	None	None	No	None	No	None	No	2
RWEC-OCS	410	A	7/11/2019	21:28:12	No	Medium	No	No	None	None	No	None	Yes	Halipteris Sea Pen	Yes	2 on 3
RWEC-OCS	410	B	7/11/2019	21:29:22	No	Low	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWEC-OCS	410	C	7/11/2019	21:30:38	No	Medium	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWEC-OCS	411	A	7/11/2019	20:09:25	IND	IND	No	No	None	None	No	None	IND	Barnacle, Shrimp	IND	IND
RWEC-OCS	411	B	7/11/2019	20:10:47	IND	IND	No	No	None	None	No	None	IND	None	IND	IND
RWEC-OCS	411	C	7/11/2019	20:12:08	IND	IND	No	No	None	None	No	None	IND	Barnacle	IND	IND
RWEC-OCS	412	A	7/12/2019	1:42:04	No	Medium	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	412	B	7/12/2019	1:43:58	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	412	C	7/12/2019	1:45:17	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	413	A	7/12/2019	0:53:50	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWEC-OCS	413	B	7/12/2019	0:55:31	No	Medium	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-OCS	413	D	7/12/2019	0:58:49	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	414	A	7/11/2019	15:19:07	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	414	B	7/11/2019	15:20:20	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	414	C	7/11/2019	15:21:41	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWEC-OCS	415	A	7/11/2019	16:08:45	IND	IND	No	No	None	None	No	None	Yes	Podocerid Amphipoda	IND	2 -> 3
RWEC-OCS	415	B	7/11/2019	16:10:00	IND	IND	No	No	None	None	No	None	No	Podocerid Amphipoda	IND	2 -> 3
RWEC-OCS	415	C	7/11/2019	16:11:24	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	IND	2
RWEC-OCS	416	A	7/11/2019	16:35:15	No	Low	No	No	None	None	No	None	Yes	Shrimp, Unidentified Organism	No	2 -> 3
RWEC-OCS	416	C	7/11/2019	16:38:23	No	Low	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWEC-OCS	416	D	7/11/2019	16:39:45	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-OCS	417	A	7/11/2019	18:11:38	No	Medium	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWEC-OCS	417	C	7/11/2019	18:14:15	No	Medium	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWEC-OCS	417	D	7/11/2019	18:15:32	No	Medium	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 on 3
RWEC-OCS	418	A	7/11/2019	18:36:30	No	Low	No	No	None	None	No	None	IND	None	IND	IND
RWEC-OCS	418	B	7/11/2019	18:38:09	No	Low	No	No	None	None	No	None	Yes	None	No	IND
RWEC-OCS	418	D	7/11/2019	18:40:38	No	Low	No	No	None	None	No	None	Yes	None	No	IND
RWEC-OCS	419	A	7/11/2019	19:37:10	No	Low	No	No	None	None	No	None	IND	None	IND	IND
RWEC-OCS	419	B	7/11/2019	19:38:24	No	Low	No	No	None	None	No	None	IND	None	IND	IND
RWEC-OCS	419	C	7/11/2019	19:39:44	No	Low	No	No	None	None	No	None	No	None	No	IND
RWEC-OCS	420	A	7/12/2019	22:00:42	No	Low	No	No	None	None	No	None	IND	None	No	2

Area	StationID	Replicate	Date	Time	Low DO Present?	Sediment Oxygen Demand	Beggiatoa Present?	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern	Invasive Taxa Present?	Type of Invasive Taxa	Tubes Present?	Epifauna	Voids Present?	Successional Stage
RWEC-OCS	420	B	7/12/2019	22:01:54	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda, Shrimp	No	2
RWEC-OCS	420	C	7/12/2019	22:03:07	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWEC-OCS	421	D	7/14/2019	8:53:37	No	Medium	No	No	None	None	No	None	IND	None	No	2 on 3
RWEC-OCS	421	E	7/14/2019	9:45:09	No	Medium	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 on 3
RWEC-OCS	421	F	7/14/2019	9:46:49	No	Medium	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	422	B	7/14/2019	8:16:16	No	Low	No	No	None	None	No	None	No	None	No	2 -> 3
RWEC-OCS	422	C	7/14/2019	8:17:35	No	Low	No	No	None	None	No	None	Yes	Shrimp	No	2 -> 3
RWEC-OCS	422	D	7/14/2019	8:19:10	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-OCS	423	A	7/14/2019	7:26:09	No	Low	No	No	None	None	No	None	Yes	Crab	No	2
RWEC-OCS	423	C	7/14/2019	7:29:15	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWEC-OCS	423	D	7/14/2019	7:30:50	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWEC-OCS	424	A	7/14/2019	7:01:19	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWEC-OCS	424	C	7/14/2019	7:04:11	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWEC-OCS	424	D	7/14/2019	7:05:19	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWEC-OCS	425	A	7/14/2019	4:56:37	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWEC-OCS	425	B	7/14/2019	4:57:56	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWEC-OCS	425	C	7/14/2019	4:59:16	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWEC-OCS	426	A	7/14/2019	3:15:40	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWEC-OCS	426	B	7/14/2019	3:16:49	No	Low	No	No	None	None	No	None	No	None	No	2
RWEC-OCS	426	C	7/14/2019	3:18:02	No	Low	No	No	None	None	No	None	No	None	No	2
RWEC-OCS	427	A	7/14/2019	2:05:29	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWEC-OCS	427	B	7/14/2019	2:06:51	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWEC-OCS	427	C	7/14/2019	2:08:23	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWEC-OCS	428	A	7/14/2019	1:19:52	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda, Shrimp	No	2
RWEC-OCS	428	B	7/14/2019	1:21:08	No	Low	No	No	None	None	No	None	Yes	Shrimp	No	2
RWEC-OCS	428	C	7/14/2019	1:22:29	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWEC-RI	429	A	7/14/2019	0:27:24	No	Low	No	No	None	None	No	None	Yes	Shrimp	No	2
RWEC-RI	429	B	7/14/2019	0:28:33	No	Low	No	No	None	None	No	None	Yes	Amphipoda, Shrimp	No	2
RWEC-RI	429	C	7/14/2019	0:29:40	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	430	A	7/13/2019	8:23:11	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	430	B	7/13/2019	8:24:43	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	430	C	7/13/2019	8:26:23	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	431	A	7/13/2019	7:43:27	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWEC-RI	431	C	7/13/2019	7:46:27	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWEC-RI	431	D	7/13/2019	7:48:08	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 on 3
RWEC-RI	432	A	7/13/2019	7:10:43	No	Low	No	No	None	None	No	None	Yes	None	No	2 on 3
RWEC-RI	432	C	7/13/2019	7:13:41	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 on 3
RWEC-RI	432	D	7/13/2019	7:15:34	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 on 3
RWEC-RI	433	A	7/13/2019	6:45:55	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWEC-RI	433	B	7/13/2019	6:47:11	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWEC-RI	433	C	7/13/2019	6:48:35	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWEC-RI	434	A	7/13/2019	10:08:00	No	Low	No	No	None	None	No	None	IND	None	No	2

Area	StationID	Replicate	Date	Time	Low DO Present?	Sediment Oxygen Demand	Beggiatoa Present?	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern	Invasive Taxa Present?	Type of Invasive Taxa	Tubes Present?	Epifauna	Voids Present?	Successional Stage
RWEC-RI	434	B	7/13/2019	10:10:02	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	434	C	7/13/2019	10:11:26	No	Low	No	No	None	None	No	None	IND	Hermit Crab	No	2 -> 3
RWEC-RI	435	A	7/13/2019	11:15:04	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	435	B	7/13/2019	11:20:49	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	435	D	7/13/2019	11:23:39	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWEC-RI	436	A	7/13/2019	11:40:53	No	Low	No	No	None	None	No	None	IND	None	Yes	3
RWEC-RI	436	C	7/13/2019	11:43:57	No	Low	No	No	None	None	No	None	IND	None	No	2 -> 3
RWEC-RI	436	D	7/13/2019	11:45:27	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	437	A	7/13/2019	12:23:57	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	437	B	7/13/2019	12:25:06	No	Low	No	No	None	None	No	None	Yes	Gastropod	No	2 -> 3
RWEC-RI	437	C	7/13/2019	12:26:18	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2 -> 3
RWEC-RI	438	A	7/13/2019	12:38:37	No	Low	No	No	None	None	No	None	IND	None	No	2
RWEC-RI	438	C	7/13/2019	12:41:04	No	None	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWEC-RI	438	D	7/13/2019	12:42:15	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2
RWEC-RI	439	A	7/13/2019	12:51:40	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	439	B	7/13/2019	12:52:49	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	439	C	7/13/2019	12:54:10	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWEC-RI	440	B	7/13/2019	13:17:33	No	Medium	No	No	None	None	No	None	No	None	No	1 on 3
RWEC-RI	440	C	7/13/2019	13:18:48	No	Medium	No	No	None	None	No	None	No	None	Yes	1 on 3
RWEC-RI	440	D	7/13/2019	13:20:00	No	Medium	No	No	None	None	No	None	No	None	Yes	1 on 3
RWEC-RI	441	A	7/13/2019	14:47:19	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 on 3
RWEC-RI	441	B	7/13/2019	14:48:37	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWEC-RI	441	C	7/13/2019	14:49:58	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 on 3
RWEC-RI	442	A	7/13/2019	15:20:44	No	Low	No	No	None	None	No	None	Yes	None	Yes	2 -> 3
RWEC-RI	442	C	7/13/2019	15:23:10	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWEC-RI	442	D	7/13/2019	15:24:22	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWEC-RI	443	A	7/13/2019	16:07:25	No	Low	No	No	None	None	No	None	Yes	None	Yes	1 on 3
RWEC-RI	443	B	7/13/2019	16:08:40	No	Low	No	No	None	None	No	None	Yes	None	No	1 on 3
RWEC-RI	443	C	7/13/2019	16:09:55	No	Low	No	No	None	None	No	None	Yes	None	No	1 on 3
RWEC-RI	444	A	7/13/2019	16:29:50	No	Medium	No	No	None	None	No	None	No	Amphipoda, Shrimp	No	1 on 3
RWEC-RI	444	B	7/13/2019	16:30:58	No	Medium	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWEC-RI	444	D	7/13/2019	16:36:48	No	Medium	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	445	A	7/13/2019	16:59:42	No	Medium	No	No	None	None	No	None	IND	Hermit Crab, Podocerid Amphipoda	No	2
RWEC-RI	445	B	7/13/2019	17:00:50	No	Medium	No	No	None	None	No	None	Yes	Gastropod	No	2
RWEC-RI	445	C	7/13/2019	17:02:01	No	Medium	No	No	None	None	No	None	Yes	None	No	2
RWEC-RI	446	A	7/13/2019	17:21:22	No	Medium	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	446	B	7/13/2019	17:22:23	No	Medium	No	No	None	None	No	None	IND	Crab, Gastropod	No	2 on 3
RWEC-RI	446	C	7/13/2019	17:23:44	No	Medium	No	No	None	None	No	None	IND	None	Yes	1 on 3
RWEC-RI	447	B	7/13/2019	17:38:33	No	Medium	No	No	None	None	No	None	Yes	None	No	1 on 3
RWEC-RI	447	C	7/13/2019	17:39:48	No	Medium	No	No	None	None	No	None	IND	None	No	2
RWEC-RI	447	D	7/13/2019	17:41:04	No	Medium	No	No	None	None	No	None	Yes	None	No	2

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RWEC-RI	448	A	7/13/2019	18:00:00	No	Medium	No	No	None	None	No	None	No	None	No	IND
RWEC-RI	448	B	7/13/2019	18:01:15	No	Medium	No	No	None	None	No	None	No	None	No	2 -> 3
RWEC-RI	448	D	7/13/2019	18:03:33	No	Medium	No	No	None	None	No	None	No	None	No	IND
RWEC-RI	449	A	7/13/2019	18:14:52	No	Medium	No	No	None	None	No	None	No	None	Yes	3
RWEC-RI	449	B	7/13/2019	18:16:06	No	Medium	No	No	None	None	No	None	No	Crab	IND	3
RWEC-RI	449	C	7/13/2019	18:17:16	No	Medium	No	No	None	None	No	None	No	None	Yes	3
RWEC-RI	450	B	7/25/2019	13:34:29	No	Medium	No	No	None	None	No	None	No	None	Yes	IND
RWEC-RI	450	F	7/25/2019	14:02:00	No	Medium	No	No	None	None	No	None	No	None	Yes	IND
RWEC-RI	450	G	7/25/2019	14:03:23	No	Medium	No	No	None	None	No	None	No	None	Yes	IND
RWEC-RI	451	A	7/13/2019	20:16:50	No	High	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	451	C	7/13/2019	20:34:02	No	Medium	No	No	None	None	No	None	Yes	None	No	3
RWEC-RI	451	D	7/13/2019	20:35:21	No	Medium	No	No	None	None	No	None	Yes	Gastropod, Sponge	No	1
RWEC-RI	452	A	7/25/2019	14:24:03	No	Medium	No	No	None	None	No	None	No	None	No	1
RWEC-RI	452	B	7/25/2019	14:25:17	No	Medium	No	No	None	None	No	None	No	Hermit Crab	No	1
RWEC-RI	452	D	7/25/2019	14:28:08	No	Medium	No	No	None	None	No	None	No	None	No	1
RWEC-RI	453	A	7/25/2019	14:52:32	No	Low	No	No	None	None	No	None	No	None	No	1
RWEC-RI	453	C	7/25/2019	14:55:33	No	Low	No	No	None	None	No	None	No	None	No	IND
RWEC-RI	453	D	7/25/2019	14:56:57	No	Low	No	No	None	None	No	None	No	None	No	IND
RWEC-RI	454	A	7/25/2019	15:34:50	No	Low	No	No	None	None	No	None	No	None	No	2 -> 3
RWEC-RI	454	B	7/25/2019	15:36:08	No	Low	No	No	None	None	No	None	No	None	Yes	2 on 3
RWEC-RI	454	C	7/25/2019	15:37:20	No	Low	No	No	None	None	No	None	No	None	Yes	2 on 3
RWEC-RI	455	A	7/25/2019	15:50:07	No	Medium	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWEC-RI	455	B	7/25/2019	15:51:12	No	Medium	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	455	C	7/25/2019	15:52:19	No	Medium	No	No	None	None	No	None	Yes	None	No	2
RWEC-OCS	456	A	7/12/2019	22:21:54	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-OCS	456	B	7/12/2019	22:23:02	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWEC-OCS	456	C	7/12/2019	22:24:19	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-OCS	457	A	7/12/2019	22:42:55	No	Low	No	No	None	None	No	None	Yes	Shrimp	No	2 -> 3
RWEC-OCS	457	B	7/12/2019	22:44:20	No	Low	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWEC-OCS	457	C	7/12/2019	22:45:34	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-OCS	458	A	7/12/2019	23:05:27	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-OCS	458	B	7/12/2019	23:06:39	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-OCS	458	C	7/12/2019	23:07:51	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-OCS	459	A	7/12/2019	23:29:07	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-OCS	459	B	7/12/2019	23:30:15	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	459	C	7/12/2019	23:31:22	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-OCS	460	A	7/13/2019	2:14:26	No	Low	No	No	None	None	No	None	Yes	Gastropod	No	2 -> 3

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RWEC-OCS	460	C	7/13/2019	2:17:15	No	Low	No	No	None	None	No	None	Yes	Shrimp	No	2 -> 3
RWEC-OCS	460	D	7/13/2019	2:18:44	No	Low	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWEC-OCS	461	A	7/13/2019	2:37:35	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	461	B	7/13/2019	2:38:54	No	Low	No	No	None	None	No	None	No	None	No	IND
RWEC-OCS	461	C	7/13/2019	2:40:08	No	Low	No	No	None	None	No	None	Yes	IND	No	IND
RWEC-OCS	462	A	7/13/2019	3:02:37	No	Low	No	No	None	None	No	None	Yes	None	No	2
RWEC-OCS	462	B	7/13/2019	3:04:03	No	Low	No	No	None	None	No	None	IND	None	No	IND
RWEC-OCS	462	C	7/13/2019	3:05:25	No	Low	No	No	None	None	No	None	IND	None	No	IND
RWEC-OCS	463	A	7/13/2019	3:27:49	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-OCS	463	F	7/13/2019	6:00:19	No	Low	No	No	None	None	No	None	Yes	None	No	2 on 3
RWEC-OCS	463	G	7/13/2019	6:01:40	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	464	A	7/13/2019	3:51:34	No	Low	No	No	None	None	No	None	Yes	IND	No	2 on 3
RWEC-RI	464	C	7/13/2019	3:54:48	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWEC-RI	464	D	7/13/2019	3:56:37	No	Medium	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
Reference Area	501	A	7/10/2019	22:28:13	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda, Shrimp	No	2 -> 3
Reference Area	501	B	7/10/2019	22:29:32	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2 -> 3
Reference Area	501	C	7/10/2019	22:30:51	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda, Shrimp	No	2
Reference Area	502	A	7/10/2019	22:08:01	No	Low	No	No	None	None	No	None	IND	None	No	2 -> 3
Reference Area	502	B	7/10/2019	22:09:23	No	Low	No	No	None	None	No	None	IND	None	No	IND
Reference Area	502	D	7/10/2019	22:12:05	No	Low	No	No	None	None	No	None	IND	None	No	2 -> 3
Reference Area	503	A	7/10/2019	21:47:28	No	Low	No	No	None	None	No	None	No	None	No	IND
Reference Area	503	B	7/10/2019	21:48:49	No	Medium	No	No	None	None	No	None	Yes	None	IND	2 -> 3
Reference Area	503	C	7/10/2019	21:50:12	No	Medium	No	No	None	None	No	None	Yes	None	IND	2 -> 3
Reference Area	504	A	7/10/2019	21:26:22	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
Reference Area	504	B	7/10/2019	21:27:38	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
Reference Area	504	C	7/10/2019	21:29:00	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
Reference Area	505	A	7/10/2019	21:05:59	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 on 3
Reference Area	505	B	7/10/2019	21:07:24	No	Medium	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
Reference Area	505	C	7/10/2019	21:08:45	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	601	A	7/12/2019	18:25:05	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	601	B	7/12/2019	18:26:14	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	601	C	7/12/2019	18:27:26	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	602	A	7/12/2019	16:36:04	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	No	2 -> 3

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RWEC-OCS	602	B	7/12/2019	16:37:15	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	602	C	7/12/2019	16:38:31	No	Low	No	No	None	None	No	None	IND	Podocerid Amphipoda	Yes	2 on 3
RWEC-OCS	603	A	7/12/2019	2:34:33	No	Low	No	No	None	None	No	None	Yes	Amphipoda	No	2 -> 3
RWEC-OCS	603	B	7/12/2019	2:36:11	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	603	C	7/12/2019	2:41:35	No	Low	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWEC-RI	604	A	7/14/2019	0:10:17	No	Low	No	No	None	None	No	None	No	None	No	2
RWEC-RI	604	B	7/14/2019	0:11:31	No	Low	No	No	None	None	No	None	No	None	No	2
RWEC-RI	604	C	7/14/2019	0:12:52	No	Low	No	No	None	None	No	None	No	None	No	2
RWEC-OCS	605	A	7/14/2019	1:03:18	No	None	No	No	None	None	No	None	No	Podocerid Amphipoda	No	IND
RWEC-OCS	605	B	7/14/2019	1:04:53	No	None	No	No	None	None	No	None	No	None	No	IND
RWEC-OCS	605	C	7/14/2019	1:06:35	No	None	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	606	A	7/14/2019	2:39:17	No	None	No	No	None	None	No	None	No	None	No	IND
RWEC-OCS	606	B	7/14/2019	2:41:18	No	None	No	No	None	None	No	None	IND	Amphipoda	No	2
RWEC-OCS	606	C	7/14/2019	2:42:40	No	None	No	No	None	None	No	None	No	Podocerid Amphipoda	No	2
RWEC-OCS	607	B	7/14/2019	3:37:08	No	Low	No	No	None	None	No	None	Yes	Caprellid Amphipoda, Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	607	E	7/14/2019	5:36:27	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-OCS	607	F	7/14/2019	5:38:05	No	Low	No	No	None	None	No	None	IND	None	Yes	3
RWEC-OCS	608	B	7/14/2019	4:35:26	No	Low	No	No	None	None	No	None	Yes	None	No	2 on 3
RWEC-OCS	608	C	7/14/2019	4:36:48	No	Medium	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWEC-OCS	608	F	7/14/2019	5:58:37	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	Yes	2 on 3
RWEC-OCS	609	A	7/14/2019	6:19:10	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-OCS	609	B	7/14/2019	6:20:57	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWEC-OCS	609	C	7/14/2019	6:22:35	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	610	A	7/13/2019	13:40:44	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	610	B	7/13/2019	13:41:58	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWEC-RI	610	C	7/13/2019	13:43:04	No	Low	No	No	None	None	No	None	Yes	None	No	2 -> 3
RWEC-RI	611	A	7/13/2019	10:50:09	No	Low	No	No	None	None	No	None	Yes	Podocerid Amphipoda	No	2 -> 3
RWEC-RI	611	B	7/13/2019	10:51:49	No	Low	No	No	None	None	No	None	No	None	No	2 -> 3
RWEC-RI	611	C	7/13/2019	10:53:30	No	Low	No	No	None	None	No	None	No	None	No	IND
RWEC-RI	612	A	7/25/2019	15:20:47	No	Low	No	No	None	None	No	None	Yes	IND	Yes	2 on 3
RWEC-RI	612	B	7/25/2019	15:22:04	No	Low	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWEC-RI	612	C	7/25/2019	15:23:12	No	Low	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWEC-RI	613	A	7/25/2019	14:38:03	No	None	No	No	None	None	No	None	IND	None	No	IND
RWEC-RI	613	B	7/25/2019	14:39:21	No	None	No	No	None	None	No	None	No	None	No	IND
RWEC-RI	613	D	7/25/2019	14:41:49	No	None	No	No	None	None	No	None	No	Hermit Crab	No	IND
RWEC-RI	614	A	7/13/2019	19:44:23	No	High	No	No	None	None	No	None	No	None	IND	IND

Area	StationID	Replicate	Date	Time	Low DO Present?	Sediment Oxygen Demand	Beggiatoa Present?	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern	Invasive Taxa Present?	Type of Invasive Taxa	Tubes Present?	Epifauna	Voids Present?	Successional Stage
RWEC-RI	614	B	7/13/2019	19:45:35	No	High	No	No	None	None	No	None	No	None	Yes	3
RWEC-RI	614	C	7/13/2019	19:46:49	No	High	No	No	None	None	No	None	No	None	Yes	3
RWEC-RI	615	A	7/13/2019	18:59:20	No	High	No	No	None	None	No	None	Yes	None	Yes	2 on 3
RWEC-RI	615	B	7/13/2019	19:03:40	No	High	No	No	None	None	No	None	Yes	Jonah Crab	Yes	2 on 3
RWEC-RI	615	D	7/13/2019	19:06:09	No	High	No	No	None	None	No	None	IND	None	Yes	3

Area	StationID	Replicate	Date	Time	Comment
RWF	001	A	7/11/2019	13:57:50	Light grayish brown very fine sand with small white shell pieces throughout. Some medium and coarse pebbles on the surface and in the far field that are encrusted in bryozoans. Barnacles on the pebbles in the center and far right surface far field.
RWF	001	B	7/11/2019	13:59:08	Grayish brown very fine sand with pebbles ranging from medium to very coarse on the surface. Bryozoans on some of these pebbles. White encrusting, possible barnacles on pebble in the center surface, and pebbles in the far field. Very shallow penetration.
RWF	001	D	7/11/2019	14:01:25	Grayish brown very fine sand with two very coarse pebbles at the SWI encrusted with bryozoans and barnacles. Small brownish red worm at depth on left center.
RWF	002	A	7/11/2019	10:55:45	Light brown fine sand transitioning to grayish brown/black very fine sand at depth. Clusters of polychaete tubes at surface. 2 fecal stacks from podocerid amphipods at SWI in center and on far right. White polychaete below surface on far left, small rusty brown worm below surface center and light white-ish pink polychaete below that at depth.
RWF	002	B	7/11/2019	10:57:09	Light brown fine sand transitioning to grayish brown very fine sand and silt half way down sediment column with a darker gray patch of silt at depth, far right. Clusters of polychaete tubes on surface with visible appendages at openings. Small light pink hydroid polyps on far right surface. Two pinkish orange worms half way down sediment column, left. Small rusty brown worm center.
RWF	002	C	7/11/2019	10:58:32	Light brown fine sand transitioning to darker gray/black very fine sand at depth. Long fecal stack from podocerid amphipod in center of SWI. Narrow rusty brown worm, center, right about a quarter down sediment column with a small void below it. Two large voids in the reduced sediment center and another void below those at depth.
RWF	003	A	7/11/2019	12:33:47	Light brown fine sand transitioning to light bluish gray very fine sand with streaks of darker gray/black very fine sand/silt at depth. Multiple clusters of polychaete tubes interspersed with other polychaete tubes with appendages visible on far left SWI. Large pink polychaete burrowed half way down sediment column in center. Void in far left bottom corner. Filled void in far right bottom.
RWF	003	C	7/11/2019	12:36:24	Light brown fine sand transitioning to light bluish gray very fine sand with streaks of darker gray/black silt at depth. Short worm tubes at SWI on left and one in center, right. Small amphipod (likely Ampelisca) on SWI at left. Small filled void half way down sediment column in center, left.
RWF	003	D	7/11/2019	12:37:50	Light brown fine sand over top of light bluish gray very fine sand with streaks of darker gray/black silt. Caprellid amphipod at SWI, center left adjacent to a worm emerging from tube. Worm tubes on right at SWI. Some very small white worms burrowed just below the SWI. A very small brownish worm below surface towards the left. Three small filled voids about half way down sediment column.
RWF	004	A	7/11/2019	9:57:28	Rusty brown coarse sand with some light brown silt overlying the SWI. Sediment column transitions to light brownish gray fine sand at depth. SWI slopes up to the right. Light pink worm at depth on far left.
RWF	004	B	7/11/2019	9:58:47	Rusty brownish yellow coarse sand transitioning to lighter brownish yellow medium to coarse sand. Some light brown silt deposited on SWI. SWI slopes up to left. Two fecal stacks from amphipods at surface.
RWF	004	C	7/11/2019	10:00:06	Rusty brown coarse sand with some light gray silt interspersed. Shallow penetration.
RWF	005	A	7/11/2019	8:38:33	Rusty brown very fine sand transitioning to light gray very fine sand with streaks of darker gray/black silt at depth. Several fecal stacks from podocerid amphipod at SWI. Some small tubes on far right surface. Several small rusty brown worms at interface between light and darker sediment transition. Some patches of white streaks throughout sediment column. Large vertical void, partially filled on far right.
RWF	005	B	7/11/2019	8:39:55	Light brown very fine sand transitioning to gray very fine sand interspersed with darker gray/black streaks of silt. Numerous very small patches of white deposits throughout deeper sediment column. 3-4 fecal stacks from podocerid amphipods on far right. Several small worms just below surface. Reddish brown polychaete half way down sediment column in center.
RWF	005	D	7/11/2019	8:42:38	Light brown very fine sand transitioning to light gray very fine sand and silt overlying darker gray/black silt at depth. Several fecal stacks from podocerid amphipods on surface. Large void on far left extending from the SWI through the entire sediment column haloed by orange-brown sediment. Another small horizontal void on far right halfway down sediment column. Numerous small white patches throughout the reduced sediment layer.
RWF	006	A	7/11/2019	7:46:34	Light brown fine sand transitioning to bluish gray fine sand and dark gray/black very fine sand/silt at depth. Thin tubes in suspension. One podocerid amphipod fecal stack on right, far field. Small worm in center, right at the interface between light brown and bluish gray sediment transition. Two large voids at depth on far right and far left corners.
RWF	006	B	7/11/2019	7:53:17	Light brown fine sand transitioning to light gray with streaks of darker gray/black very fine sand and silt at depth. Significant resuspension into the water column. Some small worms at the sediment surface and shallow burrows. Yellowish tan worm on left half way down sediment column. Void at the base of the sediment column.
RWF	006	C	7/11/2019	7:54:45	Light brown fine sand transitioning to light gray fine sand over top of darker gray very fine sand and silt at depth. Clusters of polychaetes in the center right surface. Possible shrimp on surface center. Some narrow burrows at sediment surface, left center. Thin worm just below surface direct center. Medium sized void about 3/4 down sediment column. Three large polychaetes burrowed on far right beginning halfway down sediment column.
RWF	007	A	7/11/2019	7:09:55	Light brown fine sand transitioning to light gray fine sand at depth with a patch of darker gray/black very fine sand deep on the right. A polychaete emerging from tube on SWI at center right. To its left is a shrimp on the SWI. Two worms burrowed near SWI on the right. Another worm in the direct center.
RWF	007	C	7/11/2019	7:12:44	Light brown fine sand over top of light gray very fine sand. White shell on surface, right. On the surface, center, is an amphipod fecal stack and 2-3 tubes with visible polychaete appendages. Three small rusty brown worms at depth on the left.
RWF	007	D	7/11/2019	7:14:04	Light brown fine sand with black particles throughout transitioning to light gray very fine sand. SWI slopes down to the right. A few white and gray very fine to fine pebbles on the surface. Two amphipod fecal stacks in far field, left. Small white shell just below the surface, center. Large filled void extending from SWI to bottom of sediment column.
RWF	008	A	7/11/2019	5:55:22	Light brown fine sand over top of light gray very fine sand. Some resuspension into the water column. SWI slopes up to the left slightly. Three shrimp on the surface right, next to a small colony of light pink hydroids (polyps). Dark brown worm just below the surface in the center left. Just below that is a rusty brown narrow worm. To the right of that is a light orange-ish white polychaete half way down the sediment column in the center, right.

Area	StationID	Replicate	Date	Time	Comment
RWF	008	B	7/11/2019	5:56:54	Light brown fine sand with small grains of black very fine sand throughout with some light gray very fine sand at depth on right. Several worms and tubes on surface. Shallow burrow at surface in the center, left.
RWF	008	C	7/11/2019	5:58:09	Light brown fine sand over top gray to darker gray very fine sand. Some resuspension into the water column. Shallow burrowing evident. Burrows in PV.
RWF	009	A	7/11/2019	5:30:41	Light brown fine sand with two patches of light white particles in the center. Shallow penetration. Some small white shells at the surface in the far field. A few amphipod fecal stacks on surface. Burrows in PV.
RWF	009	B	7/11/2019	5:32:03	Light brown fine sand throughout with a patch of light gray very fine sand/silt at depth in the center, left. Shallow burrowing evident. Significant resuspension. Burrows in PV.
RWF	009	C	7/11/2019	5:33:41	Light brown fine sand over top light gray very fine sand and silt at depth. 7-8 amphipod fecal stacks on surface. Small dark brown worm half way down on left. Orange worm in the right bottom corner. Burrows in PV.
RWF	010	A	7/10/2019	19:58:57	Light brown fine sand transitioning to light gray very fine sand with a patch of darker gray silt on the right at depth. Several amphipod fecal stacks on the surface. Cluster of polychaete tubes in the center, left surface. Two narrow rusty brown worms about half way down sediment column on the left. Possible worm below those in the center.
RWF	010	B	7/10/2019	20:00:19	Light brown fine sand transitioning to light gray very fine sand over top of patches of darker gray/black very fine sand and silt at depth. Polychaete tube on far left surface. 3-4 amphipod fecal stacks with amphipods on surface. Some shallow burrows at the SWI Two small narrow worms on far right just below the surface. Narrow void towards the bottom center.
RWF	010	C	7/10/2019	20:01:38	Light brown fine sand transitioning to light gray very fine sand with a patch of darker gray/black silt at depth, center right. A fecal stack with an amphipod in the center on the surface. Some very small worms near the surface. A worm on far left a little more than half way down. Some patches of white material at depth, left.
RWF	011	A	7/10/2019	19:14:29	Light brown transitioning to light gray very fine sand with patches of darker gray very fine sand. Caprellid at SWI, center. Several tubes on surface with polychaete appendages in openings. Numerous small burrows just below the surface with 2-3 narrow rusty brown worms. Extensive voids at depth spanning the width of the image.
RWF	011	B	7/10/2019	19:15:39	Light brown very fine sand transitioning to light gray very fine sand and darker gray very fine sand at depth. Several clusters of worm tubes on right and at center at the SWI. Some small shallow burrows at the surface. A small reddish brown worm in center, left at the redox boundary. Small filled void at bottom, right.
RWF	011	D	7/10/2019	19:18:05	Light brown very fine sand transitioning to light gray very fine sand mixed with darker gray very fine sand at depth. Cluster of worm tubes on surface, right with a caprellid amphipod on one. Tubes on surface, far right. Some shallow burrows at SWI. Narrow, rusty brown worm just below surface far left, with a light pinkish larger worm just to its right. Very small filled void bottom right corner.
RWF	012	A	7/10/2019	10:54:04	Light brown medium sand with some light gray fine sand at depth. A few amphipod fecal strands on surface, far field. Bright white fine shell hash on the right, center. Burrows in PV.
RWF	012	B	7/10/2019	10:55:24	Light brown medium sand with some light gray fine sand at depth. Shrimp on surface, far field, left. Small tubes at SWI in far field. Narrow worm burrowed in bottom left corner.
RWF	012	C	7/10/2019	10:56:45	Light brown medium sand transitioning to light gray fine sand at depth. 2 worm tubes on surface, left, center. Small white shell on surface left.
RWF	013	A	7/10/2019	11:59:19	Light brown very fine sand transitioning to gray very fine sand mixed with darker gray very fine sand at depth. Numerous amphipod fecal strands on surface. Cluster of worm tubes on far right SWI. Very fine shallow burrows at surface. Narrow worm at redox boundary in the center, left. Large pink worm halfway down sediment column on right with streaks of very dark gray/black silt below it. Small filled void on left, half way down sediment column. Two small rusty brown worms at depth, left.
RWF	013	B	7/10/2019	12:01:03	Light brownish gray very fine sand mixed with gray very fine sand transitioning to darker gray very fine sand at depth. Overpenetration on far right. Light pink worm a bit below SWI, left center. Extensive void with orange halo, extending from just below the SWI to depth, where it extends horizontally to the left across the width of the image.
RWF	013	C	7/10/2019	12:02:38	Light brown very fine sand transitioning to gray very fine sand mixed with darker gray fine sand at depth. 3 amphipod fecal strands on surface. Numerous very shallow fine burrows at surface. Several small reddish brown worms at the redox boundary, with one brighter orange worm in center 1/4 down sediment column. Large segmented white worm in center of sediment column. Filled relic void in far right corner.
RWF	014	A	7/10/2019	13:10:21	Homogenous light yellowish brown fine sand throughout with some small patches of grayish tan silt. Some small pieces of shell hash on surface. Small sediment clasts on surface.
RWF	014	C	7/10/2019	13:13:04	Homogenous light yellowish brown fine sand throughout with some small patches of grayish tan silt. One amphipod on top of a fecal strand on right, far field. Large polychaete at depth on far right.
RWF	014	D	7/10/2019	13:14:28	Light brown fine sand over top gray to darker gray very fine sand. Some resuspension into the water column.
RWF	015	A	7/10/2019	14:02:42	Light brown fine sand throughout. Some small white shell hash on surface and below SWI. Possible small worm in center bottom. Shallow burrows evident.
RWF	015	B	7/10/2019	14:04:05	Light brown fine sand throughout mixed with some small white shell hash. Shallow burrows evident
RWF	015	C	7/10/2019	14:05:34	Brown fine sand with dark black particles and small white shell hash throughout. Two small pinkish brown worms burrowed in center, right.
RWF	016	A	7/10/2019	15:01:41	Light brown fine sand throughout. Piece of a white shell on surface, left. Worm tube on surface, far right. Pink worm burrowed half way down sediment column on right. Burrows in PV
RWF	016	B	7/10/2019	15:03:07	Light brownish gray fine sand throughout. Caprellid on surface, far left. Several amphipod fecal strands on surface in far field.
RWF	016	C	7/10/2019	15:04:47	Light brown fine sand mixed with gray fine sand throughout. Some amphipod fecal strands in far field.

Area	StationID	Replicate	Date	Time	Comment
RWF	017	A	7/10/2019	16:19:41	Light brown fine sand transitioning to gray very fine sand with streaks of dark gray/black very fine sand at depth. Stage 2 tube at center. Caprellid on surface, right. Single amphipod fecal strand on surface, left. Some small shallow burrows at surface. Worm 1/4 way down sediment column, center, left. Small void on far left at the aRPD boundary. Small horizontal void at depth on left.
RWF	017	C	7/10/2019	16:22:28	Light brown fine sand over top of gray very fine sand with streaks of darker gray very fine sand at depth. Some resuspension into the water column. 2-3 tubes at the SWI. 2-3 small worms at the redox boundary. A small void at the redox boundary with a small worm burrowed directly below it.
RWF	017	D	7/10/2019	16:23:54	Light brown fine sand transitioning to gray very fine sand mixed with some darker gray/black very fine sand at depth. Worm tube at SWI, right. 2 small filled voids at redox boundary center, right.
RWF	018	B	7/10/2019	17:40:37	Light brown fine sand over top of gray fine sand mixed with very fine sand with a dark patch of silt at depth. Several worms emerging from SWI. Two amphipod fecal strands on SWI at far right. Numerous very small shallow burrows at surface. A small reddish brown narrow worm at the redox boundary.
RWF	018	C	7/10/2019	17:42:01	Brown fine sand over top of gray very fine sand with several large patches of dark gray/black very fine sand/silt at depth. Several small burrows at the SWI. Filled void at depth, right corner.
RWF	018	D	7/10/2019	17:43:12	Light brown fine sand transitioning to gray very fine sand with patches of darker gray/black very fine sand at depth. 4 amphipod fecal stacks at surface. Several shallow burrows at the SWI. Possible shrimp or amphipod on surface, center. 2 small filled voids just below the surface, center. A very small pink worm just above the left-most void.
RWF	019	A	7/10/2019	18:16:00	Light brown fine sand with some light gray fine sand at depth. Some small shell hash on surface, far field. A single amphipod fecal strand on surface. Burrows in PV.
RWF	019	B	7/10/2019	18:17:25	Light brown fine sand transitioning to light gray fine sand at depth. Single amphipod on a fecal strand at surface left in the far field. Burrows in PV.
RWF	019	C	7/10/2019	18:18:41	Light brown fine sand over top of light gray fine sand. Single amphipod fecal strand on surface, right. Burrows in PV.
RWF	020	A	7/10/2019	18:53:40	Light brown fine sand with some gray fine sand at depth. A few amphipod fecal strands on far left, surface. Several small rusty brown worms burrowed just below the surface in the center. Burrows in PV.
RWF	020	B	7/10/2019	18:55:18	Light brown fine sand over top of light gray fine sand with some small white shell hash throughout. Two amphipod fecal stacks, one with an amphipod on it, on surface with a caprellid adjacent to the one on the right. Possible pink worm appendages visible emerging from short tubes at SWI, left, center, slightly far field. Burrows in PV.
RWF	020	C	7/10/2019	18:56:27	Light brown fine sand with some gray fine sand at depth. Some small white shell hash throughout. Two amphipod fecal stacks in distance on surface. Burrows in PV.
RWF	021	A	7/9/2019	21:18:41	Light tan very fine sand mixed with gray very fine sand. Cluster of worm tubes on surface, far right with appendages emerging. Filled void/burrow extending from the SWI to the base of the sediment column. Pinkish white worm burrowed just below the surface on far right. Burrows in PV.
RWF	021	B	7/9/2019	21:19:56	Light brown very fine sand over top of dark gray very fine sand with streaks of darker patches at depth. Several small worm tubes at SWI. Two small rusty brown worms, one halfway down sediment column, center, and the other at base of sediment column, right. Burrows in PV.
RWF	021	D	7/9/2019	21:22:21	Light brown very fine sand transitioning to light gray very fine sand over top of darker gray very fine sand/silt. Some resuspension. Several small tubes at SWI. Numerous shallow burrows at SWI. 2-3 small worms at redox boundary. Large yellowish brown halo extending from oxic sediment into anoxic layer. Burrows in PV.
RWF	022	A	7/9/2019	22:19:18	Rusty brown medium sand with a patch of light gray silt on far left. Several clusters of worm tubes on surface and in far field. Burrows in PV.
RWF	022	B	7/9/2019	22:20:49	Rusty brown medium sand mixed with light gray very fine sand throughout. Some clusters of worm tubes at surface as well as some sediment clasts. Small worm at~2 cm at left. Burrows in PV.
RWF	022	C	7/9/2019	22:22:00	Rusty brown medium sand throughout. Cluster of worm tubes on surface, center, left. Burrows in PV.
RWF	023	E	7/9/2019	23:53:58	Light brown very fine sand transitioning to gray very fine sand at depth. Several very small burrows at the SWI. 3 very small brown worms and a larger whitish pink worm at the redox boundary. Small filled void at depth, center.
RWF	023	F	7/9/2019	23:55:16	Light brown very fine sand at surface transitioning to light gray very fine sand over darker gray very fine sand/silt at depth. Numerous very fine burrows and tubes at the surface. Significant resuspension into the WC. A narrow rusty brown worm at depth, center.
RWF	023	G	7/9/2019	23:56:33	Light brown very fine sand with distinct dark gray/black patches at the SWI, transitioning to darker gray very fine sand/silt at depth. Significant resuspension into the WC. Numerous very fine burrows at surface. Burrows in PV.
RWF	024	A	7/9/2019	23:30:23	Multicolored granules with a patch of light brown very fine sand/silt at depth. Some very fine detrital material at surface.
RWF	024	B	7/9/2019	23:31:27	Multicolored granules with some light brown very fine sand interspersed at depth. 2 fecal stacks from podocerid amphipods at the surface.
RWF	024	C	7/9/2019	23:32:42	Multicolored granules with some light brown very fine sand interspersed at depth. Possible pink amphipod dragged down in center.
RWF	025	A	7/11/2019	0:57:27	Yellowish tan coarse sand with some very coarse sand at depth.
RWF	025	C	7/11/2019	1:00:31	Yellowish tan coarse sand throughout. Very shallow penetration.
RWF	025	D	7/11/2019	1:02:03	No penetration. Light tan medium sand throughout. A few coarse pebbles on surface with some unidentified encrusting organism. Single podocerid amphipod on fecal stack with a caprellid amphipod just below it on the same stack.
RWF	026	A	7/11/2019	2:13:30	Homogenous light tan fine sand throughout with small patches of light grayish brown very fine sand on left at depth. Some small white shell hash on surface. A few tubes on surface in far field, right. A small rusty brown worm in bottom left corner. Burrows in PV.

Area	StationID	Replicate	Date	Time	Comment
RWF	026	B	7/11/2019	2:14:57	Homogenous light tan fine sand throughout with some small white shell hash. Some small clusters of tubes on surface, far field. Partial view of infauna at depth at penetration maximum to right of center. Burrows in PV.
RWF	026	C	7/11/2019	2:16:19	Light tan fine sand throughout with some small white shell hash and a small patch of light gray very fine sand in bottom left corner. A few tubes on surface, far field. Burrows in PV.
RWF	027	A	7/11/2019	2:52:59	Light tan fine sand transitioning to light gray with patches of dark gray fine sand at depth. Small patch of dark gray reduced sediment half way down on left. A few small pieces of shell throughout. Burrows in PV.
RWF	027	B	7/11/2019	2:54:17	Light brown fine sand transitioning to light gray fine sand at depth. Podocerid amphipod fecal stack on surface, right. Possible Caprellid amphipod on surface, left. Worm appendages from tube at SWI, on right, far field. Burrows in PV.
RWF	027	C	7/11/2019	2:55:41	Light brown fine sand transitioning to light gray fine sand with a patch of darker gray very fine sand in bottom right corner. Small beige crab on surface, center. A small brown transected burrow just below the surface, far left. A patch of white material, possibly shell half way down on left. A small pink worm burrowed in bottom right corner. Burrows in PV.
RWF	028	A	7/11/2019	3:32:14	Brown medium sand transitioning to light gray and darker gray fine sand at depth. Some resuspension into the WC. A few fecal stacks with podocerid amphipods on surface right and center, far field. A pinkish worm at redox boundary, left. Burrows in PV.
RWF	028	B	7/11/2019	3:33:36	Light brown medium sand throughout. A few collapsed podocerid fecal stacks on surface, right. Unidentified small pink organism in far field (out of focus), left. Burrows in PV.
RWF	028	C	7/11/2019	3:34:57	Brown medium sand transitioning to light gray medium to fine sand. A small divot at the SWI, left. Small casts on surface. Possible antennae/appendages on surface, left, far field. A large patch of white material in bottom left corner. Burrows in PV.
RWF	029	A	7/11/2019	4:21:42	Rusty brown medium sand with several small white shell pieces throughout. Podocerid amphipod on fecal stack in center, far field.
RWF	029	C	7/11/2019	4:24:22	Light brown medium sand with tan fine organic material deposited on surface. Shallow penetration. Divot in SWI in the center. Some collapsed podocerid fecal stacks on surface.
RWF	029	D	7/11/2019	4:25:35	Rusty brown medium sand with a patch of tan medium sand mixed with white shell hash at depth, left. Several podocerid amphipod fecal stacks on surface. Shrimp on surface, far left. Caprellid amphipod at left in mid-field.
RWF	030	A	7/11/2019	4:42:57	Light brown fine sand throughout. Piece of a white shell on surface, left. Worm tube on surface, far right. Pink worm burrowed half way down sediment column on right. Burrows in PV.
RWF	030	B	7/11/2019	4:44:20	Light brown fine sand with a patch of light gray very fine sand in bottom left. Some podocerid amphipod fecal stacks, mostly collapsed. Small beige crab on surface, right. Burrows in PV.
RWF	030	C	7/11/2019	4:45:41	Rusty brown fine sand over light brown fine sand. Several podocerid fecal stacks on surface. Small unidentified pink organisms, possible amphipoda or shrimp, in far field (out of focus). Small pink amphipod (podocerid) dragged down to just below the surface, right.
RWF	031	A	7/9/2019	20:49:06	Homogenous light tan medium sand throughout with a few small pieces of white shell. Significant resuspension into the WC. Some sediment clasts/detritus on surface, left.
RWF	031	B	7/9/2019	20:50:16	Light tan medium sand with some white shell hash throughout. Cluster of tubes with worms on surface, left. Burrows in PV.
RWF	031	D	7/9/2019	20:52:38	Light tan medium sand with some white shell hash and a patch of gray medium sand in bottom left corner. Numerous clusters of worm tubes on surface. Pinkish brown worm at depth, center.
RWF	032	A	7/9/2019	20:02:24	Light brownish gray fine sand throughout. Small transparent shrimp on surface, center. Fecal stack from a podocerid amphipod in far field, right. Dark rusty brown worm at depth, center. Burrows in PV.
RWF	032	B	7/9/2019	20:03:32	Light brownish gray fine sand throughout with a few white very fine pebbles. A few worm tubes and sand clasts on the surface.
RWF	032	C	7/9/2019	20:04:47	Light brownish gray fine sand throughout with some small white coarse sand. Small pink/transparent shrimp on surface, center. Some worm tubes on surface, right. Burrows in PV.
RWF	033	A	7/9/2019	19:28:46	Rusty light brown medium sand over lighter brown fine sand. A podocerid amphipod fecal stack on surface, far field. Some detrital sediment clasts on surface. Light pinkish tint in far right corner. Burrows in PV.
RWF	033	B	7/9/2019	19:30:01	Light brown medium sand mixed with fine sand. Cluster of worm tubes on far left, surface and far field, center. Small crab on surface, center/right. SWI slopes up to the right. Burrows in PV.
RWF	033	C	7/9/2019	19:31:09	Rusty light brown medium sand over lighter brown fine sand. Several podocerid amphipods and fecal stacks on surface. Worm tube on surface, center and far right. Detrital sediment clasts on surface. Burrows in PV.
RWF	034	A	7/9/2019	18:45:49	Light brownish gray fine sand mixed with some medium sand. Two podocerid amphipods and fecal stacks on surface, far field. Patch of dark gray/black very fine sand at depth, center. Burrows in PV.
RWF	034	B	7/9/2019	18:47:01	Light brown fine sand throughout. Podocerid amphipod fecal stacks on far right, surface, far field. Unidentified organism (tube worm?) in far field, far right, surface. SWI slopes up to the right. Pinkish orange worm burrowed at depth, center.
RWF	034	C	7/9/2019	18:48:08	Light brown fine sand throughout with a small patch of white shell hash quarter the way down on left. Very fine sediment/silt deposited on surface. Podocerid fecal stacks on surface, far field, left. Small pink crustacean likely amphipod) on surface, center. Clustered tubes in far field right. Burrows in PV.
RWF	035	E	7/10/2019	23:24:37	Light brownish gray fine sand throughout. Three tubes at SWI, center. SWI slopes up to the left. Burrows in PV.
RWF	035	F	7/10/2019	23:26:06	Homogenous light brownish gray fine sand throughout. SWI mounds up a bit in the center.
RWF	035	G	7/10/2019	23:27:33	Homogenous light gray fine sand throughout with some small white shell hash on surface. Cluster of tube worms on surface, far left. Some podocerid amphipod fecal stacks on surface, far field. Burrows in PV.

Area	StationID	Replicate	Date	Time	Comment
RWF	036	A	7/10/2019	10:14:19	Light brown fine sand throughout. A few podocerid amphipod fecal stacks on surface, in the far distance. Burrows in PV.
RWF	036	C	7/10/2019	10:16:50	Light brown fine sand throughout. Several podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	036	D	7/10/2019	10:18:10	Light brown fine sand throughout. Significant resuspension into the WC. Several podocerid amphipod fecal stacks on the surface. Burrows in PV.
RWF	037	A	7/11/2019	0:08:39	Rusty brown fine sand throughout. SWI mounds up in the far field. Two shrimp on the surface towards the right. Four podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	037	B	7/11/2019	0:10:33	Light brown fine sand throughout. A few podocerid amphipod fecal stacks on surface, far field. Some sediment clasts on surface.
RWF	037	C	7/11/2019	0:11:46	Light brown fine sand throughout. Two podocerid amphipod fecal stacks on surface. A small divot at SWI on right. Some detrital/sediment clasts on surface.
RWF	038	A	7/10/2019	7:42:39	Light brown medium sand transitioning to dark gray/black medium sand mixed with fine sand. Several podocerid amphipod fecal stacks on surface, far field. Potential worm burrowed at redox boundary, center.
RWF	038	B	7/10/2019	7:43:55	Light brown medium sand transitioning to light gray medium sand with patches of dark gray fine sand at depth. Several podocerid amphipod fecal stacks on surface, far field. Two small pink/transparent shrimp on surface, left. A small pink worm and a yellowish brown worm burrowed at redox boundary on right. Burrows in PV.
RWF	038	C	7/10/2019	7:45:11	Light brown medium sand with a patch of light gray medium sand at depth in the right corner. Majority of aRPD is below penetration. SWI mounds in the far field. Tubes in far field. Burrow halo at right. Burrows in PV.
RWF	039	A	7/10/2019	7:05:39	Light brown fine sand transitioning to light and dark gray fine sand at depth. Two fine pebble sized shell pieces at depth, left. Burrow halos, possible infauna at depth near center. Burrows in PV.
RWF	039	B	7/10/2019	7:06:52	Light brown fine sand with patches of gray very fine sand at depth. Sediment clasts on surface. 1 podocerid amphipod fecal stack on surface, far field. Burrows in PV.
RWF	039	C	7/10/2019	7:08:10	Light brown very fine sand over top of light gray fine sand with a few patches of darker gray very fine sand/silt at depth. Small red/transparent shrimp on surface, towards the right. Podocerid amphipod fecal stack on far right, surface. Short tube in far field at left. Light pink worm at redox boundary, right, and a narrow pinkish brown worm at depth, center. Burrows in PV.
RWF	040	A	7/9/2019	13:51:52	Rusty brown fine sand with white shell hash throughout. Numerous clusters of worm tubes, including Pectinaria on far left, far field. Two podocerid amphipod fecal stacks on surface. Small pinkish white amphipod dragged down just below the surface, center. Light pink worm at depth, center. Burrows in PV.
RWF	040	B	7/9/2019	13:53:01	Rusty brown fine sand throughout. Several worm tubes on surface, center. A few podocerid amphipod fecal stacks on surface, with a possible shrimp (brownish) below the fecal stack in the center. Burrows in PV
RWF	040	C	7/9/2019	13:54:06	Rusty brown fine sand with white shell hash throughout. Some tube worms on surface, left and center.
RWF	041	A	7/9/2019	14:27:44	Light brown fine sand with a few pieces of small white shell. A cluster of worm tubes on far left, surface. A few sediment clasts on surface. Burrows in PV.
RWF	041	B	7/9/2019	14:28:53	Light brown fine sand with a few pieces of small white shell. A cluster of worm tubes in far field, center. Two podocerid amphipod fecal stacks in far field. Two small burrows at the SWI. A pink worm near bottom, center.
RWF	041	C	7/9/2019	14:30:00	Light brown fine sand with a few pieces of small white shell and a patch of light gray very fine sand just below the surface, right. A caprellid amphipod in far field.
RWF	042	A	7/9/2019	14:49:07	Light tan fine sand transitioning to light gray very fine sand with patches of dark gray very fine sand. Several podocerid amphipod fecal stacks on surface. Tube on very far right, surface and some more tube worms on surface to the left of fecal stack. Brownish pink worm below aRPD on left and another in center at depth. Burrows in PV.
RWF	042	B	7/9/2019	14:50:11	Tan fine sand with a patch of gray very fine sand at depth, right and some pieces of white shell hash throughout. Small worm tubes in far field. Distinct flat Ampelisca amphipod tubes throughout the surface.
RWF	042	C	7/9/2019	14:51:21	Light tan fine sand throughout. Several podocerid amphipods and fecal stacks on surface. Some tube worms on far right and far left surface. Two small worms burrowed at depth, center.
RWF	043	A	7/9/2019	15:39:11	Light brown very fine sand over dark gray very fine sand/silt transitioning to light gray very fine sand at depth. Two podocerid amphipods on fecal stacks on surface. Burrows in PV.
RWF	043	B	7/9/2019	15:40:18	Light brown very fine sand transitioning to gray very fine sand with a patch of light gray fine sand in the bottom left corner. Several podocerid amphipod fecal stacks on surface. Three caprellid amphipods on right, surface, far field. Several large clasts of very dark black deposits, likely artefact of sampling (organic-rich sediment stuck to faceplate). Numerous small white clams on surface, center and burrowed just below the surface.
RWF	043	C	7/9/2019	15:41:28	Light brown very fine sand over top of light gray very fine sand/silt. A patch of yellowish very fine sand on far right at depth. Some small podocerid amphipod fecal stacks on right. Some very black sediment clasts/deposits on surface (likely artefact of sampling). Two small reddish brown worms burrowed half way down in center and on right.
RWF	044	A	7/9/2019	16:55:29	Light tan transitioning to light gray fine sand throughout. Several podocerid amphipods and associated fecal stacks on surface, far field. Caprellid amphipod in far field, left. Burrows in PV.
RWF	044	B	7/9/2019	16:56:39	Light tan transitioning to light gray fine sand throughout with some small white shell fragments. Burrow halos. Burrows in PV.
RWF	044	C	7/9/2019	16:57:52	Light gray fine sand throughout with some small white shell hash. Two podocerid amphipod fecal stacks on surface. Burrows in PV.
RWF	045	A	7/9/2019	17:55:00	Light gray fine sand throughout. Two tubes in far field. Burrow halos below aRPD. Burrows in PV.
RWF	045	B	7/9/2019	17:56:07	Tan fine sand transitioning to light gray fine sand at depth. Several podocerid amphipod fecal stacks on surface low to SWI, left. Burrows in PV.

Area	StationID	Replicate	Date	Time	Comment
RWF	045	C	7/9/2019	17:57:16	Tan fine sand transitioning to light gray fine sand at depth with a patch of gray very fine sand/silt on far left. Podocerid amphipod fecal stack on surface, left. A tube in far field.
RWF	046	A	7/10/2019	3:26:20	Light tan sand throughout. Several podocerid amphipods and associated fecal stacks on surface. Light pink/white worm burrowed half way down on far right. Burrows in PV.
RWF	046	B	7/10/2019	3:27:47	Light tan fine sand throughout with a small patch of gray very fine sand/silt on far right. Several worm tubes with organisms emerging in far field, on far left and another on far right. Burrows in PV.
RWF	046	C	7/10/2019	3:29:08	Light brown fine sand over top of very dark gray/black very fine sand. Some small burrows at SWI. Two possible Ampelisca amphipod tubes in dragdown at right. Burrows in PV.
RWF	047	A	7/10/2019	4:06:40	Light yellowish brown medium sand throughout. Few worm tubes at SWI. Numerous podocerid amphipods and associated fecal stacks on surface. Possible shrimp on surface, center. Burrows in PV.
RWF	047	C	7/10/2019	4:08:57	Light brown medium sand throughout. Few worm tubes at SWI. Several podocerid amphipods and associated fecal stacks on surface.
RWF	047	D	7/10/2019	4:10:00	Light brown medium sand throughout with a small patch of gray medium sand just below surface on left. A few podocerid amphipods and fecal stacks in far field. A small rusty brown worm burrowed on far right, just below the SWI.
RWF	048	A	7/10/2019	4:24:46	Light brown fine sand with a patch of reduced gray fine sand on left at depth. Some small white shell hash throughout. A few podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	048	B	7/10/2019	4:26:08	Light tan fine sand throughout. Shallow penetration. Fecal stacks from podocerid amphipods on surface, center. Significant resuspension into the WC. Some sediment clasts on surface, far field. Burrows in PV.
RWF	048	C	7/10/2019	4:27:13	Light tan fine sand throughout with a patch of white shell hash just below surface, left. Two podocerid amphipod fecal stacks on surface. Burrows in PV.
RWF	049	A	7/10/2019	5:39:04	Light brown medium sand mixed with gray very fine sand and some shell pieces. A lot of sediment clasts/detrital matter deposited on surface. Tube in far field left. Burrows in PV.
RWF	049	B	7/10/2019	5:40:18	Light brown medium sand throughout. Some small shell hash. Small tubes in mid-field. Burrows in PV.
RWF	049	C	7/10/2019	5:41:33	Light brown medium sand throughout with some small white shell hash. Very fine detrital material deposited on surface, far field. Small tube at SWI. Burrows in PV.
RWF	050	A	7/4/2019	21:55:03	Light tan fine sand throughout with some small white shell hash. A cluster of tubes on surface, right. Small rusty brown worm at depth, center. Burrows in PV.
RWF	050	B	7/4/2019	21:56:07	Light brown very fine sand with shell hash transitioning to light gray very fine sand/silt over darker gray very fine sand at depth. Tube worm on surface, far right. Small void just below the surface, left, and another smaller filled void (orange color) about half way down on left.
RWF	050	C	7/4/2019	21:58:04	Light brown fine sand over light gray fine sand. Clusters of tubes across surface with organisms emerging. Small rusty brown worm half way down center, left and another pinkish brown worm to its right. Burrows in PV.
RWF	051	A	7/4/2019	22:26:10	Light brown fine sand with white shell fragments throughout. Cluster of tubes on surface far right as well as in the center. Several podocerid amphipod fecal stacks on the surface, far field.
RWF	051	B	7/4/2019	22:27:27	Light brown fine sand with a patch of gray very fine sand at depth and white shell fragments throughout. One tube on surface at the very far left. A worm just below the surface in the center.
RWF	051	C	7/4/2019	22:28:21	Light brown fine sand with some white shell fragments. Numerous tubes on surface in far field. A few podocerid amphipod fecal stacks in far field, surface.
RWF	052	A	7/4/2019	23:34:17	Light brown fine sand throughout with some white shell fragments. Burrow halos. Burrows in PV.
RWF	052	B	7/4/2019	23:35:24	Light brown fine sand with white shell fragments throughout. Podocerid amphipod fecal stack in far field, center. Light pink worm at depth, far left.
RWF	052	D	7/4/2019	23:37:48	Light brown fine sand throughout with white shell fragments. Potential burrow hole at SWI on right.
RWF	053	B	7/5/2019	0:26:38	Light tan medium sand transitioning to light tan medium sand mixed with multicolored very coarse sand at depth. Three podocerid amphipod fecal stacks with associated amphipods on surface. Burrows in PV.
RWF	053	C	7/5/2019	0:30:02	Tan medium sand mixed with very coarse sand. A few podocerid fecal stacks on surface far field. Burrows in PV.
RWF	053	D	7/5/2019	0:31:37	Multicolored very coarse sand transitioning to tan medium sand mixed with very coarse sand. SWI slopes down to the right. Some tube clusters on surface, left and center, far field. 2 podocerid amphipod fecal stacks in far field. Burrows in PV.
RWF	054	A	7/5/2019	0:55:51	Light brown fine sand with a patch of light gray fine sand in bottom right corner. 3-4 podocerid amphipod fecal stacks with associated podocerid in far field.
RWF	054	B	7/5/2019	0:57:06	Homogenous light brown fine sand throughout. Tubes on right, surface. Hermit crab in center, far field. Burrows in PV.
RWF	054	D	7/5/2019	0:59:56	Homogenous light brown fine sand throughout. Several podocerid amphipod fecal stack on surface. Very small crustacean (crab) on surface, center. Worm burrowed at depth, center/left.
RWF	055	A	7/5/2019	1:38:55	Light brown fine sand with a patch of light gray very fine sand in bottom right corner. Small Stage 2 tubes in mid-field.
RWF	055	C	7/5/2019	1:41:43	Light brown fine sand transitioning to light gray fine sand at depth. Podocerid amphipod fecal stacks on left, far field.
RWF	055	D	7/5/2019	1:43:39	Light brown fine sand throughout with a small patch of dark gray fine sand in left bottom corner. Significant resuspension into WC; small tube in suspension. SWI mounds up in the center. Worm burrowed in center of sediment column.
RWF	056	I	7/5/2019	7:16:56	Brown very fine sand over dark black very fine sand and silt at depth. Overpenetration. Large oxygenated void on far left at depth, with worm present.
RWF	056	M	7/5/2019	7:53:44	Light tan very fine sand over dark gray/black very fine sand and silt at depth. Significant resuspension into the water column. Small tubes at SWI, right. Some small burrows at the very surface. 2-3 small clams burrowed at the very surface, center.
RWF	056	N	7/5/2019	8:51:31	Brown very fine sand over dark black very fine sand and silt at depth. Significant resuspension into the water column, small tubes in suspension. Very shallow burrows at SWI. Small clam below SWI at right.
RWF	057	B	7/5/2019	2:53:19	Homogenous light brown fine sand throughout. Several podocerid amphipod fecal stacks on surface. Some unidentified epifauna in far field (light pinkish white in center). Burrows in PV.

Area	StationID	Replicate	Date	Time	Comment
RWF	057	C	7/5/2019	2:54:35	Homogenous brown fine sand throughout with some small shell fragments. Some podocerid amphipods and fecal stacks on surface. Small gastropod on surface, center. Burrows in PV.
RWF	057	D	7/5/2019	2:55:55	Homogenous brown fine sand throughout with some white shell particles. A few podocerid amphipod fecal stacks in far field. Small gray shrimp on surface, right. Burrows in PV.
RWF	057E1	B	7/5/2019	5:17:06	Homogenous rusty brown fine sand throughout with some small white shell fragments. Several podocerid amphipods and associated fecal stacks on surface, far field.
RWF	057E1	C	7/5/2019	5:18:46	Homogenous rusty brown fine sand throughout. Several clusters of tubes on surface, right. Light brownish white crab to the left of the cluster of tubes at SWI. Some podocerid amphipod fecal stacks on surface, far field.
RWF	057E1	D	7/5/2019	5:20:24	Homogenous light brown fine sand throughout with some very fine sand/silt deposited on surface. Several podocerid amphipod fecal stacks on surface. A few worm solitary worm tubes on surface.
RWF	057E2	A	7/5/2019	5:46:04	Homogenous light brown fine sand throughout. Several podocerid amphipods and associated fecal stacks on surface. A small light pink worm on far right, 3/4 down sediment column. Burrows in PV.
RWF	057E2	B	7/5/2019	5:47:44	Homogenous light brown fine sand throughout. Several podocerid amphipods and associated fecal stacks on surface. A pinkish red shrimp, on surface, right, far field.
RWF	057E2	C	7/5/2019	5:49:06	Light brown fine sand with patches of light gray very fine sand at depth. Some podocerid amphipods with associated fecal stacks on surface. Sediment clasts along surface, far field.
RWF	057W1	A	7/5/2019	6:17:36	Homogenous rusty brown fine sand throughout with some small white shell fragments. Significant resuspension into the WC, small tubes in suspension.
RWF	057W1	B	7/5/2019	6:19:01	Homogenous rusty brown fine sand throughout. Small white shrimp on surface, right. Small tubes in suspension.
RWF	057W1	C	7/5/2019	6:20:17	Homogenous rusty brown fine sand throughout. Significant resuspension into the WC, small tubes in suspension. Divot on surface on the left, far field.
RWF	057W2	A	7/5/2019	6:32:30	Light brown fine sand with some white shell hash throughout. Several tubes in far field with a larger cluster of tubes in center, far field. Some small Burrows at SWI.
RWF	057W2	B	7/5/2019	6:33:51	Light brown fine sand throughout. Single podocerid amphipod fecal strand on surface, left. A tube on surface, center far field.
RWF	057W2	D	7/5/2019	6:36:52	Light brown fine sand throughout. Some tubes on surface in center. Small crab on surface to the left of tubes and a hermit crab on far right. Tunicates in far field. Small pinkish brown worm at depth in center.
RWF	058	A	7/5/2019	3:15:52	Yellowish brown coarse sand mixed with medium sand transitioning to light brown medium sand with fine pebble sized white shell hash throughout. Few Stage 2 tubes at SWI.
RWF	058	B	7/5/2019	3:17:15	Yellowish brown medium sand mixed with fine pebble-sized white shell hash. Some brown very fine sand on right and deposited on surface, far field. Small tubes at far field right. Several podocerid amphipod fecal stacks in far field, surface, left.
RWF	058	C	7/5/2019	3:18:35	Rusty brown medium sand mixed with very fine pebble sized white shell hash throughout. Small Stage 2 tube at midfield left. Hermit crab on surface, right. Gastropod behind hermit crab.
RWF	059	A	7/5/2019	3:56:16	Rusty brown medium sand with a patch of darker brown medium sand half way down sediment column, right. Two podocerid amphipods on a fecal stack on surface, center. Several other podocerid amphipod fecal stacks on surface, far field. Small tubes at left.
RWF	059	B	7/5/2019	3:57:26	Rusty brown medium sand with shell fragments throughout. Some podocerid amphipod fecal stacks on surface, far field. A lot of small tubes and sediment flocs on surface.
RWF	059	C	7/5/2019	3:58:42	Rusty brown medium sand throughout. A few podocerid amphipods and fecal stacks on surface. Several small tubes and sediment flocs on surface.
RWF	060	A	7/5/2019	17:04:01	Light brown very coarse sand transitioning to light tan coarse sand at depth. Small short tubes at SWI. Podocerid amphipod tube lying on surface at left.
RWF	060	B	7/5/2019	17:05:10	Multicolored very coarse sand mixed with tan medium sand. Two podocerid amphipod fecal stacks in far field, surface left. Burrows in PV.
RWF	060	D	7/5/2019	17:17:07	Light brown medium sand with a few some coarse pebbles. SWI collapsed on left. Tube clusters in far field. Burrows in PV.
RWF	061	A	7/5/2019	18:24:27	Homogenous light brown fine sand throughout. Several Podocerid amphipod fecal stacks on surface. Small pink shrimp on surface, far left. Some sediment flocs on surface. Burrows in PV.
RWF	061	B	7/5/2019	18:25:48	Homogenous light brown fine sand throughout. Several Podocerid amphipod fecal stacks and associated amphipods on surface. Small tubes on surface in midfield. Burrows in PV.
RWF	061	C	7/5/2019	18:26:55	Homogenous light brown fine sand throughout. Significant resuspension into the water column. Several Podocerid amphipod fecal stacks and associated amphipods on surface. Small pink shrimp on surface, center. Small pale tan crab on surface, center.
RWF	062	A	7/5/2019	19:28:06	Brown fine sand over top of very dark black very fine sand/silt. Some podocerid amphipod fecal stacks on surface, far field. A tube on surface, far field, right. A clear brown shrimp on surface, center. Burrows in PV.
RWF	062	C	7/5/2019	19:31:03	Brown fine sand over top of gray very fine sand mixed with silt. A few podocerid amphipod fecal stacks in far field. Burrows in PV.
RWF	062	D	7/5/2019	19:32:21	Brown very fine sand over top of dark black very fine sand at depth. A few podocerid amphipods and associated fecal stacks on surface. Burrows in PV.

Area	StationID	Replicate	Date	Time	Comment
RWF	063	A	7/5/2019	23:11:56	Homogenous orange-brown medium sand throughout. Some podocerid amphipods and associated fecal stacks on surface, far field. Many small tubes at SWI. Stalk of Corymorpha hydroid in far field left (present in PV). Unidentified epifauna at far right, possible shrimp.
RWF	063	B	7/5/2019	23:13:13	Homogenous orange-brown medium sand throughout. Several podocerid amphipods and associated fecal stacks on surface. Several small tubes at SWI.
RWF	063	C	7/5/2019	23:14:24	Homogenous light brown fine sand throughout. Some resuspension into water column. Small tubes in far field and a Stage 1 tube in suspension.
RWF	064	A	7/6/2019	0:15:28	Homogenous orange-brown medium sand throughout. Several podocerid amphipods and associated fecal stacks on surface.
RWF	064	B	7/6/2019	0:17:42	Homogenous orange-brown medium sand throughout. Several podocerid amphipods and associated fecal stacks on surface. Pink shrimp on surface, center.
RWF	064	D	7/6/2019	0:20:43	Homogenous orange-brown medium sand throughout. Empty crepidula shell on surface, far field. A few podocerid amphipod fecal stacks in far field.
RWF	065	A	7/6/2019	1:00:36	Homogenous orange-brown medium sand throughout. Some podocerid amphipod fecal stacks in far field, left. Small pinkish shrimp on surface, far left. Many small tubes on surface. Burrows in PV.
RWF	065	B	7/6/2019	1:02:16	Homogenous orange-brown medium sand throughout. SWI mounds in far field, right. Some podocerid fecal stacks on surface. Possible hermit crab on far left, far field. Small tubes on surface.
RWF	065	C	7/6/2019	1:03:36	Homogenous orange-brown medium sand throughout. SWI slopes up to the left. Some podocerid amphipods and associated fecal stacks on surface, far field. Small tubes on surface.
RWF	066	A	7/6/2019	2:04:36	Homogenous yellowish brown medium sand throughout. Small tubes and snail on surface, left.
RWF	066	B	7/6/2019	2:06:09	Homogenous yellowish brown medium sand throughout. Some small white shell fragments. Few podocerid amphipod fecal stacks in far field.
RWF	066	C	7/6/2019	2:08:20	Homogenous yellowish brown medium sand throughout. Small tubes across surface. Several podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	067	E	7/6/2019	17:24:02	Brown medium sand mixed with fine sand over top of dark gray/black very fine sand/silt. Depression in the SWI in far field. Several podocerid amphipod fecal stacks in far field. Small filled voids in the center at depth. Burrows in PV.
RWF	067	F	7/6/2019	17:53:45	Brown fine sand over top of dark gray/black very fine sand/silt. Small tubes on surface. Small burrows and less compact sediment at the SWI. Some small white clams (Gemma gemma). Burrows just below surface. A small void on left filled with white mucous at the redox boundary.
RWF	067	G	7/6/2019	17:55:05	Brown fine sand over top of dark gray/black very fine sand/silt. Dark black mud clasts deposited on surface, left, likely due to sampling artefact. Few small tubes at SWI.
RWF	068	A	7/6/2019	4:07:29	Rusty yellowish brown fine sand throughout. Several podocerid amphipods and associated fecal stacks in far field. Light pink shrimp on surface, right. Burrows in PV.
RWF	068	B	7/6/2019	4:09:21	Light brown fine sand throughout. Several podocerid amphipods and associated fecal stacks on surface. Some small burrows holes on surface, far field. Small tubes on surface far field. Burrows in PV.
RWF	068	D	7/6/2019	4:11:56	Light brown fine sand with a small patch of light gray fine sand at depth, center. Two podocerid amphipod fecal stacks with associated amphipod on surface. Small white hermit crab on surface, center. Possible hydroid on surface, right.
RWF	069	A	7/6/2019	5:36:04	Very fine pebbles mixed with coarse sand, patch of light gray silt in bottom left corner. Gray very coarse pebble on surface, center. Podocerid amphipod at fecal stack in far field left, low to SWI.
RWF	069	B	7/6/2019	5:37:29	Poorly sorted sediment, including a mixture of very coarse sand, medium sand, and several medium pebbles. Few very small Stage 1 tubes in suspension.
RWF	069	D	7/6/2019	5:40:10	Poorly sorted sediment, a mixture of light tan medium sand and multicolored coarse pebbles. Barnacles on far left, surface. Several podocerid amphipod fecal stacks in far field. Some hydroids on surface, right and left. Burrow in PV.
RWF	070	A	7/9/2019	10:38:23	Rusty brown fine sand with a patch of dark gray very fine sand in center at depth. Some podocerid amphipod fecal stacks on right, far field. A small crab on surface, center. Several large worm tubes on surface, right. Burrows in PV.
RWF	070	B	7/9/2019	10:39:55	Homogenous rusty brown fine sand throughout. Cluster of small worm tubes on surface, far left. Some small shallow burrows at SWI. Burrows in PV.
RWF	070	C	7/9/2019	10:41:29	Homogenous rusty brown fine sand throughout. Several worm tubes in far field. Burrows in PV.
RWF	071	A	7/10/2019	1:37:52	Yellowish brown coarse sand mixed with some medium sand. Unidentified pink crustacean on surface, center. Burrows in PV.
RWF	071	B	7/10/2019	1:39:07	Yellowish brown coarse sand mixed with tan fine sand. Some small white shell fragments on surface.
RWF	071	D	7/10/2019	1:41:29	Yellowish brown coarse sand mixed with some light tan medium sand. Small scallop valve on surface, center. Several podocerid amphipod fecal stacks in far field.
RWF	072	A	7/7/2019	2:18:05	Poorly sorted sediment consisting of multicolored medium pebbles mixed with very coarse sand and some fine sand. Some podocerid amphipod fecal stacks in far field.

Area	StationID	Replicate	Date	Time	Comment
RWF	072	B	7/7/2019	2:19:32	Mixture of multicolored very coarse sand and lighter coarse sand. SWI slopes up on the right. Several podocerid amphipod fecal stacks in far field. Several pink amphipods on surface, far left, center, and far right.
RWF	072	D	7/7/2019	2:22:15	Multicolored very coarse sand over top of light tan coarse sand transitioning to medium sand at depth. Several (3) small pink worms buried on right, from just below the surface to about half way down sediment column.
RWF	073	A	7/7/2019	1:26:43	No penetration. Light brown very fine sand with coarse and very coarse pebbles on the surface. Very coarse pebble on far left has unidentified orange encrusting organism, perhaps a sponge. Barnacles and bryozoa on pebbles.
RWF	073	C	7/7/2019	1:29:11	Brown fine sand with a few coarse to very coarse pebbles and shell fragments on the surface. Very coarse pebble in far field encrusted with white grazed barnacles. Burrows in PV.
RWF	073	D	7/7/2019	1:30:31	No penetration. White barnacles on substrate in far field.
RWF	073E1	A	7/12/2019	19:52:15	No penetration. Brown very fine sand with coarse pebbles and shell fragments on the surface. Barnacles on pebbles. Pebble on far left encrusted with orange organism.
RWF	073E1	C	7/12/2019	19:54:35	Very little penetration. Brown fine sand with coarse pebbles and shell fragments on surface. Some potentially very coarse pebbles in far field. Barnacles and grazed barnacles on pebbles on surface.
RWF	073E1	D	7/12/2019	19:55:52	No penetration. Very coarse pebbles on surface with barnacles encrusting.
RWF	073E2	A	7/12/2019	20:15:18	No penetration. Presumably white barnacles in far field.
RWF	073E2	B	7/12/2019	20:16:34	Very limited penetration. Light brown fine sand with coarse pebbles on surface. Skate egg case on surface. Barnacle on surface, left and barnacles and grazed barnacles in far field. Burrows in PV.
RWF	073E2	D	7/12/2019	20:18:54	No penetration. Barnacles and grazed barnacles on substrate on surface. Small pink shrimp on far right surface.
RWF	073W1	A	7/12/2019	19:38:14	Light brown fine sand with white shell fragments throughout. Very shallow penetration. A few podocerid fecal stacks in far field. Burrows in PV.
RWF	073W1	B	7/12/2019	19:39:30	Light brown fine sand with some small white shell fragments. Shallow penetration. Several podocerid amphipod fecal stacks in far field. Sea pen with bryozoa growth in far field, right. Burrows in PV.
RWF	073W1	C	7/12/2019	19:40:48	Light brown fine sand with some white shell fragments on surface. Very shallow penetration.
RWF	073W2	B	7/12/2019	19:21:16	Light yellowish brown medium sand throughout. Podocerid amphipod on fecal stack on surface, left. Burrows in PV.
RWF	073W2	C	7/12/2019	19:22:30	No penetration. Sea pen in far field, left.
RWF	073W2	D	7/12/2019	19:23:56	Light brown fine sand throughout. Shallow penetration. Several podocerid amphipod fecal stacks on surface, far field. Larger substrate in far field, right with possible barnacles encrusting. Burrows in PV.
RWF	074	A	7/7/2019	0:14:52	Orangish brown well sorted medium and fine sand transitioning to lighter brown at depth. Several podocerid amphipods on fecal stacks on surface, far field. Small tubes at SWI, center and right. Burrows in PV.
RWF	074	B	7/7/2019	0:16:23	Yellowish brown fine sand throughout. Two transparent shrimp on surface. Several podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	074	C	7/7/2019	0:17:49	Yellowish brown fine sand throughout. A few podocerid amphipods on surface, far field. Burrows in PV.
RWF	075	A	7/6/2019	23:26:57	No penetration. Few small tubes visible at one part of SWI that can be seen. Burrows in PV.
RWF	075	C	7/6/2019	23:29:13	Light yellowish brown fine sand throughout. Small tubes at SWI. Burrows in PV.
RWF	075	D	7/6/2019	23:30:26	Light yellowish brown fine sand throughout. A few podocerid amphipod fecal stacks on surface, far field. No matching PV pair.
RWF	076	A	7/6/2019	21:45:46	No penetration. Shrimp in water column.
RWF	076	C	7/6/2019	22:02:26	No penetration, landed on cobble or boulder. Barnacles and bryozoa on surface substrate.
RWF	076	D	7/6/2019	22:03:27	No penetration, landed on cobble or boulder. Bryozoa encrusting surface substrate. Grazed barnacle patch in far field. Hydroids in lower left and far field center.
RWF	077	A	7/6/2019	21:00:28	Light tan fine sand throughout. Some podocerid amphipod fecal stacks on surface, far field. Few tubes at or on surface. Burrows on surface, center. Burrows in PV.
RWF	077	B	7/6/2019	21:01:30	Light tan fine sand throughout. Some podocerid amphipod fecal stacks on surface, far field. Pale pink worm just below surface, left. Burrows in PV.
RWF	077	C	7/6/2019	21:02:36	Light tan fine sand throughout. Some podocerid amphipod fecal stacks on surface, far field. Worm just visible in lower right. Burrows in PV.
RWF	078	A	7/6/2019	19:52:02	Light tan fine sand with some streaks of darker tan fine sand in center, burrow halos.. Burrows in PV.
RWF	078	C	7/6/2019	19:54:13	Light brown medium sand mixed with multicolored very fine pebbles. Single podocerid amphipod on fecal stack on surface, far field. Burrows in PV.
RWF	078	D	7/6/2019	19:55:28	Light brown medium sand mixed with multicolored very fine pebbles. Some white shell fragments. Burrows in PV.
RWF	079	A	7/6/2019	16:11:46	Yellowish brown medium sand mixed with fine sand with a patch of darker brown fine sand in center of sediment column. A few podocerid amphipods fecal stacks on surface, far field. Gastropod shell on surface, far field. Burrows in PV.
RWF	079	B	7/6/2019	16:12:45	Rusty yellowish brown fine sand mixed with medium sand throughout. Several podocerid amphipod fecal stacks on surface, with one associated podocerid amphipod visible. Burrows in PV.

Area	StationID	Replicate	Date	Time	Comment
RWF	079	C	7/6/2019	16:13:56	Light yellowish brown fine sand mixed with medium sand with a small patch of darker brown fine sand at depth, right. Some small podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	080	A	7/6/2019	14:05:06	Light tan fine sand throughout. Several podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	080	B	7/6/2019	14:25:26	Rusty light brown fine sand transitioning to lighter tan fine sand at depth. Several podocerid amphipod fecal stacks on surface, far field. Small tubes at SWI center. Burrows in PV.
RWF	080	D	7/6/2019	14:30:16	Very light tan fine sand throughout. Numerous small podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	081	A	7/6/2019	11:13:25	No penetration. Rusty brown coarse sand with some medium to coarse pebbles on surface. Single sea pen on surface, left. Burrows in PV.
RWF	081	B	7/6/2019	11:14:48	Rusty yellowish brown coarse sand with a coarse pebble on surface. Several sea pen on surface, far field. Caprellid amphipod and bryozoan growth on sea pen, left.
RWF	081	C	7/6/2019	11:25:20	Rusty brown coarse sand throughout. SWI slopes up to the left. Sea pen in water column, left side with caprellid attached. Burrows in PV.
RWF	082	A	7/10/2019	0:54:38	Light gray medium sand throughout. Numerous podocerid amphipods and associated fecal stacks on surface, far field. Burrows in PV.
RWF	082	B	7/10/2019	0:55:49	Light rusty brown medium sand transitioning to light gray medium sand at depth. Several podocerid amphipods and associated fecal stacks on surface, far field. Cluster of tubes on surface, center left. Vertical streaks of darker sediment, indicative of burrows. Burrows in PV.
RWF	082	C	7/10/2019	1:01:31	Gray medium sand over top of some light gray medium sand at depth, right. Some small, collapsed podocerid amphipod fecal stacks on surface, far field. Multiple small Stage 1 tubes in suspension. Burrows in PV.
RWF	083	A	7/7/2019	3:08:32	Poorly sorted, multicolored very coarse sand mixed with tan medium sand.
RWF	083	C	7/7/2019	3:10:58	Poorly sorted, multicolored coarse pebbles mixed with multicolored very fine pebbles, with light grayish brown very fine sand interspersed in center. Some bryozoan growth on the dark gray coarse pebble in the center.
RWF	083	D	7/7/2019	3:12:11	Light tan and rusty brown coarse sand. White barnacles and bryozoa encrusting medium pebble on surface, center. Podocerid amphipod fecal stack on surface, right, far field. Burrows in PV.
RWF	084	A	7/7/2019	4:19:12	No penetration. Barnacles on pebble in far field. Shrimp in center. Burrows in PV.
RWF	084	B	7/7/2019	4:21:09	Light brown fine sand throughout. SWI ripples up on right. Two tubes on surface, left, one with a podocerid amphipod fecal stack on it. Sea pen with bryozoa growth on it on left, far field. Burrows in PV.
RWF	084	D	7/7/2019	4:28:03	Light brown fine sand throughout. Hard substrate in far field encrusted with barnacles and bryozoa, with a podocerid amphipod fecal stack over it. Burrows in PV.
RWF	085	A	7/7/2019	5:53:20	Yellowish brown fine sand throughout with a darker brown vertical streak on far right. Numerous podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	085	B	7/7/2019	5:55:18	Yellowish brown fine sand throughout. Numerous podocerid amphipod fecal stacks on surface, far field. A small cluster of tubes on surface, right. Burrows in PV.
RWF	085	C	7/7/2019	6:00:24	Yellowish brown fine sand throughout. Some podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	086	A	7/7/2019	7:29:24	Yellowish brown medium sand throughout with some brownish gray silt deposited on right. A few podocerid amphipod fecal stacks in far field. Pink amphipod on surface, left. Some small tubes on surface. Small pale brown worm half way down sediment column, left. Burrows in PV.
RWF	086	B	7/7/2019	8:18:11	Yellowish brown medium sand transitioning to light brown fine sand at depth, patch of light gray fine sand in bottom left. Some small podocerid amphipod fecal stacks on surface. Some small tubes on surface. Burrows in PV.
RWF	086	D	7/7/2019	8:33:03	Light yellowish brown fine sand throughout, some medium sand mixed in. Numerous small podocerid amphipod fecal stacks and a few associated amphipods on surface, far field. Some small tubes on surface. Burrows in PV.
RWF	087	A	7/7/2019	10:55:15	Poorly sorted, dark gray and white very fine pebbles mixed with grayish light brown fine sand. A couple of podocerid amphipod fecal stacks in far field, right. Burrows in PV.
RWF	087	B	7/7/2019	10:56:35	Poorly sorted, light brown fine sand mixed with some very fine pebbles over top of gray to dark gray very fine sand at depth on the far left and far right. Podocerid amphipod in midfield.
RWF	087	C	7/7/2019	10:58:03	Light gray and white very coarse sand with some medium sand interspersed.
RWF	088	A	7/7/2019	13:16:30	Homogenous light tan medium sand throughout. Some podocerid fecal stacks on surface, far field. Some small tubes on surface. Burrows in PV.
RWF	088	B	7/7/2019	13:17:38	Homogenous yellowish tan medium sand throughout. Some podocerid fecal stacks on surface, far field. Some small tubes on surface. Burrows in PV.

Area	StationID	Replicate	Date	Time	Comment
RWF	088	C	7/7/2019	13:18:34	Yellowish brown medium sand layered over very dark black silt at depth. Couple small tubes at SWI. Two very small podocerid amphipod fecal stacks on surface with one associated amphipod. A filled void in the dark silt layer at depth, left.
RWF	089	B	7/7/2019	14:23:40	Rusty yellowish brown very coarse sand with some tan fine sand mixed in at depth. SWI slopes down to the right. A few podocerid amphipod fecal stacks on surface, far field. Small pale pink worm on far left, half way down sediment column. Burrows in PV.
RWF	089	C	7/7/2019	14:24:57	Rusty yellowish brown very coarse sand interspersed with some tan fine sand at depth. SWI slopes down to the right. Several podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	089	D	7/7/2019	14:26:05	Light yellowish brown granules with some tan fine sand interspersed. SWI slopes up to the right. Some short podocerid amphipod fecal stacks on surface with two associated amphipods visible. Burrows in PV.
RWF	090	A	7/7/2019	15:18:28	Yellowish brown medium sand layered over light brown medium sand at depth. A few podocerid amphipod fecal stacks with associated amphipods on surface. Burrows in PV.
RWF	090	B	7/7/2019	15:19:30	Yellowish brown coarse sand over light brown medium sand at depth. Burrows in PV.
RWF	090	C	7/7/2019	15:20:32	Rusty yellowish brown coarse sand mixed with medium sand. A few podocerid amphipod fecal stacks on surface. A shell fragment on surface, far field. Some light brown organic silt deposits on sediment surface. Small tubes on surface.
RWF	091	A	7/7/2019	16:15:20	Light brown fine sand throughout with a few vertical streaks of rusty brown fine sand. Several podocerid amphipod fecal stacks and associated amphipods on surface, far field. Burrows in PV.
RWF	091	B	7/7/2019	16:16:29	Light brown fine sand throughout. Several podocerid amphipod fecal stacks and associated amphipods on surface, far field. Small tubes in far field. Burrows in PV.
RWF	091	C	7/7/2019	16:17:36	Homogenous light brown fine sand throughout. Some podocerid amphipod fecal stacks and associated amphipods on surface, far field. Burrows in PV.
RWF	092	A	7/7/2019	16:49:41	Light brown fine sand throughout. Several podocerid amphipod fecal stacks and associated amphipods on surface, far field. A pink crustacean (unidentified amphipod) on surface, center, and another that's been dragged down into sediment. Burrows in PV.
RWF	092	B	7/7/2019	16:50:54	Light brown fine sand throughout. Numerous podocerid amphipod fecal stacks and associated amphipods on surface and surface, far field. Burrows in PV.
RWF	092	C	7/7/2019	16:52:12	Light brown fine sand throughout. Some podocerid amphipod fecal stacks and associated amphipods on surface. Burrows in PV.
RWF	093	A	7/7/2019	17:29:03	Homogenous light brown fine sand throughout. A few short podocerid amphipods with some associated amphipods on surface, far field. Burrows in PV.
RWF	093	B	7/7/2019	17:30:13	Light brown fine sand throughout with a vertical streak of rusty brown fine sand in center, right. Some podocerid amphipod fecal stacks on surface, far field, right. A small pale pink worm buried on left. Burrows in PV.
RWF	093	C	7/7/2019	17:31:29	Homogenous light brown fine sand throughout with some small shell fragments buried at depth. Some podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	094	A	7/7/2019	18:13:44	Light brown fine sand transitioning to light gray fine sand at depth, with a few patches of dark gray fine sand at the bottom. A few podocerid amphipod fecal stacks on surface, far field. Some streaks of rusty brown vertically from surface. A very small worm at depth, center. Burrows in PV.
RWF	094	B	7/7/2019	18:14:50	Light brown fine sand transitioning to light gray fine sand, a small patch of dark gray fine sand at depth, left center. A few podocerid amphipod fecal stacks in far field, with one prominent one with associated amphipod on surface, right. Burrows in PV.
RWF	094	C	7/7/2019	18:16:09	Light brown fine sand transitioning to lighter brownish gray fine sand with a small patch of darker gray fine sand at depth, center. SWI slopes up sharply to the right. A single short podocerid amphipod fecal stack in center. Burrows in PV.
RWF	095	A	7/7/2019	18:51:52	Light yellowish tan medium sand throughout. A podocerid amphipod fecal stack on surface, left, far field. Small tubes at SWI. Burrows in PV.
RWF	095	B	7/7/2019	18:53:16	Light yellowish tan fine sand throughout. A patch of dark gray fine sand in the center of the sediment column. Several podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	095	D	7/7/2019	18:55:42	Light rusty brown coarse sand mixed with light tan medium sand. A caprellid amphipod on surface, left. Some podocerid amphipod fecal stacks on surface. A small rusty pink worm in bottom, right corner. Burrows in PV.
RWF	096	A	7/8/2019	5:53:01	Light tan fine sand throughout. A few podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	096	B	7/8/2019	5:54:18	Light tan fine sand throughout. Several podocerid amphipod fecal stacks on surface, far field. Small tubes on surface, center and left. Burrows in PV.
RWF	096	C	7/8/2019	5:55:39	Light tan fine sand throughout. Some resuspension into water column. Several podocerid amphipod fecal stacks on surface, far field. Burrow or buried podocerid fecal stack on left just below surface. Burrows in PV.
RWF	097	A	7/8/2019	5:17:51	Rusty brown medium sand with a patch of dark gray fine sand at depth, center. Several podocerid amphipods on fecal stacks on surface, far field. Small clusters of tubes on surface. Burrows in PV.
RWF	097	B	7/8/2019	5:19:10	Rusty brown medium sand throughout with some small pieces of shell. A couple podocerid amphipods on fecal stacks on surface. Small tube clusters across surface. Pink amphipod on surface, left. Unidentified organisms burrowed just below SWI center. Burrows in PV.
RWF	097	C	7/8/2019	5:20:21	Rusty brown medium sand throughout. A few shell fragments at surface. Numerous podocerid amphipod fecal stacks and associated amphipods on surface, far field. Some tubes on surface. Burrows in PV.
RWF	098	A	7/8/2019	4:31:46	Rusty brown medium sand throughout, with a vertical streak of darker brown medium sand on right extending from the surface. Several podocerid amphipods on fecal stacks on surface, far field. Clusters of tubes on surface. Burrows in PV.

Area	StationID	Replicate	Date	Time	Comment
RWF	098	B	7/8/2019	4:33:01	Rusty brown medium sand throughout with a few streaks of darker brown. Some shell fragments half way down sediment column. Three podocerid amphipods on fecal stacks on surface, far field. Many small tubes across surface. Burrows in PV.
RWF	098	C	7/8/2019	4:34:12	Rusty brown medium sand throughout with 2 patches of light gray silt center, right. Several podocerid amphipods on fecal stacks or surface. Small tubes on surface. Burrows in PV.
RWF	099	A	7/8/2019	3:45:58	Rusty brown medium sand. Significant resuspension into the water column. Several podocerid amphipods and associated fecal stacks on surface. A few small clusters of tubes on surface. Burrows in PV.
RWF	099	B	7/8/2019	3:47:02	Rusty light brown medium sand with a few small patches of darker brown medium sand. Several podocerid amphipods and associated fecal stacks on surface. Some small tubes on surface. Burrows in PV.
RWF	099	C	7/8/2019	3:48:14	Rusty light brown medium sand throughout. A few podocerid amphipods and associated fecal stacks on surface. Burrows in PV.
RWF	100	A	7/8/2019	2:46:50	Light tan fine sand over light grayish tan fine sand. Numerous podocerid amphipod fecal stacks on surface, far field. Some clusters of small tubes on surface. Burrows in PV.
RWF	100	C	7/8/2019	2:49:18	Light tan fine sand throughout. Several podocerid amphipods and associated fecal stacks on surface, far field. Burrows in PV.
RWF	100	D	7/8/2019	2:50:27	Rusty brown coarse sand over top of light brown medium sand at depth. Some podocerid amphipods and associated fecal stacks on surface. Burrows in PV.
RWF	101	B	7/8/2019	2:10:20	Rusty brown medium sand throughout. Some podocerid amphipods and associated fecal stacks on surface. Burrows in PV.
RWF	101	C	7/8/2019	2:11:32	Rusty brown medium sand mixed with coarse sand. SWI slopes up to the left. A few podocerid amphipod fecal stacks on surface, far field. A single pink amphipod on surface, far field, left. A round sand clast on surface, far right. Burrows in PV.
RWF	101	D	7/8/2019	2:12:43	Rusty brown medium sand with patches of darker gray medium/fine sand. Some podocerid amphipod fecal stacks on surface. Small tubes on surface, right. Burrows in PV.
RWF	102	A	7/8/2019	1:27:47	Light brown fine sand throughout with a small patch of darker brown fine sand just below surface, right. A couple podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	102	B	7/8/2019	1:29:07	Light brown fine sand transitioning to light grayish brown fine sand at depth. SWI divots in center. A podocerid amphipod fecal stack with associated amphipod on surface, far field. A pinkish white worm burrowed at depth, right. Burrows in PV.
RWF	102	C	7/8/2019	1:30:18	Light brown fine sand with a couple of vertical streaks of darker brown fine sand. A few small podocerid amphipod fecal stacks on surface, right. Burrows in PV.
RWF	103	A	7/8/2019	0:35:04	Rusty brown fine sand over top of light grayish brown fine sand. Some small podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	103	B	7/8/2019	0:36:19	Rusty brown fine sand over top of light grayish brown fine sand. A podocerid amphipod fecal stack on far right and a few small ones in far field. Two transparent shrimp on surface, far field. Burrows in PV.
RWF	103	C	7/8/2019	0:37:36	Light brown fine sand transitioning to light gray fine sand. A few podocerid amphipods and associated fecal stacks on surface, left. A large tube on surface, center. Burrow below surface, center, left.
RWF	104	B	7/7/2019	23:52:35	Rusty brown very coarse sand mixed with brown medium sand at depth with a small patch of dark gray fine sand in bottom left corner. Some small tubes on surface and two small podocerid amphipod fecal stacks on surface. Burrows in PV.
RWF	104	C	7/7/2019	23:53:47	Rusty brown coarse sand mixed with rusty brown fine sand with a patch of dark gray very fine sand on left half way down sediment column. Several small podocerid amphipod fecal stacks on surface, far field. A small pink amphipod just below surface (likely dragged down), left. A pale brown worm burrowed in center at depth. Burrows in PV.
RWF	104	D	7/7/2019	23:55:00	Light tan fine sand mixed with rusty brown very coarse sand throughout with some white shell fragments. Large white shell fragment on left. A couple of podocerid amphipod fecal stacks on surface, and a hermit crab on surface, right. Burrows in PV.
RWF	105	A	7/7/2019	23:08:30	Light brown fine sand throughout with some faint streaks of light gray fine sand. A couple of small podocerid amphipod fecal stacks on surface, right. Burrows in PV.
RWF	105	B	7/7/2019	23:09:38	Light brownish gray fine sand throughout. A few small tubes on surface. Burrows in PV.
RWF	105	C	7/7/2019	23:10:47	Light brown fine sand throughout. Several podocerid amphipod fecal stacks on surface, far field. Some small burrows just below the SWI. Burrows in PV.
RWF	106	A	7/7/2019	22:48:58	Poorly sorted light tan/white very coarse sand mixed with light tan fine sand. A few small podocerid amphipod fecal stacks on surface, far field. Caprellid amphipod at SWI to left of center. A tube on surface, center. Pink unidentified organism buried just below surface, center. Burrows in PV.
RWF	106	B	7/7/2019	22:50:09	Light tan coarse sand throughout. SWI slopes up to the right. Several podocerid amphipod fecal stacks on surface. Worm just below surface, center. Burrows in PV.
RWF	106	C	7/7/2019	22:51:16	Poorly sorted light tan very coarse sand mixed with medium sand . Some small podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	107	A	7/8/2019	20:46:23	Brown coarse sand mixed with some brown, gray, and white very coarse sand with some white shell fragments. Several podocerid amphipod fecal stacks on surface, far field. Podocerid fecal stack buried (drag down) below surface, left.
RWF	107	B	7/8/2019	20:47:32	Rusty brown coarse sand throughout, with some light tan medium sand interspersed at depth. SWI slopes up to the left.
RWF	107	C	7/8/2019	20:48:35	Rusty brown and dark gray very coarse sand with some gray fine sand at depth, left corner. Some shell fragments. A few podocerid amphipod fecal stacks on surface, one with amphipod on it. Small pinkish brown worm at depth, left.
RWF	108	A	7/8/2019	18:50:24	Rusty brown coarse sand throughout. A few podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	108	B	7/8/2019	18:51:28	Rusty brown coarse sand with some light tan medium sand interspersed at depth, right. SWI slopes up to the right. A few small podocerid amphipods on surface, right. Burrows in PV.

Area	StationID	Replicate	Date	Time	Comment
RWF	108	C	7/8/2019	18:52:33	Rusty brown coarse sand with some light tan medium sand interspersed at depth. SWI slopes up to left slightly. A few podocerid amphipods and associated fecal stacks on surface, far field. Small crustacean burrowed below surface, left.
RWF	109	A	7/8/2019	19:36:27	Rusty brown coarse sand mixed with light tan medium sand. Some remnants of podocerid amphipod fecal stacks on surface. Burrows in PV.
RWF	109	B	7/8/2019	19:37:35	Light brown medium sand mixed with some rusty brown coarse sand, a patch of dark gray medium sand at depth, center. SWI slopes up to the right. Several podocerid amphipods on fecal stacks on surface. A few small clusters of tubes on surface, center and left. Burrows in PV.
RWF	109	C	7/8/2019	19:38:45	Rusty brown coarse sand transitioning to lighter rusty brown medium sand at depth. Several podocerid amphipods and associated fecal stacks on surface. Caprellid amphipod on surface, center. Pink worm burrowed just at SWI on far left. Some small tubes on surface, left. Burrows in PV.
RWF	110	A	7/8/2019	19:54:26	Light brown fine sand throughout. Several long podocerid amphipod fecal stacks on surface, far field. Some sediment clasts on surface. A pink amphipod buried just below surface, center. Burrows in PV.
RWF	110	B	7/8/2019	19:55:32	Light brown fine sand throughout. Several podocerid amphipod fecal stacks on surface, far field. Pink amphipod on surface, center, far field. Burrow at SWI left. Burrows in PV.
RWF	110	C	7/8/2019	19:56:44	Light brown fine sand throughout. Some podocerid amphipod fecal stacks on surface, far field. A tube in the center, left. Burrows in PV.
RWF	111	A	7/8/2019	7:24:05	Yellowish brown coarse sand transitioning to light tan medium sand at depth. Several podocerid amphipods on fecal stacks on surface. Burrows in PV.
RWF	111	B	7/8/2019	7:25:36	Yellowish brown coarse sand mixed with light brown medium sand throughout. A single small podocerid amphipod fecal stack on surface, far field. Burrows in PV.
RWF	111	C	7/8/2019	7:30:44	Yellowish brown coarse sand on left, and mixed with light rusty brown medium sand at depth and on right. Two patches of dark gray medium sand on left. Large white shell on surface with a few white barnacles attached. Two small podocerid amphipod fecal stacks on surface. Burrows in PV.
RWF	112	A	7/8/2019	8:41:01	Rusty brown medium sand throughout with patches of light gray medium sand at depth. Sea pen encrusted with bryozoa on surface, left. Some podocerid amphipod fecal stacks on surface, far field. Burrows in PV.
RWF	112	C	7/8/2019	8:43:25	Rusty brown medium sand throughout with some small shell fragments. A few podocerid amphipod fecal stacks and caprellid amphipods on surface, far field. A few small clusters of tubes on surface. A pink amphipod burrowed just at SWI on right. Burrows in PV.
RWF	112	D	7/8/2019	8:44:46	Light brown medium sand throughout. Numerous podocerid amphipods on fecal stacks and a caprellid amphipod on surface, far field. Small corrugated bivalve buried just below SWI, left. Burrows in PV.
RWF	113	A	7/8/2019	9:55:45	Pale brown medium sand. Fecal stack and podocerid amphipod in the nearfield. Burrows in the upper cms of sediment. Curled fauna at SWI, right. Possible tubes to the left of the closer fecal stack.
RWF	113	B	7/8/2019	9:57:08	Pale brown medium sand. Fecal stack and podocerid amphipod at SWI and caprellid amphipod at SWI, left. Stage 2 tubes at SWI.
RWF	113	C	7/8/2019	9:58:33	Pale brown medium sand. Fecal stack and podocerid amphipod at SWI, with a tube at left.
RWF	114	A	7/8/2019	11:09:27	Pale brown very coarse sand with smaller grains mixed in. Stage 2 tube in far field at right. Fecal stack and podocerid amphipod at SWI.
RWF	114	C	7/8/2019	11:12:09	Pale brown very coarse sand with smaller grains mixed in. Stage 2 tube at SWI at center. Fecal stack and podocerid amphipod at SWI. Bivalve intersected by the camera at bottom left.
RWF	114	D	7/8/2019	11:13:27	Pale brown very coarse sand with smaller grains mixed in. One patch of silt-clay under SWI, may be a camera artefact. Possible tube above fines at center. Fecal stack of podocerid amphipod at SWI.
RWF	115	A	7/8/2019	11:43:41	Pale brown coarse sand. Stage 2 tube at center, far field. Fecal stack and podocerid amphipod at SWI.
RWF	115	B	7/8/2019	11:44:52	Pale brown coarse sand. Tubes or fecal stacks in far field at left. Fecal stack of podocerid amphipod at SWI. Burrows/tubes in the upper cms of sediment.
RWF	115	C	7/8/2019	11:46:24	Pale brown very coarse sand over coarse sand. Fecal stack and podocerid amphipod and stage 2 tubes cover SWI.
RWF	116	A	7/8/2019	18:25:25	Pale brown very coarse sand over coarse sand. Fecal stack of podocerid amphipod and pink fauna at SWI.
RWF	116	B	7/8/2019	18:26:24	Pale brown very coarse sand over coarse sand. One pocket of medium sand at SWI on right. Standing and collapsed fecal stack of podocerid amphipod at SWI near medium sand pocket. Faint brown streaks below the SWI. Long polychaete extends to max. penetration at right.
RWF	116	C	7/8/2019	18:27:22	Pale brown very coarse sand. fecal stack of podocerid amphipod in midfield. Clear fauna at SWI.

Area	StationID	Replicate	Date	Time	Comment
RWF	117	A	7/8/2019	17:42:13	Pale brown very coarse sand. Fecal stack of podocerid amphipod at SWI.
RWF	117	B	7/8/2019	17:43:25	Pale brown very coarse sand. Fecal stack and podocerid amphipod at SWI.
RWF	117	C	7/8/2019	17:44:35	Pale brown very coarse sand. Fecal stack and podocerid amphipod at SWI.
RWF	118	A	7/8/2019	16:49:30	Pale brown coarse sand over medium sand. Fecal stack of podocerid amphipod at SWI. Dark streak near SWI at right. Worm near max penetration at left.
RWF	118	B	7/8/2019	16:50:42	Pale brown coarse sand with some smaller grains mixed in. Fecal stack and podocerid amphipod at SWI. Possible tubes in far field at right. Burrows in the upper cms of sediment. Small worm near max penetration at center.
RWF	118	C	7/8/2019	16:51:52	Pale brown coarse sand with some smaller grains mixed in. Fecal stack and podocerid amphipod in far field. Burrows in the upper cms of sediment, one 3cm down at left.
RWF	119	B	7/8/2019	16:10:16	Pale brown coarse sand with some larger grains mixed in. Fecal stack and podocerid amphipod and brown streaks at SWI.
RWF	119	C	7/8/2019	16:11:30	Pale brown very coarse sand over coarse sand. Fecal stack of podocerid amphipod at SWI.
RWF	119	D	7/8/2019	16:12:47	Pale brown very coarse sand over coarse sand. Fecal stack of podocerid amphipod at SWI and stage 2 tubes at right. Sea pen in far field.
RWF	120	A	7/8/2019	14:58:02	Pale brown coarse sand. Fecal stack and podocerid amphipod at SWI with possible tubes or fecal matter. Small patch of dark fines at left edge.
RWF	120	B	7/8/2019	14:59:15	Pale brown coarse sand. Fecal stack and podocerid amphipod at SWI. Bivalve shell on sediment surface in far field.
RWF	120	C	7/8/2019	15:00:16	Pale brown coarse sand. Fecal stack and podocerid amphipod at SWI. Tubes in far field at right. Small, white, circular object at the base of fecal stack at right.
RWF	121	A	7/8/2019	14:11:50	Pale brown medium sand with some larger grains at SWI. Fecal stack and podocerid amphipod at SWI. Burrows in the upper cms of sediment. Shell pieces at SWI and buried at right.
RWF	121	B	7/8/2019	14:12:57	Pale brown very coarse sand over coarse sand. Fecal stack and podocerid amphipod and possible fecal deposits at SWI.
RWF	121	C	7/8/2019	14:14:11	Pale brown medium sand with a patch of very fine pebble at center. Long fecal stack and podocerid amphipod at SWI and in far field. One streak of dark sand at right edge.
RWF	122	A	7/8/2019	13:28:33	Pale brown coarse sand. Fecal stack of podocerid amphipod at SWI with stage 2 tube at right.
RWF	122	B	7/8/2019	13:29:41	Pale brown coarse sand. Fecal stack and podocerid amphipod at SWI.
RWF	122	C	7/8/2019	13:30:54	Pale brown coarse sand. Fecal stack and podocerid amphipod at SWI.
RWF	123	A	7/8/2019	12:56:57	Pale brown coarse sand. Fecal stack and podocerid amphipod at SWI with possible tube or fecal matter at center.
RWF	123	B	7/8/2019	12:58:12	Pale brown coarse sand. Fecal stack and podocerid amphipod at SWI with possible tube or fecal matter in nearfield at right.
RWF	123	C	7/8/2019	12:59:21	Pale brown coarse sand. Fecal stack and podocerid amphipod at SWI. Worm about 3cm down at right.
RWF	124	A	7/7/2019	19:13:27	Pale brown medium sand over fine sand. Fecal stack and podocerid amphipod at SWI.
RWF	124	C	7/7/2019	19:15:49	Pale brown medium sand over fine sand. Fecal stack of podocerid amphipod at SWI. Medium to large worm about 2 cm down at right.
RWF	124	D	7/7/2019	19:16:58	Pale brown medium sand over fine sand. Fecal stack and podocerid amphipod at SWI. \
RWF	125	A	7/7/2019	19:53:48	Pale brown coarse sand. Fecal stack and podocerid amphipod at SWI. Possible burrow near max penetration left of center (light colored sand).
RWF	125	B	7/7/2019	19:55:02	Pale brown coarse sand. Fecal stack of podocerid amphipod at SWI. Small streaks of reduced sediment.
RWF	125	C	7/7/2019	19:56:24	Pale brown coarse sand. Large worm in sand near max penetration below 4 cm deep.
RWF	126	A	7/7/2019	20:18:22	Pale brown coarse sand over medium. A ripple in the sand spans the SWI. Fecal stack of podocerid amphipod and shrimp at SWI on left. Evidence of deep burrowing in PV from reduced mound.
RWF	126	B	7/7/2019	20:19:31	Pale brown medium sand. Fecal stack and podocerid amphipod at SWI. Burrows in the upper cms of sediment.
RWF	126	C	7/7/2019	20:20:42	Pale brown medium sand. Fecal stack and podocerid amphipod at SWI, hermit crab in the far field. Possible small amphipod in the water column.
RWF	127	A	7/7/2019	22:04:42	Pale brown coarse sand with some larger grains mixed in. Fecal stack and small podocerid amphipods at SWI.

Area	StationID	Replicate	Date	Time	Comment
RWF	127	B	7/7/2019	22:05:54	Pale brown coarse sand with some larger grains mixed in. Fecal stack and podocerid amphipod at SWI.
RWF	127	C	7/7/2019	22:06:57	Pale brown very coarse sand with some smaller grains mixed in. Fecal stack and podocerid amphipod and possible tubes at SWI.
RWF	128	A	7/7/2019	21:18:58	Pale brown very coarse sand over coarse sand. Fecal stack and podocerid amphipod and fecal deposits at SWI. Worm near max. penetration at left.
RWF	128	C	7/7/2019	21:21:23	Pale brown very coarse sand over coarse sand. Fecal stack and podocerid amphipod at SWI. Unknown object below SWI at right.
RWF	128	D	7/7/2019	21:22:54	Pale brown very coarse sand over coarse sand. Fecal stack and podocerid amphipod in midfield at left and dragged below SWI at center. Stage 2 tube in far field at center.
RWF	129	B	7/7/2019	21:02:30	Pale brown very coarse sand with smaller grains mixed in and larger grains at SWI. Fecal stack of podocerid amphipod and fecal casts or tubes at SWI.
RWF	129	C	7/7/2019	21:03:40	Pale brown coarse sand with larger grains at the SWI. Fecal stack and podocerid amphipod at SWI.
RWF	129	D	7/7/2019	21:04:49	Pale brown coarse sand with larger grains at the SWI. Fecal stack and podocerid amphipod at SWI.
RWF	136	A	7/9/2019	3:46:03	Pale brown very fine pebble with coarse sand mixed in. Stage 2 tube at SWI at right.
RWF	136	B	7/9/2019	3:47:25	Pale brown very coarse sand with coarse sand and pebbles mixed in. Stage 2 tube in far field at left.
RWF	136	C	7/9/2019	3:48:41	Medium pebble over pale brown coarse sand. Stage 2 tubes in far field at left, cobble with hydroid growth at right.
RWF	137	A	7/9/2019	4:18:43	Medium pebble over brown coarse sand. Stage 2 tubes in far field. Possible fecal stack in far field. White spot on stone in far field may be remains of a barnacle. Open spaces at bottom left likely due to dragdown.
RWF	137	B	7/9/2019	4:20:00	Brown very coarse sand mixed with coarse sand with larger grains mixed in. Stage 2 tube in far field at left. Barnacles at SWI at right, and possible shrimp to the left of the barnacles.
RWF	137	D	7/9/2019	4:22:38	Medium pebble over pale brown coarse sand. Tubes at SWI. Polychaete at max penetration at left. Cobble in far field with blurred white spots, possibly barnacles.
RWF	138	B	7/9/2019	5:34:38	No penetration. Image shows a rocky habitat. Grazed barnacles, brown growth, and a red sea star on large rocks.
RWF	138	C	7/9/2019	5:35:43	No penetration. Image shows a rocky habitat. Brown growth and barnacles on cobble.
RWF	138	D	7/9/2019	5:37:00	Pale brown very coarse sand with coarse sand mixed in. Stage 2 tubes in far field. Small blue shell fragment at SWI. Large rock with white spots in far field.
RWF	139	B	7/9/2019	6:13:03	Pale brown coarse sand. Stage 2 tubes and fecal stack of podocerid amphipod at SWI.
RWF	139	C	7/9/2019	6:14:10	Pale brown coarse sand with larger grains at the SWI. Stage 2 tube in front of orange pebble at center, two antennae emerging from behind a pebble to the right.
RWF	139	D	7/9/2019	6:15:19	Pale brown coarse sand with larger grains mixed in. Stage 2 tubes at SWI at right. Brown branching growth on stone in far field at left.
RWF	140	A	7/9/2019	6:58:45	Pale brown fine sand. Ampelisca tube in far field, fecal stack of podocerid amphipod, and fecal cast at SWI. Depression in sand may be an epifaunal track seen in PV.
RWF	140	B	7/9/2019	7:00:03	Pale brown fine sand. Thin stage 2 tubes and ampelisca tubes cover the sediment surface. Faint brown streaks in sediment suggest burrowing. Fecal stack of podocerid amphipod in far field.
RWF	140	D	7/9/2019	7:02:37	Pale brown fine sand. Stage 2 tubes and fecal stack of podocerid amphipod in far field. Possible gastropod in nearfield at right.
RWF	141	A	7/9/2019	2:49:39	Pale brown coarse sand with pebbles at the SWI. Stage 2 tubes and brown branching growth at SWI. Pink fauna under pebble at SWI at center. Evidence of deep burrowing in PV.
RWF	141	C	7/9/2019	2:52:17	Pale brown very coarse sand. Stage 2 tubes at SWI. Clear-pink shrimp at center.
RWF	141	D	7/9/2019	2:53:32	Pale brown very coarse sand with coarse sand mixed in. Stage 2 tubes and fecal stack of podocerid amphipod in nearfield.
RWF	142	A	7/9/2019	2:10:54	Pale brown very coarse sand. Small tube at SWI at center.
RWF	142	B	7/9/2019	2:12:25	Pale brown very coarse sand with some larger grains at the SWI. Fecal stack and podocerid amphipod in far field. Possible tube in far field at center.
RWF	142	D	7/9/2019	2:15:17	Pale brown very coarse sand with small amounts of coarse sand mixed at depth. Fecal stack of podocerid amphipod in far field at right.
RWF	143	A	7/9/2019	1:32:03	Pale brown fine sand. Fecal stack and podocerid amphipod at SWI. Possible tubes in far field.
RWF	143	B	7/9/2019	1:33:23	Brown coarse sand. Possible tubes in far field and in nearfield at center.
RWF	143	C	7/9/2019	1:38:24	Pale brown fine sand. Fecal stack and podocerid amphipod at SWI. Possible tubes in far field. Fecal deposits at SWI at right.
RWF	144	A	7/8/2019	23:33:09	Pale brown coarse sand with some pebbles at the SWI. Fecal stack of podocerid amphipod at SWI.
RWF	144	B	7/8/2019	23:34:24	Brown very coarse sand. Possible fecal stack or deposit at SWI at left edge. Stage 2 tubes at SWI.
RWF	144	C	7/8/2019	23:35:27	Pale brown coarse sand mixed with very fine pebble. Stage 2 tubes in nearfield.
RWF	201	A	7/9/2019	0:11:57	No penetration. Pebbles/cobbles on sand. Spiral-Shaped egg ribbon on stone in nearfield, with barnacles, orange encrusting growth, and brown growth on stones.

Area	StationID	Replicate	Date	Time	Comment
RWF	201	B	7/9/2019	0:12:58	No penetration. The far field of the image shows a rocky habitat. Barnacles on a rock at left.
RWF	201	E	7/9/2019	0:56:35	No penetration. The far field of the image shows a rocky habitat. Barnacles, brown branching growth, red-orange encrusting growth, and shrimp on rocks. PV is species-rich.
RWF	202	A	7/8/2019	23:00:33	Pale brown very fine pebble with a layer of medium sand mixed in mid-depths. Tube at SWI at left.
RWF	202	B	7/8/2019	23:01:48	Pale brown very fine pebble with larger pebbles mixed in. Collapsed fecal stack of podocerid amphipod at SWI at left.
RWF	202	C	7/8/2019	23:03:02	Pale brown very fine pebble mixed with very coarse sand. Fecal stack of podocerid amphipod on orange stone at left.
RWF	203	B	7/8/2019	22:42:12	Low penetration. Pale brown fine sand with a cobble at center. Stage 2 tubes near cobble and in far field, fecal stack of podocerid amphipod in far field. Barnacles on cobble. Burrows in the upper cms of sediment. Possible small sea anemone in front of the larger section of barnacles.
RWF	203	C	7/8/2019	22:43:23	No penetration. Fecal stack of podocerid amphipod in the far field.
RWF	203	D	7/8/2019	22:44:30	Pale brown fine sand. Fecal stack of podocerid amphipod in the far field in front of barnacles. Shrimp or plankton in the water column.
RWF	204	A	7/9/2019	5:51:30	Pale brown fine sand. Fecal stack of podocerid amphipod in far field. stage 2 tube in nearfield at center.
RWF	204	B	7/9/2019	5:52:41	Pale brown fine sand. Fecal stack and podocerid amphipod at SWI. Pink fauna in nearfield at left. Possible tubes in far field behind fecal stack.
RWF	204	C	7/9/2019	5:54:01	Pale brown fine sand. Fecal stack of podocerid amphipod in far field. Dark burrow in sand at center with a small tube above.
RWF	205	A	7/7/2019	6:49:08	Pale brown medium sand. Fecal stack and podocerid amphipod, stage 2 tubes, and possible fecal casts at SWI. Slightly darker sand indicates burrows extending to max. penetration. Shrimp at SWI at center.
RWF	205	B	7/7/2019	6:52:07	Pale brown medium sand. Fecal stack and podocerid amphipod and sand-coated tube at SWI.
RWF	205	C	7/7/2019	6:53:41	Pale brown medium sand. Fecal stack and podocerid amphipod and stage 2 tubes in nearfield.
RWF	206	A	7/7/2019	3:39:01	Pale brown very coarse sand with coarse sand mixed in. Evidence of burrowing in the PV
RWF	206	B	7/7/2019	3:40:25	Pale brown very coarse sand with coarse sand mixed in. Fecal stack and podocerid amphipod at SWI with small stage 2 tubes in nearfield at left.
RWF	206	C	7/7/2019	3:41:35	Pale brown very coarse sand with coarse sand mixed in. Fecal stack of podocerid amphipod and stage 2 tube in far field.
RWF	207	B	7/7/2019	11:36:30	Pale brown medium sand. Fecal stack of podocerid amphipod in far field with possible tubes or fecal casts in far field.
RWF	207	C	7/7/2019	11:37:47	Pale brown medium sand. Fecal stack of podocerid amphipod in far field with possible tubes or fecal casts in far field. Burrows in the upper cms of sediment.
RWF	207	D	7/7/2019	11:39:00	Pale brown medium sand. Sand-Coated tube in midfield at center.
RWF	208	A	7/7/2019	12:30:40	Pale brown fine sand. Stage 2 tubes at SWI. Shell pieces and pebbles mixed into sediment, possibly creating voids during dragdown.
RWF	208	B	7/7/2019	12:32:01	Pale brown medium sand. Fecal casts at SWI with possible tubes in midfield at right.
RWF	208	E	7/7/2019	12:44:35	Pale brown medium sand. Low penetration. Pebbles with brown growth in nearfield, polymastia sponge in far field.
RWF	209	A	7/8/2019	4:52:46	Pale brown coarse sand. Stage 2 tubes at SWI, fecal stack of podocerid amphipod and brown-coated sea pen in midfield.
RWF	209	B	7/8/2019	4:53:55	Pale brown medium sand. Stage 2 tubes at SWI with fecal stack of podocerid amphipod. Possible mucous or fecal casts at SWI at center. Burrows in the upper cms of sediment.
RWF	209	C	7/8/2019	4:55:09	No penetration. Group of brown-coated sea pens in far field, extending horizontally from the right edge. Stage 2 tubes in background.
RWF	210	A	7/7/2019	14:51:04	Pale brown fine sand with coarse sand mixed in. Fecal stack of podocerid amphipod in nearfield behind a maroon fauna at SWI (possible hydroid colony). Burrows in the upper cms of sediment.
RWF	210	C	7/7/2019	14:53:28	Pale brown fine sand with coarse sand mixed in. Stage 2 tubes covering the SWI. fecal stack and podocerid amphipod in the far field. Burrows in the upper cms of sediment.
RWF	210	D	7/7/2019	14:54:41	Pale brown medium sand. Stage 2 tubes at SWI with fecal casts. fecal stack and podocerid amphipod with sand-coated tubes in far field. Slightly darker sand at right indicates burrow extending to max. penetration.
RWF	211	A	7/8/2019	1:48:34	Pale brown coarse sand with larger grains mixed in. Fecal stack and podocerid amphipod in midfield and burrows in the upper cms of sediment.
RWF	211	C	7/8/2019	1:50:57	Pale brown very coarse sand. Fecal stack and podocerid amphipod at SWI, stage 2 tubes in midfield.
RWF	211	D	7/8/2019	1:52:10	Pale brown very coarse sand. Fecal stack and podocerid amphipod at SWI.
RWF	212	B	7/7/2019	21:48:10	Pale brown coarse sand. Fecal stack and podocerid amphipod at SWI, burrows and possible voids in the upper cms of sediment. stage 2 tubes in midfield at left. Possible crustacean at SWI.

Area	StationID	Replicate	Date	Time	Comment
RWF	212	C	7/7/2019	21:49:29	Pale brown coarse sand. Fecal stack of podocerid amphipod in nearfield.
RWF	212	D	7/7/2019	21:50:37	Pale brown coarse sand. Fecal stack of podocerid amphipod at SWI. Possible tubes in midfield.
RWF	213	A	7/8/2019	15:48:06	Pale brown coarse sand mixed with medium sand. Possible fecal stack in nearfield at center.
RWF	213	C	7/8/2019	15:50:35	Pale brown coarse sand over medium sand. Possible fecal casts and stage 2 tubes in far field. Small pocket of reduced sediment near max. penetration at left. Sea pen covered in brown growth in far field, white spot on sea pen may be epifauna.
RWF	213	D	7/8/2019	15:51:43	Pale brown medium sand with larger grains mixed in. Stage 2 tubes in midfield with burrows in the upper cms of sediment.
RWF	214	A	7/6/2019	22:43:53	Orange-Brown medium pebble over pale brown very coarse sand. Brown branching growth on pebbles at SWI with possible amphipod attached.
RWF	214	C	7/6/2019	22:46:12	Orange-Brown medium pebble over pale brown very coarse sand. Brown branching growth on pebbles at SWI with long strand at center. Curled fauna among pebbles, one prominent at right.
RWF	214	D	7/6/2019	22:47:23	No penetration. Cobbles covered in barnacles. Tall, merged barnacles and cone-shaped solitary barnacles are present, with a possible third type at center. Transparent shrimp at center, and red-orange fauna at the bottom edge.
RWF	215	A	7/6/2019	18:18:34	Pale brown medium sand. Stage 2 tubes in nearfield. Shell pieces mixed in sediment. Possible scallop in nearfield at center (sand colored shell with eyes facing camera).
RWF	215	B	7/6/2019	18:19:43	No penetration. Red anemone in nearfield at left. Out of focus white spots may be coral.
RWF	215	C	7/6/2019	18:21:03	No penetration. Yellow sponge (Polymastia spp.) protruding from sediment. Possible tubes or fecal casts in nearfield at center.
RWF	216	A	7/6/2019	15:27:26	Pale brown very coarse sand. Stage 2 tubes at SWI.
RWF	216	B	7/6/2019	15:28:26	Pale brown very coarse sand. Stage 1 tubes at SWI. Orange encrusting growth (likely a sponge) in far field.
RWF	216	C	7/6/2019	15:39:45	No penetration. Sea pen covered in brown growth in nearfield.
RWF	217	A	7/6/2019	15:02:22	Pale brown coarse sand. Fecal stack of podocerid amphipod at SWI.
RWF	217	C	7/6/2019	15:04:28	No penetration. Orange encrusting growth (likely a sponge) at sediment surface near bottom edge.
RWF	217	D	7/6/2019	15:05:36	No penetration. Many epifauna in PV. White, out-of-focus spots may be polymastia spp. Sponge or shells.
RWF	218	A	7/6/2019	6:25:58	No penetration. Barnacles on rock in the nearfield coated in brown growth. Polymastia spp. Sponge in far field at left.
RWF	218	C	7/6/2019	6:32:43	Pale brown medium sand. Low penetration. Possible tubes at SWI. Stones with barnacles close to camera, one with red-orange encrusting organism at left. Large stone with white and red spots out of focus in far field.
RWF	218	D	7/6/2019	6:34:24	No penetration.
RWF	218E1	A	7/6/2019	7:21:51	No penetration. Stone with brown growth in nearfield.
RWF	218E1	C	7/6/2019	7:24:58	No penetration. Sea pens and white spots out of focus in far field.
RWF	218E1	D	7/6/2019	7:26:34	Pale brown fine sand with some larger grains mixed in. Sea pen in nearfield with stage 2 tubes at the sediment surface. Possible burrows in the upper cms of sediment at left. Gastropod on sea pen in nearfield, and larger sea pens in far field.
RWF	218E2	A	7/6/2019	7:41:03	Pale brown medium sand. Fecal stack of podocerid amphipod at SWI and in far field. stage 2 tube at SWI to the right of the fecal stack.
RWF	218E2	B	7/6/2019	7:42:32	Pale brown medium sand. Barnacles and caprellid amphipods on stones at SWI. Brown branching growth at left. fecal stack of podocerid amphipod at SWI at center.
RWF	218E2	C	7/6/2019	7:43:54	Pale brown coarse sand. Fecal stack and podocerid amphipod in far field.
RWF	218W1	A	7/6/2019	8:38:40	No penetration. Sea pens covered in brown growth out of focus at bottom edge.
RWF	218W1	B	7/6/2019	8:56:33	No penetration. Sea pens in nearfield covered in brown growth.
RWF	218W1	C	7/6/2019	8:58:15	Pale brown medium sand. Stage 2 tubes in midfield. Large stone with white and red spots in far field.
RWF	218W2	A	7/6/2019	9:24:34	Pale brown coarse sand with very coarse sand mixed in. Fecal stack and podocerid amphipod and stage 2 tubes at SWI. Curled fauna likely dragged by camera below the SWI at center.
RWF	218W2	C	7/6/2019	9:27:13	Pale brown coarse sand. Stage 2 tubes in nearfield. Possible pink fauna in far field at left.
RWF	218W2	D	7/6/2019	9:29:00	Pale brown coarse sand. Fecal stack of podocerid amphipod and stage 2 tubes at SWI. Streaks of slightly darker sand extending to max. penetration may be burrows. Small cerianthid anemone at SWI at right, its tube may be visible in the sand below.
RWF	219	A	7/6/2019	10:25:09	Pale brown very coarse sand. White egg case in midfield. Stage 2 tubes out of focus in far field.
RWF	219	B	7/6/2019	10:35:20	No penetration. Sea pens covered in brown growth in the nearfield. Star coral in PV, which is not visible in SPI.
RWF	219	D	7/6/2019	10:38:38	No penetration. Brown growth, white spots, and red encrusting organism out of focus in the far field.
RWF	220	B	7/5/2019	18:00:36	Pale brown medium sand. Collapsed fecal stack of podocerid amphipod at SWI at center-left. Stones with brown growth, orange encrusting organisms, and white spots in far field.

Area	StationID	Replicate	Date	Time	Comment
RWF	220	C	7/5/2019	18:01:38	No penetration. Stones with white spots and red encrusting organisms out of focus in the far field. White spots are likely barnacles based on PV.
RWF	220	D	7/5/2019	18:02:46	No penetration. Brown growth and white spots out of focus in the far field. White spots are likely barnacles based on PV.
RWF	220E1	B	7/5/2019	22:07:54	No penetration. White spots out of focus in the far field. White spots are likely barnacles based on PV. Burrows in PV.
RWF	220E1	C	7/5/2019	22:09:18	Pale brown medium sand. Shrimp at SWI at center, stage 2 tubes in midfield at center. Shell pieces in far field.
RWF	220E1	D	7/5/2019	22:10:38	No penetration. Stones covered in barnacles. Shrimp and possible anemone or sponge on stone at center. Sea pens in front of stone at left.
RWF	220E2	B	7/5/2019	22:34:03	Pale brown coarse sand. Fecal stack and podocerid amphipod and stage 2 tubes at SWI. Burrows in the upper cms of sediment.
RWF	220E2	C	7/5/2019	22:35:10	No penetration. Red spot out of focus may be epifauna.
RWF	220E2	D	7/5/2019	22:36:20	No penetration. Brown branching growth in nearfield at bottom edge.
RWF	220W1	A	7/5/2019	21:31:16	Pale brown coarse sand. Stage 2 tubes cover the SWI.
RWF	220W1	B	7/5/2019	21:32:37	No penetration. Brown-Red encrusting organism in nearfield. Possible stalks on large stone in far field.
RWF	220W1	C	7/5/2019	21:33:53	Pale brown coarse sand. Fecal stack and podocerid amphipod and stage 2 tubes at SWI. Possible small bivalve in water column.
RWF	220W2	C	7/5/2019	20:39:20	No penetration. Fecal stack and podocerid amphipod and possible tubes at SWI.
RWF	220W2	D	7/5/2019	20:40:35	No penetration. Possible tube near bottom edge.
RWF	221	A	7/11/2019	1:19:41	Pale brown fine sand. Fecal stack of podocerid amphipod and stage 2 tubes in nearfield. Slightly darker sand indicates burrows extending to max. penetration. Sparse burrows in PV.
RWF	221	B	7/11/2019	1:20:58	Pale brown fine sand. Stage 2 tubes at SWI with fecal stack and podocerid amphipod in far field. Slightly darker sand indicates burrows extending to max. penetration. Very small worms in the upper cms of sediment.
RWF	221	C	7/11/2019	1:22:23	Pale brown fine sand. Fecal casts at SWI. fecal stack and podocerid amphipod near possible large burrow opening in far field at right. Slightly darker sand indicates burrows extending to max. penetration. Burrow 1 cm down above burrow at center.
RWF	222	A	7/5/2019	3:34:53	Pale brown fine sand. Fecal stack and podocerid amphipod at SWI. Burrows in the upper cms of sediment.
RWF	222	B	7/5/2019	3:36:03	Pale brown fine sand. Stage 2 tubes and shrimp at SWI. Burrows in the upper cms of sediment.
RWF	222	C	7/5/2019	3:37:20	Pale brown fine sand. Fecal stack and podocerid amphipod and stage 2 tubes at SWI. Burrows in the upper cms of sediment. Structure ~2cm down in sediment at right may be a large tube/burrow.
RWF	223	A	7/11/2019	11:38:35	Pale brown very fine sand over gray very fine sand. Stage 2 tubes at SWI. Tube at center may be ampelisca amphipod. Burrows in the upper cms of sediment. Oxic streaks extend below the aRPD. Worms at mid-depths below the aRPD. Sparse burrows in PV.
RWF	223	C	7/11/2019	11:41:48	Pale brown very fine sand over gray very fine sand. Stage 2 tubes in far field. Stage 1 tubes at SWI at left, and fecal deposit at center. Burrows in the upper cms of sediment. Large open void at right. Sparse burrows in PV.
RWF	223	D	7/11/2019	11:43:17	Pale brown very fine sand over gray very fine sand. Ampelisca tube and possible fecal stack at SWI. Burrows/tubes in the upper cms of sediment. Long oxic streaks with worms extend below the aRPD. Worm and infilled void deep in sediment at bottom right. Sparse burrows in PV.
RWF	224	A	7/11/2019	8:16:30	Brown very coarse sand with a thin coating of pale brown fines at the SWI. Stage 2 tubes and fecal stack of podocerid amphipod at SWI. Burrows/tubes in the upper cms of sediment. Burrows in PV.
RWF	224	B	7/11/2019	8:17:46	Brown very coarse sand with a thin coating of pale brown fines at the SWI. Stage 2 tubes and fecal stack of podocerid amphipod at SWI. Burrows/tubes in the upper cms of sediment. Pink fauna ~3cm down at center left. Burrows in PV.
RWF	224	C	7/11/2019	8:19:08	Brown coarse sand. Fecal stack of podocerid amphipod in far field. Burrows in PV.
RWF	225	A	7/11/2019	6:27:41	Pale brown fine sand over gray very fine sand. Stage 2 tubes and pink fauna at SWI. Burrows in the upper cms of sediment. Long oxic streaks extend to max. penetration. Worms at mid-depths.
RWF	225	B	7/11/2019	6:29:06	Pale brown fine sand over gray very fine sand. Grouped tubes with protruding fauna and ampelisca tube at SWI. Collapsed fecal stack of podocerid amphipod at far right. Long oxic streaks extend to max. penetration. Large worm near max. penetration.
RWF	225	C	7/11/2019	6:30:31	Pale brown fine sand over gray very fine sand. Stage 2 tubes, fecal cases, and fecal stack of podocerid amphipod at SWI. Pink fauna at SWI. Burrows in the upper cms of sediment. Fauna at mid-depths at center-right. Slightly darker sand at center indicates burrow extending to max. penetration.
RWF	226	A	7/10/2019	20:15:14	Pale brown fine sand over gray very fine sand. Stage 2 tubes, fecal stack of podocerid amphipod, and shrimp at SWI. Polychaete near max. penetration. Pocket of oxic silt-clay to the left of polychaete. Burrows in PV.
RWF	226	C	7/10/2019	20:18:03	Pale brown fine sand over gray very fine sand. Stage 2 tubes, shrimp, and possible amphipod at SWI. Worm 1cm down at center, two polychaetes 3cm down at right, and larger polychaete at mid-depths. Long saturated streaks extend to max. penetration. Burrows in PV.
RWF	226	D	7/10/2019	20:19:24	Pale brown fine sand over gray very fine sand. Unknown organism at SWI at left. Possible tubes at center and in far field at right. Burrow ~2cm deep at right. Open void and brown saturated streaks at mid-depths. Burrows in PV.
RWF	227	A	7/10/2019	11:30:26	Pale brown fine sand over gray fine sand with faint patches of darker sediment. Stage 2 tubes and burrows at SWI and in the upper cms of sediment. Burrow halos and possible clear fauna at mid-depths, and large void at max. penetration.

Area	StationID	Replicate	Date	Time	Comment
RWF	227	B	7/10/2019	11:32:00	Pale brown fine sand over gray fine sand with faint patches of darker sediment. Stage 2 tubes, fecal stack of podocerid amphipod at SWI, and small burrows in the upper cms. Possible infilled void 3cm down. Large voids, patch of reduced sediment, and red fauna near max. penetration. Burrows in PV.
RWF	227	D	7/10/2019	11:35:22	Pale brown fine sand over gray fine sand with faint patches of darker sediment. Burrows in the upper cms of sediment and large burrow at left with fauna inside. Worms near the aRPD, and open void near max. penetration.
RWF	228	A	7/10/2019	13:32:33	Pale brown medium sand with streaks of brown at SWI. Fecal casts at SWI.
RWF	228	B	7/10/2019	13:34:00	Pale brown medium sand with streaks of brown at SWI. Fecal casts at SWI. Burrows in the upper cms of sediment. Burrows in PV.
RWF	228	C	7/10/2019	13:35:23	Pale brown medium sand with streaks of brown at SWI. Fecal casts at SWI. Pink fauna and shrimp at SWI. Burrows in the upper cms of sediment.
RWF	229	A	7/10/2019	15:24:01	Pale brown fine sand over gray fine sand. Fecal casts at SWI. Burrows in the upper cms of sediment, and worms near max. penetration. Burrows in PV.
RWF	229	B	7/10/2019	15:25:10	Pale brown fine sand over gray fine sand. Fecal casts and fecal stack of podocerid amphipod at SWI. Small worm about 3cm down at center. Burrows in PV.
RWF	229	C	7/10/2019	15:26:24	Pale brown fine sand over gray fine sand. Fecal casts and fecal stack of podocerid amphipod at in the far field. Small worm about 3cm down at center, saturated streaks in the upper cms of sediment. Burrows in PV.
RWF	230	A	7/10/2019	17:57:23	Pale brown fine sand over dark gray very fine sand with faint streaks of brown in the oxic layer. 1Mm tubes at SWI with pink fauna at right. Burrow, ~2cm at SWI with worms in the upper cms of sediment. Streaks of oxic sediment extend below the aRPD. Burrows in PV.
RWF	230	B	7/10/2019	17:58:41	Pale brown fine sand over dark gray very fine sand with faint streaks of brown in the oxic layer. Fecal stack of podocerid amphipod, ~1mm tubes, and Ampelisca tube on the right at SWI. Brown scallop swimming just above the SWI at center. Large burrow halo extending to max. penetration at right edge. Burrows in PV.
RWF	230	C	7/10/2019	17:59:54	Pale brown fine sand over dark gray very fine sand with faint streaks of brown in the oxic layer. Fecal stack of podocerid amphipod, shrimp, and white scallop at SWI in the nearfield. Stage 2 tube at left of the scallop in midfield. Worm 2cm down at center above smaller worm just below the aRPD. Streaks of oxic sediment extend below the aRPD. Burrows in PV.
RWF	231	A	7/9/2019	22:34:53	Pale brown medium sand over gray medium sand with streaks of brown at SWI. Fecal stack of podocerid amphipod at SWI. Possible stage 2 tubes in far field. Shrimp at SWI. Burrows in PV.
RWF	231	B	7/9/2019	22:36:03	Pale brown medium sand over gray medium sand with streaks of brown at SWI. Fecal casts, shrimp, and stage 2 tubes at SWI. Burrows in PV.
RWF	231	C	7/9/2019	22:37:13	Pale brown medium sand over gray medium sand. Fecal casts at SWI, stage 2 tubes in midfield. Burrows in PV.
RWF	232	A	7/11/2019	14:53:05	No penetration. Orange sea star, bivalve shell in the midfield, cobble covered in barnacles in the far field.
RWF	232	B	7/11/2019	14:54:27	Brown medium sand with pebbles mixed in and cobbles in far field. Fecal stack and podocerid amphipod in the far field and at SWI. Burrows in PV.
RWF	232	C	7/11/2019	14:55:43	Brown medium sand with pebbles mixed in and cobbles in far field. Fecal stack and podocerid amphipod, possible tubes in the far field.
RWF	233	A	7/11/2019	1:54:18	Pale brown medium sand with streaks of brown at SWI. Tubes at SWI, burrows in the upper cms of sediment.
RWF	233	B	7/11/2019	1:55:39	Pale brown medium sand with streaks of brown at SWI. Stage 2 tubes, fecal stack of podocerid amphipod, Jonah crab in far field at right.
RWF	233	C	7/11/2019	1:57:11	Pale brown medium sand with streaks of brown at SWI. Fecal stack and podocerid amphipod, tubes at SWI. Burrows in the upper cms of sediment.
RWF	234	A	7/11/2019	3:14:50	Brown-gray fine sand over dark gray very fine sand. Mound of sand spans the entire SWI. Stage 2 tubes in far field. Burrows in PV.
RWF	234	B	7/11/2019	3:16:11	Brown-gray fine sand over dark gray very fine sand. Fecal stack of podocerid amphipod, fecal casts at SWI. Tubes in far field. Polychaete ~4cm down, oxic streaks extend below the aRPD.
RWF	234	D	7/11/2019	3:19:03	Brown-gray fine sand over dark gray very fine sand. Fecal stack of podocerid amphipod and shrimp at SWI. Stage 2 tubes in the far field. Worm near aRPD, center-left.
RWF	235	A	7/9/2019	19:45:20	Pale brown coarse sand with finer grains mixed in. Stage 2 tubes at the SWI.
RWF	235	B	7/9/2019	19:46:44	Pale brown coarse sand with finer grains mixed in. Fecal stack of podocerid amphipod at SWI and in far field.
RWF	235	C	7/9/2019	19:47:55	Pale brown coarse sand with finer grains mixed in. Fecal stack of podocerid amphipod, stage 2 tubes at SWI. Burrows in the upper cms of sediment. Streaks of reduced sediment at mid-depths.
RWF	236	A	7/10/2019	8:23:47	Brown-gray fine sand with faint streaks of brown in the oxic layer. Stage 2 tubes, fecal stack and podocerid amphipod in far field. Saturated streaks extend to max. penetration. Burrows in PV.
RWF	236	E	7/10/2019	8:59:36	Brown-gray fine sand with faint streaks of brown in the oxic layer. Stage 2 tubes in far field. Burrowing features extend to max. penetration.
RWF	236	F	7/10/2019	9:01:19	Brown-gray fine sand with faint streaks of brown in the oxic layer. Stage 2 tubes in midfield, fecal stack and podocerid amphipod in far field. Burrows and tubes in the upper cms of sediment. Worms below 4cm.
RWF	237	A	7/10/2019	23:48:36	Orange medium sand. Fecal stack of podocerid amphipod at SWI/midfield. Clumps of tubes at SWI. Sea pen with brown growth in far field.

Area	StationID	Replicate	Date	Time	Comment
RWF	237	B	7/10/2019	23:49:59	Orange medium sand. Fecal stack and podocerid amphipod at SWI/far field. Clumps of tubes in far field. possible fauna 1cm down at center and at right.
RWF	237	D	7/10/2019	23:52:35	Orange medium sand. Fecal stack and podocerid amphipod at SWI/far field. Clumps of tubes at SWI. Streaks of brown extending down from SWI may be burrows. Shrimp at SWI.
RWF	238	A	7/10/2019	4:56:03	Brown-gray fine sand over dark gray fine sand with streaks of brown at SWI. Fecal stack and podocerid amphipod, shrimp, and fecal casts at SWI. Possible fauna in sediment 3cm down at left .
RWF	238	B	7/10/2019	4:57:10	Brown-gray fine sand over dark gray silt-clay. Stage 2 tubes (possibly Ampelisca) in far field.
RWF	238	C	7/10/2019	4:58:16	Brown-gray fine sand over dark gray fine sand with streaks of brown at SWI. Fecal casts at SWI, fecal stack and podocerid amphipod in far field. Burrows in PV.
RWF	239	E	7/10/2019	6:23:29	Pale brown medium sand with streaks of brown at SWI. Stage 2 tubes and fauna at SWI.
RWF	239	G	7/10/2019	6:27:14	Pale brown medium sand with streaks of brown at SWI. Fecal stack and podocerid amphipod, other fauna in far field. Burrows in the upper cms of sediment.
RWF	239	H	7/10/2019	6:33:02	Pale brown medium sand with streaks of brown at SWI. Fecal stack of podocerid amphipod in midfield at SWI. Cobble in far field with bright spots (possible barnacles) and branching growths.
RWF	240	A	7/9/2019	15:18:20	Pale brown medium sand with streaks of brown at SWI. Burrows in the upper cms of sediment, possible stage 2 tubes in far field.
RWF	240	B	7/9/2019	15:19:30	Pale brown medium sand with streaks of brown at SWI. Fecal casts and shrimp at SWI, fecal stack of podocerid amphipod in far field. Burrows in the upper cms of sediment. Worm visible in burrow near max penetration at right.
RWF	240	C	7/9/2019	15:20:40	Pale brown medium sand with streaks of brown at SWI. Fecal stack of podocerid amphipod in midfield. Burrows in the upper cms of sediment. Polychaete near max. penetration.
RWF	241	A	7/4/2019	22:58:09	Brown fine sand. Stage 2 tubes in background at left.
RWF	241	B	7/4/2019	22:59:21	Brown fine sand. Stage 2 tubes in midfield. Burrows in the upper cms of sediment. Burrow at center-right extends to max. penetration, with fauna at bottom.
RWF	241	C	7/4/2019	23:00:16	Brown fine sand. Fecal stack of podocerid amphipod, stage 2 tubes in midfield. Jonah crab at SWI at right .
RWF	242	A	7/5/2019	1:18:50	Brown medium sand. Fecal stack and podocerid amphipod at SWI. Sand-coated tube at SWI under curled fecal stack in midfield.
RWF	242	B	7/5/2019	1:20:06	Brown medium sand. Fecal stack of podocerid amphipod at SWI with stage 2 tubes.
RWF	242	C	7/5/2019	1:21:22	Brown medium sand. Fecal stack of podocerid amphipod at SWI with stage 2 tubes.
RWF	243	A	7/5/2019	19:02:51	Pale brown medium sand with patch of dark gray fines near max penetration. Fecal stack of podocerid amphipod at SWI. Small burrow 1cm down at right, and possible fauna 3cm down at center.
RWF	243	C	7/5/2019	19:05:15	Pale brown medium sand over dark gray silt-clay. Fecal stack and podocerid amphipod with stage 2 tubes at SWI. Possible 4-5cm burrow at right. Possible infilled void near max. penetration at left.
RWF	243	D	7/5/2019	19:06:18	Pale brown medium sand over dark gray silt-clay with dark camera artefacts at SWI. Fecal stack and podocerid amphipod and red-orange emergent fauna at SWI. Deep burrow halos at center of image.
RWF	244	A	7/6/2019	0:38:59	Pale brown medium sand. Fecal stack of podocerid amphipod and collapsed sand-coated tubes at SWI.
RWF	244	B	7/6/2019	0:40:22	Pale brown medium sand. Stage 2 tubes and fecal casts at SWI.
RWF	244	C	7/6/2019	0:41:51	Pale brown medium sand with some larger grains mixed in. Fecal casts and stage 2 tubes at SWI, fecal stack of podocerid amphipod and fauna with two antennae in far field.
RWF	245	A	7/6/2019	3:39:20	Pale brown medium sand. Fecal stack and podocerid amphipod, fecal casts, and stage 2 tubes at SWI. Burrows in the upper cms of sediment.
RWF	245	B	7/6/2019	3:40:36	Pale brown medium sand. Shrimp and one possible clump of tubes or fecal material in far field. Possible epifauna in nearfield at right (gastropod and crab?). Stage 2 tubes at SWI.
RWF	245	D	7/6/2019	3:43:52	Pale brown medium sand with larger grains mixed in. One stone covered in barnacles in the far field. Stage 2 tubes at SWI.
RWF	246	A	7/7/2019	2:35:25	Pale brown medium sand. Fecal stack and podocerid amphipod with caprellid amphipods in nearfield. Stage 2 tubes in nearfield. Burrows in the upper cms of sediment. Possible fauna under burrow 2cm down at center-left.
RWF	246	B	7/7/2019	2:36:56	Pale brown medium sand. Fecal stack and podocerid amphipod in midfield. Possible red fauna at mid-depths.
RWF	246	C	7/7/2019	2:38:09	Pale brown medium sand. Small fecal stack of podocerid amphipod at SWI, higher boundary roughness in far field.
RWF	247	A	7/7/2019	0:38:07	Orange-brown coarse sand with larger grains mixed in. Stage 1 tubes at the SWI in foreground. Stage 2 tubes at SWI in background.
RWF	247	B	7/7/2019	0:39:27	Orange-brown coarse sand. Tubes or fecal casts at the SWI, larger sand-coated tube in the far field.
RWF	247	C	7/7/2019	0:40:52	Orange-brown coarse sand with cobbles in the far field. Tubes at SWI with burrow in the upper cms of sediment. Shrimp in midfield. Stones in far field have brown growth attached.
RWF	248	A	7/6/2019	22:17:38	Pale brown medium sand. Fecal stack of podocerid amphipod in midfield at right. Possible sea pen in far field.

Area	StationID	Replicate	Date	Time	Comment
RWF	248	C	7/6/2019	22:19:54	Pale brown medium sand. Fecal stack and podocerid amphipod at SWI.
RWF	248	D	7/6/2019	22:21:01	Pale brown coarse sand with larger grains mixed in. Large sand-coated tube at SWI at left. Stones with hydroids in the far field.
RWF	249	A	7/6/2019	19:03:17	No penetration. Brown branching growth and stones in far field. White spots on stones may be coral or barnacles. The closer spots appear to be barnacles.
RWF	249	B	7/6/2019	19:04:15	No penetration. Boulder in far field with white spots, brown branching growth, and sea star. The closer spots appear to be barnacles, one patch at the furthest extent of the camera flash at left may be coral.
RWF	249	C	7/6/2019	19:05:29	No penetration. Boulders in the far field with Northern Star Coral ("blurry" white spots) and barnacles (angular white spots). Translucent-pink fauna closer to camera at bottom.
RWF	250	A	7/7/2019	5:17:03	Pale brown fine sand. Stage 2 tubes at the SWI with possible fecal casts. Burrow ~2cm deep at center, and worm 2cm down
RWF	250	B	7/7/2019	5:24:15	Pale brown fine sand over gray fine sand. Fecal stack and podocerid amphipod with stage 2 tubes and fecal casts at SWI. Deep burrow at left.
RWF	250	C	7/7/2019	5:25:50	Pale brown medium sand. Fecal stack and podocerid amphipod with stage 2 tubes at SWI. Possible sand-coated tube at left edge. Burrows in upper cms of sediment.
RWF	251	A	7/8/2019	6:37:16	Orange-brown medium sand with larger grains mixed in. Fecal stack of podocerid amphipod at SWI, worm near max. penetration at right.
RWF	251	B	7/8/2019	6:38:50	Orange-brown medium sand with larger grains mixed in. Fecal stack and podocerid amphipod and stage 2 tubes at SWI. Burrows in upper cms of sediment, one extends to max. penetration at right.
RWF	251	C	7/8/2019	6:40:02	Orange-brown medium sand. Fecal stack and podocerid amphipod at SWI.
RWF	252	A	7/8/2019	21:06:52	Pale brown medium sand. Fecal stack and podocerid amphipod, pink fauna, and sand-coated tube in the far field. Burrows in the upper 4cm of sediment.
RWF	252	B	7/8/2019	21:08:00	Pale brown medium sand. Gorgonian in midfield partially covered with extra polymeric substances. Stage 2 tubes in midfield under sea pen.
RWF	252	C	7/8/2019	21:09:06	Pale brown medium sand. Fecal stack and podocerid amphipod in far field. Shrimp in water column at right edge.
RWF	253	A	7/8/2019	14:34:34	Orange-brown coarse sand. Fecal stack of podocerid amphipod at SWI. stage 2 tubes at SWI. Burrows in upper cms of sediment.
RWF	253	C	7/8/2019	14:36:55	Orange-brown coarse sand. Fecal stack and podocerid amphipod and stage 2 tubes in nearfield.
RWF	253	D	7/8/2019	14:38:00	Orange-brown coarse sand. Fecal stack and podocerid amphipod in nearfield, stage 2 tubes at center in far field.
RWF	254	A	7/8/2019	3:06:28	Pale brown coarse sand. Fecal stack and podocerid amphipod and sand-coated tubes at SWI. Streak of reduced sediment about 1cm down.
RWF	254	B	7/8/2019	3:07:32	Pale brown medium sand. Fecal stack and podocerid amphipod at SWI. Burrows in upper cms of sediment.
RWF	254	C	7/8/2019	3:08:41	Pale brown medium sand. Fecal stack and podocerid amphipod in midfield, stage 2 tubes cover the SWI with pink fauna at center (may be shrimp). Burrows in upper cms of sediment. Yellow-brown bivalve buried in sediment at center.
RWF	255	A	7/9/2019	1:13:53	Brown medium sand. Fecal stack of podocerid amphipod and small tubes at SWI. Shrimp and possible caprellid amphipod at center.
RWF	255	B	7/9/2019	1:15:02	Pale brown medium sand. Fecal stack and podocerid amphipod in midfield, fecal cast or tube at SWI at left edge.
RWF	255	C	7/9/2019	1:16:34	Pale brown medium sand. Fecal stack and podocerid amphipod in nearfield, stage 2 tubes at center in far field. Long, dark-colored burrows extend to max. penetration.
RWF	256	A	7/8/2019	23:16:27	Brown coarse sand. Fecal stack of podocerid amphipod at SWI, mound and pocket of smaller grains at right may be remnants of a biogenic structure.
RWF	256	B	7/8/2019	23:17:35	Brown coarse sand. Fecal casts in far field.
RWF	256	C	7/8/2019	23:18:46	Brown coarse sand. Fecal stack and podocerid amphipod at SWI.
RWF	257	A	7/9/2019	4:02:59	Pale brown very coarse sand with larger grains mixed in. Fecal stack of podocerid amphipod at SWI.
RWF	257	B	7/9/2019	4:04:04	Pale brown very coarse sand. Stage 1 tubes and fauna at SWI.
RWF	257	C	7/9/2019	4:05:13	Pale brown very coarse sand mixed with coarse sand. Collapsed fecal stack of podocerid amphipod at SWI.
RWF	258	A	7/9/2019	2:30:20	Pale brown coarse sand with some larger grains mixed in. Stage 2 tubes at SWI in background.
RWF	258	B	7/9/2019	2:31:29	Pale brown very coarse sand. Fecal stack, tube of podocerid amphipod at SWI.
RWF	258	C	7/9/2019	2:32:48	Pale brown fine pebble over coarse sand with larger grains mixed in. Fecal stack, tube of podocerid amphipod at SWI. Curled fauna under pebble at left. Caprellid amphipods at center, and stage 2 tube at SWI.
RWF	259	A	7/8/2019	0:13:38	Pale brown medium sand. Fecal stack, tube, and podocerid amphipod at SWI.

Area	StationID	Replicate	Date	Time	Comment
RWF	259	B	7/8/2019	0:15:39	Pale brown medium sand. Fecal stack and podocerid amphipod at SWI. Polychaete in sand.
RWF	259	C	7/8/2019	0:17:09	Pale brown medium sand. Fecal stack, tube, and podocerid amphipod at SWI. Possible worms 2-4cm deep.
RWF	260	A	7/8/2019	9:21:49	Pale brown medium sand. Fecal stack, tube of podocerid amphipod at SWI. Burrows in PV.
RWF	260	B	7/8/2019	9:28:42	Pale brown medium sand. Fecal stack of podocerid amphipod, stage 2 tubes at SWI (ampelisca amphipod). Small fecal casts at SWI. Burrows in the upper 2-4cm of sediment, and burrows in PV.
RWF	260	C	7/8/2019	9:30:05	Pale brown medium sand. Fecal stack of podocerid amphipod at SWI. Burrows in PV.
RWF	261	A	7/8/2019	17:23:34	Orange very coarse sand. Fecal stack of podocerid amphipod at SWI.
RWF	261	B	7/8/2019	17:24:44	Orange very coarse sand. Fecal stack of podocerid amphipod at SWI.
RWF	261	D	7/8/2019	17:27:00	Orange very coarse sand. Fecal stack of podocerid amphipod with possible caprellid amphipod at SWI. Polychaete at depth.
RWF	262	A	7/7/2019	17:51:19	Pale brown medium sand. Fecal stack of podocerid amphipod, and small fecal casts at SWI. Shrimp at SWI at center. Burrows in PV.
RWF	262	B	7/7/2019	17:52:39	Pale brown medium sand. Fecal stack of podocerid amphipod, and small fecal casts at SWI. Burrows in PV.
RWF	262	D	7/7/2019	17:54:56	Pale brown medium sand. Fecal stack of podocerid amphipod, and small fecal casts at SWI. Burrows in PV.
RWEC-OCS	401	A	7/12/2019	10:22:08	Pale brown medium sand with brown streaks at SWI. Stage 2 tubes and fecal deposits at SWI.
RWEC-OCS	401	B	7/12/2019	10:23:26	Pale brown medium sand. Fecal stack of podocerid amphipod at SWI with possible caprellid amphipod in far field. Burrows in PV.
RWEC-OCS	401	C	7/12/2019	18:44:55	Pale brown medium sand. Fecal stack, tube of podocerid amphipod at SWI. Fauna in sand around 3cm deep. Burrows in PV.
RWEC-OCS	402	A	7/12/2019	17:59:32	Pale brown medium sand. Fecal stack of podocerid amphipod at SWI. Burrows in PV.
RWEC-OCS	402	B	7/12/2019	18:00:54	No penetration. Fecal stacks of podocerid amphipod in far field.
RWEC-OCS	402	C	7/12/2019	18:02:03	Pale brown medium sand. Fecal stack of podocerid amphipod at SWI. Burrows in PV.
RWEC-OCS	403	A	7/12/2019	17:35:54	Orange-brown coarse sand. Stage 2 tubes cover the SWI. Fecal stacks and curled fauna at SWI. Possible fauna in sediment near SWI at left.
RWEC-OCS	403	B	7/12/2019	17:36:56	Orange-brown coarse sand. Fecal stack, tube of podocerid amphipod at SWI.
RWEC-OCS	403	C	7/12/2019	17:38:08	Orange-brown coarse sand. Fecal stack of podocerid amphipod with stage 2 tubes at SWI. Burrows in PV.
RWEC-OCS	404	A	7/12/2019	16:12:58	Light brown fine sand over dark gray silt-clay. Layer of very dark silt-clay at mid-depths. Fecal stack, tube of podocerid amphipod at SWI. Void near max. penetration.
RWEC-OCS	404	B	7/12/2019	16:14:12	Light brown medium sand over dark gray silt-clay. Fecal stack, tube of podocerid amphipod at SWI. A burrow is delineated by pale sand grains that have been pulled down into the darker layer.
RWEC-OCS	404	D	7/12/2019	16:16:42	Light brown coarse sand over dark gray silt-clay. Fecal stack, tube of podocerid amphipod at SWI.
RWEC-OCS	405	A	7/12/2019	0:03:16	Pale brown medium sand. Fecal stack, tube of podocerid amphipod at SWI. Worm near max. penetration.
RWEC-OCS	405	B	7/12/2019	0:04:37	Pale brown medium sand. Fecal stack, tube of podocerid amphipod at SWI with possible epifauna in far field.
RWEC-OCS	405	D	7/12/2019	0:07:20	Pale brown medium sand. Fecal stack, tube, and podocerid amphipod at SWI.
RWEC-OCS	406	A	7/11/2019	23:36:03	Pale brown fine sand over gray fines. Fecal stack, tube, and podocerid amphipod at SWI, polychaete near max. penetration. Burrows in PV.
RWEC-OCS	406	B	7/11/2019	23:37:17	Pale brown fine sand over gray fines. Fecal stack and podocerid amphipod at SWI, small worms about 4cm deep in sediment. Burrows in PV.
RWEC-OCS	406	D	7/11/2019	23:39:53	Pale brown fine sand over gray fines. Fecal stack, podocerid amphipod, and stage 2 tubes at SWI. Worms near max. penetration.
RWEC-OCS	407	A	7/11/2019	22:52:31	Pale brown medium sand with brown streaks at SWI. Fecal stack, podocerid amphipod, and stage 2 tubes at SWI. Pocket of dark material in pale sand.
RWEC-OCS	407	B	7/11/2019	22:53:56	Pale brown medium sand. Stage 2 tubes at SWI.
RWEC-OCS	407	C	7/11/2019	22:55:09	Pale brown medium sand. Fecal stack of podocerid amphipod at SWI. Burrows in PV.
RWEC-OCS	408	A	7/11/2019	22:29:58	Pale brown medium sand. Fecal stack of podocerid amphipod at SWI.

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RWEC-OCS	408	B	7/11/2019	22:31:12	Pale brown medium sand. Fecal stack of podocerid amphipod at SWI. Curled fauna in far field.
RWEC-OCS	408	C	7/11/2019	22:32:23	Pale brown medium sand. Stage 2 tubes at SWI. Possible fauna ~4cm deep at left.
RWEC-OCS	409	A	7/11/2019	21:52:22	Pale brown medium sand. Stage 2 tubes at SWI. Burrows in the upper 2-4cm.
RWEC-OCS	409	B	7/11/2019	21:53:38	Pale brown medium sand. Fecal stack of podocerid amphipod, and stage 2 tubes at SWI. Burrows in the upper 2-4cm.
RWEC-OCS	409	C	7/11/2019	21:54:52	Pale brown medium sand. Fecal deposits at SWI.
RWEC-OCS	410	A	7/11/2019	21:28:12	Brown fine sand over gray fine sand. Fecal stack of podocerid amphipod, and stage 2 tubes at SWI with sea star in the far field. Worms below 4cm in sediment, and void near max. penetration.
RWEC-OCS	410	B	7/11/2019	21:29:22	Pale brown fine sand over gray fine sand. Small burrows and worms in the upper 2-4cm of sediment. Possible camera artefact at SWI at far left. Worm and open voids at depth amid large areas of oxic sediment.
RWEC-OCS	410	C	7/11/2019	21:30:38	Brown fine sand over gray fine sand. Stage 2 tubes at SWI with burrow and void in the upper cms of sediment. Worms below 4cm deep. Long streaks of oxic material extend below the aRPD.
RWEC-OCS	411	A	7/11/2019	20:09:25	No penetration. Cobbles covered with barnacles and brown growth. Clear/red shrimp on a cobble.
RWEC-OCS	411	B	7/11/2019	20:10:47	No penetration. The far field of the image shows a rocky habitat.
RWEC-OCS	411	C	7/11/2019	20:12:08	No penetration. Bivalve shell and brown branching growth in nearfield. The far field of the image shows a rocky habitat with barnacles.
RWEC-OCS	412	A	7/12/2019	1:42:04	Light gray fine sand over gray very fine sand. Fecal stack of podocerid amphipod with fecal deposits at SWI. Pink fauna at SWI. Worms above 4cm in sediment.
RWEC-OCS	412	B	7/12/2019	1:43:58	Pale brown fine sand with streaks of brown material at the SWI. Fecal stack of podocerid amphipod at SWI.
RWEC-OCS	412	C	7/12/2019	1:45:17	Brown medium sand. Fecal stack of podocerid amphipod at SWI. Worms above 4cm in sediment.
RWEC-OCS	413	A	7/12/2019	0:53:50	Pale brown fine sand. Fecal stack of podocerid amphipod at SWI. Stage 2 tubes in far field.
RWEC-OCS	413	B	7/12/2019	0:55:31	Pale brown fine sand over gray. Collapsed fecal stack and stage 2 tube at SWI. Possible clear epifauna at center. Worms near the aRPD boundary. Burrows in PV.
RWEC-OCS	413	D	7/12/2019	0:58:49	Pale brown fine sand over gray. Fecal stack of podocerid amphipod at SWI. Worms near the aRPD boundary. Burrows in PV.
RWEC-OCS	414	A	7/11/2019	15:19:07	Pale brown medium sand. Fecal stack and podocerid amphipod at SWI. Burrows in PV.
RWEC-OCS	414	B	7/11/2019	15:20:20	Pale brown medium sand. Fecal stack of podocerid amphipod at SWI. Burrows in PV.
RWEC-OCS	414	C	7/11/2019	15:21:41	Pale brown medium sand. Fecal stack of podocerid amphipod at SWI.
RWEC-OCS	415	A	7/11/2019	16:08:45	Pale brown medium sand. Low penetration. fecal stacks, tubes, of podocerid amphipod in far field. Burrows in PV.
RWEC-OCS	415	B	7/11/2019	16:10:00	Pale brown medium sand. Low penetration. fecal stacks of podocerid amphipod. Burrows in PV.
RWEC-OCS	415	C	7/11/2019	16:11:24	Pale brown medium sand. Low penetration. fecal stacks of podocerid amphipod at SWI. Possible clear epifauna at SWI.
RWEC-OCS	416	A	7/11/2019	16:35:15	Pale brown medium sand with brown streaks at SWI. Stage 2 tubes, shrimp at SWI. Burrows in PV.
RWEC-OCS	416	C	7/11/2019	16:38:23	Pale brown medium sand over fine sand. Stage 2 tubes at SWI. Void near max. penetration. Burrows in PV.
RWEC-OCS	416	D	7/11/2019	16:39:45	Pale brown medium sand over fine sand with brown streaks at SWI. Stage 2 tubes with fauna at SWI. Worms above 4cm in sediment. Burrows in PV.
RWEC-OCS	417	A	7/11/2019	18:11:38	Pale brown fine sand over gray very fine sand. Stage 2 tubes with fauna at SWI. Worms and a void deep in sediment. Long streaks of oxic material extend below the aRPD. Burrows in PV.
RWEC-OCS	417	C	7/11/2019	18:14:15	Pale brown fine sand over gray very fine sand. Stage 2 tubes with fauna at SWI. Worms and a burrow in the upper 2-4cm of sediment, and a void at depth. Long streaks of oxic material extend below the aRPD. Burrows in PV.
RWEC-OCS	417	D	7/11/2019	18:15:32	Pale brown fine sand over gray very fine sand. Fecal stack, tube of podocerid amphipod at SWI. Burrows in the upper 2cm of sediment. Worm near the aRPD at far right. Streaks of oxic material extend below the aRPD. Burrows in PV.
RWEC-OCS	418	A	7/11/2019	18:36:30	Very low penetration. The far field of the image shows a rocky habitat. Brown growth in nearfield, large orange object in the far field.
RWEC-OCS	418	B	7/11/2019	18:38:09	Low penetration. Pale brown silt-clay with fluidized grains creating texture at SWI. Cobbles with attached organisms on surface. Stage 2 tubes in the far field.
RWEC-OCS	418	D	7/11/2019	18:40:38	Low penetration. Pale brown silt-clay with fluidized grains creating texture at SWI. Cobbles with attached organisms on surface. Stage 2 tube under cobble at right.
RWEC-OCS	419	A	7/11/2019	19:37:10	No penetration. The far field of the image shows a rocky habitat.
RWEC-OCS	419	B	7/11/2019	19:38:24	Very low penetration. Pale brown silt-clay with fluidized grains creating texture at SWI. Cobble with brown growth in nearfield.
RWEC-OCS	419	C	7/11/2019	19:39:44	Low penetration. Pale brown very fine sand with fluidized grains creating texture at SWI. Cobbles with brown growth on surface. Tall, thin object in far field.
RWEC-OCS	420	A	7/12/2019	22:00:42	Pale brown medium sand. Collapsed fecal stack and possible stage 2 tubes at SWI.

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RWEC-OCS	420	B	7/12/2019	22:01:54	Pale brown medium sand mixed with fine sand. Possible fecal deposits at SWI. Fecal stack, tube of podocerid amphipod in far field.
RWEC-OCS	420	C	7/12/2019	22:03:07	Pale brown medium sand mixed with fine sand. Fecal stack, stage 2 tubes, of podocerid amphipod at SWI.
RWEC-OCS	421	D	7/14/2019	8:53:37	Pale brown very fine sand over gray silt-clay. Camera artefacts at SWI. Faint infilled void at left. Small worms throughout sediment column. Cerianthids in PV.
RWEC-OCS	421	E	7/14/2019	9:45:09	Pale brown fine sand over gray silt-clay. Fecal stack, tube of podocerid amphipod at SWI. Burrow halo below the aRPD. Patch of black material in sediment at far right.
RWEC-OCS	421	F	7/14/2019	9:46:49	Pale brown very fine sand over gray. Fecal stack and podocerid amphipod at SWI. Worms above 4cm in sediment, and a burrow halo extends from the SWI below the aRPD at left.
RWEC-OCS	422	B	7/14/2019	8:16:16	Pale brown fine sand. Collapsed fecal stack and possible fecal deposits at SWI. Worm near max. penetration. Burrows in PV.
RWEC-OCS	422	C	7/14/2019	8:17:35	Pale brown medium sand. Stage 2 tubes, shrimp, possible scallop shell, and possible crab carapace at SWI. Burrows in PV.
RWEC-OCS	422	D	7/14/2019	8:19:10	Pale brown medium sand. Stage 2 tube and pebbles at SWI. Burrows in PV.
RWEC-OCS	423	A	7/14/2019	7:26:09	Pale brown coarse sand. Stage 2 tubes at SWI. Very small, sand-colored crabs at SWI on the right. Possible burrow in sand below the crabs.
RWEC-OCS	423	C	7/14/2019	7:29:15	Pale brown coarse sand. Stage 2 tubes at SWI. stage 2 tube at center with burrow structure in sand below.
RWEC-OCS	423	D	7/14/2019	7:30:50	Pale brown coarse sand. Stage 2 tubes at SWI.
RWEC-OCS	424	A	7/14/2019	7:01:19	Pale brown coarse sand. Fecal stack, tube of podocerid amphipod at SWI.
RWEC-OCS	424	C	7/14/2019	7:04:11	Pale brown coarse sand with brown sand near the SWI. Stage 2 tubes at SWI.
RWEC-OCS	424	D	7/14/2019	7:05:19	Pale brown coarse sand with brown sand near the SWI. Stage 2 tubes at SWI.
RWEC-OCS	425	A	7/14/2019	4:56:37	Orange-brown medium sand. Stage 2 tubes and camera artefacts at SWI.
RWEC-OCS	425	B	7/14/2019	4:57:56	Pale brown medium sand. Stage 2 tubes at SWI.
RWEC-OCS	425	C	7/14/2019	4:59:16	Orange-brown coarse sand. Tubes coated with sand and shells at SWI.
RWEC-OCS	426	A	7/14/2019	3:15:40	Pale brown medium sand with a layer of brown sand at SWI. Fecal stack and podocerid amphipod at SWI.
RWEC-OCS	426	B	7/14/2019	3:16:49	Pale brown medium sand. Stage 2 tubes at SWI in background.
RWEC-OCS	426	C	7/14/2019	3:18:02	Pale brown medium sand. Stage 2 tubes at SWI in background.
RWEC-OCS	427	A	7/14/2019	2:05:29	Pale brown coarse sand with streaks of brown sand. Stage 2 tubes at SWI.
RWEC-OCS	427	B	7/14/2019	2:06:51	Pale brown coarse sand with streaks of brown sand. Fecal stack and podocerid amphipod at SWI.
RWEC-OCS	427	C	7/14/2019	2:08:23	Pale brown coarse sand. Stage 2 tubes at SWI.
RWEC-OCS	428	A	7/14/2019	1:19:52	Pale brown medium sand. Fecal stack of podocerid amphipod at SWI.
RWEC-OCS	428	B	7/14/2019	1:21:08	Pale brown medium sand. Stage 2 tubes at SWI.
RWEC-OCS	428	C	7/14/2019	1:22:29	Pale brown coarse sand. Stage 2 tubes at SWI.
RWEC-RI	429	A	7/14/2019	0:27:24	Pale brown medium sand. Stage 2 tubes at SWI.
RWEC-RI	429	B	7/14/2019	0:28:33	Pale brown medium sand. Stage 2 tubes at SWI. Amphipod in WC.
RWEC-RI	429	C	7/14/2019	0:29:40	Pale brown medium sand. Stage 2 tubes at SWI. Burrows in PV.
RWEC-RI	430	A	7/13/2019	8:23:11	Pale brown medium sand under a layer of orange-brown medium sand. Tubes in upper 2cm of sand. Burrows in PV.
RWEC-RI	430	B	7/13/2019	8:24:43	Pale brown medium sand. Tubes in upper 2cm of sand. Burrows in PV.
RWEC-RI	430	C	7/13/2019	8:26:23	Pale brown medium sand. Thin layer of orange material at SWI. Tubes in upper 2cm of sand. Burrows in PV.
RWEC-RI	431	A	7/13/2019	7:43:27	Pale gray very fine sand over gray very fine sand. Thin layer of orange material at SWI. Fecal stacks and podocerid amphipods with tubes at SWI. Worms and burrow halos below 4cm in sediment, with void. Burrows and cerianthids in PV.
RWEC-RI	431	C	7/13/2019	7:46:27	Pale gray fine sand over gray very fine sand. Thin layer of orange material at SWI. Fecal stacks and podocerid amphipods with tubes at SWI. Worms and burrow halos below 4cm in sediment, with void. Burrows in PV.
RWEC-RI	431	D	7/13/2019	7:48:08	Pale gray fine sand over gray very fine sand. Thin layer of orange material at SWI. Fecal stacks and podocerid amphipods with tubes at SWI. Worms and burrow halos below 4cm in sediment. Long streaks of oxic material below aRPD. Burrows and cerianthids in PV.
RWEC-RI	432	A	7/13/2019	7:10:43	Pale gray fine sand over gray very fine sand. Thin layer of orange material at SWI. Stage 2 tubes and pink fauna at SWI. Worms below 4cm in sediment. Burrows in PV.
RWEC-RI	432	C	7/13/2019	7:13:41	Pale gray fine sand over gray very fine sand. Thin layer of orange material at SWI. Fecal stacks and podocerid amphipod with tubes at SWI. Streaks of oxic material below aRPD, and worms below 4cm. Burrows in PV.
RWEC-RI	432	D	7/13/2019	7:15:34	Pale gray fine sand over gray very fine sand. Stage 2 tubes, fecal stack of podocerid amphipod at SWI. A large depression spans the SWI, with a small mound at the bottom and oxic burrow halo below. Worms below 4cm in sediment. Burrows in PV.
RWEC-RI	433	A	7/13/2019	6:45:55	Pale gray fine sand over gray very fine sand. Stage 2 tubes, fecal stacks with podocerid amphipods at SWI. Open voids and worms below the aRPD.
RWEC-RI	433	B	7/13/2019	6:47:11	Pale gray fine sand over gray very fine sand. Stage 2 tubes, fecal stacks with podocerid amphipods at SWI. Infilled void and large section of infauna in sediment.
RWEC-RI	433	C	7/13/2019	6:48:35	Pale gray fine sand over gray very fine sand. Brown streaks at SWI. Stage 2 tubes, fecal stacks of podocerid amphipod at SWI. Large voids below the aRPD, and a red patch (possible infauna) in lower left. Burrow near the aRPD at left.
RWEC-RI	434	A	7/13/2019	10:08:00	Pale gray fine sand over gray fine sand. Brown streaks at SWI. Tubes or collapsed fecal stacks at SWI. Worms under 4cm deep.

Area	StationID	Replicate	Date	Time	Comment
RWEC-RI	434	B	7/13/2019	10:10:02	Pale gray fine sand over gray fine sand. Stage 2 tube at SWI. Brown streaks at SWI. Stage 2 tube at SWI, burrows in PV.
RWEC-RI	434	C	7/13/2019	10:11:26	Pale gray medium sand mixed with fine sand. Possible fecal matter or tubes dragged below the SWI. Burrows in PV.
RWEC-RI	435	A	7/13/2019	11:15:04	Pale brown medium sand with brown streaks. Stage 2 tubes at the SWI. Worm about 2cm deep at center. Burrows in PV.
RWEC-RI	435	B	7/13/2019	11:20:49	Pale brown medium sand with brown streaks. Stage 2 tubes at the SWI. Worm near max. penetration. Burrows in PV.
RWEC-RI	435	D	7/13/2019	11:23:39	Pale brown medium sand with brown streaks. Tubes and fecal stacks with podocerid amphipods at SWI. Burrows in PV.
RWEC-RI	436	A	7/13/2019	11:40:53	Orange-brown medium sand with pockets of gray fine sand. Voids near max. penetration. Burrows in PV.
RWEC-RI	436	C	7/13/2019	11:43:57	Orange-brown medium sand over gray fine sand. Camera artefacts at SWI. Short streaks of oxic material below aRPD, and one streak of dark material at depth. Burrows and fecal stacks in PV.
RWEC-RI	436	D	7/13/2019	11:45:27	Orange-brown medium sand mixed with gray fine sand. Stage 2 tubes in the far field. Fecal deposits at the SWI. Possible worm intersected at right. Burrows in PV.
RWEC-RI	437	A	7/13/2019	12:23:57	Orange-brown medium sand mixed with gray fine sand. Stage 2 tube at SWI. Burrows in PV.
RWEC-RI	437	B	7/13/2019	12:25:06	Orange-brown medium sand over gray fine sand. Stage 2 tubes and gastropod at SWI. Burrows in PV.
RWEC-RI	437	C	7/13/2019	12:26:18	Orange-brown medium sand over gray fine sand. Fecal stack of podocerid amphipod in far field, possible tubes. Burrows in PV.
RWEC-RI	438	A	7/13/2019	12:38:37	Brown coarse sand with pale brown fines mixed in. Tubes/burrows in sand at right.
RWEC-RI	438	C	7/13/2019	12:41:04	Brown coarse sand with pale brown fines mixed in. Tube, fecal stack of podocerid amphipod at SWI.
RWEC-RI	438	D	7/13/2019	12:42:15	Brown coarse sand with pale brown fines mixed in. Tube, fecal stack of podocerid amphipod at SWI.
RWEC-RI	439	A	7/13/2019	12:51:40	Orange-brown medium sand over gray fine sand. Stage 2 tubes and fecal deposits at SWI. Burrows in PV.
RWEC-RI	439	B	7/13/2019	12:52:49	Orange-brown medium sand over orange-brown coarse sand. Stage 2 tubes at SWI. Burrows below aRPD.
RWEC-RI	439	C	7/13/2019	12:54:10	Orange-brown medium sand over gray coarse sand. Fecal stack of podocerid amphipod in far field.
RWEC-RI	440	B	7/13/2019	13:17:33	Orange-brown medium sand over gray very fine sand. Polychaetes deep in the sediment. Possible infilled void in bottom right corner.
RWEC-RI	440	C	7/13/2019	13:18:48	Orange-brown fine sand over gray very fine sand. Worm, oxic burrow, and void below aRPD.
RWEC-RI	440	D	7/13/2019	13:20:00	Orange-brown fine sand over gray fine sand. Infilled voids, pockets of oxic material below the aRPD, and a void that may be associated with a shallow burrow near the SWI. Camera artefacts at the SWI. Burrows in PV.
RWEC-RI	441	A	7/13/2019	14:47:19	Pale gray fine sand over gray fine sand. Thin layer of orange material at SWI. Tube, fecal stack, and podocerid amphipods at SWI. Worms and a pocket of dark material deep in sediment.
RWEC-RI	441	B	7/13/2019	14:48:37	Pale gray fine sand over gray fine sand. Thin layer of orange material at SWI. Fecal stack stage 2 tubes, and podocerid amphipods at SWI. Burrowing features deep in sediment.
RWEC-RI	441	C	7/13/2019	14:49:58	Pale gray fine sand over gray fine sand. Thin layer of orange material at SWI. Tube, fecal stack, and podocerid amphipods at SWI. Worm below 4cm at center of image. Pocket of white material near max. penetration.
RWEC-RI	442	A	7/13/2019	15:20:44	Pale gray fine sand over gray fine sand. Thin layer of orange material at SWI. Stage 2 tubes at SWI, burrow and worm ~3cm deep. Infilled voids in sediment.
RWEC-RI	442	C	7/13/2019	15:23:10	Pale gray fine sand over gray fine sand. Thin layer of orange material at SWI. Tube, fecal stack, and podocerid amphipods at SWI. Large void at left with fauna in intersected burrow above it.
RWEC-RI	442	D	7/13/2019	15:24:22	Pale gray fine sand over gray fine sand. Orange material at SWI. Tube, fecal stack, and podocerid amphipods at SWI. Infilled voids throughout the sediment column, with one open void at max. penetration.
RWEC-RI	443	A	7/13/2019	16:07:25	Pale gray fine sand over gray fine sand. Orange material at SWI. Stage 1 tubes at SWI, worms and void below aRPD.
RWEC-RI	443	B	7/13/2019	16:08:40	Pale gray fine sand over gray fine sand. Orange material at SWI. Stage 1 tubes at SWI, large polychaete at max. penetration.
RWEC-RI	443	C	7/13/2019	16:09:55	Pale gray fine sand over gray fine sand. Orange material at SWI. Stage 1 tubes at SWI, large polychaete at max. penetration.
RWEC-RI	444	A	7/13/2019	16:29:50	Pale gray fine sand over gray fine sand. Orange material at SWI. Burrow at far right, worm at max. penetration. Streak of white material in the oxic layer. Transparent shrimp on SWI at left, ~0.5cm amphipod on SWI at right.
RWEC-RI	444	B	7/13/2019	16:30:58	Pale gray fine sand over gray fine sand. Orange material at SWI. Stage 2 tubes at SWI. Voids in the oxic layer and below the aRPD.
RWEC-RI	444	D	7/13/2019	16:36:48	Pale gray fine sand over gray fine sand. Stage 2 tube at SWI. Possible infilled void/burrow structure at right near the aRPD.
RWEC-RI	445	A	7/13/2019	16:59:42	Brown fine sand over gray very fine sand. Fecal stack of podocerid amphipod at SWI. Hermit crab at SWI.
RWEC-RI	445	B	7/13/2019	17:00:50	Brown fine sand over gray very fine sand. Stage 2 tube at far left.
RWEC-RI	445	C	7/13/2019	17:02:01	Brown fine sand over gray very fine sand. Stage 2 tubes at SWI. Pocket of darker sand in the oxic layer.
RWEC-RI	446	A	7/13/2019	17:21:22	Brown fine sand over gray very fine sand. Stage 2 tubes at SWI. Burrowing features at depth.
RWEC-RI	446	B	7/13/2019	17:22:23	Brown medium sand over gray very fine sand. Gastropod, quahog shell with barnacles, deep burrows surrounded with oxic sediment, and polychaetes deep in sediment. Brown strands attached to quahog shell.
RWEC-RI	446	C	7/13/2019	17:23:44	Brown medium sand over gray very fine sand. Shell fragments throughout sediment. Shallow aRPD and tubes in water column suggest stage 1. Polychaetes deep in sediment, with small open voids near max. penetration.
RWEC-RI	447	B	7/13/2019	17:38:33	Brown fine sand over gray very fine sand. Shell fragments throughout sediment. Tubes 2mm in diameter, and shells with red algae at SWI. Clear specks (possibly fauna) cling to the algae. Red and green algae dragged into sediment. Worm visible in sed column. Infilled void at depth at left.
RWEC-RI	447	C	7/13/2019	17:39:48	Brown fine sand over gray very fine sand. Shell fragments throughout sediment. Collapsed fecal stacks or deposits and large pebbles at SWI.
RWEC-RI	447	D	7/13/2019	17:41:04	Brown fine sand over gray very fine sand. Tubes 2mm in diameter at SWI and in far field. Possible scallop shell with brown branched growth attached. Clear specks (possibly fauna) cling to the growth.

Area	StationID	Replicate	Date	Time	Comment
RWEC-RI	448	A	7/13/2019	18:00:00	Brown silt-clay over gray silt-clay. Shell fragments and fluidized fines in the upper sediment create texture. Mussel shells, small shell fragments, and brown growth covering the SWI.
RWEC-RI	448	B	7/13/2019	18:01:15	Brown silt-clay over gray silt-clay. Shell fragments and fluidized fines in the upper sediment create texture. Mussel shells, small shell fragments, and brown growth covering the SWI. Yellow-brown worm ~6cm deep in sediment at left.
RWEC-RI	448	D	7/13/2019	18:03:33	Brown silt-clay over gray silt-clay. Shell fragments and fluidized fines in the upper sediment create texture. Mussel shells, small shell fragments, and brown growth covering the SWI.
RWEC-RI	449	A	7/13/2019	18:14:52	Brown silt-clay over gray silt-clay. Shell fragments and fluidized fines in the upper sediment create texture. Mussel shells, small shell fragments, and brown growth covering the SWI. Worms and voids near max. penetration.
RWEC-RI	449	B	7/13/2019	18:16:06	Brown silt-clay over gray silt-clay. Shell fragments and fluidized fines in the upper sediment create texture. Mussel shells and small shell fragments at the SWI. Upper, oxic layer is distorted by large burrows, one extending down to max. penetration. Material in burrows is darker than surrounding oxic sediment. Crab at SWI, and worms in upper 4cm.
RWEC-RI	449	C	7/13/2019	18:17:16	Brown silt-clay over gray silt-clay. Shell fragments and fluidized fines in the upper sediment create texture. Shells, small shell fragments, camera artefacts, and brown growth covering the SWI. Open burrow extending from SWI to max. penetration, and voids near max. penetration.
RWEC-RI	450	B	7/25/2019	13:34:29	Brown silt-clay over gray silt-clay with fluidized fines at the SWI. Mussel and slipper shells cover the SWI, with camera artefacts at right. Large burrows and voids deep in sediment.
RWEC-RI	450	F	7/25/2019	14:02:00	Brown silt-clay over gray silt-clay with fluidized fines at the SWI. Mussel and slipper shells cover the SWI. Large burrows and voids deep in sediment.
RWEC-RI	450	G	7/25/2019	14:03:23	Brown silt-clay over gray silt-clay with fluidized fines at the SWI. Mussel and slipper shells cover the SWI. Large burrows and voids deep in sediment. Fauna with spots in void at center.
RWEC-RI	451	A	7/13/2019	20:16:50	Pale brown very fine sand over gray very fine sand. Stage 2 tubes and a small branching growth at SWI. Faint infilled voids and small blurred voids near the bottom edge of the image.
RWEC-RI	451	C	7/13/2019	20:34:02	Brown very fine sand over gray silt-clay. Possible stage 1 tubes at SWI over a shallow aRPD. Large burrow opening at SWI, possibly from epifauna. Oxidized pockets with possible fauna below the aRPD, and voids near max. penetration.
RWEC-RI	451	D	7/13/2019	20:35:21	Brown very fine sand over gray silt-clay. Stage 1 tubes, shell fragments, sponge and gastropod at SWI.
RWEC-RI	452	A	7/25/2019	14:24:03	Gray medium sand with smears of darker fines likely carried by the camera from the previous station. Shell fragments at SWI.
RWEC-RI	452	B	7/25/2019	14:25:17	Gray medium sand. Shell fragments at SWI.
RWEC-RI	452	D	7/25/2019	14:28:08	Gray coarse sand. Shell fragments at SWI.
RWEC-RI	453	A	7/25/2019	14:52:32	Pale gray medium sand. Shell fragments at SWI.
RWEC-RI	453	C	7/25/2019	14:55:33	Pale gray fine sand. Shell fragments at SWI.
RWEC-RI	453	D	7/25/2019	14:56:57	Pale gray medium sand.
RWEC-RI	454	A	7/25/2019	15:34:50	Pale gray very fine sand over gray silt-clay. Stage 2 burrows in the upper 2-3cm of sediment. Long, faint streaks of oxidized material extend below the aRPD, and streaks of black material at depth.
RWEC-RI	454	B	7/25/2019	15:36:08	Pale gray very fine sand over gray silt-clay. Small stage 2 burrows in upper 1cm of sediment. Voids and burrow halos near max. penetration.
RWEC-RI	454	C	7/25/2019	15:37:20	Pale gray very fine sand over gray silt-clay. Small stage 2 burrows in upper 1cm of sediment. Voids and burrow halos near max. penetration.
RWEC-RI	455	A	7/25/2019	15:50:07	Light gray very fine sand over darker fines. Streaks of oxidized material extend below the aRPD. Stage 2 tubes at the SWI, worms and partially filled void several cms below SWI. Black and white specks throughout sediment. The image has irregular distortion throughout WC and sediment.
RWEC-RI	455	B	7/25/2019	15:51:12	Light gray very fine sand over darker fines. Streaks of oxidized material extend below the aRPD. Small Stage 2 tubes at the SWI, worms and burrow halo several cms below SWI. Black and white specks throughout sediment. The image has irregular distortion throughout WC and sediment.
RWEC-RI	455	C	7/25/2019	15:52:19	Light gray silt-clay over darker fines. Streaks of brighter material in the darker fines. Stage 2 tubes at the SWI with worms below SWI. Black and white specks throughout sediment. The image has irregular distortion throughout WC and sediment.
RWEC-OCS	456	A	7/12/2019	22:21:54	Orange-brown fine sand. Tubes and fecal casts at the SWI, and possible red worm in lower right corner. Burrows in PV.
RWEC-OCS	456	B	7/12/2019	22:23:02	Orange-brown fine sand. Tubes at the SWI. Small pink infauna at ~2-3 cm below SWI to left of center.
RWEC-OCS	456	C	7/12/2019	22:24:19	Orange-brown fine sand. Tubes and fecal casts at the SWI. Burrows in PV.
RWEC-OCS	457	A	7/12/2019	22:42:55	Pale brown fine sand mixed with coarser sand. Pockets of gray fines near max. penetration. Stage 2 tubes at SWI and worms sever cms below SWI. Small shrimp at SWI. Burrows in PV.
RWEC-OCS	457	B	7/12/2019	22:44:20	Pale brown fine sand mixed with coarser sand. Pockets of gray fines near max. penetration. Stage 2 tubes at SWI, large void at right, and worms several cms below SWI. Burrows in PV.
RWEC-OCS	457	C	7/12/2019	22:45:34	Pale brown fine sand mixed with coarser sand. Pockets of dark gray fines and streaks of coarse white material near max. penetration. Stage 2 tubes at SWI and worms several cms below SWI. Longer burrow halos extend below the aRPD. Burrows in PV
RWEC-OCS	458	A	7/12/2019	23:05:27	Pale brown medium sand, one medium pebble on SWI. Tubes and large shell piece at SWI. Burrows in PV.
RWEC-OCS	458	B	7/12/2019	23:06:39	Brown medium sand over pale brown medium sand. Tubes at SWI. Divot or possible burrow opening at right. Shell fragments or pebbles in far field. Burrows in PV.
RWEC-OCS	458	C	7/12/2019	23:07:51	Brown medium sand over pale brown. Tubes at SWI. Burrows in PV.
RWEC-OCS	459	A	7/12/2019	23:29:07	Orange-brown medium sand. Tubes and fecal casts at SWI. Burrows in PV.
RWEC-OCS	459	B	7/12/2019	23:30:15	Orange-brown medium sand. Tubes and fecal strands at SWI. Appears to be podocerid amphipod on stack in far field. Burrows in PV.
RWEC-OCS	459	C	7/12/2019	23:31:22	Orange-brown medium sand. Tubes as at SWI. Burrows in PV.
RWEC-OCS	460	A	7/13/2019	2:14:26	Pale brown very fine sand over gray. Stage 2 tubes in far field, and worms deep in sediment. Bivalve shells and small gastropod at SWI. Plume of fine material in the water column coming off the sediment surface. Burrows in PV.

Area	StationID	Replicate	Date	Time	Comment
RWEC-OCS	460	C	7/13/2019	2:17:15	Pale brown very fine sand over gray. Stage 2 tubes at SWI, and the aRPD is near max. penetration; burrow halos near base of aRPD. Small shrimp at SWI. Burrows in PV.
RWEC-OCS	460	D	7/13/2019	2:18:44	Pale brown very fine sand over gray. Stage 2 tubes at SWI, and small feeding void near SWI at right, and large burrow with streaks of saturated material extending to max. penetration. Burrows in PV.
RWEC-OCS	461	A	7/13/2019	2:37:35	Orange-brown medium sand. Tubes at SWI. Dark brown streaks extend down from SWI. Podocerid amphipod on fecal stack. Burrows in PV.
RWEC-OCS	461	B	7/13/2019	2:38:54	Orange-brown medium sand. Dark brown streaks extend down from SWI. Possible fauna at SWI. Burrows in PV.
RWEC-OCS	461	C	7/13/2019	2:40:08	Orange-brown medium sand. Tubes at SWI, two near center appear to be amphipod tubes. Dark brown streaks extend down from SWI. Possible fauna (amphipod?) at SWI.
RWEC-OCS	462	A	7/13/2019	3:02:37	Orange-brown medium sand. Tubes at SWI. Brown streaks in sand.
RWEC-OCS	462	B	7/13/2019	3:04:03	Orange-brown medium sand. Possible small tubes kicked into water column.
RWEC-OCS	462	C	7/13/2019	3:05:25	Orange-brown medium sand. Tubes or fecal casts at SWI. Brown streaks in sand.
RWEC-OCS	463	A	7/13/2019	3:27:49	Pale brown very fine sand over gray. Layer of saturated brown sand at SWI. The aRPD is faint, and the depth of the aRPD plus faint streaks of oxidized material extending below it suggest stage 3. Stage 2 tubes at SWI. Burrows in PV.
RWEC-OCS	463	F	7/13/2019	6:00:19	Pale brown very fine sand over gray. The aRPD is faint, and long streaks of oxic material extend below the aRPD. Medium fecal casts, tubes, and a large polychaete (appears to be Pectinaria sp.) in tube at SWI. Worms in sediment near max. penetration. Burrows in PV.
RWEC-OCS	463	G	7/13/2019	6:01:40	Pale brown very fine sand over gray. Pocket of saturated brown sand at SWI. The aRPD is more distinct than A & F. Stage 2 tube at SWI, and long streaks of oxic material extend below the aRPD. Burrows in PV.
RWEC-RI	464	A	7/13/2019	3:51:34	Pale brown very fine sand over gray fines near max. penetration. Layer of saturated brown sand at SWI. Stage 2 tubes at SWI, long streaks of oxic material and worms several cms below SWI, including possible maldanid. Pink fauna in far field. Burrows in PV.
RWEC-RI	464	C	7/13/2019	3:54:48	Pale brown very fine sand. Layer of saturated brown sand at SWI. Stage 2 tubes, fecal strands - tall podocerid amphipod fecal stack at right, and large burrow at SWI. Long streaks of oxic material and worms several cms below SWI. Burrows in PV.
RWEC-RI	464	D	7/13/2019	3:56:37	Pale brown very fine sand over gray fines. Layer of saturated brown sand at SWI. Podocerid amphipod at SWI, streaks of oxic material extend below aRPD, voids and worms below aRPD. Burrows in PV.
Reference Area	501	A	7/10/2019	22:28:13	Orange-brown medium sand. Podocerid amphipod fecal stacks at SWI, and possible small tubes kicked into water column. Small shrimp at SWI. Burrows in PV.
Reference Area	501	B	7/10/2019	22:29:32	Orange-brown medium sand. Fecal stacks at SWI, and possible small tubes kicked into water column. Podocerid amphipods on feca stacks. Small shrimp at SWI. Burrows in PV.
Reference Area	501	C	7/10/2019	22:30:51	Orange-brown medium sand. Fecal stacks at SWI, and possible small tubes kicked into water column. Podocerid amphipods on feca stacks. Small shrimp at SWI.
Reference Area	502	A	7/10/2019	22:08:01	Orange-brown medium sand. Fecal casts at SWI, and possible small tubes kicked into water column and in far field. Burrows in PV.
Reference Area	502	B	7/10/2019	22:09:23	Orange-brown medium sand. Possible small tubes kicked into water column.
Reference Area	502	D	7/10/2019	22:12:05	Orange-brown medium sand. amphipod fecal stacks at SWI in mid-field, and possible small tubes kicked into water column. Burrows in PV.
Reference Area	503	A	7/10/2019	21:47:28	Pale brown coarse sand. Granule and small pebbles on surface. Burrows in PV.
Reference Area	503	B	7/10/2019	21:48:49	Orange fine sand over dark gray silt-clay. Stage 2 tubes at SWI, taller ones in far field. Small pockets of larger grains near SWI and max. penetration. Few burrows in PV.
Reference Area	503	C	7/10/2019	21:50:12	Pale brown fine sand over dark gray very fine sand with very coarse sand grains and granules incorporated in upper ~4 cm. Oxic silt-clay extends ~0.5cm below the orange sand. Stage 2 tubes at SWI. Part of worm visible at depth on left. Possible worms near aRPD boundary and possible closed voids near max. penetration. Burrows in PV pair.
Reference Area	504	A	7/10/2019	21:26:22	Pale brown fine sand. Layer of saturated brown sand at SWI. Short podocerid fecal stacks at SWI. Possible amphipod at surface in midfield, type not clear. Burrows in PV.
Reference Area	504	B	7/10/2019	21:27:38	Pale brown fine sand. Layer of saturated brown sand at SWI. Pockets of gray sand at max. penetration. Fecal stacks at SWI, one with podocerid amphipod at left. Burrows in PV.
Reference Area	504	C	7/10/2019	21:29:00	Pale brown fine sand. Layer of saturated brown sand at SWI. Pockets of gray sand at max. penetration. Fecal stacks at SWI, one with podocerid amphipod at right. Burrows in PV.
Reference Area	505	A	7/10/2019	21:05:59	Pale brown fine sand. Podocerid amphipod fecal stacks at SWI and worm in sediment.
Reference Area	505	B	7/10/2019	21:07:24	Pale brown fine sand over gray very fine sand. Fecal stacks one with podocerid amphipod on it, and stage 2 tubes at SWI. Streak of oxic sand below aRPD at center. Burrows in PV.
Reference Area	505	C	7/10/2019	21:08:45	Pale brown fine sand. Podocerid amphipod fecal stacks in far field and oblong fecal casts laying on surface (visible in PV too). Brown streaks in sand at center. Burrows in PV.
RWEC-OCS	601	A	7/12/2019	18:25:05	Pale brown medium sand. Podocerid amphipods on fecal stacks and tubes at SWI. Burrows in PV.
RWEC-OCS	601	B	7/12/2019	18:26:14	Pale brown medium sand. Podocerid amphipods on fecal stacks and tubes at SWI. Burrows in PV.
RWEC-OCS	601	C	7/12/2019	18:27:26	Pale brown medium sand. One podocerid amphipod fecal stack in far field, and tubes at SWI. Burrows in PV.
RWEC-OCS	602	A	7/12/2019	16:36:04	Pale brown medium sand. Podocerid amphipod on short fecal stack at SWI. Possible tubes in far field. Burrows in PV.

Area	StationID	Replicate	Date	Time	Comment
RWEC-OCS	602	B	7/12/2019	16:37:15	Pale brown medium sand. Podocerid amphipods on fecal stacks and tubes at SWI. Worm in sediment at left ~ 3 cm. Burrows in PV.
RWEC-OCS	602	C	7/12/2019	16:38:31	Pale brown medium sand over dark gray. Podocerid amphipods on fecal stacks. Small agglutinated balls on SWI (visible in PV too) and possible tubes at SWI in far field. A dark gray reduced void at mid-depths. Streaks of saturated material in sand. Burrows in PV.
RWEC-OCS	603	A	7/12/2019	2:34:33	Gray-brown fine sand. Layer of saturated brown sand at SWI. Possible tubes in far field, one in suspension; and pink fauna, likely amphipod at SWI. Amphipod or worm near max. penetration. Needle-like plankton in water column. Burrows in PV.
RWEC-OCS	603	B	7/12/2019	2:36:11	Gray-brown fine sand. Layer of saturated brown sand at SWI. Podocerid amphipods on fecal stacks at SWI. Small tubes in suspension. Burrows in PV.
RWEC-OCS	603	C	7/12/2019	2:41:35	Gray-brown fine sand. Layer of saturated brown sand at SWI. Podocerid amphipods on fecal stacks and tubes at SWI. Pinkish mark at lower right, might be worm near max. penetration. Burrows in PV.
RWEC-RI	604	A	7/14/2019	0:10:17	Pale brown fine sand. Layer of saturated brown sand at SWI. Small fecal stack in far field, not clear if it is an amphipod stack or not.
RWEC-RI	604	B	7/14/2019	0:11:31	Pale brown fine sand. Layer of saturated brown sand at SWI. Small sandy clasts at SWI.
RWEC-RI	604	C	7/14/2019	0:12:52	Pale brown fine sand. Layer of saturated brown sand at SWI. Fecal stack laying on SWI. Pink fauna, likely amphipod, and shell in far field.
RWEC-OCS	605	A	7/14/2019	1:03:18	Orange-brown coarse sand. Podocerid amphipod fecal stack at SWI in midfield. Small shell fragments at SWI.
RWEC-OCS	605	B	7/14/2019	1:04:53	Orange-brown coarse sand. Tubes at SWI.
RWEC-OCS	605	C	7/14/2019	1:06:35	Orange-brown coarse sand. Podocerid amphipod on fecal stack at SWI. Burrows in PV.
RWEC-OCS	606	A	7/14/2019	2:39:17	Pale brown coarse sand. Shell fragments at SWI. Burrows in PV.
RWEC-OCS	606	B	7/14/2019	2:41:18	Pale brown coarse sand. Amphipod in sediment at center. Small tubes or casts at SWI.
RWEC-OCS	606	C	7/14/2019	2:42:40	Pale brown coarse sand. Podocerid amphipod fecal stack in far field at right.
RWEC-OCS	607	B	7/14/2019	3:37:08	Very fine sand. Small patches of dark gray reduced sediment at depth. Fecal stack and stage 2 tubes at SWI, and streaks of oxic material extend below aRPD. Caprellid amphipod clinging to podocerid amphipod fecal stack. Burrows in PV.
RWEC-OCS	607	E	7/14/2019	5:36:27	Very fine sand. Small pockets of dark reduced sediments 5-10cm down. Small tubes in suspension. Small burrows from SWI to 2cm. Burrow with halo extends below aRPD. Burrows in PV.
RWEC-OCS	607	F	7/14/2019	5:38:05	Very fine sand. Pockets of dark reduced sediments at 5-10cm down. Large voids near max. penetration with fauna inside. Burrows in PV.
RWEC-OCS	608	B	7/14/2019	4:35:26	Pale gray fine sand over gray silt-clay. Stage 2 tube at SWI, large polychaete in burrow below aRPD. Burrows in PV.
RWEC-OCS	608	C	7/14/2019	4:36:48	Pale gray fine sand. Stage 2 tubes and fecal stack at SWI, along with camera artefacts. Podocerid amphipod on fecal stack. Voids and small worms in sediment. Burrows in PV.
RWEC-OCS	608	F	7/14/2019	5:58:37	Pale gray fine sand. Stage 2 tubes and fecal stacks with podocerid amphipods at SWI, and pink fauna at left. Large void under burrow at center, small worms in sediment. Burrows in PV.
RWEC-OCS	609	A	7/14/2019	6:19:10	Pale brown medium sand. Stage 2 tubes at SWI. Burrows in PV.
RWEC-OCS	609	B	7/14/2019	6:20:57	Pale brown medium sand. Two podocerid amphipoda fecal stacks at SWI. Tubes at SWI. Small worm near max. penetration. Burrows in PV.
RWEC-OCS	609	C	7/14/2019	6:22:35	Pale brown medium sand. Fecal casts and stacks laying on surface, and tubes at SWI. Burrows in PV.
RWEC-RI	610	A	7/13/2019	13:40:44	Pale gray fine sand with some coarser grains near the SWI. Small tubes at SWI and in suspension. Faint streaks of darker sand throughout. Small thin sand-lined burrowing structures visible in upper few cm. Burrows in PV.
RWEC-RI	610	B	7/13/2019	13:41:58	Pale gray fine sand. Two podocerid amphipod fecal stacks in far field at right. Sand tube with possible eggs at SWI at left. Faint streaks of darker sand throughout. Burrows in PV.
RWEC-RI	610	C	7/13/2019	13:43:04	Pale gray fine sand. Tubes at SWI. Faint streaks of darker sand throughout. Thin worm at center. Burrows in PV.
RWEC-RI	611	A	7/13/2019	10:50:09	Pale brown fine sand with darker streaks. Deeper aRPD near but not past max. penetration, boundary difficult to determine. Podocerid amphipod fecal stacks at SWI. Stage 2 tubes in far field. Burrows in PV.
RWEC-RI	611	B	7/13/2019	10:51:49	Pale brown fine sand over pale gray. Shallow burrowing in upper few cm apparent. Burrows in PV.
RWEC-RI	611	C	7/13/2019	10:53:30	Pale brown fine sand over pale gray. A depression in the sediment spans the entire SWI, with a pocket of pale gray sand at the bottom. Collapsed tubes (perhaps ampelisca amphipod) about 1cm each cover the floor of the depression. Burrows in PV.
RWEC-RI	612	A	7/25/2019	15:20:47	Pale brown silt-clay over gray. Stage 2 tubes and unidentified fauna at SWI. Worms and voids below aRPD. The image has irregular distortion throughout WC and sediment. Burrows in PV.
RWEC-RI	612	B	7/25/2019	15:22:04	Pale brown silt-clay over gray. Stage 2 tubes at SWI. Streaks of oxic material extend below the aRPD, and worms below aRPD. Closed voids and a small open void at max. penetration. Streak of darker material at center. The image has irregular distortion throughout WC and sediment.
RWEC-RI	612	C	7/25/2019	15:23:12	Pale brown very fine sand with silt-clay over gray. Stage 2 tubes at SWI. Streaks of oxic material extend below the aRPD, and worms/voids below aRPD. Streaks of darker material at center. The image has irregular distortion throughout WC and sediment.
RWEC-RI	613	A	7/25/2019	14:38:03	Gray medium sand with shell pieces on sediment surface. Possible large tube in far field.
RWEC-RI	613	B	7/25/2019	14:39:21	Gray medium sand with shell pieces on sediment surface.
RWEC-RI	613	D	7/25/2019	14:41:49	Gray medium sand with shell pieces on sediment surface. Hermit crab on SWI.
RWEC-RI	614	A	7/13/2019	19:44:23	Pale brown silt-clay over gray silt-clay. Small shell pieces interspersed deep in sediment. Large mussel shell pieces and small cobbles at SWI. Fecal deposits at SWI, encrusting growth on cobbles. Some oxic material below aRPD, and possible voids near max. penetration

Area	StationID	Replicate	Date	Time	Comment
RWEC-RI	614	B	7/13/2019	19:45:35	Pale brown silt-clay over gray silt-clay. Small shell pieces interspersed deep in sediment. Large shell pieces and small cobbles at SWI. Encrusting growth on cobbles. A burrow extends to a void filled with oxic sediment near max. penetration.
RWEC-RI	614	C	7/13/2019	19:46:49	Pale brown silt-clay over gray silt-clay. Small shell pieces interspersed deep in sediment. Large shell pieces (mussel prominent) and small cobbles at SWI. Streaks of oxic material extend below aRPD, and voids near max penetration.
RWEC-RI	615	A	7/13/2019	18:59:20	Pale brown silt-clay with small shell pieces over dark gray silt-clay. Silt becomes brighter near max. penetration. Mussel shells at SWI. Stage 2 tubes at SWI, worm in upper left, and void near max. penetration.
RWEC-RI	615	B	7/13/2019	19:03:40	Pale brown silt-clay with small shell pieces over dark gray silt-clay. Silt becomes brighter near max. penetration. Mussel shells at SWI, with possible scallop shell. Stage 2 tubes in far field by crab, and large burrow with a void at center.
RWEC-RI	615	D	7/13/2019	19:06:09	Pale brown silt-clay with small shell pieces over dark gray silt-clay. Silt becomes brighter near max. penetration. Camera artefacts at SWI. Small burrows in upper 1-2cm, and worms and voids below aRPD.

ATTACHMENT D

PLAN VIEW IMAGE ANALYSIS RESULTS

Notes:

IND=Indeterminate

Bedform Size Measurement: "-" indicates variable is not measured for the replicate.

Area	StationID	Replicate	Date	Time	Image Width (cm)	Image Height (cm)	Field of View	Possible Habitat of Interest	Habitat Type	Substrate Group	Substrate Subgroup	Gravel Mode (mm)	Boulders	Bedforms	Bedform Wavelength (cm)	Debris
RWF	001	A	7/11/2019	13:57:33	76.66	51.11	0.39	None	Continuous Large Pebbles and Cobbles on Sand	Gravel Mixes	Sandy Gravel	35.77	No	None	-	Small Shell Fragments
RWF	001	B	7/11/2019	13:58:50	IND	IND	IND	None	Continuous Large Pebbles and Cobbles on Sand	Gravel Mixes	Sandy Gravel	IND	No	None	-	Large Shell Fragments
RWF	001	C	7/11/2019	14:00:01	80.70	53.80	0.43	None	Continuous Large Pebbles and Cobbles on Sand	Gravel Mixes	Sandy Gravel	26.77	No	None	-	Large Shell Fragments
RWF	002	A	7/11/2019	10:55:27	76.92	51.28	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	002	B	7/11/2019	10:56:50	77.77	51.84	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	002	C	7/11/2019	10:58:14	78.16	52.10	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	003	A	7/11/2019	12:33:29	75.22	50.14	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	003	C	7/11/2019	12:36:06	77.50	51.66	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	003	D	7/11/2019	12:37:33	77.57	51.72	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	004	A	7/11/2019	9:57:10	79.71	53.14	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	004	B	7/11/2019	9:58:27	83.47	55.64	0.46	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragments
RWF	004	C	7/11/2019	9:59:47	87.79	58.53	0.51	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	005	A	7/11/2019	8:38:16	72.12	48.08	0.35	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	005	B	7/11/2019	8:39:37	71.04	47.36	0.34	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	005	D	7/11/2019	8:42:20	76.73	51.16	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	006	A	7/11/2019	7:46:16	72.97	48.64	0.35	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	006	B	7/11/2019	7:53:00	70.40	46.93	0.33	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	006	C	7/11/2019	7:54:27	75.73	50.49	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	007	A	7/11/2019	7:09:36	79.92	53.28	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	007	C	7/11/2019	7:12:25	79.07	52.71	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	007	D	7/11/2019	7:13:46	76.47	50.98	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragments
RWF	008	A	7/11/2019	5:55:04	75.69	50.46	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	008	B	7/11/2019	5:56:36	77.00	51.33	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	008	C	7/11/2019	5:57:51	74.29	49.52	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment
RWF	009	A	7/11/2019	5:30:23	77.15	51.43	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	009	B	7/11/2019	5:31:45	79.59	53.06	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	009	C	7/11/2019	5:33:23	74.39	49.59	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	010	A	7/10/2019	19:58:39	75.00	50.00	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	010	B	7/10/2019	20:00:00	81.89	54.59	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment
RWF	010	C	7/10/2019	20:01:20	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment
RWF	011	A	7/10/2019	19:14:10	78.59	52.39	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	011	B	7/10/2019	19:15:20	83.02	55.35	0.46	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None

Area	StationID	Replicate	Date	Time	Image Width (cm)	Image Height (cm)	Field of View	Possible Habitat of Interest	Habitat Type	Substrate Group	Substrate Subgroup	Gravel Mode (mm)	Boulders	Bedforms	Bedform Wavelength (cm)	Debris
RWF	011	D	7/10/2019	19:17:46	77.08	51.38	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	012	A	7/10/2019	10:53:45	77.53	51.69	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	012	B	7/10/2019	10:55:05	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	012	C	7/10/2019	10:56:27	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	013	A	7/10/2019	11:59:01	75.22	50.14	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	013	B	7/10/2019	12:00:45	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	013	C	7/10/2019	12:02:20	71.63	47.75	0.34	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	014	A	7/10/2019	13:10:04	70.97	47.32	0.34	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	014	C	7/10/2019	13:12:46	75.80	50.53	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	014	D	7/10/2019	13:14:10	81.46	54.31	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	015	A	7/10/2019	14:02:24	76.55	51.03	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	015	B	7/10/2019	14:03:47	77.34	51.56	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	015	D	7/10/2019	14:06:35	78.47	52.31	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	016	A	7/10/2019	15:01:22	77.46	51.64	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	016	B	7/10/2019	15:02:49	78.67	52.45	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	016	C	7/10/2019	15:04:28	77.77	51.84	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	017	A	7/10/2019	16:19:23	73.41	48.94	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	017	C	7/10/2019	16:22:10	74.64	49.76	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	017	D	7/10/2019	16:23:36	77.19	51.46	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	018	B	7/10/2019	17:40:19	74.89	49.93	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	018	C	7/10/2019	17:41:41	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	018	D	7/10/2019	17:42:55	74.82	49.88	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	019	A	7/10/2019	18:15:41	76.25	50.83	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	019	B	7/10/2019	18:17:06	77.92	51.95	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	019	C	7/10/2019	18:18:22	79.84	53.22	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	020	A	7/10/2019	18:53:22	75.51	50.34	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	020	B	7/10/2019	18:54:58	81.04	54.03	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	020	C	7/10/2019	18:56:08	80.58	53.72	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	021	A	7/9/2019	21:18:23	77.30	51.54	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	021	B	7/9/2019	21:19:38	75.51	50.34	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	021	D	7/9/2019	21:22:04	71.27	47.51	0.34	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	022	A	7/9/2019	22:18:59	80.25	53.50	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	022	B	7/9/2019	22:20:31	80.83	53.89	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments

Area	StationID	Replicate	Date	Time	Image Width (cm)	Image Height (cm)	Field of View	Possible Habitat of Interest	Habitat Type	Substrate Group	Substrate Subgroup	Gravel Mode (mm)	Boulders	Bedforms	Bedform Wavelength (cm)	Debris
RWF	022	C	7/9/2019	22:21:42	83.60	55.73	0.47	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	023	E	7/9/2019	23:53:40	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	023	F	7/9/2019	23:54:58	76.96	51.31	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	023	G	7/9/2019	23:56:15	73.65	49.10	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	024	B	7/9/2019	23:31:10	83.74	55.82	0.47	None	Sand with Mobile Gravel	Gravel	Granule	2.23	No	Ripples	IND	Small Shell Fragments
RWF	024	C	7/9/2019	23:32:23	76.51	51.01	0.39	None	Sand with Mobile Gravel	Gravel	Granule	2.17	No	Ripples	IND	Large Shell Fragment
RWF	024	D	7/9/2019	23:33:36	86.19	57.46	0.50	None	Patchy Cobbles & Boulders on Sand	Gravel	Granule	2.15	Yes	None	-	Large Shell Fragment
RWF	025	A	7/11/2019	0:57:09	73.27	48.85	0.36	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	7.94	No	None	-	Small Shell Fragments
RWF	025	C	7/11/2019	1:00:14	76.66	51.11	0.39	None	Patchy Cobbles & Boulders on Sand	Gravelly	Gravelly Sand	23.76	No	None	-	Small Shell Fragments
RWF	025	D	7/11/2019	1:01:44	81.38	54.25	0.44	None	Patchy Cobbles & Boulders on Sand	Gravelly	Gravelly Sand	33.09	Yes	None	-	None
RWF	026	A	7/11/2019	2:13:12	81.93	54.62	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	026	B	7/11/2019	2:14:38	83.47	55.64	0.46	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	026	C	7/11/2019	2:16:02	76.62	51.08	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	027	A	7/11/2019	2:52:38	75.54	50.36	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	027	B	7/11/2019	2:53:57	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	027	C	7/11/2019	2:55:22	74.14	49.43	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	028	A	7/11/2019	3:31:56	77.11	51.41	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	028	B	7/11/2019	3:33:18	77.30	51.54	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	028	C	7/11/2019	3:34:39	75.91	50.61	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	029	A	7/11/2019	4:21:25	71.43	47.62	0.34	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	44.17	No	None	-	Large and Small Shell Fragments
RWF	029	C	7/11/2019	4:24:05	76.32	50.88	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragments
RWF	029	D	7/11/2019	4:25:17	77.50	51.66	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	030	A	7/11/2019	4:42:39	80.37	53.58	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	030	B	7/11/2019	4:44:03	72.69	48.46	0.35	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	030	C	7/11/2019	4:45:23	77.69	51.79	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	031	A	7/9/2019	20:48:47	78.47	52.31	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	031	B	7/9/2019	20:49:58	81.12	54.08	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	031	D	7/9/2019	20:52:20	81.68	54.45	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	032	A	7/9/2019	20:02:06	72.12	48.08	0.35	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	032	B	7/9/2019	20:03:14	75.11	50.07	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	032	C	7/9/2019	20:04:30	76.92	51.28	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	033	A	7/9/2019	19:28:28	81.80	54.54	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	033	B	7/9/2019	19:29:44	77.00	51.33	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	033	C	7/9/2019	19:30:51	78.63	52.42	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None

Area	StationID	Replicate	Date	Time	Image Width (cm)	Image Height (cm)	Field of View	Possible Habitat of Interest	Habitat Type	Substrate Group	Substrate Subgroup	Gravel Mode (mm)	Boulders	Bedforms	Bedform Wavelength (cm)	Debris
RWF	034	A	7/9/2019	18:45:32	79.59	53.06	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	034	B	7/9/2019	18:46:44	70.46	46.97	0.33	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	034	C	7/9/2019	18:47:50	77.23	51.49	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	035	E	7/10/2019	23:24:17	79.35	52.90	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	035	F	7/10/2019	23:25:48	79.39	52.93	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	035	G	7/10/2019	23:27:16	78.04	52.03	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	036	A	7/10/2019	10:13:57	75.07	50.05	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	036	C	7/10/2019	10:16:32	74.04	49.36	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	036	D	7/10/2019	10:17:53	73.90	49.27	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	037	A	7/11/2019	0:08:21	73.58	49.06	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	037	B	7/11/2019	0:10:13	75.99	50.66	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	037	C	7/11/2019	0:11:27	80.37	53.58	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	038	A	7/10/2019	7:42:22	77.50	51.66	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	038	B	7/10/2019	7:43:35	75.58	50.39	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	038	C	7/10/2019	7:44:53	78.00	52.00	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	039	A	7/10/2019	7:05:21	78.83	52.55	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	039	B	7/10/2019	7:06:34	75.51	50.34	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	039	C	7/10/2019	7:07:52	78.04	52.03	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	040	A	7/9/2019	13:51:34	78.20	52.13	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	040	B	7/9/2019	13:52:44	80.37	53.58	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	040	C	7/9/2019	13:53:49	76.77	51.18	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	041	A	7/9/2019	14:27:27	79.71	53.14	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	041	B	7/9/2019	14:28:35	76.32	50.88	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	042	A	7/9/2019	14:48:49	73.31	48.87	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	042	C	7/9/2019	14:51:03	77.15	51.43	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	042	D	7/9/2019	14:52:15	74.14	49.43	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	043	A	7/9/2019	15:38:54	69.21	46.14	0.32	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	043	B	7/9/2019	15:40:01	71.72	47.82	0.34	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	043	C	7/9/2019	15:41:11	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	044	A	7/9/2019	16:55:12	74.71	49.81	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	044	B	7/9/2019	16:56:21	75.65	50.44	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	044	C	7/9/2019	16:57:34	75.40	50.27	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	045	A	7/9/2019	17:54:42	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None

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RWF	045	B	7/9/2019	17:55:50	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	046	A	7/10/2019	3:26:02	76.81	51.21	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	046	B	7/10/2019	3:27:26	82.85	55.23	0.46	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	046	C	7/10/2019	3:28:49	79.23	52.82	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment
RWF	047	A	7/10/2019	4:06:22	73.17	48.78	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	047	C	7/10/2019	4:08:38	81.59	54.39	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	047	D	7/10/2019	4:09:42	78.95	52.63	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	048	A	7/10/2019	4:24:27	77.19	51.46	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	048	B	7/10/2019	4:25:50	77.34	51.56	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	048	C	7/10/2019	4:26:55	77.73	51.82	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	049	A	7/10/2019	5:38:46	75.51	50.34	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	049	B	7/10/2019	5:39:59	77.73	51.82	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	049	C	7/10/2019	5:41:14	82.58	55.06	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	050	A	7/4/2019	21:53:52	87.44	58.30	0.51	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	050	B	7/4/2019	21:55:51	91.23	60.82	0.55	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	050	C	7/4/2019	21:56:53	78.47	52.31	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	051	A	7/4/2019	22:24:57	93.25	62.16	0.58	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	051	B	7/4/2019	22:26:15	84.28	56.19	0.47	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	051	C	7/4/2019	22:27:09	89.24	59.50	0.53	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	052	A	7/4/2019	23:33:06	90.70	60.47	0.55	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	052	B	7/4/2019	23:34:13	88.99	59.33	0.53	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	052	D	7/4/2019	23:36:37	88.04	58.69	0.52	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	053	B	7/5/2019	0:25:24	86.47	57.65	0.50	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	8.07	No	None	-	None
RWF	053	C	7/5/2019	0:28:48	100.26	66.84	0.67	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	5.85	No	None	-	None
RWF	053	D	7/5/2019	0:30:26	81.46	54.31	0.44	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	5.43	No	None	-	None
RWF	054	A	7/5/2019	0:54:40	86.14	57.43	0.49	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	054	B	7/5/2019	0:55:54	93.81	62.54	0.59	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	054	D	7/5/2019	0:58:43	91.87	61.25	0.56	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	055	A	7/5/2019	1:37:44	88.14	58.76	0.52	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	055	C	7/5/2019	1:40:32	88.49	58.99	0.52	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	055	D	7/5/2019	1:42:28	90.33	60.22	0.54	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	056	I	7/5/2019	7:16:36	74.43	49.62	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	056	K	7/5/2019	7:19:51	76.25	50.83	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	056	N	7/5/2019	8:51:11	77.81	51.87	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	057	B	7/5/2019	2:53:01	87.84	58.56	0.51	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None

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RWF	057	C	7/5/2019	2:54:16	90.38	60.25	0.54	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	057	D	7/5/2019	2:55:36	88.39	58.92	0.52	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment
RWF	057E1	B	7/5/2019	5:16:48	88.79	59.19	0.53	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	057E1	C	7/5/2019	5:18:28	88.24	58.82	0.52	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	057E1	D	7/5/2019	5:20:06	91.23	60.82	0.55	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	057E2	A	7/5/2019	5:45:47	76.81	51.21	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	057E2	B	7/5/2019	5:47:27	84.69	56.46	0.48	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	057E2	C	7/5/2019	5:48:49	75.54	50.36	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	057W1	A	7/5/2019	6:17:18	80.91	53.94	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	057W1	B	7/5/2019	6:18:44	76.47	50.98	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	057W1	D	7/5/2019	6:21:21	86.86	57.91	0.50	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragments and Shell Hash, Unidentified Object
RWF	057W2	A	7/5/2019	6:32:12	79.84	53.22	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	057W2	B	7/5/2019	6:33:33	83.87	55.91	0.47	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	057W2	D	7/5/2019	6:36:34	83.42	55.61	0.46	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	058	A	7/5/2019	3:15:35	79.75	53.17	0.42	None	Sand Sheet	Slightly Gravelly	Slightly Gravelly Sand	2.13	No	None	-	Shell Hash, Sand Dollar Test
RWF	058	B	7/5/2019	3:16:57	83.16	55.44	0.46	None	Sand Sheet	Slightly Gravelly	Slightly Gravelly Sand	2.63	No	None	-	Shell Hash
RWF	058	C	7/5/2019	3:18:18	86.38	57.59	0.50	None	Sand Sheet	Slightly Gravelly	Slightly Gravelly Sand	2.16	No	None	-	Large Shell Fragment, Shell Hash
RWF	059	A	7/5/2019	3:55:59	77.84	51.90	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	059	B	7/5/2019	3:57:09	80.45	53.64	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	059	C	7/5/2019	3:58:25	84.05	56.03	0.47	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	060	A	7/5/2019	17:03:42	83.42	55.61	0.46	None	Patchy Pebbles on Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	4.31	No	Ripples	IND	None
RWF	060	B	7/5/2019	17:04:51	83.47	55.64	0.46	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	5.15	No	Ripples	IND	None
RWF	060	D	7/5/2019	17:16:49	81.59	54.39	0.44	None	Patchy Pebbles on Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	17.41	No	Ripples	90.10	None
RWF	061	A	7/5/2019	18:24:08	80.29	53.53	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	061	B	7/5/2019	18:25:29	84.28	56.19	0.47	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	061	C	7/5/2019	18:26:38	81.46	54.31	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	062	A	7/5/2019	19:27:48	79.75	53.17	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	062	C	7/5/2019	19:30:45	81.38	54.25	0.44	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	4.75	No	None	-	Shell Hash
RWF	062	D	7/5/2019	19:32:01	84.69	56.46	0.48	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	3.81	No	None	-	Shell Hash
RWF	063	A	7/5/2019	23:11:38	82.54	55.03	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	063	B	7/5/2019	23:12:55	86.14	57.43	0.49	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	063	C	7/5/2019	23:14:04	87.59	58.39	0.51	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	064	A	7/6/2019	0:15:09	83.20	55.47	0.46	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	064	B	7/6/2019	0:17:23	85.11	56.74	0.48	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	064	D	7/6/2019	0:20:24	86.19	57.46	0.50	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments

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RWF	065	A	7/6/2019	1:00:18	77.77	51.84	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	065	B	7/6/2019	1:01:57	83.47	55.64	0.46	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	065	C	7/6/2019	1:03:18	82.41	54.94	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	066	A	7/6/2019	2:04:18	77.11	51.41	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	066	B	7/6/2019	2:05:50	82.50	55.00	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	066	C	7/6/2019	2:08:01	83.51	55.67	0.46	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	067	E	7/6/2019	17:23:44	83.83	55.88	0.47	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	067	F	7/6/2019	17:53:28	81.04	54.03	0.44	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	8.10	No	None	-	Small Shell Fragments
RWF	067	G	7/6/2019	17:54:47	80.33	53.55	0.43	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.95	No	None	-	Shell Hash
RWF	068	A	7/6/2019	4:07:10	76.66	51.11	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	068	B	7/6/2019	4:09:01	77.88	51.92	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	068	D	7/6/2019	4:11:37	80.66	53.77	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	069	A	7/6/2019	5:35:47	80.91	53.94	0.44	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	6.88	No	None	-	None
RWF	069	B	7/6/2019	5:37:11	80.08	53.39	0.43	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	9.74	No	Ripples	49.58	Small Shell Fragments
RWF	069	D	7/6/2019	5:39:51	84.51	56.34	0.48	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	10.70	No	Ripples	55.58	Small Shell Fragments
RWF	070	A	7/9/2019	10:38:05	81.00	54.00	0.44	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	6.61	No	None	-	Shell Hash
RWF	070	B	7/9/2019	10:39:37	76.81	51.21	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	070	C	7/9/2019	10:41:12	74.46	49.64	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	071	A	7/10/2019	1:37:34	74.14	49.43	0.37	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	3.46	No	None	-	None
RWF	071	B	7/10/2019	1:38:50	76.81	51.21	0.39	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	3.20	No	None	-	Shell Hash
RWF	071	D	7/10/2019	1:41:11	76.06	50.71	0.39	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.79	No	None	-	Large Shell Fragments, Seagrass Detritus
RWF	072	A	7/7/2019	2:17:47	82.28	54.85	0.45	None	Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	4.39	No	Ripples	48.75	None
RWF	072	B	7/7/2019	2:19:14	78.27	52.18	0.41	None	Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	3.26	No	None	-	None
RWF	072	C	7/7/2019	2:20:35	80.25	53.50	0.43	None	Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	4.01	No	None	-	None
RWF	073	A	7/7/2019	1:26:25	77.65	51.77	0.40	None	Continuous Large Pebbles and Cobbles on Sand	Gravel Mixes	Sandy Gravel	39.86	No	None	-	None
RWF	073	C	7/7/2019	1:28:54	82.41	54.94	0.45	None	Coarse Pebbles on Sand	Gravelly	Gravelly Sand	24.04	No	None	-	None
RWF	073	D	7/7/2019	1:30:13	79.23	52.82	0.42	None	Continuous Large Pebbles and Cobbles on Sand	Gravel Mixes	Sandy Gravel	29.05	No	None	-	None
RWF	073E1	A	7/12/2019	19:51:57	77.53	51.69	0.40	None	Continuous Large Pebbles and Cobbles on Sand	Gravel Mixes	Sandy Gravel	19.64	No	None	-	None
RWF	073E1	C	7/12/2019	19:54:17	73.69	49.13	0.36	None	Continuous Large Pebbles and Cobbles on Sand	Gravel Mixes	Sandy Gravel	18.91	No	None	-	None
RWF	073E1	D	7/12/2019	19:55:35	71.43	47.62	0.34	None	Continuous Large Pebbles and Cobbles on Sand	Gravel Mixes	Sandy Gravel	16.31	No	None	-	None
RWF	073E2	A	7/12/2019	20:15:00	77.65	51.77	0.40	None	Continuous Large Pebbles and Cobbles on Sand	Gravel Mixes	Sandy Gravel	13.72	No	None	-	None
RWF	073E2	B	7/12/2019	20:16:16	76.55	51.03	0.39	None	Continuous Large Pebbles and Cobbles on Sand	Gravel Mixes	Sandy Gravel	11.23	No	None	-	None
RWF	073E2	D	7/12/2019	20:18:37	72.90	48.60	0.35	None	Continuous Large Pebbles and Cobbles on Sand	Gravel Mixes	Sandy Gravel	21.75	No	None	-	None
RWF	073W1	A	7/12/2019	19:37:57	70.81	47.21	0.33	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	53.70	Yes	None	-	None

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RWF	073W1	B	7/12/2019	19:39:12	77.65	51.77	0.40	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	138.09	Yes	None	-	None
RWF	073W1	D	7/12/2019	19:41:47	75.44	50.29	0.38	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.01	No	None	-	None
RWF	073W2	B	7/12/2019	19:20:55	77.19	51.46	0.40	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	2.70	No	None	-	Large Shell Fragments
RWF	073W2	C	7/12/2019	19:22:12	74.29	49.52	0.37	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	14.73	Yes	None	-	Small Shell Fragments
RWF	073W2	D	7/12/2019	19:23:36	82.37	54.91	0.45	None	Patchy Cobbles & Boulders on Sand	Gravelly	Gravelly Sand	48.73	Yes	None	-	None
RWF	074	A	7/7/2019	0:14:33	74.78	49.86	0.37	None	Sand Sheet	Slightly Gravelly	Slightly Gravelly Sand	2.12	No	None	-	None
RWF	074	B	7/7/2019	0:16:05	79.59	53.06	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	074	C	7/7/2019	0:17:32	76.28	50.86	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	075	A	7/6/2019	23:26:39	84.23	56.16	0.47	None	Patchy Cobbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	150.50	No	None	-	None
RWF	075	B	7/6/2019	23:27:52	65.46	43.64	0.29	None	Continuous Large Cobbles and Boulders on Sand	Gravel	Boulder	302.55	Yes	None	-	None
RWF	075	C	7/6/2019	23:28:55	79.88	53.25	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	076	A	7/6/2019	21:45:28	73.76	49.17	0.36	None	IND	Slightly Gravelly	Slightly Gravelly Sand	IND	IND	None	-	None
RWF	076	C	7/6/2019	22:02:08	71.59	47.73	0.34	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	259.40	Yes	None	-	None
RWF	076	D	7/6/2019	22:03:09	55.24	36.83	0.20	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	580.21	Yes	None	-	None
RWF	077	A	7/6/2019	21:00:10	72.39	48.26	0.35	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	077	B	7/6/2019	21:01:13	65.19	43.46	0.28	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	077	C	7/6/2019	21:02:18	66.84	44.56	0.30	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	078	A	7/6/2019	19:51:44	81.21	54.14	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	078	C	7/6/2019	19:53:55	69.99	46.66	0.33	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	4.67	No	Ripples	IND	None
RWF	078	D	7/6/2019	19:55:10	81.68	54.45	0.44	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	2.72	No	Ripples	51.09	Small Shell Fragments
RWF	079	A	7/6/2019	16:11:28	74.93	49.95	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	079	B	7/6/2019	16:12:27	78.63	52.42	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	079	C	7/6/2019	16:13:38	81.63	54.42	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	080	A	7/6/2019	14:04:49	82.37	54.91	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	080	B	7/6/2019	14:25:09	78.43	52.29	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	080	D	7/6/2019	14:29:59	75.91	50.61	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	081	A	7/6/2019	11:13:07	78.83	52.55	0.41	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	5.12	No	IND	IND	None
RWF	081	B	7/6/2019	11:14:27	81.59	54.39	0.44	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	4.22	No	None	-	None
RWF	081	C	7/6/2019	11:25:02	75.54	50.36	0.38	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	2.27	No	None	-	None
RWF	082	A	7/10/2019	0:54:20	75.18	50.12	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	082	B	7/10/2019	0:55:31	77.15	51.43	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None

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RWF	082	C	7/10/2019	1:01:13	79.51	53.01	0.42	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	9.67	No	None	-	Small Shell Fragments
RWF	083	A	7/7/2019	3:08:13	86.91	57.94	0.50	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	9.99	No	Ripples	61.28	Small Shell Fragments
RWF	083	C	7/7/2019	3:10:40	79.88	53.25	0.43	None	Patchy Pebbles on Sand with Mobile Gravel	Gravelly	Gravelly Sand	3.99	No	Ripples	IND	Small Shell Fragments
RWF	083	D	7/7/2019	3:11:54	79.59	53.06	0.42	None	Patchy Pebbles on Sand with Mobile Gravel	Gravelly	Gravelly Sand	4.64	No	None	-	None
RWF	084	A	7/7/2019	4:18:54	79.84	53.22	0.42	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	35.26	No	None	-	None
RWF	084	B	7/7/2019	4:20:51	77.53	51.69	0.40	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	29.59	No	None	-	None
RWF	084	D2	7/7/2019	4:28:40	74.46	49.64	0.37	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	26.81	Yes	None	-	Small Shell Fragments
RWF	085	A	7/7/2019	5:53:03	79.35	52.90	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	085	B	7/7/2019	5:55:00	81.98	54.65	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	085	C	7/7/2019	6:00:06	78.79	52.53	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	086	A	7/7/2019	7:29:06	81.42	54.28	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	086	B	7/7/2019	8:17:53	67.56	45.04	0.30	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Sand Dollar Test
RWF	086	D	7/7/2019	8:32:44	82.32	54.88	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	087	A	7/7/2019	10:54:57	75.65	50.44	0.38	None	Patchy Pebbles on Sand with Mobile Gravel	Gravelly	Gravelly Sand	8.20	No	None	-	Small Shell Fragments
RWF	087	B	7/7/2019	10:56:17	76.70	51.13	0.39	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	7.80	No	None	-	Small Shell Fragments
RWF	087	C	7/7/2019	10:57:45	78.51	52.34	0.41	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	3.14	No	Ripples	57.77	Small Shell Fragments
RWF	088	A	7/7/2019	13:16:10	75.18	50.12	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	088	B	7/7/2019	13:17:20	76.73	51.16	0.39	None	Patchy Pebbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	19.18	No	None	-	Large Shell Fragment
RWF	088	C	7/7/2019	13:18:16	81.59	54.39	0.44	None	Patchy Boulders on Sand	Gravelly	Gravelly Sand	315.35	Yes	None	-	Small Shell Fragments
RWF	089	B	7/7/2019	14:23:22	75.40	50.27	0.38	None	Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	2.26	No	None	-	Small Shell Fragments
RWF	089	C	7/7/2019	14:24:37	87.99	58.66	0.52	None	Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	2.93	No	None	-	None
RWF	089	D	7/7/2019	14:25:46	77.30	51.54	0.40	None	Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	2.45	No	None	-	None
RWF	090	A	7/7/2019	15:18:10	76.10	50.73	0.39	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.03	No	Ripples	IND	None
RWF	090	B	7/7/2019	15:19:13	78.75	52.50	0.41	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.76	No	None	-	Large Shell Fragment
RWF	090	C	7/7/2019	15:20:14	78.47	52.31	0.41	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.22	No	Ripples	IND	None
RWF	091	A	7/7/2019	16:15:02	73.69	49.13	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	091	B	7/7/2019	16:16:11	76.51	51.01	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	091	C	7/7/2019	16:17:15	75.62	50.41	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	092	A	7/7/2019	16:49:22	76.25	50.83	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	092	B	7/7/2019	16:50:36	75.04	50.02	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	092	C	7/7/2019	16:51:54	79.51	53.01	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None

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RWF	093	A	7/7/2019	17:28:46	75.88	50.58	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	093	B	7/7/2019	17:29:54	73.48	48.99	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	093	C	7/7/2019	17:31:11	76.81	51.21	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	094	A	7/7/2019	18:13:27	79.31	52.87	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	094	B	7/7/2019	18:14:33	68.81	45.88	0.32	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	094	C	7/7/2019	18:15:51	73.69	49.13	0.36	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	7.86	No	None	-	None
RWF	095	A	7/7/2019	18:51:34	74.78	49.86	0.37	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.62	No	Ripples	63.23	None
RWF	095	B	7/7/2019	18:52:58	81.46	54.31	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	Ripples	IND	Large Shell Fragment
RWF	095	D	7/7/2019	18:55:24	76.81	51.21	0.39	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.30	No	Ripples	IND	Large Shell Fragments
RWF	096	A	7/8/2019	5:52:43	78.55	52.37	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	096	B	7/8/2019	5:53:59	81.93	54.62	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	096	C	7/8/2019	5:55:21	79.67	53.12	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	097	A	7/8/2019	5:17:33	77.69	51.79	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	097	B	7/8/2019	5:18:51	78.31	52.21	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	097	C	7/8/2019	5:20:00	77.34	51.56	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	098	A	7/8/2019	4:31:26	78.43	52.29	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	098	B	7/8/2019	4:32:42	75.73	50.49	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	098	C	7/8/2019	4:33:54	72.49	48.33	0.35	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	099	A	7/8/2019	3:45:41	75.95	50.63	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	099	B	7/8/2019	3:46:45	77.69	51.79	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	099	C	7/8/2019	3:47:54	79.23	52.82	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	100	A	7/8/2019	2:46:30	77.69	51.79	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	100	C	7/8/2019	2:49:00	78.71	52.47	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	100	D	7/8/2019	2:50:08	74.82	49.88	0.37	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.24	No	None	-	None
RWF	101	B	7/8/2019	2:10:02	78.99	52.66	0.42	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	3.29	No	None	-	None
RWF	101	C	7/8/2019	2:11:14	76.92	51.28	0.39	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.18	No	None	-	None
RWF	101	D	7/8/2019	2:12:25	81.76	54.51	0.45	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.45	No	None	-	None
RWF	102	A	7/8/2019	1:27:29	78.75	52.50	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	102	B	7/8/2019	1:28:50	76.85	51.23	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Sand Dollar Test
RWF	102	C	7/8/2019	1:30:00	81.59	54.39	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	103	A	7/8/2019	0:34:47	76.51	51.01	0.39	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.68	No	None	-	None

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RWF	103	B	7/8/2019	0:36:01	79.11	52.74	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	103	C	7/8/2019	0:37:19	79.59	53.06	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	104	B	7/7/2019	23:52:16	88.49	58.99	0.52	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	3.24	No	None	-	Small Shell Fragments
RWF	104	C	7/7/2019	23:53:28	80.37	53.58	0.43	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.14	No	None	-	Large Shell Fragments
RWF	104	D	7/7/2019	23:54:41	76.47	50.98	0.39	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	3.06	No	None	-	Small Shell Fragments
RWF	105	A	7/7/2019	23:08:13	71.69	47.79	0.34	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	105	B	7/7/2019	23:09:21	72.76	48.51	0.35	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	105	C	7/7/2019	23:10:29	74.64	49.76	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	106	A	7/7/2019	22:48:39	75.47	50.31	0.38	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.52	No	Ripples	66.48	None
RWF	106	B	7/7/2019	22:49:51	68.33	45.55	0.31	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.39	No	Ripples	51.58	None
RWF	106	C	7/7/2019	22:50:59	70.11	46.74	0.33	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	3.27	No	Ripples	IND	None
RWF	107	A	7/8/2019	20:46:05	66.05	44.03	0.29	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.31	No	Ripples	IND	None
RWF	107	B	7/8/2019	20:47:14	68.00	45.34	0.31	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.27	No	Ripples	68.66	None
RWF	107	C	7/8/2019	20:48:18	68.54	45.69	0.31	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.74	No	Ripples	IND	None
RWF	108	A	7/8/2019	18:50:06	80.79	53.86	0.44	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	3.10	No	None	-	None
RWF	108	B	7/8/2019	18:51:11	75.84	50.56	0.38	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	2.65	No	None	-	None
RWF	108	C	7/8/2019	18:52:15	67.59	45.06	0.30	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	3.15	No	None	-	None
RWF	109	A	7/8/2019	19:36:10	74.32	49.55	0.37	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	3.34	No	None	-	None
RWF	109	B	7/8/2019	19:37:17	81.93	54.62	0.45	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.73	No	None	-	None
RWF	109	C	7/8/2019	19:38:27	74.75	49.83	0.37	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	3.36	No	None	-	None
RWF	110	A	7/8/2019	19:54:08	78.87	52.58	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	110	B	7/8/2019	19:55:13	78.39	52.26	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	110	C	7/8/2019	19:56:26	81.25	54.17	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	111	A	7/8/2019	7:23:47	81.72	54.48	0.45	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	5.04	No	Ripples	71.39	Shell Hash
RWF	111	B	7/8/2019	7:25:16	82.76	55.17	0.46	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.21	No	Ripples	IND	Shell Hash
RWF	111	C	7/8/2019	7:30:26	78.04	52.03	0.41	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.86	No	None	-	Large Shell Fragment, Shell Hash
RWF	112	A	7/8/2019	8:40:44	74.96	49.98	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	112	C	7/8/2019	8:43:07	77.27	51.51	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	112	D	7/8/2019	8:44:28	75.44	50.29	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	113	A	7/8/2019	9:55:28	82.37	54.91	0.45	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.20	No	None	-	None
RWF	113	B	7/8/2019	9:56:51	80.04	53.36	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Sand Dollar Tests

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RWF	113	C	7/8/2019	9:58:15	80.83	53.89	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	114	A	7/8/2019	11:09:09	77.27	51.51	0.40	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.32	No	Ripples	72.31	None
RWF	114	C	7/8/2019	11:11:51	72.12	48.08	0.35	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	3.01	No	Ripples	74.06	Small Shell Fragments
RWF	114	D	7/8/2019	11:13:08	82.80	55.20	0.46	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.48	No	Ripples	68.53	None
RWF	115	A	7/8/2019	11:43:23	79.27	52.85	0.42	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	3.96	No	None	-	None
RWF	115	B	7/8/2019	11:44:35	76.96	51.31	0.39	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.31	No	None	-	None
RWF	115	C	7/8/2019	11:46:06	73.65	49.10	0.36	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.95	No	Ripples	64.12	None
RWF	116	A	7/8/2019	18:25:08	72.39	48.26	0.35	None	Sand with Mobile Gravel	Gravel	Granule	2.41	No	None	-	None
RWF	116	B	7/8/2019	18:26:06	71.43	47.62	0.34	None	Sand with Mobile Gravel	Gravel	Granule	2.14	No	Ripples	IND	None
RWF	116	C	7/8/2019	18:27:05	87.20	58.13	0.51	None	Sand with Mobile Gravel	Gravel	Granule	2.33	No	None	-	Large Shell Fragment
RWF	117	A	7/8/2019	17:41:56	77.96	51.97	0.41	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.21	No	None	-	None
RWF	117	B	7/8/2019	17:43:07	83.51	55.67	0.46	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.23	No	None	-	Skate Egg Case
RWF	117	C	7/8/2019	17:44:17	78.16	52.10	0.41	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.47	No	None	-	None
RWF	118	A	7/8/2019	16:49:13	68.00	45.34	0.31	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.04	No	Ripples	63.87	None
RWF	118	B	7/8/2019	16:50:25	82.02	54.68	0.45	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	4.92	No	None	-	None
RWF	118	C	7/8/2019	16:51:34	83.38	55.59	0.46	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.08	No	None	-	None
RWF	119	B	7/8/2019	16:09:59	76.13	50.76	0.39	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.16	No	None	-	None
RWF	119	C	7/8/2019	16:11:13	77.50	51.66	0.40	None	Patchy Pebbles on Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.32	No	None	-	Small Shell Fragments
RWF	119	D	7/8/2019	16:12:29	76.85	51.23	0.39	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	5.12	No	None	-	Small Shell Fragments
RWF	120	A	7/8/2019	14:57:44	75.33	50.22	0.38	None	Sand Sheet	Slightly Gravelly	Slightly Gravelly Sand	2.01	No	None	-	None
RWF	120	B	7/8/2019	14:58:58	75.65	50.44	0.38	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	3.66	No	None	-	Large Shell Fragment
RWF	120	C	7/8/2019	14:59:59	73.76	49.17	0.36	None	Sand Sheet	Slightly Gravelly	Slightly Gravelly Sand	2.09	No	None	-	Small Shell Fragments
RWF	121	A	7/8/2019	14:11:33	66.30	44.20	0.29	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.10	No	Ripples	52.86	None
RWF	121	B	7/8/2019	14:12:39	77.30	51.54	0.40	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.71	No	Ripples	IND	Large Shell Fragment
RWF	121	C	7/8/2019	14:13:53	76.81	51.21	0.39	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	4.74	No	Ripples	77.85	Small Shell Fragments
RWF	122	A	7/8/2019	13:28:15	75.58	50.39	0.38	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.02	No	None	-	None
RWF	122	B	7/8/2019	13:29:23	78.12	52.08	0.41	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.60	No	None	-	Sand Dollar Test, Moon Snail Egg Case
RWF	122	C	7/8/2019	13:30:34	81.00	54.00	0.44	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.97	No	None	-	Shell Hash
RWF	123	A	7/8/2019	12:56:39	85.25	56.83	0.48	None	Sand Sheet	Sand	Sand or Finer	IND	No	Ripples	26.21	None
RWF	123	B	7/8/2019	12:57:54	81.93	54.62	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	Ripples	41.13	Shell Hash
RWF	123	C	7/8/2019	12:59:03	81.63	54.42	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	Ripples	31.81	None

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RWF	124	A	7/7/2019	19:13:10	73.03	48.69	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	124	C	7/7/2019	19:15:31	78.16	52.10	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	124	D	7/7/2019	19:16:40	76.47	50.98	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	125	A	7/7/2019	19:53:29	82.11	54.74	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	125	B	7/7/2019	19:54:44	78.04	52.03	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	125	C	7/7/2019	19:56:06	80.37	53.58	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	126	A	7/7/2019	20:18:04	80.79	53.86	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	126	B	7/7/2019	20:19:14	69.46	46.30	0.32	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	126	C	7/7/2019	20:20:24	79.27	52.85	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	Ripples	7.62	None
RWF	127	A	7/7/2019	22:04:23	82.02	54.68	0.45	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.46	No	Ripples	70.15	None
RWF	127	B	7/7/2019	22:05:37	76.55	51.03	0.39	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.55	No	Ripples	IND	Small Shell Fragments
RWF	127	C	7/7/2019	22:06:39	78.00	52.00	0.41	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	3.12	No	Ripples	IND	None
RWF	128	A	7/7/2019	21:18:40	78.00	52.00	0.41	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.47	No	Ripples	IND	None
RWF	128	C	7/7/2019	21:21:06	85.76	57.17	0.49	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.43	No	IND	IND	Small Shell Fragments
RWF	128	D	7/7/2019	21:22:37	71.27	47.51	0.34	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.49	No	Ripples	IND	None
RWF	129	B	7/7/2019	21:02:13	82.54	55.03	0.45	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.89	No	Ripples	78.06	None
RWF	129	C	7/7/2019	21:03:23	77.38	51.59	0.40	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	7.48	No	None	-	None
RWF	129	D	7/7/2019	21:04:32	76.77	51.18	0.39	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	6.14	No	None	-	Large Shell Fragments
RWF	136	A	7/9/2019	3:45:46	73.69	49.13	0.36	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	7.49	No	Ripples	IND	None
RWF	136	B	7/9/2019	3:47:07	76.47	50.98	0.39	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	5.10	No	Ripples	32.49	None
RWF	136	C	7/9/2019	3:48:24	77.50	51.66	0.40	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	5.81	No	Ripples	36.75	None
RWF	137	A	7/9/2019	4:18:25	70.05	46.70	0.33	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	9.92	No	None	-	None
RWF	137	B	7/9/2019	4:19:41	76.81	51.21	0.39	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	6.14	No	Ripples	67.43	None
RWF	137	D	7/9/2019	4:22:20	78.08	52.05	0.41	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	5.08	No	None	-	None
RWF	138	A	7/9/2019	5:33:05	IND	IND	IND	None	IND	Gravel	Boulder	IND	Yes	None	-	None
RWF	138	B	7/9/2019	5:34:20	70.27	46.85	0.33	None	Continuous Large Cobbles and Boulders on Sand	Gravel	Cobble	66.29	Yes	None	-	Large Shell Fragments
RWF	138	C	7/9/2019	5:35:24	80.21	53.47	0.43	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	34.76	Yes	None	-	Large Shell Fragments, Shell Hash
RWF	139	B	7/9/2019	6:12:45	78.16	52.10	0.41	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	37.78	No	None	-	None
RWF	139	C	7/9/2019	6:13:52	86.28	57.52	0.50	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	7.77	No	Ripples	67.96	None
RWF	139	D	7/9/2019	6:15:01	81.98	54.65	0.45	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	7.51	No	IND	IND	Large Shell Fragment
RWF	140	A	7/9/2019	6:58:27	76.96	51.31	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	140	B	7/9/2019	6:59:45	81.93	54.62	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	140	D	7/9/2019	7:02:20	76.02	50.68	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None

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RWF	141	A	7/9/2019	2:49:21	86.28	57.52	0.50	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	5.75	No	Ripples	IND	None
RWF	141	C	7/9/2019	2:51:59	82.85	55.23	0.46	None	Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	9.94	No	Ripples	46.01	None
RWF	141	D	7/9/2019	2:53:12	83.69	55.79	0.47	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	7.39	No	Ripples	35.09	None
RWF	142	A	7/9/2019	2:10:36	85.06	56.71	0.48	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel	Granule	2.13	No	Ripples	52.03	None
RWF	142	B	7/9/2019	2:12:04	82.32	54.88	0.45	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	2.88	No	Ripples	40.26	None
RWF	142	D	7/9/2019	2:14:59	78.08	52.05	0.41	None	Patchy Boulders on Sand	Gravelly	Gravelly Sand	2.34	Yes	Ripples	55.67	None
RWF	143	A	7/9/2019	1:31:44	78.67	52.45	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	143	B	7/9/2019	1:33:04	83.16	55.44	0.46	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	2.08	No	Ripples	53.79	Skate Egg Case
RWF	143	C	7/9/2019	1:38:06	78.55	52.37	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	144	A	7/8/2019	23:32:52	75.36	50.24	0.38	None	Patchy Pebbles on Sand with Mobile Gravel	Gravelly	Gravelly Sand	5.90	No	Ripples	IND	None
RWF	144	B	7/8/2019	23:34:06	75.95	50.63	0.38	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	4.68	No	Ripples	IND	None
RWF	144	C	7/8/2019	23:35:10	80.70	53.80	0.43	None	Patchy Pebbles on Sand with Mobile Gravel	Gravelly	Gravelly Sand	4.44	No	Ripples	IND	Small Shell Fragments
RWF	201	A	7/9/2019	0:11:40	80.29	53.53	0.43	None	Patchy Cobbles & Boulders on Sand	Gravelly	Gravelly Sand	24.09	Yes	None	-	None
RWF	201	B	7/9/2019	0:12:42	73.76	49.17	0.36	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	17.46	Yes	None	-	None
RWF	201	E	7/9/2019	0:56:19	73.45	48.96	0.36	None	Continuous Large Cobbles and Boulders on Sand	Gravel	Boulder	355.11	Yes	None	-	Small Shell Fragments
RWF	202	A	7/8/2019	23:00:16	73.34	48.90	0.36	None	Sand with Mobile Gravel	Gravel	Granule	2.69	No	Ripples	IND	None
RWF	202	B	7/8/2019	23:01:31	69.52	46.35	0.32	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel	Granule	2.90	No	Ripples	75.21	None
RWF	202	C	7/8/2019	23:02:45	73.00	48.67	0.36	None	Sand with Mobile Gravel	Gravel	Granule	2.55	No	Ripples	IND	None
RWF	203	B	7/8/2019	22:41:54	77.57	51.72	0.40	None	Patchy Cobbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	32.19	No	None	-	Nudibranch Eggs
RWF	203	C	7/8/2019	22:43:05	79.31	52.87	0.42	None	Patchy Cobbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	122.40	No	None	-	None
RWF	203	D	7/8/2019	22:44:13	77.65	51.77	0.40	None	Patchy Cobbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	111.56	No	None	-	None
RWF	204	A	7/9/2019	5:51:13	77.08	51.38	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	204	B	7/9/2019	5:52:23	77.08	51.38	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	204	C	7/9/2019	5:53:44	77.69	51.79	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	205	A	7/7/2019	6:48:51	77.57	51.72	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	205	B	7/7/2019	6:51:47	81.59	54.39	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	205	C	7/7/2019	6:53:23	79.07	52.71	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment
RWF	206	A	7/7/2019	3:38:43	76.25	50.83	0.39	None	Sand with Mobile Gravel	Gravel	Granule	2.29	No	None	-	None
RWF	206	B	7/7/2019	3:40:07	81.98	54.65	0.45	None	Patchy Boulders on Sand	Gravelly	Gravelly Sand	3.96	Yes	None	-	None
RWF	206	C	7/7/2019	3:41:17	IND	IND	IND	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	IND	No	Ripples	IND	None
RWF	207	B	7/7/2019	11:36:11	77.65	51.77	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	207	C	7/7/2019	11:37:29	78.43	52.29	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	207	D	7/7/2019	11:38:42	78.55	52.37	0.41	None	Sand Sheet	Slightly Gravelly	Slightly Gravelly Sand	2.36	No	None	-	Large Shell Fragment

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RWF	208	A	7/7/2019	12:30:22	76.28	50.86	0.39	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	30.77	No	None	-	None
RWF	208	D	7/7/2019	12:34:12	72.19	48.13	0.35	None	Patchy Boulders on Sand	Gravel	Boulder	679.66	Yes	None	-	None
RWF	208	E	7/7/2019	12:44:18	74.82	49.88	0.37	None	Patchy Boulders on Sand	Gravelly	Gravelly Sand	205.76	Yes	None	-	None
RWF	209	A	7/8/2019	4:52:28	80.37	53.58	0.43	None	Patchy Pebbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	2.01	No	None	-	None
RWF	209	B	7/8/2019	4:53:37	80.12	53.42	0.43	None	Patchy Cobbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	65.70	No	None	-	None
RWF	209	C	7/8/2019	4:54:50	79.96	53.31	0.43	None	Patchy Cobbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	117.94	No	None	-	None
RWF	210	A	7/7/2019	14:50:45	78.95	52.63	0.42	None	Patchy Cobbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	2.89	No	None	-	None
RWF	210	C	7/7/2019	14:53:11	70.65	47.10	0.33	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.12	No	Ripples	IND	None
RWF	210	D	7/7/2019	14:54:21	77.84	51.90	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	211	A	7/8/2019	1:48:16	79.03	52.68	0.42	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel	Granule	2.11	No	None	-	None
RWF	211	C	7/8/2019	1:50:39	91.76	61.18	0.56	None	Sand with Mobile Gravel	Gravel	Granule	3.36	No	None	-	Small Shell Fragments
RWF	211	D	7/8/2019	1:51:52	87.69	58.46	0.51	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel	Granule	3.36	No	None	-	Moon Snail Egg Case
RWF	212	B	7/7/2019	21:47:53	74.46	49.64	0.37	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	3.72	No	Ripples	IND	None
RWF	212	C	7/7/2019	21:49:12	73.48	48.99	0.36	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	11.14	No	Ripples	IND	None
RWF	212	D	7/7/2019	21:50:19	65.11	43.41	0.28	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	3.47	No	Ripples	IND	None
RWF	213	A	7/8/2019	15:47:49	78.79	52.53	0.41	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.63	No	None	-	Small Shell Fragments
RWF	213	C	7/8/2019	15:50:18	78.47	52.31	0.41	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	92.73	No	None	-	Small Shell Fragments
RWF	213	D	7/8/2019	15:51:26	78.83	52.55	0.41	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	2.50	No	None	-	None
RWF	214	A	7/6/2019	22:43:36	65.99	43.99	0.29	None	Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	5.06	No	Ripples	IND	None
RWF	214	C	7/6/2019	22:45:54	76.55	51.03	0.39	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	3.19	No	Ripples	73.82	None
RWF	214	D	7/6/2019	22:47:05	73.79	49.20	0.36	None	Continuous Large Cobbles and Boulders on Sand	Gravel	Boulder	337.24	Yes	None	-	None
RWF	215	A	7/6/2019	18:18:18	78.16	52.10	0.41	None	Patchy Pebbles on Sand with Mobile Gravel	Gravelly	Gravelly Sand	6.25	No	None	-	Barnacle Hash
RWF	215	B	7/6/2019	18:19:26	68.87	45.92	0.32	None	Patchy Cobbles & Boulders on Sand	Gravel	Boulder	IND	Yes	None	-	Barnacle Hash
RWF	215	C	7/6/2019	18:20:45	79.03	52.68	0.42	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	92.59	Yes	None	-	None
RWF	216	A	7/6/2019	15:27:08	86.05	57.36	0.49	None	Patchy Pebbles on Sand	Gravelly	Gravelly Sand	15.34	No	IND	IND	None
RWF	216	B	7/6/2019	15:28:08	85.06	56.71	0.48	None	Patchy Boulders on Sand	Gravelly	Gravelly Sand	28.50	Yes	None	-	Shell Hash
RWF	216	C	7/6/2019	15:39:27	73.41	48.94	0.36	None	Patchy Boulders on Sand	Gravel Mixes	Sandy Gravel	4.89	Yes	None	-	Barnacle Hash
RWF	217	A	7/6/2019	15:02:05	81.72	54.48	0.45	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel	Granule	2.18	No	None	-	None
RWF	217	C	7/6/2019	15:04:11	82.02	54.68	0.45	None	Patchy Pebbles on Sand	Gravelly	Gravelly Sand	2.32	No	Ripples	41.67	None
RWF	217	D	7/6/2019	15:05:18	122.74	81.83	1.00	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	165.70	Yes	None	-	Barnacle Hash

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RWF	218	A	7/6/2019	6:25:40	76.36	50.91	0.39	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	89.34	Yes	None	-	None
RWF	218	C	7/6/2019	6:32:25	83.56	55.70	0.47	None	Patchy Cobbles & Boulders on Sand	Gravelly	Gravelly Sand	54.59	Yes	None	-	None
RWF	218	D	7/6/2019	6:34:05	82.32	54.88	0.45	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	42.12	Yes	None	-	None
RWF	218E1	A	7/6/2019	7:21:32	83.65	55.76	0.47	None	Patchy Cobbles & Boulders on Sand	Gravel	Boulder	60.23	Yes	None	-	None
RWF	218E1	C	7/6/2019	7:24:40	86.05	57.36	0.49	None	Patchy Cobbles & Boulders on Sand	Gravelly	Gravelly Sand	49.05	Yes	None	-	None
RWF	218E1	D	7/6/2019	7:26:15	87.10	58.07	0.51	None	Patchy Cobbles & Boulders on Sand	Gravelly	Gravelly Sand	4.79	Yes	None	-	None
RWF	218E2	A	7/6/2019	7:40:45	83.16	55.44	0.46	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	3.33	No	Ripples	46.21	None
RWF	218E2	B	7/6/2019	7:42:12	79.27	52.85	0.42	None	Patchy Pebbles on Sand with Mobile Gravel	Gravelly	Gravelly Sand	7.00	No	Ripples	36.24	None
RWF	218E2	C	7/6/2019	7:43:35	78.63	52.42	0.41	None	Patchy Pebbles on Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.10	No	Ripples	IND	None
RWF	218W1	A	7/6/2019	8:38:24	77.46	51.64	0.40	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	69.45	No	None	-	Spent Squid Eggs
RWF	218W1	B	7/6/2019	8:56:15	83.60	55.73	0.47	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	135.02	No	None	-	None
RWF	218W1	C	7/6/2019	8:57:57	79.07	52.71	0.42	None	Patchy Boulders on Sand	Gravel Mixes	Sandy Gravel	398.10	Yes	None	-	None
RWF	218W2	A	7/6/2019	9:24:16	81.04	54.03	0.44	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.97	No	None	-	None
RWF	218W2	C	7/6/2019	9:26:54	86.38	57.59	0.50	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	7.92	No	Ripples	54.23	None
RWF	218W2	D	7/6/2019	9:28:41	83.83	55.88	0.47	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	4.89	No	Ripples	57.88	None
RWF	219	B	7/6/2019	10:35:02	81.50	54.34	0.44	None	IND	Gravelly	Gravelly Sand	3.67	No	None	-	None
RWF	219	C	7/6/2019	10:36:35	76.58	51.06	0.39	None	Patchy Cobbles & Boulders on Sand	Gravel	Boulder	308.89	Yes	None	-	None
RWF	219	D	7/6/2019	10:38:21	80.66	53.77	0.43	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	205.02	Yes	None	-	Barnacle Hash
RWF	220	B	7/5/2019	18:00:18	80.58	53.72	0.43	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	34.92	Yes	None	-	Small Shell Fragments
RWF	220	C	7/5/2019	18:01:20	83.92	55.94	0.47	None	Patchy Cobbles on Sand	Gravel Mixes	Sandy Gravel	54.41	No	None	-	Small Shell Fragments
RWF	220	D	7/5/2019	18:02:28	69.40	46.26	0.32	None	Patchy Boulders on Sand	Gravel Mixes	Sandy Gravel	IND	Yes	None	-	Barnacle Hash
RWF	220E1	B	7/5/2019	22:07:36	87.64	58.43	0.51	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	111.45	Yes	None	-	Large Shell Fragments
RWF	220E1	C	7/5/2019	22:08:59	82.11	54.74	0.45	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	30.38	Yes	None	-	Barnacle Hash
RWF	220E1	D	7/5/2019	22:10:21	84.97	56.64	0.48	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	231.39	Yes	None	-	Barnacle Hash, Skate Egg Sack
RWF	220E2	B	7/5/2019	22:33:43	76.40	50.93	0.39	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	8.66	No	Ripples	52.66	None
RWF	220E2	C	7/5/2019	22:34:52	79.15	52.77	0.42	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	156.45	Yes	None	-	Barnacle Hash
RWF	220E2	D	7/5/2019	22:36:01	81.42	54.28	0.44	None	Patchy Cobbles & Boulders on Sand	Gravelly	Gravelly Sand	14.25	Yes	None	-	None
RWF	220W1	A	7/5/2019	21:30:59	88.09	58.72	0.52	None	Patchy Pebbles on Sand with Mobile Gravel	Gravelly	Gravelly Sand	735.37	No	None	-	None
RWF	220W1	B	7/5/2019	21:32:21	80.54	53.69	0.43	None	Patchy Boulders on Sand	Gravelly	Gravelly Sand	4.97	Yes	None	-	None

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RWF	220W1	C	7/5/2019	21:33:34	82.85	55.23	0.46	None	Patchy Cobbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	3.45	No	None	-	Large Shell Fragment
RWF	220W2	B	7/5/2019	20:37:36	78.95	52.63	0.42	None	Patchy Cobbles & Boulders on Sand	Gravel Mixes	Sandy Gravel	130.53	Yes	None	-	Small Shell Fragments
RWF	220W2	C	7/5/2019	20:39:02	80.95	53.97	0.44	None	Patchy Cobbles & Boulders on Sand	Gravelly	Gravelly Sand	121.16	Yes	None	-	None
RWF	220W2	D	7/5/2019	20:40:15	82.76	55.17	0.46	None	Patchy Cobbles & Boulders on Sand	Gravelly	Gravelly Sand	129.24	Yes	None	-	None
RWF	221	A	7/11/2019	1:19:22	75.54	50.36	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	221	B	7/11/2019	1:20:40	77.15	51.43	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	221	C	7/11/2019	1:22:05	79.07	52.71	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	222	A	7/5/2019	3:34:36	87.69	58.46	0.51	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	222	B	7/5/2019	3:35:46	88.24	58.82	0.52	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	222	C	7/5/2019	3:37:02	87.30	58.20	0.51	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	223	A	7/11/2019	11:38:16	80.45	53.64	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	223	C	7/11/2019	11:41:29	76.58	51.06	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	223	D	7/11/2019	11:42:59	78.16	52.10	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	224	A	7/11/2019	8:16:11	71.40	47.60	0.34	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.62	No	None	-	None
RWF	224	B	7/11/2019	8:17:27	82.71	55.14	0.46	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.48	No	None	-	Large Shell Fragment
RWF	224	C	7/11/2019	8:18:48	77.38	51.59	0.40	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.45	No	None	-	None
RWF	225	A	7/11/2019	6:27:24	70.37	46.91	0.33	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	225	B	7/11/2019	6:28:48	83.74	55.82	0.47	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	225	C	7/11/2019	6:30:13	77.96	51.97	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	226	A	7/10/2019	20:14:56	79.75	53.17	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	226	C	7/10/2019	20:17:45	79.55	53.03	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	226	D	7/10/2019	20:19:06	76.51	51.01	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	227	A	7/10/2019	11:30:08	71.46	47.64	0.34	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	227	B	7/10/2019	11:31:42	75.40	50.27	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	227	D	7/10/2019	11:35:04	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	228	A	7/10/2019	13:32:16	75.00	50.00	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	228	B	7/10/2019	13:33:42	78.16	52.10	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	228	C	7/10/2019	13:35:02	77.30	51.54	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	229	A	7/10/2019	15:23:42	79.15	52.77	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	229	B	7/10/2019	15:24:52	74.43	49.62	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	229	C	7/10/2019	15:26:05	79.80	53.20	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	230	A	7/10/2019	17:57:05	79.23	52.82	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	230	B	7/10/2019	17:58:23	78.87	52.58	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	230	C	7/10/2019	17:59:36	76.06	50.71	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None

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RWF	231	A	7/9/2019	22:34:35	74.11	49.41	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	231	B	7/9/2019	22:35:45	79.15	52.77	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	231	C	7/9/2019	22:36:55	74.46	49.64	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	232	A	7/11/2019	14:52:48	77.69	51.79	0.40	None	Patchy Pebbles on Sand with Mobile Gravel	Gravelly	Gravelly Sand	10.62	No	None	-	Large Shell Fragments
RWF	232	B	7/11/2019	14:54:09	81.42	54.28	0.44	None	Patchy Pebbles on Sand with Mobile Gravel	Gravelly	Gravelly Sand	11.53	No	None	-	Large Shell Fragments
RWF	232	D	7/11/2019	14:56:45	75.00	50.00	0.38	None	Continuous Large Pebbles and Cobbles on Sand	Gravel Mixes	Sandy Gravel	223.13	Yes	None	-	Barnacle Hash
RWF	233	A	7/11/2019	1:54:00	79.31	52.87	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	233	B	7/11/2019	1:55:21	79.03	52.68	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	233	C	7/11/2019	1:56:52	82.76	55.17	0.46	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	234	A	7/11/2019	3:14:32	78.79	52.53	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	234	B	7/11/2019	3:15:53	79.92	53.28	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	234	D	7/11/2019	3:18:46	70.81	47.21	0.33	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	235	A	7/9/2019	19:45:03	76.51	51.01	0.39	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.04	No	None	-	None
RWF	235	B	7/9/2019	19:46:26	84.05	56.03	0.47	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.10	No	None	-	None
RWF	235	C	7/9/2019	19:47:37	76.85	51.23	0.39	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.05	No	None	-	None
RWF	236	A	7/10/2019	8:23:29	74.96	49.98	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	236	E	7/10/2019	8:59:16	82.15	54.77	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	236	F	7/10/2019	9:00:58	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	237	A	7/10/2019	23:48:17	81.21	54.14	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	237	B	7/10/2019	23:49:41	75.47	50.31	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	237	D	7/10/2019	23:52:18	75.69	50.46	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	238	A	7/10/2019	4:55:45	75.91	50.61	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	238	B	7/10/2019	4:56:52	78.75	52.50	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	238	C	7/10/2019	4:57:58	78.71	52.47	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	239	E	7/10/2019	6:23:11	77.65	51.77	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	239	G	7/10/2019	6:26:56	83.29	55.53	0.46	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	239	H	7/10/2019	6:32:43	76.21	50.81	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragments
RWF	240	A	7/9/2019	15:18:03	77.84	51.90	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	240	B	7/9/2019	15:19:12	77.38	51.59	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	240	C	7/9/2019	15:20:23	78.04	52.03	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	241	A	7/4/2019	22:56:57	91.33	60.89	0.56	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	241	B	7/4/2019	22:58:07	89.09	59.39	0.53	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	241	C	7/4/2019	22:59:05	90.86	60.57	0.55	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash

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RWF	242	A	7/5/2019	1:17:38	91.33	60.89	0.56	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Moon Snail Egg Case
RWF	242	B	7/5/2019	1:18:55	88.99	59.33	0.53	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	242	C	7/5/2019	1:20:11	87.99	58.66	0.52	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	243	A	7/5/2019	19:02:34	81.08	54.05	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	243	B	7/5/2019	19:03:44	82.11	54.74	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	243	C	7/5/2019	19:04:56	82.50	55.00	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	244	A	7/6/2019	0:38:41	83.29	55.53	0.46	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	244	B	7/6/2019	0:40:03	85.11	56.74	0.48	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	244	C	7/6/2019	0:41:32	83.69	55.79	0.47	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	245	A	7/6/2019	3:39:02	78.00	52.00	0.41	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	14.95	No	None	-	Small Shell Fragments
RWF	245	B	7/6/2019	3:40:17	80.08	53.39	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	245	D	7/6/2019	3:43:34	80.33	53.55	0.43	None	Patchy Cobbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	106.30	No	None	-	None
RWF	246	A	7/7/2019	2:35:06	82.02	54.68	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	246	B	7/7/2019	2:36:38	84.55	56.37	0.48	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Moon Snail Egg Case
RWF	247	A	7/7/2019	0:37:49	75.54	50.36	0.38	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	6.80	No	Ripples	31.35	None
RWF	247	B	7/7/2019	0:39:09	82.58	55.06	0.45	None	Patchy Pebbles on Sand with Mobile Gravel	Gravelly	Gravelly Sand	22.16	No	Ripples	57.74	None
RWF	247	C	7/7/2019	0:40:34	84.19	56.13	0.47	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	15.29	No	Ripples	26.25	None
RWF	248	A	7/6/2019	22:17:20	86.81	57.87	0.50	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	4.05	No	None	-	None
RWF	248	C	7/6/2019	22:19:36	87.44	58.30	0.51	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	5.68	No	Ripples	IND	Moon Snail Egg Case
RWF	248	D	7/6/2019	22:20:44	74.75	49.83	0.37	None	Patchy Pebbles on Sand with Mobile Gravel	Gravelly	Gravelly Sand	13.58	No	IND	IND	None
RWF	249	A	7/6/2019	19:03:01	78.59	52.39	0.41	None	Continuous Large Cobbles and Boulders on Sand	Gravel	Cobble	96.01	Yes	None	-	None
RWF	249	B	7/6/2019	19:03:59	IND	IND	IND	None	Continuous Large Cobbles and Boulders on Sand	Gravel	Boulder	IND	Yes	None	-	Shell Hash
RWF	249	D	7/6/2019	19:06:14	83.42	55.61	0.46	None	Continuous Large Cobbles and Boulders on Sand	Gravel	Cobble	174.91	Yes	None	-	Shell Hash
RWF	250	A	7/7/2019	5:16:45	79.71	53.14	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	250	B	7/7/2019	5:23:57	78.83	52.55	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	250	C	7/7/2019	5:25:32	76.28	50.86	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	251	A	7/8/2019	6:36:58	77.57	51.72	0.40	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	5.43	No	Ripples	62.86	None
RWF	251	B	7/8/2019	6:38:32	84.42	56.28	0.48	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	2.53	No	None	-	Shell Hash
RWF	251	C	7/8/2019	6:39:43	80.83	53.89	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	252	A	7/8/2019	21:06:34	77.00	51.33	0.40	None	Patchy Pebbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	5.13	No	None	-	Small Shell Fragments
RWF	252	B	7/8/2019	21:07:42	79.59	53.06	0.42	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	163.69	No	None	-	None

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RWF	252	C	7/8/2019	21:08:49	75.88	50.58	0.38	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	47.80	No	None	-	None
RWF	253	A	7/8/2019	14:34:16	84.97	56.64	0.48	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.12	No	None	-	None
RWF	253	C	7/8/2019	14:36:36	78.47	52.31	0.41	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.35	No	None	-	Large Shell Fragment
RWF	253	D	7/8/2019	14:37:41	75.69	50.46	0.38	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.78	No	None	-	None
RWF	254	A	7/8/2019	3:06:11	78.79	52.53	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	254	B	7/8/2019	3:07:13	79.19	52.79	0.42	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.11	No	None	-	Small Shell Fragments
RWF	254	C	7/8/2019	3:08:23	76.25	50.83	0.39	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.41	No	None	-	Small Shell Fragments
RWF	255	A	7/9/2019	1:13:35	74.61	49.74	0.37	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	6.47	No	None	-	None
RWF	255	B	7/9/2019	1:14:44	78.83	52.55	0.41	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	3.28	No	None	-	None
RWF	255	C	7/9/2019	1:16:15	80.95	53.97	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	256	A	7/8/2019	23:16:09	75.80	50.53	0.38	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel	Granule	3.66	No	Ripples	66.36	None
RWF	256	B	7/8/2019	23:17:18	68.87	45.92	0.32	None	Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	6.89	No	Ripples	IND	None
RWF	256	C	7/8/2019	23:18:28	81.08	54.05	0.44	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	16.49	No	Ripples	IND	None
RWF	257	A	7/9/2019	4:02:40	75.47	50.31	0.38	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	4.15	No	None	-	None
RWF	257	B	7/9/2019	4:03:46	81.63	54.42	0.44	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	4.76	No	Ripples	72.31	None
RWF	257	C	7/9/2019	4:04:55	83.87	55.91	0.47	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	3.49	No	None	-	None
RWF	258	A	7/9/2019	2:30:02	72.69	48.46	0.35	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	13.33	No	Ripples	32.81	Moon Snail Egg Case
RWF	258	B	7/9/2019	2:31:11	84.92	56.61	0.48	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	13.87	No	Ripples	IND	None
RWF	258	C	7/9/2019	2:32:30	76.89	51.26	0.39	None	Patchy Pebbles on Sand with Mobile Gravel	Gravel Mixes	Sandy Gravel	17.81	No	None	-	None
RWF	259	A	7/8/2019	0:13:19	80.83	53.89	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	259	B	7/8/2019	0:15:21	78.47	52.31	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	259	C	7/8/2019	0:16:51	80.83	53.89	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWF	260	A	7/8/2019	9:21:31	73.27	48.85	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	260	B	7/8/2019	9:28:24	80.08	53.39	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	260	C	7/8/2019	9:29:48	81.68	54.45	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	261	A	7/8/2019	17:23:15	86.62	57.75	0.50	None	Sand with Mobile Gravel	Gravel	Granule	2.02	No	None	-	None
RWF	261	B	7/8/2019	17:24:26	68.21	45.47	0.31	None	Sand with Mobile Gravel	Gravel	Granule	2.05	No	None	-	None
RWF	261	D	7/8/2019	17:26:43	87.39	58.26	0.51	None	Sand with Mobile Gravel	Gravel	Granule	2.18	No	Ripples	IND	None
RWF	262	A	7/7/2019	17:51:01	77.92	51.95	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWF	262	B	7/7/2019	17:52:21	79.39	52.93	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWF	262	D	7/7/2019	17:54:37	80.37	53.58	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	401	B	7/12/2019	10:23:08	76.25	50.83	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	401	C	7/12/2019	18:44:38	67.27	44.85	0.30	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None

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RWEC-OCS	401	D	7/12/2019	18:45:57	81.46	54.31	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	402	A	7/12/2019	17:59:13	81.33	54.22	0.44	None	Patchy Pebbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	31.99	No	None	-	None
RWEC-OCS	402	B	7/12/2019	18:00:35	80.37	53.58	0.43	None	Patchy Pebbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	29.60	No	None	-	Shell Hash
RWEC-OCS	402	C	7/12/2019	18:01:45	75.84	50.56	0.38	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	6.83	No	None	-	None
RWEC-OCS	403	A	7/12/2019	17:35:36	77.69	51.79	0.40	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.46	No	None	-	Small Shell Fragments
RWEC-OCS	403	B	7/12/2019	17:36:39	78.87	52.58	0.41	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.37	No	None	-	Shell Hash
RWEC-OCS	403	C	7/12/2019	17:37:50	78.04	52.03	0.41	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.73	No	None	-	Shell Hash
RWEC-OCS	404	A	7/12/2019	16:12:41	65.85	43.90	0.29	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash, Large Shell Fragment
RWEC-OCS	404	B	7/12/2019	16:13:54	79.80	53.20	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWEC-OCS	404	D	7/12/2019	16:16:24	75.40	50.27	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWEC-OCS	405	A	7/12/2019	0:02:57	79.59	53.06	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	405	B	7/12/2019	0:04:17	77.50	51.66	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	405	D	7/12/2019	0:07:02	75.25	50.17	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	406	A	7/11/2019	23:35:45	77.92	51.95	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	406	B	7/11/2019	23:36:57	77.34	51.56	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment
RWEC-OCS	406	D	7/11/2019	23:39:33	79.27	52.85	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	407	A	7/11/2019	22:52:13	70.65	47.10	0.33	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	407	B	7/11/2019	22:53:36	81.08	54.05	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragments
RWEC-OCS	407	C	7/11/2019	22:54:51	76.62	51.08	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	408	A	7/11/2019	22:29:40	73.93	49.29	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWEC-OCS	408	B	7/11/2019	22:30:54	73.41	48.94	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash, Large Shell Fragment
RWEC-OCS	408	C	7/11/2019	22:32:05	74.64	49.76	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWEC-OCS	409	A	7/11/2019	21:52:04	75.88	50.58	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	409	B	7/11/2019	21:53:20	80.83	53.89	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWEC-OCS	409	C	7/11/2019	21:54:35	73.31	48.87	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	410	A	7/11/2019	21:27:54	73.21	48.80	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	410	B	7/11/2019	21:29:05	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	410	C	7/11/2019	21:30:18	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	411	A	7/11/2019	20:09:07	74.14	49.43	0.37	None	Continuous Large Pebbles and Cobbles on Sand	Gravel	Cobble	62.03	No	None	-	Large Shell Fragments
RWEC-OCS	411	B	7/11/2019	20:10:29	77.96	51.97	0.41	None	Continuous Large Pebbles and Cobbles on Sand	Gravel	Cobble	82.12	No	None	-	Large Shell Fragments
RWEC-OCS	411	C	7/11/2019	20:11:50	79.88	53.25	0.43	None	Continuous Large Pebbles and Cobbles on Sand	Gravel	Cobble	69.89	No	None	-	Large Shell Fragments
RWEC-OCS	412	A	7/12/2019	1:41:47	73.31	48.87	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments

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RWEC-OCS	412	B	7/12/2019	1:43:40	77.81	51.87	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	412	C	7/12/2019	1:45:00	74.46	49.64	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	413	A	7/12/2019	0:53:32	76.96	51.31	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	413	B	7/12/2019	0:55:11	67.71	45.14	0.31	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	413	D	7/12/2019	0:58:32	72.19	48.13	0.35	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	414	A	7/11/2019	15:18:50	71.53	47.68	0.34	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	414	B	7/11/2019	15:20:02	75.04	50.02	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	414	C	7/11/2019	15:21:22	82.58	55.06	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	415	A	7/11/2019	16:08:28	73.52	49.01	0.36	None	Patchy Pebbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	31.86	No	None	-	None
RWEC-OCS	415	B	7/11/2019	16:09:42	74.07	49.38	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	415	C	7/11/2019	16:11:06	77.73	51.82	0.40	None	Patchy Pebbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	31.61	No	None	-	None
RWEC-OCS	416	A	7/11/2019	16:34:58	79.63	53.09	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	416	C	7/11/2019	16:38:03	75.00	50.00	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	416	D	7/11/2019	16:39:26	83.96	55.97	0.47	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	417	A	7/11/2019	18:11:20	73.45	48.96	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	417	C	7/11/2019	18:13:57	74.71	49.81	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	417	D	7/11/2019	18:15:14	74.64	49.76	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	418	A	7/11/2019	18:36:11	80.25	53.50	0.43	None	Continuous Large Pebbles and Cobbles on Sand	Gravel Mixes	Sandy Gravel	42.40	No	None	-	Large Shell Fragments
RWEC-OCS	418	B	7/11/2019	18:37:51	80.16	53.44	0.43	None	Continuous Large Pebbles and Cobbles on Sand	Gravel Mixes	Sandy Gravel	100.87	No	None	-	Large Shell Fragments
RWEC-OCS	418	D	7/11/2019	18:40:21	72.69	48.46	0.35	None	Continuous Large Cobbles and Boulders on Sand	Gravel	Cobble	68.33	Yes	None	-	Large Shell Fragments
RWEC-OCS	419	A	7/11/2019	19:36:52	72.93	48.62	0.35	None	Continuous Large Pebbles and Cobbles on Sand	Gravel	Pebble	81.56	No	None	-	None
RWEC-OCS	419	B	7/11/2019	19:38:06	81.80	54.54	0.45	None	Continuous Large Pebbles and Cobbles on Sand	Gravel	Pebble	23.72	No	None	-	Large Shell Fragments
RWEC-OCS	419	C	7/11/2019	19:39:26	76.66	51.11	0.39	None	Continuous Large Pebbles and Cobbles on Sand	Gravel	Pebble	58.13	No	None	-	Large Shell Fragments
RWEC-OCS	420	A	7/12/2019	22:00:24	80.87	53.91	0.44	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	10.11	No	None	-	Small Shell Fragments
RWEC-OCS	420	B	7/12/2019	22:01:37	78.99	52.66	0.42	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	8.56	No	None	-	Small Shell Fragments
RWEC-OCS	420	C	7/12/2019	22:02:49	80.37	53.58	0.43	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	19.29	No	None	-	Small Shell Fragments
RWEC-OCS	421	D	7/14/2019	8:53:18	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	421	E	7/14/2019	9:44:50	77.42	51.61	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	421	F	7/14/2019	9:46:31	70.21	46.80	0.33	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	422	B	7/14/2019	8:15:59	74.68	49.78	0.37	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	12.94	No	None	-	None
RWEC-OCS	422	C	7/14/2019	8:17:19	70.43	46.95	0.33	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	9.51	No	None	-	None

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RWEC-OCS	422	D	7/14/2019	8:18:52	76.06	50.71	0.39	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	9.51	No	None	-	None
RWEC-OCS	423	A	7/14/2019	7:25:50	81.55	54.36	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	Ripples	79.82	None
RWEC-OCS	423	C	7/14/2019	7:28:56	78.20	52.13	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	Ripples	IND	Shell Hash
RWEC-OCS	423	D	7/14/2019	7:30:32	77.08	51.38	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	Ripples	58.20	Shell Hash
RWEC-OCS	424	A	7/14/2019	7:01:02	72.69	48.46	0.35	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	5.57	No	Ripples	65.68	Shell Hash
RWEC-OCS	424	C	7/14/2019	7:03:53	83.92	55.94	0.47	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	6.71	No	Ripples	IND	Shell Hash
RWEC-OCS	424	D	7/14/2019	7:05:01	82.50	55.00	0.45	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	7.84	No	Ripples	54.24	Small Shell Fragments
RWEC-OCS	425	A	7/14/2019	4:56:20	70.84	47.23	0.33	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWEC-OCS	425	B	7/14/2019	4:57:38	77.19	51.46	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWEC-OCS	425	C	7/14/2019	4:58:58	80.54	53.69	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash, Large Shell Fragment
RWEC-OCS	426	A	7/14/2019	3:15:22	73.55	49.03	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	426	B	7/14/2019	3:16:30	76.77	51.18	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	426	C	7/14/2019	3:17:44	78.39	52.26	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	427	A	7/14/2019	2:05:10	82.02	54.68	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	427	B	7/14/2019	2:06:33	81.85	54.56	0.45	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	427	C	7/14/2019	2:08:03	81.38	54.25	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	Ripples	IND	Moon Snail Egg Case
RWEC-OCS	428	A	7/14/2019	1:19:33	77.19	51.46	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWEC-OCS	428	B	7/14/2019	1:20:50	77.96	51.97	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWEC-OCS	428	C	7/14/2019	1:22:11	80.62	53.75	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWEC-RI	429	A	7/14/2019	0:27:06	74.25	49.50	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Moon Snail Egg Case, Shell Hash
RWEC-RI	429	B	7/14/2019	0:28:15	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	429	C	7/14/2019	0:29:23	73.76	49.17	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWEC-RI	430	A	7/13/2019	8:22:54	78.00	52.00	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	430	B	7/13/2019	8:24:25	76.51	51.01	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	430	C	7/13/2019	8:26:04	76.70	51.13	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWEC-RI	431	A	7/13/2019	7:43:09	76.47	50.98	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	431	C	7/13/2019	7:46:10	61.68	41.12	0.25	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	431	D	7/13/2019	7:47:51	77.30	51.54	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	432	A	7/13/2019	7:10:25	71.30	47.53	0.34	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	432	C	7/13/2019	7:13:24	71.92	47.95	0.34	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	432	D	7/13/2019	7:15:17	74.18	49.45	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	433	A	7/13/2019	6:45:37	79.92	53.28	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	433	B	7/13/2019	6:46:53	78.79	52.53	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	433	C	7/13/2019	6:48:17	68.97	45.98	0.32	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	434	A	7/13/2019	10:07:41	79.84	53.22	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments

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RWEC-RI	434	B	7/13/2019	10:09:44	77.27	51.51	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	434	C	7/13/2019	10:11:07	77.11	51.41	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	435	A	7/13/2019	11:14:46	78.87	52.58	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	435	B	7/13/2019	11:20:31	78.31	52.21	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	435	D	7/13/2019	11:23:22	63.34	42.22	0.27	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	436	A	7/13/2019	11:40:36	71.07	47.38	0.34	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	436	C	7/13/2019	11:43:39	77.84	51.90	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	436	D	7/13/2019	11:45:08	75.76	50.51	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	437	A	7/13/2019	12:23:39	69.52	46.35	0.32	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment
RWEC-RI	437	B	7/13/2019	12:24:48	75.65	50.44	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	437	C	7/13/2019	12:25:59	79.92	53.28	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment
RWEC-RI	438	A	7/13/2019	12:38:19	78.75	52.50	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	438	C	7/13/2019	12:40:46	77.15	51.43	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragments
RWEC-RI	438	D	7/13/2019	12:41:56	85.76	57.17	0.49	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	439	A	7/13/2019	12:51:23	71.14	47.42	0.34	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	439	B	7/13/2019	12:52:31	66.47	44.31	0.29	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	439	C	7/13/2019	12:53:52	78.43	52.29	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	440	A	7/13/2019	13:16:02	68.63	45.75	0.31	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Moon Snail Egg Case
RWEC-RI	440	B	7/13/2019	13:17:16	73.21	48.80	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	440	D	7/13/2019	13:19:42	65.35	43.57	0.28	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	441	A	7/13/2019	14:47:02	78.35	52.24	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	441	B	7/13/2019	14:48:19	73.41	48.94	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	441	C	7/13/2019	14:49:40	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	442	A	7/13/2019	15:20:25	77.50	51.66	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	442	C	7/13/2019	15:22:52	75.88	50.58	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	442	D	7/13/2019	15:24:04	72.29	48.19	0.35	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	443	A	7/13/2019	16:07:08	77.11	51.41	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	Ripples	8.84	None
RWEC-RI	443	B	7/13/2019	16:08:22	78.59	52.39	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	Ripples	14.37	None
RWEC-RI	443	C	7/13/2019	16:09:37	78.23	52.16	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	Ripples	12.58	None
RWEC-RI	444	A	7/13/2019	16:29:32	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	Ripples	IND	None
RWEC-RI	444	B	7/13/2019	16:30:41	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	Ripples	IND	None
RWEC-RI	444	D	7/13/2019	16:36:30	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	Ripples	IND	None
RWEC-RI	445	A	7/13/2019	16:59:24	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	445	B	7/13/2019	17:00:33	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	Ripples	IND	Large Shell Fragment
RWEC-RI	446	A	7/13/2019	17:21:04	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	446	B	7/13/2019	17:22:05	75.04	50.02	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragments
RWEC-RI	446	C	7/13/2019	17:23:26	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	447	A	7/13/2019	17:36:58	76.13	50.76	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragments
RWEC-RI	447	B	7/13/2019	17:38:14	77.19	51.46	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragments
RWEC-RI	447	C	7/13/2019	17:39:30	77.88	51.92	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragments
RWEC-RI	448	A	7/13/2019	17:59:42	79.63	53.09	0.42	None	Mollusk Bed (or Shells) on Mud	Sand	Sand or Finer	IND	No	None	-	Large Mussel Shell Fragments
RWEC-RI	448	B	7/13/2019	18:00:56	82.54	55.03	0.45	None	Mollusk Bed (or Shells) on Mud	Sand	Sand or Finer	IND	No	None	-	Large Mussel Shell Fragments

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RWEC-RI	448	D	7/13/2019	18:03:15	IND	IND	IND	None	Mollusk Bed (or Shells) on Mud	Sand	Sand or Finer	IND	No	None	-	Large Mussel Shell Fragments
RWEC-RI	449	A	7/13/2019	18:14:34	IND	IND	IND	None	Mollusk Bed (or Shells) on Mud	Sand	Sand or Finer	IND	No	None	-	Large Mussel Shell Fragments
RWEC-RI	449	B	7/13/2019	18:15:48	74.11	49.41	0.37	None	Mollusk Bed (or Shells) on Mud	Sand	Sand or Finer	IND	No	None	-	Large Mussel Shell Fragments
RWEC-RI	449	C	7/13/2019	18:16:58	IND	IND	IND	None	Mollusk Bed (or Shells) on Mud	Sand	Sand or Finer	IND	No	None	-	Large Mussel Shell Fragments
RWEC-RI	450	B	7/25/2019	13:34:11	88.89	59.26	0.53	None	Mollusk Bed (or Shells) on Mud	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragments
RWEC-RI	450	F	7/25/2019	14:01:41	87.49	58.33	0.51	None	Mollusk Bed (or Shells) on Mud	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragments
RWEC-RI	450	G	7/25/2019	14:03:05	88.64	59.09	0.52	None	Mollusk Bed (or Shells) on Mud	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragments
RWEC-RI	451	A	7/13/2019	20:16:26	IND	IND	IND	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	IND	No	None	-	None
RWEC-RI	451	C	7/13/2019	20:33:43	IND	IND	IND	None	IND	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragments
RWEC-RI	451	D	7/13/2019	20:35:03	IND	IND	IND	None	Patchy Cobbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	IND	No	None	-	Large Shell Fragments
RWEC-RI	452	A	7/25/2019	14:23:44	81.21	54.14	0.44	None	Patchy Cobbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	85.81	No	None	-	Small Shell Fragments
RWEC-RI	452	B	7/25/2019	14:24:58	86.96	57.97	0.50	None	Patchy Pebbles on Sand	Slightly Gravelly	Slightly Gravelly Sand	35.80	No	None	-	Large Shell Fragments
RWEC-RI	452	D	7/25/2019	14:27:49	89.19	59.46	0.53	None	Patchy Cobbles on Sand	Gravelly	Gravelly Sand	114.61	No	None	-	Large Shell Fragments
RWEC-RI	453	A	7/25/2019	14:52:14	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment
RWEC-RI	453	C	7/25/2019	14:55:15	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	453	D	7/25/2019	14:56:39	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	454	A	7/25/2019	15:34:32	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	454	C	7/25/2019	15:37:01	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	455	A	7/25/2019	15:49:49	82.63	55.08	0.46	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	456	A	7/12/2019	22:21:36	74.07	49.38	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	456	B	7/12/2019	22:22:45	72.39	48.26	0.35	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	456	C	7/12/2019	22:23:57	81.17	54.11	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	457	A	7/12/2019	22:42:37	75.95	50.63	0.38	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	6.20	No	None	-	None
RWEC-OCS	457	B	7/12/2019	22:44:02	71.40	47.60	0.34	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	4.52	No	None	-	None
RWEC-OCS	457	C	7/12/2019	22:45:16	76.62	51.08	0.39	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	6.39	No	None	-	None
RWEC-OCS	458	A	7/12/2019	23:05:07	79.51	53.01	0.42	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	5.04	No	None	-	Large Shell Fragments
RWEC-OCS	458	B	7/12/2019	23:06:20	81.33	54.22	0.44	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	5.69	No	None	-	Small Shell Fragments
RWEC-OCS	458	C	7/12/2019	23:07:34	74.68	49.78	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment
RWEC-OCS	459	A	7/12/2019	23:28:50	66.95	44.64	0.30	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	459	B	7/12/2019	23:29:57	74.18	49.45	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	459	C	7/12/2019	23:31:02	77.77	51.84	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	460	A	7/13/2019	2:14:07	80.29	53.53	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	460	C	7/13/2019	2:16:54	75.58	50.39	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	460	D	7/13/2019	2:18:27	74.53	49.69	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large and Small Shell Fragments
RWEC-OCS	461	A	7/13/2019	2:37:18	69.36	46.24	0.32	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None

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RWEC-OCS	461	B	7/13/2019	2:38:37	76.81	51.21	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	462	A	7/13/2019	3:02:19	81.68	54.45	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	462	B	7/13/2019	3:03:45	75.44	50.29	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	462	C	7/13/2019	3:05:07	71.40	47.60	0.34	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	463	A	7/13/2019	3:27:32	77.15	51.43	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	463	F	7/13/2019	6:00:01	69.00	46.00	0.32	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	463	G	7/13/2019	6:01:22	71.20	47.47	0.34	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	464	A	7/13/2019	3:51:17	77.96	51.97	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	464	C	7/13/2019	3:54:30	77.50	51.66	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	464	D	7/13/2019	3:56:16	79.84	53.22	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
Reference Area	501	A	7/10/2019	22:27:55	80.83	53.89	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
Reference Area	501	B	7/10/2019	22:29:14	77.15	51.43	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
Reference Area	501	C	7/10/2019	22:30:33	78.27	52.18	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
Reference Area	502	A	7/10/2019	22:07:43	77.92	51.95	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
Reference Area	502	B	7/10/2019	22:09:05	77.11	51.41	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment, Shell Hash
Reference Area	502	D	7/10/2019	22:11:46	78.35	52.24	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
Reference Area	503	A	7/10/2019	21:47:10	73.21	48.80	0.36	None	Sand with Mobile Gravel	Gravelly	Gravelly Sand	9.27	No	None	-	Large Shell Fragment
Reference Area	503	B	7/10/2019	21:48:30	81.33	54.22	0.44	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.30	No	None	-	Small Shell Fragments
Reference Area	503	C	7/10/2019	21:49:53	85.34	56.89	0.49	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	10.10	No	None	-	Small Shell Fragments
Reference Area	504	A	7/10/2019	21:26:03	76.55	51.03	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
Reference Area	504	B	7/10/2019	21:27:18	77.23	51.49	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
Reference Area	504	C	7/10/2019	21:28:42	79.71	53.14	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
Reference Area	505	A	7/10/2019	21:05:42	71.49	47.66	0.34	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
Reference Area	505	B	7/10/2019	21:07:06	73.31	48.87	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
Reference Area	505	C	7/10/2019	21:08:27	81.59	54.39	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	601	A	7/12/2019	18:24:47	72.69	48.46	0.35	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	601	B	7/12/2019	18:25:56	77.08	51.38	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	601	C	7/12/2019	18:27:08	78.31	52.21	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment
RWEC-OCS	602	A	7/12/2019	16:35:47	72.09	48.06	0.35	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	602	B	7/12/2019	16:36:57	77.92	51.95	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	602	C	7/12/2019	16:38:14	75.54	50.36	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	603	A	7/12/2019	2:34:14	78.99	52.66	0.42	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-OCS	603	B	7/12/2019	2:35:52	78.55	52.37	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments

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RWEC-OCS	603	C	7/12/2019	2:41:16	81.38	54.25	0.44	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragments
RWEC-RI	604	A	7/14/2019	0:09:59	75.11	50.07	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	604	B	7/14/2019	0:11:12	76.85	51.23	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	604	C	7/14/2019	0:12:34	80.25	53.50	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Small Shell Fragment
RWEC-OCS	605	A	7/14/2019	1:03:00	76.96	51.31	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Large Shell Fragment
RWEC-OCS	605	B	7/14/2019	1:04:35	74.93	49.95	0.37	None	Sand Sheet	Sand	Sand or Finer	IND	No	Ripples	IND	Shell Hash
RWEC-OCS	605	C	7/14/2019	1:06:16	78.63	52.42	0.41	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWEC-OCS	606	A	7/14/2019	2:38:59	72.22	48.15	0.35	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	4.57	No	Ripples	68.36	Shell Hash
RWEC-OCS	606	B	7/14/2019	2:41:00	74.07	49.38	0.37	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	6.30	No	Ripples	IND	Shell Hash
RWEC-OCS	606	C	7/14/2019	2:42:22	78.83	52.55	0.41	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	7.49	No	Ripples	IND	Shell Hash
RWEC-OCS	607	A	7/14/2019	3:35:40	75.40	50.27	0.38	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	607	E	7/14/2019	5:36:09	76.51	51.01	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	607	F	7/14/2019	5:37:44	82.76	55.17	0.46	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	608	B	7/14/2019	4:35:08	76.10	50.73	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	608	C	7/14/2019	4:36:30	77.57	51.72	0.40	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	608	F	7/14/2019	5:58:19	73.41	48.94	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-OCS	609	A	7/14/2019	6:18:51	77.92	51.95	0.40	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.34	No	Ripples	34.32	Small Shell Fragments
RWEC-OCS	609	B	7/14/2019	6:20:39	82.98	55.32	0.46	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.21	No	Ripples	45.46	Shell Hash
RWEC-OCS	609	C	7/14/2019	6:22:17	83.20	55.47	0.46	None	Sand with Mobile Gravel	Slightly Gravelly	Slightly Gravelly Sand	2.36	No	Ripples	36.61	Shell Hash
RWEC-RI	610	A	7/13/2019	13:40:26	76.66	51.11	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	610	B	7/13/2019	13:41:40	76.17	50.78	0.39	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	610	C	7/13/2019	13:42:47	73.27	48.85	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	611	A	7/13/2019	10:49:52	69.21	46.14	0.32	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	611	B	7/13/2019	10:51:31	80.62	53.75	0.43	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	611	C	7/13/2019	10:53:10	73.34	48.90	0.36	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	612	A	7/25/2019	15:20:29	83.02	55.35	0.46	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	612	D	7/25/2019	15:24:08	87.94	58.62	0.52	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	None
RWEC-RI	613	A	7/25/2019	14:37:45	87.54	58.36	0.51	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWEC-RI	613	B	7/25/2019	14:39:02	86.14	57.43	0.49	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWEC-RI	613	D	7/25/2019	14:41:31	IND	IND	IND	None	Sand Sheet	Sand	Sand or Finer	IND	No	None	-	Shell Hash
RWEC-RI	614	A	7/13/2019	19:44:04	76.62	51.08	0.39	None	Mollusk Bed (or Shells) on Mud	Sand	Sand or Finer	IND	No	None	-	Shell Hash and Large Shell Fragments
RWEC-RI	614	B	7/13/2019	19:45:17	75.29	50.19	0.38	None	Mollusk Bed (or Shells) on Mud	Sand	Sand or Finer	IND	No	None	-	Shell Hash and Large Shell Fragments
RWEC-RI	614	C	7/13/2019	19:46:31	IND	IND	IND	None	Mollusk Bed (or Shells) on Mud	Sand	Sand or Finer	IND	No	None	-	Shell Hash and Large Shell Fragments
RWEC-RI	615	A	7/13/2019	18:59:02	75.54	50.36	0.38	None	Mollusk Bed (or Shells) on Mud	Sand	Sand or Finer	IND	No	None	-	Large Mussel Shell Fragments
RWEC-RI	615	C	7/13/2019	19:04:39	IND	IND	IND	None	Mollusk Bed (or Shells) on Mud	Sand	Sand or Finer	IND	No	None	-	Large Mussel Shell Fragments
RWEC-RI	615	D	7/13/2019	19:05:51	IND	IND	IND	None	Mollusk Bed (or Shells) on Mud	Sand	Sand or Finer	IND	No	None	-	Large Mussel Shell Fragments

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	001	A	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Barnacles	Sparse (1 to <30%)	No	None	No
RWF	001	B	Attached Fauna	IND	No	None	None	Attached Hydroids	IND	Sparse (1 to <30%)	No	None	No
RWF	001	C	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Barnacles	Sparse (1 to <30%)	No	None	No
RWF	002	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	002	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	002	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	003	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	003	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	003	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	004	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	004	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	004	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	005	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	005	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	005	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	006	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	006	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	006	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	007	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	007	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	007	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	008	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	008	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	008	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	009	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	009	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	009	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	010	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	010	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	010	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	011	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	011	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	011	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	012	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	012	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	012	C	Soft Sediment Fauna	None	No	None	None	IND	IND	None	No	None	IND
RWF	013	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	013	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	Yes
RWF	013	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	Tracks and Trails	None	No	None	Yes
RWF	014	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	014	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	014	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	015	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	015	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	015	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	016	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	016	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	016	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	017	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	017	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	017	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	018	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	018	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	018	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	019	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	019	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	019	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	020	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	020	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	020	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	021	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Starfish Bed	None	No	None	Yes
RWF	021	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Starfish Bed	None	No	None	Yes
RWF	021	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Starfish Bed	None	No	None	Yes
RWF	022	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	022	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	022	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	023	E	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	No
RWF	023	F	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	023	G	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWF	024	B	Soft Sediment Fauna	None	No	None	None	Mobile Crustaceans on Soft Sediments	None	None	No	None	No
RWF	024	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Attached Hydroids	Trace (<1%)	No	None	No
RWF	024	D	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Attached Hydroids	Trace (<1%)	No	None	No
RWF	025	A	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Pennatulid Bed	Sparse (1 to <30%)	Possible	*Botrylloides sp.* tunicate	No
RWF	025	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Pennatulid Bed	Barnacles	Sparse (1 to <30%)	No	None	No
RWF	025	D	Soft Sediment Fauna	Attached Fauna	No	None	None	Tracks and Trails	Attached Hydroids	Trace (<1%)	Possible	*Botrylloides sp.* tunicate	No
RWF	026	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	026	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	026	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	027	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	027	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	IND
RWF	027	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	028	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	028	B	Soft Sediment Fauna	None	No	None	None	Mobile Crustaceans on Soft Sediments	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	028	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	029	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	Attached Hydroids	Trace (<1%)	No	None	No
RWF	029	C	Soft Sediment Fauna	None	No	None	None	Mobile Crustaceans on Soft Sediments	None	None	No	None	No
RWF	029	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	Tracks and Trails	None	No	None	No
RWF	030	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	No
RWF	030	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	No
RWF	030	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	031	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Tracks and Trails	None	No	None	Yes
RWF	031	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	031	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Starfish Bed	None	No	None	Yes
RWF	032	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	032	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Tracks and Trails	None	No	None	Yes
RWF	032	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	033	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	033	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	033	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	034	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	034	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	034	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	035	E	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	035	F	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	035	G	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	IND
RWF	036	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	036	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	036	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	037	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	037	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	037	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	038	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Tracks and Trails	None	No	None	Yes
RWF	038	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	038	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	039	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	039	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	039	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Tracks and Trails	None	No	None	Yes
RWF	040	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	040	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	040	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	041	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	041	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	042	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	042	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	042	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	043	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	Tracks and Trails	None	No	None	Yes
RWF	043	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	043	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	044	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	044	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	044	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	045	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	045	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	046	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	046	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	046	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	Trace (<1%)	No	None	Yes
RWF	047	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Tracks and Trails	None	No	None	Yes
RWF	047	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Tunicate Bed	None	No	None	Yes
RWF	047	D	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Tunicate Bed	None	No	None	Yes
RWF	048	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	048	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	048	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	049	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	049	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	049	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	050	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	050	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Tracks and Trails	None	No	None	Yes
RWF	050	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	051	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	051	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	051	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	052	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	052	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	052	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Tracks and Trails	None	No	None	Yes
RWF	053	B	Soft Sediment Fauna	None	No	None	None	Small Surface-Burrowing Fauna	None	None	No	None	No
RWF	053	C	Soft Sediment Fauna	None	No	None	None	Small Surface-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	053	D	Soft Sediment Fauna	None	No	None	None	Small Surface-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	054	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	054	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Diverse Soft Sediment EpiFauna	None	No	None	Yes
RWF	054	D	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	055	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	055	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	055	D	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	056	I	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	056	K	Soft Sediment Fauna	Inferred Fauna	No	None	None	Tracks and Trails	Small Tube-Building Fauna	None	No	None	Yes
RWF	056	N	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Tracks and Trails	None	No	None	Yes
RWF	057	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	057	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	057	D	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Tunicate Bed	Trace (<1%)	No	None	Yes
RWF	057E1	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Tunicate Bed	None	No	None	Yes
RWF	057E1	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Tunicate Bed	None	No	None	Yes
RWF	057E1	D	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Tunicate Bed	None	No	None	Yes
RWF	057E2	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Tunicate Bed	None	No	None	Yes
RWF	057E2	B	Soft Sediment Fauna	None	No	None	None	Mobile Crustaceans on Soft Sediments	Tunicate Bed	None	No	None	Yes
RWF	057E2	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	057W1	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Tunicate Bed	None	No	None	Yes
RWF	057W1	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Tunicate Bed	None	No	None	Yes
RWF	057W1	D	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	057W2	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Tunicate Bed	None	No	None	Yes
RWF	057W2	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Tunicate Bed	None	No	None	Yes
RWF	057W2	D	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Tunicate Bed	None	No	None	Yes
RWF	058	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	058	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	058	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	059	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	059	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	059	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	060	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	Trace (<1%)	No	None	Yes
RWF	060	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	060	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	061	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Tunicate Bed	None	No	None	Yes
RWF	061	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Tunicate Bed	None	No	None	Yes
RWF	061	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	062	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	062	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	062	D	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	063	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	063	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	063	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	064	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	064	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	064	D	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	065	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	065	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	065	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	066	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	066	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	066	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	067	E	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	067	F	Soft Sediment Fauna	Inferred Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	Tracks and Trails	None	No	None	Yes
RWF	067	G	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	068	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
RWF	068	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	068	D	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	069	A	Soft Sediment Fauna	None	No	None	None	Mobile Crustaceans on Soft Sediments	None	None	No	None	No
RWF	069	B	Attached Fauna	None	No	None	None	Attached Hydroids	None	Trace (<1%)	No	None	No
RWF	069	D	Soft Sediment Fauna	None	No	None	None	Mobile Crustaceans on Soft Sediments	None	None	No	None	No
RWF	070	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	070	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	070	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	071	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	071	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	071	D	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	072	A	Soft Sediment Fauna	None	No	None	None	IND	None	None	No	None	Yes
RWF	072	B	Attached Fauna	None	No	None	None	Mobile Crustaceans on Hard or Mixed Substrates	None	Trace (<1%)	No	None	Yes
RWF	072	C	Attached Fauna	None	No	None	None	Mobile Crustaceans on Hard or Mixed Substrates	None	Trace (<1%)	No	None	Yes
RWF	073	A	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Barnacles	Dense (70 to < 90%)	No	None	No
RWF	073	C	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Barnacles	Sparse (1 to <30%)	No	None	No
RWF	073	D	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Diverse Colonizers	Dense (70 to < 90%)	Possible	*Botrylloides sp.* tunicate	No
RWF	073E1	A	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Barnacles	Moderate (30 to < 70%)	No	None	No
RWF	073E1	C	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Barnacles	Moderate (30 to < 70%)	No	None	No
RWF	073E1	D	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Barnacles	Moderate (30 to < 70%)	No	None	No
RWF	073E2	A	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Barnacles	Moderate (30 to < 70%)	Possible	*Botrylloides sp.* tunicate	No
RWF	073E2	B	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Larger Deep-Burrowing Fauna	Sparse (1 to <30%)	No	None	No
RWF	073E2	D	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Barnacles	Moderate (30 to < 70%)	No	None	No
RWF	073W1	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Barnacles	Sparse (1 to <30%)	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	073W1	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Attached Hydroids	Sparse (1 to <30%)	No	None	Yes
RWF	073W1	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	073W2	B	Soft Sediment Fauna	Attached Fauna	No	None	None	IND	None	Trace (<1%)	No	None	Yes
RWF	073W2	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Attached Hydroids	None	Sparse (1 to <30%)	No	None	No
RWF	073W2	D	Soft Sediment Fauna	Attached Fauna	No	None	None	Attached Hydroids	Barnacles	Sparse (1 to <30%)	No	None	No
RWF	074	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	074	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	074	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	075	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Attached Hydroids	Sparse (1 to <30%)	No	None	Yes
RWF	075	B	Attached Fauna	None	No	None	None	Attached Hydroids	Diverse Colonizers	Complete (90-100%)	No	None	No
RWF	075	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	076	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Attached Hydroids	Sparse (1 to <30%)	No	None	Yes
RWF	076	C	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Diverse Colonizers	Moderate (30 to < 70%)	Possible	*Botrylloides sp.* tunicate	Yes
RWF	076	D	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Small Tube-Building Fauna	Moderate (30 to < 70%)	No	None	Yes
RWF	077	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	077	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	077	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	078	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	078	C	Soft Sediment Fauna	Attached Fauna	No	None	None	IND	None	Trace (<1%)	No	None	No
RWF	078	D	Soft Sediment Fauna	Attached Fauna	No	None	None	IND	None	Trace (<1%)	No	None	No
RWF	079	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	079	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	079	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	080	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	080	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	080	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	081	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
RWF	081	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Pennatulid Bed	None	Trace (<1%)	No	None	No
RWF	081	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	Trace (<1%)	No	None	No
RWF	082	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	082	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	082	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	083	A	Attached Fauna	None	No	None	None	Attached Hydroids	None	Sparse (1 to <30%)	No	None	No
RWF	083	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Attached Hydroids	Trace (<1%)	No	None	No
RWF	083	D	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Barnacles	Trace (<1%)	No	None	No
RWF	084	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Attached Hydroids	Sparse (1 to <30%)	No	None	Yes
RWF	084	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	Barnacles	Sparse (1 to <30%)	No	None	Yes
RWF	084	D2	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Barnacles	Moderate (30 to < 70%)	Possible	*Botrylloides sp.* tunicate	Yes
RWF	085	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	Larger Tube-Building Fauna	None	No	None	Yes
RWF	085	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	Larger Tube-Building Fauna	None	No	None	Yes
RWF	085	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	Larger Tube-Building Fauna	None	No	None	Yes
RWF	086	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	086	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	086	D	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	087	A	Attached Fauna	None	No	None	None	Barnacles	None	Trace (<1%)	No	None	Yes
RWF	087	B	Attached Fauna	None	No	None	None	Barnacles	None	Trace (<1%)	No	None	No
RWF	087	C	Attached Fauna	None	No	None	None	Barnacles	None	Trace (<1%)	No	None	No
RWF	088	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	088	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	Trace (<1%)	No	None	Yes
RWF	088	C	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Small Tube-Building Fauna	Sparse (1 to <30%)	Possible	*Botrylloides sp.* tunicate	Yes
RWF	089	B	Soft Sediment Fauna	None	No	None	None	Mobile Crustaceans on Soft Sediments	None	None	No	None	No
RWF	089	C	Soft Sediment Fauna	None	No	None	None	Mobile Crustaceans on Soft Sediments	Larger Deep-Burrowing Fauna	None	No	None	No
RWF	089	D	Soft Sediment Fauna	None	No	None	None	Mobile Crustaceans on Soft Sediments	Larger Deep-Burrowing Fauna	None	No	None	No
RWF	090	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
RWF	090	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	090	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	091	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	091	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	091	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	092	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	092	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	092	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	093	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	093	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	093	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	094	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	094	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	094	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	095	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	Small Tube-Building Fauna	None	No	None	Yes
RWF	095	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	Trace (<1%)	No	None	Yes
RWF	095	D	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Tunicate Bed	None	No	None	Yes
RWF	096	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	096	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	096	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	097	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	097	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	097	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	098	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	098	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	098	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	099	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	099	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	099	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	100	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	100	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	100	D	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	101	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	None	None	No	None	Yes
RWF	101	C	Soft Sediment Fauna	None	No	None	None	Mobile Crustaceans on Soft Sediments	None	None	No	None	Yes
RWF	101	D	Soft Sediment Fauna	None	No	None	None	Mobile Crustaceans on Soft Sediments	None	None	No	None	Yes
RWF	102	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	102	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	102	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	103	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	103	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	103	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	104	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
RWF	104	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	Tunicate Bed	Trace (<1%)	No	None	Yes
RWF	104	D	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	105	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	105	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	105	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	106	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	106	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
RWF	106	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	107	A	Soft Sediment Fauna	None	No	None	None	IND	None	None	No	None	No
RWF	107	B	Soft Sediment Fauna	None	No	None	None	Mobile Crustaceans on Soft Sediments	None	None	No	None	No
RWF	107	C	Soft Sediment Fauna	None	No	None	None	Mobile Crustaceans on Soft Sediments	None	None	No	None	No
RWF	108	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	108	B	Soft Sediment Fauna	Attached Fauna	No	None	None	IND	None	Trace (<1%)	Possible	*Botrylloides sp.* tunicate	No
RWF	108	C	Soft Sediment Fauna	Attached Fauna	No	None	None	IND	None	Trace (<1%)	No	None	Yes
RWF	109	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	109	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	109	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	110	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	110	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	110	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	111	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
RWF	111	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
RWF	111	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
RWF	112	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	112	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	112	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	113	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	113	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	113	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	114	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	114	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	114	D	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	115	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	115	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	115	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	116	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
RWF	116	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Hard or Mixed Substrates	Trace (<1%)	No	None	Yes
RWF	116	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	Trace (<1%)	No	None	Yes
RWF	117	A	Soft Sediment Fauna	None	No	None	None	Mobile Crustaceans on Soft Sediments	None	None	No	None	Yes
RWF	117	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	117	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	118	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	118	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	118	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	119	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	119	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	Trace (<1%)	No	None	Yes
RWF	119	D	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	120	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	120	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	120	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	121	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	121	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	Trace (<1%)	No	None	Yes
RWF	121	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
RWF	122	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	122	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	122	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	No
RWF	123	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	No
RWF	123	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	No
RWF	123	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	No

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	124	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	124	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	Yes
RWF	124	D	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	125	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	125	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWF	125	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	126	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	126	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	126	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	127	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWF	127	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWF	127	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWF	128	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	128	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	128	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	Small Tube-Building Fauna	None	No	None	Yes
RWF	129	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	129	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	129	D	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	136	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Attached Hydroids	Trace (<1%)	No	None	No
RWF	136	B	Soft Sediment Fauna	Attached Fauna	No	None	None	IND	None	Trace (<1%)	No	None	Yes
RWF	136	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	Trace (<1%)	No	None	Yes
RWF	137	A	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	None	Trace (<1%)	No	None	No
RWF	137	B	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Barnacles	Trace (<1%)	No	None	No
RWF	137	D	Attached Fauna	Soft Sediment Fauna	No	None	None	Barnacles	None	Trace (<1%)	No	None	No
RWF	138	A	Attached Fauna	None	No	None	None	Barnacles	Attached Tube-Building Fauna	Complete (90-100%)	No	None	Yes
RWF	138	B	Attached Fauna	None	No	None	None	Barnacles	Attached Hydroids	Dense (70 to < 90%)	No	None	No
RWF	138	C	Attached Fauna	Soft Sediment Fauna	No	None	None	Barnacles	Attached Hydroids	Moderate (30 to < 70%)	No	None	Yes
RWF	139	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Barnacles	Trace (<1%)	No	None	Yes
RWF	139	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	Barnacles	Trace (<1%)	No	None	Yes
RWF	139	D	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Barnacles	Trace (<1%)	No	None	Yes
RWF	140	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	140	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	140	D	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	141	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	Trace (<1%)	No	None	Yes
RWF	141	C	Soft Sediment Fauna	Attached Fauna	No	None	Sea scallop	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	Trace (<1%)	No	None	Yes
RWF	141	D	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	Trace (<1%)	No	None	Yes
RWF	142	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	Trace (<1%)	No	None	No
RWF	142	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	Trace (<1%)	No	None	Yes
RWF	142	D	Soft Sediment Fauna	Attached Fauna	No	None	None	IND	None	Sparse (1 to <30%)	No	None	No
RWF	143	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	143	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	Trace (<1%)	No	None	Yes
RWF	143	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	144	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Barnacles	Trace (<1%)	No	None	Yes
RWF	144	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Attached Hydroids	Trace (<1%)	No	None	Yes
RWF	144	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Barnacles	Trace (<1%)	No	None	Yes
RWF	201	A	Attached Fauna	Soft Sediment Fauna	No	None	None	Barnacles	Larger Tube-Building Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	201	B	Attached Fauna	Soft Sediment Fauna	No	None	None	Barnacles	Attached Hydroids	Moderate (30 to < 70%)	Possible	*Botrylloides sp.* tunicate	Yes
RWF	201	E	Attached Fauna	None	No	None	None	Barnacles	Attached Hydroids	Complete (90-100%)	Possible	*Botrylloides sp.* tunicate	Yes
RWF	202	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWF	202	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	Trace (<1%)	No	None	Yes
RWF	202	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWF	203	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	203	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	Barnacles	Sparse (1 to <30%)	No	None	Yes
RWF	203	D	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Barnacles	Sparse (1 to <30%)	No	None	Yes
RWF	204	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	204	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	204	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	205	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
RWF	205	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	205	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	206	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWF	206	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Attached Hydroids	Sparse (1 to <30%)	Possible	*Botrylloides sp.* tunicate	No
RWF	206	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	IND	None	None	No	None	No
RWF	207	B	Soft Sediment Fauna	None	No	None	None	Mobile Crustaceans on Soft Sediments	Larger Tube-Building Fauna	None	No	None	Yes
RWF	207	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	207	D	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	Trace (<1%)	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	208	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Barnacles	Sparse (1 to <30%)	No	None	Yes
RWF	208	D	Attached Fauna	Soft Sediment Fauna	Yes	Non-Reef Building Hard Coral	None	Diverse Colonizers	None	Moderate (30 to < 70%)	No	None	Yes
RWF	208	E	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Attached Tube-Building Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	209	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	Trace (<1%)	No	None	Yes
RWF	209	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Small Tube-Building Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	209	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	210	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	Larger Deep-Burrowing Fauna	Trace (<1%)	No	None	No
RWF	210	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	Larger Tube-Building Fauna	Trace (<1%)	No	None	Yes
RWF	210	D	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	211	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	Trace (<1%)	No	None	No
RWF	211	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Hard or Mixed Substrates	None	No	None	No
RWF	211	D	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Barnacles	Trace (<1%)	No	None	No
RWF	212	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWF	212	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	No
RWF	212	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	No
RWF	213	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
RWF	213	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	213	D	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Attached Tube-Building Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	214	A	Soft Sediment Fauna	None	No	None	None	IND	None	None	No	None	No
RWF	214	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Attached Hydroids	Sparse (1 to <30%)	No	None	No
RWF	214	D	Attached Fauna	Soft Sediment Fauna	No	None	None	Diverse Colonizers	None	Dense (70 to < 90%)	Possible	*Botrylloides sp.* tunicate	Yes
RWF	215	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	Trace (<1%)	No	None	Yes
RWF	215	B	Attached Fauna	None	Yes	Non-Reef Building Hard Coral	None	Attached Hydroids	Barnacles	Moderate (30 to < 70%)	No	None	No
RWF	215	C	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Tube-Building Fauna	Barnacles	Moderate (30 to < 70%)	Possible	*Botrylloides sp.* tunicate	Yes
RWF	216	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Diverse Colonizers	Sparse (1 to <30%)	Possible	*Botrylloides sp.* tunicate	Yes
RWF	216	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	Attached Sponges	Sparse (1 to <30%)	Possible	*Botrylloides sp.* tunicate	Yes
RWF	216	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Attached Tube-Building Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	217	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	Trace (<1%)	No	None	No
RWF	217	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Attached Sponges	Sparse (1 to <30%)	Possible	*Botrylloides sp.* tunicate	Yes
RWF	217	D	Attached Fauna	Soft Sediment Fauna	No	None	None	Diverse Colonizers	Larger Deep-Burrowing Fauna	Moderate (30 to < 70%)	Possible	*Botrylloides sp.* tunicate	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	218	A	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Tube-Building Fauna	Attached Sponges	Moderate (30 to < 70%)	No	None	Yes
RWF	218	C	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Tube-Building Fauna	Barnacles	Sparse (1 to <30%)	No	None	Yes
RWF	218	D	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Tube-Building Fauna	Barnacles	Moderate (30 to < 70%)	No	None	Yes
RWF	218E1	A	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Tube-Building Fauna	Attached Sponges	Complete (90-100%)	Possible	*Botrylloides sp.* tunicate	Yes
RWF	218E1	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	Attached Tube-Building Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	218E1	D	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	Attached Tube-Building Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	218E2	A	Soft Sediment Fauna	Attached Fauna	No	None	None	IND	None	Trace (<1%)	No	None	Yes
RWF	218E2	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	Trace (<1%)	No	None	Yes
RWF	218E2	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	None	Trace (<1%)	No	None	Yes
RWF	218W1	A	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Tube-Building Fauna	Barnacles	Moderate (30 to < 70%)	Possible	*Botrylloides sp.* tunicate	Yes
RWF	218W1	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	Attached Tube-Building Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	218W1	C	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Tube-Building Fauna	Larger Tube-Building Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	218W2	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	218W2	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	218W2	D	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	219	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	Attached Tube-Building Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	219	C	Attached Fauna	None	Yes	Non-Reef Building Hard Coral	None	Attached Tube-Building Fauna	Diverse Colonizers	Dense (70 to < 90%)	No	None	Yes
RWF	219	D	Attached Fauna	Soft Sediment Fauna	Yes	Non-Reef Building Hard Coral	None	Attached Tube-Building Fauna	Barnacles	Moderate (30 to < 70%)	No	None	Yes
RWF	220	B	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Larger Deep-Burrowing Fauna	Moderate (30 to < 70%)	No	None	Yes
RWF	220	C	Attached Fauna	Soft Sediment Fauna	No	None	None	Diverse Colonizers	Larger Deep-Burrowing Fauna	Moderate (30 to < 70%)	Possible	*Botrylloides sp.* tunicate	Yes
RWF	220	D	Attached Fauna	Soft Sediment Fauna	No	None	None	Diverse Colonizers	Larger Deep-Burrowing Fauna	Dense (70 to < 90%)	No	None	Yes
RWF	220E1	B	Attached Fauna	Soft Sediment Fauna	No	None	None	Diverse Colonizers	Larger Deep-Burrowing Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	220E1	C	Attached Fauna	Soft Sediment Fauna	No	None	None	Barnacles	Small Tube-Building Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	220E1	D	Attached Fauna	Soft Sediment Fauna	No	None	None	Diverse Colonizers	Larger Deep-Burrowing Fauna	Dense (70 to < 90%)	No	None	Yes
RWF	220E2	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	220E2	C	Attached Fauna	Soft Sediment Fauna	No	None	None	Diverse Colonizers	Small Tube-Building Fauna	Moderate (30 to < 70%)	Possible	*Botrylloides sp.* tunicate	Yes
RWF	220E2	D	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	Attached Tube-Building Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	220W1	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	None	Trace (<1%)	No	None	Yes
RWF	220W1	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Attached Tube-Building Fauna	Sparse (1 to <30%)	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	220W1	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	220W2	B	Attached Fauna	Soft Sediment Fauna	No	None	None	Diverse Colonizers	Small Tube-Building Fauna	Moderate (30 to < 70%)	Possible	*Botrylloides sp.* tunicate	Yes
RWF	220W2	C	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Tube-Building Fauna	Larger Deep-Burrowing Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	220W2	D	Attached Fauna	Soft Sediment Fauna	No	None	None	Diverse Colonizers	Larger Deep-Burrowing Fauna	Sparse (1 to <30%)	Possible	*Botrylloides sp.* tunicate	Yes
RWF	221	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	221	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWF	221	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	222	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	222	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	222	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	223	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	223	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	223	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	224	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	224	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	224	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	225	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	225	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	225	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	226	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	226	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	226	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	227	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	Yes
RWF	227	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	Yes
RWF	227	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	Yes
RWF	228	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	228	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	228	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	229	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	229	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	229	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	230	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	230	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	230	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	231	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	231	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	231	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	232	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Attached Hydroids	Sparse (1 to <30%)	No	None	Yes
RWF	232	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	Trace (<1%)	No	None	Yes
RWF	232	D	Attached Fauna	Soft Sediment Fauna	No	None	Sea scallop	Attached Hydroids	Barnacles	Moderate (30 to < 70%)	No	None	Yes
RWF	233	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	233	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	233	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	234	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	234	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	234	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	235	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWF	235	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWF	235	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWF	236	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	No
RWF	236	E	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	No
RWF	236	F	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	237	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	237	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	237	D	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	238	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	238	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	238	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	239	E	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	239	G	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	239	H	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	Sparse (1 to <30%)	No	None	Yes
RWF	240	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	240	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	240	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	241	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	241	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	241	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	242	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	242	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	242	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	243	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	243	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	243	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	244	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	244	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	244	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	245	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	245	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	245	D	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Barnacles	Trace (<1%)	No	None	Yes
RWF	246	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	246	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	247	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	247	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	Trace (<1%)	No	None	No
RWF	247	C	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	None	Trace (<1%)	No	None	Yes
RWF	248	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
RWF	248	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
RWF	248	D	Soft Sediment Fauna	Attached Fauna	No	None	None	IND	None	Trace (<1%)	No	None	Yes
RWF	249	A	Attached Fauna	None	Yes	Non-Reef Building Hard Coral	None	Diverse Colonizers	None	Dense (70 to < 90%)	Possible	*Botrylloides sp.* tunicate	Yes
RWF	249	B	Attached Fauna	None	Yes	Non-Reef Building Hard Coral	None	Diverse Colonizers	None	Dense (70 to < 90%)	No	None	Yes
RWF	249	D	Attached Fauna	None	Yes	Non-Reef Building Hard Coral	None	Barnacles	Attached Hydroids	Dense (70 to < 90%)	No	None	No
RWF	250	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	250	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	250	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	251	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	251	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	No
RWF	251	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	No
RWF	252	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	Trace (<1%)	No	None	Yes
RWF	252	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	Sparse (1 to <30%)	Possible	*Botrylloides sp.* tunicate	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWF	252	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	Trace (<1%)	No	None	Yes
RWF	253	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	253	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	253	D	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	254	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	254	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	254	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	None	Trace (<1%)	No	None	Yes
RWF	255	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWF	255	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	Tracks and Trails	None	No	None	No
RWF	255	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Mobile Crustaceans on Soft Sediments	Tracks and Trails	None	No	None	Yes
RWF	256	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWF	256	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	IND	None	None	No	None	No
RWF	256	C	Soft Sediment Fauna	Attached Fauna	No	None	None	IND	None	Trace (<1%)	No	None	Yes
RWF	257	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	No
RWF	257	B	Soft Sediment Fauna	None	No	None	None	IND	None	None	No	None	Yes
RWF	257	C	Soft Sediment Fauna	None	No	None	None	IND	None	None	No	None	Yes
RWF	258	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	None	Trace (<1%)	No	None	Yes
RWF	258	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	258	C	Soft Sediment Fauna	Attached Fauna	No	None	Sea scallop	Larger Deep-Burrowing Fauna	None	Trace (<1%)	No	None	Yes
RWF	259	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	259	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	259	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWF	260	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWF	260	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	260	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWF	261	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWF	261	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWF	261	D	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWF	262	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	262	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWF	262	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWEC-OCS	401	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWEC-OCS	401	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWEC-OCS	401	D	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
RWEC-OCS	402	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	Trace (<1%)	No	None	Yes
RWEC-OCS	402	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	Trace (<1%)	No	None	Yes
RWEC-OCS	402	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWEC-OCS	403	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	403	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	403	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	404	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	None	Trace (<1%)	No	None	Yes
RWEC-OCS	404	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	404	D	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	405	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWEC-OCS	405	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	405	D	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	406	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWEC-OCS	406	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWEC-OCS	406	D	Soft Sediment Fauna	None	No	None	None	Mobile Crustaceans on Soft Sediments	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	407	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	407	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	407	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	408	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	408	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	None	Trace (<1%)	No	None	Yes
RWEC-OCS	408	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	409	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	409	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	409	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	410	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	410	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	410	C	Soft Sediment Fauna	None	No	None	None	IND	None	None	No	None	Yes
RWEC-OCS	411	A	Attached Fauna	Soft Sediment Fauna	No	None	None	Barnacles	Attached Hydroids	Dense (70 to < 90%)	No	None	No
RWEC-OCS	411	B	Attached Fauna	Soft Sediment Fauna	No	None	None	Barnacles	Attached Hydroids	Dense (70 to < 90%)	No	None	No
RWEC-OCS	411	C	Attached Fauna	Soft Sediment Fauna	No	None	None	Barnacles	Attached Hydroids	Dense (70 to < 90%)	No	None	No
RWEC-OCS	412	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWEC-OCS	412	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	412	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWEC-OCS	413	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
RWEC-OCS	413	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	413	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
RWEC-OCS	414	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	414	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	414	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	415	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	415	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	415	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	416	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	416	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	416	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	417	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	417	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	417	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	418	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	Attached Hydroids	Sparse (1 to <30%)	No	None	Yes
RWEC-OCS	418	B	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	Small Tube-Building Fauna	Sparse (1 to <30%)	No	None	Yes
RWEC-OCS	418	D	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	None	Moderate (30 to < 70%)	No	None	No
RWEC-OCS	419	A	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	None	Sparse (1 to <30%)	No	None	No
RWEC-OCS	419	B	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	None	Sparse (1 to <30%)	No	None	No
RWEC-OCS	419	C	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	None	Sparse (1 to <30%)	No	None	No
RWEC-OCS	420	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	420	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	420	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	421	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	421	E	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	421	F	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	422	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	422	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWEC-OCS	422	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	423	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	423	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	423	D	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	424	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	424	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	424	D	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	425	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	425	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	425	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	None	Trace (<1%)	No	None	Yes
RWEC-OCS	426	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	IND	None	None	No	None	Yes
RWEC-OCS	426	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	426	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	427	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	427	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	427	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Tracks and Trails	None	No	None	Yes
RWEC-OCS	428	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	428	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	428	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWEC-RI	429	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWEC-RI	429	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWEC-RI	429	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWEC-RI	430	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	430	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-RI	430	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-RI	431	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-RI	431	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-RI	431	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-RI	432	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-RI	432	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-RI	432	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-RI	433	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-RI	433	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	433	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-RI	434	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWEC-RI	434	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	434	C	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	435	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	435	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	435	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	436	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	436	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	436	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	437	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	437	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	437	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	438	A	Soft Sediment Fauna	None	No	None	None	IND	None	None	No	None	Yes
RWEC-RI	438	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWEC-RI	438	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWEC-RI	439	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	Yes
RWEC-RI	439	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Mollusks on Soft Sediments	None	No	None	Yes
RWEC-RI	439	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	IND	None	None	No	None	Yes
RWEC-RI	440	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	Yes
RWEC-RI	440	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	Yes
RWEC-RI	440	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	Yes
RWEC-RI	441	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tunneling Megafauna	None	No	None	Yes
RWEC-RI	441	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-RI	441	C	Soft Sediment Fauna	None	No	None	None	IND	IND	None	No	None	IND
RWEC-RI	442	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Tunneling Megafauna	Tracks and Trails	None	No	None	Yes
RWEC-RI	442	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Tunneling Megafauna	Tracks and Trails	None	No	None	Yes
RWEC-RI	442	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Tunneling Megafauna	Tracks and Trails	None	No	None	Yes
RWEC-RI	443	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Tracks and Trails	None	None	No	None	No
RWEC-RI	443	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Tracks and Trails	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-RI	443	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	Yes
RWEC-RI	444	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	IND	None	None	No	None	Yes
RWEC-RI	444	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWEC-RI	444	D	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWEC-RI	445	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWEC-RI	445	B	Soft Sediment Fauna	Attached Fauna	No	None	None	None	None	Trace (<1%)	No	None	No
RWEC-RI	446	A	Soft Sediment Fauna	None	No	None	None	None	None	None	No	None	No
RWEC-RI	446	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	IND	None	None	No	None	No
RWEC-RI	446	C	Soft Sediment Fauna	IND	No	None	None	IND	None	None	No	None	IND
RWEC-RI	447	A	Soft Sediment Fauna	Attached Fauna	No	None	None	IND	None	Trace (<1%)	No	None	Yes
RWEC-RI	447	B	Soft Sediment Fauna	Attached Fauna	No	None	None	None	None	Trace (<1%)	No	None	No
RWEC-RI	447	C	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Hydroids	None	Sparse (1 to <30%)	No	None	Yes
RWEC-RI	448	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Mussel Bed	Small Tube-Building Fauna	Sparse (1 to <30%)	No	None	Yes
RWEC-RI	448	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Mussel Bed	None	Moderate (30 to < 70%)	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWEC-RI	448	D	Soft Sediment Fauna	Attached Fauna	No	None	None	Mussel Bed	Filamentous Algal Bed	Sparse (1 to <30%)	No	None	Yes
RWEC-RI	449	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	None	Sparse (1 to <30%)	No	None	Yes
RWEC-RI	449	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	Filamentous Algal Bed	Sparse (1 to <30%)	No	None	Yes
RWEC-RI	449	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	None	Sparse (1 to <30%)	No	None	Yes
RWEC-RI	450	B	Attached Fauna	None	No	None	None	Sessile Gastropods	Attached Hydroids	Dense (70 to < 90%)	No	None	No
RWEC-RI	450	F	Attached Fauna	None	No	None	None	Sessile Gastropods	Attached Hydroids	Complete (90-100%)	No	None	No
RWEC-RI	450	G	Attached Fauna	None	No	None	None	Sessile Gastropods	Attached Hydroids	Complete (90-100%)	No	None	No
RWEC-RI	451	A	Benthic Macroalgae	Attached Fauna	No	None	None	Filamentous Algal Bed	Attached Sponges	Moderate (30 to < 70%)	No	None	IND
RWEC-RI	451	C	Benthic Macroalgae	Soft Sediment Fauna	No	None	None	Filamentous Algal Bed	None	Sparse (1 to <30%)	No	None	IND
RWEC-RI	451	D	Benthic Macroalgae	Soft Sediment Fauna	No	None	None	Filamentous Algal Bed	None	Sparse (1 to <30%)	No	None	IND
RWEC-RI	452	A	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Sponges	None	Sparse (1 to <30%)	No	None	No
RWEC-RI	452	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	None	None	None	No	None	No
RWEC-RI	452	D	Attached Fauna	Soft Sediment Fauna	No	None	None	Attached Sponges	None	Sparse (1 to <30%)	No	None	No
RWEC-RI	453	A	IND	None	No	None	None	IND	None	None	No	None	IND
RWEC-RI	453	C	Soft Sediment Fauna	Benthic Macroalgae	No	None	None	Larger Deep-Burrowing Fauna	Filamentous Algal Bed	Sparse (1 to <30%)	No	None	No
RWEC-RI	453	D	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWEC-RI	454	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
RWEC-RI	454	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Tracks and Trails	None	None	No	None	No
RWEC-RI	455	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Tracks and Trails	Larger Deep-Burrowing Fauna	None	No	None	No
RWEC-OCS	456	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	456	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	456	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	457	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	457	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	457	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	458	A	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Tube-Building Fauna	None	Sparse (1 to <30%)	No	None	Yes
RWEC-OCS	458	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	458	C	Soft Sediment Fauna	Attached Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	Trace (<1%)	No	None	Yes
RWEC-OCS	459	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	459	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	459	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	460	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	460	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	460	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	461	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWEC-OCS	461	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	462	A	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	462	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	462	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	463	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	463	F	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	463	G	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-RI	464	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	464	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	464	D	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
Reference Area	501	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
Reference Area	501	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
Reference Area	501	C	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
Reference Area	502	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
Reference Area	502	B	Soft Sediment Fauna	Attached Fauna	No	None	None	Small Tube-Building Fauna	None	Trace (<1%)	No	None	Yes
Reference Area	502	D	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
Reference Area	503	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	No
Reference Area	503	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
Reference Area	503	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes
Reference Area	504	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
Reference Area	504	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
Reference Area	504	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
Reference Area	505	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
Reference Area	505	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Tracks and Trails	None	No	None	Yes
Reference Area	505	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWEC-OCS	601	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWEC-OCS	601	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	601	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	602	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	602	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	602	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-OCS	603	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	603	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	None	None	No	None	Yes

Area	StationID	Replicate	Biotic Subclass	Co-occurring Biotic Subclass	Sensitive Taxa Present?	Type of Sensitive Taxa	Type of Species of Concern Observed	Biotic Group	Co-occurring Biotic Group	Percent Cover of All Attached Fauna	Invasive Taxa Present?	Type of Invasive Taxa	Tubes
RWEC-OCS	603	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	604	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWEC-RI	604	B	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWEC-RI	604	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	605	A	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	605	B	Soft Sediment Fauna	None	No	None	None	IND	None	None	No	None	Yes
RWEC-OCS	605	C	Soft Sediment Fauna	None	No	None	None	IND	None	None	No	None	Yes
RWEC-OCS	606	A	Soft Sediment Fauna	None	No	None	None	IND	None	None	No	None	Yes
RWEC-OCS	606	B	Soft Sediment Fauna	None	No	None	None	Small Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	606	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	None	None	No	None	Yes
RWEC-OCS	607	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	607	E	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tunneling Megafauna	None	No	None	Yes
RWEC-OCS	607	F	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	608	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWEC-OCS	608	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Mobile Crustaceans on Soft Sediments	None	No	None	Yes
RWEC-OCS	608	F	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	Yes
RWEC-OCS	609	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	609	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	Small Tube-Building Fauna	None	No	None	Yes
RWEC-OCS	609	C	Soft Sediment Fauna	None	No	None	None	Larger Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-RI	610	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Tracks and Trails	None	No	None	Yes
RWEC-RI	610	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Larger Deep-Burrowing Fauna	None	No	None	Yes
RWEC-RI	610	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Small Tube-Building Fauna	Tracks and Trails	None	No	None	Yes
RWEC-RI	611	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	611	B	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	611	C	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Deep-Burrowing Fauna	Larger Tube-Building Fauna	None	No	None	Yes
RWEC-RI	612	A	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Tracks and Trails	None	No	None	Yes
RWEC-RI	612	D	Soft Sediment Fauna	Inferred Fauna	No	None	None	Larger Tube-Building Fauna	Tracks and Trails	None	No	None	Yes
RWEC-RI	613	A	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	IND	None	No	None	IND
RWEC-RI	613	B	Soft Sediment Fauna	None	No	None	None	Larger Deep-Burrowing Fauna	IND	None	No	None	IND
RWEC-RI	613	D	Soft Sediment Fauna	None	No	None	None	IND	IND	None	No	None	IND
RWEC-RI	614	A	Attached Fauna	None	No	None	None	Attached Hydroids	None	Sparse (1 to <30%)	No	None	No
RWEC-RI	614	B	Attached Fauna	None	No	None	None	Attached Hydroids	None	Sparse (1 to <30%)	No	None	No
RWEC-RI	614	C	Attached Fauna	None	No	None	None	Attached Hydroids	None	Sparse (1 to <30%)	No	None	No
RWEC-RI	615	A	Attached Fauna	None	No	None	None	IND	None	Trace (<1%)	No	None	No
RWEC-RI	615	C	Attached Fauna	None	No	None	None	IND	None	Sparse (1 to <30%)	No	None	No
RWEC-RI	615	D	Attached Fauna	None	No	None	None	IND	None	Trace (<1%)	No	None	No

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	001	A	No	Yes	None	Barnacles, Hydroids	None	None
RWF	001	B	No	No	None	Hydroids	None	None
RWF	001	C	No	Yes	None	Barnacles, Hydroids, Sea Star	None	None
RWF	002	A	No	Yes	None	Podocerid Amphipoda	None	None
RWF	002	B	No	Yes	None	Podocerid Amphipoda, Shrimp, Unidentified Organism	None	None
RWF	002	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	003	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	003	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	003	D	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	004	A	No	No	None	Podocerid Amphipoda, Shrimp	None	None
RWF	004	B	Yes	Yes	None	Podocerid Amphipoda, Shrimp	None	None
RWF	004	C	No	Yes	None	None	None	None
RWF	005	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	005	B	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	005	D	Yes	Yes	None	Podocerid Amphipoda, Shrimp	None	None
RWF	006	A	Yes	Yes	Cerianthid	Podocerid Amphipoda, Shrimp	None	None
RWF	006	B	Yes	No	None	None	None	None
RWF	006	C	Yes	Yes	None	None	None	None
RWF	007	A	Yes	Yes	None	None	None	None
RWF	007	C	Yes	Yes	None	None	None	None
RWF	007	D	Yes	Yes	None	None	None	None
RWF	008	A	Yes	Yes	None	Paguroid	None	None
RWF	008	B	Yes	Yes	None	None	None	None
RWF	008	C	Yes	Yes	None	Nudibranch, Podocerid Amphipoda	None	None
RWF	009	A	Yes	Yes	None	None	None	None
RWF	009	B	Yes	Yes	None	None	None	None
RWF	009	C	Yes	Yes	None	None	None	None
RWF	010	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	010	B	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	010	C	Yes	IND	None	None	None	None
RWF	011	A	Yes	No	None	Podocerid Amphipoda	None	None
RWF	011	B	Yes	Yes	None	Ampelisca Amphipoda, Podocerid Amphipoda	None	Silver Hake

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	011	D	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	012	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	012	B	Yes	Yes	None	Paguroid, Podocerid Amphipoda	None	None
RWF	012	C	IND	IND	Polychaetes	IND	None	None
RWF	013	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	013	B	Yes	Yes	None	None	None	None
RWF	013	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	014	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	014	C	Yes	Yes	None	Sea Star	None	None
RWF	014	D	Yes	Yes	None	None	None	None
RWF	015	A	Yes	No	None	None	None	None
RWF	015	B	Yes	No	None	Sea Star, Shrimp	None	None
RWF	015	D	Yes	Yes	None	None	None	None
RWF	016	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	016	B	Yes	Yes	None	None	None	None
RWF	016	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	017	A	Yes	Yes	None	None	None	None
RWF	017	C	Yes	Yes	None	Podocerid Amphipoda, Shrimp	None	None
RWF	017	D	Yes	Yes	Cerianthid	None	None	None
RWF	018	B	Yes	Yes	None	None	None	None
RWF	018	C	Yes	No	None	None	None	None
RWF	018	D	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	019	A	Yes	Yes	None	Podocerid Amphipoda, Shrimp	None	None
RWF	019	B	Yes	Yes	None	Podocerid Amphipoda, Shrimp	None	None
RWF	019	C	Yes	Yes	None	Podocerid Amphipoda, Shrimp	None	None
RWF	020	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	020	B	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	020	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	021	A	Yes	Yes	None	Sea Star	None	None
RWF	021	B	Yes	Yes	None	Sea Star	None	None
RWF	021	D	Yes	Yes	None	Sea Star	None	None
RWF	022	A	Yes	No	None	Sea Star, Shrimp	None	None
RWF	022	B	Yes	No	Cerianthid	Crab, Sea Star	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	022	C	Yes	Yes	None	Sea Star	None	None
RWF	023	E	Yes	Yes	None	Sea Star	None	None
RWF	023	F	Yes	No	None	Sea Star	None	None
RWF	023	G	Yes	No	None	Sea Star	None	None
RWF	024	B	No	No	None	Podocerid Amphipoda	None	None
RWF	024	C	Yes	No	None	Barnacles, Hydroids	None	None
RWF	024	D	Yes	No	None	Barnacles, Halipteris Sea Pen, Hydroids	None	None
RWF	025	A	No	No	None	Barnacles, Colonial Tunicate, Halipteris Sea Pen, Hydroids	None	IND
RWF	025	C	No	No	None	Barnacles, Crab, Halipteris Sea Pen, Hydroids	None	None
RWF	025	D	No	Yes	None	Barnacles, Colonial Tunicate, Halipteris Sea Pen, Hydroids, Shrimp	None	None
RWF	026	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	026	B	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	026	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	027	A	Yes	Yes	None	Nudibranch, Podocerid Amphipoda	None	None
RWF	027	B	Yes	Yes	None	None	None	None
RWF	027	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	028	A	Yes	Yes	Polychaetes	Podocerid Amphipoda, Shrimp	None	None
RWF	028	B	Yes	No	Polychaetes	Podocerid Amphipoda	None	None
RWF	028	C	Yes	Yes	Polychaetes	Podocerid Amphipoda	None	None
RWF	029	A	No	Yes	None	Hydroids, Podocerid Amphipoda, Shrimp	None	None
RWF	029	C	No	No	None	Crabs, Podocerid Amphipoda	None	None
RWF	029	D	No	Yes	None	Podocerid Amphipoda, Shrimp	None	None
RWF	030	A	Yes	Yes	Polychaetes	Podocerid Amphipoda	None	None
RWF	030	B	Yes	Yes	Polychaetes	Podocerid Amphipoda, Shrimp	None	None
RWF	030	C	Yes	Yes	Polychaetes	Ampelisca Amphipoda, Podocerid Amphipoda, Shrimp	None	None
RWF	031	A	No	Yes	None	None	None	IND
RWF	031	B	Yes	Yes	Polychaetes	None	None	None
RWF	031	D	No	Yes	None	Sea Star	None	None
RWF	032	A	Yes	Yes	None	Ampelisca Amphipoda	None	None
RWF	032	B	No	Yes	None	None	None	None
RWF	032	C	Yes	Yes	None	Sea Star	None	None
RWF	033	A	Yes	No	None	Podocerid Amphipoda, Shrimp, Tunicates	None	None
RWF	033	B	Yes	No	None	Tunicates	None	None
RWF	033	C	Yes	No	None	Tunicates	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	034	A	Yes	Yes	None	None	None	None
RWF	034	B	Yes	No	None	Podocerid Amphipoda, Shrimp	None	None
RWF	034	C	Yes	No	None	Podocerid Amphipoda	None	None
RWF	035	E	Yes	Yes	None	Isopod, Podocerid Amphipoda, Shrimp	None	None
RWF	035	F	Yes	Yes	None	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
RWF	035	G	Yes	Yes	None	None	None	None
RWF	036	A	Yes	Yes	None	Tunicates	None	Hake
RWF	036	C	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	036	D	Yes	Yes	None	Corymorpha, Shrimp	None	None
RWF	037	A	Yes	Yes	None	Paguroid, Podocerid Amphipoda	None	None
RWF	037	B	No	Yes	Polychaetes	Podocerid Amphipoda	None	IND
RWF	037	C	No	No	Polychaetes	None	None	None
RWF	038	A	No	Yes	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWF	038	B	Yes	Yes	Polychaetes	Podocerid Amphipoda	None	None
RWF	038	C	Yes	Yes	Polychaetes	Podocerid Amphipoda	None	None
RWF	039	A	Yes	Yes	None	Podocerid Amphipoda, Shrimp	None	None
RWF	039	B	Yes	No	Polychaetes	Podocerid Amphipoda, Shrimp	None	None
RWF	039	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	040	A	Yes	No	None	Podocerid Amphipoda	None	None
RWF	040	B	Yes	No	None	Podocerid Amphipoda	None	None
RWF	040	C	No	No	None	Paguroid, Podocerid Amphipoda, Shrimp	None	None
RWF	041	A	Yes	Yes	None	None	None	None
RWF	041	B	No	No	None	Podocerid Amphipoda, Sea Star, Tunicates	None	None
RWF	042	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	042	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	042	D	Yes	Yes	Polychaetes	Podocerid Amphipoda	None	None
RWF	043	A	Yes	Yes	None	Podocerid Amphipoda, Shrimp	None	None
RWF	043	B	No	No	None	Podocerid Amphipoda	None	None
RWF	043	C	No	No	None	None	None	None
RWF	044	A	Yes	No	None	Podocerid Amphipoda	None	None
RWF	044	B	Yes	Yes	Polychaetes	Podocerid Amphipoda	None	None
RWF	044	C	Yes	No	None	Isopod, Podocerid Amphipoda, Shrimp	None	None
RWF	045	A	Yes	No	None	None	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	045	B	Yes	No	None	None	None	None
RWF	046	A	Yes	No	Polychaetes	Tunicates	None	None
RWF	046	B	Yes	Yes	None	Ampelisca Amphipoda, Podocerid Amphipoda, Tunicates	None	Red Hake
RWF	046	C	No	No	Polychaetes	Hydroids, Tunicates	None	None
RWF	047	A	No	Yes	Polychaetes	Tunicates	None	None
RWF	047	C	No	No	None	Tunicates	None	None
RWF	047	D	Yes	No	Cerianthid, Polychaetes	Podocerid Amphipoda, Tunicates	None	IND
RWF	048	A	Yes	No	Polychaetes	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
RWF	048	B	Yes	No	Polychaetes	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
RWF	048	C	Yes	No	Polychaetes	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
RWF	049	A	Yes	No	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWF	049	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	049	C	Yes	No	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWF	050	A	Yes	No	None	Ampelisca Amphipoda, Nudibranch, Sea Star	None	Silver Hake
RWF	050	B	No	Yes	None	Sea Stars	None	None
RWF	050	C	Yes	No	None	None	None	Silver Hake
RWF	051	A	No	No	Polychaetes	Tunicates	None	None
RWF	051	B	No	No	Cerianthid	None	None	None
RWF	051	C	No	No	None	None	None	None
RWF	052	A	Yes	No	Cerianthid	None	None	None
RWF	052	B	Yes	No	Cerianthid, Tunicates	None	None	None
RWF	052	D	No	Yes	Tunicates	None	None	None
RWF	053	B	Yes	No	None	None	None	None
RWF	053	C	Yes	No	None	None	None	None
RWF	053	D	Yes	No	Cerianthid	Podocerid Amphipoda	None	None
RWF	054	A	No	No	Polychaetes	Ampelisca Amphipoda, Podocerid Amphipoda, Tunicates	None	IND
RWF	054	B	Yes	Yes	None	Corymorpha, Paguroid, Shrimp, Tunicates	None	None
RWF	054	D	No	No	None	Ampelisca Amphipoda	None	None
RWF	055	A	No	No	None	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
RWF	055	C	No	No	Polychaetes	Ampelisca Amphipoda, Podocerid Amphipoda, Shrimp, Tunicates	None	None
RWF	055	D	No	No	None	None	None	None
RWF	056	I	Yes	No	Cerianthid	None	None	Hake
RWF	056	K	No	Yes	Cerianthid	Podocerid Amphipoda, Sea Stars	None	None
RWF	056	N	No	Yes	None	Podocerid Amphipoda, Sea Stars	None	None
RWF	057	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	057	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	057	D	Yes	No	None	Corymorpha, Hydroids, Halipteris Sea Pen, Tunicates	None	IND
RWF	057E1	B	No	No	None	Paguroid, Podocerid Amphipoda, Tunicates	None	None
RWF	057E1	C	No	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	057E1	D	No	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	057E2	A	No	No	Polychaetes	Paguroid, Podocerid Amphipoda, Tunicates	None	None
RWF	057E2	B	No	No	None	Ampelisca Amphipoda, Podocerid Amphipoda, Tunicates	None	None
RWF	057E2	C	No	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	057W1	A	No	Yes	None	Tunicates	None	None
RWF	057W1	B	No	No	None	Paguroid, Podocerid Amphipoda, Tunicates	None	IND
RWF	057W1	D	No	No	None	IND	None	None
RWF	057W2	A	No	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	057W2	B	No	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	057W2	D	No	No	None	Paguroid, Podocerid Amphipoda, Tunicates	None	None
RWF	058	A	No	No	None	Cerianthid	None	None
RWF	058	B	No	No	None	Tunicates	None	None
RWF	058	C	No	No	None	Gastropod, Paguroid	None	None
RWF	059	A	No	No	Polychaetes	Paguroid, Podocerid Amphipoda, Sand Dollar	None	None
RWF	059	B	No	No	Polychaetes	Podocerid Amphipoda	None	None
RWF	059	C	No	No	Polychaetes	Podocerid Amphipoda	None	None
RWF	060	A	No	No	None	Hydroids, Podocerid Amphipoda	None	None
RWF	060	B	Yes	No	None	Shrimp	None	None
RWF	060	D	Yes	Yes	None	None	None	None
RWF	061	A	Yes	Yes	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWF	061	B	Yes	Yes	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWF	061	C	No	No	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWF	062	A	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	062	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	062	D	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	063	A	No	No	None	Corymorpha, Podocerid Amphipoda, Sand Dollar, Shrimp	None	None
RWF	063	B	No	No	None	Gastropod, Sand Dollar, Tunicates	None	None
RWF	063	C	No	No	Polychaetes	Shrimp, Tunicates	None	None
RWF	064	A	No	No	Cerianthid, Polychaetes	Podocerid Amphipoda, Shrimp, Tunicates	None	None
RWF	064	B	No	No	Polychaetes	Paguroid, Gastropod, Tunicates	None	None
RWF	064	D	No	No	Polychaetes	Tunicates	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	065	A	Yes	No	Polychaetes	Gastropod, Tunicates	None	IND
RWF	065	B	No	Yes	None	Gastropod, Podocerid Amphipoda, Tunicates	None	None
RWF	065	C	No	No	None	None	None	None
RWF	066	A	No	No	Polychaetes	Isopod, Podocerid Amphipoda, Tunicates	None	None
RWF	066	B	No	No	Polychaetes	Shrimp, Tunicates	None	None
RWF	066	C	Yes	No	Polychaetes	Podocerid Amphipoda	None	None
RWF	067	E	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	067	F	No	Yes	None	Podocerid Amphipoda	None	None
RWF	067	G	No	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	068	A	Yes	No	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWF	068	B	Yes	Yes	Polychaetes	Podocerid Amphipoda	None	None
RWF	068	D	No	No	Polychaetes	Paguroid, Podocerid Amphipoda, Shrimp	None	None
RWF	069	A	No	No	None	Podocerid Amphipoda, Shrimp, Tunicate	None	None
RWF	069	B	No	No	None	Barnacle, Hydroids	None	None
RWF	069	D	Yes	No	None	Podocerid Amphipoda	None	None
RWF	070	A	Yes	No	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWF	070	B	Yes	Yes	None	Corymorpha, Podocerid Amphipoda, Tunicates	None	None
RWF	070	C	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	071	A	Yes	No	None	Shrimp	None	None
RWF	071	B	No	Yes	None	None	None	None
RWF	071	D	No	No	None	Gastropod, Podocerid Amphipoda	None	None
RWF	072	A	Yes	No	Cerianthid	Paguroid	None	None
RWF	072	B	Yes	No	None	Podocerid Amphipoda	None	None
RWF	072	C	Yes	No	None	Podocerid Amphipoda	None	None
RWF	073	A	Yes	No	None	Barnacles, Crab, Halipteris Sea Pen, Hydroids	None	None
RWF	073	C	Yes	No	None	Barnacles, Hydroids	None	None
RWF	073	D	Yes	No	Bivalves, Cerianthid	Barnacles, Colonial Tunicate, Crab, Halipteris Sea Pen, Hydroids	None	None
RWF	073E1	A	Yes	No	Cerianthid	Barnacles, Hydroids, Shrimp	Red Algae	None
RWF	073E1	C	Yes	No	Cerianthid	Barnacles, Hydroids, Shrimp	None	None
RWF	073E1	D	Yes	No	None	Anemone, Barnacles, Halipteris Sea Pen, Hydroids	None	None
RWF	073E2	A	Yes	No	None	Barnacles, Cerianthid, Colonial Tunicate, Crab, Hydroids, Shrimp	None	None
RWF	073E2	B	Yes	No	None	Barnacles, Halipteris Sea Pen, Hydroids, Podocerid Amphipoda	None	None
RWF	073E2	D	Yes	Yes	None	Barnacles, Hydroids, Halipteris Sea Pen, Nudibranchs, Shrimp	None	None
RWF	073W1	A	Yes	No	None	Barnacles, Hydroids, Halipteris Sea Pen, Podocerid Amphipoda	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	073W1	B	Yes	Yes	None	Barnacles, Hydroids, Halipteris Sea Pen, Podocerid Amphipoda	None	None
RWF	073W1	D	Yes	Yes	None	Halipteris Sea Pen, Podocerid Amphipoda	None	None
RWF	073W2	B	Yes	No	None	Barnacles, Hydroids	None	None
RWF	073W2	C	Yes	Yes	None	Barnacles, Halipteris Sea Pen, Hydroids, Shrimp	None	Pout
RWF	073W2	D	Yes	Yes	None	Barnacles, Halipteris Sea Pen, Hydroids, Shrimp	None	None
RWF	074	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	074	B	No	No	None	Podocerid Amphipoda, Shrimp	None	None
RWF	074	C	Yes	Yes	None	Podocerid Amphipoda, Shrimp	None	None
RWF	075	A	Yes	Yes	Cerianthids	Hydroids, Tunicates	None	None
RWF	075	B	No	No	None	Anemone, Barnacles, Crabs, Halipteris Sea Pen, Hydroids, Shrimp, Sponges	None	IND
RWF	075	C	Yes	Yes	Cerianthid, Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWF	076	A	Yes	No	Cerianthid	Hydroids, Podocerid Amphipoda, Tunicates	None	IND
RWF	076	C	No	No	Cerianthids	Barnacles, Colonial Tunicates, Halipteris Sea Pen, Hydroids	None	None
RWF	076	D	No	No	Cerianthids	Barnacles, Hydroids	None	None
RWF	077	A	Yes	Yes	Polychaetes	Gastropod, Podocerid Amphipoda, Tunicates	None	None
RWF	077	B	Yes	Yes	Cerianthid, Polychaetes	Gastropod, Podocerid Amphipoda, Tunicates	None	None
RWF	077	C	Yes	Yes	Polychaetes	Gastropod, Podocerid Amphipoda, Tunicates	None	None
RWF	078	A	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	078	C	Yes	No	None	Barnacles, Hydroids	None	None
RWF	078	D	Yes	No	None	Hydroids	None	None
RWF	079	A	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	079	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	079	C	Yes	Yes	None	Gastropod, Podocerid Amphipoda	None	None
RWF	080	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	080	B	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	080	D	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	081	A	Yes	Yes	None	Halipteris Sea Pen, Podocerid Amphipoda, Shrimp	None	None
RWF	081	B	No	No	None	Barnacles, Halipteris Sea Pen, Hydroids, Podocerid Amphipoda	None	None
RWF	081	C	Yes	Yes	None	Barnacles, Halipteris Sea Pen, Hydroids	None	None
RWF	082	A	Yes	Yes	Polychaetes	Podocerid Amphipoda	None	None
RWF	082	B	Yes	Yes	Polychaetes	Podocerid Amphipoda	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	082	C	Yes	Yes	Bivalve, Polychaetes	Podocerid Amphipoda	None	None
RWF	083	A	No	No	None	Halipteris Sea Pen, Hydroids, Paguroid, Shrimp	None	None
RWF	083	C	Yes	No	Bivalve	None	None	None
RWF	083	D	Yes	No	Bivalves	Barnacles, Hydroids	None	None
RWF	084	A	Yes	Yes	Bivalves	Barnacle, Halipteris Sea Pen, Hydroids, Shrimp, Sponge	None	None
RWF	084	B	Yes	Yes	None	Barnacles, Halipteris Sea Pen, Hydroids	None	None
RWF	084	D2	Yes	No	None	Barnacles, Colonial Tunicate, Halipteris Sea Pen, Hydroids	None	None
RWF	085	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	085	B	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	085	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	086	A	Yes	No	None	Corymorpha	None	None
RWF	086	B	Yes	No	None	Podocerid Amphipoda	None	None
RWF	086	D	Yes	No	None	Corymorpha, Podocerid Amphipoda	None	None
RWF	087	A	Yes	No	None	Barnacles	None	Red Hake
RWF	087	B	No	No	None	Barnacles, Paguroid	None	None
RWF	087	C	Yes	No	None	Barnacles, Hydroids, Shrimp	None	Pout
RWF	088	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	088	B	Yes	No	None	Barnacles, Gastropod, Halipteris Sea Pen, Hydroids, Podocerid Amphipoda	Fucaceae	None
RWF	088	C	Yes	No	None	Barnacles, Colonial Tunicate, Gastropods, Halipteris Sea Pen, Hydroids, Paguroid, Shrimp	None	None
RWF	089	B	Yes	No	None	Paguroid, Podocerid Amphipoda	None	Fourspot Flounder
RWF	089	C	Yes	No	None	Podocerid Amphipoda	None	None
RWF	089	D	Yes	No	None	Podocerid Amphipoda	None	None
RWF	090	A	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	090	B	Yes	No	None	Gastropod, Halipteris Sea Pen, Podocerid Amphipoda, Tunicates	None	None
RWF	090	C	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	091	A	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	091	B	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	091	C	Yes	Yes	None	Paguroid, Podocerid Amphipoda, Tunicates	None	None
RWF	092	A	Yes	Yes	None	Corymorpha, Podocerid Amphipoda, Tunicates	None	None
RWF	092	B	Yes	Yes	None	Gastropod, Podocerid Amphipoda	None	None
RWF	092	C	Yes	Yes	None	Corymorpha, Podocerid Amphipoda, Tunicates	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	093	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	093	B	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	093	C	Yes	Yes	None	Corymorpha, Podocerid Amphipoda, Tunicates	None	None
RWF	094	A	Yes	Yes	None	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
RWF	094	B	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	094	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	095	A	Yes	Yes	None	Podocerid Amphipoda, Shrimp	None	None
RWF	095	B	Yes	Yes	None	Barnacles, Podocerid Amphipoda	None	None
RWF	095	D	Yes	No	None	Paguroid, Podocerid Amphipoda, Tunicates	None	None
RWF	096	A	Yes	Yes	None	Corymorpha, Podocerid Amphipoda, Tunicate	None	None
RWF	096	B	Yes	Yes	None	Corymorpha, Podocerid Amphipoda	None	None
RWF	096	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	097	A	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	097	B	Yes	No	None	Podocerid Amphipoda	None	None
RWF	097	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	098	A	Yes	Yes	None	Corymorpha, Podocerid Amphipoda, Tunicates	None	None
RWF	098	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	098	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	099	A	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	099	B	Yes	No	None	Podocerid Amphipoda, Sand Dollar, Shrimp	None	None
RWF	099	C	Yes	Yes	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWF	100	A	Yes	Yes	Polychaetes	Podocerid Amphipoda	None	None
RWF	100	C	Yes	No	Polychaetes	Podocerid Amphipoda	None	None
RWF	100	D	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	101	B	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	101	C	Yes	No	None	Halipteris Sea Pen, Podocerid Amphipoda, Tunicates	None	None
RWF	101	D	Yes	No	None	Podocerid Amphipoda, Shrimp, Tunicates	None	None
RWF	102	A	Yes	Yes	None	Ampelisca Amphipoda, Podocerid Amphipoda	None	Hake
RWF	102	B	Yes	No	None	Podocerid Amphipoda, Shrimp	None	None
RWF	102	C	Yes	Yes	None	Podocerid Amphipoda	None	Silver Hake
RWF	103	A	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	103	B	Yes	Yes	None	Tunicates	None	None
RWF	103	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	104	B	Yes	No	None	Tunicates	None	None
RWF	104	C	Yes	No	None	Barnacles, Hydroids, Podocerid Amphipoda, Tunicates	None	None
RWF	104	D	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	105	A	Yes	Yes	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWF	105	B	Yes	No	None	Cerianthid, Podocerid Amphipoda	None	None
RWF	105	C	Yes	No	Polychaetes	Podocerid Amphipoda	None	None
RWF	106	A	Yes	No	None	Podocerid Amphipoda	None	None
RWF	106	B	Yes	No	Polychaetes	None	None	None
RWF	106	C	Yes	Yes	Bivalve	Podocerid Amphipoda	None	None
RWF	107	A	No	No	Bivalve	Cerianthid, Halipteris Sea Pen, Podocerid Amphipoda, Shrimp	None	None
RWF	107	B	Yes	No	None	Podocerid Amphipoda	None	None
RWF	107	C	No	No	None	Cerianthid, Podocerid Amphipoda	None	None
RWF	108	A	Yes	No	None	Gastropod, Halipteris Sea Pen, Podocerid Amphipoda	None	None
RWF	108	B	Yes	No	None	Barnacles, Colonial Tunicate, Halipteris Sea Pen, Podocerid Amphipoda	None	None
RWF	108	C	No	No	None	Barnacles, Podocerid Amphipoda	None	None
RWF	109	A	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	109	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	109	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	110	A	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	110	B	Yes	No	None	Halipteris Sea Pen, Podocerid Amphipoda, Tunicates	None	None
RWF	110	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	111	A	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	111	B	Yes	Yes	None	Tunicates	None	None
RWF	111	C	Yes	Yes	None	Podocerid Amphipoda, Shrimp, Tunicates	None	None
RWF	112	A	Yes	No	None	Halipteris Sea Pen, Podocerid Amphipoda, Tunicates	None	None
RWF	112	C	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	112	D	Yes	Yes	None	Podocerid Amphipoda, Shrimp, Tunicates	None	Hake
RWF	113	A	Yes	Yes	None	Podocerid Amphipoda, Shrimp	None	None
RWF	113	B	Yes	No	Polychaetes	Podocerid Amphipoda, Tunicates	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	113	C	Yes	No	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWF	114	A	Yes	No	None	Podocerid Amphipoda, Shrimp	None	None
RWF	114	C	Yes	No	None	Podocerid Amphipoda, Shrimp	None	None
RWF	114	D	Yes	No	None	Gastropod, Podocerid Amphipoda	None	None
RWF	115	A	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	115	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	115	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	116	A	Yes	No	None	Corymorpha	None	None
RWF	116	B	Yes	No	Bivalve	Podocerid Amphipoda	None	None
RWF	116	C	Yes	No	None	Barnacles, Podocerid Amphipoda	None	None
RWF	117	A	No	IND	Bivalve	Podocerid Amphipoda	None	None
RWF	117	B	Yes	No	Bivalve	Podocerid Amphipoda	None	None
RWF	117	C	Yes	No	None	Podocerid Amphipoda	None	None
RWF	118	A	Yes	No	None	Podocerid Amphipoda	None	None
RWF	118	B	Yes	No	Bivalve	Podocerid Amphipoda, Tunicates	None	None
RWF	118	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	119	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	119	C	Yes	Yes	None	Barnacles, Podocerid Amphipoda, Shrimp, Tunicates	None	None
RWF	119	D	Yes	No	None	Podocerid Amphipoda, Shrimp	None	None
RWF	120	A	Yes	No	None	Podocerid Amphipoda	None	None
RWF	120	B	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	120	C	Yes	No	None	Podocerid Amphipoda	None	None
RWF	121	A	Yes	No	None	Paguroid, Podocerid Amphipoda	None	None
RWF	121	B	Yes	No	None	Barnacles, Podocerid Amphipoda, Tunicates	None	None
RWF	121	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	122	A	Yes	No	Polychaetes	Paguroids, Podocerid Amphipoda	None	None
RWF	122	B	Yes	Yes	None	Halipteris Sea Pen, Paguroids, Podocerid Amphipoda, Tunicates	None	None
RWF	122	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	123	A	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	123	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	123	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	124	A	Yes	Yes	None	Paguroid, Podocerid Amphipoda	None	None
RWF	124	C	Yes	Yes	None	Gastropods, Podocerid Amphipoda	None	None
RWF	124	D	Yes	No	None	Corymorpha, Podocerid Amphipoda, Tunicates	None	None
RWF	125	A	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	125	B	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	125	C	Yes	No	None	Podocerid Amphipoda	None	None
RWF	126	A	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	126	B	Yes	No	None	Podocerid Amphipoda	None	None
RWF	126	C	Yes	No	None	Podocerid Amphipoda	None	None
RWF	127	A	Yes	No	None	Podocerid Amphipoda	None	None
RWF	127	B	Yes	No	None	Podocerid Amphipoda	None	None
RWF	127	C	Yes	No	None	Podocerid Amphipoda	None	None
RWF	128	A	Yes	Yes	Cerianthid	Podocerid Amphipoda	None	None
RWF	128	C	Yes	No	Cerianthid	Podocerid Amphipoda	None	None
RWF	128	D	No	Yes	None	Podocerid Amphipoda	None	None
RWF	129	B	No	No	None	Podocerid Amphipoda	None	None
RWF	129	C	No	No	None	None	None	None
RWF	129	D	Yes	No	Cerianthid	None	None	Hake
RWF	136	A	Yes	No	None	Hydroids	None	None
RWF	136	B	No	No	None	Barnacles, Hydroids, Shrimp	None	None
RWF	136	C	Yes	No	None	Barnacles	None	None
RWF	137	A	No	No	Cerianthid	Barnacles, Hydroids, Podocerid Amphipoda	None	None
RWF	137	B	No	No	None	Barnacles, Halipteris Sea Pen, Hydroids, Shrimp	None	None
RWF	137	D	No	No	None	Barnacles, Halipteris Sea Pen, Hydroids	None	None
RWF	138	A	No	No	None	Anemone, Barnacles, Hydroids, Sponges, Tubes	None	None
RWF	138	B	No	No	None	Barnacles, Hydroids, Sea Star, Sponges	Red Algae	None
RWF	138	C	No	No	None	Barnacles, Hydroids, Shrimp	None	None
RWF	139	B	No	No	None	Barnacles, Gastropod, Halipteris Sea Pen, Hydroids	None	None
RWF	139	C	No	No	None	Barnacles, Hydroids	None	None
RWF	139	D	Yes	No	None	Barnacles, Halipteris Sea Pen, Hydroids	None	None
RWF	140	A	Yes	No	None	Podocerid Amphipoda, Nudibranch, Tunicates	None	None
RWF	140	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	140	D	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	141	A	Yes	No	Cerianthid, Spionids	Barnacles	None	None
RWF	141	C	Yes	No	Bivalve, Spionids	Hydroids, Sea Scallop, Shrimp	None	None
RWF	141	D	Yes	No	Cerianthid, Spionids	Hydroids, Shrimp	None	None
RWF	142	A	Yes	No	None	Barnacles, Hydroids, Shrimp, Unidentified Organism	None	None
RWF	142	B	Yes	No	Bivalve, Spionids	Barnacles, Shrimp	None	None
RWF	142	D	No	No	None	Barnacles, Hydroids, Podocerid Amphipoda, Shrimp, Sponges, Tunicates	None	None
RWF	143	A	Yes	Yes	Polychaetes	Podocerid Amphipoda	None	None
RWF	143	B	Yes	No	Spionids	Barnacles, Halipteris Sea Pen, Hydroids, Shrimp	None	None
RWF	143	C	Yes	Yes	Polychaetes	Podocerid Amphipoda	None	None
RWF	144	A	Yes	No	Spionids	Barnacles, Hydroids, Podocerid Amphipoda	None	None
RWF	144	B	Yes	No	Spionids	Barnacles, Halipteris Sea Pen, Hydroids, Podocerid Amphipoda	None	None
RWF	144	C	Yes	No	Bivalve	Barnacles, Halipteris Sea Pen, Hydroids	None	None
RWF	201	A	Yes	Yes	Spionids	Attached Tubes, Barnacles, Hydroids	None	None
RWF	201	B	Yes	No	Cerianthid, Spionids	Barnacles, Colonial Tunicate, Hydroids	None	None
RWF	201	E	Yes	No	Cerianthids	Barnacles, Colonial Tunicate, Hydroids, Sea Star, Shrimp	None	None
RWF	202	A	Yes	No	Cerianthids	None	None	None
RWF	202	B	Yes	No	None	Barnacles	None	None
RWF	202	C	Yes	No	None	Podocerid Amphipoda	None	None
RWF	203	B	Yes	Yes	Spionids	Barnacles, Halipteris Sea Pen, Podocerid Amphipoda	None	None
RWF	203	C	Yes	Yes	None	Barnacles, Podocerid Amphipoda	None	None
RWF	203	D	Yes	Yes	None	Barnacles, Paguroid, Podocerid Amphipoda, Shrimp	None	None
RWF	204	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	204	B	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	204	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	205	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	205	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	205	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	206	A	Yes	No	None	None	None	None
RWF	206	B	Yes	No	None	Barnacles, Colonial Tunicate, Halipteris Sea Pen, Hydroids	None	None
RWF	206	C	No	Yes	Bivalves	Podocerid Amphipoda	None	None
RWF	207	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	207	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	207	D	Yes	No	None	Barnacles, Halipteris Sea Pen, Podocerid Amphipoda, Tunicates	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	208	A	Yes	No	None	Barnacles, Halipteris Sea Pen, Podocerid Amphipoda, Tunicates	None	None
RWF	208	D	Yes	No	None	Attached Tubes, Barnacles, Hydroids, Northern Star Coral, Sea Star	None	None
RWF	208	E	Yes	No	None	Attached Tubes, Barnacles, Polymastia Sponge	None	None
RWF	209	A	Yes	No	None	Barnacles, Halipteris Sea Pen	None	None
RWF	209	B	Yes	No	None	Barnacles, Halipteris Sea Pen	None	None
RWF	209	C	Yes	No	Cerianthids	Barnacles, Halipteris Sea Pen, Shrimp	None	None
RWF	210	A	Yes	No	None	Barnacles, Halipteris Sea Pen, Podocerid Amphipoda	None	Silver Hake
RWF	210	C	No	No	None	Barnacles, Gastropods, Paguroid, Podocerid Amphipoda	None	None
RWF	210	D	Yes	No	None	Podocerid Amphipoda	None	None
RWF	211	A	Yes	No	Cerianthid	Barnacles, Halipteris Sea Pen, Hydroids	None	None
RWF	211	C	Yes	No	None	Podocerid Amphipoda	None	None
RWF	211	D	Yes	No	None	Barnacles, Halipteris Sea Pen, Hydroids, Paguroid	None	None
RWF	212	B	Yes	No	None	Halipteris Sea Pen, Paguroid	None	None
RWF	212	C	Yes	No	Bivalve	Podocerid Amphipoda	None	Hake
RWF	212	D	Yes	Yes	Bivalve	Podocerid Amphipoda	None	None
RWF	213	A	Yes	Yes	None	Halipteris Sea Pen	None	None
RWF	213	C	Yes	Yes	None	Attached Tubes, Barnacles, Halipteris Sea Pen	None	None
RWF	213	D	Yes	No	None	Attached Tubes, Barnacles, Halipteris Sea Pen	None	None
RWF	214	A	No	No	None	None	None	None
RWF	214	C	Yes	No	Cerianthid	Barnacles, Hydroids	None	None
RWF	214	D	Yes	No	Cerianthid	Attached Tubes, Barnacles, Colonial Tunicate, Crabs, Hydroids, Shrimp	None	None
RWF	215	A	Yes	No	None	Barnacles, Hydroids, Moon Snail	None	None
RWF	215	B	No	No	None	Anemone, Barnacles, Hydroids, Northern Star Coral, Sea Star	None	None
RWF	215	C	Yes	Yes	None	Attached Tubes, Barnacles, Colonial Tunicate, Hydroids, Paguroid, Polymastia Sponge, Sea Star	None	None
RWF	216	A	Yes	No	None	Barnacles, Colonial Tunicate, Gastropods, Halipteris Sea Pen, Hydroids	None	None
RWF	216	B	Yes	No	None	Barnacles, Colonial Tunicate, Halipteris Sea Pen, Hydroids	None	None
RWF	216	C	Yes	No	None	Barnacles, Halipteris Sea Pen, Hydroids, Sea Star, Sponges	None	None
RWF	217	A	Yes	No	Cerianthid	Barnacles, Halipteris Sea Pen, Hydroids	None	None
RWF	217	C	Yes	No	None	Barnacles, Colonial Tunicate, Crab, Halipteris Sea Pens, Hydroids	None	None
RWF	217	D	Yes	No	None	Anemone, Barnacles, Halipteris Sea Pen, Hydroids, Polymastia Sponge, Sea Star, Sponges	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	218	A	Yes	Yes	None	Attached Tubes, Barnacles, Halipteris Sea Pen, Hydroids, Polymastia Sponge, Shrimp, Sponges	Red Algae	None
RWF	218	C	Yes	Yes	None	Attached Tubes, Barnacles, Halipteris Sea Pen, Hydroids	None	None
RWF	218	D	Yes	Yes	None	Attached Tubes, Barnacles, Halipteris Sea Pen, Hydroids	None	None
RWF	218E1	A	Yes	No	None	Attached Tubes, Barnacles, Colonial Tunicate, Halipteris Sea Pen, Hydroids, Sea Star, Unidentified Organism	Red Algae	None
RWF	218E1	C	Yes	No	None	Attached Tubes, Barnacles, Halipteris Sea Pen, Hydroids, Polymastia Sponge, Sea Star, Sponges	None	None
RWF	218E1	D	Yes	No	None	Attached Tubes, Halipteris Sea Pen, Sponges	None	None
RWF	218E2	A	Yes	No	None	Barnacles, Halipteris Sea Pen	None	None
RWF	218E2	B	Yes	No	None	Barnacles, Halipteris Sea Pen	None	None
RWF	218E2	C	No	No	None	Halipteris Sea Pen, Hydroids, Podocerid Amphipoda	None	None
RWF	218W1	A	No	No	None	Attached Tubes, Barnacles, Colonial Tunicate, Halipteris Sea Pen, Sea Stars, Shrimp	None	None
RWF	218W1	B	Yes	Yes	None	Attached Tubes, Barnacles, Halipteris Sea Pen, Polymastia Sponge	Red Algae	None
RWF	218W1	C	Yes	No	None	Attached Tubes, Sea Star, Sponges	Red Algae	None
RWF	218W2	A	Yes	No	None	Nudibranchs	None	None
RWF	218W2	C	Yes	No	None	Podocerid Amphipoda	None	None
RWF	218W2	D	No	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	219	B	Yes	Yes	None	Attached Tubes, Halipteris Sea Pens, Hydroids	Red Algae	None
RWF	219	C	No	No	None	Attached Tubes, Barnacles, Hydroids, Northern Star Coral, Sponges	Red Algae	None
RWF	219	D	Yes	No	None	Attached Tubes, Barnacles, Halipteris Sea Pen, Northern Star Coral, Shrimp, Sponges	Red Algae	None
RWF	220	B	Yes	No	None	Attached Tubes, Barnacles, Hydroids, Podocerid Amphipoda, Sponges	None	None
RWF	220	C	Yes	Yes	None	Attached Tubes, Barnacles, Colonial Tunicate, Shrimp	None	None
RWF	220	D	Yes	No	Bivalves	Attached Tubes, Barnacles, Hydroids, Sea Star	None	None
RWF	220E1	B	Yes	No	Bivalves, Cerianthids	Attached Tubes, Barnacles, Halipteris Sea Pen, Hydroids, Shrimp	None	None
RWF	220E1	C	Yes	No	Cerianthids	Attached Tubes, Barnacles, Hydroids, Shrimp, Sponges	None	None
RWF	220E1	D	Yes	No	Bivalves, Cerianthids	Attached Tubes, Barnacles, Crab, Hydroids, Shrimp, Sponges	None	None
RWF	220E2	B	Yes	No	Cerianthids	Podocerid Amphipoda	None	None
RWF	220E2	C	Yes	No	Cerianthids	Attached Tubes, Barnacles, Colonial Tunicate, Hydroids, Shrimp	None	None
RWF	220E2	D	Yes	No	None	Attached Tubes, Barnacles, Hydroids, Podocerid Amphipoda, Shrimp, Sponges, Tunicate	None	None
RWF	220W1	A	No	No	None	Barnacles, Hydroids	None	None
RWF	220W1	B	Yes	Yes	None	Attached Tubes, Podocerid Amphipoda	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	220W1	C	Yes	No	None	Paguroid	None	None
RWF	220W2	B	Yes	No	None	Attached Tubes, Barnacles, Halipteris Sea Pen, Hydroids, Sponges, Tunicates	None	None
RWF	220W2	C	Yes	Yes	None	Attached Tubes, Barnacles, Hydroids, Podocerid Amphipoda, Tunicates	None	None
RWF	220W2	D	Yes	Yes	None	Attached Tubes, Barnacles, Colonial Tunicate, Hydroids	None	None
RWF	221	A	Yes	No	None	Podocerid Amphipoda	None	None
RWF	221	B	No	No	None	None	None	None
RWF	221	C	Yes	No	None	Podocerid Amphipoda	None	None
RWF	222	A	No	No	None	Shrimp	None	None
RWF	222	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	222	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	223	A	Yes	Yes	Spionids	None	None	None
RWF	223	C	Yes	Yes	Spionids	None	None	None
RWF	223	D	Yes	Yes	Spionids	None	None	None
RWF	224	A	Yes	Yes	None	None	None	None
RWF	224	B	Yes	No	None	None	None	None
RWF	224	C	Yes	No	None	None	None	None
RWF	225	A	Yes	Yes	None	None	None	None
RWF	225	B	Yes	Yes	Cerianthid	Podocerid Amphipoda	None	None
RWF	225	C	Yes	Yes	None	Ampelisca Amphipoda, Podocerid Amphipoda, Shrimp	None	None
RWF	226	A	Yes	Yes	Polychaetes	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
RWF	226	C	Yes	Yes	None	None	None	None
RWF	226	D	Yes	Yes	None	None	None	None
RWF	227	A	Yes	Yes	Cerianthid	Podocerid Amphipoda	None	Silver Hake
RWF	227	B	Yes	Yes	Cerianthid	Podocerid Amphipoda, Sea Star	None	None
RWF	227	D	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	228	A	Yes	No	None	Ampelisca Amphipoda, Podocerid Amphipoda, Sea Star	None	None
RWF	228	B	Yes	Yes	None	Ampelisca Amphipoda, Paguroids, Podocerid Amphipoda, Sea Star	None	None
RWF	228	C	Yes	No	None	Podocerid Amphipoda	None	None
RWF	229	A	Yes	No	None	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
RWF	229	B	Yes	Yes	None	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
RWF	229	C	Yes	No	None	Podocerid Amphipoda	None	None
RWF	230	A	Yes	Yes	Polychaetes	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
RWF	230	B	Yes	Yes	Polychaetes	Podocerid Amphipoda, Shrimp	None	IND
RWF	230	C	Yes	Yes	None	Ampelisca Amphipoda, Podocerid Amphipoda	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	231	A	Yes	No	None	Ampelisca Amphipoda, Sea Star	None	None
RWF	231	B	Yes	No	Spionids	None	None	Red Hake
RWF	231	C	Yes	Yes	None	Crab, Sea Star	None	None
RWF	232	A	Yes	No	None	Barnacles, Halipteris Sea Pen, Hydroids	None	None
RWF	232	B	Yes	No	None	Attached Tubes, Hydroids, Podocerid Amphipoda	None	None
RWF	232	D	No	No	None	Attached Tubes, Barnacles, Hydroids, Scallop	None	None
RWF	233	A	Yes	No	Polychaetes	None	None	None
RWF	233	B	Yes	No	Polychaetes	Podocerid Amphipoda	None	None
RWF	233	C	Yes	No	None	Podocerid Amphipoda, Shrimp	None	None
RWF	234	A	Yes	No	None	Podocerid Amphipoda	None	None
RWF	234	B	Yes	No	None	Podocerid Amphipoda	None	None
RWF	234	D	Yes	Yes	Polychaetes	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
RWF	235	A	Yes	No	Spionids	Sea Star	None	None
RWF	235	B	Yes	No	None	None	None	None
RWF	235	C	Yes	No	Bivalves	Podocerid Amphipoda, Sea Star	None	None
RWF	236	A	Yes	Yes	None	Shrimp	None	None
RWF	236	E	Yes	Yes	None	Paguroid, Shrimp	None	None
RWF	236	F	Yes	Yes	None	None	None	None
RWF	237	A	Yes	No	Bivalves	Halipteris Sea Pen, Podocerid Amphipoda, Tunicates	None	None
RWF	237	B	Yes	No	Cerianthid	Podocerid Amphipoda, Tunicates	None	None
RWF	237	D	Yes	No	None	Podocerid Amphipoda, Shrimp, Tunicates	None	None
RWF	238	A	Yes	Yes	Polychaetes	Podocerid Amphipoda	None	None
RWF	238	B	Yes	Yes	Polychaetes	Podocerid Amphipoda	None	None
RWF	238	C	Yes	No	None	Podocerid Amphipoda	None	None
RWF	239	E	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	239	G	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	239	H	Yes	No	None	Hydroids, Shrimp, Tunicates	None	None
RWF	240	A	Yes	No	None	Tunicates	None	None
RWF	240	B	Yes	No	None	Tunicates	None	None
RWF	240	C	Yes	No	None	Tunicates	None	None
RWF	241	A	Yes	No	Spionids	Tunicates	None	None
RWF	241	B	Yes	No	Cerianthids, Spionids	Tunicates	None	None
RWF	241	C	Yes	No	Cerianthids, Spionids	None	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	242	A	Yes	No	Polychaetes	Shrimp, Tunicates	None	None
RWF	242	B	Yes	Yes	Spionids	Tunicates, Unidentified Organism	None	None
RWF	242	C	Yes	No	None	Paguroid, Podocerid Amphipoda, Tunicates	None	None
RWF	243	A	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	243	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	243	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	244	A	Yes	No	Polychaetes	Ampelisca Amphipoda, Podocerid Amphipoda, Tunicates	None	None
RWF	244	B	Yes	No	Polychaetes	Ampelisca Amphipoda, Podocerid Amphipoda, Tunicates	None	None
RWF	244	C	Yes	No	Polychaetes	Ampelisca Amphipoda, Podocerid Amphipoda, Tunicates	None	None
RWF	245	A	Yes	Yes	Polychaetes	Ampelisca Amphipoda, Podocerid Amphipoda, Tunicates	None	None
RWF	245	B	Yes	Yes	Cerianthids, Polychaetes	Ampelisca Amphipoda, Podocerid Amphipoda, Tunicates	None	None
RWF	245	D	Yes	Yes	None	Barnacles	None	None
RWF	246	A	Yes	No	None	Ampelisca Amphipoda, Podocerid Amphipoda, Tunicates	None	None
RWF	246	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	247	A	Yes	Yes	None	Podocerid Amphipoda, Shrimp	None	None
RWF	247	B	Yes	No	None	Barnacles, Hydroids	None	None
RWF	247	C	No	No	None	Barnacles, Halipteris Sea Pen, Hydroids, Shrimp	None	None
RWF	248	A	Yes	No	None	Paguroid	None	None
RWF	248	C	Yes	No	None	None	None	None
RWF	248	D	Yes	No	None	Barnacles, Hydroids	None	None
RWF	249	A	No	No	None	Attached Tubes, Barnacles, Colonial Tunicate, Hydroids, Northern Star Coral, Sea Star	None	None
RWF	249	B	No	No	None	Attached Tubes, Barnacles, Hydroids, Northern Star Coral, Sea Stars	None	IND
RWF	249	D	No	No	None	Barnacles, Hydroids, Northern Star Coral, Sea Star	None	Red Hake
RWF	250	A	Yes	Yes	None	Podocerid Amphipoda, Shrimp, Tunicates	None	None
RWF	250	B	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	250	C	Yes	Yes	None	Paguroid, Podocerid Amphipoda, Tunicates	None	None
RWF	251	A	Yes	No	Bivalve	Podocerid Amphipoda	None	None
RWF	251	B	Yes	Yes	None	Podocerid Amphipoda, Tunicates, Shrimp	None	None
RWF	251	C	Yes	Yes	None	Podocerid Amphipoda, Tunicates, Shrimp	None	None
RWF	252	A	Yes	Yes	Cerianthid	Barnacles, Halipteris Sea Pen	None	None
RWF	252	B	Yes	Yes	Cerianthids	Colonial Tunicate, Halipteris Sea Pen, Hydroids, Podocerid Amphipoda	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWF	252	C	Yes	No	None	Barnacles, Halipteris Sea Pen, Podocerid Amphipoda	None	None
RWF	253	A	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	253	C	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWF	253	D	Yes	No	None	Moon Snail, Podocerid Amphipoda, Tunicates	None	None
RWF	254	A	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	254	B	Yes	No	None	Podocerid Amphipoda, Shrimp, Tunicates	None	None
RWF	254	C	Yes	No	None	Barnacles, Podocerid Amphipoda, Tunicates	None	None
RWF	255	A	Yes	No	None	Halipteris Sea Pen, Podocerid Amphipoda, Tunicates	None	None
RWF	255	B	No	Yes	None	Podocerid Amphipoda	None	None
RWF	255	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	256	A	Yes	No	Bivalves	Podocerid Amphipoda	None	None
RWF	256	B	No	Yes	None	Podocerid Amphipoda	None	None
RWF	256	C	Yes	Yes	None	Attached Tubes, Barnacles, Hydroids	None	None
RWF	257	A	Yes	No	Bivalve	Podocerid Amphipoda, Shrimp	None	None
RWF	257	B	Yes	No	None	None	None	None
RWF	257	C	Yes	No	None	Podocerid Amphipoda, Shrimp	None	None
RWF	258	A	Yes	No	Cerianthid	Barnacles, Shrimp	None	None
RWF	258	B	No	No	None	None	None	None
RWF	258	C	Yes	Yes	None	Barnacles, Halipteris Sea Pen, Sea Scallop, Shrimp	None	None
RWF	259	A	Yes	Yes	Bivalve, Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWF	259	B	Yes	No	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWF	259	C	Yes	No	Polychaetes	Ampelisca Amphipoda, Paguroid, Podocerid Amphipoda	None	None
RWF	260	A	Yes	No	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWF	260	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	260	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	Hake
RWF	261	A	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	261	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	261	D	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	262	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWF	262	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWF	262	D	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	401	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	Hake
RWEC-OCS	401	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWEC-OCS	401	D	Yes	No	None	Halipteris Sea Pen, Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	402	A	Yes	Yes	None	Barnacles, Hydroids, Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	402	B	No	No	None	Barnacles, Podocerid Amphipoda, Shrimp, Tunicates	None	None
RWEC-OCS	402	C	Yes	No	None	Gastropod, Podocerid Amphipoda	None	None
RWEC-OCS	403	A	Yes	Yes	None	Hydroids, Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	403	B	Yes	No	None	Podocerid Amphipoda, Shrimp, Tunicates	None	None
RWEC-OCS	403	C	Yes	No	None	Podocerid Amphipoda, Shrimp, Tunicates	None	None
RWEC-OCS	404	A	No	No	None	Barnacles, Shrimp, Tunicates	None	None
RWEC-OCS	404	B	Yes	Yes	None	Tunicates	None	None
RWEC-OCS	404	D	Yes	No	None	Gastropod, Podocerid Amphipoda, Shrimp, Tunicates	None	None
RWEC-OCS	405	A	Yes	No	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	405	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	405	D	Yes	No	Cerianthid	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	406	A	Yes	No	IND	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	406	B	Yes	No	None	Podocerid Amphipoda, Tunicates, Unidentified Organism	None	None
RWEC-OCS	406	D	Yes	No	None	Paguroid, Podocerid Amphipoda	None	None
RWEC-OCS	407	A	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	407	B	Yes	No	Polychaetes	Podocerid Amphipoda	None	None
RWEC-OCS	407	C	Yes	Yes	Polychaetes	Ampelisca Amphipoda, Isopods, Tunicate	None	None
RWEC-OCS	408	A	Yes	Yes	Cerianthid	Ampelisca Amphipoda, Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	408	B	Yes	Yes	None	Hydroids	None	None
RWEC-OCS	408	C	Yes	No	None	None	None	None
RWEC-OCS	409	A	Yes	No	Polychaetes	Podocerid Amphipoda	None	None
RWEC-OCS	409	B	No	No	None	None	None	None
RWEC-OCS	409	C	Yes	No	None	Sea Stars	None	None
RWEC-OCS	410	A	Yes	Yes	None	Sea Stars	None	None
RWEC-OCS	410	B	Yes	No	None	Sea Stars	None	None
RWEC-OCS	410	C	Yes	No	None	None	None	None
RWEC-OCS	411	A	Yes	No	Bivalves	Barnacles, Crab, Hydroids, Sponges	None	None
RWEC-OCS	411	B	No	No	None	Barnacles, Hydroids, Sea Star, Sponges	None	None
RWEC-OCS	411	C	No	No	None	Barnacles, Crab, Hydroids, Sea Star	None	None
RWEC-OCS	412	A	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWEC-OCS	412	B	Yes	No	None	Podocerid Amphipoda	None	None
RWEC-OCS	412	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	413	A	Yes	Yes	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	413	B	Yes	Yes	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	413	D	Yes	Yes	None	Paguroid, Podocerid Amphipoda	None	None
RWEC-OCS	414	A	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	414	B	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	414	C	Yes	No	None	Tunicates	None	None
RWEC-OCS	415	A	Yes	Yes	None	Paguroid, Shrimp	None	None
RWEC-OCS	415	B	Yes	Yes	None	Tunicates	None	None
RWEC-OCS	415	C	Yes	No	Paguroid	None	None	None
RWEC-OCS	416	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWEC-OCS	416	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWEC-OCS	416	D	Yes	Yes	None	None	None	None
RWEC-OCS	417	A	Yes	No	None	Sea Stars	None	None
RWEC-OCS	417	C	Yes	No	None	None	None	None
RWEC-OCS	417	D	Yes	Yes	Cerianthid	Sea Stars	None	None
RWEC-OCS	418	A	No	No	None	Barnacles, Hydroids	None	None
RWEC-OCS	418	B	No	No	None	Barnacles, Hydroids	None	Red Hake
RWEC-OCS	418	D	Yes	No	None	Anemone, Barnacles, Crab, Hydroids, Sea Star	None	None
RWEC-OCS	419	A	Yes	No	None	Barnacles, Halipteris Sea Pen, Hydroids, Paguroid	None	None
RWEC-OCS	419	B	Yes	No	None	Crab, Hydroids, Shrimp	None	None
RWEC-OCS	419	C	Yes	No	Bivalve	Hydroids, Shrimp	None	None
RWEC-OCS	420	A	Yes	No	None	None	None	IND
RWEC-OCS	420	B	Yes	No	None	None	None	None
RWEC-OCS	420	C	No	No	None	Ampelisca Amphipoda	None	None
RWEC-OCS	421	D	Yes	Yes	Cerianthid	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
RWEC-OCS	421	E	Yes	Yes	Cerianthid	Podocerid Amphipoda, Sea Star, Shrimp	None	None
RWEC-OCS	421	F	Yes	Yes	None	Ampelisca Amphipoda, Podocerid Amphipoda, Sea Star	None	None
RWEC-OCS	422	B	Yes	No	None	Ampelisca Amphipoda	None	None
RWEC-OCS	422	C	Yes	Yes	None	None	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWEC-OCS	422	D	Yes	Yes	None	Shrimp	None	None
RWEC-OCS	423	A	No	No	None	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
RWEC-OCS	423	C	No	No	None	Ampelisca Amphipoda	None	None
RWEC-OCS	423	D	No	No	None	Ampelisca Amphipoda	None	None
RWEC-OCS	424	A	Yes	No	None	Podocerid Amphipoda	None	None
RWEC-OCS	424	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	424	D	Yes	No	None	None	None	None
RWEC-OCS	425	A	Yes	No	None	Sand Dollar	None	None
RWEC-OCS	425	B	Yes	No	None	Podocerid Amphipoda	None	None
RWEC-OCS	425	C	Yes	No	None	Hydroids, Podocerid Amphipoda, Shrimp, Tunicates	None	None
RWEC-OCS	426	A	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	426	B	Yes	Yes	None	Ampelisca Amphipoda, Podocerid Amphipoda, Sand Dollar, Tunicates	None	None
RWEC-OCS	426	C	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	427	A	No	Yes	None	Paguroid, Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	427	B	Yes	No	None	Paguroid, Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	427	C	Yes	Yes	None	Tunicates	None	None
RWEC-OCS	428	A	No	Yes	None	None	None	None
RWEC-OCS	428	B	No	Yes	None	Paguroid	None	None
RWEC-OCS	428	C	No	Yes	None	None	None	None
RWEC-RI	429	A	No	Yes	None	None	None	None
RWEC-RI	429	B	No	Yes	None	None	None	None
RWEC-RI	429	C	No	Yes	None	None	None	None
RWEC-RI	430	A	Yes	Yes	None	None	None	None
RWEC-RI	430	B	Yes	Yes	None	None	None	None
RWEC-RI	430	C	Yes	Yes	None	None	None	None
RWEC-RI	431	A	Yes	Yes	Cerianthids	Ampelisca Amphipoda	None	None
RWEC-RI	431	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWEC-RI	431	D	Yes	Yes	Cerianthid	Podocerid Amphipoda	None	None
RWEC-RI	432	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWEC-RI	432	C	Yes	Yes	None	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
RWEC-RI	432	D	Yes	Yes	None	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
RWEC-RI	433	A	Yes	Yes	Cerianthids	Podocerid Amphipoda	None	None
RWEC-RI	433	B	Yes	Yes	None	Crab	None	None
RWEC-RI	433	C	Yes	Yes	Cerianthids	Podocerid Amphipoda	None	None
RWEC-RI	434	A	Yes	Yes	None	Ampelisca Amphipoda	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWEC-RI	434	B	Yes	Yes	Bivalve	Ampelisca Amphipoda	None	None
RWEC-RI	434	C	Yes	No	None	Ampelisca Amphipoda, Paguroid	None	None
RWEC-RI	435	A	Yes	Yes	None	Ampelisca Amphipoda	None	None
RWEC-RI	435	B	Yes	Yes	None	Moon Snail	None	None
RWEC-RI	435	D	Yes	Yes	None	Ampelisca Amphipoda, Paguroid	None	None
RWEC-RI	436	A	Yes	Yes	None	Gastropods, Unidentified Organism	None	None
RWEC-RI	436	C	Yes	Yes	None	Gastropods, Paguroid	None	None
RWEC-RI	436	D	Yes	Yes	None	Gastropods, Paguroid	None	None
RWEC-RI	437	A	Yes	Yes	None	Gastropods	None	None
RWEC-RI	437	B	Yes	Yes	None	Gastropod	None	None
RWEC-RI	437	C	Yes	Yes	None	Gastropods	None	None
RWEC-RI	438	A	No	No	None	Gastropods	None	None
RWEC-RI	438	C	No	No	None	Paguroid	None	None
RWEC-RI	438	D	Yes	Yes	None	Gastropods	None	None
RWEC-RI	439	A	Yes	Yes	None	Gastropods	None	None
RWEC-RI	439	B	Yes	Yes	None	Gastropods, Moon Snail	None	None
RWEC-RI	439	C	Yes	Yes	None	Paguroid	None	None
RWEC-RI	440	A	Yes	Yes	None	Gastropod, Paguroid	None	None
RWEC-RI	440	B	Yes	Yes	None	Paguroid, Unidentified Organism	None	None
RWEC-RI	440	D	Yes	Yes	None	None	None	None
RWEC-RI	441	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWEC-RI	441	B	Yes	No	None	Podocerid Amphipoda	None	None
RWEC-RI	441	C	IND	IND	IND	IND	None	None
RWEC-RI	442	A	Yes	Yes	None	Podocerid Amphipoda	None	None
RWEC-RI	442	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWEC-RI	442	D	Yes	Yes	None	Crab, Podocerid Amphipoda	None	None
RWEC-RI	443	A	Yes	Yes	Cerianthids	Gastropod	None	None
RWEC-RI	443	B	Yes	Yes	None	Gastropod	None	None
RWEC-RI	443	C	Yes	Yes	None	Paguroid	None	None
RWEC-RI	444	A	Yes	Yes	None	Paguroid	None	None
RWEC-RI	444	B	Yes	No	None	None	None	None
RWEC-RI	444	D	Yes	No	None	None	None	None
RWEC-RI	445	A	Yes	Yes	None	Gastropods, Paguroid	None	None
RWEC-RI	445	B	No	Yes	None	Barnacles, Paguroid	None	None
RWEC-RI	446	A	No	No	None	Paguroid	None	None
RWEC-RI	446	B	No	Yes	None	Paguroids	None	Northern Sea Robin
RWEC-RI	446	C	IND	IND	IND	IND	None	None
RWEC-RI	447	A	No	Yes	None	Barnacles, Paguroids	None	None
RWEC-RI	447	B	No	Yes	None	Hydroids	None	None
RWEC-RI	447	C	Yes	Yes	None	Hydroids	Red Algae	None
RWEC-RI	448	A	No	No	None	Barnacles, Gastropod, Hydroids, Mussels	Red Algae	None
RWEC-RI	448	B	No	No	None	Barnacles, Gastropod, Hydroids, Mussels	Red Algae	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWEC-RI	448	D	Yes	No	None	Mussels	Red Algae	None
RWEC-RI	449	A	No	No	None	Hydroids	Red Algae	None
RWEC-RI	449	B	No	No	None	Hydroids	Red Algae	None
RWEC-RI	449	C	No	No	None	Hydroids	Red Algae	None
RWEC-RI	450	B	No	No	None	Crepidula, Hydroids, Sponges	None	None
RWEC-RI	450	F	No	No	None	Crepidula, Hydroids, Sponges	None	None
RWEC-RI	450	G	No	No	None	Barnacles, Crepidula, Hydroids, Sponges	None	None
RWEC-RI	451	A	IND	IND	None	Sponges	Red Algae	None
RWEC-RI	451	C	IND	IND	None	Sponge	Red Algae	None
RWEC-RI	451	D	IND	Yes	None	Sponge, Whelk	Red Algae	None
RWEC-RI	452	A	No	No	None	Gastropods, Sponge	None	None
RWEC-RI	452	B	No	Yes	None	IND	None	None
RWEC-RI	452	D	No	No	None	Barnacles, Gastropod, Sponges	None	None
RWEC-RI	453	A	IND	IND	IND	IND	None	None
RWEC-RI	453	C	Yes	No	None	None	None	None
RWEC-RI	453	D	Yes	No	None	None	None	None
RWEC-RI	454	A	Yes	No	None	None	None	None
RWEC-RI	454	C	No	Yes	None	None	None	None
RWEC-RI	455	A	Yes	Yes	None	None	None	None
RWEC-OCS	456	A	Yes	Yes	None	None	None	None
RWEC-OCS	456	B	No	Yes	None	None	None	None
RWEC-OCS	456	C	Yes	Yes	Polychaetes	None	None	None
RWEC-OCS	457	A	Yes	Yes	None	None	None	None
RWEC-OCS	457	B	Yes	Yes	None	None	None	None
RWEC-OCS	457	C	Yes	Yes	Polychaetes	Isopod, Shrimp	None	None
RWEC-OCS	458	A	Yes	Yes	None	Corymorpha, Hydroids	None	None
RWEC-OCS	458	B	Yes	No	None	None	None	None
RWEC-OCS	458	C	Yes	No	None	Ampelisca Amphipoda, Corymorpha, Hydroids	None	None
RWEC-OCS	459	A	Yes	Yes	None	Ampelisca Amphipoda, Paguroid	None	None
RWEC-OCS	459	B	Yes	Yes	None	Podocerid Amphipoda, Shrimp	None	None
RWEC-OCS	459	C	Yes	Yes	None	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
RWEC-OCS	460	A	Yes	Yes	Polychaetes	Corymorpha, Podocerid Amphipoda, Shrimp	None	None
RWEC-OCS	460	C	Yes	Yes	Polychaetes	Ampelisca Amphipoda	None	None
RWEC-OCS	460	D	Yes	Yes	Polychaetes	Podocerid Amphipoda	None	None
RWEC-OCS	461	A	Yes	No	None	Corymorpha	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWEC-OCS	461	B	Yes	Yes	None	Gastropod, Podocerid Amphipoda	None	None
RWEC-OCS	462	A	No	No	None	Gastropod, Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	462	B	No	Yes	None	Ampelisca Amphipoda, Sand Dollar	None	None
RWEC-OCS	462	C	No	No	None	Ampelisca Amphipoda	None	None
RWEC-OCS	463	A	Yes	Yes	None	Crab, Unidentified Organism	None	None
RWEC-OCS	463	F	Yes	Yes	None	Ampelisca Amphipoda	None	None
RWEC-OCS	463	G	Yes	Yes	None	Ampelisca Amphipoda	None	None
RWEC-RI	464	A	Yes	Yes	Polychaetes	None	None	None
RWEC-RI	464	C	Yes	No	None	Podocerid Amphipoda, Shrimp	None	None
RWEC-RI	464	D	Yes	No	None	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
Reference Area	501	A	Yes	Yes	None	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
Reference Area	501	B	Yes	No	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
Reference Area	501	C	No	No	Polychaetes	Podocerid Amphipoda	None	None
Reference Area	502	A	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
Reference Area	502	B	No	No	None	Barnacles, Hydroids, Podocerid Amphipoda	None	None
Reference Area	502	D	Yes	No	Polychaetes	Ampelisca Amphipoda, Paguroid, Podocerid Amphipoda, Shrimp	None	None
Reference Area	503	A	Yes	No	Cerianthid	Paguroid	None	None
Reference Area	503	B	Yes	Yes	None	Podocerid Amphipoda	None	None
Reference Area	503	C	Yes	Yes	Cerianthid	Podocerid Amphipoda	None	None
Reference Area	504	A	Yes	Yes	Polychaetes	Podocerid Amphipoda	None	None
Reference Area	504	B	Yes	Yes	None	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
Reference Area	504	C	Yes	Yes	None	Podocerid Amphipoda	None	IND
Reference Area	505	A	Yes	Yes	None	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
Reference Area	505	B	Yes	Yes	None	Ampelisca Amphipoda, Podocerid Amphipoda	None	None
Reference Area	505	C	Yes	Yes	Polychaetes	Podocerid Amphipoda	None	None
RWEC-OCS	601	A	Yes	No	None	Gastropod, Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	601	B	Yes	No	None	Corymorpha, Gastropod, Podocerid Amphipoda	None	None
RWEC-OCS	601	C	Yes	Yes	None	Gastropods, Podocerid Amphipoda	None	None
RWEC-OCS	602	A	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	602	B	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	602	C	Yes	Yes	None	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	603	A	Yes	Yes	Polychaetes	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	603	B	Yes	No	Polychaetes	Podocerid Amphipoda, Tunicates	None	None

Area	StationID	Replicate	Burrows	Tracks	Infauna	Epifauna	Flora	Fish Type
RWEC-OCS	603	C	Yes	Yes	Polychaetes	None	None	None
RWEC-RI	604	A	No	Yes	None	Ampelisca Amphipoda	None	None
RWEC-RI	604	B	No	No	None	Gastropod	None	None
RWEC-RI	604	C	No	No	None	None	None	None
RWEC-OCS	605	A	No	No	None	None	None	None
RWEC-OCS	605	B	No	No	None	Gastropod, Paguroid	None	None
RWEC-OCS	605	C	Yes	No	None	None	None	None
RWEC-OCS	606	A	Yes	No	None	Sand Dollar	None	None
RWEC-OCS	606	B	No	No	None	Gastropod, Podocerid Amphipoda	None	None
RWEC-OCS	606	C	No	No	None	Podocerid Amphipoda	None	None
RWEC-OCS	607	A	Yes	Yes	Cerianthids	Corymorpha, Podocerid Amphipoda	None	None
RWEC-OCS	607	E	Yes	Yes	Cerianthids	Corymorpha, Podocerid Amphipoda	None	None
RWEC-OCS	607	F	Yes	Yes	Cerianthid, Polychaetes	Podocerid Amphipoda, Shrimp	None	None
RWEC-OCS	608	B	Yes	Yes	Cerianthids	Podocerid Amphipoda	None	None
RWEC-OCS	608	C	Yes	Yes	None	Podocerid Amphipoda	None	None
RWEC-OCS	608	F	Yes	Yes	None	Podocerid Amphipoda, Shrimp	None	None
RWEC-OCS	609	A	Yes	No	None	Podocerid Amphipoda, Tunicates	None	None
RWEC-OCS	609	B	Yes	No	None	Podocerid Amphipoda	None	None
RWEC-OCS	609	C	Yes	No	None	Podocerid Amphipoda	None	None
RWEC-RI	610	A	Yes	Yes	None	None	None	None
RWEC-RI	610	B	Yes	Yes	None	Paguroid	None	None
RWEC-RI	610	C	Yes	Yes	None	None	None	None
RWEC-RI	611	A	Yes	Yes	None	Ampelisca Amphipoda, Gastropods	None	None
RWEC-RI	611	B	Yes	Yes	None	Ampelisca Amphipoda, Gastropods, Paguroid	None	None
RWEC-RI	611	C	Yes	Yes	None	Ampelisca Amphipoda, Gastropods, Paguroid	None	None
RWEC-RI	612	A	Yes	Yes	None	None	None	None
RWEC-RI	612	D	Yes	Yes	None	None	None	None
RWEC-RI	613	A	Yes	IND	None	None	None	None
RWEC-RI	613	B	Yes	IND	None	IND	None	None
RWEC-RI	613	D	IND	IND	None	None	None	None
RWEC-RI	614	A	No	No	None	Hydroids, Sponges	None	None
RWEC-RI	614	B	No	No	None	Hydroids, Sponges	None	None
RWEC-RI	614	C	No	No	None	Hydroids, Sponges	None	None
RWEC-RI	615	A	No	No	None	Hydroids	None	None
RWEC-RI	615	C	No	No	None	Hydroids	Green Algae	None
RWEC-RI	615	D	No	No	None	Hydroids	None	None

Area	StationID	Replicate	Comments
RWF	001	A	Light brown gravelly sand with few small shell fragments partially buried. Hard substrate surfaces covered with attached hydroids and partially grazed barnacles.
RWF	001	B	Turbid image, lasers not visible. Cobbles and gravel with several shell fragments. Hydroid growth over hard surfaces.
RWF	001	C	Light brown sandy gravels and cobble with large shell fragments. Hydroids and barnacles over hard surfaces. Small red sea star below left laser.
RWF	002	A	Light brown, flat, sandy bottom with dense tubes and amphipod fecal stacks. Small shrimp near right laser.
RWF	002	B	Light brown, flat, sandy bottom with dense tubes and amphipod fecal stacks. Unknown organism in lower left corner of image.
RWF	002	C	Light brown, flat, sandy bottom with dense tubes and amphipod fecal stacks. Large forage depressions and small burrows in seafloor.
RWF	003	A	Light brown, flat, sandy bottom with dense tubes and amphipod fecal stacks. Large forage depressions and small burrows in seafloor.
RWF	003	C	Light brown, flat, sandy bottom with dense tubes and amphipod fecal stacks. Few small trails and burrow openings in seafloor.
RWF	003	D	Light brown, flat, sandy bottom with dense tubes and amphipod fecal stacks. Few small trails and burrow openings in seafloor.
RWF	004	A	Light brown, flat, sandy bottom with few small tubes. Very thin amphipod fecal stacks are scarce. Few small shell fragments.
RWF	004	B	Light brown, flat, sandy bottom with few small tubes and burrows. Very thin amphipod fecal stacks are scarce. Large shell half in center of image. Two shrimp at seafloor and in water column.
RWF	004	C	Light brown, flat, sandy bottom with few small tubes. Several small shell fragments. Small patches of finer sediment between lasers, clustered with small tubes.
RWF	005	A	Light brown, flat, sandy bottom with small tubes and thin fecal amphipod strands. Several small burrows and single large burrow/forage depression in upper right corner.
RWF	005	B	Light brown, flat, sandy bottom with small tubes and thin fecal amphipod strands. Several small burrows throughout image. Few small lines of tracks.
RWF	005	D	Light brown, flat, sandy bottom with small tubes and thin fecal amphipod strands. Single fat tube at image center. Several small burrows throughout image. Few small lines of tracks. Small shrimp in lower left corner of image.
RWF	006	A	Light brown, flat, sandy bottom with small tubes and thin fecal amphipod strands. Long thin tracks in upper right corner of image. Small burrow openings in upper right and lower left corners of image. Cerianthid in lower right. Small shrimp at upper center.
RWF	006	B	Light brown, flat, sandy bottom with abundant small tubes. Several burrows in lower right corner of image.
RWF	006	C	Light brown, flat, sandy bottom with abundant small tubes. Small burrows throughout image. Several long thin tracks in seafloor.
RWF	007	A	Light brown, flat, sandy bottom with abundant small tubes and burrow openings. Reduced burrow mound in lower right corner of image. Several long thin tracks in sediment.
RWF	007	C	Light brown, flat, sandy bottom with abundant small tubes and burrow openings. Small shell fragment in upper left corner. Foraging depressions in upper right corner.
RWF	007	D	Light brown sandy bottom with abundant small tubes and burrow openings. Possible ripple crest through center of image; difficult to discern due to field of view. Large shell fragment in upper right corner of image.
RWF	008	A	Light brown, flat, sandy bottom with many small tubes and burrow openings. Burrow mound with reduced sediment near lower right corner. Few small shell fragments. Single large hermit crab near left laser.
RWF	008	B	Light brown, flat, sandy bottom with many small tubes and burrow openings. Few small shell fragments. Small thin tracks. Small ridged tracks.
RWF	008	C	Light brown, flat, sandy bottom with many small tubes and burrow openings. Mound of reduced sediment near burrow opening in lower center of image. Large shell fragment in upper right corner with amphipod. Nudibranch near shell fragment.
RWF	009	A	Light brown, flat, sandy bottom with many small tubes and burrow openings. Few small shell fragments. Small thin tracks. Few small tracks, especially in upper left corner of image.
RWF	009	B	Light brown, flat, sandy bottom with many small tubes and burrow openings. Larger burrow with reduced sediment mound near right edge of image. Few small shell fragments. Few small thin tracks. Long, arching track in left side of image may be camera sampling artefact.
RWF	009	C	Light brown, flat, sandy bottom with small tubes and many small burrow openings. Areas of small repeating tracks. Few small shell fragments.
RWF	010	A	Light brown, flat, sandy bottom with small tubes and many small burrow openings. Few small amphipod fecal stacks. Shallow tracks in upper right corner of image.
RWF	010	B	Light brown, flat, sandy bottom with few small tubes and many small burrow openings. Many amphipod fecal stacks. Large shell fragment in upper right corner of image.
RWF	010	C	Turbid image, lasers not visible. Light brown sand with small tubes and burrows visible through resuspended sediment.
RWF	011	A	Light brown, flat, sandy bottom with abundant tubes and many small burrow openings. Two small burrow mounds near larges openings. Thin amphipod fecal stacks present.
RWF	011	B	Light brown, flat, sandy bottom with abundant tubes and many small burrow openings. Thin amphipod fecal stacks present. Ampelisca amphipod tubes by depression. Whiting at right edge of image. Left side of image is turbid from resuspended sediments.

Area	StationID	Replicate	Comments
RWF	011	D	Light brown, flat, sandy bottom with abundant tubes and many small burrow openings. Thin amphipod fecal stacks present.
RWF	012	A	Light brown, flat, sandy bottom with small burrow openings and few very small tubes. Amphipod fecal stacks present. Few small shell fragments.
RWF	012	B	Right half of image is very turbid. Lasers not visible. Small tubes and burrow openings in seafloor. Small thin tracks in upper left corner. Hermit crab in upper right corner.
RWF	012	C	Very turbid image. Light brown, sand. No other details visible.
RWF	013	A	Light brown, flat, sandy bottom. Long tracks and small repeating tracks in sand. Small thin amphipod stacks. Few small burrow openings and tubes.
RWF	013	B	Turbid water column. Light brown, flat, sandy bottom. Long thin shallow tracks in sand at top edge of image. Large burrow opening visible through turbidity at upper left corner of image.
RWF	013	C	Light brown, flat, sandy bottom. Many small thin fecal stacks are abundant. Large burrow opening in center of image. Shallow tracks are sparse.
RWF	014	A	Light brown, flat, sandy bottom. Many small burrow openings. Few tubes. Small thin amphipod fecal stacks. Small shell fragment at top edge of image. Two small and shallow burrow/forage depressions
RWF	014	C	Light brown, flat, sandy bottom. Few shallow depressions in seafloor. Small tubes and burrow openings throughout image. Sea star in upper left corner of image.
RWF	014	D	Light brown, flat, sandy bottom. Few shallow depressions in seafloor. Small tubes and burrow openings throughout image. Small shell in upper left corner.
RWF	015	A	Reddish-brown, flat sand with sparse shell hash. Small burrow openings and short tubes. Few larger shell fragments at bottom half of image, small amount of attached growth on shell pieces.
RWF	015	B	Reddish-brown, flat sand with sparse shell hash. Small burrow openings and short tubes. Small shrimp in lower right. Sea star at left edge of image.
RWF	015	D	Reddish-brown, flat sand with sparse shell hash. Small burrow openings and short tubes. Shallow short and repeating tracks throughout image. Shallow burrow depressions in upper left.
RWF	016	A	Light brown, flat, sand with many small burrow openings and tubes. Abundant amphipod fecal stacks. Few small shell fragments. Reduced burrow mound in lower right corner. Large burrow in upper right.
RWF	016	B	Light brown, flat, sand with many small burrows with few small tubes. Large track in lower right corner, likely fish, causing sediment resuspension. Low burrow mound above track.
RWF	016	C	Light brown, flat, sand with many small burrows with few small tubes. Small irregular tracks in seafloor. Amphipod fecal strands present. Burrow/foraging depression in upper right corner.
RWF	017	A	Light brown, flat, sand with many small burrows. Fewer short tubes. Various tracks throughout image.
RWF	017	C	Light brown, flat, sand with many small burrows. Fewer short tubes and few thin amphipod fecal strands. Many small tracks throughout image Longer thin tracks and excavated burrow mound in upper left corner of image.
RWF	017	D	Light brown, flat, sand with many small burrows. Few larger burrow openings and tubes present. Small cerianthid at right edge of image.
RWF	018	B	Light brown, flat, sand with many small burrows. Few larger burrow openings and tubes present. Many shallow tracks throughout image.
RWF	018	C	Turbid water column. Many tubes and small burrows. Lasers not visible through resuspended sediment.
RWF	018	D	Light brown, flat, sand with many small burrow openings. Thin amphipod fecal stacks and few tubes throughout image. Small tracks are abundant.
RWF	019	A	Light brown, flat, sand with many small burrow openings. Many thin amphipod fecal stacks with few amphipods discernable. Small cluster of white shell fragments near right laser. Foraging/burrow depression in lower right corner. Few small shrimp.
RWF	019	B	Light brown, flat, sand with many small burrow openings. Many thin amphipod fecal stacks. Small shrimp at right edge of image.
RWF	019	C	Light brown, flat, sand with many small burrow openings. Many thin amphipod fecal stacks. Few small shrimp.
RWF	020	A	Light brown, flat, sand with few small burrows, many amphipod fecal stacks, tracks, and few burrow/foraging depressions. Scattered small shell fragments.
RWF	020	B	Light brown, flat, sand with few small burrows, many amphipod fecal stacks, tracks, and few burrow/foraging depressions. Scattered small shell fragments.
RWF	020	C	Light brown, flat, sand with few small burrows, many amphipod fecal stacks, tracks, and few burrow/foraging depressions. Scattered small shell fragments.
RWF	021	A	Light brown, mostly flat, sand. Many small clustered tubes. Five sea stars on or partially buried in sediment. Several large burrows/foraging.
RWF	021	B	Light brown, mostly flat, sand. Many small clustered tubes. Twelve sea stars visible on sediment or buried under sand. Small thin tracks present.
RWF	021	D	Light brown, mostly flat, sand. Many small clustered tubes. Nine sea stars visible on sediment or buried under sand. Many tracks in seafloor. Small burrow opening in upper right corner with reduced burrow mound.
RWF	022	A	Reddish-brown, flat, sand. Small clustered tubes throughout image. Few small depressions in sand. Single sand dollar in lower right corner.
RWF	022	B	Reddish-brown, flat, sand. Small clustered tubes throughout image. Large crab in upper right corner. Sea star in lower right corner. Cerianthid below lasers. Shallow depression in sediment near left laser.

Area	StationID	Replicate	Comments
RWF	022	C	Reddish-brown, flat, sand. Small clustered tubes and few small burrows. Few small tracks. Two sea stars in right half of image.
RWF	023	E	Light brown, sand with small tracks and large burrow opening/depression in center of image. Smaller burrow openings present throughout image. Sea star at right side of image with small thin track terminating at the organism.
RWF	023	F	Light brown sand with rough textured surface. Few large tubes and burrows present. Orange sea star at left edge of image.
RWF	023	G	Light brown sand with many small burrow openings. Line of light disturbance at left edge of image. Sea star in lower right corner.
RWF	024	B	Reddish-brown washed granules with possible ripple crest through center of image. Small cluster of shell fragments in upper left corner of image. Few podocerid amphipod fecal stacks.
RWF	024	C	Reddish-brown washed granules with few larger gravels. Possible ripple crest at left edge of image. Ripple trough right side of image with large shell fragments covered in attached hydroids and grazed barnacles. Small burrow openings are sparse in center of image.
RWF	024	D	Reddish-brown washed granules with partially buried boulder in lower left corner. Large shell fragments throughout image. Hydroid growth and grazed barnacles attached to hard surfaces. Pennatulids in lower edge of image.
RWF	025	A	Reddish-brown sand with gravels. Large cobble covered with encrusting organisms. Sea pens present. Small pink fish near cobble.
RWF	025	C	Reddish-brown sand with few gravels and cobbles. Attached barnacles and hydroids on cobbles. Pennatulids present. Small crab in upper left near large pebble.
RWF	025	D	Light brown sand with scattered gravels. Buried cobble in upper left corner. Wide tracks in soft sediment. Hard surfaces buried by thin layer of sand, evidenced by hydroids and pennatulids on sand. Shrimp on pebble below right laser.
RWF	026	A	Light brown sand with small tubes and burrow openings. Small podocerid amphipod fecal stacks throughout image. Few short repeating tracks. Large burrow/forage depression above right laser.
RWF	026	B	Light brown sand with small tubes and burrow openings. Small podocerid amphipod fecal stacks throughout image. Few short repeating tracks.
RWF	026	C	Light brown sand with small tubes and burrow openings. Small podocerid amphipod fecal stacks throughout image. Few short repeating tracks. Long narrow depression in upper right corner of image.
RWF	027	A	Light brown sand with small tubes and burrow openings. Small podocerid amphipod fecal stacks throughout image. Few short repeating tracks. Several larger burrow/forage depressions throughout image. Nudibranch at image center.
RWF	027	B	Turbid water column, no visible layers. Light brown sand with small thin tracks. Burrow opening at middle edge of image.
RWF	027	C	Light brown sand with many small burrow openings and tubes. Abundant podocerid amphipod fecal stacks. Small faint tracks are abundant.
RWF	028	A	Light brown sand with few shallow burrow/forage depressions and associated reduced mounds. Small tracks in sand, especially along left side of image. Podocerid amphipod fecal stacks. Small tubes/burrows with pink appendages emerging above seafloor.
RWF	028	B	Light brown sand with many burrow openings and low tubes. Podocerid amphipod fecal stacks throughout image. Stout fecal cast in upper right corner. Small pink appendages emerging from openings in seafloor.
RWF	028	C	Light brown sand with many burrow openings and low tubes. Podocerid amphipod fecal stacks throughout image. Stout fecal cast at upper edge of image. Small pink appendages emerging from openings in seafloor. Short thin repeating tracks along upper edge of image.
RWF	029	A	Reddish-brown sand with cobbles and sparse shell hash. Few cobbles covered with hydroids. Podocerid amphipods throughout image. Small depression above left laser. Small shrimp near left laser.
RWF	029	C	Reddish-brown sand with few large shell fragments, one covered in encrusting barnacles. Podocerid amphipod fecal stacks throughout image. Loose, pale brown fines in patches. Two small crabs.
RWF	029	D	Reddish-brown sand with thin patches of pale fines. Long thin repeating tracks. Thin amphipod fecal stacks throughout image. Few small depressions in seafloor, possible burrows.
RWF	030	A	Reddish-brown sand with many shallow burrow depressions. Long thin podocerid amphipod fecal stacks. Short repeating tracks diagonally through image in upper right corner. Small pink appendages emerging from seafloor.
RWF	030	B	Reddish-brown sand with many shallow burrow depressions. Long, sinuous track in center of image. Few amphipod fecal stacks. Few small pink appendages extending above seafloor.
RWF	030	C	Reddish-brown sand with many shallow burrow depressions and tubes, pink appendages emerging from burrows and tubes. Podocerid amphipod fecal stacks. Ampelisca amphipods in feeding depressions in lower right. Small shallow tracks.
RWF	031	A	Light brown sand with many small clustered tubes. Few shallow, thin tracks. Scant shell hash. Small fish in lower right corner of image.
RWF	031	B	Light brown sand with scant shell hash and many small clustered tubes. Few shallow tracks. Small burrows with pink appendages emerging.
RWF	031	D	Light brown sand with dense tubes. Long thin tracks in lower right corner of image. Five sea stars on or partially buried in sand.
RWF	032	A	Light brown sand with tubes and burrows. Long, thin tracks through center of image. Shallow depressions in sand, largest at upper edge of image. Ampelisca amphipod tubes at depression at upper edge.
RWF	032	B	Light brown sand with clusters of small tubes. Few small tracks throughout image.
RWF	032	C	Light brown sand with many small tubes. Shallow depressions, large area of reduced sediment near center of image. Several sea stars at left half of image.
RWF	033	A	Light brown sand with abundant tubes and small burrow openings Few podocerid amphipod fecal stacks. Several small shrimp. Few tunicates in center of image.
RWF	033	B	Light brown sand with abundant tubes and small burrow openings Several small tunicates at center of image and at image right.
RWF	033	C	Light brown sand with abundant tubes and small burrow openings Several small tunicates at left half of image.

Area	StationID	Replicate	Comments
RWF	034	A	Light brown sand with many small burrows and few tubes. Abundant tracks throughout image. Several shallow depressions in seafloor.
RWF	034	B	Light brown sand with many small burrows and tubes. Several small red shrimp throughout image. Few podocerid amphipod tubes.
RWF	034	C	Light brown sand with many small burrows and tubes. Large burrow openings at top edge of image. Few podocerid amphipoda fecal strands throughout image.
RWF	035	E	Light brown sand with small burrows and tubes. Several small shallow depressions in sand. Few podocerid amphipod fecal stacks . Small shrimp in upper right corner. Small isopod near right laser.
RWF	035	F	Light brown sand with small tubes and very few burrows. Large depression with adjacent reduced mound in lower left corner of image. Ampelisca amphipod tubes in lower left. Small tracks cover entire visible area. Few thin amphipod fecal stacks.
RWF	035	G	Turbid water column. No lasers visible. Light brown sand with abundant small tracks. Large reduced burrow mound at right edge of image.
RWF	036	A	Reddish-brown sand with many small burrow openings and few small tubes. Few larger burrow openings in sand. Several tunicates in upper left corner. Fish tail at left edge of image.
RWF	036	C	Reddish-brown sand with small tubes and burrow openings, tubes are especially clustered around burrow/forage depressions. Many small tracks throughout image. Several small tunicates near right laser. Podocerid amphipod fecal stacks.
RWF	036	D	Reddish-brown sand with many small burrow openings and short tubes. Corymorpha in lower right corner of image. Small shrimp in lower right corner.
RWF	037	A	Reddish-brown sand with few small burrow openings and short tubes. Several shallow burrow/forage depressions, some with associated reduced mounds. Podocerid amphipod fecal stacks. Small thin tracks throughout image. Hermit crab at right edge of image.
RWF	037	B	Reddish-brown sand with many small tubes and covered with podocerid amphipod fecal stacks. Long thin tracks and few small depressions in seafloor. Very small fish at lower edge of image.
RWF	037	C	Reddish-brown sand with many small tubes and shallow depressions. Polychaete appendages visible in center of tubes.
RWF	038	A	Light brown sand with many small tubes and amphipod fecal stacks. Few long and thin tracks. Shallow depressions in seafloor. Tunicate in center of image. Few small pink polychaete appendages in tubes.
RWF	038	B	Light brown sand with large reduced burrow mounds, few small tubes, and long thin tracks. Podocerid fecal stacks present. Few small pink polychaete appendages in tubes.
RWF	038	C	Light brown sand with short tubes and small thin tracks. Large burrow/forage depression ringed by tubes and adjacent to excavated mound at left edge of image.
RWF	039	A	Light brown sand with short tubes and small thin tracks. Large depression in upper right corner of image. Few small shell fragments. Podocerid amphipod fecal stacks present.
RWF	039	B	Light brown sand with short tubes and few shallow burrow depressions. Podocerid amphipoda fecal stacks. Several small shrimp.
RWF	039	C	Light brown sand with short tubes and few shallow burrow depressions. Long thin track in upper right corner of image. Podocerid amphipoda fecal stacks. Several small shrimp.
RWF	040	A	Light brown sand with dense cover of short tubes, few small burrow openings. Small shell fragment and scant shell hash. Few podocerid amphipod fecal stacks.
RWF	040	B	Light brown sand with dense cover of short tubes, few small burrow openings. Shallow burrow/forage depressions in seafloor. Small shell fragment and scant shell hash. Few podocerid amphipod fecal stacks.
RWF	040	C	Light brown sand with short tubes and scant shell hash. Small hermit crab in center of image. Scant shell hash. Few podocerid amphipod fecal stacks.
RWF	041	A	Light brown sand with small tubes. Long thin tracks and grooves in seafloor. Scant shell hash. Reddish buried object under left laser.
RWF	041	B	Light brown sand with small tubes and few small burrow openings. Several podocerid amphipoda fecal stacks. Few tunicates present. Sea star at upper edge of image.
RWF	042	A	Light brown sand with many small tubes and podocerid amphipod fecal stacks. Few burrow openings with reduced mounds in lower left corner of image. Long thin tracks, most visible in lower right corner.
RWF	042	C	Light brown sand with many small tubes and podocerid amphipod fecal stacks. Few burrow openings with reduced mounds in lower left corner of image. Long thin tracks, most visible in lower right corner.
RWF	042	D	Light brown sand with many small tubes few podocerid amphipod fecal stacks. Large shallow depressions above lasers. Pink polychaete appendages in tube near right laser.
RWF	043	A	Light brown sand with wide swath of short repeating tracks in lower edge of image. Many podocerid amphipod fecal stacks. Shallow burrow/forage depressions in upper right corner of image Burrow amid tracks below right laser. Shrimp in upper left corner.
RWF	043	B	Light brown sand with small tubes. Large depression at right edge of image. Small black clasts and turbidity suggest possible previous penetration.
RWF	043	C	Very turbid water column. Light brown sand with short tubes.
RWF	044	A	Light brown sand with small tubes and few podocerid fecal stacks. Reduced burrow mounds in upper half of image. Large burrow forage depression ringed by tubes in upper right corner of image.
RWF	044	B	Light brown sand with small tubes and several large reduced burrow mounds. Small pink polychaete appendages emerging from tube near image center. Few podocerid amphipod fecal stacks. Unidentified object above left laser. Small thin tracks are scant.
RWF	044	C	Light brown sand with few burrow openings and many small tubes, especially surrounding depression at upper edge of image. Small isopod near left laser. Small shrimp below center of lasers.
RWF	045	A	Very turbid water column. Light brown sand with few tubes and burrows visible through resuspended sediment.

Area	StationID	Replicate	Comments
RWF	045	B	Very turbid water column. Light brown sand with few tubes and burrows visible through resuspended sediment.
RWF	046	A	Light brown sand with many short tubes and few burrows. Several small tunicates. Few pink polychaete appendages emerging from tubes.
RWF	046	B	Light brown sand with two large depressions surrounded by short flat tubes near right and left laser. Reduced mound at lower right corner. Several small tunicates. Podocerid amphipod fecal stacks. Ampelisca amphipod tubes. Short thin tracks. Red hake at upper edge of image. Tunicate between lasers.
RWF	046	C	Light brown sand with large shell fragment covered with attached barnacles and hydroids. Short tubes and amphipod fecal stacks. Tunicates in lower left corner.
RWF	047	A	Reddish-brown sand with small tubes and emerging polychaete appendages. Shallow forage depressions. Small mound between lasers. Shallow thin tracks in sand. Tunicates.
RWF	047	C	Reddish-brown sand with many tunicates and short tubes. Shallow forage depressions in upper right and lower left corners.
RWF	047	D	Reddish-brown sand with short tubes and few amphipod fecal stacks. Few small pink appendages emerging from tubes. Small patches of fines on seafloor. Many tunicates. Cerianthid along lower edge of image. Several small fish above lasers.
RWF	048	A	Light brown sand with few short tubes, including ampelisca amphipoda near forage depressions. Podocerid amphipoda fecal stacks. Pink polychaete appendages emerging from tubes.
RWF	048	B	Light brown sand with several large burrow and associated mounds. Forage depression with dense ampelisca amphipod tubes. Few Podocerid amphipod fecal stacks. Short tubes with few polychaetas emerging.
RWF	048	C	Light brown sand with polychaete and ampelisca amphipod tubes. Podocerid amphipod fecal stacks. Single burrow near right laser. Patches of fecal pellets on seafloor.
RWF	049	A	Light brown sand with short tubes. Many podocerid amphipod fecal stacks. Many tunicates present.
RWF	049	B	Light brown sand with few short tubes and burrow openings. Podocerid amphipod fecal stacks. Several shallow forage depressions in upper left corner of image. Tunicates present, especially in lower right.
RWF	049	C	Light brown sand with many small tubes, some showing pink polychaete appendages. Podocerid amphipod fecal stacks. Tunicates throughout image. Partially buried shell fragment in upper left corner of image.
RWF	050	A	Light brown sand with many clustered tubes. Large forage depression in center of image with ampelisca amphipod tubes. Nudibranch and sea star in lower left corner. Silver hake at lower edge of image.
RWF	050	B	Light brown sand with clustered tubes. Small tracks and imprints from buried sea stars.
RWF	050	C	Light brown sand with clustered tubes. Silver hake partially visible at lower left corner of image.
RWF	051	A	Light brown sand with scant shell hash and areas of dense tube clusters. Few tunicates.
RWF	051	B	Light brown sand with scant shell hash and short clustered tubes. Large forage depression in center of image. Cerianthid adjacent to left laser
RWF	051	C	Light brown sand with scant shell hash and short clustered tubes
RWF	052	A	Light brown sand with short tubes. Few shallow depressions in upper right and lower left corners. Large burrow opening with associated reduced mound. Scant shell hash. Cerianthid near center bottom.
RWF	052	B	Light brown sand with scant shell hash. Cerianthid in lower left corner near burrow mound. Few small tubes. Tunicates present.
RWF	052	D	Light brown sand with scant shell hash and short tubes. Small thin tracks in upper right corner of image. Shallow forage depression at left laser. Few tunicates near right laser.
RWF	053	B	Light brown slightly gravelly sand. Few small burrow openings. Slightly larger burrow opening with associated mound at lower right corner.
RWF	053	C	Light brown slightly gravelly sand. Very small burrow openings. Many small tubes.
RWF	053	D	Light brown slightly gravelly sand. Very small burrows and tubes. Cerianthid below and right of left laser. Few podocerid fecal stacks.
RWF	054	A	Light brown sand with shallow forage depressions. Dense ampelisca amphipods in forage depressions. Few podocerid amphipod fecal stacks. Several tunicates. Several small fish at left half of image.
RWF	054	B	Light brown sand with small thin tracks. Clusters of dense tubes throughout image. Hermit crab above lasers. Corymorpha hydroids below hermit crab. Several small shrimp present.
RWF	054	D	Light brown sand with many tubes, mostly ampelisca. Shallow forage depression at image center. Small mound at upper right corner. Oblong fecal casts or old tubes scattered across surface.
RWF	055	A	Light brown sand with several small shallow forage depressions. Few areas of ampelisca tubes. Few podocerid fecal stacks.
RWF	055	C	Turbid water column at upper left portion of image. Few podocerid amphipod fecal stacks. Short tubes. Few tunicates.
RWF	055	D	Light brown sand with short tubes. Several large and shallow forage depression throughout image.
RWF	056	I	Pale brown sand with many small burrow openings. Fish and fish trail at lower half of image. Fish not identifiable, only portion of tail is visible. Cerianthid between lasers. Very small tubes.
RWF	056	K	Light brown sand with many thin repeating tracks. Three sea stars partially or fully buried in sediment. Cerianthid above lasers. Thin small tubes. Couple podocerid amphipod stacks.
RWF	056	N	Pale brown sand with shallow tracks in lower left corner and throughout image. Shallow forage/burrow depressions above lasers. Small thin strands above right laser emerging from sediment Sea star below lasers. Couple podocerid amphipod stacks.
RWF	057	B	Pale brown sand with short tubes and few burrows. Podocerid amphipod fecal stacks and tunicates present. Large forage depression at upper edge with nearby mound.

Area	StationID	Replicate	Comments
RWF	057	C	Light brown sand with short Low reduced mound in lower left corner. Tubes, few burrows, tunicates, and many podocerid amphipod fecal stacks.
RWF	057	D	Light brown sand with many short tubes. Few burrow openings. Corymorpha along upper edge of image. Small fish in lower right corner. Large shell fragment with attached fauna including hydroids and pennatulid.
RWF	057E1	B	Light brown sand with abundant tunicates. Short tubes and podocerid amphipod fecal stacks. Hermit crab in lower left corner.
RWF	057E1	C	Light brown sand with abundant short tubes. Podocerid amphipoda fecal stacks. Abundant tunicates. Shallow forage depression in upper left corner of image.
RWF	057E1	D	Light brown sand with rough texture from tubes in image center. Abundant tunicates and podocerid amphipod fecal stacks.
RWF	057E2	A	Light brown sand with very short tubes and emerging polychaete appendages. Abundant tunicates and podocerid amphipod fecal stacks. Small hermit crab in lower left.
RWF	057E2	B	Light brown sand with large forage depression at image center. Few Ampelisca amphipods near forage depression. Few short tubes. Tunicates and podocerid amphipod fecal stacks.
RWF	057E2	C	Light brown sand with very short tubes. Few forage depressions at image center and at right side of image. Few tunicates and podocerid amphipoda fecal stacks.
RWF	057W1	A	Light brown sand with many short tubes. Many tunicates throughout image. Long thin tracks in sediment.
RWF	057W1	B	Light brown sand with many short tubes. Abundant tunicates. Small hermit crab in upper right corner of image. Few small mounds at right edge of image. Small fish is blurry, high in water column.
RWF	057W1	D	Dark brown sand with shell hash. Four large shell halves in cluster near large piece of sheet metal. Unidentified organism at shell cluster. Very small tubes.
RWF	057W2	A	Light brown sand with many short tubes and few clusters of thinner dense tubes. Many tunicates throughout image. Thin podocerid amphipod fecal stacks.
RWF	057W2	B	Light brown sand with many short tubes and few clusters of thinner dense tubes. Many tunicates throughout image. Thin podocerid amphipod fecal stacks. Moon snail egg case.
RWF	057W2	D	Light brown sand with many short tubes and few clusters of thinner dense tubes. Many tunicates throughout image. Thin podocerid amphipod fecal stacks. Hermit crab at lower center.
RWF	058	A	Reddish-brown sand with few small gravels and patches of dense shell hash. Very small tubes are dense throughout image. Sand dollar test in lower right corner of image. Cerianthid between lasers.
RWF	058	B	Reddish-brown sand with sparse shell hash. Many small tubes throughout image. Few tunicates.
RWF	058	C	Reddish-brown slightly gravelly sand with pellets and very small tubes. Sparse shell hash throughout image. Gastropod in upper right corner. Hermit crab in lower left corner. Large shell fragment at lower edge of image.
RWF	059	A	Reddish-brown sand with small thin tubes. Single sand dollar at lower edge of image. Hermit crab at top edge of image. Few podocerid fecal stacks. Few larger tubes present with pink polychaete appendages.
RWF	059	B	Reddish-brown sand with dense very mall tubes, fewer larger tubes with polychaete appendages emerging from tops of tubes. Few shallow forage depressions. Podocerid amphipod fecal stack at upper center.
RWF	059	C	Reddish-brown sand with abundant very small tubes and pellets. Few larger tubes with pink polychaete appendages. Many podocerid fecal stacks throughout image. Shallow forage depressions, especially dense near upper right corner.
RWF	060	A	Rippled dark brown sand with gravels; ripples are larger than field of view. Small area of attached hydroids on largest gravel, upper left corner. Few short tubes. Podocerid amphipod fecal stacks.
RWF	060	B	Rippled dark brown sand with gravels; ripples are larger than field of view. Very small tubes present. Burrow/forage mark evidenced by reduced material and gravel ring in lower left corner of image. Skate egg at upper left.
RWF	060	D	Light brown sand with very small tubes and many small burrow openings. Ripple crests just visible at upper left and lower right. Several large gravels. Podocerid amphipod fecal stacks. Depressions in sediment from fish.
RWF	061	A	Light brown sand with many short tubes with emerging polychaete appendages, fewer burrow openings. Podocerid fecal stacks. Faint tracks throughout image. Many round tunicates.
RWF	061	B	Light brown sand with many short tubes and emerging polychaete appendages. Fewer tunicates throughout image. Thin podocerid amphipod fecal stacks. Shallow forage depressions and few thin tracks.
RWF	061	C	Light brown sand with many short tubes and emerging polychaete appendages. Fewer tunicates throughout image. Shallow forage depressions.
RWF	062	A	Light brown sand with many short tubes. Large burrow openings in upper right corner of image. Tunicates throughout image. Podocerid amphipod fecal stacks. Large forage depression in upper left corner of image.
RWF	062	C	Light brown sand with scant shell hash and many short tubes. Few tunicates, partially burrowed partially into sand, and podocerid amphipoda tubes. Areas of image are covered with cylindrical fecal casts.
RWF	062	D	Light brown sand with scant shell hash and many short tubes. Few tunicates and podocerid amphipoda tubes. Forage depression and three burrow mounds in upper left corner.
RWF	063	A	Reddish-brown sand with dense very small tubes. Few podocerid amphipod fecal stacks. Small shrimp above lasers. Sand dollar in lower left corner. Corymorpha hydroid below lasers.
RWF	063	B	Reddish-brown sand with many very small tubes. Sand dollar in upper left corner of image. Small gastropod at upper right.
RWF	063	C	Reddish-brown sand with abundant very small tubes. Few tunicates and shrimp. Few short tubes with polychaete appendages. Center of image is marked by forage depressions and free of tubes.
RWF	064	A	Reddish-brown sand with many very small tubes. Podocerid amphipod fecal stacks throughout image. Few tunicates. Several shallow forage depressions. Cerianthid at lower center.
RWF	064	B	Reddish-brown sand with short tubes, few with pink polychaete appendages. Podocerid amphipod fecal stacks. Hermit crab below image center. Gastropod near image center.
RWF	064	D	Reddish-brown sand with very small tubes. Few short tubes with polychaete appendages. Small tunicates in lower right corner. Very small shell fragments in upper left corner.

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RWF	065	A	Reddish-brown sand with very small tubes and few slightly larger tubes. Several small fish on seafloor. Few small forage depressions in upper half of image. Few tunicates.
RWF	065	B	Reddish-brown sand with shallow tracks through center of image. Short tubes. Podocerid amphipod fecal tracks. Few tunicates. Small gastropod in lower left corner.
RWF	065	C	Reddish-brown sand with very small tubes. Few small fragments of shell hash.
RWF	066	A	Reddish-brown sand with very small tubes. Several small pink polychaete appendages. Few podocerid amphipoda fecal stacks. Small isopod at center of lower half of image.
RWF	066	B	Reddish-brown sand with many small tubes and pellets covering visible area. Polychaetes emerging from seafloor. Small shrimp below right laser. Few tunicates
RWF	066	C	Reddish-brown sand with many very small tubes, fewer small burrows with visible polychaete appendages. Two forage depressions in upper half of image. Few small shell fragments. Several thin podocerid fecal strands.
RWF	067	E	Light brown sand with small thin tracks. Few podocerid fecal stacks. Tunicate in image center. Short tubes and fewer burrow openings. Reduced mound in lower left corner. Thick fecal cast in upper right. Thin tracks.
RWF	067	F	Light brown sand with few gravels. Many small thin tracks throughout image. Many podocerid amphipoda fecal stacks.
RWF	067	G	Light brown sand with few gravels. Thin tracks and large burrow mounds. Largest burrow mound at upper edge of image near large fecal coil. Few small tunicates. Short tubes throughout image. Thin podocerid fecal stacks.
RWF	068	A	Reddish-brown sand with pelleted surface. Small polychaete appendages emerging from burrows and short tubes. Few podocerid amphipod fecal stacks.
RWF	068	B	Reddish-brown sand with large reduced mound at center of image. Few small thin tracks. Podocerid fecal stacks. Short tubes and burrows, few thin pink polychaete appendages emerging from openings.
RWF	068	D	Reddish-brown sand, rough with pelletized sediment. Short tubes with pink polychaetes emerging from openings. Thin podocerid fecal stacks. Few hermit crabs. Small shrimp below right laser.
RWF	069	A	Gravelly sand with wide range of gravel sizes. Single tunicate at image center. Single podocerid fecal stack in upper right.
RWF	069	B	Rippled gravelly sand with gravels in ripple trough. Trace hydroids attached to largest gravels. Barnacles attached to gravel in lower right corner. Few small shell fragments.
RWF	069	D	Rippled gravelly sand with gravels in ripple trough. Podocerid amphipod fecal stacks in ripple troughs. Few small shell fragments. Single burrow and reduced mound at lower left corner.
RWF	070	A	Reddish-brown sand with many thin tubes and very short tubes. Few tunicates. Many podocerid fecal stacks. Shallow forage depression at right edge of image. Scant shell hash and several gravel size particles. Pink polychaete appendages visible at lower edge.
RWF	070	B	Reddish-brown sand with pelletized patches on seafloor. Many short tubes and podocerid fecal stacks. Few tunicates and corymorpha hydroids. Shallow forage depression near left laser.
RWF	070	C	Reddish-brown sand with large mound and forage/burrow depression in center of image. Many tubes throughout image. Thin podocerid amphipod fecal stacks. Fish track in lower left corner of image.
RWF	071	A	Reddish-brown slightly gravelly sand with shallow burrow mounds. Small shrimp at upper edge of image. Many very small tubes throughout image.
RWF	071	B	Reddish brown slightly gravelly sand with thin tracks in upper left corner of image. Few small shell fragments along lower edge of image. Very small tubes throughout image.
RWF	071	D	Reddish-brown sand with few gravels. Many very small tubes throughout image, few slightly larger tubes. Gastropod and seagrass fragment in lower left corner. Two large shell pieces in lower right.
RWF	072	A	Sandy mobile gravel with larger gravels in ripple trough. Small thin fecal casts suggest burrowing fauna. Hermit crab at left edge of image. Cerianthid in lower left corner.
RWF	072	B	Sandy mobile gravel with few podocerid amphipoda and very small fecal casts suggesting burrowing. Small area of larger gravels in upper left corner with scant hydroids.
RWF	072	C	Sandy mobile gravel with few podocerid amphipoda and very small fecal casts suggesting burrowing. Small area of larger gravels in upper left corner with scant hydroids.
RWF	073	A	Encrusted large pebbles and small cobbles on sand with shell hash. Large burrow openings with reduced mounds. Hydroids and barnacles cover pebbles and cobbles. Small crab at image center. Sea pen at lower edge of image.
RWF	073	C	Reddish-brown sand with many pebbles and small cobbles covered with attached barnacles and hydroids. Several large burrow openings with associated gray mounds.
RWF	073	D	Large pebbles and small cobbles encrusted with barnacles, hydroids, and sponges on light brown sand. Diverse epifauna including crabs, bivalves, and sea pens (sea pen near left laser). Cerianthid in upper right corner. Large burrow opening in lower right corner.
RWF	073E1	A	Large pebbles and small cobbles encrusted with barnacles, hydroids on light brown sand. Cerianthid in lower right corner. Shrimp near right laser. Large reduced burrow mound in upper right. Skate egg case in upper right. Small fronds of red algae in lower right.
RWF	073E1	C	Large pebbles and small cobbles encrusted with barnacles and hydroids on light brown sand. Cerianthid in upper right corner. Shrimp above left laser. Large reduced burrow mound in lower right.
RWF	073E1	D	Large pebbles and small cobbles encrusted with barnacles and hydroids on light brown sand. Attached anemone on rock at upper edge of image. Sea pen in center of lasers.
RWF	073E2	A	Large pebbles and small cobbles encrusted with barnacles, hydroids, and sponges on light brown sand. Small crab in upper half of image. Small reduced mound at lower edge of image. Cerianthid in lower right. Decaying skate egg sack in lower right.
RWF	073E2	B	Light brown sand with small to large pebbles covered with barnacles and hydroids. Podocerid fecal stacks. Few sea pens. Several burrow openings with reduced mounds.
RWF	073E2	D	Cobble and pebbles encrusted with barnacles and hydroids on light brown sand. Nudibranchs and nudibranch eggs attached to cobbles in upper right corner. Several burrows with associated reduced mounds throughout image. Several sea pens.
RWF	073W1	A	Sandy gravels with few larger cobbles covered with barnacles and hydroids. Few sea pens along upper edge of image. Very small tubes. Several burrow openings and reduced burrow mounds.

Area	StationID	Replicate	Comments
RWF	073W1	B	Light brown sand with granules and few cobles encrusted with hydroids and barnacles. Sea pens. Burrows, thin tracks, and forage depressions give seafloor an uneven appearance.
RWF	073W1	D	Light brown sand with granules and few pebbles. Abundant very small tubes and fewer burrow openings. Few podocerid amphipod fecal stacks, mostly identifiable by cast shadows. Sea pens at upper edge of image.
RWF	073W2	B	Light brown sand with granules, few larger gravels and shells. Largest shells covered with small encrusting barnacles. Few small burrows and tubes. No dominant fauna type identifiable.
RWF	073W2	C	Light brown sand with gravels and large cobbles covered with barnacles and hydroids. Sea pens near gravelly areas of image. Thin and shallow tracks in sandy area of image. Small pout emerging from rock in lower left corner of image.
RWF	073W2	D	Light brown sand with gravels and large cobbles covered with barnacles and hydroids. Shrimp in upper left corner of image. Few sea pens in upper left. Very small burrow openings in sandy seafloor, upper right. Faint tracks in lower left. Small depressions in center of image at top edge.
RWF	074	A	Light brown sand with trace granules. Small mounds and forage depressions near image center. Small tubes at image perimeter.
RWF	074	B	Light brown sand with very small tubes and pellets in upper right and lower left corner of image. Few podocerid fecal stacks. Two translucent shrimp below left laser and upper left corner.
RWF	074	C	Light brown sand with very small tubes, few larger tubes. Podocerid amphipoda fecal stacks. Small depressions and thin tracks in upper let corner of image.
RWF	075	A	Light brown sand with large cobble or larger size rock in lower right corner with attached tunicates and hydroids. Reduced burrow mound at left edge of image. Small thin repeating tracks along upper right corner. Several cerianthids. Short tubes, especially visible in upper left corner.
RWF	075	B	Boulders covered with attached hydroids, barnacles, and a diverse group of other fauna including anemone, crabs, sponges, and sea pens. Small fish at lower edge of image near skate egg.
RWF	075	C	Light brown sand with patches of pelletized material. Many podocerid amphipod fecal stacks. Fewer burrow openings with visible polychaete appendages. Few tunicates in lower right.
RWF	076	A	Reddish-brown sand with few gravels, boulder at lower edge of image. Podocerid fecal stacks and small tubes throughout image. Fish partially in frame at upper left corner. Few tunicates.
RWF	076	C	Large cobbles and boulders with gravels on light brown sand. Larges boulder is covered entirely with hydroids. Red sponges cover boulders at lower half of image. Short tubes on sandy portion of image. Sea pen attached to hard surface at left edge of image. Crab carapace in upper left.
RWF	076	D	Large boulder covers about 70% of image. Light brown sand in remaining 30% of image. Tubes on soft sediment. Hydroids and barnacles attached to boulder. Few cerianthids at lower edge of image.
RWF	077	A	Light brown sand with abundant short tubes and podocerid fecal stacks. Shallow forage depressions. Small gastropod at upper edge of image. Thin tracks are faintly visible.
RWF	077	B	Light brown sand with large forage depressions in upper right corner of image. Short tubes and podocerid amphipod fecal stacks throughout image. Many faint tracks in seafloor. Few tunicates. Gastropod at right edge of image. Cerianthid near left laser.
RWF	077	C	Light brown sand with shallow forage depressions along lower edge of image Many short tubes, small burrows, and podocerid amphipod fecal stacks. Faint tracks in seafloor. Few tunicates.
RWF	078	A	Light brown sand, hummocky from burrow and forage depressions. Many small burrows in seafloor. Fewer podocerid amphipod fecal stacks. Very small reduced burrow mounds in upper right corner. Faint tracks throughout image.
RWF	078	C	Rippled gravels with sand. Several larger gravels have slight encrusting hydroids or barnacle cover. Reduced burrow mound at ripple crest along lower edge of image.
RWF	078	D	Washed rippled granules, gravels, and sand with few white shell fragments. Small burrows at ripple crests. Hydroids attached to pebble at upper left corner.
RWF	079	A	Reddish brown sand with small burrow openings and many thin podocerid amphipod fecal stacks. Few tunicates.
RWF	079	B	Reddish brown sand with small burrow openings, very small tubes, and podocerid fecal stacks. Small forage depressions.
RWF	079	C	Reddish-brown sand with small tubes and faint tracks. Few forage depressions in upper right corner an throughout image. Few small reduced burrow mounds in lower right. Gastropod along left edge of image. Podocerid amphipod fecal stacks.
RWF	080	A	Reddish-brown sand with many faint tracks and forage depressions. Podocerid amphipod fecal stacks and small burrows. Reduced sediment in center of depression along lower edge of image.
RWF	080	B	Reddish-brown sand with areas of paler, recently disturbed, sediment. Faint tracks throughout image. Podocerid amphipod fecal stacks and very small tubes throughout image.
RWF	080	D	Reddish-brown sand with many tracks and small burrow openings. Few short tubes and podocerid amphipod fecal stacks. Large mound at upper edge of image.
RWF	081	A	Reddish-brown coarse sand with dense gravels in lower right and upper left corners of image. Grain size distribution suggests ripple. Large reduced burrow mound at upper edge of image. Several sea pens near gravelly areas. Few podocerid amphipod fecal stacks. Few tubes. Tracks in finer sediment.
RWF	081	B	Sand with gravels in upper left and lower right corners. Abundant sea pens throughout image. Larger sized gravel at bottom edge of image with attached barnacles and spiral nudibranch egg case. Hydroids on hard surface at right edge of image. Small cluster of podocerid amphipod fecal stacks at right edge of image.
RWF	081	C	Slightly gravelly light brown sand with cobble in lower right corner of image encrusted with barnacles and hydroids. Sea pens in cluster surrounding large cobble. Thin tracks along upper left corner of image. Few small reduced burrow mounds faintly visible in image center and upper right.
RWF	082	A	Light brown sand with rough texture due to abundant very short tubes and burrows. Podocerid amphipod fecal stacks throughout image. Reduced sediment in upper right corner of image. Faint tracks contribute to uneven seafloor.
RWF	082	B	Light brown sand with many short tubes and burrow openings, few with polychaetes emerging from openings. Large depression in upper right corner. Faint tracks throughout image.

Area	StationID	Replicate	Comments
RWF	082	C	Light brown sand with few gravels. Small tubes and fewer burrow openings. Reduced burrow mound in lower left corner of image. Podocerid amphipod fecal stacks. Red bivalve siphons below lasers at image center. Few small white shell fragments. Faint tracks.
RWF	083	A	Rippled gravelly sand with larger grain sizes in ripple troughs. Sparse hydroids growing on larger gravels. Few sea pens. Unidentified hydroid in upper left corner.
RWF	083	C	Rippled gravelly sand with larger grains in ripple trough. Ripple wavelength is greater than image width, ripple is not measurable. Several small burrow mounds along edge of larger grains. Small pile of fecal casts near left laser. Red bivalve siphon in upper right.
RWF	083	D	Sand with granules and few larger gravels in upper right corner of image. Small burrow mounds near gravels. Few small tubes, most visible e in lower right. Red bivalve siphons in upper right and lower right.
RWF	084	A	Light brown sand with few large pebbles and edge of a cobble or boulder in upper right. Sandy portion of image shows many small thin tracks. Large reduced burrow mound at upper left. Small tubes. Few sea pens. Hard surfaces are covered with encrusting growth consisting of barnacles, hydroids and sponges. Shrimp at cobble above right laser.
RWF	084	B	Light brown sand with cluster of large pebbles at image center, possible cobble in upper right. Hard surfaces are covered with barnacles and trace hydroids. Sea pens on sandy areas. Very small tubes surrounding pebbles at image center. Many faint tracks.
RWF	084	D2	Light brown sand with cobbles and boulder. Hard surfaces are covered with attached hydroids and barnacles. Few sea pens. Tubes near image center. Reduced burrow mound along right edge of image.
RWF	085	A	Light brown sand with small mounds and depressions. Abundant podocerid amphipod fecal stacks. Very short tubes and small burrow openings.
RWF	085	B	Light brown sand with small mounds and depressions. Abundant podocerid amphipod fecal stacks. Very short tubes and small burrow openings.
RWF	085	C	Light brown sand with small mounds and depressions. Abundant podocerid amphipod fecal stacks. Very short tubes and small burrow openings.
RWF	086	A	Reddish-brown sand with dense cover of very small tubes. Few burrows, one distinct reduced burrow mound along lower edge of image. Two corymorpha hydroids along right edge of image.
RWF	086	B	Reddish-brown sand with abundant very small tubes. Reduced burrow mound at image center. Few podocerid amphipod fecal stacks. Sand dollar test near right laser.
RWF	086	D	Reddish-brown sand with many very small tubes and podocerid amphipod fecal stacks. Few small burrow openings. Corymorpha above right laser.
RWF	087	A	Light brown gravelly sand with largest gravels in upper right corner. Red hake at upper right near patch of fine, recently disturbed, sediment. Small tubes near hake and fines. Small reduced burrow mound in upper left. Single pebble with barnacle growth.
RWF	087	B	Light brown washed gravelly sand with gravels mainly in right half of image. Small hermit crab at top of image center. Few small shells.
RWF	087	C	Light brown washed gravelly sand. Shrimp near left laser. Burrow at upper right corner with pout.
RWF	088	A	Light brown sand with faint tracks throughout image. Many small burrow openings and very small tubes. Podocerid fecal stacks.
RWF	088	B	Light brown sand with abundant tubes and burrow openings. Large shell fragment, partially buried, with attached barnacles in upper right. Two pebbles attached shell fragments and small fucaceae algae attached. Small gastropod at upper edge of image. Sea pen in lower right.
RWF	088	C	Light brown sand with boulder in upper left quadrant of image. Boulder is encrusted with hydroids, sponges, and barnacles. Small gastropods on boulder. Sea pens in area near boulder. Hermit crab and several shrimp at image center.
RWF	089	B	Reddish granules on sand with small sandy area near image center. Fourspot flounder in upper right corner of image. Single burrow opening in upper right. Podocerid amphipod fecal stack below center of lasers; hermit crab below right laser.
RWF	089	C	Reddish-brown granules on sand with few sandy burrow openings and cluster of slightly larger pebbles above right laser. Few small fecal cast piles. Podocerid amphipod fecal strands at upper center.
RWF	089	D	Reddish-brown granules on sand with few sandy burrow openings. Slightly larger grains along right edge of image. Large burrow opening at upper left corner of image. Podocerid amphipod fecal stacks in upper right quadrant.
RWF	090	A	Reddish-brown sand with granules and few pebbles. Many small burrow openings, especially in upper left. Tunicates and podocerid amphipod tubes. Long thin tracks throughout image.
RWF	090	B	Reddish-brown sand with granules. Large shell fragment in upper left. Podocerid amphipod fecal stacks throughout image. Small gastropod and sea pen at right edge of image.
RWF	090	C	Rippled reddish brown sand and granules. Tracks at upper left corner. Small burrow openings at ripple crest along left edge. Very small tubes in ripple trough and slope. Podocerid amphipoda throughout.
RWF	091	A	Light brown sand with abundant small tubes and burrow openings. Many podocerid amphipod fecal stacks. Image center is slightly brighter and smooth. Small tracks throughout.
RWF	091	B	Light brown sand with abundant small tubes and burrow openings. Many podocerid amphipod fecal stacks. Large mound between lasers. Small tracks throughout image.
RWF	091	C	Light brown sand with abundant small tubes and burrow openings. Many podocerid amphipod fecal stacks. Several small forage depressions .Small tracks throughout image. Hermit crab at upper left corner. Few tunicates.
RWF	092	A	Light brown sand with many small tubes and burrow openings. Podocerid amphipod fecal stacks. Corymorpha hydroid between lasers. Many faint tracks. Few tunicates.
RWF	092	B	Light brown sand with many small burrow openings and tubes. Abundant podocerid amphipod fecal stacks. Small faint tracks and few shallow forage depressions. Gastropod near left laser. Few tunicates.
RWF	092	C	Light brown sand with many small burrow openings and tubes. Podocerid amphipod fecal stacks. Small faint tracks and few shallow forage depressions. Corymorpha hydroid in upper right. Few tunicates.

Area	StationID	Replicate	Comments
RWF	093	A	Light brown sand with few forage depressions and gray mound at image center. Many thin tracks. Tubes and small burrow openings. Podocerid amphipods. Stout fecal cast below right laser.
RWF	093	B	Light brown sand with abundant short tubes and fewer small burrow openings. Many podocerid amphipod fecal stacks. Long thin tracks in upper left. Mound along left edge of image.
RWF	093	C	Light brown sand with many small burrow openings and tubes. Two reduced burrow mounds in lower left and right corners. Many podocerid amphipod fecal stacks. Corymorpha near left laser.
RWF	094	A	Light brown and with many small burrow openings and tubes. Forage depression above left laser with ampelisca amphipod tubes at center of pit. Reduced burrow mound at lower edge of image. Few podocerid amphipod fecal stacks.
RWF	094	B	Light brown and with many small burrow openings and tubes. Long thin tracks in seafloor. Few tunicates. Podocerid amphipod fecal stacks. Reduced burrow mounds in upper right corner.
RWF	094	C	Light brown sand with minor rippling. Cluster of several pebbles in lower left corner. Podocerid amphipod fecal stacks. Many short tubes.
RWF	095	A	Rippled, reddish-brown sand with few gravels. Small burrow openings and few small tubes. Many podocerid amphipod fecal stacks. Tracks in sediment at ripple crest.
RWF	095	B	Rippled reddish-brown sand, ripple is not measurable due to orientation and field of view. Many small burrow openings and tubes. Podocerid amphipod fecal stacks. Large shell fragment with barnacles in upper right corner. Faint tracks in upper half of image.
RWF	095	D	Rippled gravelly sand with large shell fragment and coarsest material in ripple trough. Short podocerid amphipod fecal stacks. Small hermit crab in upper right. Many tunicates at ripple slope.
RWF	096	A	Light-brown sand with many small burrow openings and very small tubes. Podocerid amphipod fecal stacks. Tunicate in lower right. Green organic object near left laser. Corymorpha below lasers.
RWF	096	B	Light-brown sand with many small burrow openings and pelletized sediment. Podocerid amphipod fecal stacks. Corymorpha hydroid at upper edge of image. Faint tracks.
RWF	096	C	Light-brown sand with many small burrow openings and pelletized sediment. Podocerid amphipod fecal stacks. Faint tracks throughout image.
RWF	097	A	Light brown sand with abundant tubes of varying size. Thin podocerid amphipod fecal stacks. Two shallow forage depressions in upper right. Few tunicates.
RWF	097	B	Light brown sand with scant shell hash and abundant small tubes. Few larger tubes and podocerid amphipod fecal stacks. Several shallow forage depressions in seafloor.
RWF	097	C	Reddish-brown sand with many small burrow openings and very small tubes. Two small reduced burrow mounds in upper right. Distinct track/forage mark in upper left.
RWF	098	A	Reddish-brown sand with abundant very small tubes. Few small burrows. Podocerid amphipod fecal stacks. Few tunicates. Corymorpha hydroid in upper right corner. Shallow faint tracks in lower right corner.
RWF	098	B	Reddish-brown sand with abundant very small tubes. Few small burrow openings. Few podocerid amphipod fecal stacks. Several tunicates.
RWF	098	C	Reddish-brown sand with abundant very small tubes. Small burrow mound at lower edge of image. Podocerid amphipod fecal stacks. Forage depressions throughout image. Few small tunicates.
RWF	099	A	Reddish brown sand with many very small tubes. Small burrow openings. Reduced burrow mound at upper edge of image. Few small forage depressions. Several tunicates.
RWF	099	B	Reddish-brown sand with many very small tubes. Podocerid amphipod tubes. Small sand dollar it tope edge of image. Few shallow forage depressions.
RWF	099	C	Reddish-brown sand with many very small tubes and small burrow openings. Few podocerid amphipod fecal stacks. Few tunicates. Faint tracks in lower right.
RWF	100	A	Light brown sand with many small burrow openings, few polychaetes emerging from burrow openings. Many thin podocerid amphipod tubes. Several small forage depressions in top half of image. Few faint tracks.
RWF	100	C	Light brown sand with many tubes and small burrow openings, few polychaetes emerging from burrow openings. Many thin podocerid amphipod tubes. Large burrow opening in lower left corner.
RWF	100	D	Slightly gravelly sand with granules. Small tubes and burrow openings with pelletized sediment. Many thin podocerid fecal stacks. Large fecal cast in upper left. Several tunicates.
RWF	101	B	Slightly gravelly sand with granules and small pebbles in center of image. Podocerid amphipod fecal stacks. Few small tubes and burrow openings. Thin spiraled tracks in center of image and upper left.
RWF	101	C	Slightly gravelly sand with granules and small pebbles. Podocerid amphipod fecal stacks. Sea pen near left laser. Small mounds and shallow depressions. Few tunicates.
RWF	101	D	Slightly gravelly sand with granules and small pebbles. Few podocerid amphipod fecal tacks. Few tunicates. Trough depression in upper right corner.
RWF	102	A	Light brown sand with mound at image center. Ampelisca amphipods near mound. Podocerid amphipod fecal stacks. Short tubes and few small burrows throughout image Faint tracks in upper half of image.
RWF	102	B	Light brown sand with many short tubes and small burrow openings. Podocerid amphipod tubes. Sand dollar test in upper right corner. Shrimp below left laser.
RWF	102	C	Light brown sand with short tubes and fewer small burrow openings. Small pellets and fecal casts at lower edge of image. Large mound at image center. Hake in lower left corner.
RWF	103	A	Light brown sand with few gravels and mound between lasers. Many podocerid amphipod tubes, small tubes, and few burrow openings. Few tunicates. Several forage depressions. Thin tracks in seafloor.

Area	StationID	Replicate	Comments
RWF	103	B	Light brown sand with reduced mound and forage depression in center of image. Various sized tubes and small burrows throughout image. Few tunicates.
RWF	103	C	Light brown sand with large forage depression above left laser. Turbid water column obscures much of image. Large tubes, few burrows. Podocerid amphipod fecal stack at upper edge of image.
RWF	104	B	Reddish-brown sand with granules and small pebbles. Shell hash and small shell fragments. Small burrow openings with few small burrow mounds. Few small tubes. Many tunicates.
RWF	104	C	Reddish brown sandy granules and small pebbles. Large shell fragments in upper left corner with barnacles and large translucent hydroid. Many small tubes, podocerid amphipods, and tunicates.
RWF	104	D	Reddish-brown sand with granules and small pebbles. Shell hash and small shell fragments in lower right corner. Many small tubes and podocerid amphipoda fecal stacks. Few burrow mounds.
RWF	105	A	Light-brown sand with many small tubes and burrow openings. Many podocerid amphipod fecal stacks. Shallow forage depressions. Polychaetes emerging from burrows and tubes.
RWF	105	B	Light brown sand with a shallow burrow mound below lasers. Several smaller forage depressions. Podocerid amphipod fecal stacks. Cerianthid above lasers. Small burrow openings and tubes.
RWF	105	C	Light brown sand with shallow forage depression near left laser. Small polychaetes extending from very short tubes and burrows. Podocerid amphipod fecal stacks.
RWF	106	A	Rippled light brown slightly gravelly sand. Small burrow openings and podocerid fecal stacks.
RWF	106	B	Rippled light brown sand with few gravels. Many small burrow openings, especially visible at ripple crest.
RWF	106	C	Rippled light brown slightly gravelly sand with many small burrow openings. Podocerid amphipod fecal stacks. Long groove/track in upper left.
RWF	107	A	Rippled granules and sand with few pebbles. Ripple cannot be measured due to size and orientation to field of view. Cerianthid and shrimp above lasers. Small red bivalve siphon below right laser. Sea pen near left laser.
RWF	107	B	Rippled coarse sand and granules. Small reduced burrow mound above right laser. Many podocerid fecal stacks in lee of ripple.
RWF	107	C	Rippled gravelly sand. Ripple is not measurable due to alignment with field of view. Few thin podocerid fecal stacks. Small cerianthid at lower left corner.
RWF	108	A	Gravelly sand with few very small mounds and reduced burrows. Small gastropod at image center. Sea pen in upper left. Few small podocerid amphipoda fecal stacks. Short tubes.
RWF	108	B	Gravelly sand with cobble in lower right corner. Sponge and barnacles encrusting partially buried cobble. Sea pen in lower right. Few small mounds. Few podocerid fecal stacks. Low tubes in upper right.
RWF	108	C	Slightly gravelly coarse sand with two large shell fragments on left side of image. Few tubes present. Several thin podocerid amphipod fecal stacks. Barnacles on shell fragments.
RWF	109	A	Slightly gravelly coarse sand with track in upper left corner. Few small mounds and forage depressions. Podocerid amphipod fecal stacks, more dense in upper right. Very small tubes in patchy distribution throughout image. Few tunicates.
RWF	109	B	Slightly gravelly sand with patches of very small tubes and pelletized material. Abundant small burrow openings through out image. Podocerid amphipod fecal stacks. Few tunicates.
RWF	109	C	Slightly gravelly sand with patches of very small tubes and pelletized material. Abundant small burrow openings throughout image. Podocerid amphipod fecal stacks. Few tunicates.
RWF	110	A	Light brown sand with abundant small burrow openings and many very thin podocerid amphipod fecal stacks. Few tunicates present. Areas of seafloor with dense pellets.
RWF	110	B	Light brown sand with abundant small burrow openings and many very thin podocerid amphipod fecal stacks. Few tunicates present. Sea pens near right laser. Several small mounds.
RWF	110	C	Light brown sand with abundant small burrow openings and many very thin podocerid amphipod fecal stacks. Few tunicates present. Several shallow forage depressions.
RWF	111	A	Rippled reddish-brown sand with shell hash, fines, and pebbles in ripple trough. Small burrow openings at crest of burrow. Very small tubes in ripple trough. Thin podocerid fecal stacks on slope of ripple.
RWF	111	B	Rippled reddish-brown sand with shell hash, fines, and pebbles in ripple trough. Small burrow openings in ripple trough. Small thin tracks in upper edge of image.
RWF	111	C	Reddish-brown sand with scant shell hash and gravels. Few small fine burrow mounds. Few tunicates. Short podocerid fecal stacks along upper edge of image. Shrimp and large shell half at lower half of image.
RWF	112	A	Reddish-brown sand with large reduced burrow in upper right corner. Small tubes and burrow openings throughout image. Small podocerid amphipod fecal stacks. Few tunicates. Three sea pens in lower right corner.
RWF	112	C	Reddish-brown sand with abundant small burrow openings. Small thin tubes. Line of long thin repeating tracks in upper left corner. Very few small podocerid amphipod fecal stacks. Small thin fecal casts and pellets in small patches. Few tunicates.
RWF	112	D	Reddish-brown sand with Many small tubes and fewer small burrow openings. Podocerid amphipod fecal stacks and tunicates. Hake in lower left corner o f image. Small fecal pellets in patchy distribution throughout image.
RWF	113	A	Reddish-brown sand with small burrow openings and pelleted material. Many small podocerid amphipod fecal stacks. Small forage depressions at upper edge of image. Shrimp in lower half of image.
RWF	113	B	Reddish-brown sand with many short tubes surrounded by fecal pellets. Many podocerid amphipod fecal stacks. Few small burrow openings with emerging polychaetes. Shallow depressions along g upper edge of image.

Area	StationID	Replicate	Comments
RWF	113	C	Reddish-brown sand with many short tubes surrounded by fecal pellets. Many podocerid amphipod fecal stacks. Few small burrow openings with emerging polychaetes.
RWF	114	A	Rippled reddish-brown sand with granules. Small burrow openings throughout image. Small reduced burrow mound between lasers. Thin podocerid fecal stacks in upper half of image. Small shrimp at upper half of image.
RWF	114	C	Rippled reddish-brown granules on sand with few larger pebbles and small area of image in upper right corner of image. Many small podocerid fecal stacks and small burrow openings.
RWF	114	D	Rippled reddish-brown sand with granules and small pebbles. Coarsest and finest material in ripple troughs. Small burrow openings and podocerid amphipoda fecal stacks at ripple crest. Gastropod near left laser.
RWF	115	A	Reddish-brown sand with small patch of gravels in upper right corner. Many small tubes, burrow openings, and podocerid fecal stacks. Few tunicates. Two stout fecal casts near right laser. Few areas of reduced fines.
RWF	115	B	Reddish-brown sand with small patch of gravels in upper right corner. Many small tubes, burrow openings, and podocerid fecal stacks. Few tunicates.
RWF	115	C	Rippled reddish-brown sand with small patch of gravels in upper right corner. Many small tubes, burrow openings, and podocerid fecal stacks.
RWF	116	A	Reddish brown granules on sand with many small burrow mounds and burrow openings. Pebbles and corymorpha in upper left corner.
RWF	116	B	Ripple reddish brown granules on sand with small fine burrow bounds in ripple trough. Few podocerid amphipod fecal stacks. Bivalve in upper right corner.
RWF	116	C	Ripple reddish brown granules on sand with small fine burrow bounds in ripple trough. Few podocerid amphipod fecal stacks. Few shallow forage depressions in upper right corner. Barnacles on large shell fragment and large pebble in lower left.
RWF	117	A	Reddish-brown very coarse sand with granules. Thin podocerid amphipod fecal stacks. Bivalve at left edge of image.
RWF	117	B	Reddish-brown very coarse sand with few granules. Thin podocerid amphipod fecal stacks. Small fine burrow mounds throughout image. Skate egg case in lower left. Red bivalve siphon below lasers.
RWF	117	C	Reddish-brown coarse sand and granules. Small burrow openings and few fine burrow mounds. Podocerid amphipod fecal stacks throughout image.
RWF	118	A	Rippled reddish-brown coarse sand and granules. Sediment is slightly coarser in ripple troughs. Few podocerid amphipod fecal stacks. Small burrow openings and short tubes.
RWF	118	B	Light brown sand with scant small gravels. Two small red bivalve siphons. Few tunicates. Many small burrow openings, very small tubes, and podocerid amphipod fecal stacks.
RWF	118	C	Light brown sand with few granules and small pebbles. Small tunicates and podocerid amphipod fecal stacks. Many small burrow openings.
RWF	119	B	Light brown sand with few granules and small pebbles. Small tunicates and podocerid amphipod fecal stacks. Many small burrow openings.
RWF	119	C	Reddish-brown sand with granules and fewer pebbles. Small shell fragments in line with fines near left laser. Two small shrimp above left laser. Thin tracks in upper left corner of image. Barnacles attached to pebble and shell fragments. Many small burrow openings and mounds.
RWF	119	D	Reddish-brown coarse sand with few gravels. Many small burrow openings and low burrow mounds. Short and thin podocerid amphipod fecal stacks. Few tunicates. Small shrimp near burrow mound in upper right corner.
RWF	120	A	Reddish-brown sand with few granules. Abundant very small tubes and podocerid amphipod fecal stacks near patches of pellets and fines. Few burrow openings.
RWF	120	B	Reddish-brown sand with few gravels and granules. Thin podocerid amphipod fecal stacks. Many very small tubes. Long and wide continuous track across lower left and upper right corners.
RWF	120	C	Reddish-brown sand with few granules. Many small podocerid amphipod fecal stacks. Few small burrow mounds.
RWF	121	A	Rippled, reddish-brown gravels. Small tubes and podocerid amphipods on slope of ripple. Many small burrow openings in ripple trough. Hermit crab at right edge of image.
RWF	121	B	Rippled, reddish-brown sand with patches of fines and fecal casts. Small tubes and few small burrows. Large shell fragment at right edge of image, encrusted with barnacles. Many short podocerid amphipod fecal stacks. Tunicate between lasers. Ripple is not measurable due to size and orientation to camera.
RWF	121	C	Rippled, reddish-brown sand with few gravels. Small burrow openings in ripple trough. Patch of pale brown fines near right laser. Tunicates in ripple trough. Podocerid amphipods on slope of ripple.
RWF	122	A	Reddish-brown fines with few granules. Short tubes and small burrows with polychaetes extending from openings. Small podocerid amphipod fecal stacks. Two short mounds below lasers. Hermit crab at lower edge of image.
RWF	122	B	Reddish-brown sand with few gravels. Very small tubes and fewer small burrow openings. Tracks, likely from fish in seafloor. White sand dollar test at upper edge of image. Hermit crab at upper left corner. Two sea pens. Moon snail egg case near left laser. Tunicate at lower center.
RWF	122	C	Reddish-brown sand with few gravels and scant shell hash. Small burrow openings. Many small podocerid amphipod fecal stacks. Few tunicates. Small burrow mound to left of lasers.
RWF	123	A	Reddish-brown sand with two lines of pale brown fines in troughs of irregular ripples extending diagonally across image. Abundant small burrow openings and podocerid amphipod fecal stacks.
RWF	123	B	Reddish-brown sand with small patches of pale brown fines, with irregular ripples. Scant shell hash in upper right corner. Small burrow openings and podocerid amphipod fecal stacks. Few tunicates.
RWF	123	C	Reddish-brown sand with small patches of pale brown fines with small irregular ripples. Small burrow openings and podocerid amphipod fecal stacks. Few tunicates.

Area	StationID	Replicate	Comments
RWF	124	A	Light brown sand with small tracks throughout image. Small burrow openings and podocerid amphipod fecal stacks. Hermit crab near right laser.
RWF	124	C	Light brown sand with many small thin tracks throughout image. Small burrow openings, large burrow mound at lower right. Three gastropods in upper right. Few podocerid amphipod fecal stacks.
RWF	124	D	Light brown sand with many small burrow openings and podocerid amphipod fecal stacks. Corymorpha hydroid between lasers. Few tunicates.
RWF	125	A	Light brown sand with many small burrow openings and podocerid amphipod fecal stacks. Very small tubes present. Few tunicates.
RWF	125	B	Light brown sand with many small burrow openings. Few podocerid amphipoda fecal stacks. Faint tracks in upper right corner.
RWF	125	C	Light brown sand with small burrow openings. Few podocerid amphipoda fecal stacks. Few tunicates. Few shallow burrow depressions in upper half of image.
RWF	126	A	Light brown sand with many small burrow openings and clusters of very small tubes. Large reduced burrow mound in lower right corner of image. Few tunicates. Few podocerid amphipod fecal stacks.
RWF	126	B	Light brown sand with many small burrows and short tubes. Few podocerid amphipod fecal stacks.
RWF	126	C	Smooth light brown sand with slight rippling. Very small tubes in low density throughout image with exception of line in center of image with dense clusters of tubes.
RWF	127	A	Ripple reddish-brown sand with fines in ripple trough. Small thin podocerid amphipod fecal stacks on ripple slope. Small burrow openings throughout image.
RWF	127	B	Reddish-brown slightly gravelly sand with small shell fragments in lower right corner. Small burrow openings throughout image, small mound near right laser. Very few podocerid amphipod fecal stacks. Ripple edges visible in upper right and lower left corners, can't measure.
RWF	127	C	Reddish-brown slightly gravelly sand. Many small burrow openings in seafloor. Very few podocerid amphipod fecal stacks. Ripple in upper right, measurement not possible.
RWF	128	A	Reddish-brown sand with many small burrow openings and podocerid amphipod fecal stacks. Small thin tracks faintly visible in corners of image. Cerianthid in lower right corner. Ripple crest in middle of image.
RWF	128	C	Reddish-brown sand with many small burrow openings and podocerid amphipod fecal stacks. Cerianthid near right laser. Few small shell fragments along left half of image. Somewhat turbid image, possible ripple.
RWF	128	D	Rippled reddish-brown slightly gravelly sand with very small tubes and podocerid amphipod fecal stacks on slope of ripple. Faint thin tracks in ripple trough. Unable to measure ripple due to size and orientation to camera.
RWF	129	B	Ripple reddish-brown gravelly sand with fines and very small tubes in lee of ripple. Podocerid amphipods in upper right corner.
RWF	129	C	Slightly turbid water column. Reddish-brown slightly gravelly sand with patches of small tubes and pale gray fines at image center and right corners of image.
RWF	129	D	Slightly gravelly reddish-brown sand with patches of finer pale brown material. Small burrow openings and very small tubes. Large shell fragment and hake near left laser. Several cerianthids to right of hake, above lasers, and in upper right corner of image.
RWF	136	A	Reddish-brown gravels with sand in upper right and lower left corners. Distribution of grain size suggest ripples much larger than field of view. Small burrow mounds in gravelly portion of image. Hydroids attached to pebbles at image center.
RWF	136	B	Reddish-brown gravels of various sizes with bands of finer sand, suggesting slight rippling. Cobble above lasers. Several thick tubes on seafloor, not active. Scant barnacles and hydroids on cobble. Small shrimp above lasers.
RWF	136	C	Rippled granules and pebbles on sand with fines in ripple troughs. Barnacles attached to buried surface in lower left corner. Several fine burrow mounds throughout image.
RWF	137	A	Pebbles with sand. Larger pebbles are covered with attached hydroids and barnacles. Cerianthid in upper left corner.
RWF	137	B	Rippled reddish-brown sandy gravels. Hydroids and barnacles on largest gravels. Shrimp below lasers. Sea pen near right laser.
RWF	137	D	Reddish-brown sandy gravel. Largest gravels (large pebbles) are encrusted with barnacles, hydroids on pebble in upper right. Sea pen at upper edge of image.
RWF	138	A	Boulder encompasses entire field of view. Boulder is encrusted with barnacles, attached tubes, hydroids, sponges, and anemone.
RWF	138	B	Cobbles and boulder encrusted with diverse fauna, primarily hydroids and barnacles. Sponges, and sea star in lower left corner. Few mussel shells. Few red algae fronds on boulder.
RWF	138	C	Cobbles and boulder on sand. Shell hash from barnacles on sandy portion of image. Few large shell fragments among cobbles. Cobbles encrusted with hydroids and barnacles. Shrimp in upper left corner. Several short tubes near center of image.
RWF	139	B	Light brown sand with few cobbles in lower edge of image. Short tubes are present. Sea pens below left laser. Few tunicates. Gastropod to right of lasers.
RWF	139	C	Rippled light brown sand with pebbles and cobbles in ripple troughs. Very small tubes in soft sediment. Cobbles are covered with barnacles and hydroids.
RWF	139	D	Light brown sand mounded with gravels in low lying areas. Grain size distribution suggests ripple but specific ripple crests and troughs are not discernable. Largest cobbles and pebbles are encrusted with barnacles and hydroids. Small burrow openings in soft sediment.
RWF	140	A	Light brown sand with many small burrow openings and podocerid amphipod fecal stacks. Few small tubes. Few tunicates. Nudibranch at upper edge of image.
RWF	140	B	Light brown sand with many small burrow openings and podocerid amphipod fecal stacks. Few small tubes. Few tunicates. Low depression and associated mound to left of lasers.
RWF	140	D	Light brown sand with many small burrow openings and podocerid amphipod fecal stacks. Few small tubes. Few tunicates. Shallow depressions to left of lasers and in lower right corner.

Area	StationID	Replicate	Comments
RWF	141	A	Reddish brown granules and pebbles with rippled sand. Large reduced burrow in lower left corner. Clusters of tubes in center of image. Trace hydroids and barnacles on largest cobbles. Cerianthid near left laser.
RWF	141	C	Rippled reddish-brown gravels with sand at ripple crests. Many short tubes spionid growing in dense clusters. Reduced burrow mound and small burrow openings in seafloor. Large shrimp above lasers. Small bivalve with red siphon in upper right. Sea scallop at upper right corner of image.
RWF	141	D	Rippled light brown sand with gravels in ripple troughs. Spionid tubes throughout image. Cerianthid below lasers and in upper right corner of image. Trace hydroids on large pebbles. Shrimp in upper left.
RWF	142	A	Rippled granules with ripple trough in center of image. Pebbles in center of image. Small burrow mounds in ripple trough. Larger cobbles are covered with scant barnacles and hydroids. Shrimp in above right laser. Unidentified fauna in upper left at large pebble (possibly an octopus).
RWF	142	B	Rippled gravelly sand with, mostly granules with few pebbles and cobbles. Spionid tubes in small clusters at image center and in upper right corner. Several small burrow openings and associated reduced mounds. Red bivalve siphons above lasers and below right laser. Barnacles on larger cobbles.
RWF	142	D	Rippled coarse sand and granules with few pebbles and boulder to far right. Boulder is covered with diverse colonizers including hydroids, barnacles, and sponges. Several shrimp near boulder. Single tunicate below boulder.
RWF	143	A	Light brown soft sand with many amphipod fecal stacks and small burrow openings with pink polychaete appendages emerging from openings. White egg mass below left laser. Several small forage depressions. Faint tracks in sand.
RWF	143	B	Rippled sand and gravels, mostly granules with few pebbles. Larger pebbles are covered with hydroids and barnacles. Spionid tubes in lower left corner. Large burrow mound in lower right. Sea pen in lower left. Shrimp below lasers. Egg case in upper left.
RWF	143	C	Light brown soft sand with many amphipod fecal stacks and small burrow openings with pink polychaete appendages emerging from openings. Several small forage depressions. Faint tracks in sand.
RWF	144	A	Rippled coarse sand with pebbles in ripple trough. Ripple is unable to be measured due to size and field of view. Largest gravels covered with barnacles and scant hydroids. Spionid tubes on ripple slope and trough.
RWF	144	B	Rippled sand and gravels with pebbles and cobbles in ripple trough. Hydroids and few barnacles on cobbles. Sea pen in ripple trough. Fine burrow mounds in ripple tough. Few small podocerid fecal stacks.
RWF	144	C	Rippled sand with coarser gravels in ripple trough. Hydroids and barnacles on coarsest gravels, pebbles. Sea pen in lower right corner. Short tubes at ripple crest. Red bivalve siphon above right laser.
RWF	201	A	Light brown sand with small dark patches and clusters of gravels up to boulder sized particles. Large gravels are covered with barnacles, hydroids, and few attached tubes. Spionid tube clusters on fines in upper left corner. Faint tracks in seafloor.
RWF	201	B	Boulder and cobble on light brown sand. Boulder and cobbles are covered in sponges, barnacles, and hydroids. Spionid tubes on fines in lower left corner. Cerianthid in lower left.
RWF	201	E	Boulder and cobble with continuous cover of hydroids, barnacles, and sponges. Cerianthids and shrimp near center of image. Red sea star attached to boulder. Finger sponge in lower left corner.
RWF	202	A	Rippled granule with slightly coarser pebbles and fines in ripple trough along upper edge of image. Cerianthid near left laser. Small reduced burrow mound at right edge.
RWF	202	B	Rippled granules with single cobble sized gravel in upper right, covered with barnacles. Forage depression ringed with sand and small burrow mound of sand in upper right.. Small tube near forage depression.
RWF	202	C	Granules with line of coarser craves and fines suggesting a possible ripple along right half of image. Podocerid amphipod fecal stacks in ripple trough. Several small sandy burrow mound near ripple trough.
RWF	203	B	Light brown sand with cobbles in lower right corner. Large cobble in lower right covered with barnacles and nudibranch eggs. Mostly buried cobbles under thin layer of sand. Spionids in lower right. Many Podocerid amphipod fecal stacks. Two sea pens in lower right.
RWF	203	C	Light brown sand with exposed and buried cobbles along left side of image. Barnacles and tubes attached to hard surfaces. Many podocerid amphipod tubes. Few small burrow openings, including reduced burrow mound at left edge of image. Faint tracks throughout image.
RWF	203	D	Light brown sand with large cobble in image center and other pebbles and cobbles partially buried throughout image. Barnacles attached to hard surfaces. Large hermit crab on cobble at image center. Large tubes clustered near pebbles. Few podocerid amphipod fecal stacks.
RWF	204	A	Light brown sand with many small burrow openings. Few small tubes. Many podocerid amphipod fecal stacks. Faint tracks and shallow depressions throughout image.
RWF	204	B	Light brown sand with many small burrow openings. Few small tubes. Few podocerid amphipod fecal stacks. Faint tracks and shallow depressions throughout image.
RWF	204	C	Light brown sand with many small burrow openings. Few small tubes. Few podocerid amphipod fecal stacks. Faint tracks and shallow depressions throughout image.
RWF	205	A	Light brown sand with many small burrow openings. Few small tubes. Few podocerid amphipod fecal stacks. Faint tracks and shallow depressions throughout image.
RWF	205	B	Reddish-brown sand with small pellets and many small burrow openings. Few shallow forage depressions. Few tunicates and many podocerid amphipod fecal stacks.
RWF	205	C	Reddish-brown sand with small pellets and many small burrow openings. Many podocerid amphipod fecal stacks, deflected by strong current. Short tubes. Few tunicates.
RWF	206	A	Reddish-brown granules with large reduced burrow mound near left laser. Several smaller reduced burrows near larger mound.
RWF	206	B	Reddish-brown sand with line of gravels. Boulder at left edge of image covered with attached fauna including sponges, hydroids, and barnacles. Sea pen near boulder. Small burrows and burrow mounds in sandy areas.
RWF	206	C	Slightly rippled light brown sand with gravels in ripple trough. Few podocerid amphipod fecal stacks. Tracks in upper left corner of image at ripple crest.
RWF	207	B	Light brown sand with many podocerid amphipod fecal stacks. Very short tubes and few burrow openings. Few tunicates. Small forage depressions throughout image.
RWF	207	C	Light brown sand with small burrow openings and podocerid fecal stacks. Tracks are abundant in seafloor.
RWF	207	D	Light brown sand with large shell fragment in lower right corner covered with sea pens and barnacles. Tunicates and few podocerid amphipod fecal stacks. Small tubes and burrow openings.

Area	StationID	Replicate	Comments
RWF	208	A	Light brown sand with cobbles and pebbles scattered around image. Barnacles and hydroids attached to larger gravels. Small burrow openings in sandy sediment, reduced sand in upper right corner. Shallow forage depressions at image center.
RWF	208	D	Boulder on light brown sand with gravels. Boulder is covered with diverse fauna including attached tube-building fauna, barnacles, hydroids. Northern star coral on lower portion of boulder, near seafloor. Several sea stars on boulder. Many small barnacle fragments at base of boulder. Several small reduced burrow mounds.
RWF	208	E	Light brown sand with buried gravels, likely cobble or boulder. Attached tubes and polymastia sponge in upper right. Small burrow openings and tubes in soft sediment.
RWF	209	A	Light brown sand with many very small tubes and fewer small burrow openings. Pebble with barnacles in upper left corner. Sea pens below right laser.
RWF	209	B	Light brown sand with many small tubes, and many very small tubes. Barnacles and sea pens attached to buried cobbles or boulders.
RWF	209	C	Light brown sand with short tubes and fewer small burrow openings. Partially buried cobble with attached sea pens. Several small shrimp near sea pens.
RWF	210	A	Light brown sand with gravels and cobble in upper left corner. Silver hake in upper right corner of image. Podocerid amphipoda fecal stacks. Few small burrow openings.
RWF	210	C	Slightly rippled light brown sand with granules and large pebbles in lower right corner. Large gravels covered with barnacles and gastropods. Podocerid amphipod fecal stacks at ripple crest. Small hermit crab in upper right.
RWF	210	D	Light brown sand with small tubes and fecal pellets. Few small burrow openings. Few podocerid amphipod fecal stacks. Gastropod at left edge of image.
RWF	211	A	Reddish brown sandy granules with many pebbles. Larger gravels are covered with barnacles and few hydroids. Small burrow openings and associated sandy burrow mounds. Cerianthid at lower edge of image.
RWF	211	C	Granules with small sandy patches. Small shell fragments in lower right corner. Podocerid amphipod fecal stacks and small burrow openings throughout image.
RWF	211	D	Granules with few pebbles in image center. Small burrow openings and fine burrow mounds near image center. Few sea pens and moon snail egg cases. Scant barnacles and hydroids on larger pebbles.
RWF	212	B	Slightly rippled light brown slightly gravelly sand, most gravels are granule sized particles. Small hermit crab near left laser. Many small burrow openings in seafloor. Sea pen in lower left.
RWF	212	C	Slightly rippled light brown sand with many small burrow openings and podocerid amphipod fecal stacks. Burrowing bivalve at upper edge of image. Hake in upper left corner of image.
RWF	212	D	Slightly rippled light brown sand with few small gravels. Podocerid amphipod fecal stacks . Many small burrow openings. Small red bivalve siphon far below right laser. Long thin tracks at upper left corner of image.
RWF	213	A	Reddish-brown sand with granules and few pebbles. Many small burrow openings. Short tubes in upper right corner of image. Sea pen above left laser. Few small shell fragments. Tracks/depression at upper edge of image.
RWF	213	C	Reddish-brown sand with granules. Two large cobble/boulders at left edge of image. Attached tubes and grazed barnacles attached to large gravels. Sea pens attached to cobble in upper left. Thin, faint tracks above left. Many small burrow openings.
RWF	213	D	Reddish-brown sand with granules. Several large cobbles covered with attached tubes and grazed barnacles. Sea pen to right of lasers. Few small burrow openings.
RWF	214	A	Rippled reddish-brown sand and granules. No fauna or burrows visible.
RWF	214	C	Slightly rippled sandy gravels with many granules at ripple crest and pebble sized particles in troughs. Several reduce burrow mounds at edge of ripple troughs. Attached hydroids and barnacles on larger gravels. Shallow forage depressions at upper right. Cerianthid in upper left corner.
RWF	214	D	Near continuous boulders covered with diverse colonizers including sponges, barnacles, hydroids, and attached tubes. Two crabs near left laser and lower right corner. Small shrimp at image center. Few burrow mounds and cerianthids in sandy areas.
RWF	215	A	Reddish-brown sand with few gravels, especially in upper and lower right corners of image. Barnacle hash spread throughout image. Moon snail at image center. Larger gravels covered with barnacles and hydroids in lower right- appears to be edge of boulder that is out of view.
RWF	215	B	Boulder spanning width of image with gravels and barnacle hash in low lying areas. Boulder is covered with hydroids, barnacles. Adjacent boulder covered with barnacles, hydroids, northern star coral, and attached anemone. Sea star in lower portion of image.
RWF	215	C	Cobble and boulders on sand with large portion of sandy area covering buried boulders. Thin tracks and burrow openings on sandy areas. Attached tubes, barnacles, hydroids, and sponges covering boulders and cobbles. Large hermit crab on boulder in upper right corner. Polymastia sponge in lower right.
RWF	216	A	Line of pebbles on sand and granules. Partially buried cobble above left laser with encrusting sponge and attached sea pen. Barnacles and hydroids attached to pebbles. Small gastropod below line of pebbles. Reduced burrow mound in lower right corner.
RWF	216	B	Reddish-brown sand with granules and shell hash. Pebbles and cobble in upper right quadrant of image. Cobble is covered with sponge, barnacles, hydroids, and sea pens. Small tubes in sandy sediment.
RWF	216	C	Reddish-brown gravelly sand with abundant shell hash and cobbles in upper right corner. Cobbles are covered with barnacles and attached tubes, few sponges. Sea star below large cobble at right laser. Few sea pens present. Small burrow mounds in sandy sediment.
RWF	217	A	Reddish-brown granules with a line of larger gravels below center of image, suggesting ripple. Small burrow mounds of reduced fines. Cerianthid to right of lasers. Trace barnacles and hydroids. Sea pen attached to pebble at lower edge of image.
RWF	217	C	Reddish-brown sand with granules and two lines of gravels, up to large pebbles. Faint rippling present. Small reduced burrow mounds at image center and above right laser. Short tubes in ripple troughs. Sponges, hydroids, and barnacles on largest gravels. Sea pen in center and at lower edge, evident by shadows.
RWF	217	D	Light brown sand with many cobble and boulder sized gravels. Cobble and boulders are covered with diverse colonizers including Polymastia sponge, encrusting sponges, attached tubes, barnacles, and hydroids. Pink anemone at right edge of image. Few sea pens. Reduced burrow mounds in sandy sediment. Barnacle hash at lower edge of image.

Area	StationID	Replicate	Comments
RWF	218	A	Light brown sand with patches of darker red fines and partially buried cobble and boulder sized gravels. Attached tubes and Polymastia sponge cover exposed cobble and boulder surfaces. Sea pen clusters at lower edge of image and above right laser. Faint tracks in sand. Few small burrow openings in sand. Small shrimp near right laser.
RWF	218	C	Light brown sand with patches of darker red fines, possibly microalgae, and partially buried cobble and boulder sized gravels. Attached hydroids, tubes, and barnacles on larger gravels. Faint tracks in sand. Several sea pens in upper right.
RWF	218	D	Boulder and cobble on sand and smaller gravels. Small dark red patches of fines, likely microalgae. Large tubes in sandy sediment. Boulder and cobble are covered by attached tubes and barnacles with fewer hydroids and sea pens. Long faint tracks in sand.
RWF	218E1	A	Boulders and cobbles with thin layer of sand. Attached tubes cover most hard surfaces. Sea pens, sponges, sea stars, and hydroids present. Unidentified partially translucent organism above right laser. Red algae on boulder by left laser.
RWF	218E1	C	Light brown sand with dark red patches. Cobbles an boulder in upper right and buried at lower edge of image. Polymastia sponge along bottom edge. Boulder with sponges, attached tubes, and sea star at upper right. Smaller cobbles near boulder with attached barnacles and sea pens. Short tubes in sandy sediment.
RWF	218E1	D	Light brown sand with granules. Large cobble/boulder in upper left, covered with sponges and attached tubes. Small clusters of sea pens in lower left and upper edge of image. Very small tubes in sandy sediment. Reduced burrow mound in lower left.
RWF	218E2	A	Rippled light brown sandy gravels, with coarser gravels deposited in ripple troughs. Trace barnacles attached to larger gravels. Few short tubes and burrow mounds. Several sea pens in lower left and lower right.
RWF	218E2	B	Rippled light brown sand with gravels. Coarsest particles accumulating in ripple trough. Several sea pens in upper right. Many very small tubes at ripple crest and slope. Few small burrow openings and reduced burrow mounds. Barnacles attached to largest gravels.
RWF	218E2	C	Rippled light brown sand with gravels forming line in center of image indicating ripple trough. Very small tubes on slope of ripple in upper right corner. Trace hydroids attached to largest gravels. Two shallow depressions in sand in upper left.
RWF	218W1	A	Reddish-brown sand with boulders and smaller cobbles and pebbles. Sponges encrusting all cobbles. Boulders covered with barnacles and attached tubes. Several sea stars among largest gravels. Many sea pens in sandy area of image. Few small tubes and burrow mounds. Several small shrimp between lasers. Spend squid eggs on boulder in upper right.
RWF	218W1	B	Reddish-brown sand with patches of darker red fines, likely microalgae. Cobbles near right laser, partially buried and covered with attached tubes and barnacles. Many sea pens in image. Very small tubes and few burrow openings in sand. Polymastia sponge in lower right corner.
RWF	218W1	C	Reddish-brown sand with boulder in upper left and partially buried large cobble in lower left. Hard surfaces are covered in dense attached tubes. Large sea star in lower right. Reduced burrow mound in lower right. Small tubes in sandy sediment.
RWF	218W2	A	Reddish-brown sand with few gravels. Very small tubes are abundant in patchy distribution. Two small nudibranchs below left laser.
RWF	218W2	C	Slightly rippled reddish-brown gravelly sand. Many small tubes. Few podocerid amphipod fecal stacks. Several shallow forage depressions in upper left.
RWF	218W2	D	Ripple reddish-brown slightly gravelly sand. Dense, very small tubes on slope of ripple. Few podocerid amphipod tubes at ripple crest. Tunicates to lower left of left laser.
RWF	219	B	Reddish-brown sand with patches of slightly darker red fines, likely microalgae. Buried cobble or boulder near right laser with red algae. Two sea pens in lower left. Reduced burrow mound in lower left. Very small tubes. Faint tracks, especially above lasers. Shallow depression in upper right.
RWF	219	C	Boulders with few cobbles and thin layer of sand in diagonal running through center of image. Dense attached tubes cover nearly all hard surfaces. Northern star above lasers and to right of lasers. Hydroids, barnacles, and few sponges attached to cobbles in upper left. Small crab in upper left.
RWF	219	D	Boulders and smaller gravels on light brown sand. Boulders covered with Barnacles, Attached Tubes, Sponges, and Red algae. Barnacle hash on sandy areas of seafloor. Few small burrow mounds in sand. Shrimp in upper left corner. Sea pens in lower right corner.
RWF	220	B	Gravels on light brown sand with partially buried boulder in upper right. Largest gravels, pebbles and cobbles, are covered with hydroids, barnacles, few sponges and attached tubes. Few large reduced burrow mounds in sandy areas.
RWF	220	C	Cobble and smaller gravels on light brown sand. Large gravels are covered with Sponges, Barnacles, Hydroids, and attached tubes. Few large reduced burrow mounds in sandy areas. Wide shallow track near right laser. Few shrimp.
RWF	220	D	Boulder larger than field of view with light brown sand and gravel in lower left. Boulder is covered with Attached Tubes, Sponges, Barnacles, and few hydroids. Red sea star at center of image. Few bivalve siphons in sandy area of image. Large reduced burrow mounds in lower left.
RWF	220E1	B	Boulder and cobble with smaller gravels on light brown sand. Larger gravels are covered with hydroids, barnacles, attached tubes, and sponges. Cerianthids and bivalve siphons in sand. Many small shrimp. Few sea pens near right laser.
RWF	220E1	C	Light brown sand with boulder and smaller gravels. Largest gravels are covered with barnacles, sponges, attached tubes, and hydroids. Large black shell fragment and barnacle hash in lower left corner. Several cerianthids in sand. Many very small tubes in sand. Few small burrow openings.
RWF	220E1	D	Cobble and boulder on light brown sand. Large gravels are covered with barnacles, sponges, and hydroids. Many cerianthids and burrows in sandy sediment. Crab carapace below left laser. Live crab above left laser. Skate egg sack near right laser.
RWF	220E2	B	Light brown sand with two lines of gravels suggesting shallow ripple. Many small tubes in upper left corner of image. Few podocerid fecal stacks in upper left. Cerianthid near right laser.
RWF	220E2	C	Light brown sand and small gravels with boulders in left side of image. Boulders are covered with attached tubes, hydroids, sponges, and barnacles. Cerianthids and very small tubes in sandy sediment.
RWF	220E2	D	Light brown sand with few gravels. Largest gravels in include boulder and are covered with attached tubes, sponges, hydroids, and barnacles. Small tunicate near boulder at lower edge of image. Podocerid amphipod fecal stacks. Very small tubes and few burrow openings.
RWF	220W1	A	Light brown rippled sand with granules and pebbles in ripple trough. Dense very small tubes in slope of ripple. Trace hydroids and barnacles on largest gravels.
RWF	220W1	B	Light brown sand with angular boulder covered with attached tubes at left laser. Few small pebbles present. Thin podocerid amphipod fecal stacks. Small burrow openings. Two small reduced burrow mounds in lower right.

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RWF	220W1	C	Light brown sand with very small tubes and small burrow openings. Reduced burrow mound near hermit crab and cobble in upper right. Large shell fragment in upper left.
RWF	220W2	B	Light brown sand with large cobbles and boulders. Cobble and boulder surfaces are covered with hydroids, attached tubes, sponges, orange tunicates, and barnacles. Sea pen above lasers. Barnacle hash at base of boulder in upper left. Small tubes and burrow openings in sandy sediment.
RWF	220W2	C	Light brown sand with granules and large cobbles. Cobbles covered with hydroids, attached tubes, barnacles, and orange tunicates. Small tube and burrow openings in sand.
RWF	220W2	D	Light brown sand with cobbles and gravels. Cobbles are covered with sponges, attached tubes, hydroids, and barnacles. Large reduced burrow mound in upper right. Smaller tubes and burrow openings in sand. Shallow depression in image center with small thin tracks.
RWF	221	A	Pale brown sand with many small forage depressions. Very small tubes and burrow openings. Few podocerid fecal stacks.
RWF	221	B	Slightly turbid water column. Pale brown sand with abundant small tubes.
RWF	221	C	Pale brown sand with very small tubes and slightly larger burrow openings. Seafloor is rough from small depressions. Few podocerid amphipod fecal stacks.
RWF	222	A	Light brown sand with dense very small tubes. Two shrimp in upper right. Sparse shell hash.
RWF	222	B	Light brown sand with abundant very small tubes. Few burrow openings. Small mound at upper edge of image. Trace shell hash. Few podocerid amphipod tubes and tunicates.
RWF	222	C	Light brown sand with abundant very small tubes. Few burrow openings. Few small mounds and forage depressions. Trace shell hash. Few podocerid amphipod tubes and tunicates.
RWF	223	A	Pale brown sand with clusters of spionid tubes. Small burrow openings, with larger burrow/forage depression in upper right. Low reduced mound at lower left. Few small thin tracks.
RWF	223	C	Pale brown sand with clusters of spionid tubes. Small burrow openings, with few larger burrow openings, largest near left laser. Thin repeating tracks form line across image, just above lasers.
RWF	223	D	Pale brown sand with clusters of spionid tubes. Small burrow openings, with few larger burrow openings. Line of thin repeating tracks along lower edge of image.
RWF	224	A	Pale brown sand and granules. Many small burrow openings, fewer tubes.
RWF	224	B	Pale brown sand with granules. Abundant small burrow openings and fewer tubes. Large shell fragment at right edge of image. Shallow depressions in upper and lower left corners.
RWF	224	C	Pale brown sand with granules. Abundant small burrow openings and fewer tubes. Small reduced mound and burrow openings at image center.
RWF	225	A	Pale brown sand with abundant short tubes and burrow openings. Few small thin tracks in lower right corner.
RWF	225	B	Pale brown sand with abundant short tubes and burrow openings. Cerianthid above right laser. Few much larger burrow openings, especially in upper right. Repeating thin tracks in lower left. Podocerid Amphipod fecal stacks.
RWF	225	C	Pale brown sand with abundant short tubes and burrow openings. Large burrow and mound at lower edge of image. Podocerid Amphipod fecal stacks. Ampelisca amphipods near forage depression in upper right. Small shrimp above right laser.
RWF	226	A	Pale brown sand with clusters of small tubes and many small burrow openings. Dense ampelisca amphipods near large forage depression in lower right. Few polychaete appendages emerging from burrows.
RWF	226	C	Pale brown sand with abundant small burrow openings, few larger openings. Small tubes. Many small thin tracks in seafloor.
RWF	226	D	Pale brown sand with abundant small burrow openings, few larger openings. Small tubes. Many small thin tracks in seafloor.
RWF	227	A	Pale brown sand with abundant tracks throughout image. Many small burrow openings. Large burrow with hake at left edge of image. Cerianthid at lower edge of image. Podocerid amphipod fecal stacks.
RWF	227	B	Pale brown sand with many tracks. Small burrow openings. Small podocerid amphipod fecal stacks. Cerianthid at lower edge of image. Mostly buried sea star in upper right.
RWF	227	D	Turbid water column. Pale brown sand with many thin tracks. Burrows and podocerid amphipod fecal stacks in sand.
RWF	228	A	Reddish-brown sand with abundant short tubes. Shallow forage depressions with ampelisca amphipods. Few podocerid amphipod fecal stacks. Sea star partially visible at upper edge of image.
RWF	228	B	Reddish-brown sand with many small tubes and burrow openings. Faint tracks. Several shallow forage depressions with ampelisca amphipods. Partially buried sea star near shell fragments below lasers. Reduced burrow mound near left laser. Hermit crab in upper left.
RWF	228	C	Light brown sand with many short tubes. Small burrow openings. Few small shell fragments. Few podocerid amphipod fecal stacks.
RWF	229	A	Pale brown sand with small burrow openings. Few podocerid amphipod fecal stacks. Few ampelisca tubes near shallow forage depressions. Few small shell fragments.
RWF	229	B	Pale brown sand with small burrow openings. Few podocerid amphipod fecal stacks. Few ampelisca tubes near shallow forage depressions. Few small shell fragments.
RWF	229	C	Pale brown sand with small burrow openings. Few podocerid amphipod fecal stacks. Few small shell fragments.
RWF	230	A	Pale brown sand with abundant small burrow openings. Several reduced burrow mounds. Ampelisca amphipod tubes near forage depression near left laser. Faint thin tracks. Few podocerid amphipod fecal stacks. Pink polychaetes emerging from tubes near lasers.
RWF	230	B	Pale brown sand with abundant small burrow openings. Few fish burrows at upper edge of image, one with small fish emerging. Small thin tracks. Pink polychaetes emerging from tubes in lower center. Small translucent shrimp in lower center.
RWF	230	C	Pale brown sand with abundant small burrow openings. Small tubes. Forage depression in upper right corner with ampelisca amphipod tubes. Few podocerid amphipod fecal tracks.

Area	StationID	Replicate	Comments
RWF	231	A	Reddish-brown sand with small burrow openings and few tubes. Forage depression near left laser with ampelisca amphipod tubes. Sea star near right laser.
RWF	231	B	Reddish-brown sand with small burrow openings and clusters of spionid tubes. Red hake under left laser. Few large fecal casts, one above right laser.
RWF	231	C	Pale brown sand with many short tubes and fewer burrow openings. Crab making tracks across image. Buried sea star in lower left corner.
RWF	232	A	Light brown sand with gravels. Many small shell fragments covered with hydroids and barnacles. Few small burrow openings and tubes. Largest tubes in upper right corner. Single sea pen below left laser.
RWF	232	B	Light brown sand with gravels and shell fragments. Large burrow openings and reduced mounds in center of image. Hard surfaces covered with attached tubes, scant hydroids, and grazed barnacles. Few podocerid amphipod fecal stacks.
RWF	232	D	Boulder and pebble with light brown sand. Boulders covered with barnacles and hydroids. Scallop in lower left corner.
RWF	233	A	Light brown sand with shallow forage depressions and small burrows. Few very small tubes. Polychaetes visible in burrow openings.
RWF	233	B	Light brown sand with shallow forage depressions and small burrows. Fewer small tubes. Polychaetes visible in burrow openings. Podocerid amphipod fecal stacks.
RWF	233	C	Light brown sand with many small forage depressions. Small burrow openings and podocerid fecal stacks. Few red polychaete appendages emerging from burrows.
RWF	234	A	Pale brown sand with reduced burrow mounds and many small burrow openings. Few podocerid amphipod fecal stacks. Small tubes, especially near forage depression in upper left. Few small white shell fragments.
RWF	234	B	Slightly turbid water column. Pale brown sand with large forage depression in lower right. Small burrow openings and tubes. Small podocerid amphipod fecal stacks.
RWF	234	D	Pale brown sand with many small burrow openings and tracks. Shallow forage depression with ampelisca amphipods in upper right. Small shell fragments in upper right. Few podocerid amphipod fecal stacks. Pink polychaetes emerging from some tubes
RWF	235	A	Reddish-brown granules with very few tubes. Small burrow openings. Single sea star at center of image. Small cluster of spionid tubes below lasers, center bottom.
RWF	235	B	Light brown sand and granules. Many small burrow openings. Few short tubes.
RWF	235	C	Light brown sand and granules with small burrow openings. Few podocerid amphipod fecal stacks. Sea star and impressions from buried sea stars. Red bivalve siphon to right of lasers.
RWF	236	A	Slightly turbid water column. Pale brown sand with many small circular tracks. Several large burrow openings. Few podocerid amphipod fecal stacks. Several shrimp in upper left.
RWF	236	E	Slightly turbid water column. Pale brown sand with many small circular tracks. Small burrow openings in seafloor. Hermit crab to left of lasers. Shallow forage depression near left laser.
RWF	236	F	Slightly turbid water column. Pale brown sand with large forage depressions. Few burrow openings. Small tubes are dense around forage depressions.
RWF	237	A	Reddish-brown sand with many small tubes and patches of pelletized material. Podocerid amphipod fecal stacks. Few small burrow openings. Single sea pen in lower right corner. Red bivalve siphon near right laser. Tunicates present.
RWF	237	B	Reddish-brown sand with many small tubes, fewer podocerid amphipod fecal stacks. Tunicates present. Cerianthid in upper right. Few small burrow openings.
RWF	237	D	Reddish-brown sand with many small tubes, fewer podocerid amphipod fecal stacks. Tunicates present. Few small burrow openings.
RWF	238	A	Light brown sand with small burrow openings. Few podocerid amphipod fecal stacks. Shallow burrow depressions with dense tubes, largest near reduced mound at left edge of image. Shallow, steep depression near forage depression, likely fish.
RWF	238	B	Light brown sand with small burrow openings. Few podocerid amphipod fecal stacks. Shallow burrow depressions with dense tubes, largest near reduced mound at lower left corner of image. Shallow, steep depressions, likely fish.
RWF	238	C	Light brown sand with small burrow openings and patches of small tubes. Largest burrow opening with reduce burrow mound at left side of image. Large fish burrow/ forage depression in upper right.
RWF	239	E	Pale brown sand with few small burrow openings. Small patches of tubes. Two depressions in upper right, likely fish. Small black clasts at lower edge of image. Podocerid amphipod fecal stacks. Few tunicates.
RWF	239	G	Pale brown sand with small burrow openings and fewer short tubes. Few tunicates. Very small forage depressions. Few podocerid amphipod fecal stacks.
RWF	239	H	Light brown sand with scant shell hash and three large shell fragments. Largest shell fragments covered with attached hydroids. Small burrow openings and small tubes. Few tunicates. Few small shrimp.
RWF	240	A	Uneven light brown sand with many small burrow openings and few small tubes. Few tunicates.
RWF	240	B	Uneven light brown sand with many small burrow openings and few small tubes. Few tunicates.
RWF	240	C	Uneven light brown sand with many small burrow openings and few small tubes. Few tunicates.
RWF	241	A	Uneven light brown sand with scant shell hash and many small burrow openings and few small tubes. Few tunicates. Small clusters of spionids.
RWF	241	B	Uneven light brown sand with scant shell hash and many small burrow openings and few small tubes. Few tunicates. Small clusters of spionids. Cerianthid near left laser.
RWF	241	C	Reddish brown sand with scant shell hash and many small clusters of spionids. Small burrow openings. Small cerianthid below right laser.

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RWF	242	A	Reddish-brown sand with thin layer of pale gray fines and pelletized material. Many small tubes and burrow openings. Shrimp at left edge of image. Moon snail eggs below right laser. Few tunicates at upper edge of image.
RWF	242	B	Reddish-brown sand with thin layer of pale gray fines and pelletized material. Many small tubes and burrow openings. Cluster of spionids above right laser. Long thin tracks at left edge of image and along upper edge of image. Unidentifed pink taxa paritally buried in sand at left edge.
RWF	242	C	Reddish-brown sand with thin layer of pale gray fines and pelletized material. Many small tubes and burrow openings with emerging polychaete appendages. Podocerid amphipod fecal stacks. Hermit crab at lower edge of image in line with right laser. Few tunicates.
RWF	243	A	Reddish-brown sand with patchy fines and very small tubes. Small burrow openings. Few tunicates and podocerid amphipod fecal stacks.
RWF	243	B	Reddish-brown sand with short tubes and scant shell hash. Podocerid amphipod fecal stacks. Few reduced burrow mounds and small burrow openings. Few tunicates.
RWF	243	C	Reddish-brown sand with short tubes and podocerid amphipod fecal stacks. Burrow mounds/forage depression with reduced sediment above right laser. Few small shell fragments. Small black clasts in lower left. Few tunicates.
RWF	244	A	Reddish-brown sand with small burrow openings and emerging polychaete appendages. Podocerid amphipod fecal stacks. Forage depression with ampelisca amphipod tubes and reduced mound in upper left.
RWF	244	B	Reddish-brown sand with small tubes and burrow openings. Red polychaete appendages emerging from burrows. Podocerid amphipod fecal stacks. Few tunicates. Large, shallow, depressions near right laser with dense ampelisca amphipod tubes.
RWF	244	C	Reddish-brown sand with short tubes including many ampelisca amphipod tubes in upper left. Few small burrow openings. Forage depressions near ampelisca tubes in upper left and lower right. Few podocerid amphipod fecal stacks. Few tunicates.
RWF	245	A	Reddish-brown sand with many small burrow openings. Small patch of pebbles at upper edge of image. Few podocerid amphipod fecal stacks. Ampelisca amphipod tubes near forage depression right of lasers.
RWF	245	B	Reddish-brown sand with many small burrow openings, fewer podocerid amphipod fecal stacks. Ampelisca amphipods near forage depression in upper right corner. Few tunicates. Very thin tracks near left laser.
RWF	245	D	Light brown sand with several cobbles. Cobbles are covered with barnacles. Few small burrow openings in sandy sediment. Faint tracks in sand.
RWF	246	A	Light brown sand with many small burrow openings and short tubes, including ampelisca amphipod tubes. Podocerid amphipod fecal stacks at upper edge of image. Large mound and forage depression in center of image. Few tunicates.
RWF	246	B	Light brown sand with many small burrow openings and podocerid amphipod fecal stacks. Small forage depressions throughout image. Moon snail eggs at upper edge of image.
RWF	247	A	Rippled, reddish-brown sand with line of granule and pebble sized gravels in ripple trough. Very small tubes in ripple trough. Few podocerid amphipod fecal stacks throughout image. Shrimp below left laser. Faint tracks in upper left corner. Few small reduced burrow mounds in upper left.
RWF	247	B	Rippled, reddish-brown sand with gravels in ripple trough. Largest gravels are covered with scant hydroids and few barnacles. Small burrow openings and fecal casts in ripple trough and slope.
RWF	247	C	Rippled, reddish-brown gravels with small sandy ripples. Largest gravels (pebbles) are covered with hydroids and scant barnacles. Sea pens near left laser. Shrimp between lasers. Few very small tubes.
RWF	248	A	Light brown sand with few granules. Small burrow openings and small reduced burrow mounds. Few shallow forage depressions. Hermit crab in lower right corner.
RWF	248	C	Rippled, light brown sand with line of dense gravels in ripple trough. Ripple wavelength not measurable due to field of view. Small burrow openings and mounds at ripple trough. Few very small tubes.
RWF	248	D	Light brown sand with pockets of dense gravels. Largest gravels with scant hydroids and barnacles. Few small tubes and burrow openings near gravel areas.
RWF	249	A	Dense cobble and boulder with attached fauna including sponges, barnacles, attached tubes, hydroids, and northern star coral. Sea star at image center.
RWF	249	B	Dense boulder and cobble, largest boulder is larger than image field of view. All hard surfaces are covered with diverse colonizers including, hydroids, barnacles, and northern star coral. Two sea stars in upper right.
RWF	249	D	Cobble and boulder on sand with small shell fragments and barnacle shell hash. Boulder and cobbles are covered with attached hydroids and barnacles, with small patches of northern star coral. Red hake above left laser.
RWF	250	A	Reddish-brown sand with many small burrow openings and podocerid amphipod fecal stacks. Few small tubes. Shrimp near right laser. Few tunicates.
RWF	250	B	Reddish-brown sand with many small burrow openings and podocerid amphipod fecal stacks. Few small tubes. Few tunicates.
RWF	250	C	Reddish-brown sand with many small burrow openings and podocerid amphipod fecal stacks. Few small tubes. Few tunicates. Hermit crab near image center.
RWF	251	A	Reddish-brown sand with granules and small pebbles. Small burrow openings and very small tubes present. Few podocerid amphipod fecal stacks. Bivalve siphon in lower right corner.
RWF	251	B	Reddish-brown sand with granules and scant shell hash. Small burrow openings and podocerid amphipod fecal stacks. Small shrimp below left laser. Few tunicates.
RWF	251	C	Reddish-brown sand with small burrow openings and podocerid amphipod fecal stacks. Small pellets present. Few small shrimp.
RWF	252	A	Reddish-brown sand with small gravelly patch near left laser. Largest gravels covered with attached barnacles. Reduced mound near gravels. Few sea pens near left laser and in lower right corner. Faint tracks in upper right. Very small tubes. Cerianthid in lower right.
RWF	252	B	Reddish-brown sand with cobble near left laser. Cobble is covered with sponges and hydroids. Few cerianthids. Faint tracks. Several sea pens. Small burrow openings.

Area	StationID	Replicate	Comments
RWF	252	C	Reddish-brown sand with patchy gravels. Largest gravels covered with barnacles. Few sea pens. Small burrow openings and mounds in sandy areas. Patch of tubes in upper right. Few podocerid amphipod fecal stacks.
RWF	253	A	Reddish-brown sand with patches of pellets and fines. Line of dark red along right edge of image. Small tubes are abundant, especially in upper half of image. Small burrow openings. Podocerid amphipod fecal stacks.
RWF	253	C	Reddish-brown sand with granules and patchy fines. Long diagonal tracks along lower edge of image. Few small burrows and forage depressions. Podocerid amphipod fecal stacks. Many very small tubes.
RWF	253	D	Reddish-brown sand with granules. Small mounds throughout image. Many podocerid amphipod fecal stacks. Very small tubes and pelletized sediment in clusters.
RWF	254	A	Pale brown fines and very small tubes over reddish-brown sand. Few podocerid amphipod fecal stacks. Few tunicates.
RWF	254	B	Reddish-brown sand with few gravels. Tubes and pale fines in upper left portion of image. Small shrimp in lower right. Few small shell fragments near left laser. Few podocerid amphipod fecal stacks.
RWF	254	C	Reddish-brown sand with scant granules. Very small tubes and fines in patchy distribution. Few podocerid amphipod fecal stacks. Tunicates. Shell fragment with trace barnacles in lower right.
RWF	255	A	Reddish-brown fines with cluster of gravels in upper right. Many very small tubes with fine sediment in patchy distribution. Few small burrow mounds. Podocerid amphipoda. Sea pen in lower right corner.
RWF	255	B	Light brown sand with scant gravels. Sand is rough with dense tracks and podocerid amphipod fecal stacks. Few tunicates.
RWF	255	C	Light brown sand with many tracks. Podocerid amphipod fecal stacks. Few small burrows and tubes.
RWF	256	A	Slightly rippled reddish brown granules and sand with line of slightly coarser gravels in upper right. Several bivalves in ripple trough at upper right. Low burrow mounds in ripple trough and along left edge of image.
RWF	256	B	Rippled sand with gravels and fines in ripple trough. Ripple cannot be measured due to field of view. Thin faint tracks in lower left. Few podocerid amphipod fecal stacks.
RWF	256	C	Ripple sand and granules with coarser gravels in ripple trough. Largest gravel has attached tubes and barnacles. Very few small tubes and burrow mounds in ripple trough.
RWF	257	A	Light brown sand with granules and small pebbles. Small burrow mounds and burrow openings. Podocerid amphipod fecal stacks. Small bivalve in lower right.
RWF	257	B	Rippled reddish-brown sand with granules and small pebbles in ripple trough. Very few burrow openings present. Several small tubes in ripple trough. No clearly dominant fauna group.
RWF	257	C	Reddish-brown sand with scattered granules and small pebbles. Very few burrow openings present. Several small tubes. Shrimp near image center. Very few podocerid amphipod fecal stacks. No clearly dominant faunal group.
RWF	258	A	Slightly rippled lines of gravel and sand. Short tubes present in gravelly troughs. Large moon snail egg case near right laser. Several larger gravels covered with low density barnacle growth. Small shrimp on moon snail eggs.
RWF	258	B	Rippled light brown sand with line of gravels in trough at upper left corner. Field of view prevents ripple wavelength measurement. Small tubes of varying sizes, both above and below 2 mm.
RWF	258	C	Mixed gravels with sand. Larger gravels covered with sparse barnacles. Shrimp at image center. Sea pen above left laser. Bivalve with red mantle in upper left. Sea scallop at right edge of image. Few attached and deep burrowing tubes. Low, fine, burrow mounds at image center and lower left.
RWF	259	A	Light brown sand with scant shell hash. Many very small tubes. Small burrow openings with extended polychaete appendages. Few tunicates. Fish trails in lower right.
RWF	259	B	Light brown sand with large forage depression ringed in tubes at upper right. Many small burrow openings throughout image. Podocerid amphipod fecal stacks throughout image. Few tunicates.
RWF	259	C	Light brown sand with dense patches of very small tubes. Small burrow openings with pink polychaete appendages. Scant shell hash. Hermit crab in upper right corner. Ampelisca amphipods in upper right. Podocerid amphipod fecal stacks throughout image.
RWF	260	A	Light brown sand with small burrow openings. Fewer very small tubes. Few tunicates and podocerid amphipod fecal stacks.
RWF	260	B	Light brown sand with many small burrow openings. Line of light disturbance at left edge of image. Fewer short tubes. Large reduced mound and depression at image center.
RWF	260	C	Light brown sand with many small burrow openings and tubes. Forage depression at left laser near swimming hake. Few podocerid amphipod fecal stacks and tunicates.
RWF	261	A	Reddish-brown granules with abundant small burrow openings, few with reduced burrow mounds. Few tunicates and podocerid amphipod fecal stacks.
RWF	261	B	Reddish-brown granules with abundant small burrow openings, few with reduced burrow mounds. Few tunicates and podocerid amphipod fecal stacks.
RWF	261	D	Rippled reddish-brown granules with abundant small burrow openings, few with reduced burrow mounds. Ripple wavelength not measurable due to PV field of view. Few tunicates and podocerid amphipod fecal stacks.
RWF	262	A	Light brown sand with faint tracks and many small burrow openings. Podocerid amphipod fecal stacks. Clusters of very small tubes throughout image.
RWF	262	B	Light brown sand with many small burrow openings. Podocerid amphipod fecal stacks. Few tunicates. Few very small tubes.
RWF	262	D	Light brown sand with many small burrow openings. Podocerid amphipod fecal stacks. Few tunicates. Few very small tubes. Small tracks in lower right corner of image.
RWEC-OCS	401	B	Light brown sand with many small burrow openings and podocerid amphipod fecal stacks. Large burrow at upper edge of image. Few tunicates. Hake in upper left.
RWEC-OCS	401	C	Light brown sand with small burrow openings and podocerid amphipod fecal stacks. Few tunicates.

Area	StationID	Replicate	Comments
RWEC-OCS	401	D	Light brown sand with small burrow openings. Few podocerid amphipod fecal stacks. Two sea pens at upper edge of image. Few tunicates. Several shallow forage depressions.
RWEC-OCS	402	A	Light brown sand with small burrow openings and fewer very small tubes. Two cobbles with attached barnacles and hydroids. Few podocerid amphipod fecal stacks. Several tunicates.
RWEC-OCS	402	B	Light brown sand with few gravels. Largest gravels (pebbles) have attached scant barnacles. Very small tubes in small patches. Podocerid amphipod fecal stacks. Small forage depression in upper right. Unidentified fauna above and left of lasers. Few small shrimp.
RWEC-OCS	402	C	Light brown sand with granules and few pebbles. Small burrow openings, fewer podocerid amphipod fecal stacks and very small tubes. Gastropod below right laser. Few shallow burrow depressions.
RWEC-OCS	403	A	Reddish-brown coarse sand with few granules. Many very small tubes in dense patches with pale gray fines. Small burrow openings. Podocerid amphipod fecal stacks. Hydroids in lower left corner. Few small shell fragments. Long track in upper left.
RWEC-OCS	403	B	Reddish-brown sand with coarse sand and granules. Dense patches of very small tubes and fines. Small burrow openings and podocerid amphipod fecal stacks. Scant shell hash through image center. Few tunicates. Shrimp above right laser.
RWEC-OCS	403	C	Reddish-brown sand with coarse sand and granules. Dense patches of very small tubes and fines. Small burrow openings. Few podocerid amphipod fecal stacks. Scant shell hash.. Few tunicates.
RWEC-OCS	404	A	Pale brown sand with small reduced areas, likely forage depressions. Larger tubes, especially dense near reduced forage features. Scant shell hash. Tunicates. Shell fragment in lower right corner covered with barnacles and single shrimp.
RWEC-OCS	404	B	Pale brown sand with scant shell hash. Small tubes, especially dense near forage feature in upper right. Small burrow openings, two reduced burrow mounds in lower left. Small reduced clasts in lower right. Faint tracks extending through right laser.
RWEC-OCS	404	D	Reddish-brown sand with scant shell hash. Large forage depression at image center with dense small and few larger tubes. Few tunicates and podocerid amphipod fecal stacks. Small shrimp above right laser.
RWEC-OCS	405	A	Light brown sand with rough textured surface from tubes and small burrows. Podocerid amphipod fecal stacks. Few pink polychaete appendages emerging from burrows. Few tunicates.
RWEC-OCS	405	B	Light brown sand with rough textured surface from tubes and small burrows. Podocerid amphipod fecal stacks. Few tunicates.
RWEC-OCS	405	D	Light brown sand with rough textured surface from tubes and small burrows. Podocerid amphipod fecal stacks. Few tunicates. Cerianthid below lasers. Large forage depression and excavated mound below left laser.
RWEC-OCS	406	A	Pale brown sand with many small burrow openings and podocerid amphipod fecal stacks. Two red organisms emerging from sediment at lower half of image. Large forage depression and excavated mound in upper right. Few fecal casts below lasers.
RWEC-OCS	406	B	Pale brown sand with many small burrow openings and podocerid amphipod fecal stacks. Large shell above lasers. Small pink organism between lasers. Shallow forage depressions.
RWEC-OCS	406	D	Pale brown sand with large forage depression and excavated sediment near image center, several other smaller forage depressions and mounds. Podocerid amphipods throughout image. Larger tubes present, especially dense near forage depressions. Large hermit crab above lasers.
RWEC-OCS	407	A	Light brown sand with small forage depressions ringed with dense tubes. Small burrow openings. Few podocerid amphipod fecal stacks and tunicates. Thin faint tracks in lower right corner.
RWEC-OCS	407	B	Light brown sand with several shallow forage depressions and mounds, especially in upper left corner of image. Many tubes of various sizes throughout image. Several partially buried shell fragments. Small burrow openings with pink polychaete appendages. Few podocerid amphipod fecal stacks near center.
RWEC-OCS	407	C	Light brown sand with few small forage depressions below left and right lasers. Ampelisca amphipod tubes present in small clusters, especially near forage depressions. Many small burrow openings, few with pink polychaete appendages. Faint tracks in lower half of image, most prominent tracks in lower right corner. Tunicate below left laser. Two small isopods, in lower right corner and below left laser.
RWEC-OCS	408	A	Reddish brown sand with two shallow forage depressions at image center ringed with ampelisca amphipod tubes. Few small burrow openings. Scant shell hash present. Small mound in upper right with short thin tracks nearby. Few tunicates. Few podocerid amphipod decal stacks. Cerianthid in lower right.
RWEC-OCS	408	B	Reddish brown sand with scant shell hash and burrow/forage depression above lasers. Small tubes of various sizes. Large shell fragment is partially buried below lasers, scant hydroids attached to shell.
RWEC-OCS	408	C	Reddish brown sand with scant shell hash. Small forage depressions throughout image. Very small tubes and pellets. Few larger tubes and burrow openings.
RWEC-OCS	409	A	Reddish-brown sand with few small forage depression at lower edge and right edge oaf image. Short tubes and small burrow openings throughout image. Very small tubes also present. Few large fecal casts in lower half of image.Pink polychaete visible in tube at lower center.
RWEC-OCS	409	B	Reddish-brown sand with scant shell fragments. Short tubes throughout image, some in dense clusters. Very small tubes also present. Few shallow forage depressions.
RWEC-OCS	409	C	Reddish-brown sand with scant shell hash and large forage depression above right laser. Sea stars at upper and lower edges of image. Tubes of various sizes throughout image. Largest tubes are located near forage depressions. Few small burrow openings.
RWEC-OCS	410	A	Pale brown sand with abundant tubes and burrows. Small thin tracks and sea star imprints. Sea stars in upper right and lower left of image.
RWEC-OCS	410	B	Turbid water column. Pale brown sand with tubes and burrows. Sea star near right laser.
RWEC-OCS	410	C	Turbid water column. 75% of image is clouded by resuspended sediment. Small tubes and few burrows in visible seafloor.
RWEC-OCS	411	A	Cobble covered with hydroids, barnacles, and sponges on pale brown sand. Reduced mound and small burrow openings in sandy portion of seafloor. Crab under cobble at right edge of image. Clam above lasers. Additional clam partially buried with hydroid growth below lasers. Orange sponge is at upper center.
RWEC-OCS	411	B	Cobble covered in barnacles and hydroids over pale brown sand. Large shell fragments with encrusting sponges in lower half of image. Large sea star in lower right corner.
RWEC-OCS	411	C	Cobble covered in barnacles and hydroids over pale brown sand. Large shell fragment below right laser. Crab and red sea star in upper left.
RWEC-OCS	412	A	Light brown sand with small burrow openings few with associated burrow mounds. Podocerid amphipod fecal stacks. Few small tubes. Several shallow forage depressions. Tunicate at upper center. Pink polychaetes visible in tubes in lower portion of image.

Area	StationID	Replicate	Comments
RWEC-OCS	412	B	Light brown sand with many small burrow openings, few reduced mounds. Tubes and podocerid amphipod fecal stacks. Small forage depressions in lower half of image.
RWEC-OCS	412	C	Light brown sand with few shallow forage depressions and low mound in lower right corner. Small burrow openings and fewer podocerid amphipod fecal stacks. Few tunicates.
RWEC-OCS	413	A	Light brown sand few shallow forage depressions. Small burrow openings, several larger burrow openings. Few small tubes and podocerid amphipod fecal stacks. Many tracks in upper right. Few small tunicates. Pink polychaetes visible at tube tops.
RWEC-OCS	413	B	Light brown sand with shallow forage depressions ringed in dense tubes. Many small burrow openings, few with polychaete appendages emerging. Thin track below right laser. Large fecal casts in upper right.
RWEC-OCS	413	D	Light brown sand with shallow burrow depressions. Many small burrow openings. Large openings and reduced burrow mound in upper right. Few small shell fragments. Few podocerid amphipod fecal stacks. Many small tracks at left side of image.Hermit crab at lower edge of image.
RWEC-OCS	414	A	Light brown sand with tracks and shallow forage depressions. Many very small tubes. Fewer burrow openings. Few podocerid amphipod fecal stacks and tunicates.
RWEC-OCS	414	B	Light brown sand with shallow forage depressions. Many pellets and very small tubes. Fewer burrow openings. Few podocerid amphipod fecal stacks and tunicates.
RWEC-OCS	414	C	Light brown sand with shallow forage depressions. Low thick tubes with patches of pellets and pale brown fines. Tubes are densest near forage depressions. Few tunicates. Several faint burrow openings near lasers.
RWEC-OCS	415	A	Light brown sand with small pockmark forage depressions. Single pebble in upper left edge of image. Small tubes and burrow openings. Small shrimp near right laser. Hermit crab in lower portion of image. Faint tracks.
RWEC-OCS	415	B	Light brown sand with faint tracks in lower right. Very small tubes and burrow openings. Few tunicates.
RWEC-OCS	415	C	Light brown sand with several pebbles along upper edge of image. Very small tubes and pellets in patches. Fewer slightly larger tubes. Few burrow openings. Hermit crab by pebbles at upper edge.
RWEC-OCS	416	A	Pale brown sand with smooth texture, broken by many tracks. Forage depressions along image perimeter, largest in lower right with adjacent reduced excavation mound. Many small burrow openings and tubes throughout image. Few podocerid amphipod fecal stacks.
RWEC-OCS	416	C	Pale brown sand with smooth texture, broken by many tracks. Many small burrow openings and tubes.
RWEC-OCS	416	D	Pale brown sand with smooth texture, broken by many tracks. Many small burrow openings and tubes. Large shallow forage depression near left laser. Few small shell fragments.
RWEC-OCS	417	A	Pale brown sand with abundant large tubes and burrow openings. Three sea stars near image center, two are mostly buried.
RWEC-OCS	417	C	Pale brown sand with abundant large tubes and burrow openings. Forage depression in upper left.
RWEC-OCS	417	D	Pale brown sand with abundant large tubes and burrow openings. Two sea stars in lower right. Two cerianthids in upper right and lower left. Repeating tracks in lower edge of image.
RWEC-OCS	418	A	Cobbles and pebbles on pale brown sand. Many small tubes in sandy sediment. Hydroids and few barnacles on large pebble and cobble sized gravels.
RWEC-OCS	418	B	Cobbles and pebbles on pale brown sand. Many small tubes in sandy sediment. Hydroids and few barnacles on large pebble and cobble sized gravels. Red hake at center of image.
RWEC-OCS	418	D	Cobbles on pale brown sand with boulder in upper right. Attached hydroids cover most gravels. Large shell fragments covered with hydroids. Large red attached anemone in upper right. Orange sea star near left laser. Few barnacles. Small reduced burrow mound near left laser and sea star. Crab under boulder in upper right.
RWEC-OCS	419	A	Pebbles with cobbles on pale brown sand. Most gravels are encrusted with a thin cover of hydroids. Few barnacles. Sea pen in lower left. Reduced burrow mound near sea pen. Small hermit crab near center.
RWEC-OCS	419	B	Coarse pebbles with few cobbles. Several large shell fragments. Attached hydroids on many gravels. Small crab in lower right. Burrow mound near crab. Shrimp above lasers.
RWEC-OCS	419	C	Cobbles and pebbles with few large shell fragments. Hard surfaces covered with hydroids. Shrimp below lasers. Two red mantled bivalves in upper half of image. Reduced burrow mound at lower half of image.
RWEC-OCS	420	A	Light brown sand with trace gravels. Maybe small tubes of various sizes. Small burrow openings. Few reduced burrow mounds. Possible fish or skate in upper left.
RWEC-OCS	420	B	Light brown sand with few small gravels. Many small tubes and burrow openings. Fewer slightly larger tubes.
RWEC-OCS	420	C	Light brown sand with pebbles near right edge. Many small tubes, including flat ampelisca amphipod tubes.
RWEC-OCS	421	D	Pale brown sand with abundant tracks. Upper right corner of image is clouded by resuspended sediment. Many small tubes, including ampelisca amphipod tubes. Several cerianthids. Small burrows, including reduced mound at lower edge. Few podocerid amphipod fecal stacks.
RWEC-OCS	421	E	Pale brown sand with small tracks. Small tubes and burrow openings. 6mm wide tube above left laser. Several small shrimp. Sea star at lower edge of image. Few podocerid amphipod fecal stacks.
RWEC-OCS	421	F	Pale brown sand with long faint tracks. Large forage depressions in upper half of image. Small tubes, including ampelisca amphipod tubes. Ampelisca are most dense near forage depressions. Small burrow openings. Sea star at image center.
RWEC-OCS	422	B	Pale brown sand with small gravels. Several small forage depressions with ampelisca amphipod tubes. Small burrows.
RWEC-OCS	422	C	Pale brown sand with few gravels. Large burrow with reduced mound at upper edge of image. Small burrow sand fewer small tubes.

Area	StationID	Replicate	Comments
RWEC-OCS	422	D	Pale brown sand with few gravels. Thin long tracks. Many tubes and fewer burrow openings. Several burrow openings with reduced mounds. Shrimp in lower left.
RWEC-OCS	423	A	Rippled reddish-brown sand. Ampelisca and smaller tubes at crest and slope of ripple. Few podocerid amphipod fecal stacks.
RWEC-OCS	423	C	Rippled reddish-brown sand with finest material in ripple trough. Ripple wavelength not measurable due to field of view. Ampelisca and other small tubes.
RWEC-OCS	423	D	Rippled reddish-brown sand with fines in ripple troughs. Short tubes including ampelisca amphipods, primarily in ripple troughs.
RWEC-OCS	424	A	Rippled reddish-brown sand with few small gravels. Small tubes at ripple slopes. Small burrow openings at slope and trough. Few podocerid amphipod fecal stacks.
RWEC-OCS	424	C	Rippled reddish-brown sand. Ripple is not measurable due to field of view. Small gravels and scant shell hash in ripple troughs. Small burrow openings in ripple trough. Small tubes at ripple slope. Few podocerid amphipod fecal stacks. Few tunicates in ripple trough.
RWEC-OCS	424	D	Rippled reddish-brown sand. Fines and few gravels in ripple trough. Very small tubes cover ripple slope and crest. Few small burrow openings in ripple trough. Few small shell fragments in ripple trough.
RWEC-OCS	425	A	Light brown sand with scant shell hash. Two shallow forage depressions. Very small tubes. Small sand dollar above laser mid-point, partially buried.
RWEC-OCS	425	B	Light brown sand with scant shell hash. Short tubes and small pellets. Few small burrow openings, especially along top edge of image. Podocerid amphipod fecal stacks in upper right.
RWEC-OCS	425	C	Light brown sand with scant shell hash. Small tubes and pellets throughout image. Few small burrow openings. Few podocerid amphipod fecal stacks and tunicates. Shell fragments above lasers, largest covered with hydroid growth.
RWEC-OCS	426	A	Light brown sand with patches of pellets. Few small tracks. Few podocerid amphipod fecal stacks. Few small tubes and burrow openings.
RWEC-OCS	426	B	Light brown sand with many faint small tracks. Few ampelisca tubes near lasers. Small fecal pellet patches. Few tunicates. Few podocerid amphipod fecal stacks. Sand dollar in lower right.
RWEC-OCS	426	C	Light brown sand with tubes of various sizes, including very small tubes under 2mm in size, and larger tubes. Few burrow openings. Pellets throughout image.
RWEC-OCS	427	A	Reddish-brown sand with long thin tracks along lower edge of image. Many very small and slightly larger tubes. Hermit crab near right laser. Few tunicates and podocerid amphipod fecal stacks.
RWEC-OCS	427	B	Reddish-brown sand with few small forage depressions, largest above left and right lasers. Small tubes and fecal pellets. Two small shrimp and hermit crab at upper edge of image, center.
RWEC-OCS	427	C	Rippled, reddish-brown sand with ripple crest running horizontally along upper edge of image. Ripple cannot be measured due to image field of view. Tracks along ripple slope. Small tubes. Moon snail egg case in lower right. Few small burrow openings.
RWEC-OCS	428	A	Reddish-brown sand with tracks through center of image. Patches of pale fines and pellets. Small tubes, fewer slightly larger tubes.
RWEC-OCS	428	B	Reddish-brown sand with small tubes and patchy fines. Turbidity in water column partially obstructs view in left half of image. Small hermit crab near right laser.
RWEC-OCS	428	C	Reddish-brown sand with faint tracks and few shallow forage depressions Patches of pale fines, pellets, and very small tubes. Scant shell hash.
RWEC-RI	429	A	Reddish-brown sand with pale fines. Fecal pellets and very small tubes. Faint tracks in lower left corner. Moon snail egg case in lower left.
RWEC-RI	429	B	Turbid water column. Reddish-brown sand with pale fines. Fecal pellets and very small tubes. Faint tracks and few small forage depressions.
RWEC-RI	429	C	Pale brown fines with reddish sand. Scant shell hash. Clear, thin tracks between lasers. Very small tubes present.
RWEC-RI	430	A	Reddish-brown sand with several shallow forage depressions. Seafloor is uneven with small tubes and faint tracks. Few small burrow openings.
RWEC-RI	430	B	Reddish-brown sand with many short, flat, tubes. Few small shallow forage depressions along lower edge of image. Few small shell fragments. Long thin track in lower left.
RWEC-RI	430	C	Reddish-brown sand with small, shallow forage depressions. Faint thin tracks. Scant shell hash. Short tubes throughout image.
RWEC-RI	431	A	Pale brown fines with many small tubes of various sizes. Three cerianthids. Large burrow opening with reduced burrow mound in lower left. Faint tracks. Ampelisca tubes.
RWEC-RI	431	C	Pale brown fines with many long thin tracks. Many podocerid amphipod fecal stacks. Small tubes and burrow openings, both small and large. Large burrows with edges of large diameter tubes visible at seafloor surface in upper left, may be cerianthids.
RWEC-RI	431	D	Pale brown fines with many long thin tracks. Two very large burrow openings in upper left. Many podocerid amphipod fecal stacks. Five cerianthids.
RWEC-RI	432	A	Pale brown fines with many small tubes. Podocerid amphipod fecal stacks. Small burrow openings. Long thin tracks.
RWEC-RI	432	C	Pale brown fines with many small tubes. Small burrow openings and several large burrow openings/forage depressions. Forage depressions with dense ampelisca amphipod tubes. Fewer podocerid amphipod fecal stacks. Many small tubes. Thin tracks.
RWEC-RI	432	D	Pale brown fines with abundant small and very small tubes, including ampelisca amphipod tubes. Podocerid amphipod fecal stacks. Many small burrow openings. Small than tracks. Few reduced burrow mounds.
RWEC-RI	433	A	Pale brown sand with many small burrow openings. Small tubes throughout image. Small reduced burrow mounds and fecal coils. Many podocerid amphipod fecal stacks. Long thin tracks. Few cerianthids. Small shrimp.
RWEC-RI	433	B	Pale brown fines with very large burrow at image center, crab in burrow. Many small burrow openings and tubes. Few small reduced burrow openings and fecal coils. Thin tracks in upper right.
RWEC-RI	433	C	Pale brown fines with many small burrow openings. Abundant small tubes. Few reduced burrow mounds and fecal coils. Few thin tracks. Cerianthid near right l laser.
RWEC-RI	434	A	Reddish-brown sand with many small burrow openings. Forage depressions, reduced excavation mound near left laser. Dense ampelisca tubes near forage areas. Reduced burrow mound in upper left. Several small shell fragments.

Area	StationID	Replicate	Comments
RWEC-RI	434	B	Reddish-brown sand with rough texture from small tracks and tubes. Many small burrow openings. Small forage depressions with ampelisca amphipod tubes. Small shell fragments. Red-mantled bivalve between lasers.
RWEC-RI	434	C	Reddish-brown sand with several forage depressions ringed by dense tubes, including ampelisca amphipod tubes. Hermit crab at center of image. Small burrow openings. Few small shell fragments.
RWEC-RI	435	A	Reddish-brown sand with many burrow openings. Several shallow forage depressions with dens tubes, including ampelisca amphipod tubes. Few faint tracks.
RWEC-RI	435	B	Reddish-brown sand with many small burrow openings. Short tubes. Several shallow forage depressions with tubes. Moon snail in upper left. Faint tracks throughout image.
RWEC-RI	435	D	Reddish-brown sand with large forage depression ringed by tubes, including ampelisca amphipoda tubes, in upper right. Several small forage depressions. Small burrow openings throughout image. Hermit crab in lower right.
RWEC-RI	436	A	Reddish-brown sand with several forage depressions ringed with dense tubes. Many small burrow openings Thin tracks and gastropods. Few small shell fragments. Red epifauna at lower center, may be Corymorpha hydroid.
RWEC-RI	436	C	Reddish-brown sand with several forage depressions ringed with dense tubes. Many small burrow openings Thin tracks and gastropods. Small hermit crab at left middle.
RWEC-RI	436	D	Reddish-brown sand with several forage depressions ringed with dense tubes. Many small burrow openings Gastropods above and below left laser. Hermit crabs along left edge of image.
RWEC-RI	437	A	Reddish-brown sand with small forage depressions, large forage depression and excavated mound in lower left. Short tubes near depressions. Small burrow openings. Small shell fragment near right laser. Several small gastropods.
RWEC-RI	437	B	Reddish-brown sand with forage depressions and small tubes. Few gastropods. Very small tracks are scant.
RWEC-RI	437	C	Reddish-brown sand with faint long tracks. Several shallow burrows/forage depressions in lower half of image. Few small reduced burrow mounds. Tubes near burrows/forage depressions. Small shell fragment below right laser.
RWEC-RI	438	A	Dark brown sand with few small forage depressions. Gastropod below right laser. Few tubes.
RWEC-RI	438	C	Dark brown sand with many very small tubes and fecal pellets. Two large shell fragments in upper right. Small hermit crab in upper right. Turbidity clouding left side of image.
RWEC-RI	438	D	Dark brown sand with small shell fragments. Few small depressions and burrows. Very small tubes. Gastropod in upper left. Trails in left edge of image.
RWEC-RI	439	A	Dark brown sand with many tracks and small burrow openings. Few small tubes. Several shallow forage depressions. Gastropods in upper right.
RWEC-RI	439	B	Dark brown sand with several forage depressions. Large tubes near forage depressions. Several small burrow openings. Many gastropods, including moon snail. Many small thin trails.
RWEC-RI	439	C	Turbid water column. Dark brown sand with small depressions and burrow openings. Trails visible through turbidity. Hermit crab at right edge of image.
RWEC-RI	440	A	Pale brown sand with many tracks and trails. Small burrow openings in sand. Moon snail eggs in lower right. Gastropod and hermit crab in lower right. Small depressions throughout image.
RWEC-RI	440	B	Pale brown sand with large forage depressions and many small burrow openings. Small reduced burrow mounds and fecal coils near left laser. Translucent object at lower edge of image. Many tracks and trails. Hermit crab in upper left.
RWEC-RI	440	D	Pale brown sand with three shallow forage depressions and many other smaller depressions. Many tracks and trails. Small burrow openings. Small tubes near forage depressions. Several reduced fecal coils.
RWEC-RI	441	A	Pale brown sand with many large forage depressions. Few openings large enough for tunneling megafauna. Tubes most dense near forage depressions. Many small burrow openings. Few long thin trails. Podocerid amphipod fecal stacks.
RWEC-RI	441	B	Pale brown fines with shallow depressions in lower left and below right laser. Many smaller depressions in upper half of image. Small tubes and burrow openings. Few podocerid amphipod fecal stacks.
RWEC-RI	441	C	Very turbid water column. No fauna visible. Light brown sand with depressions barely visible through resuspended sediment.
RWEC-RI	442	A	Pale brown fines with large burrows and reduced mounds. Abundant tracks and trails. Few podocerid amphipoda fecal stacks, tubes, and smaller burrows.
RWEC-RI	442	C	Pale brown fines with large burrows and reduced mounds. Abundant tracks and trails. Few podocerid amphipoda fecal stacks, tubes, and smaller burrows.
RWEC-RI	442	D	Pale brown fines with large burrows and reduced mounds. Abundant tracks and trails. Few podocerid amphipoda fecal stacks, tubes, and smaller burrows. Crab in upper right.
RWEC-RI	443	A	Pale brown fines with very small ripples. Several cerianthids above lasers. Small thin trails.
RWEC-RI	443	B	Pale brown sand with slight rippling. Few burrow openings. Many thin trails. Gastropod under right laser. Small tubes.
RWEC-RI	443	C	Slightly rippled pale brown sand with several large burrow openings and reduced sediment areas. Very small tubes. Many tracks and trails. Hermit crab in upper left.
RWEC-RI	444	A	Slightly ripple pale brown sand. Slightly turbid water column. Small gastropods at image center. Few small tracks, burrow openings, and tubes.
RWEC-RI	444	B	Slightly rippled pale brown sand with few large burrow openings. Slightly turbid water column.
RWEC-RI	444	D	Rippled pale brown sand. Small clasts near ripple crest. Slightly turbid water column. Burrow in lower left.
RWEC-RI	445	A	Pale brown sand. Small burrow openings and few trails. Few gastropods and single hermit crab. Turbid water column
RWEC-RI	445	B	Pale brown, slightly rippled sand. Large shell half at image center with scant barnacles. Hermit crab in upper left. Few trails.
RWEC-RI	446	A	Pale brown sand with few small shell fragments. Turbid water column. Hermit crab in upper right.
RWEC-RI	446	B	Pale brown sand with many large shell fragments. Depression in upper left. Few hermit crabs. Few tracks throughout image. Northern sea robin in upper right.
RWEC-RI	446	C	Turbid water column. Pale brown sand with small shell fragments.
RWEC-RI	447	A	Pale brown sand with many shell fragments. Few barnacles cover largest shells. Few tracks and long trails. Few hermit crabs.
RWEC-RI	447	B	Pale brown sand with shell fragments. Attached hydroids on large shell fragment in upper right. Few tracks and trails.
RWEC-RI	447	C	Pale brown sand with shell fragments. Attached hydroids on largest shell fragments. Few tracks and trails. Red algae in lower right.
RWEC-RI	448	A	Dark brown sand with many decaying mussel shells, many with attached hydroids and scant barnacles. Few small gastropods. Red algae in upper left attached to shell. Many small tubes.
RWEC-RI	448	B	Mussel bed on dark brown sand with many broken shell fragments. Mussels show signs of grazed barnacles, hydroids, and red algal growth. Gastropods and small tubes.

Area	StationID	Replicate	Comments
RWEC-RI	448	D	Dark brown sand with abundant shell fragments. Cluster of mussels and three plumes of red algae. Small burrow faintly visible in lower half, center, of image. Few small tubes
RWEC-RI	449	A	Dark brown sand with dense mussel shell fragments. Two small areas with red algal growth near image center. Hydroids on shell fragments. Very small tubes
RWEC-RI	449	B	Dark brown sand with dense mussel shell fragments. Red algae near left laser and along right edge of image. Very small tubes faintly visible in sandy areas. Hydroid growth on shell fragments.
RWEC-RI	449	C	Dark brown sand with dense mussel shell fragments. Small patches of red algae. Trace hydroids on shell fragments. Very small tubes faintly visible.
RWEC-RI	450	B	Dense crepidula and crepidula shell fragments. Sparse hydroids cover crepidula. Orange sponge in lower left.
RWEC-RI	450	F	Dense crepidula and crepidula shell fragments. Sparse hydroids cover crepidula. Orange sponge in upper right.
RWEC-RI	450	G	Dense crepidula and crepidula shell fragments. Sparse hydroids cover crepidula. Orange sponge and barnacles along right side of image.
RWEC-RI	451	A	Turbid water column. Dark brown sand. Red algae and yellow sponges. Branching growth in lower right. Yellow sponges and red algae preumed to be growing on large pebbles/small cobbles.
RWEC-RI	451	C	Turbid water column. Dark brown sand with large shell fragments. Red algae along upper edge of image. Orange sponge near image center.
RWEC-RI	451	D	Turbid water column. Three large areas of red algae. Yellow sponge among algae at left edge of image. Large whelk leaving wide trail. Yellow sponges and red algae preumed to be growing on large pebbles/small cobbles.
RWEC-RI	452	A	Dark gray and brown sand with large yellow sponge in lower right, on small cobble. Few small shell fragments. Few gastropods.
RWEC-RI	452	B	Dark gray and brown sand with angular pebbles in bottom and part of another at upper edge, plus various sized shell fragments. Possible orange-pink sponge on pebbles. Faint tracks in upper portion of image.
RWEC-RI	452	D	Dark gray and brown sand with pebbles, cobbles, and shell fragments. Yellow sponges attached to cobbles and perhaps shells. Possible orange-pink sponge at center. Grazed barnacles on larger pebbles. Small gastropod in lower left.
RWEC-RI	453	A	Very turbid water column. Dark brown sand with no discernable features. Single small shell fragment in upper left.
RWEC-RI	453	C	Turbid water column. Dark brown sand with red algae in lower right corner. Large burrow openings in lower right. Several small shell fragments.
RWEC-RI	453	D	Turbid water column. Dark brown sand with few small shell fragments. Two burrow openings faintly visible along lower edge of image.
RWEC-RI	454	A	Turbid water column. Dark gray sand with large burrow openings faintly visible.
RWEC-RI	454	C	Turbid water column. Faint tracks and trails in dark brown sand.
RWEC-RI	455	A	Turbid water column. Faint tracks and trails in dark brown sand. Few small burrow openings.
RWEC-OCS	456	A	Light brown sand with many small tubes. Small burrow openings. Forage depression below right laser. Reduced burrow mound adjacent to right laser. Faint tracks throughout image.
RWEC-OCS	456	B	Light brown sand with small shell fragments in upper right corner. Many small tubes. Few faint tracks.
RWEC-OCS	456	C	Light brown sand with many small tubes. Long thin tracks along right edge of image. Few small burrow openings with pink polychaete appendages along lower edge of image.
RWEC-OCS	457	A	Pale brown sand with a few small black pebbles and many small burrow openings. Very small tubes throughout image. Few faint tracks, most visible in upper left corner.
RWEC-OCS	457	B	Pale brown sand with a cluster of small pebble near left laser. Many small burrow openings. Larger burrows with reduced sediment and fecal coil between lasers. Longer infauna appendage emerging from sediment near pebbles. Small clusters of tubes in small patches. Few faint tracks throughout image.
RWEC-OCS	457	C	Pale brown sand with a few scattered small pebbles. Many small burrow openings. Short tubes, especially in lower right. Few thin tracks throughout image.Translucent shrimp and pink polychaete appendages in lower right. Isopod above middle of lasers.
RWEC-OCS	458	A	Pale brown sand with few small gravels. Clusters of small tubes. Faint tracks throughout image. Several partially buried shell fragments covered with attached hydroids. Small Corymorpha hydroid in lower right. Few reduced burrow mounds and openings.
RWEC-OCS	458	B	Pale brown sand with few gravels. Small tubes in low density throughout image. Few burrow openings with reduced burrow mounds.
RWEC-OCS	458	C	Pale brown sand with faint tracks throughout image. Many small burrow openings, few larger with reduced burrow mounds. Small forage depression with ampelisca amphipod tubes in upper right. Corymorpha to left of lasers. Partially buried shell with hydroids in upper right.
RWEC-OCS	459	A	Reddish-brown sand with many faint tracks. Forage depressions with dense ampelisca amphipod tubes. Few small shell fragments in lower right. Few burrow openings along lower edge of image. Hermit crab in upper right.
RWEC-OCS	459	B	Reddish-brown sand with many faint tracks throughout image. Small burrow openings and tubes. Podocerid amphipod fecal stack in upper left. Two small shrimp.
RWEC-OCS	459	C	Reddish--brown sand with abundant small burrow openings, clusters of short tubes. Small depressions with larger tubes, including ampelisca below right laser. Podocerid amphipod fecal stacks in lower left corner.
RWEC-OCS	460	A	Pale brown sand with dense small burrow openings. Clusters of small tubes. Many thin tracks along upper edge of image. Several small corymorpha. Ctenophore in water column. Few podocerid amphipod fecal stacks in upper left. Pink polychaete appendages in lower right.
RWEC-OCS	460	C	Pale brown sand with many small burrow openings. Small depressions ringed with dense tubes, including ampelisca amphipod tubes. Large, thick tube above lasers, halfway to upper edge of image. Pink polychaete appendages visible in lower right.
RWEC-OCS	460	D	Pale brown sand with many small burrow openings, few larger burrows with reduced mounds. Short tubes clustered in small patches. Large shell fragments in upper left and lower right. Pink appendages in upper right and lower center. Few podocerid amphipod fecal stacks.
RWEC-OCS	461	A	Reddish-brown sand with patchy fines, pellets, and clusters of very small tubes. Fewer small burrow openings. Corymorpha in upper right.

Area	StationID	Replicate	Comments
RWEC-OCS	461	B	Reddish-brown sand with small pellets and tubes. Small burrow openings. Low mound near left laser. Gastropod near left laser. Faint tracks along lower edge of image. Few podocerid amphipod fecal stacks.
RWEC-OCS	462	A	Reddish-brown sand with many small tubes. Few podocerid amphipod fecal stacks. Few tunicates. Gastropod in lower left.
RWEC-OCS	462	B	Reddish-brown sand with faint tracks. Small depressions with ampelisca amphipod tubes. Few small shell fragments. Sand dollar at lower right.
RWEC-OCS	462	C	Reddish-brown sand with many short tubes. Several small depressions with dense ampelisca tubes.
RWEC-OCS	463	A	Pale brown sand with tubes and small burrow openings. Large crab in upper left. Faint trails along lower edge of image. Indeterminate epifauna mostly buried at lower right.
RWEC-OCS	463	F	Pale brown sand with several large forage depressions and associated mounds. Flat ampelisca amphipod tubes near right laser. Many short tubes and small burrow openings. Faint tracks near left laser.
RWEC-OCS	463	G	Pale brown sand with small tubes and few burrow openings. Several raised mounds, likely associated with fish forage behavior. Ampelisca amphipods near raised mounds.
RWEC-RI	464	A	Pale brown sand with many small burrow openings, fewer small tubes. Largest burrows ringed by reduced sediment near image center. Long thin tracks. Pink polychaete appendages below center of lasers.
RWEC-RI	464	C	Pale brown sand with many tubes of various sizes, mostly small. Forage area with largest tubes in lower right. Many small shrimp. Few podocerid amphipod fecal stacks.
RWEC-RI	464	D	Pale brown sand with short tubes and fewer small burrow openings, few larger burrows. Shallow forage depressions, largest near left laser. Few flat ampelisca tubes. Podocerid amphipod fecal stacks in upper right.
Reference Area	501	A	Reddish-brown sand with dark gray reduced and disturbed patch below left laser. Large forage depression along left edge of image. Many short tubes. Podocerid amphipod fecal stacks. Few ampelisca tubes.
Reference Area	501	B	Reddish-brown sand with reduced mound near left laser. Forage depression above left laser with dense tubes. Burrow openings with pink polychaete appendages. Few podocerid amphipod fecal stacks between lasers. Few tunicates.
Reference Area	501	C	Reddish-brown sand with pale fines and small tubes in dense patches. Few larger tubes. Podocerid amphipod fecal stacks along upper edge of image. Polychaete appendages near right laser.
Reference Area	502	A	Reddish brown sand with scant shell hash. Many very small tubes. Podocerid amphipod fecal stacks. Faint tracks. Few tunicates. Small burrow openings.
Reference Area	502	B	Reddish brown sand with scant shell hash. Large shell fragment along upper edge of image with attached barnacles and hydroids. Many small tubes and patches of pale pellets. Few podocerid amphipod fecal stacks.
Reference Area	502	D	Reddish-brown sand with scant shell hash. Ampelisca amphipod tubes near forage depression above lasers. Very large tube in upper left. Few podocerid amphipod fecal stacks. Several shrimp near image center. Very small hermit crab above left laser by forage depression edge.
Reference Area	503	A	Reddish-brown sand with granules and few pebbles. Large shell fragment along left edge of image. Several reduced burrow mounds in lower half of image. Small hermit crab near central burrow mound. Cerianthid below left laser.
Reference Area	503	B	Reddish-brown sand with few small pebbles and thin drape of pale pelletized fines. Many small burrow openings. Forage depression with large tubes and nearby tracks in upper left. Multiple podocerid fecal stacks. Pellets and large fecal coil in lower right.
Reference Area	503	C	Light brown sand with few gravels. Tracks and trails in upper left. Cerianthid in upper left. Small burrow openings, few with halos of reduced sediment. Few podocerid amphipod fecal stacks.
Reference Area	504	A	Reddish-brown sand with few shallow forage depressions, excavated and reduced mound in lower right. Small tubes, clustered most dense near forage depressions. Fewer burrow openings, two with reduced halos in lower left. Few podocerid amphipod fecal stacks. Faint repeating tracks throughout image. PInk polychaete appendages visible.
Reference Area	504	B	Light-brown sand with many small forage depressions near dense tube clusters, mainly ampelisca amphipod tubes. Few podocerid amphipod fecal stacks. Faint small tracks throughout image.
Reference Area	504	C	Light brown sand with few shallow forage depressions. Very small tubes throughout image. Fewer podocerid amphipod fecal stacks, mostly in upper half of image. Fish tail partly visible at right edge of image. Faint tracks throughout image, longest and deepest track in upper right.
Reference Area	505	A	Light brown sand with many faint tracks. Large forage depression with dense ampelisca tubes in lower left. Few podocerid amphipod fecal stacks in upper left. Few small burrow openings.
Reference Area	505	B	Light brown sand with few shallow forage depressions. Ampelisca amphipod tubes in small depression at upper left. Many long thin repeating tracks in upper right. Podocerid amphipod fecal stack in upper right.
Reference Area	505	C	Light brown sand with short tubes, mostly clustered around forage depression at left edge of image. Many podocerid amphipod fecal stacks in upper half of image. Faint trails through center of image. Few small burrow openings with extended pink polychaete appendages.
RWEC-OCS	601	A	Reddish-brown sand with small burrow openings and many podocerid amphipod fecal stacks. Few small tunicates. Very small tubes throughout image. Small gastropod in upper left corner.
RWEC-OCS	601	B	Reddish-brown sand with small burrow openings and podocerid amphipod fecal stacks. Many very small tubes throughout image. Small gastropod near right laser. Corymorpha at upper left.
RWEC-OCS	601	C	Reddish-brown sand with many small tubes. Few burrow openings. Line of repeating tracks passes diagonally through right laser. Gastropods and shell fragment in lower left.
RWEC-OCS	602	A	Reddish-brown sand with many small tubes, mostly clustered near large forage depression and mound in lower left corner. Many small burrow openings. Podocerid amphipod fecal stacks and few tunicates. Faint tracks near forage depression and throughout image.
RWEC-OCS	602	B	Reddish-brown sand with large forage depressions and associated mounds along right side of image. Dense tubes in forage depressions Smaller tubes throughout image. Few podocerid amphipod fecal stacks, tunicates, and small burrow openings. Thin tracks near mound and depression at right.
RWEC-OCS	602	C	Reddish-brown sand with reduced forage mound in lower left and few smaller forage depressions above lasers. Thin tracks in upper right and near lower left forage mound. Small burrow openings, and tubes throughout image. Few podocerid amphipod fecal stacks and tunicates.
RWEC-OCS	603	A	Reddish-brown sand with many small burrow openings, largest burrow openings surrounded by reduced sediment. Fewer tubes of various sizes. Few podocerid amphipod fecal stacks in upper half of image. Large track in upper right corner. Few tunicates. Pink polychaete appendages visible, especially near lower edge.
RWEC-OCS	603	B	Reddish-brown sand with small burrow openings, many with pink polychaete appendages. Few tunicates. Few podocerid amphipod fecal stacks.

Area	StationID	Replicate	Comments
RWEC-OCS	603	C	Reddish-brown sand with large forage depression and reduced mound below left laser. Many short tubes near forage depression and mound. Small burrow openings with pink polychaete appendages throughout image. Thin tracks at lower center.
RWEC-RI	604	A	Reddish-brown sand with small patches of flat ampelisca amphipod tubes. Few long thin tracks between lasers.
RWEC-RI	604	B	Reddish-brown sand with few small depressions. Low density of small tubes throughout image. Small gastropod below left laser.
RWEC-RI	604	C	Reddish-brown sand with few small depressions. Low density of small tubes throughout image.
RWEC-OCS	605	A	Reddish-brown sand with few small depressions. Low density of small tubes throughout image.
RWEC-OCS	605	B	Rippled reddish-brown sand with ripple crest running across center of image. Ripple size not measurable due to field of view. Pale fines at ripple slope. Hermit crab between lasers and in upper left. Very small gastropod by right laser.
RWEC-OCS	605	C	Reddish-brown sand with scant shell hash. Patches of pellets and pale fines. Very few small and very small tubes. Several small burrow openings.
RWEC-OCS	606	A	Rippled reddish-brown sand with pale fines and shell hash in ripple trough. Small burrow openings in ripple trough. Sand dollar at upper edge of image. Few very small tubes.
RWEC-OCS	606	B	Rippled reddish brown sand with pale fines and scant shell hash in ripple trough. Very small tubes on ripple slope and in trough. Ripple size is not measurable due to field of view. Gastropod near right laser. Podocerid amphipod fecal stack at ripple crest.
RWEC-OCS	606	C	Rippled reddish-brown sand with pale fines, scant shell hash, and few gravels in ripple trough. Ripple size not measurable due to field of view. Many short tubes at ripple slope. Few podocerid amphipod fecal stacks at ripple crest.
RWEC-OCS	607	A	Pale brown sand with large forage depression below left laser. Many small burrow openings and very small tubes. Tracks along lower edge of mage and faint tracks throughout visible area. Cerianthid below lasers. Small Corymorpha hydroid below right laser. Few small fecal coils above lasers. Podocerid amphipod fecal stacks above forage depression.
RWEC-OCS	607	E	Pale brown sand with megafauna tunnel to right of laser. Corymorpha above tunnel. Many smaller burrows. Cerianthids between lasers. Few small thin trails. Few podocerid amphipod tubes.
RWEC-OCS	607	F	Pale brown sand with large forage depression and burrow near left laser. Clusters of small tubes near excavated sediment mound. Abundant small burrow openings. Few shrimp in upper half of image. Large tubes along top edge of image. Cerianthid in lower left corner.
RWEC-OCS	608	B	Pale brown sand with shallow depression and adjacent mound below left laser. Several large burrow openings in lower half of image. Many podocerid amphipod fecal stacks in upper half of image. Small cerianthid below right laser. Many thin tracks and trails.
RWEC-OCS	608	C	Pale brown sand with shallow depression below right laser. Turbid water column in lower left. Many tracks and trails, prominent crab tracks in upper right. Many podocerid amphipod fecal stacks. Large burrow openings below lasers. Few small tubes.
RWEC-OCS	608	F	Pale brown sand with dense tracks and trails. Many small burrow openings. Short tubes. Podocerid amphipod fecal stacks. Several shrimp.
RWEC-OCS	609	A	Rippled, reddish-brown sand with fines and few granules in ripple trough. Small burrow openings in ripple slope and trough. Small tubes at ripple slope. Podocerid amphipod fecal stacks near ripple crest. Few tunicates.
RWEC-OCS	609	B	Rippled reddish-brown sand with few granules. Pale fines and shell hash in ripple trough. Burrow openings in ripple trough. Very small tubes along ripple slope and trough. Few podocerid amphipod fecal stacks.
RWEC-OCS	609	C	Rippled reddish-brown sand with few granules. Pale fines and shell hash in ripple trough. Large forage depression near left laser. Small tubes in forage depression and elsewhere throughout image. Burrow openings in ripple trough and slope. Few podocerid amphipod tubes.
RWEC-RI	610	A	Pale brown sand with many small depressions. Sand is textured with faint tracks. Small burrow openings and few small tubes.
RWEC-RI	610	B	Pale brown sand with many small depressions ringed with tubes. Few small burrow openings. Hermit crab at image center. Faint tracks throughout image.
RWEC-RI	610	C	Pale brown sand with small depressions ringed with tubes in upper half of image. Many faint tracks and trails throughout image. Very few small burrow openings.
RWEC-RI	611	A	Pale brown sand with small forage depressions, many with dense ampelisca amphipod tubes in center. Many small burrow openings. Tracks and trails throughout image. Several gastropods along left edge of image.
RWEC-RI	611	B	Pale brown sand with small forage depressions, few with dense ampelisca amphipod tubes in center (see upper right for best example). Many small burrow openings. Tracks and trails throughout image. Gastropod at image center. Small hermit crab in lower right corner.
RWEC-RI	611	C	Pale brown sand with many small forage depression. Large forage depression with reduced burrow at center below right laser; surrounded by ampelisca amphipod tubes. Two very large burrow openings near right laser. Many small burrow openings. Few gastropods. Tracks throughout image, long thin trail at upper right.
RWEC-RI	612	A	Turbid water column. Pale brown sand with abundant tracks. Large tubes. Few burrow openings.
RWEC-RI	612	D	Turbid water column. Pale brown sand with abundant tracks. Large tubes. Several large burrow openings. Low mound near right laser.
RWEC-RI	613	A	Dark image with turbid water column.. Few small shell fragments on sand. Burrow openings clearly visible.
RWEC-RI	613	B	Dark image with turbid water column. Large shell fragment with reddish coloration or epifaunal growth near right laser. Few small shell fragments on sand. Burrow openings clearly visible.
RWEC-RI	613	D	Dark image with turbid water column. Small shell fragments visible through resuspended sediment.
RWEC-RI	614	A	Dark brown sand with scant shell hash and cover of larger shell fragments. Attached hydroids and few orange sponges encrust much of shell cover.
RWEC-RI	614	B	Dark brown sand with scant shell hash and cover of larger shell fragments. Attached hydroids and few orange sponges encrust much of shell cover.
RWEC-RI	614	C	Dark brown sand with scant shell hash and cover of larger shell fragments. Attached hydroids and few orange sponges encrust much of shell cover.
RWEC-RI	615	A	Dark brown sand with dense mussel shell fragment cover. Scant hydroids attached to shell fragments.
RWEC-RI	615	C	Dark brown sand with dense mussel shell fragment cover. Scant hydroids attached to shell fragments. Patch of green algae attached to shells along lower edge of image.
RWEC-RI	615	D	Dark brown sand with dense mussel shell fragment cover. Scant hydroids attached to shell fragments.