BOEM/New Hampshire Cooperative Agreement (Contract M14ACOOO10) Technical Report

Surficial Geology of the Continental Shelf Off New Hampshire, USA: Morphologic Features and Surficial Sediments

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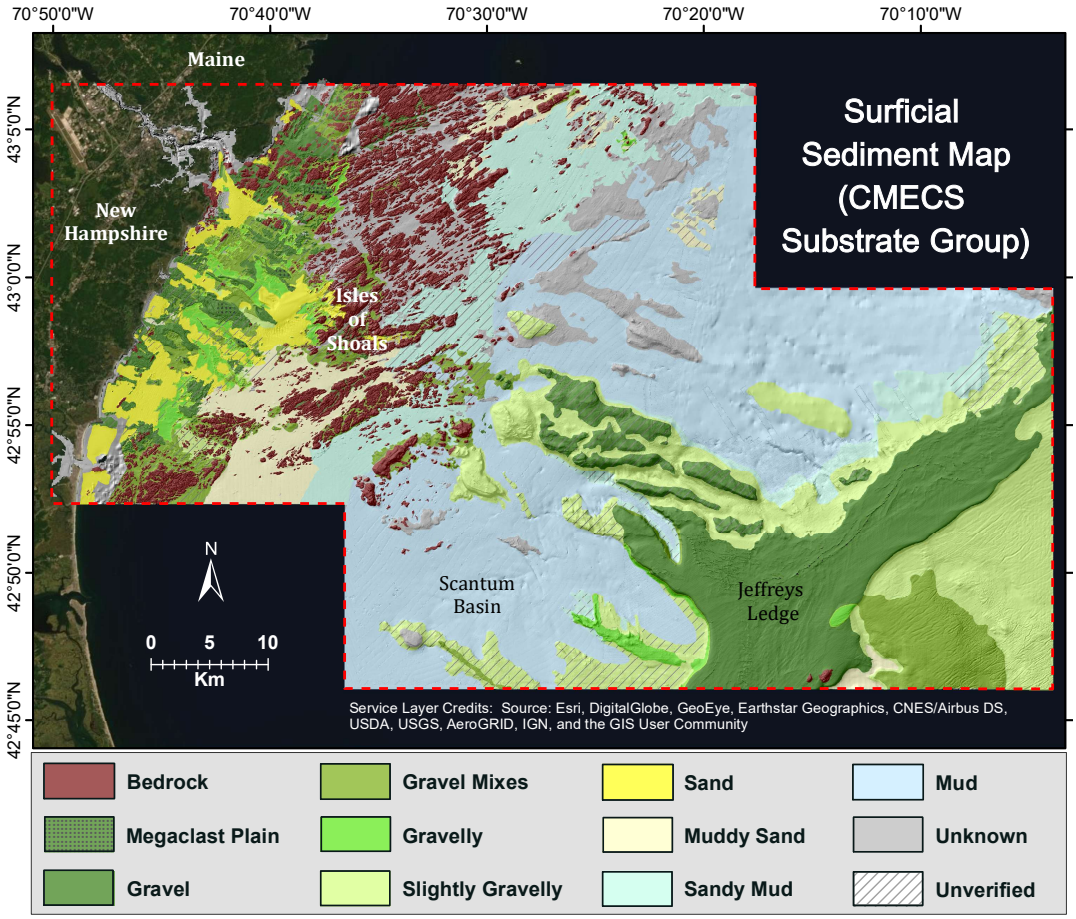

Acknowledgements

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We gratefully acknowledge NOAA National Ocean Service in providing hydrographic and backscatter survey data. A number of colleagues at the University of New Hampshire Center for Coastal and Ocean Mapping/Joint Hydrographic Center provided scientific and technical support, advice, and insight including Paul Johnson (Data Management), Colleen Mitchell (Graphics Design and Editing), Will Fessenden (IT Group), and Larry Mayer, Giuseppe Masetti, Michael Bogonko, and Erin Nagel (Faculty and Research Scientists).

In Memoriam

Maxlimer Coromoto Vallee-Anziani was a valued colleague and a major contributor to the original report and maps describing the surficial geology of the continental shelf off New Hampshire that were published in 2016. This earlier work laid the foundation for the expanded report and maps presented here. Sadly, Maxlimer passed away on January 24, 2017. Her original contributions are very important to the work presented here.

Map Coordinate System, Projection and Datum

Coordinate System: WGS 1984 UTM Zone 19N

Projection: Transverse Mercator

Horizontal Datum: WGS 1984

Vertical Datum: MLLW

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Surficial Geology Maps of the Continental Shelf Off New Hampshire: Morphologic Features and Surficial Sediments

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Abstract

The continental shelf off New Hampshire (NH) in the Western Gulf of Maine (WGOM) is extremely complex and includes extensive bedrock outcrops, marine-modified glacial deposits, marine-formed shoals, seafloor plains, and associated features that are composed of a range of sediment types from mud to gravel. Furthermore, the physiography and composition of the seafloor frequently changes dramatically over relatively short distances (tens of meters). The complexity of the WGOM seafloor results from the interplay of glaciations, sea-level fluctuations, and marine processes (waves and currents). High-resolution multibeam echosounder (MBES) bathymetry and backscatter surveys, along with ground truth consisting of archived seismic reflection profiles, bottom sediment grain size data, vibracores, and video were used to develop surficial geology maps based on the Coastal and Marine Ecological Classification Standard (CMECS). The surficial geology maps cover ~3,250 km^2 and extend from the coast of NH seaward ~50 km to Jeffreys Ledge and depict major geoforms (physiographic features) and seafloor substrate (sediment size) classifications. CMECS provides a sound basis for classifying the texture of the seafloor; however, the geoform classifications need to be broadened for paraglacial environments in future studies.

The surficial geology maps presented here are a major refinement of the original maps produced in 2016 (see Ward et al., 2016a). The new maps reflect the results of a major field campaign conducted in 2016-2017 to obtain accurately located sediment samples and seafloor images to complement the original bottom sediment database. The new sites specifically targeted areas where high-resolution MBES bathymetry existed or where surficial features warranted further ground truth for evaluations. This work was designed to enhance the surficial geology mapping efforts and contribute to the development of new approaches for utilizing acoustics to remotely classify seafloor sediments and morphologic features (also supported by the University of New Hampshire Joint Hydrographic Center). The new surficial geology maps presented here depict the exposed bedrock, morphologic features, and sediment distribution on the continental shelf off NH, revealing features of the seafloor in exceptional detail that have not been previously described.

An important finding of this study was the extent and importance of marine-modified glacial features on the WGOM continental shelf. Extensive glacial deposits including drumlins, eskers, outwash, and moraines have been eroded and modified by wave and tidal currents as sea level fluctuated over the last 12,000 years. These features are potential sources of sand and gravel for future beach nourishment projects; however, more detailed subbottom seismic surveys and vibracores are needed for verification. Also, these potential resource areas are presently too far from shore and in too great a depth of water to be easily utilized. As the demand for sand and gravel becomes more acute and technologies advance, mineral resources farther offshore and in deeper water will likely become viable.

Introduction

A Cooperative Agreement was established in 2014 between the Bureau of Ocean Energy Management (BOEM) Marine Minerals Program (MMP), the University of New Hampshire (UNH) Center for Coastal and Ocean Mapping/Joint Hydrographic Center (CCOM/JHC), and the New Hampshire Geological Survey (NHGS) to identify potential marine mineral resources (sand and gravel) on the continental shelf off New Hampshire (NH). Part of this effort included the development of high-resolution surficial geology maps of the seafloor to help characterize bottom sediments and to provide a base for habitat or environmental assessments in the event mineral resources were found and were going to be utilized. The first set of maps was completed in 2016 (Ward et al., 2016a) and depicted exposed bedrock, major morphologic features, and the distribution of surficial sediment.

Presented here is a major update and refinement of the surficial geology maps. The maps cover an area of ~3,250 km^2 extending from the NH coast ~50 km seaward to Jeffreys Ledge (Figure 1). The goal of this work was to refine the surficial geology maps by increasing the detail where possible and by applying more rigorously a standardized, widely used approach to classify the seafloor (i.e. Coastal and Marine Ecological Classification Standard or CMECS; FGDC, 2012). To achieve this goal, the surficial geology maps were updated and CMECS applied utilizing a significantly expanded database including the results of a major field campaign and additional high-resolution bathymetry and backscatter.

Included within this report are the following.

1. High-resolution surficial geology maps depicting seafloor geoforms and substrate sediment classifications of the study area (Figure 1). These maps were developed from the original archived geophysical database, the results of a new and extensive field campaign conducted in 2016-2017, and an expansion of the high-resolution bathymetry in the Western Gulf of Maine (WGOM) (Ward et al., 2021h).
2. A detailed description of the methods and protocols used to develop the surficial geology maps. See ***Development of the Surficial Geology Maps of the Continental Shelf off New Hampshire***.
3. A ***Glossary*** of commonly used terms.
4. An extensive historical sediment grain size database built from all available studies from the continental shelf off NH carried out by investigators from UNH between 1971 and 2015. See ***New Hampshire Continental Shelf Historical Geophysical Database*** and **Appendix A**.
5. The geophysical database from a field campaign conducted in 2016-2017 which provided ground truth for the surficial geology mapping effort (see ***New Hampshire Continental Shelf 2016-2017 Field Campaign).*** Included here are stations and sampling history (**Appendix B**) and bottom sediment grain size classifications and statistics (**Appendix C**).

The surficial geology maps, grain size data, and seafloor photographs can be viewed at: (https://maps.ccom.unh.edu/portal/apps/webappviewer/index.html?id=aecfde28e84340b49b45029e6418c02f) (UNH CCOM/JHC web page "New Hampshire Shelf Surficial Geology").

This report and its associated databases, as well as additional sediment and seafloor photographs from the New Hampshire Continental Shelf 2016-2017 Field Campaign, are available digitally from the University of New Hampshire Scholars Repository (https://scholars.unh.edu/). Included are the following databases.

1. The *New Hampshire Continental Shelf Geophysical Database: 2016-2017 Field Campaign – Seafloor and Sample Photographs and Sediment Data* which includes photographs of the

sediment samples, seafloor photographs of locations where samples were collected, and selected grain size statistics (Ward et al., 2021b). (https://dx.doi.org/10.34051/d/2021.1)

2. The *New Hampshire Continental Shelf Geophysical Database: 2016-2017 Field Campaign - Stations and Sediment Data* which includes the station sampling history and sediment grain size data (Ward et al., 2021c). (https://dx.doi.org/10.34051/d/2021.2)
3. The *New Hampshire Continental Shelf Geophysical Database: 2016-2017 Field Campaign - Seafloor Photographs* which includes 855 seafloor photographs from 155 stations on the inner continental shelf off NH (Ward et al., 2021e). (https://dx.doi.org/10.34051/d/2021.5)
4. The *New Hampshire Continental Shelf Historical Geophysical Database: 1971 to 2015 - Sediment Data* which includes sediment grain size data from historical studies (Ward et al., 2021d). (https://dx.doi.org/10.34051/d/2021.3)

The report and databases presented here are part of a comprehensive series of reports on the bathymetry and surficial geology of the continental shelf off New Hampshire developed and supported by BOEM and UNH CCOM/JHC. Other associated major reports include the following.

1. Ward, L.G., Vallee-Anziani, M., and McAvoy, Z.S., 2016a, New Hampshire and Vicinity Continental Shelf: Morphologic Features and Surficial Sediments: BOEM/New Hampshire Cooperative Agreement (Contract M14ACOOO10) Technical Report, BOEM Marine Minerals Branch, 381 Elden Street, Herndon, VA, 20170, 24 pp. (http://ccom.unh.edu/publications/new-hampshire-and-vicinity-continental-shelf-morphologic-features-and-surficial)
2. Ward, L.G., Johnson, P., Nagel, E., McAvoy, Z.S., and Vallee-Anziani, M., 2016b, Western Gulf of Maine Bathymetry and Backscatter Synthesis: BOEM/New Hampshire Cooperative Agreement (Contract M14ACOOO10) Technical Report, BOEM Marine Minerals Branch, 381 Elden Street, Herndon, VA, 20170, 18 pp.
   Available at the UNH Scholars Repository: https://dx.doi.org/10.34051/p/2021.27
3. Ward, L.G., McAvoy, Z.S., and Vallee-Anziani, M., 2021a, New Hampshire and Vicinity Continental Shelf: Sand and Gravel Resources: BOEM/New Hampshire Cooperative Agreement (Contract M14ACOOO10) Technical Report, BOEM Marine Minerals Branch, 381 Elden Street, Herndon, VA, 20170, 97 pp.
   Available at the UNH Scholars Repository: https://dx.doi.org/10.34051/p/2021.30
4. Ward, L.G., Morrison, R.C., McAvoy, Z.S., and Vallee-Anziani, M., 2021g, Analysis of Vibracores from the New Hampshire Continental Shelf from 1984 and 1988: BOEM/New Hampshire Cooperative Agreement (Contract M14AC00010) Technical Report, Department of Interior, Bureau of Ocean Energy Management, Marine Minerals Division, 45600 Woodland Road, Sterling, VA, 20166, 173 pp.
   Available at the UNH Scholars Repository: https://dx.doi.org/10.34051/p/2021.26
5. Ward, L.G., Johnson, P., Bogonko, M., McAvoy, Z.S., and Morrison, R.C., 2021h, Northeast Bathymetry and Backscatter Compilation: Western Gulf of Maine, Southern New England, and Long Island Sound: BOEM/New Hampshire Cooperative Agreement (Contract M14ACOOO10) Technical Report, Department of Interior, Bureau of Ocean Energy Management, Marine Minerals Division, 45600 Woodland Road, Sterling, VA, 20166., 23 pp.
   Available at the UNH Scholars Repository: https://dx.doi.org/10.34051/p/2021.28

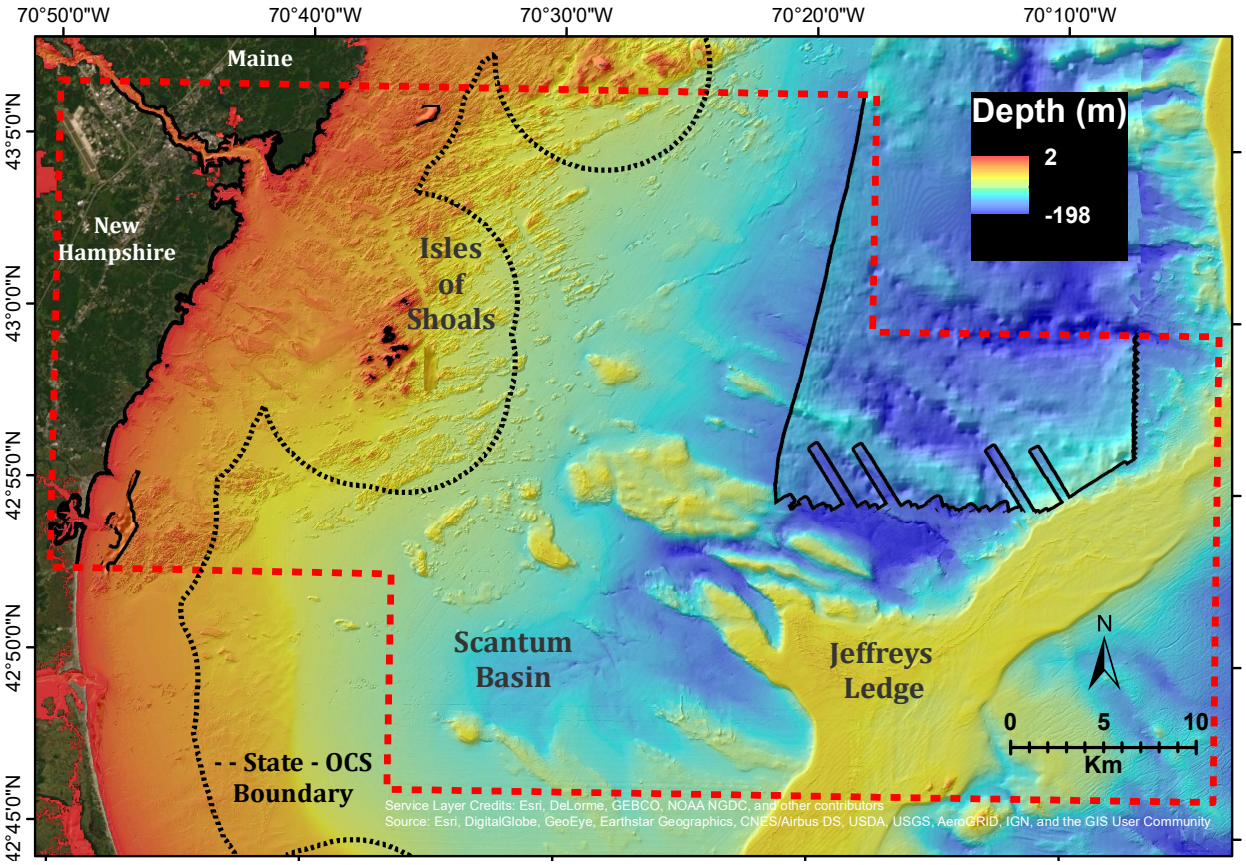

Figure 1. Location map of the study area. Surficial geology maps depicting geoforms and surficial sediments were developed for the area outlined by the red dashed line. The black dashed line is the boundary between state and federal jurisdiction. The bathymetry map was primarily developed from high-resolution multibeam surveys and lidar and is gridded at 4 m. The exception is the area outlined in black in the upper right that is based on a compilation of lower-resolution single beam surveys and regional coverages. This area is gridded at 16 m.

Development of the Surficial Geology Maps of the Continental Shelf off New Hampshire

The surficial geology of the continental shelf off NH is depicted in three types of maps that utilize CMECS (FGDC, 2012) including: Geoforms (major morphologic or physiographic features); Geologic Substrate Subclass; and Substrate Group. The CMECS classification and the methods used to develop the surficial geology maps are described below.

Approach to Mapping the Surficial Geology

Mapping the surficial geology of the continental shelf off NH used the following protocol. Geoforms and geologic substrate type (sediment) were identified and mapped based on bathymetry, bathymetric derivatives, backscatter where available, and ground truth consisting of grain size data and photographs. All of these databases were not available for the entire study area. Consequently, the best information available was used.

The seafloor was mapped at three levels depending on the availability and the quality of data:

1. Seafloor regions where high-quality bathymetry and backscatter were available and where reliable ground truth stations with either grain size data or video existed were classified and mapped using the CMECS hierarchy. This includes geoforms, substrate subclass, and substrate group. The mapped substrates in these regions were well vetted and verified.
2. Seafloor regions where high-quality bathymetry and acoustic backscatter were available, but without reliable ground truth stations, were classified and the geoforms and substrate sediment subclass mapped with reasonable confidence. However, mapping the more detailed substrate groups was based on proximity and comparisons to other mapped regions with similar morphology and acoustic characteristics. In these regions, the substrate group was inferred, mapped, and identified with a diagonal line pattern overlay. Ultimately these areas will need ground truth for verification.
3. Seafloor regions that lack high-resolution bathymetry, backscatter, and ground truth were not mapped at this time. These regions were left transparent and the underlying hillshade displayed to show the bottom topography.

Mapping the Surficial Geology

Interpretation and mapping of the seafloor geology was done by skilled analysts with backgrounds in earth sciences and seafloor characterization. The maps were based on the following:

1. High-resolution bathymetry for almost the entire study area (Ward et al., 2021h)
2. Acoustic backscatter synthesis for ~50% of the study area (Ward et al., 2021h)
3. Bathymetry derivatives including hillshade, roughness, and bathymetric position index
4. An extensive geophysical database consisting of archived surficial sediment grain size data from studies conducted between 1971 and 2015 along with analog subbottom seismic profiles from the 1980s
5. An intensive field campaign in 2016 and 2017 on the NH continental shelf targeting areas where additional ground truth was needed including sediment samples and seafloor photographs

The mapping procedure relied on the expertise of experienced analysts with geophysical and seafloor characterization backgrounds for several reasons related to the study area and the nature of the database. First, the study area is large (~3,250 km^2) and is a paraglacial environment. The seafloor is extremely variable with a wide range of seafloor types that frequently change over short distances. Second, the geophysical database developed for this study for ground truth is extensive, but inconsistent in spatial coverage, leaving large areas with incomplete or sparse information. Furthermore, some of the sediment grain size data are from surveys completed as early as the 1970s and the positioning has large uncertainty (discussed below). Third, the high-resolution MBES bathymetry for most of the study area is excellent. However, high quality, co-registered acoustic backscatter, which is critical to automated seafloor classification algorithms, is very limited in coverage. Therefore, after an initial assessment was done using more automated approaches to mapping the study area, such as remote or supervised classifications schemes (e.g., Erdey-Heydorn, 2008; Dorschel et al., 2014) and MBES backscatter Angular Range Analysis (Fonseca and Mayer, 2007), the use of skilled analysts was determined to be the best approach for this study.

Since the mapping effort described here was completed, an automated landform analysis algorithm (Bathymetry- and Reflectivity-Based Approach for Seafloor Segmentation: BRESS) was developed at UNH CCOM/JHC which utilizes high-resolution bathymetry to map landforms (e.g., flat, slope, ridge, valley, shoulder, footslope) (Masetti et al., 2018). BRESS has been tested on small areas of the NH continental

shelf with good success (Ward et al., 2019) and on the U.S. Atlantic continental margin (Sowers, 2020; Sowers et al., 2020). Future work will also consider the use of machine learning approaches (e.g., Pendleton et al., 2019).

The surficial geology maps for the NH continental shelf were originally produced in ArcGIS 10 (Ward et al., 2016a). Differences in the observed bathymetric derivatives such as hillshade, roughness, BPI, and backscatter served as traceable outlines of transitions between different morphologic or sedimentologic characteristics. Polygons were manually drawn using the Create Polygon Feature tool within an editing session, resulting in ~4,900 individual polygon features. For each feature drawn, a designation of morphologic (geoform) and sediment type was entered, along with comments stating the justification for the geologic interpretation. The surficial geology map layers were composed of separate polygon feature shapefiles consisting of a geoform layer, substrate subclass layer, and substrate group layer. The map polygons were then checked again by an analyst to confirm that interpretations of map areas matched the designations within the map layers attribute table. Metadata was constructed in an Excel spreadsheet, transposed to the feature layer descriptions using ArcCatalog, and converted to XML using USGS Metadata Wizard, 2015 for ArcGIS 10.0.

A major field campaign in 2016-2017 (described below) was motivated by recognition that the original maps had significant data gaps in several important locations where higher resolution was desired. In order to incorporate the new information derived from the 2016-2017 field campaign, improve cartographic representation in the surficial geology, and re-organize the original map databases to more closely match FGDC (2012) standards for CMECS, a number of modifications were made to the original map products. The ~4,900 individual polygon features were combined using the Spatial Join Tool (Analysis Toolbox) and stored as an ESRI FGDBR. For quality assurance, a map topology was created and unsuccessful joins or previous errors such as dangles, overlapping, incompleteness, or gaps between polygons were corrected with Create Topology Tool (Data Management Toolbox). Attribute tables for the surficial map polygons were then enhanced with attribute hierarchy as defined by the CMECS proposed data structure and Crosswalk Tools version 1.0 (Office of Coastal Management, 2015).

Once in the intended format, updated WGOM bathymetry data, 2016-2017 ground truth sediment analysis results, and seafloor photos were used to verify, re-classify, or re-segment the surficial map polygons. Expanded bathymetry coverage and ground truth data also enabled expansion of the surficial geology maps to include areas closer to shore and into the nearshore of southern Maine.

Keeping in compliance with the FGDC and BOEM MMIS spatial data standards, metadata was constructed for each of the updated map and ground truth vector layers. The USGS Metadata Tools extension (USGS Metadata Wizard) for ArcGIS 10.7 was used to set field attribute definitions and domains while ArcCatalog was employed to format descriptions, contact information, and to summarize processing steps.

Coastal and Marine Ecological Classification Standard

The CMECS geologic substrate classifications are built on a simplification of the Wentworth (1922) and Folk (1954; 1980) classification schemes (Table 1). Essentially, the size classes are grouped into a hierarchy of broader categories including Substrate Class, Substrate Group, and Substrate Subgroup. Each level provides more detailed sediment classifications. The advantage of this approach is that it allows the seafloor sediment to be mapped at different levels of detail that reflect the database. Here, the seafloor sediment is mapped at the Substrate Subclass and Substrate Group levels.

Based on an adaption of CMECS (FGDC, 2012), for this study geoforms are defined as morphologic features that are formed by geologic processes. For example, relatively large features with positive relief such as exposed bedrock, drumlins, moraines, or sandy shoals would be considered geoforms. Low-lying features

and depressions are also included as geoforms; for example, flat or low-slope seafloor plains, sand ramps, basins, or small channels on the seafloor. The geoforms were identified by bathymetry, bathymetric derivatives, backscatter intensity, and sediment textural characteristics. The primary bathymetric derivatives used here were hillshade, BPI, and roughness. Aspect and slope were also computed and tested, but did not provide additional information and were not used in the classifications. The definitions of the geoforms used in this study are defined in Table 2. Most of the geoform classifications used here come directly from or are slightly modified from CMECS. However, a number of classifications were not present in the CMECS and therefore were defined here.

Table 1. CMECS Substrate Classification (FGDC, 2012).

Substrate Origin	Substrate Class	Substrate Subclass	Substrate Group	Substrate Subgroup
Geologic Substrate	Rock Substrate	Bedrock		
	Unconsolidated Mineral Substrate	Coarse Unconsolidated Substrate	Gravel	Boulder
				Cobble
				Pebble
				Granule
			Gravel Mixes	Sandy Gravel
				Muddy Sandy Gravel
				Muddy Gravel
			Gravelly	Gravelly Sand
				Gravelly Muddy Sand
				Gravelly Mud
		Fine Unconsolidated Substrate	Slightly Gravelly	Slightly Gravelly Sand
				Slightly Gravelly Muddy Sand
				Slightly Gravelly Sandy Mud
				Slightly Gravelly Mud
			Sand	Very Coarse Sand
				Coarse Sand
				Medium Sand
				Fine Sand
				Very Fine Sand
			Muddy Sand	Silty Sand
				Silty-Clayey Sand
				Clayey Sand
			Sandy Mud	Sandy Silt
				Sandy Silt-Clay
				Sandy Clay
			Mud	Silt
				Silt-Clay
				Clay

Table 2(a). Geoforms classification modified after FGDC (2012).

Bedforms or Bedform Field: Areas of larger bedforms or subaqueous dunes that are identifiable with bathymetry, hillshade, and backscatter. Thus, they must have wavelengths that exceed the bathymetry grid size. They are assumed to be largely composed of sand or gravelly sand and are formed by waves and currents.
Bedrock Border: Deposits of unconsolidated sediment surrounding a bedrock outcrop. They are identified by bathymetry, hillshade, roughness, and acoustic backscatter.
Channel: Linear or sinuous depressions on an otherwise flat seafloor.
Depression: Small, shallow basins or low areas of the seafloor with no natural outlet. Depressions are identified by bathymetry, BPI, and hillshade.
Ebb Tidal Delta: Subaqueous, typically fan-shaped delta composed of mostly sand and fine gravel located on the seaward side of a tidal inlet. The morphology of these features is controlled by the flood and ebb tidal currents through the adjacent tidal inlet.
Iceberg Scour Scar: Gouges or deformations of the bottom formed by movements of an iceberg dragging across the substrate. These are formed in glaciated areas and can extend for long distances.
Inlet: Narrow opening in the coast that facilitates water exchange between the ocean and adjacent enclosed bays, lagoons or marshes.
Moraine: Elongated mound or ridge-like feature often occurring as clusters on sloping seafloor or imposed on bathymetric features with positive relief. These distinct subglacial deposits are composed of unsorted, unstratified gravel mixes to megaclasts.
Ridge: Elongated, narrow, steep-sided, crested features. Identifiable in bathymetry and shaded relief.
Shoal: Relatively shallow area in a body of water, rising above adjacent seafloor. Shoals are morphologically diverse and are largely influenced by tidal or river currents. Shoals are normally composed of sand but can also be gravel mixes.
Slope: An inclined area of seafloor with a gentle change in depth over its upper and lower limits. Slopes occur at all scales and can be composed of various types of material. Primarily identified by bathymetry.
Tombolo: Sand or gravel bar or barrier that connects an island with the mainland.

Table 2(b). Geoform Classification modified after Barnhardt et al. (2007).

Nearshore Ramp: Gently sloping sandy or gravelly seafloor located offshore of a beach. The nearshore ramp generally exhibits shore-parallel bathymetric contours and is primarily covered with sand-rich sediment, although locally small exposures of ledge, cobbles, and boulders may be present.

Table 2(c): Geoforms classification defined for this study.

Bedrock Outcrop: Exposed bedrock with little sediment coverage. It is often heavily vegetated. Bedrock outcrops are identified by bathymetry, hillshade, roughness, and acoustic backscatter. The bedrock often has ridges separated by bathymetric lows or swales with sediment.
Marine-Formed Feature or Shoals: Wave- or current-formed features such as sand bars or mounds, shoals formed at lower sea levels but now submerged, and sand or gravel ridges. The marine-formed features tend

to have relief but are generally smooth in appearance. Although defined here, the features are similar in some cases to moraine shoals or other drowned, elongated offshore ridges.
Marine-Modified Glacial Feature: Glacially formed features now submerged and altered via erosion in the marine environment. Examples include eroded drumlins, eskers, outwash, or moraines (see Glossary). In the study area, the drumlins tend to be 0.5 - 4 km in length (long axis) and are oriented northwest-southeast. Some of the larger features (up to 10 km) appear to be groups of drumlins. Small glacial moraines also occur that are less than a few hundred meters in length, linear to arcuate in shape with low relief, and tend to be oriented in a northeast-southwest direction (likely De Geer moraines). Marine-modified glacial features tend to have high backscatter and roughness. The surface can appear eroded and rough, presumably due to the presence of cobble to boulder gravels.
Seafloor Plain: Large areas of the seafloor that are relatively flat or have a low slope. They can have local areas that are undulating or slightly rougher than adjacent areas. Seafloor plains tend to be composed of finer-grained sediments.
Sediment-Draped Bedrock: Bedrock covered by a thin layer of sediment. It appears as distinctive bedrock, but the texture is more subdued.
Undefined: Apparent geoforms or areas of the seafloor which cannot be identified with the available database.

Major Data Sources for Geoform and Substrate Mapping

New Hampshire Continental Shelf Geophysical Database: 1971-2015

The UNH CCOM/JHC "New Hampshire Continental Shelf Geophysical Database: 1971-2015" includes grain size data and statistics from multiple studies carried out between 1971 and 2015. The database contains 725 samples, 24 vibracore logs (described in Ward et al., 2021g), and ~1,280 km of analog seismic-reflection profiles (Figure 2). The surveys were conducted on the NH continental shelf from the early 1970s until 2015 by a number of investigators from UNH. Although the archived database is relatively large, the coverage is somewhat inconsistent in quality and distribution. In addition, the positioning uncertainty of the station locations varies over an order of magnitude (discussed below). The 1971-2015 sediment grain size data and classifications are given in Appendix A. A full description of the vibracores including locations, analysis methods, core logs, and sediment data can be found in Ward et al. (2021g). More information about the subbottom seismics can be found in Ward et al. (2021a). Much of the UNH database was incorporated into previous sediment syntheses by the United States Geological Survey (USGS) (Poppe et al., 2003; Reid et al., 2005). In addition, parts of the database were incorporated into the Bureau of Ocean Energy Management (BOEM) Marine Minerals Program (MMP) data portal (Marine Minerals Information System or MMIS). Several other sediment databases were utilized for the mapping effort.

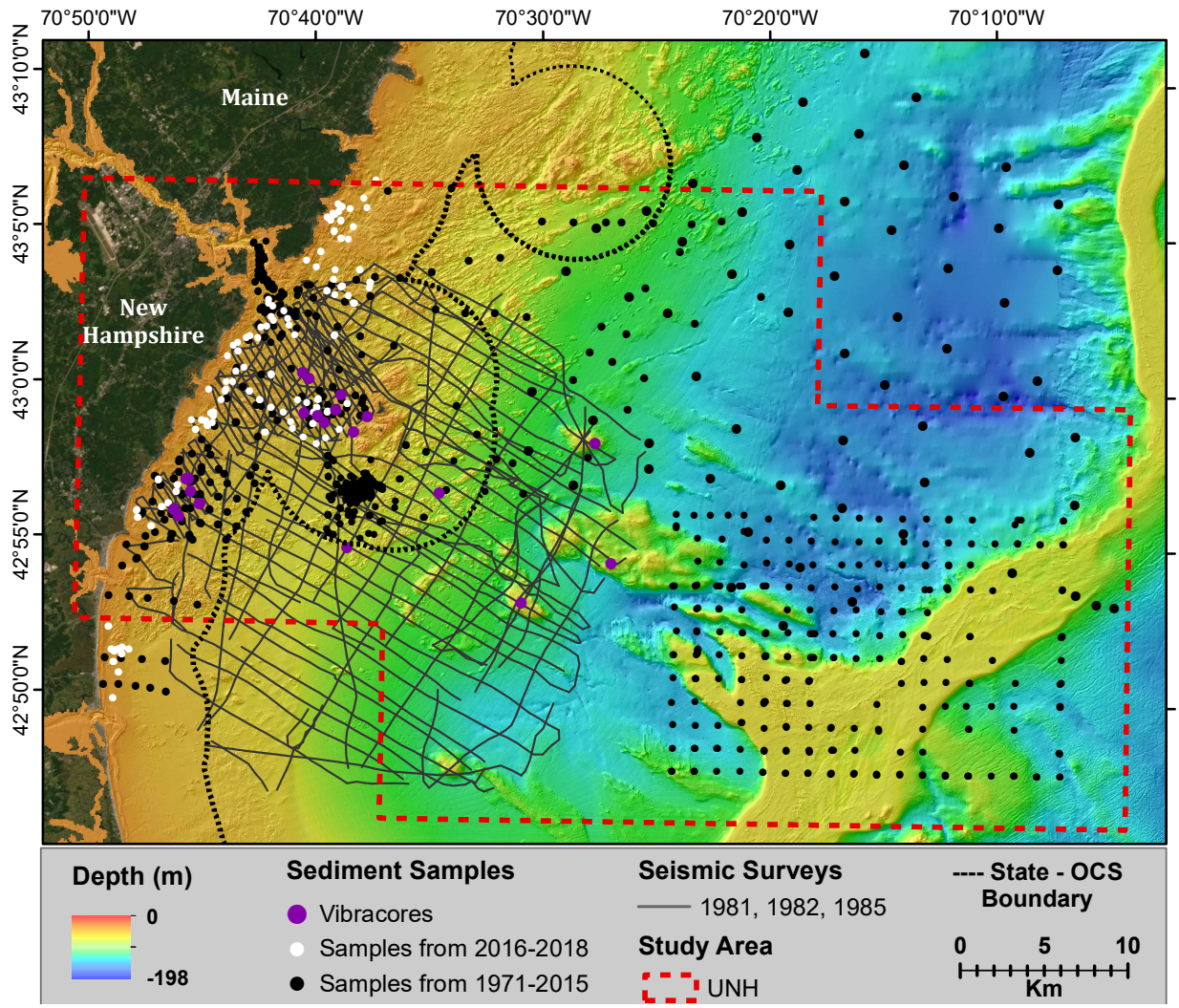

Figure 2. Location map for the UNH CCOM/JHC New Hampshire shelf geophysical database consisting of sediment grain size data and classifications, vibracore logs, seismic-reflection profiles (SBP), and seafloor photographs. Except for the SBP, the database can be viewed at: (https://maps.ccom.unh.edu/portal/apps/webappviewer/index.html?id=aecfde28e84340b49b45029e6418c02f). Most of the database is also available and can be downloaded (see the **Introduction** for locations).

New Hampshire Continental Shelf 2016-2017 Field Campaign

To address a gap in ground truth coverage of the seafloor, a major field campaign was conducted in 2016–2017 on the NH continental shelf to obtain accurately-located sediment samples and seafloor images. In total, 151 stations were occupied over thirteen one-day cruises. Seafloor video was obtained at all of the stations, while sediment samples were collected for grain size analysis at eighty-five stations (Figure 3; Appendices B and C). Not all stations occupied were sampled for sediments due to the coarseness of the substrate (e.g., bedrock or pebble-cobble bottoms). The new stations specifically targeted areas where high-resolution MBES bathymetry and backscatter existed or surficial features warranted further ground truth for evaluations. This work was designed to enhance the surficial geology mapping efforts and to

provide needed data for an associated study being conducted in conjunction with UNH CCOM/JHC with the purpose of assessing new methods to utilize acoustics to aid in seafloor mapping (Ward et al., 2019).

The cruises were conducted aboard the UNH Research Vessel Gulf Surveyor, a 19 m twin screw aluminum catamaran. Bottom sediment samples were collected with a Shipek grab sampler. Seafloor video was obtained with a fabricated drop camera consisting of a Delta Vision camera frame mounted 0.4 m from the seafloor when in its vertical position. The base of the frame was 0.3 m by 0.3 m and was divided into 2 cm increments that provided a scale on all sides. The camera had a 1.2 mm pixel resolution (Pe'eri et al., 2013). The ship's Global Navigation Satellite System (GNSS) was recorded during sampling. The estimated accuracy of the sample positions was ~30 m for the Shipek grab samples and ~50 m for the video locations (discussed below). However, it is likely the positioning was more accurate than these estimates. The bottom sediments were analyzed with standard sieve and pipette analyses after Folk (1980). Statistics and initial sediment classifications were determined in Gradistat (Blott and Pye, 2001). Subsequently, the sediment samples were classified with CMECS (FGDC, 2012). Additional sediment samples previously collected by the UNH Ocean Engineering 972 Hydrographic Field Course classes in 2012, 2014, and 2018 were analyzed and pooled with the 2016-2017 Field Campaign database. The sediment grain size data is presented in Appendix C.

Positioning Uncertainty of Station Locations

Determination of the station locations where bottom sediment samples were collected was based on the position of the research vessel. This makes the reasonable assumption that the sediment sampler hung directly below the deployment location on the sampling platform (boat). However, determination of the accuracy of the position of the research vessel has changed significantly over time from the earlier studies in the database from the 1970s which used radar and dead reckoning to the highly accurate RTK GNSS used today. The uncertainty in position of the earliest studies included in the Historical Geophysical Database is not clear, but the error was estimated by the ship's crew to range from 250 to 1,000 m depending on distance to known points (targets). Samples using radar for positioning were included in the database, but were not used for verification or ground truth in the surficial geology maps presented in this report. Loran C was used for the sediment samples collected from the 1980s to the early 1990s. The absolute positioning error for Loran C was between ~185 and 463 m, depending on distance from shore and land obstructions (USCG Loran-C Users Handbook, accessed March 15, 2021), although the precision of the positions were significantly better. The data included in the sediment database presented here had no obstructions and were collected during good weather and sea conditions. Therefore, it is likely the positioning error was closer to the lower estimate for the accuracy of Loran C. The most accurate positions came from the RTK or post-processed GNSS used since the early 2000s, with position uncertainty on the order of meters for the research vessel. However, for bottom samples the GNSS antenna offset has to be considered, as well as orientation of the boat. Additionally, the drift of the boat and the drag on the camera must be considered for seafloor videography and photographs. The total estimated error for RTK GNSS are on the order of 30 m for sediment samples and 50 m for videography and photographs. The uncertainty of each sample location was evaluated and a numbering system for location uncertainties assigned (described in Table 3). Uncertainty information is included in the database in Appendices A and C and was considered in the mapping procedures (e.g., location and reliability of analyses).

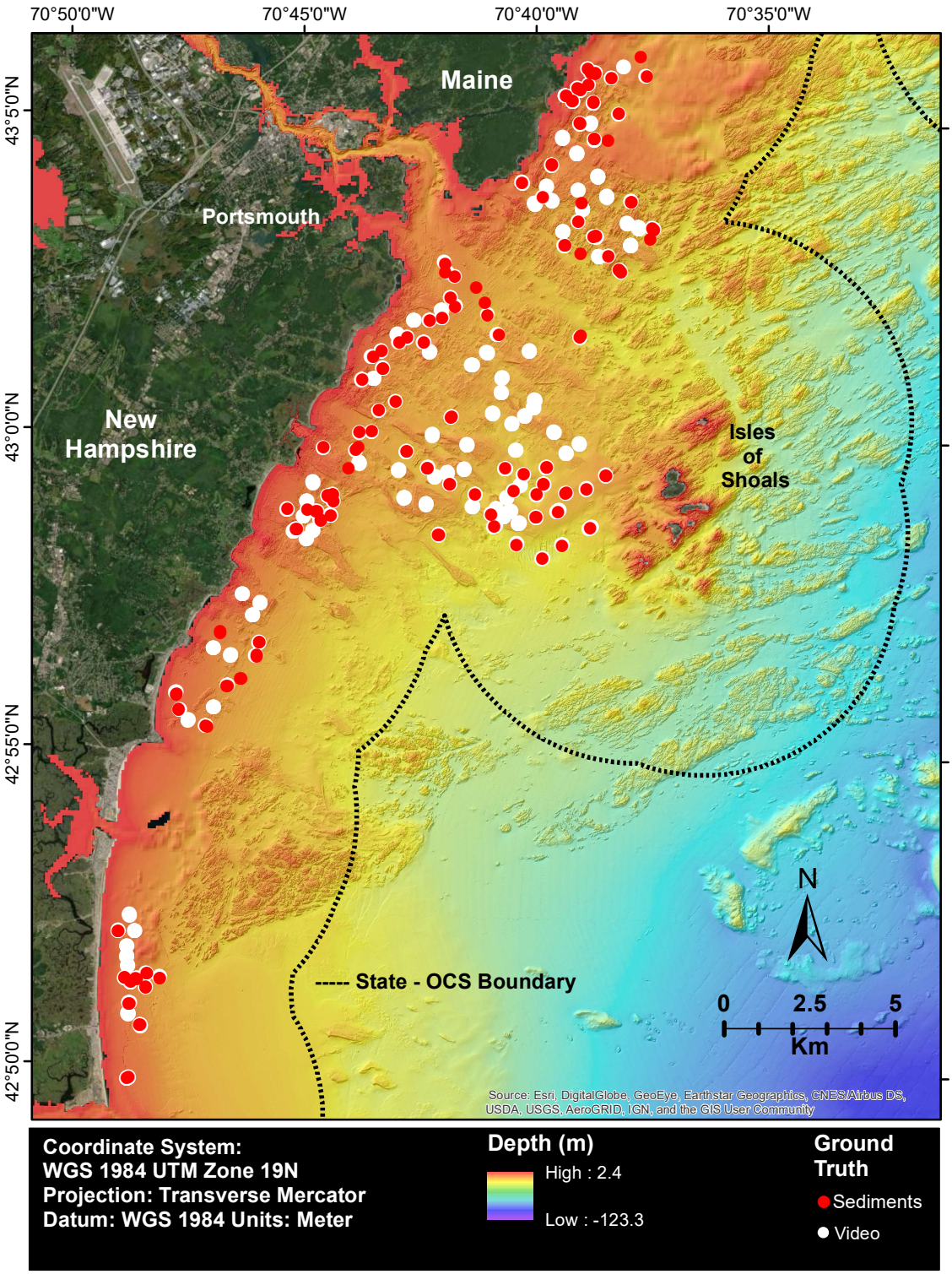

Figure 3. Location map of the NH Shelf 2016-2017 Field Campaign bottom sediment sampling and videography stations. Station locations and sample types are shown in Appendix B. The sediment data and seafloor photographs are downloadable at UNH Scholars Repository at https://dx.doi.org/10.34051/d/2021.1, https://dx.doi.org/10.34051/d/2021.2, and https://dx.doi.org/10.34051/d/2021.5, and viewable at: https://maps.ccom.unh.edu/portal/apps/webappviewer/index.html?id=aecfde28e84340b49b45029e6418c02f.

Table 3. Estimated station location uncertainty based on a review of the sampling platform's navigation system, associated position determination uncertainties, antenna location relative to equipment deployment location (offsets), and field experience. These values are best estimates with recognition that the values are guidelines and not exact. They apply only to the databases presented in this report and are not meant to be applied to other databases. The categories were used to describe each sediment grain size sample in the Historical Geophysical Database (Appendix A) and the 2016-2017 Field Campaign (Appendix C).

Category	System Used for Ship Positioning	Estimated Sample Location Uncertainty
1	GNSS: Corrected with RTK or Postprocessing	Less than 30 m
2	GNSS: Without Corrections	30 m to 50 m
3	Loran C	185 m to 463 m
4	Radar, Charts, Dead Reckoning	250 m to 1000 m

Bathymetry and Backscatter

The primary bathymetry and backscatter databases used for seafloor mapping of the continental shelf off NH included the Northeast Bathymetry and Backscatter Compilation: Western Gulf of Maine, Southern New England, and Long Island (NE Compilation) (Ward et al., 2021h), and the UNH Ocean Engineering 972 Hydrographic Field Course MBES surveys from 2003 to 2018 (excluding the survey from 2011 which was located outside of the study area). The NE Compilation is an update and expansion of the WGOM Bathymetry and Backscatter Synthesis (WGOM Synthesis) (Ward et al., 2016b). The NE Compilation bathymetry synthesis incorporates all known (to the investigators) high-resolution multibeam echosounder (MBES) surveys in the WGOM including the CCOM/JHC surveys and combines them into a single map product (Figure 4). Although the extent of the high-resolution multibeam bathymetry is large, there are still major gaps in the coverage of the seafloor. In these areas, the lower resolution regional coverages that are largely based on single beam acoustic surveys fill the gaps, but the quality is far lower. While the high-resolution MBES bathymetry synthesis is gridded at 4 m, the regional bathymetry is gridded at 16 m (Figure 5). However, the original bathymetry for the regional coverage was gridded at a much higher resolution (up to 90 m) and was simply re-gridded in the NE Compilation.

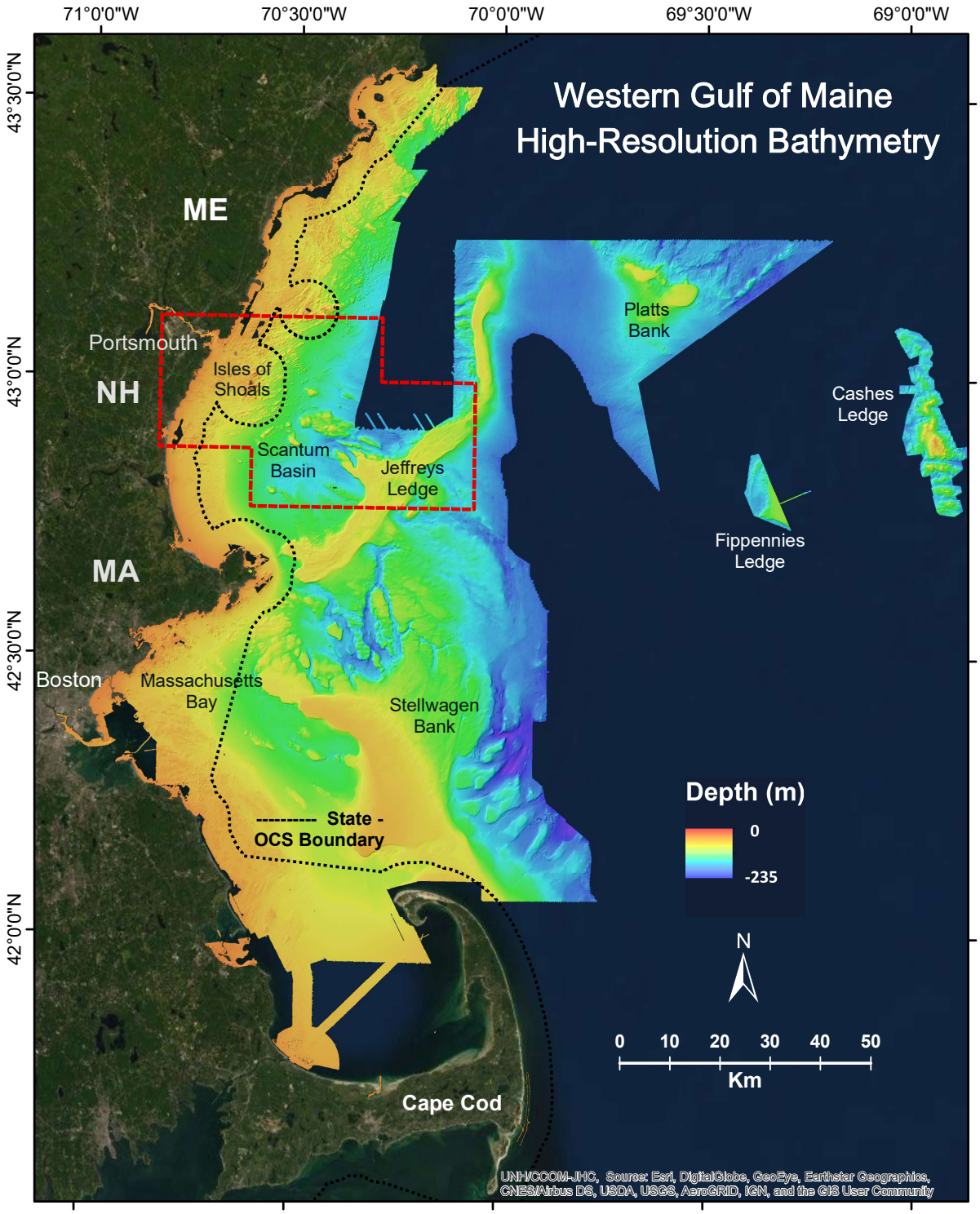

Figure 4. High-resolution bathymetry synthesis for the Western Gulf of Maine gridded at 4 m from the Northeast Bathymetry and Backscatter Compilation. See http://ccom.unh.edu/project/NE-bathymetry-and-backscatter-compilation, assessed March 15, 2021. Surficial geology maps were developed for the area outlined with a dashed red line.

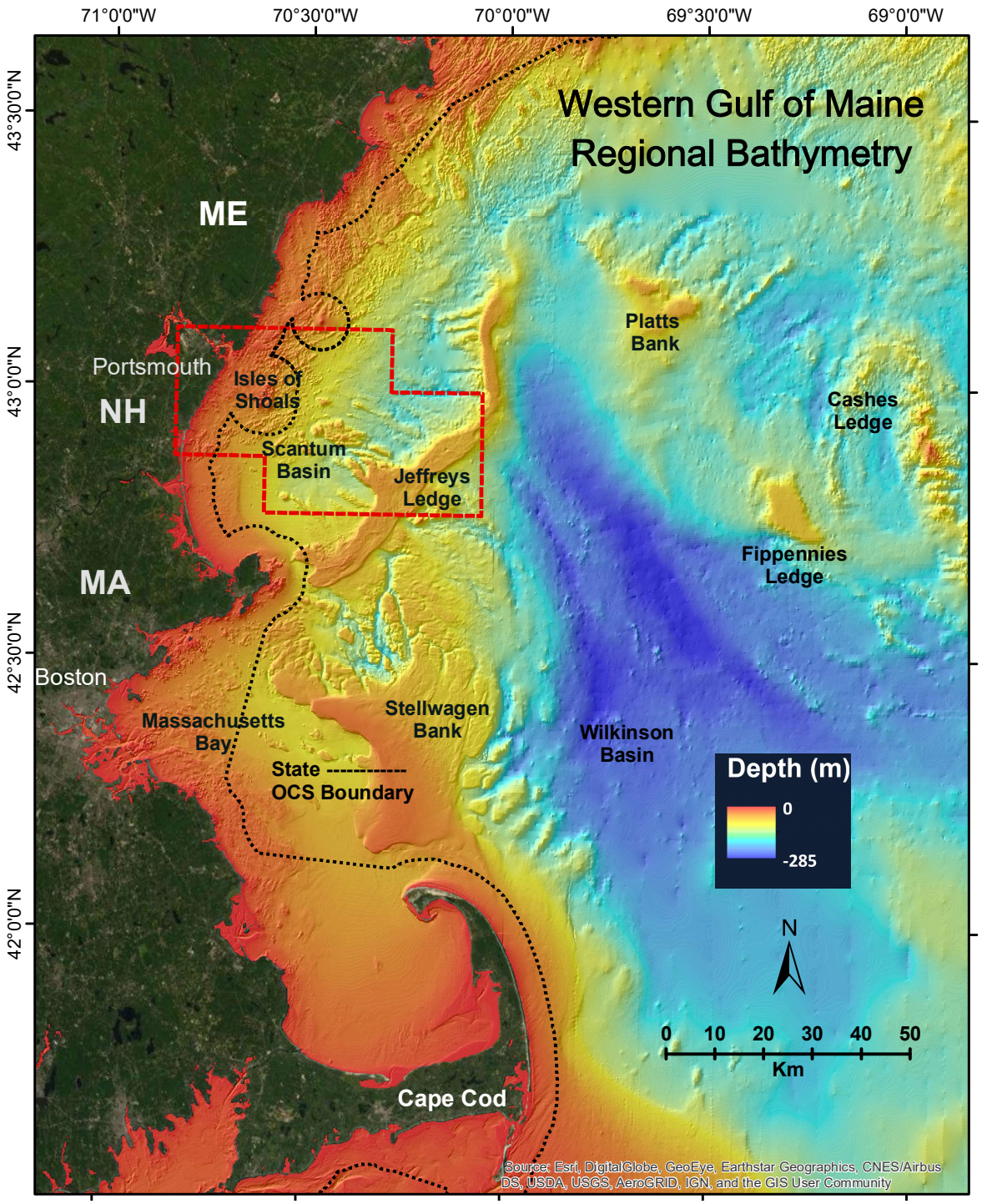

Figure 5. Regional bathymetry synthesis for the Western Gulf of Maine gridded at 16 m from the Northeast Bathymetry and Backscatter Compilation. See http://ccom.unh.edu/project/NE-bathymetry-and-backscatter-compilation, assessed March 15, 2021. Surficial geology maps were developed for the area outlined in with a dashed red line.

The backscatter synthesis was prepared from MBES mosaics available from National Centers for Environmental Information (NCEI), NOAA National Ocean Service (NOS), and UNH JHC/CCOM as part of the WGOM Bathymetry and Backscatter Synthesis (Figure 6; Ward et al., 2016b). The goal was to develop a single surface with backscatter surveys to help map the seafloor and predict sediment grain size. However, a review of the MBES backscatter mosaics obtained for the synthesis revealed the surveys were collected with different acoustic systems that each used different algorithms to process the backscatter. Also, the MBES was run over a wide range of frequencies. Recent studies have also shown that the algorithms used by different vendors can yield different results, and the lack of a consistent calibration method is problematic for combining or synthesizing MBES backscatter (Weber et al., 2018; Smith et al., 2020). Finally, with the exception of the UNH JHC surveys, many of the backscatter mosaics were of poor quality and needed to be reprocessed. Therefore, all backscatter surveys were converted to grayscale and the range of pixel intensity values were normalized and standardized across all surveys to create a seamless mosaic image gridded at 1.5 m. The backscatter mosaic was very useful for identifying textural boundaries and geomorphologically significant seafloor features. However, it was not useful for predictive models.

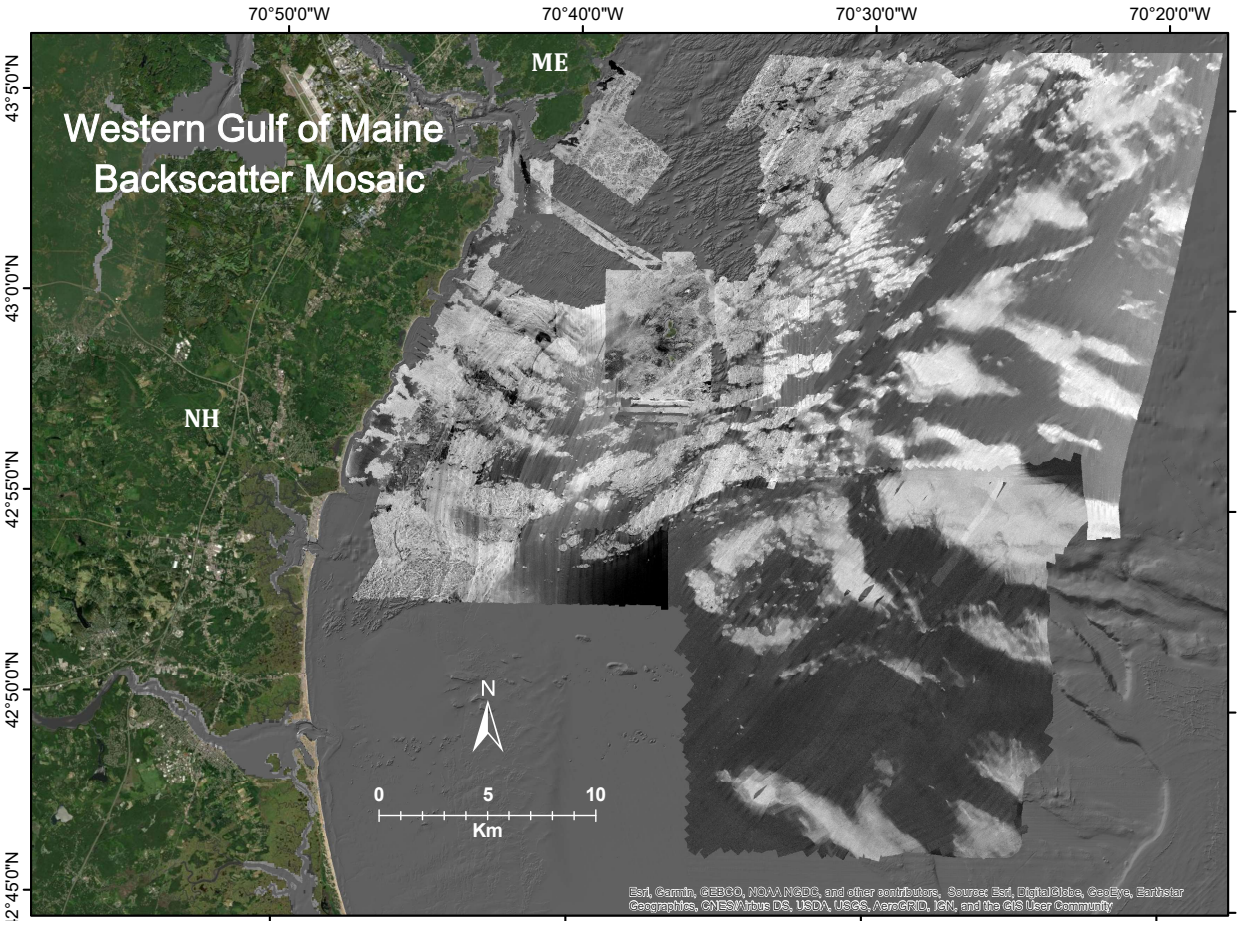

Figure 6. Backscatter synthesis shown in the Western Gulf of Maine Bathymetry and Backscatter Synthesis. Intensity is indicated by grayscale with the lighter shades indicating stronger backscatter reflection.

Based on the results of this effort it was decided that in going forward, acoustic backscatter surveys would not be synthesized, but rather kept as separate mosaics with intensity presented in decibels if possible. The MBES surveys carried out each summer as part of the UNH CCOM/JHC (Ocean Engineering 972) Hydrographic Field Course are consistently of high quality (referred to as the CCOM/JHC Summer Hydro or SH in the databases). Therefore, the CCOM/JHC Summer Hydro high-resolution bathymetry was merged into the NE Compilation bathymetry synthesis described above, but was also kept as separate surveys along with the co-registered backscatter. The backscatter from the CCOM/JHC Summer Hydro surveys run prior to 2016 were included in the WGOM Synthesis described above, but also maintained as separate surveys with intensity values in decibels, except for SH2017 and SH2018 which were archived as grayscale mosaics (Figure 7). The CCOM/JHC Summer Hydro surveys proved very useful for mapping purposes, but were too limited in scope to use remote sensing applications for developing the surficial geology maps. More details of the surveys and metadata can be are found in Ward et al. (2016b) and Ward et al. (2021h). The NE Compilation is available on the UNH CCOM/JHC web site at http://ccom.unh.edu/project/NE-bathymetry-and-backscatter-compilation, accessed March 15, 2021.

Bathymetric Derivatives

Previous work has shown that several bathymetric derivatives are helpful for seafloor characterization and substrate mapping including slope, bottom roughness or rugosity, ruggedness, and bathymetric position index (BPI) (Erdey-Heydorn, 2008; Dorschel et al., 2014; Oliveira et al., 2020). Many of these derivatives have been used in supervised or unsupervised remote classifications or machine learning in the past (Diesing et al., 2014). During this study the seafloor classification and mapping was completed manually by an expert analyst. However, several bathymetric derivatives proved helpful in determining textural boundaries (e.g., roughness or rugosity) and physiographic features (e.g., hillshade and BPI). Therefore, the derivatives for the continental shelf off NH were developed at the highest resolution possible (and practical). The multibeam surveys for the study area were re-gridded with regard to their location and data source (original resolution). The bathymetry was divided into a nearshore and offshore region and gridded at 2 m and 4 m, respectively. In the areas where only low-resolution bathymetry was available, the grid size was 8 m.

The bathymetry was gridded using the “Mosaic to New Raster” tool from the Data Management Toolbox in ERSI ArcGIS 10.3. The new bathymetry datasets were stored in geodatabases in FGDBR (File Geodatabase Raster) format. The pixel type and depth were set to 32-bit supporting decimals (32_BIT_FLOAT), and the number of bands was set to one. The Mosaic Operator for the overlapping areas was configured to be the average value of the overlapping cells. The bathymetry was then used to create the derivatives including hillshade, BPI, and roughness.

Hillshade

The hillshade was developed by generating an imaginary light source and casting shades and shadows to create the shaded relief effect (Figure 8). A default azimuth of 315° and altitude of 45° were used for the illumination. The output values range from 0 to 255, with 0 representing the shadowed areas and 255 representing the brightest. The vertical exaggeration was 10x. The hillshade was very helpful in defining bathymetric features as it highlights bathymetric changes. Also, the vertical exaggerations can be altered to enhance features where needed.

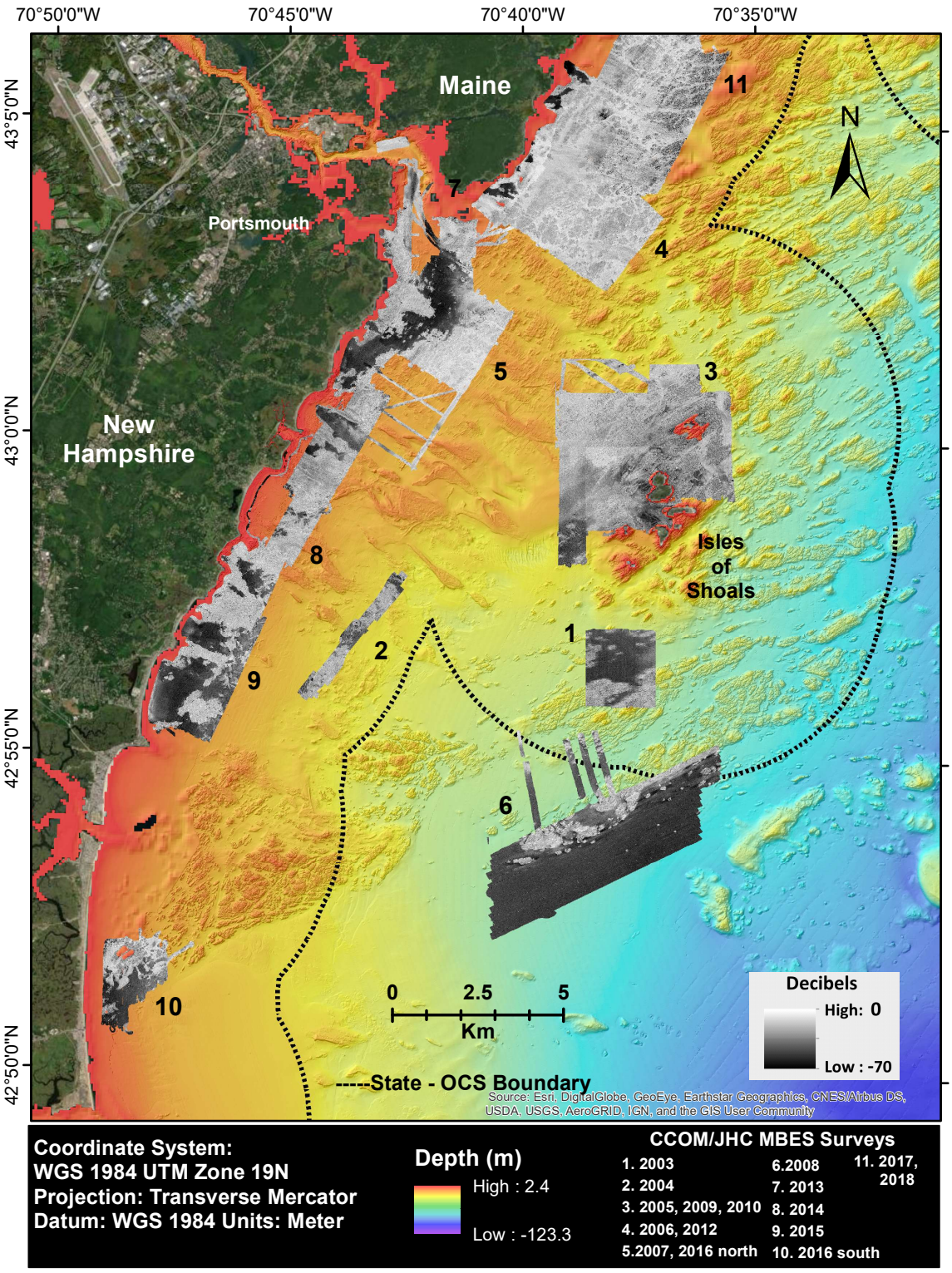

Figure 7. Location map of the UNH CCOM/JHC (Ocean Engineering 972) Hydrographic Field Course MBES surveys. The range of backscatter intensity in decibels shown in the legend is approximate due to the different MBES systems and variable frequencies used in the surveys. Also, the 2017 and 2018 backscatter surveys are in grayscale and not decibel values. For these surveys the lighter shades indicate stronger backscatter reflection or intensity. Station locations and sample types are given in Appendix B.

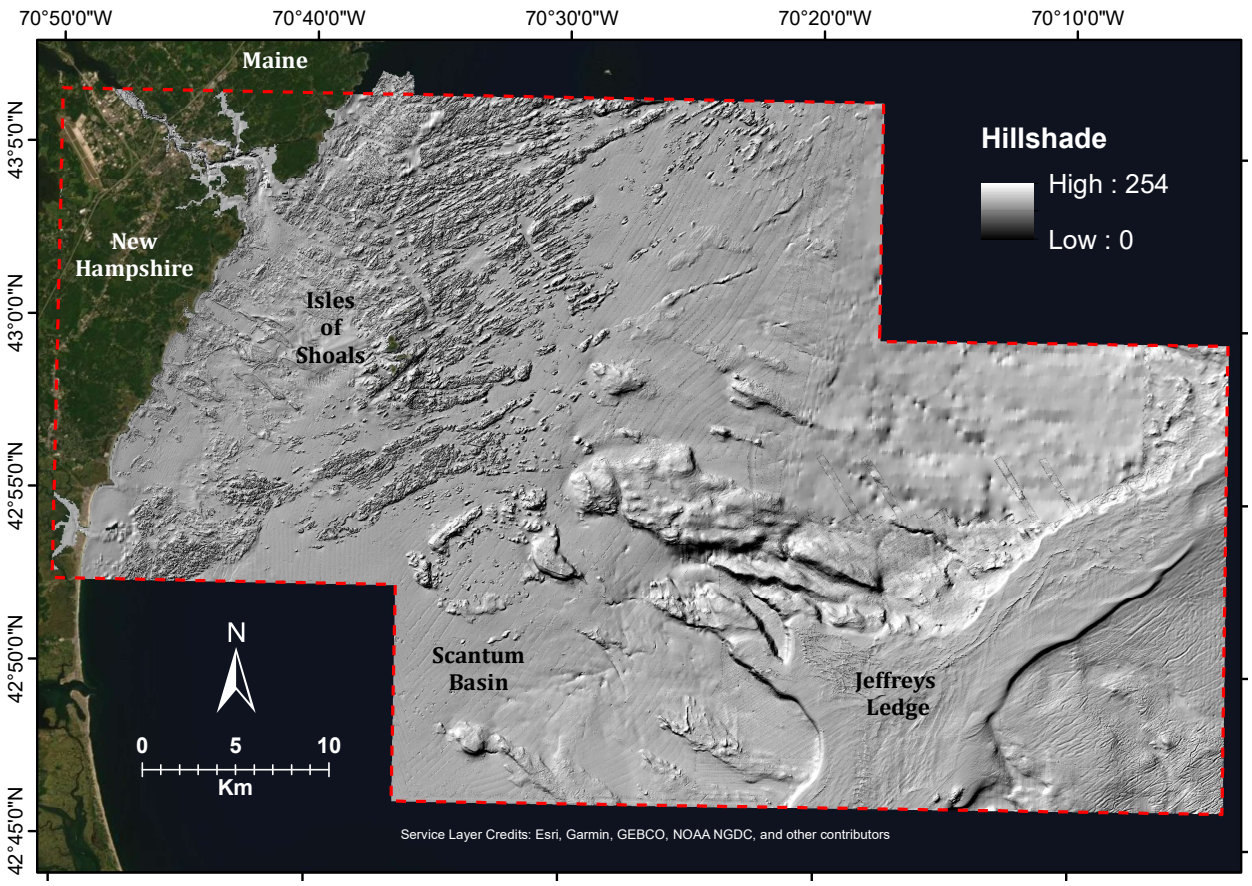

Figure 8. Hillshade for the continental shelf off New Hampshire. The vertical exaggeration is 10x.

Bathymetric Positioning Index (BPI)

BPI compares the elevation of each gridded cell in the bathymetry within the inner radius of an annulus to the mean elevation of the surrounding area defined by the outer radius of the annulus (Verfaillie et al., 2007). A negative BPI value is assigned for depressions and a positive BPI value to elevated features. Erdey-Heydorn et al. (2008) used BPI to identify seafloor features. In this study, the index was derived from bathymetric raster surfaces using the "Benthic Terrain Modeler toolbox" and was calculated for a broad scale (B-BPI). The B-BPI was applied with different inner and outer radii depending upon the resolution of the grid in order to maintain the same scale factor for both nearshore and offshore areas. The 2 m nearshore grid used a 20-cell inner radius and an 800-cell outer radius. The 4 m offshore grid used a 10-cell inner radius and a 400-cell outer radius. Therefore, both the nearshore and offshore B-BPI derivatives have a scale factor of 1,600 (Figure 9). BPI was very useful for identifying bathymetric features, especially when combined with hillshade.

Roughness

The roughness value equals the sum of the change in elevation between a central grid cell and its eight surrounding grid cells. The roughness surfaces were generated using the Surface Texture toolset from the Geomorphometry and Gradient Metric Toolbox. A circular analysis window was used with a radius of 3 cells for the Neighborhood Settings (Figure 10). The roughness proved useful for identifying changes in bottom texture and for defining boundaries.

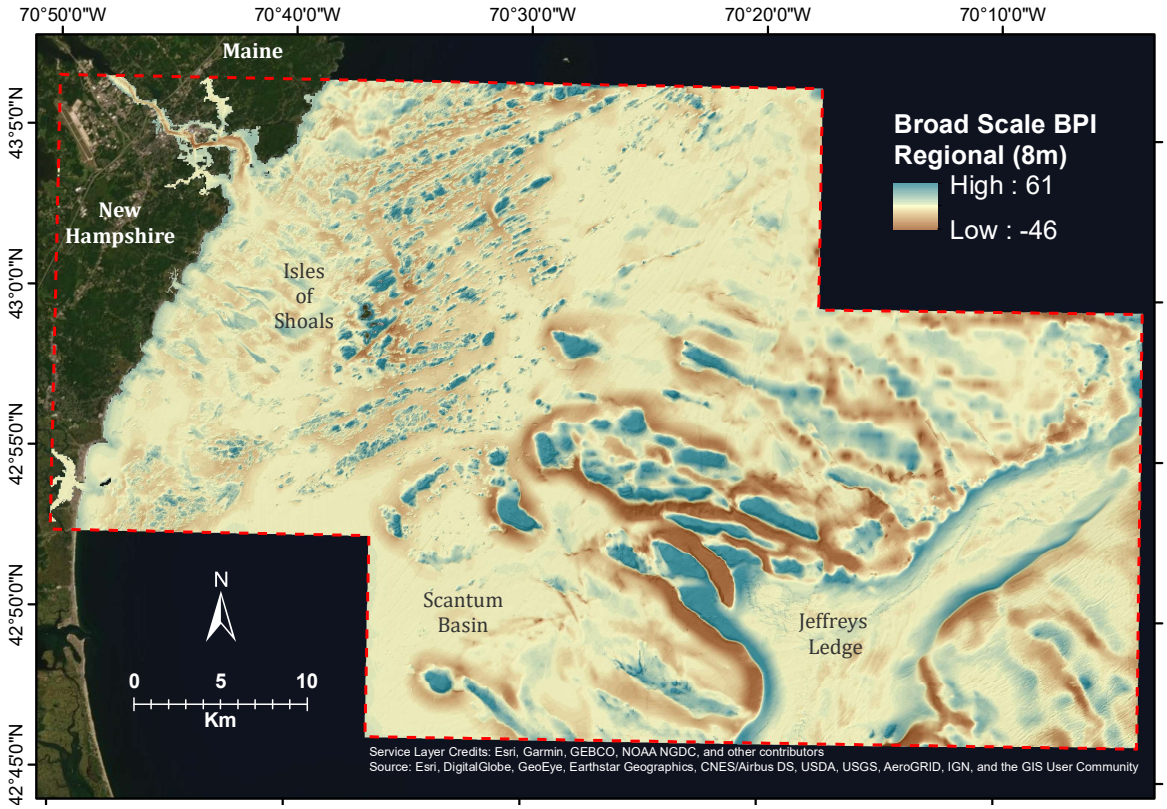

Figure 9. Bathymetry Position Index (BPI) for the continental shelf off New Hampshire.

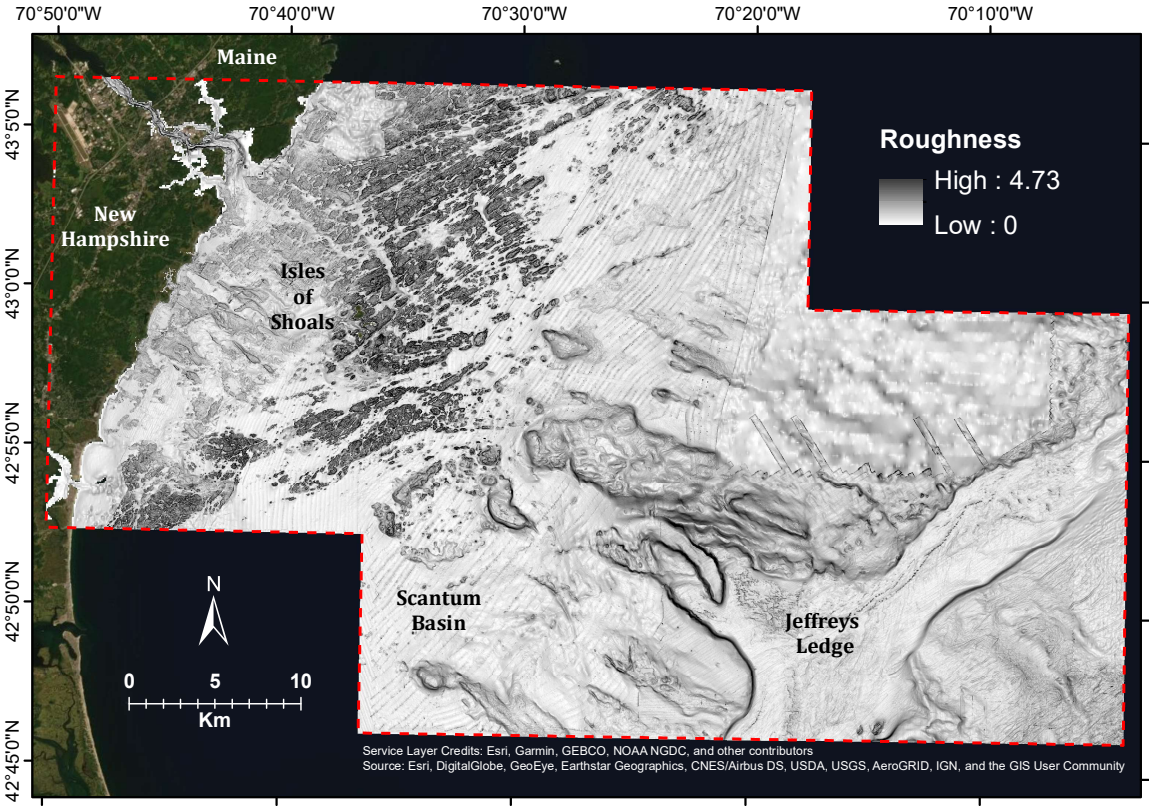

Figure 10. Seafloor roughness for the continental shelf off New Hampshire.

Surficial Geology of the Continental Shelf Off New Hampshire

The surficial geology of the WGOM continental shelf is highly complex due to the impact of glaciations, sea-level fluctuations, marine processes, and the antecedent topography (Uchupi, 1966; Oldale and Uchupi, 1970; Oldale et al., 1973; Ballard and Uchupi, 1974; Schnitker et al., 2001; Uchupi, 2004; Barnhardt et al., 2007; and Uchupi and Bolmer, 2008). In order to describe the surficial geology of the continental shelf off NH, help assess potential areas where sand and gravel resources may be located, provide a base for habitat and future environmental studies, and advance the understanding of the processes that shaped the seafloor, high-resolution surficial geology maps were developed that depict the geoforms and surficial sediment distribution in detail. Here, we present the surficial geology maps and make an initial assessment of the origin of many of the physiographic features based on CMECS. This includes taking into consideration the glacial and sea-level history that modified the antecedent topography and lead to many of the depositional features observed today.

Glaciation, Sea-Level and Upland Surficial Geology in the WGOM

During the last glacial period (Wisconsin), the Laurentide Ice Sheet (LIS) covered New England and the Gulf of Maine, extending to Long Island and Georges Bank. The LIS reached its maximum extent approximately 24,000 yrs B.P. (Balco and Schaefer, 2006). The upland and nearshore shelf was heavily eroded by the advancing ice sheet, exposing bedrock in many areas and leaving extensive sediment deposits including moraines, drumlins, eskers, glaciomarine deltas, submarine grounding lines, fans, kettles, tills, and stratified drift (Birch, 1984; Sinclair et al., 2018). Subsequently, the glacial deposits on what is now the inner continental shelf off NH were eroded by intertidal and shallow-water wave and tidal processes as the coast first underwent a transgression (marine incursion), then a regression (lowering of sea level), and a final transgression. The cause of the shift in the shoreline was driven by glacially-forced eustatic sea-level changes and isostatic adjustments of the earth's crust.

The first (late Pleistocene – early Holocene) marine incursion occurred during deglaciation when the glacier's terminus was receding and the ice front was in contact with the ocean, resulting in a submergence of the upland. The magnitude of the highstand (most landward inundation of the ocean) varied along the coast from Massachusetts to Maine due to the different ice thicknesses and levels of isostatic depression. Around 14,000 yrs B.P. the highstand extended to approximately 30 m above present in northern Massachusetts (Barnhardt et al., 2007), ~45 m in NH (Birch, 1988), and ~75 m in southern Maine (Kelley et al., 2010). Following the highstand, isostatic uplift of the crust due to the removal of the weight of the ice as it melted led to a major lowering of relative sea level (marine regression) as the rate of rebound exceeded eustatic sea-level rise. At approximately 12,500 yrs B.P. the relative or local sea level lowered to ~55-60 m below current sea level in southern Maine (Kelley et al., 2010), and ~45 m below current sea level in Massachusetts (Oldale et al., 1993; Barnhardt et al., 2007). As isostatic uplift began to slow, eustatic sea-level rise overtook crustal rebound leading to a relative sea-level rise and a transgression that is still occurring today. Due to the magnitude of the changes in relative sea level in the WGOM, the position of the NH shoreline migrated ~40 km (Ward and Adams, 2001). During the maximum transgression with ice retreat, the ocean flooded inland ~25 km, and during the maximum regression, the coastline was ~15 km seaward of its present position (Figure 11).

As a result of the glaciation and relative sea-level fluctuations, the coastal upland in the WGOM is dominated by glacial and glaciomarine deposits. This is clearly shown in surficial geology maps of the NH seacoast published by the NH Geological Survey (Bennet et al., 2004). The major features and deposits within approximately ten kilometers of the shoreline include bedrock outcrops, glacial tills, glaciomarine sediment, and Holocene (recent) deposits (Figure 12). The till deposits, which are extensive, include drumlins, eskers, and moraines. The glaciomarine deposits include wave-modified marine deltas, wave-

formed features composed of sand and gravel, and the three facies of the Presumpscot Formation including the proximal (sandy), distal (silt and clay), and undifferentiated mixtures (sand, silt, and clay). It is reasonable to assume that these same types of deposits occur on the adjacent continental shelf.

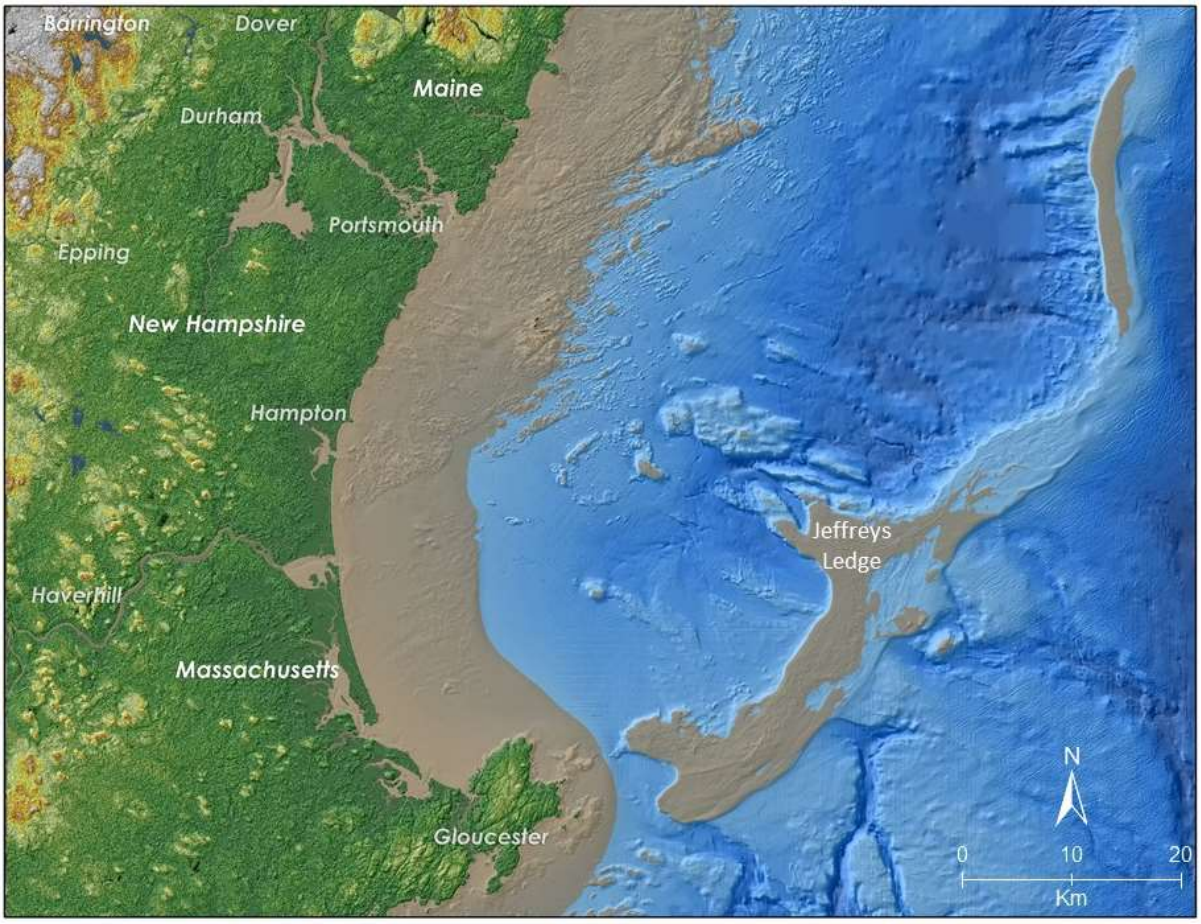

Figure 11. Location of the NH shoreline (seaward edge of brown area) during the last sea-level lowstand at -60 m, ~12,500 yrs B.P. (based on sea level curve from Kelley et al., 2010). During the Holocene transgression, the shoreline migrated landward reaching its present position about 4,000 B.P. (Ward and Adams, 2001). Sub-aerial exposure of the New Hampshire continental shelf and the subsequent transgression lead to extensive erosion and modification of the glacial deposits. Note the surface of Jeffreys Ledge and some of the drumlins (mounds to the west of Jeffreys Ledge) are above or near sea level during the lowstand.

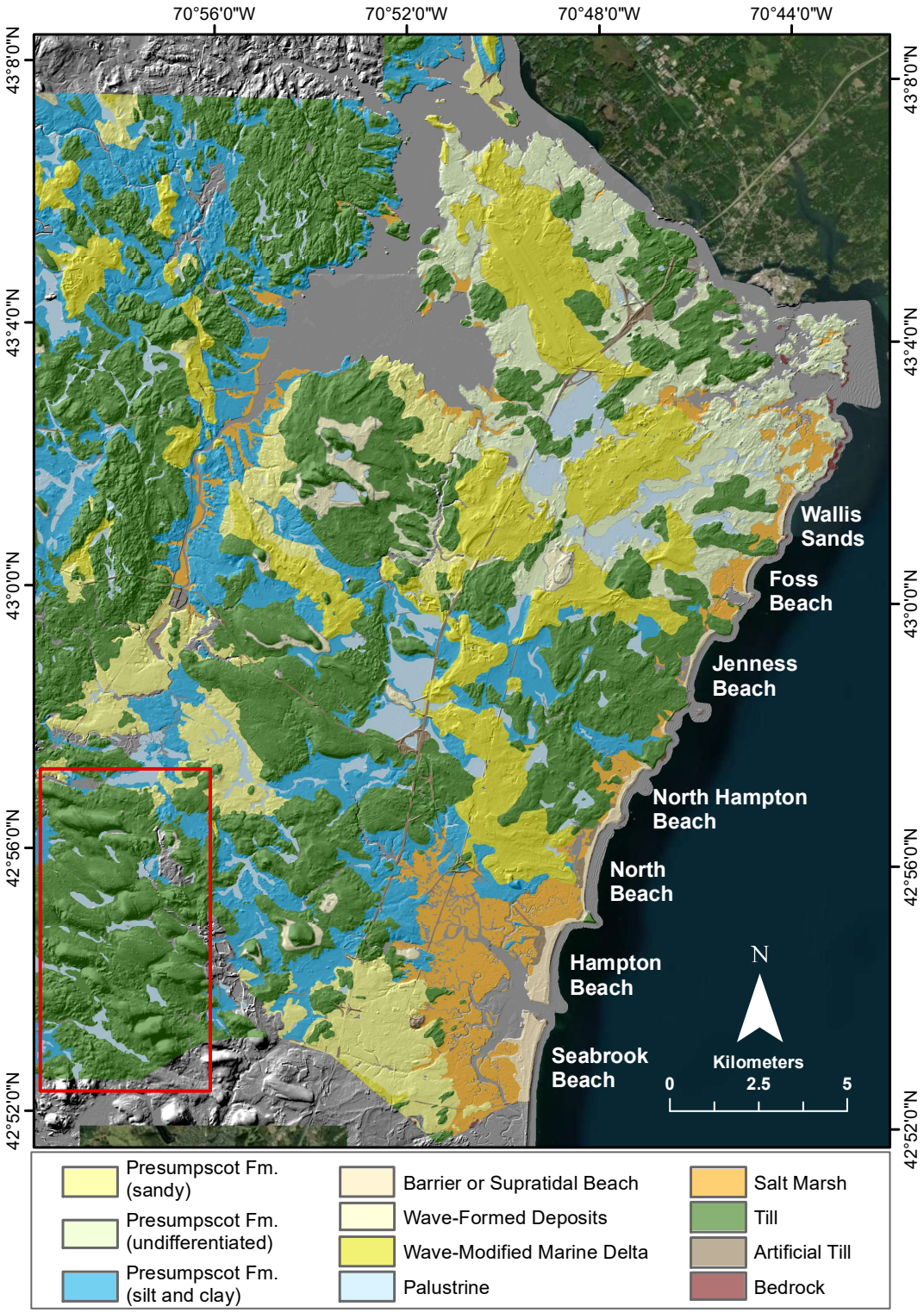

Figure 12. Surficial geology map of the NH coastal upland (modified from the NH Geological Survey digital map series; Bennett et al., 2004 http://granit.unh.edu, accessed January 2021) from Ward et al. (2021f). Note the extensive glacial deposits including tills (e.g., drumlins), Presumpscot Formation (glaciomarine), and wave-modified marine deltas. The red box in the lower left highlights an area where drumlins are also present. Definitions for terms can be found in the Glossary.

Surficial Geology of the Shelf

High-resolution mapping of the surficial geology of the continental shelf off NH, using the CMECS geoform and geologic substrate classifications, reveals the seafloor is primarily composed of the following: extensive megaclast platforms (cobble and boulder), many of which extend offshore from the headlands along the coast; sandy nearshore ramps which extend from the beaches; bedrock outcrops; marine shoals; large elongated mounds with twenty meters or more of relief that appear to be marine-modified drumlins; smaller linear ridges composed of sand and gravel that appear to be eroded eskers; and seafloor plains. The seafloor plains are composed of sand, gravel mixes, and gravel in shallower depths (and were exposed sub-aerially during the sea-level lowstand), while in deeper water they are composed of mud. There are also a number of large ridges or bathymetric highs in the WGOM including Jeffreys Ledge, Cashes Ledge, Fippennies Ledge, and Platts Bank. Jeffreys Ledge, which forms the seaward extent of the study area, rises up ~150 m from the adjacent basins (i.e., Scantum Basin or Wilkinson Basin) to depths less than 50 m on the ridge surface (Figure 5).

The surficial geology maps provide a detailed view of the major physiographic features or geoforms and the general composition of the substrate. The substrate is broken into three classes including exposed bedrock, coarse and fine unconsolidated substrates, and a much more detailed description of the seafloor sediments mapped as substrate groups. These maps serve several purposes. First, the geoform maps depict the major seafloor features and also provide insights into the origin and controls of physiographic features and potential sediment types and sources (Figures 13, 14, and 15). Second, the map showing the CMECS subclass provides a very broad overview of the bedrock and the general nature of the surficial sediments from coarse-grained to fine-grained unconsolidated mineral material (Figure 16). Finally, the maps depicting the sediment groups provide the most detail of the seafloor surficial sediments (Figures 17, 18, and 19). Collectively, these maps significantly advance our understanding of the continental shelf off NH. Each of the map types are discussed below in more detail.

It should be noted again that the size of the study area is large and, despite having an extensive database including high-resolution bathymetry, acoustic backscatter, and surficial sediment grain size data, many areas have sparse or incomplete coverages. In addition, the quality of the data varies depending on age and location. As a result, the mapping of the seafloor includes locations where the evidence is strong, locations where less information is available (shown by diagonal lines on the maps), and locations where the database is too weak at this time to allow interpretation of the seafloor (simply shown as grayscale hillshade).

Geoforms (Physiographic Features): Origin and Characteristics

The geoforms identified and classified on the continental shelf off NH show very clear trends (Figure 13). The inner NH continental shelf within 15 km of the coast north of Portsmouth Harbor is dominated by extensive bedrock outcrops, often separated by troughs or swales with sediment, and surrounded by bedrock borders composed of coarse sediment. The general trend of the outcropping bedrock is in a northeast-southwest direction. Landward of the Isles of Shoals and south of Portsmouth Harbor, the bedrock that had dominated the seafloor to the north transitions into sediment-draped bedrock and large sediment deposits (Figure 14). In this area, extensive marine-modified (eroded) glacial features are found. Geoforms that appear to be the roots of eroded drumlins or eskers are common, which have left megaclast deposits.

Morphologic evidence suggests that some of the marine-formed shoals developed from the erosion of drumlins or other glacial features as was observed in other paraglacial environments (Carter and Orford, 1988). The largest sandy shoal in the study area is located just landward of the Isles of Shoals (named here as the Northern Sand Body) and appears to lie between two eroded drumlins (Figure 14). It is likely the

Northern Sand Body was formed from a wave-modified delta or marine shoal as seen on the adjacent upland. However, this is speculative and remains to be tested. Also present on the NH shelf are numerous De Geer moraines which formed by the receding ice front (Sinclair et al., 2018). The bedrock becomes more subdued south of the study area in northern Massachusetts and is ultimately buried by sandy sediment, likely from the Merrimack River.

A number of the marine-modified glacial features found close to shore also extend onshore. Particularly noticeable are marine-modified glacial deposits with megaclasts found directly off the numerous headlands along the coast. These deposits formed as the till-dominated headlands eroded during the present sea-level transgression leaving behind gravel and megaclast deposits. Also, a narrow ridge (likely an esker) originates on the inner shelf and continues onshore. The marine-formed features, as well as some of the offshore eroded drumlins, are possible targets for marine mineral resources and will be examined in greater detail in future studies.

From several kilometers seaward of the Isles of Shoals to Jeffreys Ledge, the geoforms are dominated by seafloor plains and very large marine-modified glacial features including drumlins (Figure 15). During the sea-level lowstand, the surface of Jeffreys Ledge and the nearby drumlin-like features were likely eroded by wave activity. In addition, the eroded material, which would have included sand and fine gravel, was deposited as aprons around the glacial features. A large fan-shaped structure composed of gravels to gravel mixes located on the seaward side of Jeffreys Ledge is interpreted as a subaqueous fan. The subaqueous fan resulted from subglacial discharge from beneath the glacier during the period when the ice front was close to or grounded on Jeffreys Ledge.

Seafloor Sediments Based on CMECS Substrate Subclass Map

The geologic substrate maps depict the surficial sediment composing the seafloor. The substrate subclass simply classifies the seafloor into bedrock and coarse or fine unconsolidated mineral substrate (Figure 16). The coarse unconsolidated mineral substrate includes gravel, gravel mixes, and gravelly sediment which encompass the Wentworth size classes from gravelly sand or gravelly mud to boulder gravels. The fine unconsolidated mineral substrate is composed of sediment ranging from mud to slightly gravelly sand (Table 1).

As would be expected due to the glacial history, the seafloor landward of the Isles of Shoals has extensive bedrock outcrops that tend to have coarse unconsolidated mineral substrate between the ridges. The marine-modified glacial deposits fall into this category and tend to be gravelly, although they may contain appreciable quantities of sand. The fine unconsolidated mineral substrate is found closer to shore extending off beaches and in between coarse unconsolidated mineral substrate extending off headlands.

Seaward of the Isles of Shoals, the seafloor tends to be composed of fine unconsolidated mineral substrate with the exception of the marine-modified glacial deposits (Figure 16). The glacial deposits tend to include coarse unconsolidated mineral substrate with gravel, gravel mixes, and gravelly sediment. The fine unconsolidated sediment is typically muddy to sandy mud but can be coarser depending on proximity to glacial features or bedrock.

Seafloor Sediments Based on CMECS Substrate Group Map

The geologic substrate group describes the composition of the unconsolidated mineral sediments of the seafloor in much greater detail than the substrate subclass (Figure 17). The substrate groups are closely aligned to the Wentworth scale and have the advantage of simplifying the Wentworth size classes by combining ranges.

The seafloor of the inner continental shelf landward of the Isles of Shoals is extremely heterogeneous due to the mixture of bedrock, marine-modified glacial features, and marine-formed features or shoals (Figure

18). Here the seafloor is frequently composed of gravel mixes interspersed with gravel and associated with eroded glacial features such as drumlins or eskers. Close by are gravelly mixes to gravelly sediments, which are frequently gravelly sands. The exposed bedrock has gravel mixes to gravelly sediments in the troughs between the bedrock outcrops as well. The nearshore regions have relatively large areas of sand which are found close to shore on nearshore ramps. Sandy areas are also found farther offshore associated with eroded glacial features or marine-formed shoals. One large marine-formed feature, the Northern Sand Body (Figure 18), is a potential source of sand for beach nourishment and was described in Ward et al. (2021a).

The outer continental shelf seaward of the Isles of Shoals is somewhat complex as a result of marine-modified glacial features providing coarse sediments intermixed with muds (Figure 19). The surface of Jeffreys Ledge is composed of gravel and gravel mixes (e.g., sandy gravel), while the adjacent seafloor is mostly gravelly (gravelly sands, gravelly muddy sand, or gravelly mud). Jeffreys Ledge was likely a grounding line as the ice front retreated in the Gulf of Maine, which left extensive glacial deposits. During the last sea-level lowstand, the surface of Jeffreys Ledge was exposed to shallow water processes (Figures 5 and 11), eroding the glacial deposits and forming a slightly gravelly apron around much of Jeffreys Ledge.

At least one large sand deposit occurs in the offshore area on top of an eroded drumlin (Figure 19). This could be a potential marine mineral resource in the future when sand and gravel mining become economically feasible for deposits farther from shore in deeper water (Ward et al., 2021a). Based on the number of large marine-modified glacial features, there are likely several more viable sand and gravel deposits offshore. Note that several of the marine-modified glacial features are not mapped (shown as gray hillshade) because their composition is presently unknown. Away from the glacial features, the seafloor is mostly muddy, transitioning into a sandy mud closer to land.

Summary and Conclusions

The purpose of the work presented here was three-fold. First, to develop high-resolution surficial geology maps of the complex paraglacial continental shelf off NH in the Western Gulf of Maine (WGOM) in order to aid in marine mineral resource (sand and gravel) identification, evaluation, and required environmental studies for any sites that may be proposed for sand and gravel extraction. Secondly, to apply a standardized, widely used approach to classify the seafloor (i.e. the Coastal and Marine Ecological Classification Standard or CMECS; FGDC, 2012). The challenge here was adapting the CMECS classification to a paraglacial environment. Third, to advance our ability to utilize re-purposed, archived geophysical data by combining the older data with new, high-resolution acoustic surveys and applying modern technologies such as GIS platforms, data processing programs, and new algorithms. Future work will also evaluate the use of machine learning (Pendleton et al., 2019).

High-resolution mapping of the surficial geology of the continental shelf off NH and extending to Jeffreys Ledge (an area of ~3,250 km^2), using the CMECS geoform and geologic substrate classifications, reveals the seafloor is primarily composed of extensive bedrock outcrops, large megaclast platforms (cobble and boulder), marine-modified drumlins and eskers, sandy nearshore ramps, marine shoals, and seafloor plains. These features are composed of sand, gravel mixes, and gravel in shallower depths transitioning to mud in deeper water. The largest feature in the study area is Jeffreys Ledge, which has up to ~150 m of relief over the nearby basins and depths less than 50 m on the ridge surface.

Understanding the glacial history of the region, sea-level changes in the WGOM, and the surficial geology of the adjacent upland provides insights on how the geoforms and substrate on the continental shelf off NH were likely formed and modified over time. The sandy seafloor plain sediment found in the nearshore shelf (within approximately 15 kilometers of the coast) is likely sourced from reworked marine-modified

glaciomarine delta or proximal sandy glaciomarine deposits. Also, very common on the inner shelf are gravel mixes to gravels that are likely the result of erosion of eskers or till moraines. Large elongated megaclast deposits composed of cobbles and boulders are interpreted as the remnants of drumlins that were eroded by marine processes during the Late Pleistocene sea-level transgression, the early Holocene regression, and the Holocene transgression which is continuing today. Finally, De Geer moraines are common on the inner shelf. Farther offshore below the relative sea-level lowstand that occurred ~12,000 yrs B.P., glacial features such as drumlins have not been altered by marine processes as extensively as those on the inner shelf. The exceptions are features that have high relief such as large drumlins that were winnowed by wave action during the last sea-level lowstand. The surface of Jeffreys Ledge was also modified by shallow water processes during the sea-level lowstand, producing wave-formed features that can be seen in the high-resolution bathymetry.

Evaluation of potential marine mineral resources on the NH shelf identified several sites where sand and gravel resources may be suitable for beach nourishment projects to enhance coastal resiliency. These deposits are discussed in detail in Ward et al. (2021a) and include a large marine shoal (see Figures 14 and 18) and the eroded surface of a drumlin (see Figure 19). These potential resource areas are presently too far from shore and in too great a depth of water to be easily utilized. However, as the demand for sand and gravel becomes more acute and technologies advance, mineral resources farther offshore and in deeper water likely will become viable.

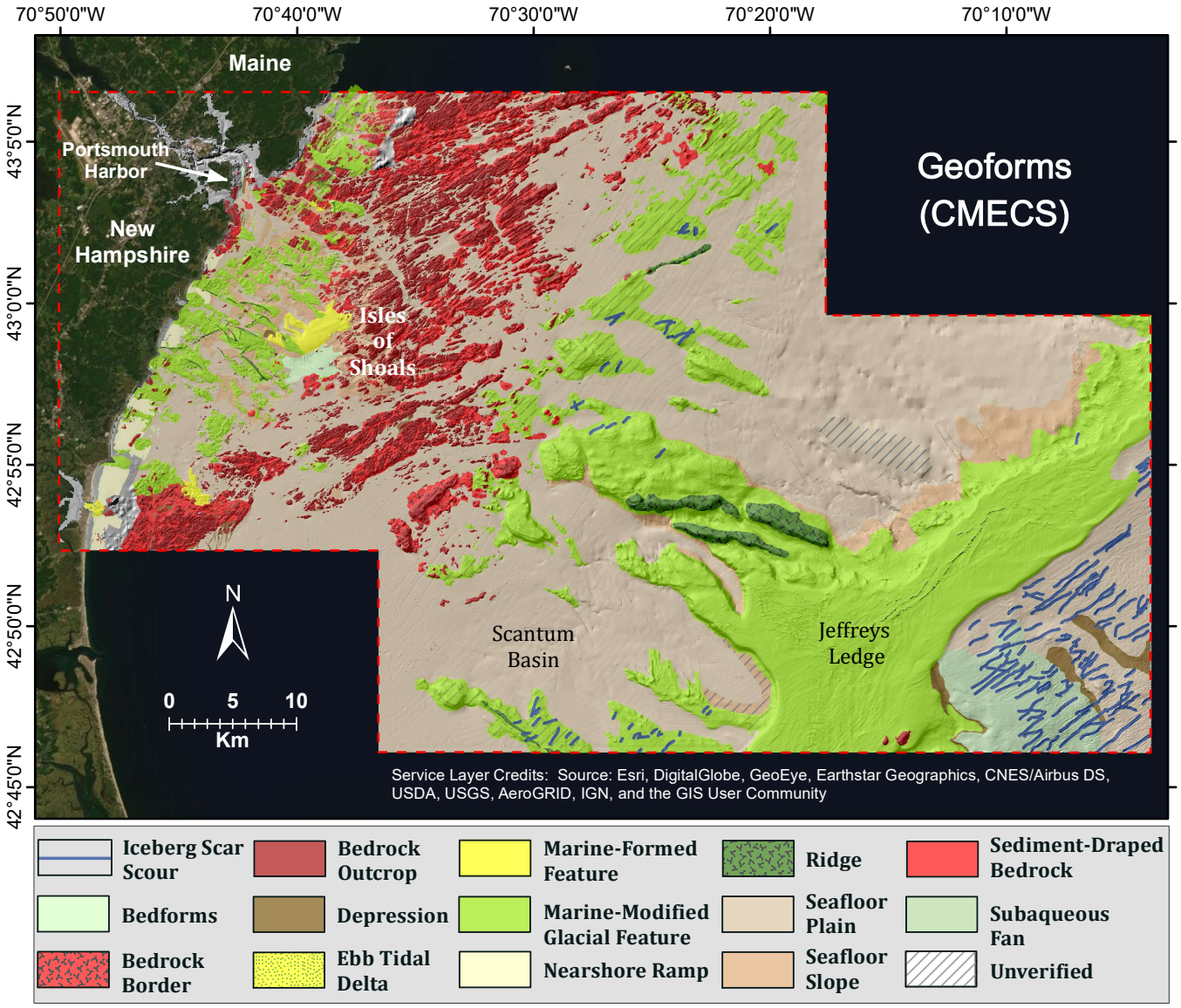

Figure 13. Major physiographic features (geoforms) map for the continental shelf off New Hampshire. The geoform terminology is based on a modification of CMECS (FGDC, 2012). See Table 2 for definitions of geoforms.

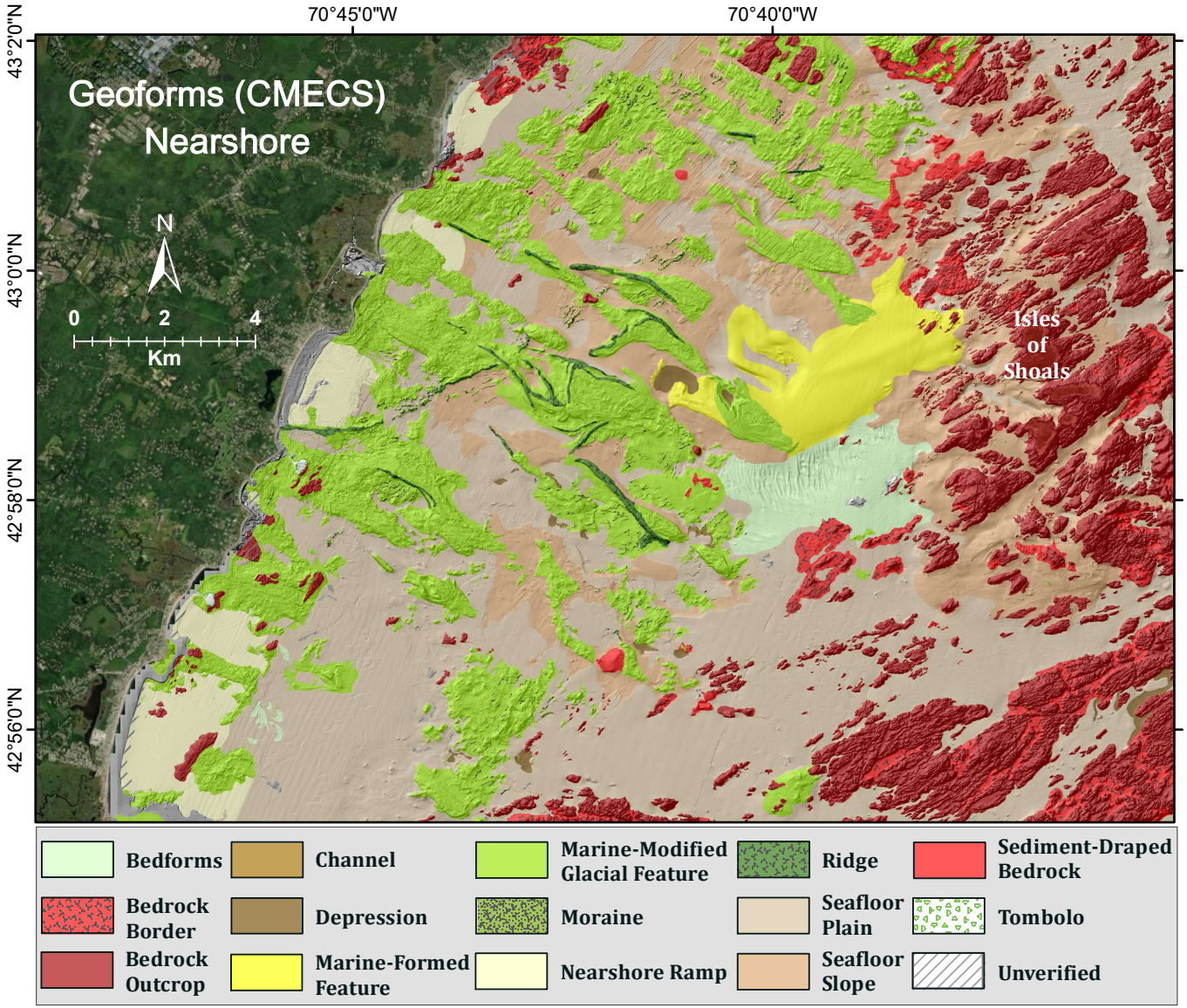

Figure 14. Geoform map for the inner continental shelf off New Hampshire. The large yellow feature (Marine-Formed Feature) is potentially a sand and fine gravel resource (see Ward et al., 2021a). The ridges are likely eroded eskers.

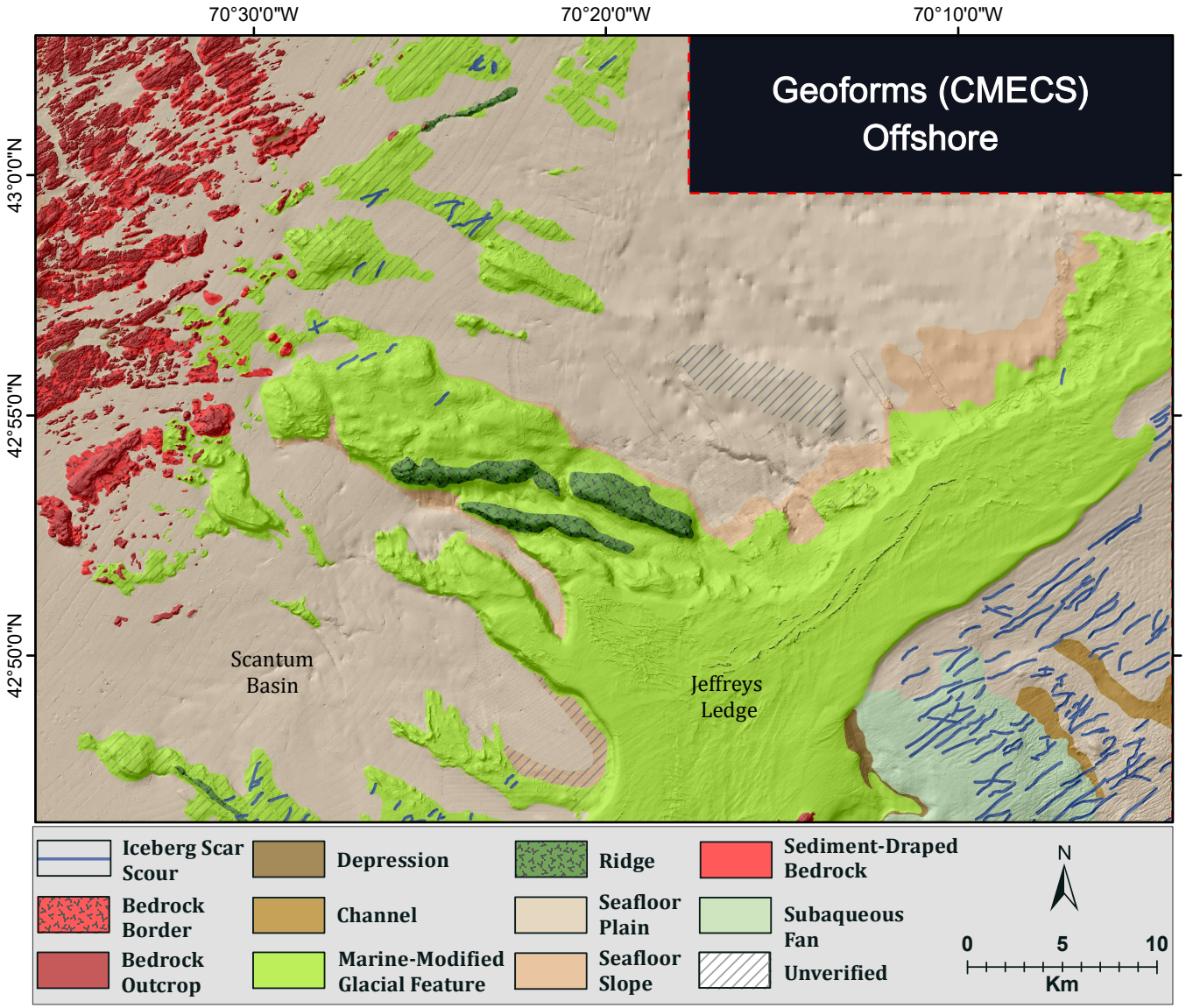

Figure 15. Geoform map for the offshore continental shelf off New Hampshire. The mounds trending northeast-southwest have the same orientation as drumlins on the NH seacoast (see Figure 12).

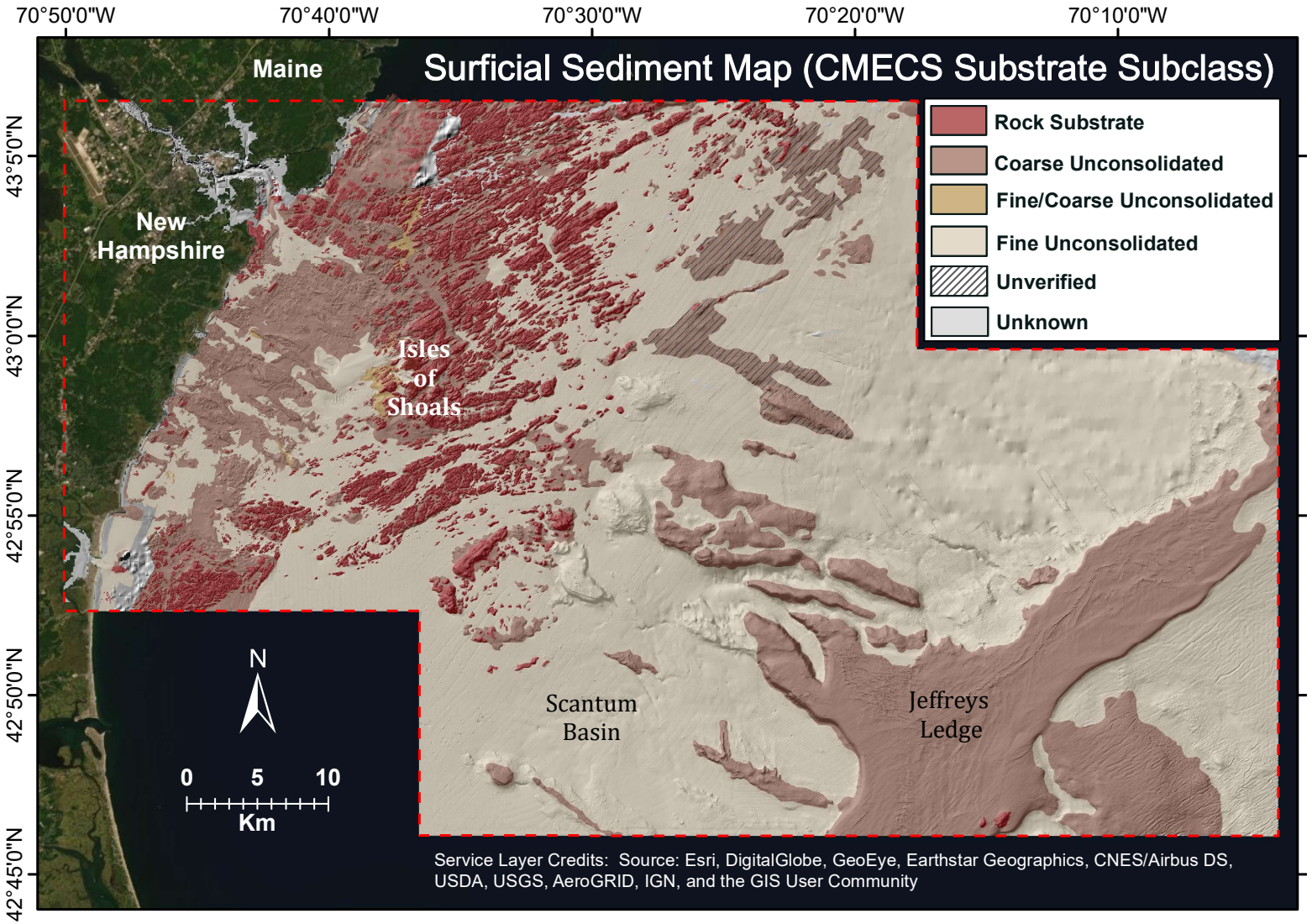

Figure 16. Surficial sediment map of the continental shelf off New Hampshire based on the CMECS classification for Geologic Substrate Subclasses (FGDC, 2012).

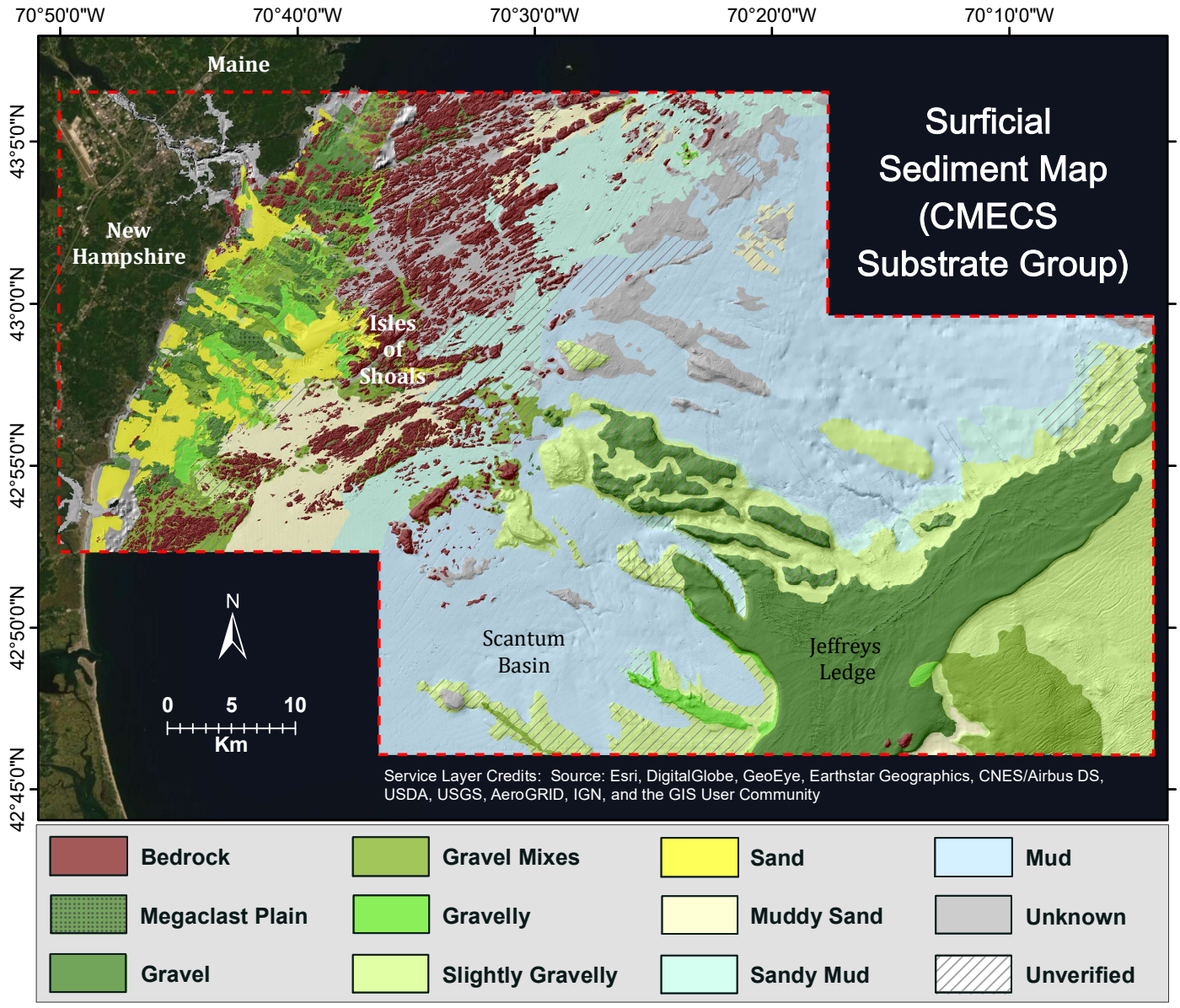

Figure 17. Surficial sediment map of the continental shelf off New Hampshire based on the CMECS classification for Geologic Substrate Groups (FGDC, 2012).

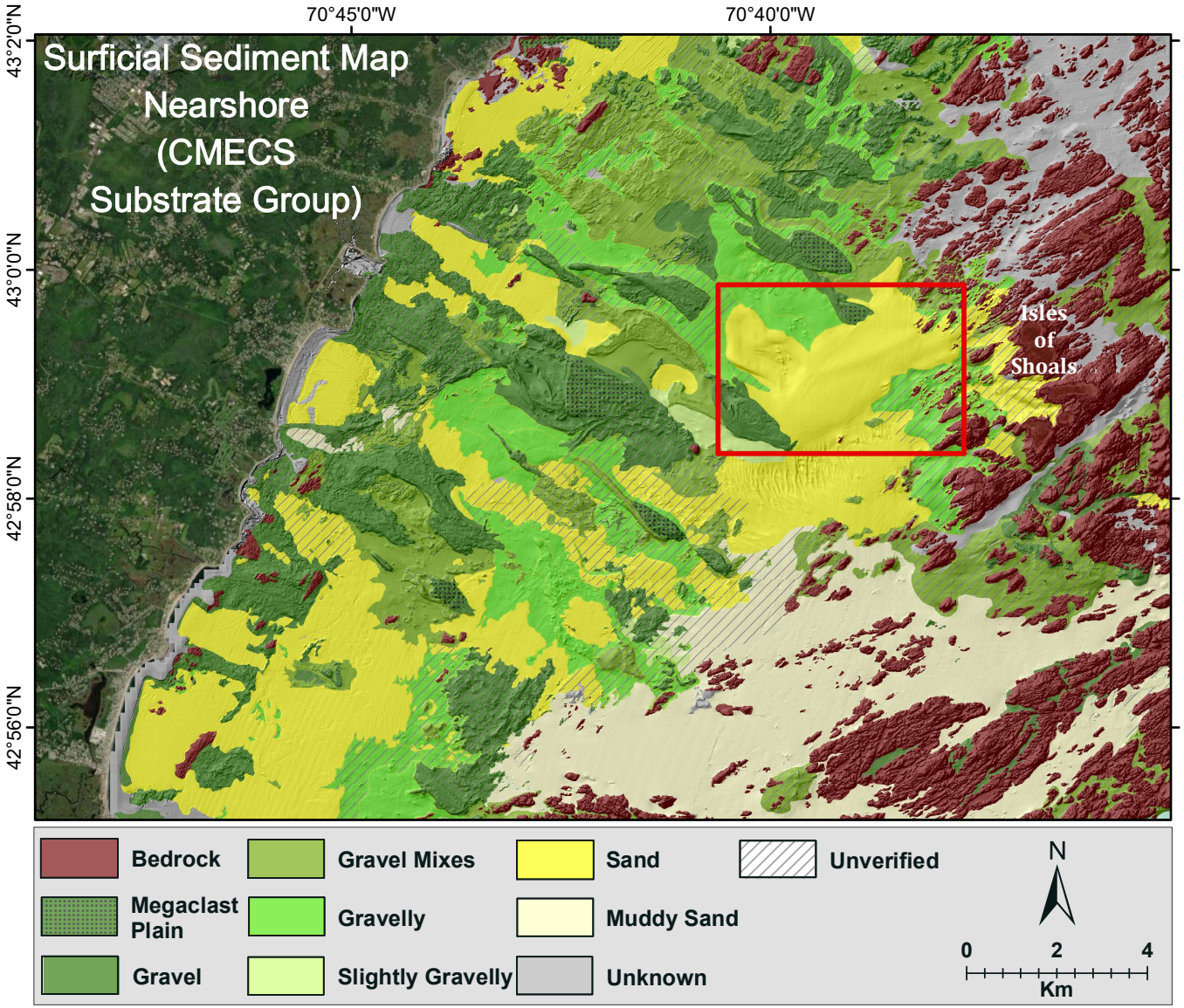

Figure 18. Map of Geologic Substrate Groups for the nearshore region of the continental shelf off New Hampshire. Note the large sand body (Northern Sand Body) immediately to the east of the Isles of Shoals (red box) which is a potential sand source for beach nourishment (Ward et al., 2021a).

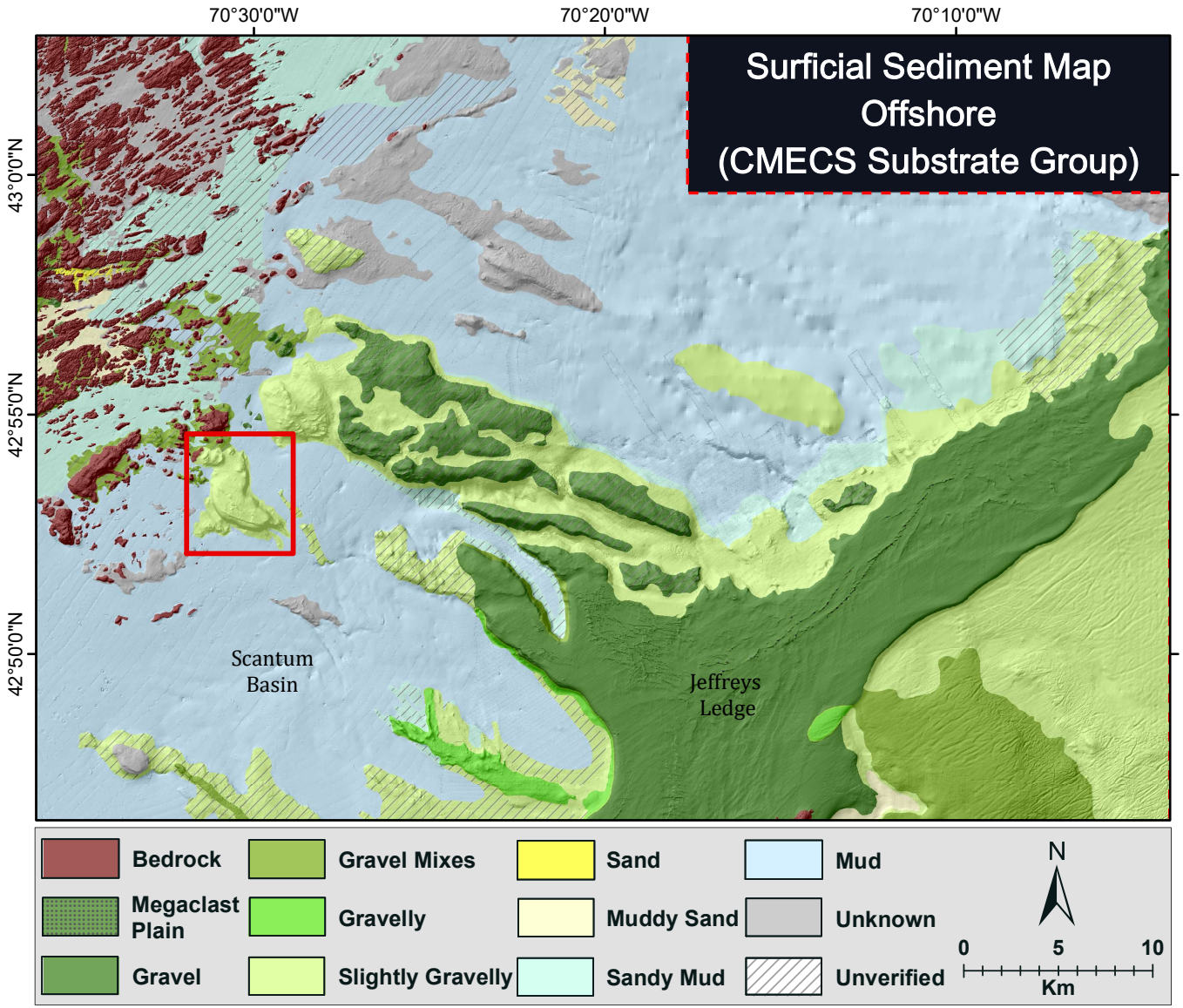

Figure 19. Map of Geologic Substrate Groups for the outer continental shelf off New Hampshire. The red box outlines a marine-modified drumlin that is a potential sand and gravel resource (see Ward et al., 2016a; 2021a)

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Glossary

Backscatter: The measure of a signal/sound reflected back in its originating direction based on the amount of sound reflected by the seafloor and received by a sonar. Provides information on hardness and roughness of bottom; typically a stronger signal indicates a harder seafloor, whereas a weaker signal indicates a softer seafloor.

Barrier Beach: Narrow and elongated beach built by waves, currents, and winds that rises above the high-tide level and extends generally parallel to the upland. Separated from the upland by a lagoon or marsh.

Bedrock: General term for the rock that is part of the crust. It is not unattached (like boulders are). Can be buried by sediment or exposed.

Datum: Reference system or an approximation of the Earth's surface against which positional measurements can be made (e.g., latitude, longitude, and elevation). See geodetic datum.

Dead Reckoning: Determination of the position of a ship based on known initial position, velocity and distance covered.

Delta: Landform that develops by the deposition of sediment flowing water (e.g., river, glacial stream) enters a larger water body (e.g. ocean, lake, estuary).

Drumlin: A low, smoothly rounded, elongated and oval hill, mound, or ridge of compact glacial till, built under the glacial ice and shaped by its flow. The longer axis is parallel to the direction of movement of the ice. Composed of a large range of sediment from boulders to mud.

Ellipsoid: A flattened sphere used to represent the geometric model of the Earth (e.g. the Earth is not completely round and is slightly flattened at the poles); a mathematical model of the Earth to represent horizontal positions on maps and charts (versus the topographic or actual visible surface of the Earth).

Erode (for beaches): To remove sediment by the action of current, waves, or wind.

Esker: A long, low, narrow, sinuous, steep-sided ridge or mound composed of irregularly stratified sand and gravel that was deposited by a subglacial stream or in an ice tunnel. Eskers, unlike drumlins, are stratified accumulations of sand and gravel.

Eustatic Sea Level, Also Global: Change in the level of the ocean irrespective of the land.

Fan: Triangle-shaped accumulation of sediments, called alluvium. Formed as flowing water interacts with sloped topography.

Geodetic Datum: Provides a reference surface (such as sea level) from which all locations on Earth can be defined with coordinates; system developed to assist surveyors, navigators, and to create maps by translating Earth’s three-dimensional surface to two-dimensional coordinates.

Geoid: The true zero surface of the Earth for measuring elevations defined by Earth’s gravity. The geoid surface must be modeled. Mean sea level is a close approximation.

Geometric Datum: Coordinate system for collection of positions relative to an ellipsoid model of the Earth.

GNSS (Global Navigation Satellite System): A general term describing any satellite constellation that provides positioning, navigation, and timing on a global basis. GPS is the most prevalent GNSS.

Ground Truth: Validation of data by direct observation or sampling in the field.

Grounding Line: The zone where a glacier transitions from lying above land to floating on an open water body (e.g. ice shelf).

Hillshade: A technique for visualizing terrain through a 3D grayscale representation by creating an illumination effect of a surface based on elevation variations.

Horizontal Datum: Coordinate system for positions on Earth (e.g., latitude and longitude).

IGS08: Geodetic datum used by surveyors, engineers, and mapping professionals to measure locations (latitude and longitude) and elevations to the Earth's surface throughout the world. Referenced to an ellipsoid.

Intertidal: Area of a beach between high water and low water. Also called foreshore.

Isostatic: Change in land level relative to the sea, causing localized changes.

Kettle: Depression in a glacial outwash drift formed when a glacier retreats and melts.

Lag Deposits: Coarse-grained material that is left after currents, waves or wind have winnowed or eroded the finer material.

MLLW (Mean Lower Low Water): Average height of all the lower low water levels recorded at a given location over a 19-year period (epoch) or a computed equivalent period.

MSL (Mean Sea Level): Average water levels for all stages of the tide over a 19-year period (epoch) at a given location.

Megaclasts: Larger clasts (fragments of rock). Usually refers to cobbles and boulders.

Megaclast Platform: Flat or gently sloping surface composed of megaclasts.

Morphology: The external structure and form of landforms.

Multibeam Echosounder (MBES): Sonar system that emits sound waves from directly beneath a ship’s hull, and produces acoustic waves in a narrow fan shape. Used to obtain bathymetric coverage of the seafloor.

NAD83 (North American Datum of 1983): Geodetic datum used by surveyors, engineers, and mapping professionals to measure locations (latitude and longitude) and elevations of the Earth's surface in the United States. Referenced to an ellipsoid.

NAVD88 (North American Vertical Datum of 1988): Vertical datum used by surveyors, engineers, and mapping professionals to measure and relate elevations to the Earth's surface.

Outwash: Deposit of sand and gravel (glacial sediments) at the terminus of a glacier carried by glacial streams.

Palustrine: Relating to any non-tidal and non-saline inland wetland (marsh, swamp, bog).

Paraglacial: Regions effected by previous glaciations.

Presumpscot Formation: Glacial marine sediments of late Pleistocene age. It is widespread along the Maine and New Hampshire coastlines and inland along major river valleys.

Projection: System of mathematics and geometry to transfer locations on the Earth onto a flat piece of paper (a map).

Regression (coast): A seaward migration of the coast as sea level falls.

Regression (sea level): Referred to in this report as a lowering of sea level.

Sediment: Fragmental material that originates from breaking down rocks.

Shoaling (Sediment): Buildup of sediment due to deposition.

Shoaling (Waves): Alteration of a wave as it proceeds from deep water into shallow water. There is an initial decrease in height of the incoming wave, followed by an increase in height until it breaks.

Stratified Drift: Well-sorted and stratified layers of sand and gravel deposited by glacial meltwater.

Subbottom Seismics: Sonar system that operates by emitting a low-frequency energy signal that penetrates through the seafloor (unlike a multibeam echosounder which measures the surface of the seafloor) to characterize different layers of sediment or rock under the seafloor. The time it takes for the sound to return to the vessel is used to determine the thickness and position of these layers.

Subsidence: Sinking of the Earth’s crust relative to the surrounding area.

Tidal Datum: Standard elevation framework used to track local water levels as measured by a tidal gauging station.

Tidal Inlet: An inlet through a barrier beach which water flows alternately landward with the rising tide and seaward with the falling tide.

Till or Glacial Till: Unsorted and unstratified sediment deposited by a glacier. Generally unconsolidated, deposited directly by and underneath a glacier without subsequent reworking by water from the glacier, and consisting of a heterogeneous mixture of clay, sand, gravel, and boulders varying widely in size and shape.

Transgression (coast): Causing a landward migration of the coast as sea level rises.

Transgression (sea level): In this report refers to a rise in sea level.

Uplift: Rising of the Earth's crust relative to the surrounding area.

Vertical Datum: Measures elevation above a reference surface.

Vibracore: Method for retrieving continuous, undisturbed sediment core samples by driving a tube into the subsurface with a vibrating device. Can be limited by the composition and hardness of the seafloor.

WGS84 (World Geodetic System 1984): Geodetic datum used by surveyors, engineers, and mapping professionals to measure locations (latitude and longitude) and elevations to the Earth's surface throughout the world. Referenced to an ellipsoid.

Appendix A: New Hampshire Continental Shelf Historical Geophysical Database: 1971-2015 Sediment Data

Sediment grain size data from the UNH CCOM/JHC Historical Geophysical Database (surveys conducted on the NH continental shelf between 1971 and 2015) are presented here. In total, grain size data was available for 725 bottom sediment samples. Included for each sample when available are sample identification information, station and sample characteristics, sediment classifications, grain size statistics, and grain size distribution. Not all of these parameters were avaialble for every study.

The surveys are ordered from the most recent surveys and ending with the surveys from the 1970s. The sediment grain size data is grouped by the principal investigator or associated publication (e.g., Wilson, Nifong, etc.) or research program name (e.g., NEWBEX, OOA, etc.). The cruises are divided into separate sections [e.g., Nifong Thesis (1), Nifong Thesis (2), etc.]. Data for each cruise is spread across four pages (where complete grain size data was available) or two pages (where limited grain size data was available), with each sample identified in the first column by the Sample ID.

Samples were analyzed with standard sieve and pipette analyses after Folk (1980). The sediment grain size classifications include: CMECS (Coastal and Marine Ecological Classification Standard; FGDC, 2012); Gradistat (Blott and Pye, 2001); and Wentworth (Wentworth, 1922; described in Folk, 1954, 1980). Statistics are based on the phi scale and include the graphic mean, sorting, skewness, and kurtosis (Folk, 1980). Each sample has a "Reliability Ranking for Positioning" which gives an estimate of the uncertainty of the location of the sample classified from 1 to 4. Explanation of uncertainty and the numbering system is given in "Positioning Uncertainty of Station Locations" and in Table 3.

The historical sediment grain size data is available for viewing at the UNH CCOM/JHC web site: (https://maps.ccom.unh.edu/portal/apps/webappviewer/index.html?id=aecfde28e84340b49b45029e6418c02f). The ***New Hampshire Continental Shelf Historical Geophysical Database: 1971 to 2015 - Sediment Data*** is also available as a Microsoft Excel file from the University of New Hampshire Scholars Repository https://dx.doi.org/10.34051/d/2021.3.

Section 1: Nifong Thesis Survey (2015)

Nifong Thesis (2015) (1): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type	Total Wt (gm)
Sta_1_A	Sta_1_A	43.075752	-70.709218	1	15.2	5/27/2015	Shipex	265.39
Sta_1_B	Sta_1_B	43.075303	-70.709677	1	15.2	5/27/2015	Shipex	259.77
Sta_2_A	Sta_2_A	43.073203	-70.704790	1	15.5	5/27/2015	Shipex	725.93
Sta_2_B	Sta_2_B	43.073645	-70.704790	1	15.5	5/27/2015	Shipex	539.34
Sta_3_A	Sta_3_A	43.065938	-70.705078	1	12.2	5/27/2015	Shipex	158.42
Sta_3_B	Sta_3_B	43.066050	-70.705273	1	12.2	5/27/2015	Shipex	263.77
Sta_4_A.1	Sta_4_A	43.058923	-70.701907	1	10.7	5/27/2015	Shipex	278.99
Sta_4_A.2	Sta_4_A	43.058923	-70.701907	1	10.7	5/27/2015	Shipex	504.93
Sta_4_B	Sta_4_B	43.059307	-70.702338	1	10.7	5/27/2015	Shipex	291.65
Sta_5_A	Sta_5_A	43.055795	-70.698737	1	12.2	5/28/2015	Shipex	154.56
Sta_5_B	Sta_5_B	43.055558	-70.698700	1	12.2	5/28/2015	Shipex	136.01
Sta_6_A	Sta_6_A	43.049352	-70.688253	1	18.3	5/29/2015	Shipex	273.69
Sta_7_A	Sta_7_A	43.045998	-70.694900	1	14.6	5/29/2015	Shipex	66.75
Sta_7_B	Sta_7_B	43.045973	-70.694802	1	14.6	5/29/2015	Shipex	197.51
Sta_8_A	Sta_8_A	43.040050	-70.682387	1	20.4	5/27/2015	Shipex	182.42
Sta_8_B	Sta_8_B	43.039337	-70.682270	1	20.4	5/27/2015	Shipex	273.72
Sta_9_A	Sta_9_A	43.036523	-70.677572	1	24.4	5/27/2015	Shipex	504.25
Sta_9_B	Sta_9_B	43.036458	-70.677442	1	24.4	5/27/2015	Shipex	539.45
Sta_10_A	Sta_10_A	43.037565	-70.688847	1	18.9	5/29/2015	Shipex	101.14
Sta_10_B	Sta_10_B	43.037552	-70.688630	1	18.9	5/29/2015	Shipex	196.75
Sta_10_C	Sta_10_C	43.037730	-70.688890	1	18.9	5/29/2015	Shipex	173.26

Nifong Thesis (2015) (1): Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
Sta_1_A	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted
Sta_1_B	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted
Sta_2_A	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
Sta_2_B	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
Sta_3_A	Slightly Granuley	Slightly Granuley Medium Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Medium Sand	Slightly Granular Medium Sand	Medium Sand	Medium Sand	Moderatley Sorted
Sta_3_B	Slightly Granuley	Slightly Granuley Medium Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Medium Sand	Slightly Granular Medium Sand	Medium Sand	Medium Sand	Moderately Well Sorted
Sta_4_A.1	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
Sta_4_A.2	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
Sta_4_B	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
Sta_5_A	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Well Sorted
Sta_5_B	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	N/A	Slightly Fine Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Well Sorted
Sta_6_A	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
Sta_7_A	Slightly Granuley	Slightly Granuley Very Fine Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Very Fine Sand	Slightly Granular Very Fine Sand	Fine Sand	Fine Sand	Well Sorted
Sta_7_B	Slightly Pebbly	Slightly Pebbly Very Fine Sand	Slightly Gravelly Sand	N/A	Slightly Medium Gravelly Very Fine Sand	Slightly Pebbly Very Fine Sand	Very Fine Sand	Very Fine Sand	Well Sorted
Sta_8_A	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	N/A	Slightly Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Moderately Sorted
Sta_8_B	Pebbly	Pebbly Medium Sand	Gravelly Sand	N/A	Medium Gravelly Medium Sand	Pebbly Medium Sand	Coarse Sand	Coarse Sand	Poorly Sorted
Sta_9_A	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
Sta_9_B	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Poorly Sorted
Sta_10_A	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
Sta_10_B	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
Sta_10_C	Pebbly	Pebbly Fine Sand	Gravelly Sand	N/A	Medium Gravelly Fine Sand	Pebbly Fine Sand	Fine Sand	Fine Sand	Poorly Sorted

Nifong Thesis (2015) (1): Grain Size Statistics

Sample ID	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
Sta_1_A	39.5	59.6	0.9				B			-4.13	17.51	0.78	0.58	-0.28	1.21	2.41	-0.55	0.61	0.89
Sta_1_B	37.2	62.5	0.3				B			-4.41	21.26	1.07	0.48	-0.46	1.38	2.52	-0.74	0.61	3.18
Sta_2_A	77.9	21.6	0.5				B			-5.17	36.00	-4.12	17.39	-2.70	6.48	2.59	0.69	0.61	N/A
Sta_2_B	69.6	29.7	0.7				B			-5.05	33.13	-3.37	10.34	-2.23	4.68	2.66	0.53	0.61	1.89
Sta_3_A	2.3	96.6	1.1				U			-0.20	1.15	1.30	0.41	1.13	0.46	0.87	-0.31	0.61	1.46
Sta_3_B	0.6	98.5	0.9				U			0.95	0.52	1.70	0.31	1.64	0.32	0.51	-0.22	0.61	0.92
Sta_4_A.1	59.6	39.9	0.5				B			-4.05	16.56	-2.13	4.38	-1.41	2.65	2.41	0.37	0.61	0.79
Sta_4_A.2	53.2	46.1	0.7				B			-4.36	20.53	-1.58	2.99	-1.28	2.43	2.65	0.17	0.61	N/A
Sta_4_B	71.4	27.9	0.7				B			-4.86	28.98	-3.59	12.03	-2.33	5.01	2.65	0.62	0.61	1.28
Sta_5_A	0.1	98.4	1.5				U			2.49	0.18	2.96	0.13	2.95	0.13	0.39	-0.13	0.61	0.64
Sta_5_B	0.7	97.8	1.5				U			2.43	0.19	2.93	0.13	2.93	0.13	0.41	-0.12	0.61	0.73
Sta_6_A	62.0	37.0	1.0				B			-3.62	12.30	-1.93	3.81	-1.32	2.50	2.12	0.38	0.61	0.74
Sta_7_A	0.0	98.7	1.3				U			2.30	0.20	3.08	0.12	3.00	0.13	0.44	-0.35	0.61	0.72
Sta_7_B	0.3	98.3	1.4				U			2.36	0.19	3.09	0.12	3.01	0.12	0.45	-0.29	0.61	0.66
Sta_8_A	2.2	96.9	1.0				U			1.26	0.42	2.23	0.21	2.23	0.21	0.73	-0.09	0.61	0.66
Sta_8_B	16.6	82.7	0.7				B			-3.33	10.06	1.69	0.31	0.91	0.53	1.94	-0.63	0.61	0.58
Sta_9_A	48.1	51.3	0.5				B			-4.67	25.46	-0.71	1.64	-1.23	2.35	2.58	-0.20	0.61	0.55
Sta_9_B	49.1	50.4	0.5				B			-3.62	12.30	-0.93	1.91	-1.07	2.10	1.99	-0.07	0.66	0.65
Sta_10_A	67.5	31.5	1.0				B			-4.79	27.67	-3.40	10.56	-1.70	3.25	3.17	0.65	0.51	N/A
Sta_10_B	64.2	34.2	1.6				B			-4.65	25.11	-3.43	10.78	-1.61	3.05	3.13	0.70	0.52	1.07
Sta_10_C	7.5	91.3	1.2				U			3.22	0.11	3.33	0.10	2.22	0.21	1.41	-0.38	1.45	0.57

Nifong Thesis (2015) (1): Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0
Sta_1_A	0.00	0.00	4.10	8.20	4.60	6.50	4.60	4.20	4.00	3.40	2.90	2.20	2.50	5.10	11.30	22.70	10.50	1.60	0.60	0.10	0.90
Sta_1_B	0.00	0.00	7.00	18.00	6.10	2.30	2.10	0.70	0.50	0.50	0.60	0.80	1.70	6.80	21.30	26.50	4.40	0.30	0.10	0.00	0.30
Sta_2_A	0.00	16.00	21.20	17.00	12.50	3.40	3.40	1.70	1.50	1.30	1.10	1.00	1.30	2.60	5.00	7.40	2.40	0.40	0.20	0.10	0.50
Sta_2_B	0.00	11.70	10.00	17.00	8.80	9.90	4.00	3.60	2.60	2.00	1.50	1.40	1.80	3.50	6.70	10.30	3.60	0.50	0.30	0.10	0.70
Sta_3_A	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.30	0.40	1.50	3.80	6.80	8.60	14.80	22.70	31.40	7.60	0.60	0.30	0.10	1.00
Sta_3_B	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.10	0.10	0.20	0.60	1.20	2.20	6.00	18.50	52.40	16.40	0.90	0.20	0.10	0.90
Sta_4_A.1	0.00	0.00	0.00	11.10	15.10	11.50	7.90	5.90	4.90	3.20	2.50	2.10	2.20	3.40	7.10	15.00	3.50	2.50	1.40	0.20	0.50
Sta_4_A.2	0.00	0.00	6.60	13.20	12.70	5.50	5.30	4.10	3.30	2.60	2.10	1.90	2.10	3.90	8.00	16.50	4.60	3.20	3.30	0.40	0.70
Sta_4_B	0.00	0.00	40.80	7.40	2.20	4.00	4.30	4.20	4.80	3.70	2.40	1.60	1.40	2.30	6.20	7.80	2.40	1.80	1.80	0.20	0.70
Sta_5_A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10	0.20	0.40	2.30	5.70	44.70	43.10	1.80	1.60
Sta_5_B	0.00	0.00	0.00	0.00	0.00	0.20	0.30	0.10	0.10	0.10	0.10	0.10	0.10	0.30	0.60	2.80	5.90	45.90	40.00	1.90	1.50
Sta_6_A	0.00	0.00	0.00	0.00	13.50	15.00	12.70	7.80	7.70	5.30	4.90	4.20	4.50	4.80	4.90	7.30	4.20	0.80	1.00	0.40	1.00
Sta_7_A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.20	0.40	0.90	3.00	8.40	28.00	53.60	4.10	1.30
Sta_7_B	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.10	0.10	0.30	0.70	2.70	7.50	28.40	53.20	5.40	1.40
Sta_8_A	0.00	0.00	0.00	0.00	0.30	0.40	0.40	0.50	0.30	0.30	0.30	0.40	1.10	2.70	6.40	20.90	32.60	22.30	9.10	1.00	1.00
Sta_8_B	0.00	0.00	0.00	2.10	7.10	2.50	2.00	1.10	0.80	0.90	0.90	1.10	2.50	6.60	12.60	25.20	22.80	8.50	2.30	0.30	0.70
Sta_9_A	0.00	0.00	16.00	3.30	5.90	8.90	5.60	3.70	2.70	2.20	3.30	4.90	7.60	10.60	9.40	7.10	4.80	2.50	0.80	0.10	0.60
Sta_9_B	0.00	0.00	0.00	4.50	7.30	13.20	7.10	6.60	5.30	5.00	6.40	7.40	9.20	11.00	8.00	4.70	2.30	1.00	0.40	0.10	0.50
Sta_10_A	0.00	0.00	26.80	1.90	18.70	13.20	1.90	2.30	1.40	1.30	0.70	0.40	0.50	0.80	1.20	2.30	3.80	7.00	12.60	2.20	1.00
Sta_10_B	0.00	0.00	14.80	20.20	14.00	8.80	2.90	1.10	1.30	1.20	1.00	0.60	0.60	1.40	2.20	3.00	3.40	6.00	13.20	2.70	1.60
Sta_10_C	0.00	0.00	0.00	0.00	2.20	1.30	0.50	1.10	1.30	1.00	0.80	0.70	1.50	4.90	9.40	14.20	14.60	16.40	24.60	4.20	1.30

Nifong Thesis (2015) (2): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type	Total Wt (gm)
Sta_11_A	Sta_11_A	43.026837	-70.687220	1	24.4	5/29/2015	Shipex	212.43
Sta_11_B	Sta_11_B	43.026850	-70.687130	1	24.4	5/29/2015	Shipex	40.34
Sta_11_C	Sta_11_C	43.026507	-70.687193	1	24.4	5/29/2015	Shipex	348.24
Sta_12_A	Sta_12_A	43.031727	-70.704225	1	15.2	5/28/2015	Shipex	190.55
Sta_12_B	Sta_12_B	43.031635	-70.704800	1	15.2	5/28/2015	Shipex	185.28
Sta_14_A	Sta_14_A	43.041070	-70.701710	1	18.3	5/28/2015	Shipex	250.51
Sta_14_B	Sta_14_B	43.041110	-70.702105	1	18.3	5/28/2015	Shipex	285.42
Sta_15_A	Sta_15_A	43.049682	-70.705518	1	15.2	5/29/2015	Shipex	220.39
Sta_15_B	Sta_15_B	43.049537	-70.705527	1	15.2	5/29/2015	Shipex	264.96
Sta_16_A	Sta_16_A	43.042942	-70.689025	1	17.7	5/29/2015	Shipex	153.03
Sta_16_B	Sta_16_B	43.042750	-70.689062	1	17.7	5/29/2015	Shipex	117.92
Sta_17_B	Sta_17_B	43.047613	-70.676675	1	20.4	5/27/2015	Shipex	408.15
Sta_19_A	Sta_19_A	43.022295	-70.695493	1	21.3	5/29/2015	Shipex	401.83
Sta_19_B	Sta_19_B	43.022295	-70.695628	1	21.3	5/29/2015	Shipex	389.30
Sta_20_A	Sta_20_A	43.031153	-70.693498	1	17.7	5/28/2015	Shipex	97.99
Sta_20_B	Sta_20_B	43.031133	-70.693543	1	17.7	5/28/2015	Shipex	103.52
Sta_21_A	Sta_21_A	43.040017	-70.694092	1	15.2	5/28/2015	Shipex	195.70
Sta_21_B	Sta_21_B	43.040122	-70.694452	1	15.2	5/28/2015	Shipex	113.32
Sta_22_A	Sta_22_A	43.037393	-70.682190	1	20.7	5/27/2015	Shipex	381.74
Sta_22_B	Sta_22_B	43.037060	-70.681973	1	20.7	5/27/2015	Shipex	432.33
Sta_23_A	Sta_23_A	43.055077	-70.707808	1	15.2	5/28/2015	Shipex	336.24
Sta_23_B	Sta_23_B	43.054655	-70.708142	1	15.2	5/28/2015	Shipex	363.49

Nifong Thesis (2015) (2): Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
Sta_11_A	Pebbly	Pebbly Medium Sand	Gravelly Sand	N/A	Medium Gravelly Medium Sand	Pebbly Medium Sand	Medium Sand	Medium Sand	Poorly Sorted
Sta_11_B	Pebble Mixes	Muddy Sandy Pebble Gravel	Muddy Sandy Gravel	N/A	Coarse Silty Sandy Pebble Gravel	Coarse Silty Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
Sta_11_C	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted
Sta_12_A	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Well Sorted
Sta_12_B	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Well Sorted
Sta_14_A	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Moderately Well Sorted
Sta_14_B	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Fine Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
Sta_15_A	Slightly Granuley	Slightly Granuley Medium Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Medium Sand	Slightly Granular Medium Sand	Medium Sand	Medium Sand	ModeratelyWell Sorted
Sta_15_B	Pebbly	Pebbly Medium Sand	Gravelly Sand	N/A	Coarse Gravelly Medium Sand	Pebbly Medium Sand	Coarse Sand	Coarse Sand	Very Poorly Sorted
Sta_16_A	Slightly Pebbly	Slightly Pebbly Very Fine Sand	Slightly Gravelly Sand	N/A	Slightly Coarse Gravelly Very Fine Sand	Slightly Pebbly Very Fine Sand	Fine Sand	Fine Sand	Moderately Sorted
Sta_16_B	Pebbly	Pebbly Fine Sand	Gravelly Sand	N/A	Medium Gravelly Fine Sand	Pebbly Fine Sand	Medium Sand	Medium Sand	Very Poorly Sorted
Sta_17_B	Gravel	Pebble Gravel	Gravel	N/A	Medium Gravel	Pebble Gravel	Fine Gravel	Pebble Gravel	Poorly Sorted
Sta_19_A	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Poorly Sorted
Sta_19_B	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Fine Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Poorly Sorted
Sta_20_A	Slightly Granuley	Slightly Granuley Very Fine Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Very Fine Sand	Slightly Granular Very Fine Sand	Fine Sand	Fine Sand	Moderately Well Sorted
Sta_20_B	Slightly Granuley	Slightly Granuley Very Fine Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Very Fine Sand	Slightly Granular Very Fine Sand	Fine Sand	Fine Sand	Moderately Well Sorted
Sta_21_A	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	N/A	Slightly Medium Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Well Sorted
Sta_21_B	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Well Sorted
Sta_22_A	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted
Sta_22_B	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
Sta_23_A	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
Sta_23_B	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Fine Gravel	Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted

Nifong Thesis (2015) (2): Grain Size Statistics

Sample ID	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
Sta_11_A	6.1	93.0	0.9				U			0.34	0.79	1.69	0.31	1.65	0.32	1.02	-0.31	2.26	0.51
Sta_11_B	78.9	18.5	2.6				B			-4.36	20.53	-3.30	9.85	-2.29	4.90	2.28	-0.64	1.19	0.80
Sta_11_C	42.0	57.2	0.8				B			-3.74	13.38	0.56	0.68	-0.35	1.28	2.37	-0.42	0.60	0.97
Sta_12_A	0.4	97.7	1.9				U			2.16	0.22	2.80	0.14	2.81	0.14	0.47	-0.05	1.15	0.63
Sta_12_B	0.1	97.8	2.2				U			2.20	0.22	2.79	0.14	2.82	0.14	0.45	0.04	1.15	0.61
Sta_14_A	0.2	98.4	1.4				U			1.62	0.33	2.32	0.20	2.36	0.19	0.57	0.03	1.38	0.62
Sta_14_B	57.9	40.9	1.2				B			-4.54	23.26	-1.65	3.14	-1.14	2.20	2.69	0.23	0.78	0.76
Sta_15_A	3.2	96.0	0.7				U			0.87	0.55	1.90	0.27	1.85	0.28	0.69	-0.31	1.80	0.93
Sta_15_B	19.2	80.2	0.5				B			-4.03	16.34	1.72	0.30	0.56	0.68	2.17	-0.77	1.78	0.69
Sta_16_A	4.4	94.2	1.4				U			1.52	0.35	2.88	0.14	2.72	0.15	0.96	-0.46	1.66	0.67
Sta_16_B	15.6	83.4	1.0				B			-3.72	13.18	2.57	0.17	1.74	0.30	2.14	-0.69	2.03	0.68
Sta_17_B	85.8	13.7	0.4				B			-3.99	15.89	-3.09	8.51	-2.72	6.61	1.61	0.47	1.59	1.35
Sta_19_A	66.2	33.5	0.4				B			-3.73	13.27	-2.26	4.79	-1.61	3.05	1.99	0.44	0.72	1.52
Sta_19_B	73.5	26.1	0.4				B			-3.35	10.20	-2.12	4.35	-1.68	3.20	1.63	0.42	1.06	0.67
Sta_20_A	0.2	97.6	2.2				U			2.10	0.23	3.05	0.12	2.96	0.13	0.57	-0.29	1.25	0.47
Sta_20_B	0.8	97.2	2.0				U			2.10	0.23	3.02	0.12	2.94	0.13	0.57	-0.28	1.26	0.71
Sta_21_A	1.5	96.5	2.0				U			2.48	0.18	2.94	0.13	2.95	0.13	0.45	-0.03	1.10	0.71
Sta_21_B	0.0	97.4	2.5				U			2.47	0.18	2.86	0.14	2.90	0.13	0.43	0.09	1.13	0.78
Sta_22_A	42.3	57.3	0.4				B			-4.51	22.78	0.27	0.83	-0.27	1.20	2.65	-0.29	0.66	0.52
Sta_22_B	53.1	45.8	1.1				B			-4.20	18.38	-1.60	3.03	-1.16	2.23	2.60	0.21	0.65	0.59
Sta_23_A	76.7	22.7	0.6				B			-5.32	39.95	-4.64	24.93	-2.68	6.43	2.96	0.82	1.05	0.90
Sta_23_B	49.2	49.9	0.8				B			-4.21	18.51	0.88	0.54	-0.80	1.74	2.67	0.02	0.58	0.70

Nifong Thesis (2015) (2): Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0
Sta_11_A	0.00	0.00	0.00	0.00	0.50	2.20	0.70	1.30	0.70	0.70	1.20	1.30	2.10	5.60	19.00	37.60	19.00	5.00	1.80	0.40	0.90
Sta_11_B	0.00	0.00	0.00	38.00	5.20	18.20	8.20	4.20	3.30	1.80	1.30	1.00	1.70	2.60	3.60	4.30	1.90	0.70	1.00	0.40	2.60
Sta_11_C	0.00	0.00	0.00	3.10	13.80	8.00	8.50	3.60	2.80	2.20	1.80	1.80	3.30	9.10	14.60	14.00	6.60	3.60	2.00	0.40	0.80
Sta_12_A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10	0.20	0.20	0.20	0.30	0.60	1.20	2.70	13.30	50.30	25.80	3.10	1.90
Sta_12_B	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10	0.10	0.20	0.40	0.90	2.40	14.20	52.50	23.60	3.30	2.20
Sta_14_A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10	0.20	0.40	0.80	1.90	3.50	11.70	45.70	25.00	8.00	1.20	1.40
Sta_14_B	0.00	0.00	11.30	3.40	5.30	7.20	7.70	9.70	8.00	5.40	4.70	3.90	3.90	4.50	3.80	3.80	6.40	5.30	3.60	0.90	1.20
Sta_15_A	0.00	0.00	0.00	0.00	0.70	0.30	0.40	0.40	0.50	0.90	1.10	1.30	1.80	3.40	8.30	39.00	35.80	4.00	1.30	0.10	0.70
Sta_15_B	0.00	0.00	0.00	10.60	3.00	0.80	1.10	1.20	1.20	1.30	1.60	1.60	2.00	3.20	8.10	31.70	28.40	2.80	0.80	0.10	0.50
Sta_16_A	0.00	0.00	0.00	1.40	0.40	1.00	0.30	0.40	0.50	0.40	0.50	0.40	0.60	0.60	3.10	7.70	14.10	24.30	37.00	5.80	1.50
Sta_16_B	0.00	0.00	0.00	6.10	7.20	0.20	0.70	0.20	0.60	0.60	0.60	0.40	0.70	1.30	4.40	9.60	13.60	20.90	27.30	4.50	1.10
Sta_17_B	0.00	0.00	6.00	3.70	22.40	22.00	13.00	8.40	6.30	4.00	2.90	1.70	1.30	1.00	1.40	2.20	2.10	0.60	0.40	0.20	0.40
Sta_19_A	0.00	0.00	0.00	3.00	13.20	20.20	9.50	8.80	6.30	5.20	4.60	3.90	4.20	5.90	6.20	4.90	2.10	0.90	0.60	0.10	0.40
Sta_19_B	0.00	0.00	0.00	0.00	5.90	14.80	17.30	16.00	11.30	8.10	5.60	3.30	3.20	4.60	4.10	2.70	1.20	0.70	0.60	0.20	0.40
Sta_20_A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.20	0.10	0.20	0.30	0.80	1.60	4.70	9.30	28.10	44.70	7.70	2.20
Sta_20_B	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.30	0.20	0.20	0.30	0.40	0.70	1.40	4.30	9.40	30.30	43.00	7.20	2.00
Sta_21_A	0.00	0.00	0.00	0.00	1.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.30	2.00	5.50	45.50	38.00	4.80	2.00
Sta_21_B	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10	0.20	0.50	2.40	6.80	54.00	29.70	3.60	2.60
Sta_22_A	0.00	4.50	5.70	0.00	4.20	11.70	7.70	3.50	2.80	2.20	2.30	2.90	4.50	6.70	7.60	9.80	10.60	7.90	4.20	0.80	0.40
Sta_22_B	0.00	0.00	8.60	2.40	14.30	11.20	7.10	4.30	2.80	2.40	2.60	3.20	5.10	7.00	6.70	7.20	6.10	4.60	2.70	0.60	1.10
Sta_23_A	0.00	30.60	27.90	2.00	7.60	2.90	2.70	1.20	1.00	0.80	0.60	0.60	0.70	1.20	1.70	4.00	9.10	3.50	1.10	0.20	0.60
Sta_23_B	0.00	0.00	6.00	7.20	9.00	4.60	8.80	6.60	3.80	3.20	3.20	2.90	3.20	3.40	3.30	8.00	16.40	6.90	2.30	0.40	0.80

Section 2: NEWBEX Survey (2012)

NEWBEX Survey (2012) (1): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type	Total Wt (gm)
NB_01	15_S1	43.070682	-70.704077	1	15.1	11/26/2012	Shipek	72.18
NB_02	15_S2	43.070710	-70.704057	1	15.1	11/26/2012	Shipek	106.22
NB_03	14_S1	43.068822	-70.704358	1		11/26/2012	Shipek	35.04
NB_04	14_S2	43.068815	-70.704428	1		11/26/2012	Shipek	60.59
NB_05	13_S1	43.066312	-70.704792	1	12.9	11/26/2012	Shipek	55.80
NB_06	13_S2	43.066407	-70.704713	1	12.9	11/26/2012	Shipek	51.50
NB_07	12_S1	43.063998	-70.705130	1	15.5	11/26/2012	Shipek	52.08
NB_08	12_S2	43.064040	-70.705173	1	15.5	11/26/2012	Shipek	66.19
NB_09	11_S1	43.060667	-70.705672	1	18.2	11/26/2012	Shipek	67.01
NB_10	11_S2	43.060570	-70.705683	1	18.2	11/26/2012	Shipek	68.66
NB_11	10_S1	43.058133	-70.705605	1		11/26/2012	Shipek	71.14
NB_12	10_S2	43.058135	-70.705778	1		11/26/2012	Shipek	52.10
NB_13	09_S1	43.059418	-70.703545	1	18.1	11/26/2012	Shipek	638.28
NB_14	09_S2	43.059173	-70.703467	1	18.1	11/26/2012	Shipek	91.10
NB_15	09_S3	43.059500	-70.703622	1	18.1	11/26/2012	Shipek	55.60
NB_16	08_S1	43.057327	-70.702315	1	14.1	11/26/2012	Shipek	194.16
NB_17	08_S2	43.057295	-70.702267	1	14.1	11/26/2012	Shipek	206.30
NB_18	07_S1	43.055378	-70.701928	1	13.6	11/26/2012	Shipek	85.74
NB_19	07_S2	43.055353	-70.701882	1	13.6	11/26/2012	Shipek	89.20
NB_20	07_S3	43.055312	-70.701822	1	13.6	11/26/2012	Shipek	269.49

NEWBEX Survey (2012) (1): Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
NB_01	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Fine Gravel	Sandy Pebble Gravel	Coarse Sand	Coarse Sand	Poorly Sorted
NB_02	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
NB_03	Slightly Granuley	Slightly Granuley Medium Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Medium Sand	Slightly Granular Medium Sand	Medium Sand	Medium Sand	Moderately Sorted
NB_04	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Medium Sand	Medium Sand	Moderately Sorted
NB_05	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Medium Sand	Medium Sand	Poorly Sorted
NB_06	Slightly Granuley	Slightly Granuley Medium Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Medium Sand	Slightly Granular Medium Sand	Medium Sand	Medium Sand	Moderately Sorted
NB_07	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Medium Sand	Medium Sand	Moderately Sorted
NB_08	Slightly Pebbly	Slightly Pebbly Medium Sand	Slightly Gravelly Sand	N/A	Slightly Fine Gravelly Medium Sand	Slightly Pebbly Medium Sand	Medium Sand	Medium Sand	Well Sorted
NB_09	Pebbly	Pebbly Medium Sand	Gravelly Sand	N/A	Medium Gravelly Medium Sand	Pebbly Medium Sand	Medium Sand	Medium Sand	Poorly Sorted
NB_10	Pebbly	Pebbly Medium Sand	Gravelly Sand	N/A	Coarse Gravelly Medium Sand	Pebbly Medium Sand	Coarse Sand	Coarse Sand	Very Poorly Sorted
NB_11	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Medium Sand	Medium Sand	Poorly Sorted
NB_12	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Medium Sand	Medium Sand	Moderately Sorted
NB_13	Gravel	Pebble Gravel	Gravel	N/A	Very Coarse Gravel	Pebble Gravel	Coarse Gravel	Pebble Gravel	Poorly Sorted
NB_14	Gravel	Pebble Gravel	Gravel	N/A	Coarse Gravel	Pebble Gravel	Coarse Gravel	Pebble Gravel	Poorly Sorted
NB_15	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_16	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_17	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_18	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
NB_19	Pebbly	Pebbly Medium Sand	Gravelly Sand	N/A	Medium Gravelly Medium Sand	Pebbly Medium Sand	Medium Sand	Medium Sand	Poorly Sorted
NB_20	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted

NEWBEX Survey (2012) (1): Grain Size Statistics

Sample ID	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
NB_01	32.9	66.4	0.6				B	1.75	-3.74	-2.24	4.73	-2.96	7.77	0.01	0.99	1.99	-0.50	0.70	1.32
NB_02	51.9	47.7	0.3				B	-4.24	1.75	-4.29	19.52	-1.33	2.51	-1.28	2.43	2.43	0.04	0.50	0.96
NB_03	4.4	95.2	0.4				U	1.75		-0.15	1.11	1.38	0.38	1.24	0.42	0.82	-0.39	1.44	0.85
NB_04	5.9	93.9	0.3				U	1.75		-0.54	1.46	1.31	0.40	1.09	0.47	1.00	-0.38	1.24	1.29
NB_05	10.5	89.0	0.5				U	1.75		-1.06	2.08	1.48	0.36	1.06	0.48	1.20	-0.56	1.39	2.02
NB_06	4.0	95.4	0.6				U	1.75		0.04	0.97	1.58	0.33	1.43	0.37	0.86	-0.39	1.56	0.85
NB_07	9.1	90.2	0.7				U	1.75		-0.11	1.08	1.84	0.28	1.80	0.29	0.99	-0.39	3.18	0.91
NB_08	1.8	97.6	0.6				U	1.75		1.36	0.39	1.89	0.27	1.92	0.26	0.43	-0.03	1.07	0.97
NB_09	16.5	82.7	0.8				U	1.75		-2.47	5.56	1.85	0.28	1.02	0.49	1.80	-0.71	3.33	0.88
NB_10	25.7	73.8	0.5				B	1.75	-4.24	-4.03	16.31	1.74	0.30	0.30	0.81	2.39	-0.77	0.83	0.95
NB_11	6.3	93.1	0.6				U	1.75		-0.46	1.38	1.66	0.32	1.39	0.38	1.03	-0.50	1.51	4.06
NB_12	5.0	94.3	0.7				U	1.75		-0.08	1.06	1.77	0.29	1.58	0.33	0.97	-0.41	1.70	0.95
NB_13	92.1	7.6	0.4				B	-5.24	-3.74	-5.37	41.38	-4.79	27.70	-4.43	21.54	1.61	0.67	1.90	0.38
NB_14	91.3	8.2	0.6				U	-4.24		-4.43	21.53	-4.20	18.34	-4.20	18.34	1.12	0.46	9.54	1.41
NB_15	76.4	22.8	0.8				U	-4.24		-4.37	20.71	-3.69	12.92	-2.11	4.32	2.58	0.79	1.00	1.11
NB_16	68.4	31.1	0.6				B	-4.73	1.75	-4.83	28.48	-4.06	16.71	-2.41	5.30	2.68	0.78	0.56	0.42
NB_17	65.0	34.6	0.3				B	-4.73	1.75	-4.85	28.84	-4.05	16.61	-2.37	5.17	2.74	0.77	0.51	0.78
NB_18	53.7	44.7	1.7				B	1.75	-4.24	-4.15	17.74	-1.71	3.27	-1.21	2.31	2.52	0.26	0.58	0.89
NB_19	9.2	89.9	0.8				B	1.75	-3.74	-0.88	1.84	1.58	0.34	1.27	0.41	1.50	-0.52	2.15	0.47
NB_20	70.9	28.5	0.6				T	-5.24	-3.24	-5.21	36.89	-2.87	7.29	-2.14	4.39	2.79	0.34	0.77	0.31

NEWBEX Survey (2012) (1): Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0
NB_01	0.00	0.00	0.00	0.00	9.41	0.00	7.20	7.29	4.52	4.50	4.18	3.57	5.32	8.55	14.42	23.04	5.91	0.99	0.29	0.14	0.64
NB_02	0.00	0.00	0.00	24.53	7.11	5.31	5.52	3.16	3.46	2.84	2.56	2.60	3.70	6.69	11.06	16.32	3.86	0.66	0.20	0.09	0.34
NB_03	0.00	0.00	0.00	0.00	0.00	0.00	1.21	1.00	0.80	1.41	2.85	3.89	5.34	11.22	28.93	36.00	6.29	0.51	0.12	0.06	0.36
NB_04	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.41	1.66	3.36	4.66	4.92	6.64	12.77	24.19	30.38	7.29	1.29	1.25	0.45	0.29
NB_05	0.00	0.00	0.00	0.00	0.00	0.00	1.83	2.33	2.17	4.19	3.92	3.68	4.72	8.97	18.87	34.80	11.78	1.28	0.33	0.61	0.53
NB_06	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.22	0.76	2.10	2.65	3.08	4.09	8.45	21.24	37.85	14.74	2.45	0.64	0.22	0.64
NB_07	0.00	0.00	0.00	0.00	0.00	3.39	0.23	2.06	2.26	1.15	0.66	0.32	0.60	1.40	7.48	44.90	29.49	4.48	0.68	0.21	0.69
NB_08	0.00	0.00	0.00	0.00	0.00	0.70	0.50	0.25	0.05	0.28	0.26	0.43	0.62	1.47	7.53	47.92	34.52	4.07	0.64	0.14	0.62
NB_09	0.00	0.00	0.00	0.00	3.26	4.47	2.21	2.99	2.21	1.34	0.81	0.77	0.87	1.44	4.80	34.92	31.34	6.37	1.15	0.27	0.81
NB_10	0.00	0.00	0.00	10.62	1.90	4.64	3.05	2.52	1.52	1.47	0.61	0.63	0.74	1.27	4.73	33.92	26.36	4.31	0.99	0.25	0.46
NB_11	0.00	0.00	0.00	0.00	0.00	0.00	0.19	1.17	1.78	3.20	3.50	3.51	4.45	6.98	12.64	37.65	21.24	2.61	0.39	0.10	0.60
NB_12	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.33	1.68	2.83	2.67	2.78	3.77	5.18	10.98	36.64	25.90	4.71	1.33	0.36	0.68
NB_13	0.00	42.45	20.06	2.08	15.14	7.20	2.23	1.50	0.80	0.61	0.49	0.37	0.32	0.31	0.52	2.15	1.60	1.05	0.56	0.18	0.37
NB_14	0.00	0.00	0.00	84.06	3.24	1.54	0.65	1.17	0.29	0.32	0.29	0.24	0.20	0.20	0.32	1.46	1.84	1.70	1.55	0.35	0.59
NB_15	0.00	0.00	0.00	42.93	11.78	8.21	4.40	4.18	2.39	2.49	1.36	0.93	0.73	0.89	1.47	6.56	5.30	2.96	2.23	0.43	0.77
NB_16	0.00	0.00	33.93	18.47	7.24	1.64	2.02	1.41	1.64	2.00	1.88	1.77	1.92	2.82	5.18	10.82	3.34	1.99	1.13	0.23	0.58
NB_17	0.00	0.00	38.70	12.73	7.88	0.28	1.00	1.72	1.88	0.85	0.95	1.36	1.89	3.06	5.89	12.97	3.89	2.38	1.81	0.43	0.34
NB_18	0.00	0.00	0.00	14.44	5.98	12.18	11.91	3.87	2.87	2.40	1.92	1.79	2.27	3.56	5.93	16.39	7.71	3.49	1.36	0.22	1.71
NB_19	0.00	0.00	0.00	0.00	5.54	1.58	0.00	0.66	0.59	0.87	3.29	2.95	5.07	9.38	14.60	34.08	13.13	5.08	1.99	0.34	0.85
NB_20	0.00	17.94	2.79	4.97	9.55	12.01	10.51	5.33	4.59	3.19	2.26	1.91	2.20	3.04	3.70	8.49	4.19	1.90	0.66	0.11	0.66

NEWBEX Survey (2012) (2): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type	Total Wt (gm)
NB_21	06_S1	43.055967	-70.699415	1	12.6	11/26/2012	Shipek	59.13
NB_22	06_S2	43.056038	-70.699355	1	12.6	11/26/2012	Shipek	74.80
NB_23	05_S1	43.054482	-70.698567	1	13.2	11/26/2012	Shipek	59.81
NB_24	05_S2	43.054552	-70.698233	1	13.2	11/26/2012	Shipek	88.40
NB_25	04_S1	43.052222	-70.697197	1	13.0	11/26/2012	Shipek	51.17
NB_26	04_S2	43.052003	-70.697673	1	13.0	11/26/2012	Shipek	80.40
NB_27	03_S1	43.053682	-70.695457	1	15.0	11/26/2012	Shipek	119.50
NB_28	03_S2	43.053648	-70.695433	1	15.0	11/26/2012	Shipek	277.59
NB_29	01_S1	43.050700	-70.694400	1	14.8	11/26/2012	Shipek	116.11
NB_30	01_S2	43.050600	-70.694300	1	14.8	11/26/2012	Shipek	97.50
NB_31	A1_S1	43.072623	-70.705797	1	16.8	7/3/2013	Shipek	138.67
NB_32	A1_S2	43.072590	-70.705530	1	16.8	7/3/2013	Shipek	141.29
NB_33	B1_S1	43.068607	-70.705162	1	15.2	7/3/2013	Shipek	43.79
NB_34	B1_S2	43.068588	-70.704493	1	15.2	7/3/2013	Shipek	46.32
NB_35	C1_S1	43.064702	-70.704343	1		7/3/2013	Shipek	31.74
NB_36	C1_S2	43.064862	-70.704485	1		7/3/2013	Shipek	32.84
NB_37	D1_S1	43.061678	-70.704100	1	17.7	7/3/2013	Shipek	129.10
NB_38	D1_S2	43.061887	-70.704170	1	17.7	7/3/2013	Shipek	317.99
NB_39	F1_S1	43.057322	-70.703735	1	16.8	7/3/2013	Shipek	556.15
NB_40	F1_S2	43.057767	-70.703087	1	16.8	7/3/2013	Shipek	448.61

NEWBEX Survey (2012) (2): Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
NB_21	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	N/A	Slightly Fine Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Well Sorted
NB_22	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	N/A	Slightly Fine Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Well Sorted
NB_23	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	N/A	Slightly Medium Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Well Sorted
NB_24	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Well Sorted
NB_25	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Well Sorted
NB_26	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Very Fine Sand	Very Fine Sand	Well Sorted
NB_27	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebbly Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_28	Gravel	Pebble Gravel	Gravel	N/A	Coarse Gravel	Pebbly Gravel	Medium Gravel	Pebble Gravel	Poorly Sorted
NB_29	Pebbly	Pebbly Fine Sand	Gravelly Sand	N/A	Medium Gravelly Fine Sand	Pebbly Fine Sand	Coarse Sand	Coarse Sand	Very Poorly Sorted
NB_30	Pebbly	Pebbly Fine Sand	Gravelly Sand	N/A	Medium Gravelly Fine Sand	Pebbly Fine Sand	Coarse Sand	Coarse Sand	Very Poorly Sorted
NB_31	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Very Coarse Gravel	Sandy Pebble Gravel	Medium Gravel	Pebble Gravel	Very Poorly Sorted
NB_32	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_33	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Medium Sand	Medium Sand	Moderately Sorted
NB_34	Slightly Granuley	Slightly Granuley Medium Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Medium Sand	Slightly Granular Medium Sand	Medium Sand	Medium Sand	Moderately Well Sorted
NB_35	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Coarse Sand	Coarse Sand	Poorly Sorted
NB_36	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Medium Sand	Medium Sand	Moderately Sorted
NB_37	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_38	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_39	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_40	Gravel	Pebble Gravel	Gravel	N/A	Very Coarse Gravel	Pebble Gravel	Very Coarse Gravel	Pebble Gravel	Moderately Sorted

NEWBEX Survey (2012) (2): Grain Size Statistics

Sample ID	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
NB_21	1.9	96.9	1.2				U	2.74		2.40	0.19	2.89	0.14	2.91	0.13	0.41	-0.05	1.02	0.62
NB_22	0.6	98.7	0.7				U	3.24		2.50	0.18	2.97	0.13	2.96	0.13	0.38	-0.14	0.90	0.64
NB_23	1.3	96.4	2.2				U	2.74		2.15	0.23	2.88	0.14	2.90	0.13	0.48	-0.13	1.19	0.57
NB_24	0.6	98.5	0.9				U	3.24		2.11	0.23	3.03	0.12	2.96	0.13	0.49	-0.39	1.15	0.62
NB_25	0.5	97.9	1.5				U	3.24		2.33	0.20	2.96	0.13	2.95	0.13	0.47	-0.17	1.18	0.64
NB_26	0.5	98.3	1.3				U	3.24		2.51	0.18	3.08	0.12	3.02	0.12	0.39	-0.31	0.95	0.62
NB_27	75.8	23.6	0.7				U	-4.24		-4.37	20.71	-3.46	10.97	-2.11	4.32	2.60	0.73	1.04	0.92
NB_28	90.3	9.4	0.3				U	-5.24		-5.28	38.83	-4.16	17.81	-3.92	15.18	1.76	0.46	1.59	
NB_29	29.6	69.5	0.9				B	3.24	2.24	-3.63	12.38	2.02	0.25	0.63	0.65	2.72	-0.64	0.61	0.61
NB_30	24.6	74.2	1.2				B	3.24	2.24	-3.32	9.97	2.16	0.22	0.79	0.58	2.63	-0.65	0.74	0.65
NB_31	77.7	22.2	0.1				B	-5.24	-4.24	-5.35	40.79	-4.13	17.45	-3.02	8.09	2.46	0.61	0.82	0.90
NB_32	75.2	24.5	0.3				B	-4.24	1.75	-4.33	20.11	-3.55	11.67	-2.39	5.23	2.14	0.72	0.82	
NB_33	5.6	93.8	0.5				U	1.75		-0.52	1.44	1.28	0.41	1.05	0.48	0.99	-0.38	1.12	1.60
NB_34	1.8	97.9	0.3				U	1.25		0.25	0.84	1.23	0.43	1.19	0.44	0.64	-0.22	1.15	1.10
NB_35	17.5	81.9	0.6				B	1.75	-0.74	-1.38	2.61	0.44	0.74	0.39	0.77	1.34	-0.09	0.74	2.70
NB_36	5.1	94.3	0.6				U	1.75		-0.45	1.37	1.52	0.35	1.17	0.45	0.99	-0.54	1.16	1.50
NB_37	74.3	24.2	1.4				B	-3.74	1.75	-4.33	20.08	-3.71	13.10	-2.03	4.08	2.63	0.82	0.80	2.60
NB_38	72.1	27.0	1.0				B	-3.74	1.75	-4.58	23.97	-3.36	10.30	-2.02	4.07	2.60	0.64	0.71	
NB_39	79.5	20.1	0.4				B	-4.24	-5.24	-5.27	38.51	-3.87	14.65	-2.47	5.53	2.91	0.63	2.35	
NB_40	97.6	2.2	0.2				U	-5.74		-5.88	58.89	-5.49	44.85	-5.06	33.36	0.94	0.68	1.00	

NEWBEX Survey (2012) (2): Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0
NB_21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.72	0.12	0.09	0.03	0.04	0.06	0.09	0.29	2.02	6.64	49.83	34.67	3.18	1.23
NB_22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.13	0.14	0.09	0.07	0.05	0.07	0.20	1.44	5.61	44.50	44.67	1.99	0.72
NB_23	0.00	0.00	0.00	0.00	0.00	0.68	0.24	0.06	0.19	0.15	0.07	0.15	0.17	0.40	0.95	4.60	7.29	45.61	34.53	2.64	2.26
NB_24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.18	0.29	0.25	0.20	0.36	0.69	1.28	4.92	7.55	31.04	49.05	3.18	0.87
NB_25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.23	0.17	0.13	1.25	0.30	0.72	2.84	5.81	41.07	41.19	4.45	1.52
NB_26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.06	0.06	0.10	0.07	0.15	0.41	1.72	4.88	32.61	54.85	3.42	1.28
NB_27	0.00	0.00	0.00	42.98	6.21	13.18	3.65	4.98	2.68	2.11	1.69	1.58	1.53	1.81	1.83	2.88	1.96	2.43	6.58	1.27	0.66
NB_28	0.00	24.14	16.91	13.18	15.53	6.78	7.37	2.66	2.07	1.62	1.22	1.00	0.76	0.67	0.61	0.88	0.52	1.23	2.00	0.54	0.32
NB_29	0.00	0.00	0.00	4.91	7.08	8.56	3.15	2.11	2.24	1.56	1.03	0.97	1.42	2.60	3.54	10.33	15.30	15.25	16.15	2.91	0.90
NB_30	0.00	0.00	0.00	0.00	6.65	9.70	1.67	1.99	2.71	1.93	1.55	1.34	1.77	3.31	3.65	8.74	14.60	12.95	23.29	2.95	1.20
NB_31	0.00	36.16	0.00	18.66	4.31	4.88	5.42	3.96	2.21	2.08	2.22	2.22	2.72	4.03	5.33	4.59	0.72	0.20	0.09	0.05	0.14
NB_32	0.00	0.00	0.00	31.14	21.31	8.11	6.15	3.64	2.39	2.44	2.62	2.36	2.84	4.17	5.36	5.63	1.04	0.29	0.14	0.08	0.30
NB_33	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.67	1.01	3.17	4.70	5.78	8.35	12.97	22.49	30.31	8.21	0.75	0.18	0.09	0.53
NB_34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.16	0.73	1.58	3.14	6.88	19.23	37.54	26.00	3.13	0.28	0.06	0.04	0.32
NB_35	0.00	0.00	0.00	0.00	0.00	0.94	1.30	1.61	4.13	9.55	12.47	11.53	9.60	9.47	11.11	20.28	5.87	0.93	0.40	0.20	0.61
NB_36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	1.29	2.62	4.46	5.93	6.57	9.39	16.60	40.03	10.10	0.87	0.23	0.11	0.56
NB_37	0.00	0.00	0.00	30.75	34.29	4.23	2.04	1.35	0.68	1.01	0.53	0.44	0.49	0.73	1.91	7.69	6.07	3.54	2.17	0.63	1.46
NB_38	0.00	0.00	12.47	13.11	22.06	9.44	7.27	3.65	2.21	1.85	1.26	1.19	1.29	1.98	3.61	8.56	5.22	2.27	1.20	0.37	0.99
NB_39	0.00	22.85	0.00	21.62	22.43	8.58	2.13	1.07	0.48	0.29	0.29	0.38	0.51	0.80	1.37	5.46	5.03	3.76	2.03	0.46	0.45
NB_40	49.90	9.38	16.18	6.64	7.57	5.02	1.85	0.77	0.22	0.09	0.09	0.09	0.08	0.09	0.15	0.45	0.35	0.48	0.31	0.08	0.22

NEWBEX Survey (2012) (3): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type	Total Wt (gm)
NB_41	G1_S1	43.055922	-70.701318	1	13.7	7/3/2013	Shipek	179.28
NB_42	G1_S2	43.055930	-70.701290	1	13.7	7/3/2013	Shipek	240.13
NB_43	H1_S1	43.054240	-70.698332	1	12.8	7/3/2013	Shipek	45.20
NB_44	H1_S2	43.053720	-70.698718	1	12.8	7/3/2013	Shipek	50.20
NB_45	I1_S1	43.052695	-70.696708	1	12.2	7/3/2013	Shipek	36.07
NB_46	I1_S2	43.052448	-70.696595	1	12.2	7/3/2013	Shipek	41.31
NB_47	J1_S1	43.051265	-70.693852	1	12.8	7/3/2013	Shipek	157.31
NB_48	A1_S1	43.072758	-70.705955	1	15.1	10/21/2013	Shipek	1047.50
NB_49	A1_S2	43.072748	-70.705960	1	15.1	10/21/2013	Shipek	812.85
NB_50	B1_S1	43.069007	-70.705178	1	13.5	10/21/2013	Shipek	69.40
NB_51	B1_S2	43.068913	-70.705202	1	13.5	10/21/2013	Shipek	76.50
NB_52	C1_S1	43.064830	-70.704493	1	15.6	10/21/2013	Shipek	68.57
NB_53	C1_S2	43.064998	-70.704240	1	15.6	10/21/2013	Shipek	75.30
NB_54	D1_S1	43.061995	-70.703853	1	20.4	10/21/2013	Shipek	509.58
NB_55	D1_S2	43.061993	-70.703935	1	20.4	10/21/2013	Shipek	429.26
NB_56	E1_S1	43.059927	-70.703615	1	19.7	10/21/2013	Shipek	76.90
NB_57	E1_S2	43.060033	-70.703532	1	19.7	10/21/2013	Shipek	462.60
NB_58	F1_S1	43.057682	-70.703418	1	16.9	10/21/2013	Shipek	384.60
NB_59	F1_S2	43.057737	-70.703315	1	16.9	10/21/2013	Shipek	727.30
NB_60	G1_S1	43.056003	-70.701455	1	15.1	10/21/2013	Shipek	229.40

NEWBEX Survey (2012) (3): Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
NB_41	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_42	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_43	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	N/A	Slightly Fine Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Moderately Well Sorted
NB_44	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	N/A	Slightly Medium Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Well Sorted
NB_45	Slightly Pebbly	Slightly Pebbly Very Fine Sand	Slightly Gravelly Sand	N/A	Slightly Fine Gravelly Very Fine Sand	Slightly Pebbly Very Fine Sand	Fine Sand	Fine Sand	Moderately Well Sorted
NB_46	Slightly Granuley	Slightly Granuley Very Fine Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Very Fine Sand	Slightly Granular Very Fine Sand	Fine Sand	Fine Sand	Moderately Well Sorted
NB_47	Gravel	Pebble Gravel	Gravel	N/A	Coarse Gravel	Pebble Gravel	Medium Gravel	Pebble Gravel	Poorly Sorted
NB_48	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_49	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
NB_50	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Coarse Sand	Coarse Sand	Poorly Sorted
NB_51	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Coarse Sand	Coarse Sand	Poorly Sorted
NB_52	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Coarse Sand	Coarse Sand	Moderately Sorted
NB_53	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Coarse Sand	Coarse Sand	Poorly Sorted
NB_54	Gravel	Pebble Gravel	Gravel	N/A	Very Coarse Gravel	Pebble Gravel	Coarse Gravel	Pebble Gravel	Poorly Sorted
NB_55	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_56	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_57	Gravel	Pebble Gravel	Gravel	N/A	Very Coarse Gravel	Pebble Gravel	Coarse Gravel	Pebble Gravel	Moderately Well Sorted
NB_58	Gravel	Pebble Gravel	Gravel	N/A	Coarse Gravel	Pebble Gravel	Medium Gravel	Pebble Gravel	Poorly Sorted
NB_59	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_60	Pebbly	Pebbly Fine Sand	Gravelly Sand	N/A	Medium Gravelly Fine Sand	Pebbly Fine Sand	Medium Sand	Medium Sand	Poorly Sorted

NEWBEX Survey (2012) (3): Grain Size Statistics

Sample ID	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
NB_41	77.9	21.5	0.6				B	-4.24	2.24	-4.72	26.28	-4.06	16.68	-2.23	4.68	2.77	0.82	2.51	
NB_42	66.4	32.9	0.7				B	-4.73	2.24	-5.21	37.12	-4.38	20.88	-2.41	5.30	3.06	0.79	0.51	
NB_43	1.4	97.7	0.9				U	2.74		1.84	0.28	2.86	0.14	2.80	0.14	0.58	-0.29	1.27	0.60
NB_44	1.0	97.8	1.2				U	2.74		2.11	0.23	2.89	0.14	2.89	0.13	0.48	-0.16	1.16	0.60
NB_45	2.6	95.8	1.7				U	3.24		1.90	0.27	2.97	0.13	2.92	0.13	0.64	-0.32	1.59	0.70
NB_46	1.6	97.1	1.3				U	3.24		2.07	0.24	2.99	0.13	2.95	0.13	0.56	-0.26	1.39	0.60
NB_47	89.7	10.1	0.3				U	-4.73		-4.87	29.28	-3.92	15.15	-3.65	12.53	1.58	0.49	1.61	
NB_48	65.0	34.4	0.6				B	-4.24	1.25	-4.63	24.74	-3.06	8.33	-2.10	4.30	2.41	0.49	0.58	0.98
NB_49	54.3	45.1	0.6				B	-4.24	1.75	-4.71	26.19	-1.63	3.09	-1.52	2.87	2.53	0.04	0.55	0.75
NB_50	7.2	92.6	0.2				U	1.25		-0.77	1.70	1.08	0.47	0.85	0.56	1.02	-3.39	1.00	0.90
NB_51	7.6	92.0	0.4				U	1.75		-0.80	1.74	1.17	0.44	0.90	0.54	1.09	-0.38	0.95	1.33
NB_52	5.0	94.5	0.5				U	1.25		-0.72	1.65	0.81	0.57	0.68	0.62	0.97	-0.20	0.85	2.10
NB_53	11.3	88.1	0.6				U	1.75		-1.13	2.19	1.21	0.43	0.81	0.57	1.26	-0.45	0.90	1.29
NB_54	87.0	12.6	0.4				U	-5.24		-5.38	41.59	-4.87	29.14	-4.26	19.13	1.79	0.76	1.93	1.19
NB_55	61.0	38.0	1.0				B	-5.24	-4.24	-5.19	36.58	-3.46	10.98	-2.18	4.52	2.94	0.54	0.54	0.92
NB_56	72.2	26.2	1.6				B	-4.73	-3.74	-4.88	29.45	-4.49	22.47	-2.49	5.60	2.82	0.89	0.55	
NB_57	96.4	3.5	0.1				U	-5.24		-5.43	42.96	-5.16	35.63	-4.98	31.49	0.53	0.61	2.26	
NB_58	85.7	13.6	0.7				U	-4.24		-4.79	27.63	-4.10	17.20	-3.68	12.81	1.74	0.66	2.97	
NB_59	76.1	23.1	0.8				B	-3.24	-5.74	-5.67	50.95	-3.38	10.41	-2.18	4.52	3.02	0.49	1.26	
NB_60	12.3	86.7	1.0				B	2.24	-3.24	-2.40	5.27	1.99	0.25	1.80	0.29	1.34	-0.52	3.52	0.66

NEWBEX Survey (2012) (3): Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0
NB_41	0.00	0.00	18.82	35.60	17.47	4.73	0.42	0.26	0.40	0.17	0.06	0.14	0.29	0.50	0.99	4.76	8.24	4.65	1.65	0.23	0.63
NB_42	0.00	18.52	29.05	11.62	4.08	1.89	0.18	0.63	0.21	0.22	0.24	0.32	0.59	1.14	2.07	8.02	11.76	6.40	2.16	0.24	0.66
NB_43	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.00	0.43	0.15	0.24	0.36	0.51	0.82	1.89	6.99	8.05	40.73	34.88	3.18	0.95
NB_44	0.00	0.00	0.00	0.00	0.00	0.82	0.00	0.07	0.02	0.10	0.01	0.06	0.19	0.41	1.09	5.42	7.92	43.37	35.82	3.53	1.18
NB_45	0.00	0.00	0.00	0.00	0.00	0.00	1.40	0.55	0.12	0.48	0.17	0.45	0.69	0.92	1.51	4.61	6.04	34.87	40.98	5.52	1.68
NB_46	0.00	0.00	0.00	0.00	0.00	0.69	0.00	0.08	0.46	0.37	0.15	0.38	0.64	0.91	1.44	4.06	5.69	35.83	42.19	5.79	1.33
NB_47	0.00	0.00	46.69	0.00	21.63	9.75	4.02	3.37	2.48	1.71	1.38	1.02	1.21	1.19	1.41	1.66	0.81	0.58	0.62	0.18	0.29
NB_48	0.00	0.00	14.12	18.87	11.87	5.82	5.42	3.91	2.66	2.28	2.94	3.04	3.86	6.08	8.37	8.13	1.42	0.35	0.14	0.09	0.63
NB_49	0.00	4.89	9.45	14.15	4.43	5.35	4.58	4.29	3.95	3.18	3.60	3.66	4.62	7.51	10.45	12.37	2.28	0.43	0.12	0.07	0.60
NB_50	0.00	0.00	0.00	0.00	0.00	0.00	0.13	1.31	2.24	3.55	6.08	7.19	9.85	15.89	24.66	24.26	4.12	0.36	0.11	0.06	0.18
NB_51	0.00	0.00	0.00	0.00	0.00	0.00	0.21	1.10	1.94	4.33	6.14	7.84	9.34	12.33	19.38	28.25	7.57	0.87	0.21	0.11	0.39
NB_52	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.35	1.02	3.42	9.28	11.39	13.24	17.79	21.98	17.16	2.89	0.48	0.18	0.10	0.49
NB_53	0.00	0.00	0.00	0.00	0.00	0.00	1.43	1.97	2.97	4.93	7.53	7.29	7.74	10.06	14.64	30.84	8.63	1.00	0.24	0.11	0.62
NB_54	0.00	45.28	20.65	5.15	5.61	2.56	6.12	0.63	0.52	0.52	0.54	0.41	0.41	0.55	1.72	5.06	2.50	0.93	0.35	0.11	0.39
NB_55	0.00	17.23	5.68	14.97	11.84	4.84	2.24	1.62	1.45	1.41	1.49	1.27	1.35	1.92	4.30	13.98	8.70	3.24	1.30	0.30	0.88
NB_56	0.00	0.00	50.44	0.00	13.35	3.73	0.62	1.79	1.43	0.80	0.70	0.68	0.61	0.93	2.34	9.28	6.64	3.85	1.00	0.14	1.65
NB_57	0.00	76.47	5.28	11.52	2.21	0.24	0.36	0.11	0.06	0.14	0.16	0.15	0.13	0.12	0.22	0.91	0.78	0.65	0.28	0.09	0.12
NB_58	0.00	0.00	25.95	30.65	18.20	6.91	1.83	0.99	0.63	0.56	0.49	0.32	0.33	0.37	0.56	2.88	3.68	2.86	1.86	0.25	0.69
NB_59	15.84	0.00	6.73	5.72	17.98	17.19	7.11	2.87	1.41	1.26	0.96	0.74	0.74	0.86	1.52	4.85	5.56	4.30	3.18	0.36	0.82
NB_60	0.00	0.00	0.00	0.00	2.86	6.35	0.64	0.84	0.84	0.79	0.80	0.72	0.90	1.36	3.62	31.01	35.48	8.21	4.24	0.31	1.04

NEWBEX Survey (2012) (4): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type	Total Wt (gm)
NB_61	G1_S2	43.055973	-70.701463	1	15.1	10/21/2013	Shipek	56.00
NB_62	G1_S3	43.055930	-70.701277	1	15.1	10/21/2013	Shipek	121.10
NB_63	H1_S1	43.053930	-70.698463	1	14.0	10/21/2013	Shipek	95.40
NB_64	H1_S2	43.053878	-70.698375	1	14.0	10/21/2013	Shipek	52.80
NB_65	I1_S1	43.052573	-70.696462	1	14.2	10/21/2013	Shipek	58.36
NB_66	I1_S2	43.052545	-70.696427	1	14.2	10/21/2013	Shipek	64.80
NB_67	J1_S1	43.050712	-70.695082	1	14.0	10/21/2013	Shipek	326.90
NB_68	J1_S2	43.050690	-70.695130	1	14.0	10/21/2013	Shipek	223.50
NB_69	O1_S1	43.050693	-70.675228	1	22.0	10/21/2013	Shipek	488.50
NB_70	T1_S1	43.066780	-70.704848	1	14.5	10/21/2013	Shipek	59.79
NB_71	T1_S2	43.066902	-70.704893	1	14.5	10/21/2013	Shipek	54.20
NB_72	A1_S1	43.072490	-70.705650	1	15.0	12/17/2013	Shipek	255.72
NB_73	A1_S2	43.072763	-70.705948	1	15.0	12/17/2013	Shipek	353.30
NB_74	B1_S1	43.068882	-70.704958	1	15.6	12/17/2013	Shipek	49.90
NB_75	B1_S2	43.068873	-70.705045	1	15.6	12/17/2013	Shipek	66.76
NB_76	C1_S1	43.064935	-70.704415	1		12/17/2013	Shipek	55.20
NB_77	C1_S2	43.064872	-70.704533	1		12/17/2013	Shipek	80.80
NB_78	D1_S1	43.061908	-70.704035	1	21.5	12/17/2013	Shipek	515.20
NB_79	D1_S2	43.061715	-70.703923	1	21.5	12/17/2013	Shipek	342.80
NB_80	E1-2_S1	43.059975	-70.703493	1	20.1	12/17/2013	Shipek	206.20

NEWBEX Survey (2012) (4): Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
NB_61	Pebbly	Pebbly Fine Sand	Gravelly Sand	N/A	Medium Gravelly Fine Sand	Pebbly Fine Sand	Fine Sand	Fine Sand	Poorly Sorted
NB_62	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
NB_63	Pebbly	Pebbly Very Fine Sand	Gravelly Sand	N/A	Coarse Gravelly Very Fine Sand	Pebbly Very Fine Sand	Fine Sand	Fine Sand	Poorly Sorted
NB_64	Slightly Granuley	Slightly Granuley Very Fine Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Very Fine Sand	Slightly Granular Very Fine Sand	Fine Sand	Fine Sand	Well Sorted
NB_65	Slightly Pebbly	Slightly Pebbly Very Fine Sand	Slightly Gravelly Sand	N/A	Slightly Fine Gravelly Very Fine Sand	Slightly Pebbly Very Fine Sand	Very Fine Sand	Very Fine Sand	Moderately Well Sorted
NB_66	Pebbly	Pebbly Very Fine Sand	Gravelly Sand	N/A	Medium Gravelly Very Fine Sand	Pebbly Very Fine Sand	Fine Sand	Fine Sand	Poorly Sorted
NB_67	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted
NB_68	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted
NB_69	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Poorly Sorted
NB_70	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Medium Sand	Medium Sand	Moderately Sorted
NB_71	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Medium Sand	Medium Sand	Moderately Sorted
NB_72	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_73	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Very Coarse Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
NB_74	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Medium Sand	Medium Sand	Moderately Sorted
NB_75	Slightly Granuley	Slightly Granuley Medium Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Medium Sand	Slightly Granular Medium Sand	Medium Sand	Medium Sand	Moderately Sorted
NB_76	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Coarse Sand	Coarse Sand	Poorly Sorted
NB_77	Slightly Granuley	Slightly Granuley Medium Sand	Slightly Gravelly Sand	N/A	Slightly Very Fine Gravelly Medium Sand	Slightly Granular Medium Sand	Medium Sand	Medium Sand	Moderately Sorted
NB_78	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_79	Gravel	Pebble Gravel	Gravel	N/A	Coarse Gravel	Pebble Gravel	Coarse Gravel	Pebble Gravel	Well Sorted
NB_80	Gravel	Pebble Gravel	Gravel	N/A	Coarse Gravel	Pebble Gravel	Coarse Gravel	Pebble Gravel	Poorly Sorted

NEWBEX Survey (2012) (4): Grain Size Statistics

Sample ID	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
NB_61	8.2	90.3	1.5				U	2.24		0.56	0.68	2.05	0.24	2.01	0.25	1.15	-0.41	3.67	0.77
NB_62	55.1	43.9	1.0				B	-4.24	2.24	-4.37	20.61	-3.50	11.28	-1.78	3.44	2.82	0.76	0.48	1.42
NB_63	7.6	88.0	4.4				U	3.24		1.64	0.32	3.01	0.12	2.88	0.14	1.41	-0.55	4.42	0.64
NB_64	0.5	98.1	1.4				U	3.24		2.17	0.22	3.00	0.13	2.95	0.13	0.47	-0.32	1.11	0.63
NB_65	1.4	97.1	1.5				U	3.24		2.30	0.20	3.11	0.12	3.02	0.12	0.51	-0.39	1.41	0.70
NB_66	10.2	88.5	1.3				B	3.24	-3.74	-1.27	2.41	3.03	0.12	2.75	0.15	1.47	-0.71	3.96	0.70
NB_67	50.8	48.1	1.0				B	-3.74	3.24	-3.85	14.39	-1.15	2.21	-0.64	1.55	2.76	0.23	0.55	0.59
NB_68	48.7	50.0	1.3				B	-3.74	3.24	-3.84	14.28	-0.77	1.70	-0.47	1.39	2.80	0.13	0.53	0.79
NB_69	68.1	30.8	1.1				U	-1.24		-3.90	14.94	-1.82	3.54	-1.85	3.62	1.74	0.07	0.90	0.90
NB_70	5.5	93.9	0.6				U	1.75		-0.08	1.06	1.62	0.33	1.45	0.37	0.90	-0.45	1.75	1.27
NB_71	6.1	93.3	0.6				U	1.75		-0.22	1.17	1.65	0.32	1.60	0.33	0.84	-0.36	2.05	0.88
NB_72	73.7	26.0	0.3				B	-5.24	-3.74	-5.28	38.96	-3.33	10.05	-2.64	6.23	2.49	0.39	0.68	0.80
NB_73	54.4	45.2	0.4				B	-5.24	1.25	-5.20	36.81	-1.78	3.42	-1.83	3.55	2.68	-0.01	0.54	0.61
NB_74	5.1	94.5	0.4				U	1.75		-0.15	1.11	1.58	0.33	1.39	0.38	0.89	-0.45	1.66	1.28
NB_75	4.7	94.7	0.6				U	1.75		-0.28	1.21	1.40	0.38	1.21	0.43	0.91	-0.85	1.33	1.30
NB_76	8.5	91.0	0.6				U	1.75		-0.88	1.85	1.07	0.48	0.84	0.56	1.15	-0.30	0.93	1.61
NB_77	2.5	96.7	0.8				U	1.75		0.48	0.72	1.66	0.32	1.57	0.34	0.73	-0.34	1.53	0.96
NB_78	72.1	27.2	0.7				B	-4.73	1.75	-4.81	28.11	-4.02	16.18	-2.35	5.08	2.71	0.77	0.60	0.71
NB_79	96.5	3.3	0.2				U	-4.73		-4.92	30.25	-4.69	25.74	-4.69	25.74	0.36	0.35	2.46	
NB_80	92.8	6.9	0.3				U	-4.73		-4.92	30.32	-4.70	26.05	-4.70	26.05	1.08	0.46	9.71	

NEWBEX Survey (2012) (4): Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0
NB_61	0.00	0.00	0.00	0.00	3.40	1.57	2.33	0.46	0.25	0.22	0.38	0.61	0.62	1.12	3.32	31.07	40.77	8.44	3.66	0.25	1.52
NB_62	0.00	0.00	0.00	40.15	10.06	1.89	1.09	0.71	0.48	0.69	0.40	0.27	0.39	0.55	1.37	8.01	19.07	8.99	4.56	0.31	1.02
NB_63	0.00	0.00	0.00	3.98	1.43	1.66	0.16	0.08	0.07	0.19	0.15	0.15	0.18	0.31	0.70	3.31	6.45	30.74	43.97	2.01	4.48
NB_64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.14	0.28	0.17	0.21	0.27	0.46	1.01	4.52	7.77	35.18	45.77	2.68	1.42
NB_65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.31	0.18	0.33	0.40	0.47	0.54	0.91	2.75	5.06	25.08	56.54	5.01	1.56
NB_66	0.00	0.00	0.00	0.00	8.92	0.00	0.24	0.46	0.20	0.40	0.58	0.59	0.59	0.66	1.06	3.14	5.47	24.59	47.86	3.90	1.32
NB_67	0.00	0.00	0.00	4.77	17.63	11.28	6.26	4.83	3.33	2.73	2.77	2.39	3.47	5.23	3.72	4.61	5.94	6.05	12.43	1.51	1.05
NB_68	0.00	0.00	0.00	3.91	19.11	9.65	6.39	3.98	3.13	2.56	2.80	2.48	3.70	5.23	3.70	4.98	5.68	5.94	13.30	2.14	1.32
NB_69	0.00	0.00	0.00	7.79	11.46	10.82	7.25	8.98	10.78	11.04	10.25	7.23	4.63	2.74	2.02	2.12	1.20	0.28	0.15	0.13	1.13
NB_70	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.96	1.97	2.41	2.28	2.63	3.41	7.33	18.46	41.45	16.01	1.58	0.60	0.10	0.59
NB_71	0.00	0.00	0.00	0.00	0.00	0.00	0.40	1.51	1.84	2.37	2.42	2.69	3.10	1.25	20.98	42.42	17.68	2.09	0.57	0.12	0.56
NB_72	0.00	24.73	8.51	0.00	13.44	10.27	5.70	4.46	3.75	2.86	2.76	3.24	3.55	5.08	5.83	4.61	0.64	0.15	0.11	0.05	0.27
NB_73	0.00	17.78	8.58	3.74	6.71	4.61	4.10	3.20	2.96	2.70	3.27	4.40	5.41	8.98	11.44	9.64	1.54	0.29	0.18	0.07	0.42
NB_74	0.00	0.00	0.00	0.00	0.00	0.41	0.59	0.84	1.49	1.77	2.74	3.13	4.05	7.85	20.25	39.78	14.27	1.55	0.72	0.20	0.38
NB_75	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.76	1.45	2.35	3.37	4.42	5.76	11.71	24.73	33.20	9.85	0.96	0.46	0.22	0.61
NB_76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.11	2.91	4.46	6.75	8.01	9.54	15.09	15.82	25.13	9.01	0.90	0.55	0.17	0.57
NB_77	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.29	0.60	1.25	1.88	2.43	3.30	7.35	18.10	43.20	17.54	1.97	0.76	0.18	0.81
NB_78	0.00	0.00	29.93	20.76	9.15	3.10	3.30	2.33	2.05	1.46	1.20	0.95	0.94	1.47	3.41	9.88	6.20	1.83	1.11	0.24	0.71
NB_79	0.00	0.00	84.41	5.38	4.74	0.80	0.36	0.30	0.28	0.27	0.20	0.17	0.12	0.14	0.32	1.05	0.68	0.26	0.23	0.08	0.21
NB_80	0.00	0.00	89.59	0.00	0.00	0.53	0.38	0.78	0.83	0.73	0.54	0.41	0.29	0.26	0.46	1.87	1.47	0.77	0.65	0.15	0.30

NEWBEX Survey (2012) (5): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type	Total Wt (gm)
NB_81	E1-2_S2	43.059800	-70.703518	1	20.1	12/17/2013	Shipek	156.30
NB_82	F1_S1	43.057613	-70.702950	1	16.2	12/17/2013	Shipek	456.10
NB_83	F1_S2	43.057757	-70.703085	1	16.2	12/17/2013	Shipek	496.10
NB_84	G1_S1	43.055538	-70.701807	1	14.5	12/17/2013	Shipek	647.70
NB_85	G1_S2	43.055523	-70.701680	1	14.5	12/17/2013	Shipek	132.90
NB_86	H1_S1	43.054142	-70.698687	1	13.9	12/17/2013	Shipek	69.50
NB_87	H1_S2	43.053968	-70.698858	1	13.9	12/17/2013	Shipek	56.00
NB_88	I1_S1	43.052637	-70.696713	1	13.8	12/17/2013	Shipek	54.10
NB_89	I1_S2	43.052622	-70.696753	1	13.8	12/17/2013	Shipek	61.20
NB_90	J1_S1	43.050997	-70.694450	1	14.4	12/17/2013	Shipek	76.20
NB_91	J1_S2	43.051042	-70.694473	1	14.4	12/17/2013	Shipek	64.10
NB_92	N1_S1	43.050658	-70.676677	1	18.9	12/17/2013	Shipek	84.70
NB_93	N1_S2	43.050590	-70.676718	1	18.9	12/17/2013	Shipek	43.70

NEWBEX Survey (2012) (5): Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
NB_81	Gravel	Pebble Gravel	Gravel	N/A	Coarse Gravel	Pebble Gravel	Coarse Gravel	Pebble Gravel	Poorly Sorted
NB_82	Gravel	Pebble Gravel	Gravel	N/A	Medium Gravel	Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_83	Gravel	Pebble Gravel	Gravel	N/A	Coarse Gravel	Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
NB_84	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted
NB_85	Pebbly	Pebbly Medium Sand	Gravelly Sand	N/A	Coarse Gravelly Medium Sand	Pebbly Medium Sand	Medium Sand	Medium Sand	Poorly Sorted
NB_86	Slightly Pebbly	Slightly Pebbly Very Fine Sand	Slightly Gravelly Sand	N/A	Slightly Fine Gravelly Very Fine Sand	Slightly Pebbly Very Fine Sand	Fine Sand	Fine Sand	Well Sorted
NB_87	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	N/A	Slightly Fine Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Well Sorted
NB_88	Pebbly	Pebbly Very Fine Sand	Gravelly Sand	N/A	Medium Gravelly Very Fine Sand	Pebbly Very Fine Sand	Fine Sand	Fine Sand	Poorly Sorted
NB_89	Pebbly	Pebbly Very Fine Sand	Gravelly Sand	N/A	Coarse Gravelly Very Fine Sand	Pebbly Very Fine Sand	Fine Sand	Fine Sand	Moderately Sorted
NB_90	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Coarse Sand	Coarse Sand	Very Poorly Sorted
NB_91	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	N/A	Slightly Fine Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Moderately Sorted
NB_92	Gravel	Pebble Gravel	Gravel	N/A	Medium Gravel	Pebble Gravel	Fine Gravel	Pebble Gravel	Poorly Sorted
NB_93	Gravel	Pebble Gravel	Gravel	N/A	Medium Gravel	Pebble Gravel	Medium Gravel	Pebble Gravel	Poorly Sorted

NEWBEX Survey (2012) (5): Grain Size Statistics

Sample ID	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
NB_81	90.3	9.4	0.4				U	-4.73		-4.92	30.21	-4.68	25.60	-4.62	24.52	1.21	0.62	9.57	
NB_82	82.9	16.4	0.7				B	-3.24	-4.73	-4.67	25.44	-2.96	7.80	-2.66	6.32	2.11	0.37	1.72	
NB_83	82.6	16.9	0.5				B	-4.73	-3.74	-4.79	27.68	-3.64	12.46	-2.82	7.07	2.28	0.61	1.39	
NB_84	41.1	58.6	0.3				B	1.75	-4.24	-4.44	21.71	0.54	0.69	-0.57	1.49	2.64	-0.50	0.53	0.50
NB_85	11.5	88.0	0.5				B	1.75	-4.24	-4.01	16.12	1.76	0.30	1.54	0.34	1.50	-0.55	3.31	0.59
NB_86	0.7	98.5	0.8				U	3.24		2.35	0.20	3.00	0.12	2.96	0.13	0.42	-0.27	1.01	0.54
NB_87	0.3	99.1	0.6				U	3.24		2.34	0.20	2.94	0.13	2.93	0.13	0.41	-0.16	0.97	0.55
NB_88	11.5	87.7	0.9				U	3.24		-2.69	6.47	3.04	0.12	2.73	0.15	1.47	-0.73	3.93	0.69
NB_89	5.1	93.9	1				U	3.24		1.73	0.30	3.06	0.12	2.94	0.13	0.95	-0.59	2.89	0.58
NB_90	35.6	63.8	0.7				B	-4.24	3.24	-4.31	19.85	1.88	0.27	0.30	0.81	3.05	-0.62	0.45	0.73
NB_91	0.8	98.1	1				U	3.24		1.52	0.35	2.64	0.16	2.56	0.17	0.76	-0.22	0.83	0.67
NB_92	84.0	15.6	0.4				U	-3.74		-3.74	13.32	-2.49	5.60	-2.35	5.11	1.21	0.21	0.82	
NB_93	89.7	9.9	0.4				U	-3.74		-4.24	18.94	-3.73	13.28	-3.42	10.71	1.12	0.64	4.27	

NEWBEX Survey (2012) (5): Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0
NB_81	0.00	0.00	82.16	4.52	1.09	0.57	0.21	0.29	0.72	0.71	0.45	0.36	0.23	0.25	0.57	2.68	2.23	1.29	1.09	0.22	0.36
NB_82	0.00	0.00	15.95	2.87	14.19	15.90	14.98	11.26	5.58	2.20	1.20	0.72	0.53	0.66	1.37	3.76	3.24	2.64	2.02	0.29	0.66
NB_83	0.00	0.00	26.42	9.99	19.39	8.74	8.31	5.17	3.32	1.23	0.98	0.64	0.55	0.71	1.27	3.78	3.55	2.75	2.33	0.35	0.52
NB_84	0.00	0.00	8.63	14.66	4.56	5.12	2.37	1.47	2.04	2.19	2.76	2.48	3.22	5.38	8.71	21.29	10.04	2.73	1.78	0.21	0.34
NB_85	0.00	0.00	0.00	10.24	0.56	0.00	0.00	0.22	0.08	0.39	0.69	1.14	2.14	4.68	9.22	39.17	23.81	4.70	2.28	0.18	0.48
NB_86	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.17	0.17	0.12	0.10	0.12	0.14	0.25	0.61	3.10	6.64	38.00	47.16	2.37	0.78
NB_87	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.02	0.04	0.03	0.07	0.19	0.53	3.10	8.01	42.90	42.29	1.93	0.59
NB_88	0.00	0.00	0.00	0.00	6.69	3.04	0.46	0.31	0.45	0.51	0.47	0.50	0.55	0.58	0.93	2.68	4.77	23.71	49.22	4.23	0.90
NB_89	0.00	0.00	0.00	1.80	0.00	0.91	0.65	0.39	0.83	0.56	0.60	0.57	0.60	0.70	1.03	3.00	5.24	26.26	51.64	4.21	1.02
NB_90	0.00	0.00	0.00	27.81	7.47	0.00	0.00	0.00	0.13	0.17	0.30	0.28	0.77	2.31	4.28	8.60	9.88	10.85	23.69	2.78	0.67
NB_91	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.17	0.27	0.05	0.21	0.24	0.66	2.09	5.20	15.36	19.92	17.89	32.73	3.83	1.06
NB_92	0.00	0.00	0.00	0.00	19.40	13.49	17.14	12.43	11.24	10.31	8.25	3.75	1.41	0.66	0.43	0.60	0.38	0.08	0.04	0.02	0.37
NB_93	0.00	0.00	0.00	20.04	57.40	2.77	3.44	3.26	1.33	1.46	1.81	2.21	2.09	1.30	0.73	0.82	0.64	0.18	0.08	0.03	0.41

Section 3: Jeffreys Ledge Survey (2002-2005)

Jeffreys Ledge Survey (2002-2005) (1): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type	Total Wt (gm)
JL-01	JL00	42.933620	-70.371710	1	128	15-Jul-02	BC	19.90
JL-02	JL01	42.934240	-70.396590	1	119	15-Jul-02	BC	27.10
JL-03	JL02	42.933740	-70.383470	1	124	7/15/2002	BC	16.90
JL-04	JL03	42.933700	-70.358520	1	137	7/15/2002	BC	16.70
JL-05	JL04	42.933870	-70.346840	1	144	7/15/2002	BC	17.60
JL-06	JL05	42.932320	-70.328670	1	146	7/30/2002	BC	20.90
JL-07	JL07	42.933220	-70.296080	1	143	7/30/2002	BC	25.90
JL-08	JL08	42.933230	-70.279750	1	139	7/30/2002	BC	31.00
JL-09	JL09	42.933300	-70.262600	1	141	7/30/2002	BC	33.90
JL-10	JL10	42.933080	-70.248090	1	148	8/19/2002	BC	15.20
JL-11	JL11	42.933480	-70.230810	1	174	8/19/2002	BC	11.30
JL-12	JL12	42.933550	-70.213270	1	157	8/19/2002	BC	12.70
JL-13	JL13a	42.933620	-70.196750	1	130	8/19/2002	BC	15.40
JL-14	JL13b	42.933250	-70.197400	1	130	8/11/2005	SH	17.50
JL-15	JL14a	42.933210	-70.179770	1	128	8/19/2002	BC	26.30
JL-16	JL16	42.933390	-70.144080	1	113	9/19/2002	BC	38.30
JL-17	JL16b	42.930900	-70.148530	1	115	8/11/2005	SH	28.40
JL-18	JL20	42.921250	-70.380660	1	101	7/26/2002	SH	65.90
JL-19	JL21	42.920770	-70.362540	1	138	7/26/2002	SH	27.50
JL-20	JL22	42.925130	-70.346770	1	143	7/15/2002	BC	14.20

Jeffreys Ledge Survey (2002-2005) (1): Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
JL-01	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-02	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Very Fine Silt	Clay	Very Poorly Sorted
JL-03	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Very Fine Silt	Clay	Very Poorly Sorted
JL-04	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-05	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-06	Mud	Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-07	Slightly Granuley	Slightly Granuley Very Fine Sandy Clay	Slightly Gravelly Sandy Mud	Sandy Mud	Slightly Very Fine Gravelly Very Fine Sandy Mud	Slightly Granular Very Fine Sandy Mud	Very Fine Silt	Clay	Very Poorly Sorted
JL-08	Slightly Pebbly	Slightly Pebbly Very Fine Sandy Clay	Slightly Gravelly Sandy Mud	N/A	Slightly Medium Gravelly Very Fine Sandy Mud	Slightly Pebbly Very Fine Sandy Mud	Fine Silt	Very Fine Silt	Extremely Poorly Sorted
JL-09	Slightly Granuley	Slightly Granuley Very Fine Sandy Clay	Slightly Gravelly Sandy Mud	Sandy Mud	Slightly Very Fine Gravelly Very Fine Sandy Mud	Slightly Granular Very Fine Sandy Mud	Fine Silt	Very Fine Silt	Extremely Poorly Sorted
JL-10	Pebbly	Pebbly Clay	Gravelly Mud	N/A	Medium Gravelly Mud	Pebbly Mud	Fine Silt	Very Fine Silt	Extremely Poorly Sorted
JL-11	Mud	Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-12	Mud	Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-13	Slightly Granuley	Slightly Granuley Very Fine Sandy Silt-Clay	Slightly Gravelly Sandy Mud	Sandy Mud	Slightly Very Fine Gravelly Very Fine Sandy Mud	Slightly Granular Very Fine Sandy Mud	Very Fine Silt	Clay	Very Poorly Sorted
JL-14	Sandy Mud	Sandy Silt-Clay	Sandy Mud	Sandy Mud	Very Fine Sandy Mud	Very Fine Sandy Mud	Fine Silt	Very Fine Silt	Very Poorly Sorted
JL-15	Slightly Granuley	Slightly Granuley Very Fine Sandy Silt-Clay	Slightly Gravelly Sandy Mud	Sandy Mud	Slightly Very Fine Gravelly Very Fine Sandy Mud	Slightly Granular Very Fine Sandy Mud	Fine Silt	Very Fine Silt	Very Poorly Sorted
JL-16	Slightly Granuley	Slightly Granuley Silty-Clayey Fine Sand	Slightly Gravelly Muddy Sand	N/A	Slightly Very Fine Gravelly Muddy Fine Sand	Slightly Granular Muddy Fine Sand	Fine Sand	Fine Sand	Very Poorly Sorted
JL-17	Granuley	Granuley Silty-Clayey Very Fine Sand	Gravelly Muddy Sand	N/A	Very Fine Gravelly Muddy Very Fine Sand	Granular Muddy Very Fine Sand	Fine Sand	Fine Sand	Very Poorly Sorted
JL-18	Pebbly	Pebbly Silty-Clayey Fine Sand	Gravelly Muddy Sand	N/A	Medium Gravelly Muddy Fine Sand	Pebbly Muddy Fine Sand	Medium Sand	Medium Sand	Extremely Poorly Sorted
JL-19	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Very Fine Silt	Clay	Very Poorly Sorted
JL-20	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted

Jeffreys Ledge Survey (2002-2005) (1): Grain Size Statistics

Sample ID	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
JL-01	0.0	0.9	99.1	0.9	39.7	59.4	U	7.50		5.36	0.02	8.84	0.00	9.08	0.00	2.95	0.09	0.75	11.26
JL-02	0.0	1.8	98.2	1.8	42.9	55.3	U	7.50		5.04	0.03	8.55	0.00	8.81	0.00	3.07	0.10	0.74	9.50
JL-03	0.0	1.0	99.0	1.0	42.4	56.6	U	6.50		5.12	0.03	8.64	0.00	8.89	0.00	3.03	0.10	0.74	9.03
JL-04	0.0	0.5	99.5	0.5	36.5	63.0	U	7.50		5.63	0.02	9.07	0.00	9.27	0.00	2.84	0.08	0.77	8.36
JL-05	0.0	0.4	99.6	0.4	33.6	66.0	U	8.48		5.99	0.02	9.36	0.00	9.47	0.00	2.77	0.04	0.76	7.96
JL-06	0.0	1.1	98.9	1.1	29.1	69.8	U	6.47		6.02	0.02	9.57	0.00	9.50	0.00	3.16	0.04	0.89	7.85
JL-07	0.6	19.5	79.9	19.5	25.4	54.5	B	8.48	3.75	2.55	0.17	8.45	0.00	8.08	0.00	4.00	-0.15	0.76	6.56
JL-08	4.5	18.5	77.0	18.5	24.2	52.8	B	8.48	12.52	1.92	0.26	8.26	0.00	7.84	0.00	4.34	-0.19	0.87	8.30
JL-09	0.4	28.2	71.4	28.2	20.9	50.5	B	3.24	8.48	2.47	0.18	8.05	0.00	7.70	0.00	4.06	-0.10	0.66	6.97
JL-10	6.6	20.7	72.8	20.6	21.2	51.6	T	8.48	3.24	0.85	0.56	8.16	0.00	7.50	0.01	4.83	-0.27	0.89	6.49
JL-11	0.0	1.6	98.4	1.6	28.0	70.4	U	8.48		6.30	0.01	9.44	0.00	9.68	0.00	2.63	0.07	0.83	8.84
JL-12	0.0	2.5	97.5	2.5	29.6	67.9	U	8.48		5.93	0.02	9.35	0.00	9.51	0.00	2.80	0.02	0.86	8.54
JL-13	0.2	17.3	82.5	17.3	30.8	51.7	B	3.73	8.48	3.61	0.08	8.16	0.00	8.06	0.00	3.59	-0.01	0.69	6.76
JL-14	0.0	21.6	78.4	21.6	28.9	49.5	B	3.73	8.48	3.36	0.10	7.96	0.00	7.90	0.00	3.69	0.00	0.68	5.30
JL-15	0.1	26.0	73.9	26.0	30.5	43.4	B	3.73	8.48	3.32	0.10	7.23	0.01	7.54	0.01	3.60	0.15	0.65	5.74
JL-16	4.9	79.8	15.3	79.8	5.2	10.1	U	3.24		-0.38	1.30	2.12	0.23	2.07	0.24	2.70	0.21	1.99	1.70
JL-17	9.7	72.1	18.2	72.1	6.2	12.0	U	3.24		-0.96	1.94	2.31	0.20	2.54	0.17	3.40	0.26	1.97	1.70
JL-18	26.4	55.5	18.1	55.5	6.5	11.6	B	-3.74	2.24	-3.64	12.45	1.68	0.31	1.34	0.39	4.57	0.08	1.49	2.46
JL-19	0.0	10.0	90.0	10.0	36.7	53.3	U	3.73		4.01	0.06	8.36	0.00	8.49	0.00	3.34	0.05	0.74	10.70
JL-20	0.0	0.5	99.5	0.5	34.5	65.0	U	7.50		5.83	0.02	9.35	0.00	9.44	0.00	2.80	0.02	0.77	8.71

Jeffreys Ledge Survey (2002-2005) (1): Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0	Class % phi 5.0	Class % phi 6.0	Class % phi 7.0	Class % phi 8.0	Class % phi 9.0	Class % phi 10.0	Class % phi > 10.0	Class % phi 11.0	Class % phi 12.0	Class % phi 13.0	Class % phi 14.0
JL-01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80		5.79	9.82	11.46	12.67	10.91	8.06		10.12	10.12	10.12	10.12
JL-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.72		7.96	11.59	11.32	12.05	9.40	8.42		9.39	9.39	9.39	9.38
JL-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96		7.81	10.89	12.46	11.30	9.88	8.26		9.61	9.61	9.61	9.61
JL-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49		3.94	8.96	10.63	12.93	12.10	9.26		10.42	10.42	10.42	10.42
JL-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35		2.70	7.07	11.73	12.10	11.96	10.62		10.87	10.87	10.87	10.87
JL-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02		5.05	3.01	17.15	3.92	13.23	11.05		11.39	11.39	11.39	11.39
JL-07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.40	0.22	0.49	0.95	1.51	1.79	2.07	2.09	2.35	3.24	4.77		7.35	9.11	1.61	7.35	9.74	9.38		8.85	8.85	8.84	8.84
JL-08	0.00	0.00	0.00	0.00	0.00	3.56	0.00	0.41	0.40	0.17	0.33	0.37	0.62	1.00	1.49	1.97	2.18	2.70	3.48	4.34		3.45	4.08	6.36	10.32	10.55	8.31		8.48	8.48	8.48	8.48
JL-09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.35	0.17	0.72	1.13	1.63	2.35	3.27	6.39	7.27	4.93		2.11	2.76	6.28	9.75	9.97	7.70		8.21	8.21	8.21	8.21
JL-10	0.00	0.00	0.00	0.00	0.00	4.68	0.00	1.09	0.00	0.79	0.53	0.71	1.05	1.65	2.05	2.25	2.07	2.44	3.97	3.93		2.27	3.55	5.79	9.60	9.87	9.18		8.13	8.13	8.13	8.13
JL-11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.54		2.21	3.98	7.70	14.17	14.92	11.78		10.92	10.92	10.92	10.92
JL-12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.50		3.47	4.37	8.55	13.19	13.63	11.70		10.65	10.65	10.65	10.65
JL-13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.09	0.10	0.12	0.09	0.23	0.44	0.57	1.18	4.35	10.08		8.95	5.34	6.67	9.90	10.29	8.50		8.24	8.24	8.24	8.24
JL-14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.20	0.29	0.46	0.70	1.05	1.08	2.12	5.31	10.22		7.67	5.61	6.49	9.18	9.44	8.15		8.00	8.00	8.00	8.00
JL-15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.15	0.06	0.17	0.22	0.42	0.63	0.94	2.22	7.63	13.45		11.29	5.12	5.71	8.43	8.58	6.39		7.13	7.13	7.13	7.13
JL-16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	2.06	2.51	4.09	4.62	6.15	7.89	9.06	10.68	10.40	11.94	10.93	4.05		1.37	0.91	0.95	2.00	1.93	2.09		1.51	1.51	1.51	1.51
JL-17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.94	3.07	3.69	3.65	4.04	4.80	6.09	7.42	9.35	7.59	10.77	11.81	6.56		1.67	1.25	1.06	2.25	2.06	2.01		1.99	1.99	1.99	1.99
JL-18	0.00	0.00	0.00	0.00	14.23	5.82	0.68	1.20	2.06	2.40	2.48	2.33	3.48	5.06	6.76	9.47	10.13	10.26	4.40	1.10		1.28	1.28	1.79	2.15	2.28	1.56		1.95	1.95	1.95	1.95
JL-19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.88		7.44	8.43	10.23	10.63	9.19	7.32		9.22	9.22	9.22	9.22
JL-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47		3.55	7.27	10.99	12.74	10.85	11.23		10.73	10.73	10.73	10.73

Jeffreys Ledge Survey (2002-2005) (2): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type	Total Wt (gm)
JL-21	JL23	42.920510	-70.330420	1	156	7/30/2002	BC	16.90
JL-22	JL24	42.920660	-70.313830	1	154	7/30/2002	BC	15.60
JL-23	JL25	42.920750	-70.297350	1	168	7/30/2002	BC	15.50
JL-24	JL26	42.920510	-70.279930	1	152	7/30/2002	BC	28.40
JL-25	JL27	42.920480	-70.262640	1	143	7/30/2002	BC	32.60
JL-26	JL28	42.920980	-70.247670	1	128	8/19/2002	BC	22.50
JL-27	JL29	42.920700	-70.229820	1	132	8/19/2002	BC	20.00
JL-28	JL30	42.920280	-70.213860	1	177	8/19/2002	BC	13.10
JL-29	JL31	42.920970	-70.197230	1	139	8/19/2002	BC	24.10
JL-30	JL32	42.920500	-70.180290	1	124	8/19/2002	BC	25.30
JL-31	JL33	42.920790	-70.163120	1	119	9/19/2002	BC	52.00
JL-32	JL34b	42.920650	-70.146640	1	100	9/19/2002	BC	155.90
JL-34	JL39	42.908630	-70.364150	1	108	7/26/2002	SH	55.10
JL-35	JL40	42.907390	-70.346320	1	137	7/31/2002	BC	17.10
JL-36	JL41	42.908380	-70.329830	1	163	7/31/2002	BC	19.00
JL-37	JL42	42.908260	-70.313180	1	161	7/31/2002	BC	18.90
JL-38	JL43	42.907950	-70.296030	1	161	7/31/2002	BC	12.90
JL-39	JL44	42.908290	-70.275020	1	146	7/31/2002	BC	17.10
JL-40	JL45	42.908040	-70.262160	1	150	7/31/2002	BC	13.50
JL-41	JL46	42.909010	-70.248160	1	157	8/26/2002	BC	18.60
JL-42	JL47	42.908380	-70.230680	1	153	8/26/2002	BC	10.70

Jeffreys Ledge Survey (2002-2005) (2): Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
JL-21	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-22	Mud	Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-23	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-24	Sandy Mud	Sandy Clay	Sandy Mud	Sandy Mud	Very Fine Sandy Mud	Very Fine Sandy Mud	Very Fine Silt	Clay	Very Poorly Sorted
JL-25	Slightly Granuley	Slightly Granuley Very Fine Sandy Silt-Clay	Slightly Gravelly Sandy Mud	Sandy Mud	Slightly Very Fine Gravelly Very Fine Sandy Mud	Slightly Granular Very Fine Sandy Mud	Fine Silt	Very Fine Silt	Very Poorly Sorted
JL-26	Slightly Granuley	Slightly Granuley Very Fine Sandy Clay	Slightly Gravelly Sandy Mud	N/A	Slightly Very Fine Gravelly Very Fine Sandy Mud	Slightly Granular Very Fine Sandy Mud	Medium Silt	Fine Silt	Extremely Poorly Sorted
JL-27	Slightly Granuley	Slightly Granuley Very Fine Sandy Clay	Slightly Gravelly Sandy Mud	Sandy Mud	Slightly Very Fine Gravelly Very Fine Sandy Mud	Slightly Granular Very Fine Sandy Mud	Fine Silt	Very Fine Silt	Very Poorly Sorted
JL-28	Mud	Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-29	Slightly Granuley	Slightly Granuley Very Fine Sandy Silt-Clay	Slightly Gravelly Sandy Mud	Sandy Mud	Slightly Very Fine Gravelly Very Fine Sandy Mud	Slightly Granular Very Fine Sandy Mud	Fine Silt	Very Fine Silt	Very Poorly Sorted
JL-30	Sandy Mud	Sandy Silt-Clay	Sandy Mud	Sandy Mud	Very Fine Sandy Mud	Very Fine Sandy Mud	Medium Silt	Fine Silt	Very Poorly Sorted
JL-31	Slightly Granuley	Slightly Granuley Silty-Clayey Very Fine Sand	Slightly Gravelly Muddy Sand	Muddy Sand	Slightly Very Fine Gravelly Muddy Very Fine Sand	Slightly Granular Muddy Very Fine Sand	Very Coarse Silt	Coarse Silt	Very Poorly Sorted
JL-32	Pebble Mixes	Clayey Sandy Pebble Gravel	Muddy Sandy Gravel	N/A	Muddy Sandy Coarse Gravel	Muddy Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted
JL-34	Pebbly	Pebbly Silty-Clayey Very fine Sand	Gravelly Muddy Sand	N/A	Medium Gravelly Muddy Very Fine Sand	Pebbly Muddy Very Fine Sand	Very Fine Sand	Very Fine Sand	Extremely Poorly Sorted
JL-35	Sandy Mud	Sandy Clay	Sandy Mud	Sandy Mud	Very Fine Sandy Mud	Very Fine Sandy Mud	Very Fine Silt	Clay	Very Poorly Sorted
JL-36	Mud	Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-37	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-38	Mud	Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-39	Mud	Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-40	Mud	Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-41	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-42	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted

Jeffreys Ledge Survey (2002-2005) (2): Grain Size Statistics

Sample ID	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
JL-21	0.0	1.9	98.1	1.9	32.8	65.3	U	7.50		5.77	0.02	9.38	0.00	9.46	0.00	2.83	0.01	0.77	8.51
JL-22	0.0	0.6	99.4	0.6	30.5	68.9	U	8.48		6.13	0.01	9.51	0.00	9.63	0.00	2.70	0.03	0.79	8.55
JL-23	0.0	2.6	97.4	2.6	31.2	66.2	U	8.48		5.68	0.02	9.31	0.00	9.43	0.00	2.87	0.01	0.83	7.67
JL-24	0.0	10.9	89.1	10.9	28.9	60.2	B	8.48	3.73	3.92	0.07	8.80	0.00	8.78	0.00	3.32	-0.03	0.86	11.41
JL-25	0.1	30.1	69.8	30.1	25.4	44.4	B	3.73	8.48	2.91	0.13	7.33	0.01	7.46	0.01	3.82	0.05	0.69	4.39
JL-26	2.8	34.6	62.6	34.6	20.0	42.6	B	3.24	8.48	1.31	0.40	7.07	0.01	6.95	0.01	4.34	-0.05	0.76	5.35
JL-27	0.3	27.8	71.9	27.8	22.0	49.9	B	3.24	8.48	2.56	0.17	7.99	0.00	7.71	0.00	3.98	-0.09	0.68	5.84
JL-28	0.0	0.8	99.2	0.8	29.6	69.6	U	8.48		6.19	0.01	9.44	0.00	9.63	0.00	2.67	0.05	0.82	8.33
JL-29	0.1	24.5	75.5	24.5	29.7	45.8	B	3.73	8.48	3.21	0.11	7.51	0.01	7.65	0.00	3.68	0.08	0.65	6.20
JL-30	0.0	40.1	59.9	40.1	30.5	29.4	U	3.73		3.24	0.11	4.61	0.04	6.26	0.01	3.32	0.69	0.79	4.33
JL-31	0.2	71.3	28.6	71.3	10.7	17.9	U	3.24		2.17	0.22	3.29	0.10	4.79	0.04	3.13	0.71	1.87	2.80
JL-32	39.2	51.9	8.9	51.9	2.6	6.3	B	-4.24	2.24	-4.10	17.18	0.35	0.78	-0.21	1.16	3.68	0.02	1.03	1.70
JL-34	16.1	55.7	28.2	55.7	10.2	18.0	B	3.24	-3.74	-3.00	7.99	3.13	0.11	3.54	0.09	4.83	0.14	1.80	2.88
JL-35	0.0	15.3	84.7	15.3	25.5	59.2	B	3.73	8.48	3.66	0.08	8.79	0.00	8.43	0.00	3.63	-0.11	0.66	6.84
JL-36	0.0	0.9	99.1	0.9	31.8	67.3	U	8.48		5.04	0.03	9.54	0.00	9.26	0.00	3.13	-0.11	0.84	8.17
JL-37	0.0	0.8	99.2	0.8	32.4	66.8	U	7.50		6.07	0.01	9.51	0.00	9.59	0.00	2.73	0.02	0.76	7.83
JL-38	0.0	0.5	99.5	0.5	30.6	68.9	U	8.48		6.20	0.01	9.46	0.00	9.62	0.00	2.68	0.05	0.79	8.31
JL-39	0.0	0.8	99.2	0.8	30.1	69.1	U	8.48		6.19	0.01	9.49	0.00	9.64	0.00	2.68	0.04	0.79	8.75
JL-40	0.0	1.0	99.0	1.0	30.2	68.8	U	7.50		6.11	0.01	9.52	0.00	9.64	0.00	2.70	0.02	0.80	8.43
JL-41	0.0	1.9	98.1	1.9	31.2	66.9	U	8.48		5.77	0.02	9.31	0.00	9.45	0.00	2.83	0.02	0.83	8.48
JL-42	0.0	5.9	94.1	5.9	30.7	63.4	B	7.50	3.73	4.56	0.04	9.27	0.00	9.23	0.00	3.11	-0.07	0.86	7.40

Jeffreys Ledge Survey (2002-2005) (2): Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0	Class % phi 5.0	Class % phi 6.0	Class % phi 7.0	Class % phi 8.0	Class % phi 9.0	Class % phi 10.0	Class % phi > 10.0	Class % phi 11.0	Class % phi 12.0	Class % phi 13.0	Class % phi 14.0
JL-21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.88		2.37	7.49	10.51	12.44	11.46	9.62		11.06	11.06	11.06	11.06
JL-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63		2.02	6.22	9.16	13.07	13.39	10.38		11.28	11.28	11.28	11.28
JL-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.59		3.71	5.51	9.38	12.67	12.86	9.96		10.83	10.83	10.83	10.83
JL-24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.09	0.20	0.32	0.37	0.71	3.01	6.06		4.45	4.60	7.68	12.24	12.43	8.89		9.73	9.73	9.73	9.73
JL-25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.20	0.35	0.48	0.72	1.12	1.71	2.24	3.68	8.72	10.81		6.26	4.65	6.22	8.33	9.09	7.14		7.05	7.05	7.05	7.05
JL-26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04	0.76	1.05	0.80	0.87	1.48	2.21	2.87	3.49	3.63	4.97	8.47	5.75		3.17	3.46	5.46	7.90	8.16	7.99		6.63	6.63	6.63	6.63
JL-27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.09	0.25	0.30	0.51	1.03	1.80	2.44	2.66	4.03	7.93	6.78		3.28	3.96	6.11	8.69	9.94	8.76		7.80	7.80	7.80	7.80
JL-28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78		2.71	4.95	8.46	13.45	14.25	11.74		10.92	10.92	10.92	10.92
JL-29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	0.01	0.04	0.06	0.15	0.54	1.46	4.20	7.82	10.03		10.28	4.95	6.09	8.44	8.69	7.21		7.49	7.49	7.49	7.49
JL-30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.06	0.10	0.22	0.46	2.78	12.42	23.88		16.55	4.64	4.32	5.03	5.41	4.66		4.86	4.86	4.86	4.86
JL-31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.07	0.19	0.45	0.85	1.28	1.73	3.03	6.59	20.19	25.03	11.90		3.44	1.84	2.42	2.97	3.34	3.55		2.76	2.76	2.76	2.76
JL-32	0.00	0.00	0.00	12.69	9.23	3.16	3.08	3.73	3.86	3.48	3.73	3.88	4.47	5.00	5.76	7.73	8.44	8.49	3.14	1.26		0.61	0.42	0.66	0.93	1.20	1.36		0.92	0.92	0.92	0.92
JL-34	0.00	0.00	0.00	0.00	10.00	0.00	2.13	1.94	1.18	0.83	0.91	0.94	1.18	1.96	2.63	3.73	4.87	12.46	19.38	7.62		2.51	2.33	2.63	2.79	3.55	2.98		2.87	2.87	2.87	2.87
JL-35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	0.01	0.02	0.05	0.11	0.31	1.45	5.15	8.02		8.69	9.37	6.59	0.91	11.27	8.49		9.88	9.88	9.88	9.88
JL-36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79		8.95	10.16	0.21	12.48	12.06	9.87		11.37	11.37	11.37	11.37
JL-37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74		1.58	7.00	10.32	13.52	11.33	10.53		11.25	11.25	11.25	11.25
JL-38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49		2.14	5.37	10.04	13.12	13.82	10.39		11.16	11.16	11.16	11.16
JL-39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81		1.81	5.64	9.27	13.36	13.71	10.56		11.21	11.21	11.21	11.21
JL-40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.01		2.22	5.81	8.73	13.42	12.57	11.69		11.14	11.14	11.14	11.14
JL-41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.81		4.05	5.45	9.33	12.42	13.38	10.73		10.71	10.71	10.71	10.71
JL-42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.82		7.44	3.04	8.24	12.03	9.97	11.56		10.48	10.48	10.48	10.48

Jeffreys Ledge Survey (2002-2005) (3): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type	Total Wt (gm)
JL-43	JL48	42.908510	-70.213760	1	146	8/26/2002	BC	11.50
JL-44	JL48b	42.908280	-70.213470	1	149	8/11/2005	SH	8.40
JL-45	JL49	42.908730	-70.196880	1	121	8/26/2002	BC	19.20
JL-46	JL49b	42.908330	-70.196670	1	120	8/11/2005	SH	23.20
JL-47	JL50b	42.908880	-70.180740	1	99	8/26/2002	BC	49.40
JL-48	JL60	42.895970	-70.313350	1	150	7/31/2002	BC	18.00
JL-49	JL61	42.895720	-70.297090	1	161	7/31/2002	BC	18.60
JL-50	JL62	42.895970	-70.279680	1	163	7/31/2002	BC	12.30
JL-51	JL63	42.895590	-70.263130	1	165	7/31/2002	BC	15.50
JL-52	JL64	42.896400	-70.247020	1	156	8/26/2002	BC	13.30
JL-53	JL65	42.896220	-70.230940	1	135	8/26/2002	BC	11.20
JL-54	JL66	42.895790	-70.213960	1	123	8/26/2002	BC	23.00
JL-55	JL66b	42.895600	-70.210330	1	124	8/11/2005	SH	20.80
JL-56	JL74b	42.883930	-70.379680	1	101	6/28/2004	BC	37.30
JL-57	JL75a	42.883450	-70.364070	1	119	8/9/2002	BC	35.10
JL-58	JL75b	42.883450	-70.363800	1	117	6/28/2004	BC	18.70
JL-59	JL76	42.883380	-70.347320	1	135	8/9/2002	BC	35.90
JL-60	JL79	42.883540	-70.297680	1	130	8/2/2002	BC	34.10
JL-61	JL80	42.883430	-70.280190	1	166	8/2/2002	BC	16.50
JL-62	JL81	42.883810	-70.264010	1	155	8/2/2002	BC	26.60

Jeffreys Ledge Survey (2002-2005) (3): Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
JL-43	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-44	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-45	Muddy Sand	Silty-Clayey Very Fine Sand	Muddy Sand	Muddy Sand	Muddy Very Fine Sand	Muddy Very Fine Sand	Coarse Silt	Medium Silt	Very Poorly Sorted
JL-46	Slightly Granuley	Slightly Granuley Silty-Clayey Very Fine Sand	Slightly Gravelly Muddy Sand	Muddy Sand	Slightly Very Fine Gravelly Muddy Very Fine Sand	Slightly Granular Muddy Very Fine Sand	Coarse Silt	Medium Silt	Very Poorly Sorted
JL-47	Pebbly	Pebbly Clayey Fine Sand	Gravelly Muddy Sand	N/A	Fine Gravelly Muddy Fine Sand	Pebbly Muddy Fine Sand	Fine Sand	Fine Sand	Very Poorly Sorted
JL-48	Sandy Mud	Sandy Silt-Clay	Sandy Mud	Sandy Mud	Very Fine Sandy Mud	Very Fine Sandy Mud	Fine Silt	Very Fine Silt	Very Poorly Sorted
JL-49	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-50	Mud	Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-51	Mud	Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-52	Sandy Mud	Sandy Silt-Clay	Sandy Mud	Sandy Mud	Very Fine Sandy Mud	Very Fine Sandy Mud	Fine Silt	Very Fine Silt	Very Poorly Sorted
JL-53	Sandy Mud	Sandy Silt-Clay	Sandy Mud	Sandy Mud	Very Fine Sandy Mud	Very Fine Sandy Mud	Fine Silt	Very Fine Silt	Very Poorly Sorted
JL-54	Slightly Pebbly	Slightly Pebbly Silty-Clayey Very Fine Sand	Slightly Gravelly Muddy Sand	N/A	Slightly Fine Gravelly Muddy Very Fine Sand	Slightly Pebbly Muddy Very Fine Sand	Coarse Silt	Medium Silt	Very Poorly Sorted
JL-55	Slightly Granuley	Slightly Granuley Silty-Clayey Very Fine Sand	Slightly Gravelly Muddy Sand	Muddy Sand	Slightly Very Fine Gravelly Muddy Very Fine Sand	Slightly Granular Muddy Very Fine Sand	Very Coarse Silt	Coarse Silt	Very Poorly Sorted
JL-56	Slightly Granuley	Slightly Granuley Silty-Clayey Fine Sand	Slightly Gravelly Muddy Sand	N/A	Slightly Very Fine Gravelly Muddy Fine Sand	Slightly Granular Muddy Fine Sand	Fine Sand	Fine Sand	Very Poorly Sorted
JL-57	Slightly Granuley	Slightly Granuley Silty-Clayey Very Fine Sand	Slightly Gravelly Muddy Sand	Muddy Sand	Slightly Very Fine Gravelly Muddy Very Fine Sand	Slightly Granular Muddy Very Fine Sand	Very Coarse Silt	Coarse Silt	Very Poorly Sorted
JL-58	Muddy Sand	Silty-Clayey Very Fine Sand	Muddy Sand	Muddy Sand	Muddy Very Fine Sand	Muddy Very Fine Sand	Very Coarse Silt	Coarse Silt	Very Poorly Sorted
JL-59	Muddy Sand	Silty-Clayey Very Fine Sand	Muddy Sand	Muddy Sand	Muddy Very Fine Sand	Muddy Very Fine Sand	Very Coarse Silt	Coarse Silt	Very Poorly Sorted
JL-60	Slightly Granuley	Slightly Granuley Silty-Clayey Very Fine Sand	Slightly Gravelly Muddy Sand	Muddy Sand	Slightly Very Fine Gravelly Muddy Very Fine Sand	Slightly Granular Muddy Very Fine Sand	Coarse Silt	Medium Silt	Very Poorly Sorted
JL-61	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-62	Sandy Mud	Sandy Silt-Clay	Sandy Mud	Sandy Mud	Very Fine Sandy Mud	Very Fine Sandy Mud	Fine Silt	Very Fine Silt	Very Poorly Sorted

Jeffreys Ledge Survey (2002-2005) (3): Grain Size Statistics

Sample ID	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
JL-43	0.0	4.6	95.4	4.6	33.0	62.4	U	7.50		4.84	0.03	9.09	0.00	9.10	0.00	3.11	-0.03	0.85	8.00
JL-44	0.0	4.6	95.4	4.6	33.2	62.2	U	8.48		4.76	0.04	9.00	0.00	9.04	0.00	3.14	.-0.15	0.83	7.10
JL-45	0.0	53.1	46.9	53.1	20.8	26.1	U	3.24		3.02	0.12	3.92	0.07	5.77	0.02	3.32	0.77	0.86	3.50
JL-46	0.1	50.4	49.6	50.4	22.2	27.4	B	3.73	7.50	2.92	0.13	3.98	0.06	5.82	0.02	3.37	0.75	0.83	2.50
JL-47	6.9	83.6	9.5	83.6	3.0	6.5	B	2.74	-2.24	-0.05	1.03	2.59	0.17	2.33	0.20	2.26	-0.09	4.04	1.40
JL-48	0.0	22.3	77.7	22.3	28.5	49.2	B	3.73	7.50	3.46	0.09	7.93	0.00	7.89	0.00	3.62	0.03	0.65	6.68
JL-49	0.0	1.8	98.2	1.8	32.0	66.2	U	6.50		6.18	0.01	9.39	0.00	9.53	0.00	2.76	0.03	0.78	8.08
JL-50	0.0	0.7	99.3	0.7	30.7	68.6	U	7.50		6.16	0.01	9.48	0.00	9.62	0.00	2.68	0.04	0.80	8.61
JL-51	0.0	0.8	99.2	0.8	31.5	67.7	U	7.50		6.10	0.01	9.50	0.00	9.61	0.00	2.71	0.02	0.78	8.11
JL-52	0.0	17.3	82.7	17.3	37.1	45.6	B	3.73	7.50	3.55	0.09	7.72	0.00	7.90	0.00	3.59	0.09	0.75	6.80
JL-53	0.0	30.4	69.6	30.4	26.3	43.3	B	3.73	7.50	3.44	0.09	7.21	0.01	7.51	0.01	3.56	0.15	0.64	5.60
JL-54	3.5	51.4	45.1	51.4	18.9	26.2	B	3.24	-2.24	2.73	0.15	3.86	0.07	5.69	0.02	3.41	0.72	0.88	4.00
JL-55	0.1	68.4	31.5	68.4	16.4	15.1	U	3.24		2.71	0.15	3.64	0.08	4.77	0.04	2.62	0.73	2.65	2.30
JL-56	2.1	82.0	15.9	82.0	5.8	10.1	U	2.24		0.80	0.57	2.34	0.20	2.55	0.17	2.31	0.40	3.60	1.60
JL-57	0.1	78.3	21.6	78.3	7.9	13.7	U	3.24		2.36	0.19	3.19	0.11	4.31	0.05	2.62	0.74	3.66	2.30
JL-58	0.0	70.0	30.0	70.0	11.0	19.0	U	3.24		2.48	0.18	3.34	0.10	4.90	0.03	3.07	0.77	1.39	2.80
JL-59	0.0	73.8	26.2	73.8	10.6	15.6	U	3.24		2.64	0.16	3.42	0.09	4.72	0.04	2.71	0.78	3.17	2.71
JL-60	0.4	62.6	37.0	62.6	14.3	22.7	U	3.24		2.69	0.15	3.63	0.08	5.41	0.02	3.22	0.78	0.98	3.32
JL-61	0.0	2.8	97.2	2.8	33.0	64.0	U	8.48		5.33	0.02	9.13	0.00	9.26	0.00	2.97	0.02	0.83	8.30
JL-62	0.0	22.3	77.7	22.3	29.9	47.8	B	3.73	8.48	3.58	0.08	7.77	0.00	7.85	0.00	3.58	0.07	0.63	5.97

Jeffreys Ledge Survey (2002-2005) (3): Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0	Class % phi 5.0	Class % phi 6.0	Class % phi 7.0	Class % phi 8.0	Class % phi 9.0	Class % phi 10.0	Class % phi > 10.0	Class % phi 11.0	Class % phi 12.0	Class % phi 13.0	Class % phi 14.0
JL-43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.57		6.51	6.47	7.55	12.50	11.15	10.50		10.19	10.19	10.19	10.19
JL-44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.02	0.04	0.07	0.06	0.06	0.22	0.71	3.29		7.28	6.44	7.94	11.52	11.93	9.61		10.19	10.19	10.19	10.19
JL-45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.10	0.12	0.25	0.53	1.22	6.89	21.96	21.93		9.21	3.16	4.05	4.44	5.04	3.99		4.27	4.27	4.27	4.27
JL-46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.10	0.10	0.28	0.30	0.49	0.80	1.44	7.54	18.80	20.43		9.85	3.02	1.08	8.30	5.02	4.85		4.39	4.39	4.39	4.39
JL-47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.15	0.00	0.75	1.47	1.82	2.33	2.98	3.59	7.29	16.64	30.77	14.46	2.29		0.77	0.54	0.68	1.03	1.29	1.46		0.93	0.93	0.93	0.93
JL-48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.03	0.03	0.03	0.04	0.11	0.27	1.73	7.95	12.03		6.62	4.85	5.85	11.20	9.51	7.93		7.95	7.95	7.95	7.95
JL-49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.76		2.90	3.06	13.20	12.93	11.83	10.54		10.95	10.95	10.95	10.95
JL-50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69		2.20	5.61	9.31	13.58	12.77	11.67		11.05	11.05	11.05	11.05
JL-51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82		2.13	6.12	9.53	13.71	12.14	10.75		11.20	11.20	11.20	11.20
JL-52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.07	0.16	0.48	0.74	1.64	5.60	8.48		6.56	4.37	10.94	15.31	2.07	11.01		8.13	8.13	8.13	8.13
JL-53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.10	0.07	0.15	0.39	0.67	1.69	7.44	19.71		6.90	4.54	6.50	8.37	7.79	8.10		6.88	6.88	6.88	6.88
JL-54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52	0.00	0.00	0.08	0.04	0.14	0.16	0.27	0.57	1.44	7.66	21.84	19.12		7.81	2.37	4.12	4.62	4.84	4.65		4.19	4.19	4.19	4.19
JL-55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.31	0.23	0.42	0.58	0.75	1.09	1.88	10.10	25.87	27.09		9.90	2.02	1.95	2.57	2.50	2.74		2.47	2.47	2.47	2.47
JL-56	0.00	0.00	0.00	0.00	0.00	0.00	0.95	0.00	0.67	0.53	1.40	1.60	2.61	3.70	6.69	15.71	22.43	20.54	5.47	1.83		1.69	1.21	1.19	1.70	2.05	1.70		1.59	1.59	1.59	1.59
JL-57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.06	0.18	0.36	0.50	0.93	2.27	7.38	26.10	29.94	10.63		2.19	1.31	1.62	2.74	2.84	2.27		2.16	2.16	2.16	2.16
JL-58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.11	0.13	0.21	0.48	1.82	7.03	21.71	25.98	12.45		3.27	2.17	2.30	3.59	3.56	3.48		2.93	2.93	2.93	2.93
JL-59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.21	0.28	0.43	0.69	1.23	2.61	14.22	34.39	19.68		3.78	1.55	2.20	3.04	3.15	2.76		2.43	2.43	2.43	2.43
JL-60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.16	0.13	0.17	0.34	0.51	0.84	1.37	2.24	9.71	28.81	18.39		4.75	2.61	2.70	4.34	4.35	3.81		3.64	3.64	3.64	3.64
JL-61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.74		5.10	6.79	9.07	12.34	12.37	9.71		10.47	10.47	10.47	10.47
JL-62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.03	0.02	0.03	0.05	0.12	0.85	5.67	15.41		9.83	4.97	5.99	9.14	9.68	6.74		7.86	7.86	7.86	7.86

Jeffreys Ledge Survey (2002-2005) (4): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type	Total Wt (gm)
JL-63	JL82	42.883390	-70.245870	1	154	9/6/2002	BC	13.00
JL-64	JL83b	42.883300	-70.229820	1	115	9/6/2002	BC	29.30
JL-65	JL91	42.871180	-70.394530	1		6/28/2004	BC	12.60
JL-66	JL92a	42.870700	-70.379890	1	148	10/2/2002	BC	25.80
JL-67	JL92b	42.871520	-70.380270	1		6/28/2004	BC	9.80
JL-68	JL93	42.871270	-70.363230	1	95	6/28/2004	BC	37.10
JL-69	JL94b	42.870790	-70.346760	1	104	10/2/2002	BC	121.70
JL-70	JL96	42.871040	-70.313410	1	117	10/2/2002	BC	62.30
JL-71	JL98	42.871170	-70.280470	1	148	8/2/2002	BC	30.80
JL-72	JL99	42.871410	-70.263670	1	119	8/2/2002	BC	37.40
JL-73	JL100	42.870470	-70.246580	1	119	9/6/2002	BC	23.00
JL-74	JL101	42.870910	-70.229570	1	101	9/6/2002	BC	35.20
JL-75	JL108c	42.871080	-70.113730	1	95	11/17/2004	BC	23.10
JL-76	JL109a	42.858280	-70.396860	1	79	10/2/2002	BC	131.90
JL-77	JL110f	42.861450	-70.379150	1	68	6/28/2004	SH	36.70
JL-78	JL111	42.858550	-70.363420	1	124	6/28/2004	BC	6.90
JL-79	JL112	42.858330	-70.346680	1	57	6/28/2004	SH	48.40
JL-80	JL113c	42.858620	-70.329370	1	88	6/28/2004	SH	9.40
JL-81	JL116	42.858170	-70.279850	1	95	9/6/2002	BC	68.10
JL-82	JL117	42.858030	-70.263240	1	101	9/6/2002	BC	49.10
JL-83	JL118	42.858250	-70.246240	1	91	9/6/2002	BC	67.00

Jeffreys Ledge Survey (2002-2005) (4): Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
JL-63	Sandy Mud	Sandy Silt-Clay	Sandy Mud	Sandy Mud	Very Fine Sandy Mud	Very Fine Sandy Mud	Medium Silt	Fine Silt	Very Poorly Sorted
JL-64	Slightly Granuley	Slightly Granuley Silty-Clayey Very Fine Sand	Slightly Gravelly Muddy Sand	Muddy Sand	Slightly Very Fine Gravelly Muddy Very Fine Sand	Slightly Granular Muddy Very Fine Sand	Very Coarse Silt	Coarse Silt	Very Poorly Sorted
JL-65	Sandy Mud	Sandy Silt-Clay	Sandy Mud	Sandy Mud	Very Fine Sandy Mud	Very Fine Sandy Mud	Fine Silt	Very Fine Silt	Very Poorly Sorted
JL-66	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-67	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Very Coarse Silt	Clay	Very Poorly Sorted
JL-68	Slightly Granuley	Slightly Granuley Clayey Fine Sand	Slightly Gravelly Muddy Sand	Muddy Sand	Slightly Very Fine Gravelly Muddy Fine Sand	Slightly Granular Muddy Fine Sand	Fine Sand	Fine Sand	Very Poorly Sorted
JL-69	Slightly Granuley	Slightly Granuley Silty-Clayey Very Fine Sand	Slightly Gravelly Muddy Sand	Muddy Sand	Slightly Very Fine Gravelly Muddy Very Fine Sand	Slightly Granular Muddy Very Fine Sand	Very Fine Sand	Very Fine Sand	Poorly Sorted
JL-70	Muddy Sand	Silty-Clayey Very Fine Sand	Muddy Sand	Muddy Sand	Muddy Very Fine Sand	Muddy Very Fine Sand	Very Coarse Silt	Coarse Silt	Very Poorly Sorted
JL-71	Slightly Granuley	Slightly Granuley Very Fine Sandy Silt-Clay	Slightly Gravelly Sandy Mud	Sandy Mud	Slightly Very Fine Gravelly Very Fine Sandy Mud	Slightly Granular Very Fine Sandy Mud	Fine Silt	Very Fine Silt	Very Poorly Sorted
JL-72	Pebbly	Pebbly Silty-Clayey Very Fine Sand	Gravelly Muddy Sand	N/A	Medium Gravelly Muddy Very Fine Sand	Pebbly Muddy Very Fine Sand	Very Coarse Silt	Coarse Silt	Very Poorly Sorted
JL-73	Slightly Granuley	Slightly Granuley Silty-Clayey Very Fine Sand	Slightly Gravelly Muddy Sand	Muddy Sand	Slightly Very Fine Gravelly Muddy Very Fine Sand	Slightly Granular Muddy Very Fine Sand	Very Coarse Silt	Coarse Silt	Very Poorly Sorted
JL-74	Granuley	Granuley Fine Sand	Gravelly Sand	N/A	Very Fine Gravelly Fine Sand	Granular Fine Sand	Fine Sand	Fine Sand	Poorly Sorted
JL-75	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Coarse Sand	Coarse Sand	Poorly Sorted
JL-76	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	N/A	Slightly Fine Gravelly Fine Sand	Slightly Pebbly Fine Sand	Medium Sand	Medium Sand	Poorly Sorted
JL-77	Gravel	Pebble Gravel	Gravel	N/A	Coarse Gravel	Pebble Gravel	Fine Gravel	Pebble Gravel	Poorly Sorted
JL-78	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-79	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
JL-80	Sand	Very Fine Sand	Sand	Sand	Very Fine Sand	Very Fine Sand	Very Fine Sand	Very Fine Sand	Poorly Sorted
JL-81	Pebbly	Pebbly Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Pebbly Medium Sand	Coarse Sand	Coarse Sand	Very Poorly Sorted
JL-82	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Poorly Sorted
JL-83	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Moderately Sorted

Jeffreys Ledge Survey (2002-2005) (4): Grain Size Statistics

Sample ID	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
JL-63	0.0	43.4	56.6	43.4	24.7	31.9	U	3.73		3.20	0.11	4.58	0.04	6.25	0.01	3.36	0.68	0.74	3.90
JL-64	0.6	69.4	30.0	69.4	11.0	19.0	U	3.24		1.76	0.30	3.24	0.11	4.76	0.04	3.37	0.65	1.53	3.00
JL-65	0.0	26.2	73.8	26.2	25.7	48.1	B	3.24	8.48	3.09	0.12	7.80	0.00	7.71	0.00	3.76	0.01	0.64	5.60
JL-66	0.0	5.2	94.8	5.2	33.4	61.4	U	8.48		4.95	0.03	8.86	0.00	9.06	0.00	3.03	0.03	0.88	9.10
JL-67	0.0	7.6	92.4	7.6	31.4	61.0	B	9.48	3.73	4.56	0.04	8.84	0.00	8.53	0.00	2.80	-0.13	1.23	7.10
JL-68	0.2	83.3	16.5	83.3	5.0	11.5	U	2.74		1.30	0.41	2.71	0.15	2.95	0.13	2.28	0.44	3.21	2.30
JL-69	0.0	87.2	12.8	87.2	4.5	8.3	U	3.24		2.14	0.23	3.12	0.12	3.15	0.11	1.61	0.33	4.51	1.50
JL-70	0.0	71.9	28.1	71.9	11.6	16.5	U	3.24		2.82	0.14	3.50	0.09	4.90	0.03	2.74	0.81	2.82	2.20
JL-71	0.2	30.8	69.0	30.8	28.0	41.0	B	3.73	8.48	3.35	0.10	6.75	0.01	7.33	0.01	3.57	0.25	0.64	5.28
JL-72	5.4	64.2	30.4	64.2	12.6	17.8	B	3.24	-3.24	1.58	0.33	3.45	0.09	4.82	0.04	3.66	0.47	2.50	3.06
JL-73	0.0	71.6	28.4	71.6	13.2	15.2	U	3.24		2.84	0.14	3.60	0.08	4.79	0.04	2.58	0.77	2.93	2.40
JL-74	6.3	86.7	7.0	86.7	2.3	4.7	U	2.74		-0.14	1.10	2.46	0.18	2.14	0.23	1.89	-0.15	3.17	1.60
JL-75	6.2	90.8	3.1	90.8	0.5	2.6	U	1.25		-0.63	1.55	0.91	0.53	0.82	0.57	1.06	-0.15	1.07	0.70
JL-76	2.3	90.7	7.0	90.7	1.8	5.2	U	2.24		0.37	0.77	1.90	0.27	1.82	0.28	1.77	0.20	2.77	0.90
JL-77	85.4	14.3	0.3	14.3			U	-4.24		-4.35	20.36	-3.53	11.54	-2.98	7.91	1.67	0.61	1.07	0.40
JL-78	0.0	1.6	98.4	1.6	32.2	66.2	U	8.48		5.58	0.02	9.32	0.00	9.39	0.00	2.88	0.00	0.81	8.00
JL-79	69.9	29.2	0.9	29.2			B	-3.24	1.75	-3.75	13.45	-2.62	6.13	-1.66	3.15	2.13	0.59	0.72	0.70
JL-80	0.0	91.4	8.6	91.4	3.9	4.7	U	3.24		2.49	0.18	3.13	0.11	3.15	0.11	1.12	0.36	3.19	1.30
JL-81	14.0	80.3	5.7	80.3	1.7	4.0	U	1.25		-1.44	2.71	0.83	0.56	0.80	0.58	2.06	0.08	1.55	0.80
JL-82	0.4	92.1	7.4	92.1	3.0	4.4	U	2.74		1.59	0.33	2.56	0.17	2.56	0.17	1.26	0.25	3.08	1.20
JL-83	0.8	94.6	4.6	94.6	1.3	3.3	U	2.24		1.17	0.45	2.18	0.22	2.16	0.22	0.78	-0.05	1.69	0.90

Jeffreys Ledge Survey (2002-2005) (4): Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0	Class % phi 5.0	Class % phi 6.0	Class % phi 7.0	Class % phi 8.0	Class % phi 9.0	Class % phi 10.0	Class % phi > 10.0	Class % phi 11.0	Class % phi 12.0	Class % phi 13.0	Class % phi 14.0
JL-63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.03	0.03	0.15	0.34	2.84	15.51	24.36		11.52	2.88	7.64	2.73	5.91	6.03		4.99	4.99	4.99	4.99
JL-64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.36	0.75	0.82	1.20	2.00	2.58	3.86	7.52	19.25	22.17	9.20		3.77	1.81	2.35	3.19	3.56	3.41		2.98	2.98	2.98	2.98
JL-65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	0.08	0.09	0.15	0.27	0.97	6.43	10.07	7.97		6.36	4.23	6.44	8.69	9.20	7.98		7.76	7.76	7.76	7.76
JL-66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.05	0.01	0.01	0.01	0.03	0.06	0.35	1.50	3.10		5.14	5.82	9.75	12.74	12.82	10.84		9.43	9.43	9.43	9.43
JL-67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.04	0.03	0.07	0.09	0.15	0.73	2.50	3.92		4.33	6.37	9.13	11.57	12.75	26.05		5.55	5.55	5.55	5.55
JL-68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.59	0.71	1.56	3.19	6.11	12.01	14.53	24.74	15.51	4.29		1.13	0.42	1.51	1.98	2.20	2.21		1.77	1.77	1.77	1.77
JL-69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.38	0.69	1.02	1.40	1.94	2.75	6.13	26.62	35.84	10.44		1.46	0.67	0.89	1.43	1.73	1.96		1.15	1.15	1.15	1.15
JL-70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.06	0.08	0.13	0.27	0.62	1.60	10.90	34.94	23.20		5.78	1.37	1.97	2.53	3.18	2.51		2.70	2.70	2.70	2.70
JL-71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.01	0.02	0.05	0.06	0.05	0.14	0.40	2.26	9.37	18.28		10.79	4.01	5.83	7.56	7.62	6.06		6.83	6.83	6.83	6.83
JL-72	0.00	0.00	0.00	0.00	0.00	4.93	0.00	0.00	0.21	0.30	0.34	0.42	0.69	1.05	1.62	2.51	3.81	11.68	23.91	18.11		5.07	1.79	2.49	3.24	3.34	2.89		2.90	2.90	2.90	2.90
JL-73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.04	0.06	0.18	0.30	0.61	1.56	10.41	29.75	28.62		6.90	1.61	2.03	2.66	2.79	2.85		2.40	2.40	2.40	2.40
JL-74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.54	2.75	2.01	2.12	2.19	2.89	3.42	4.04	8.17	21.59	31.67	8.73	1.87		0.78	0.47	0.54	0.48	0.74	1.05		0.74	0.74	0.74	0.74
JL-75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99	2.09	3.08	5.32	9.16	14.61	17.85	20.42	17.73	4.12	0.88	0.48	0.21		0.02	0.15	0.11	0.19	0.45	0.58	1.55				
JL-76	0.00	0.00	0.00	0.00	0.00	0.00	1.06	0.12	0.49	0.67	1.04	2.04	6.09	8.24	12.18	22.67	21.34	13.84	2.69	0.51		0.29	0.38	0.46	0.71	0.72	1.02		0.86	0.86	0.86	0.86
JL-77	0.00	0.00	0.00	35.26	16.09	14.93	3.90	2.94	8.07	4.19	3.08	1.90	1.68	1.42	1.54	1.82	1.40	1.13	0.26	0.07	0.35											
JL-78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.03	0.03	0.06	0.22	0.44	0.69		4.42	7.09	9.41	11.36	12.30	11.29		10.65	10.65	10.65	10.65
JL-79	0.00	0.00	0.00	0.00	20.48	19.56	13.37	9.38	5.10	2.00	2.14	2.43	3.11	4.06	4.70	6.40	5.10	1.06	0.12	0.05	0.96											
JL-80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.24	0.43	0.49	0.54	1.12	5.86	31.50	36.54	14.52		1.86	0.69	0.53	0.80	1.22	1.17		0.58	0.58	0.58	0.58
JL-81	0.00	0.00	0.00	0.00	0.00	3.52	1.38	2.24	2.42	4.49	7.34	9.15	11.29	12.19	12.27	11.59	6.87	5.20	2.92	1.46		0.40	0.39	0.42	0.53	0.75	0.74		0.62	0.62	0.62	0.62
JL-82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.19	0.28	0.59	1.32	2.11	3.42	9.88	26.53	34.34	11.09	2.56		1.29	0.49	0.56	0.72	1.03	1.07		0.58	0.58	0.58	0.58
JL-83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.21	0.36	0.44	1.37	2.37	3.09	5.73	21.95	37.95	18.40	2.71	0.60		0.44	0.21	0.27	0.37	0.56	0.76		0.50	0.50	0.50	0.50

Jeffreys Ledge Survey (2002-2005) (5): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type	Total Wt (gm)
JL-84	JL120	42.858150	-70.214030	1	57	9/23/2004	SH	177.20
JL-85	JL121	42.858250	-70.196920	1	58	9/23/2004	SH	140.10
JL-86	JL123	42.858000	-70.163650	1	59	9/23/2004	SH	287.90
JL-87	JL126	42.858300	-70.113500	1	105	11/17/2004	BC	34.40
JL-88	JL127	42.846080	-70.396630	1	134	9/13/2002	BC	7.20
JL-89	JL129	42.845980	-70.363550	1	62	6/28/2004	SH	19.50
JL-90	JL131	42.846820	-70.328720	1	53	6/28/2004	SH	
JL-91	JL138	42.845720	-70.213530	1	56	9/23/2004	SH	284.70
JL-92	JL139	42.845720	-70.197430	1	54	9/23/2004	SH	125.00
JL-93	JL142b	42.845960	-70.146720	1	108	10/8/2002	BC	73.20
JL-94	JL144a	42.845970	-70.113370	1	115	9/30/2002	BC	97.80
JL-95	JL144b	42.845450	-70.114050	1	115	11/17/2004	BC	23.00
JL-96	JL145	42.832730	-70.397640	1	140	8/7/2002	BC	12.90
JL-97	JL146	42.833420	-70.380430	1	130	9/13/2002	BC	10.20
JL-98	JL151	42.833120	-70.296620	1	54	9/21/2004	SH	190.50
JL-99	JL154	42.833520	-70.247520	1	54	9/21/2004	SH	167.30
JL-100	JL156	42.832600	-70.214230	1	54	9/23/2004	SH	204.60
JL-101	JL157	42.833120	-70.197500	1	90	8/26/2005	SH	24.90
JL-102	JL159	42.833200	-70.163730	1	108	11/17/2004	BC	51.10
JL-103	JL160	42.833400	-70.147530	1	123	11/17/2004	BC	28.00
JL-104	JL162a	42.833580	-70.113580	1	130	9/30/2002	BC	68.30

Jeffreys Ledge Survey (2002-2005) (5): Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
JL-84	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
JL-85	Gravel	Pebble Gravel	Gravel	N/A	Coarse Gravel	Pebble Gravel	Medium Gravel	Pebble Gravel	Poorly Sorted
JL-86	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Very Coarse Gravel	Sandy Pebble Gravel	Medium Gravel	Pebble Gravel	Very Poorly Sorted
JL-87	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Poorly Sorted
JL-88	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-89	Granuley	Granuley Medium Sand	Gravelly Sand	N/A	Very Fine Gravelly Medium Sand	Granular Medium Sand	Medium Sand	Medium Sand	Poorly Sorted
JL-90	Gravel	Pebble Gravel	Gravel	N/A	Fine Gravel	Pebble Gravel	Fine Gravel	Pebble Gravel	Moderately Sorted
JL-91	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Very Coarse Gravel	Sandy Pebble Gravel	Medium Gravel	Pebble Gravel	Very Poorly Sorted
JL-92	Gravel	Pebble Gravel	Gravel	N/A	Coarse Gravel	Pebble Gravel	Medium Gravel	Pebble Gravel	Poorly Sorted
JL-93	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	N/A	Slightly Medium Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Poorly Sorted
JL-94	Pebbly	Pebbly Fine Sand	Gravelly Sand	N/A	Medium Gravelly Fine Sand	Pebbly Fine Sand	Fine Sand	Fine Sand	Very Poorly Sorted
JL-95	Pebbly	Pebbly Clayey Fine Sand	Gravelly Muddy Sand	N/A	Medium Gravelly Muddy Fine Sand	Pebbly Muddy Fine Sand	Very Fine Sand	Very Fine Sand	Very Poorly Sorted
JL-96	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-97	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Very Fine Silt	Clay	Very Poorly Sorted
JL-98	Gravel	Pebble Gravel	Gravel	N/A	Very Coarse Gravel	Pebble Gravel	Coarse Gravel	Pebble Gravel	Poorly Sorted
JL-99	Pebble Mixes	Clayey Sandy Pebble Gravel	Muddy Sandy Gravel	N/A	Muddy Sandy Coarse Gravel	Muddy Sandy Pebble Gravel	Medium Gravel	Pebble Gravel	Very Poorly Sorted
JL-100	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Medium Gravel	Sandy Pebble Gravel	Medium Gravel	Pebble Gravel	Very Poorly Sorted
JL-101	Pebbly	Pebbly Medium Sand	Gravelly Sand	N/A	Fine Gravelly Medium Sand	Pebbly Medium Sand	Coarse Sand	Coarse Sand	Poorly Sorted
JL-102	Sand	Fine Sand	Sand	Sand	Fine Sand	Fine Sand	Fine Sand	Fine Sand	Poorly Sorted
JL-103	Muddy Sand	Silty-Clayey Very Fine Sand	Muddy Sand	Muddy Sand	Muddy Very Fine Sand	Muddy Very Fine Sand	Very Fine Sand	Very Fine Sand	Poorly Sorted
JL-104	Pebbly	Pebbly Silty-Clayey Very Fine Sand	Gravelly Muddy Sand	N/A	Coarse Gravelly Muddy Very Fine Sand	Pebbly Muddy Very Fine Sand	Medium Sand	Medium Sand	Very Poorly Sorted

Jeffreys Ledge Survey (2002-2005) (5): Grain Size Statistics

Sample ID	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
JL-84	73.3	24.1	2.6	24.1	0.8	1.8	B	-3.24	1.25	-4.24	18.84	-3.10	8.60	-2.18	4.53	2.14	0.59	0.82	0.80
JL-85	81.2	18.5	0.3	18.5			B	-4.24	-0.24	-4.62	24.62	-3.85	14.43	-3.00	8.01	1.74	0.66	0.93	0.50
JL-86	79.5	20.3	0.2	20.3			B	-5.24	-4.24	-5.40	42.11	-5.01	32.22	-3.56	11.75	2.23	0.87	0.91	0.50
JL-87	0.1	90.0	9.9	90.0	2.7	7.2	U	2.74		1.88	0.27	2.58	0.17	2.57	0.17	1.46	0.36	4.79	1.50
JL-88	0.0	2.2	97.8	2.2	33.8	64.0	U	7.50		5.56	0.02	9.24	0.00	9.34	0.00	2.90	0.01	0.81	7.60
JL-89	5.4	92.6	2.0	92.6			U	1.75		0.09	0.94	1.52	0.35	1.46	0.36	1.05	-0.22	1.48	0.80
JL-90	89.1	11.0	0.0	11.0			U	-2.24		-3.24	9.47	-2.34	5.06	-2.29	4.88	1.00	0.28	1.37	
JL-91	70.8	27.4	1.8	27.4	0.5	1.3	U	-5.24		-5.39	41.87	-4.96	31.17	-3.18	9.04	2.62	0.87	0.59	0.90
JL-92	87.1	12.5	0.4	12.5			U	-4.24		-4.79	27.74	-4.11	17.28	-3.66	12.67	1.53	0.64	1.82	0.70
JL-93	1.2	91.2	7.6	91.2	2.0	5.6	U	2.74		2.01	0.25	2.59	0.17	2.57	0.17	1.27	0.33	4.28	1.20
JL-94	8.7	83.0	8.3	83.0	2.0	6.3	B	2.74	-3.74	-0.27	1.21	2.67	0.16	2.49	0.18	2.34	-0.16	6.66	1.20
JL-95	8.1	74.6	17.3	74.6	5.0	12.3	B	2.74	-3.24	-0.21	1.16	2.73	0.15	3.09	0.12	3.16	0.24	5.34	2.30
JL-96	0.0	0.6	99.4	0.6	32.6	66.8	U	7.50		6.19	0.01	9.51	0.00	9.62	0.00	2.67	0.04	0.75	8.93
JL-97	0.0	4.2	95.8	4.2	37.2	58.6	U	8.48		4.74	0.04	8.81	0.00	8.87	0.00	3.14	0.01	0.78	8.60
JL-98	89.4	9.9	0.7	9.9			U	-5.24		-5.38	41.56	-4.87	29.32	-4.34	20.28	1.63	0.74	2.73	1.00
JL-99	78.0	17.9	4.1	17.9	1.3	2.8	U	-4.73		-5.32	40.03	-4.72	26.37	-3.01	8.03	2.80	0.83	1.22	2.80
JL-100	79.9	19.7	0.4	19.7			B	-5.24	0.25	-5.28	38.94	-3.86	14.54	-3.12	8.66	2.16	0.49	0.90	0.50
JL-101	14.4	80.7	4.9	80.7			U	1.25		-1.58	2.99	0.76	0.59	0.58	0.67	1.59	-0.10	1.34	0.70
JL-102	0.0	92.0	8.0	92.0	2.4	5.6	U	2.74		2.14	0.23	2.80	0.14	2.83	0.14	1.28	0.42	4.06	1.10
JL-103	0.0	86.0	14.0	86.0	5.0	9.0	U	3.24		2.46	0.18	3.13	0.11	3.20	0.11	1.61	0.47	4.32	1.80
JL-104	16.4	69.5	14.1	69.5	5.6	8.5	B	3.24	-4.24	-4.10	17.17	2.95	0.13	1.78	0.29	3.54	-0.32	5.12	1.80

Jeffreys Ledge Survey (2002-2005) (5): Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0	Class % phi 5.0	Class % phi 6.0	Class % phi 7.0	Class % phi 8.0	Class % phi 9.0	Class % phi 10.0	Class % phi > 10.0	Class % phi 11.0	Class % phi 12.0	Class % phi 13.0	Class % phi 14.0
JL-84	0.00	0.00	0.00	19.49	15.18	19.49	8.58	5.02	3.20	2.37	2.41	3.22	3.69	4.33	4.66	3.85	1.22	0.44	0.20	0.14		0.11	0.17	0.15	0.29	0.44	0.44	0.91				
JL-85	0.00	0.00	13.84	28.77	25.53	1.69	4.09	0.97	2.46	3.84	4.92	5.34	3.66	2.67	1.46	0.38	0.08	0.03	0.01	0.01	0.26											
JL-86	0.00	53.45	7.38	12.45	0.00	0.49	0.94	1.00	1.49	2.29	3.11	4.09	4.40	3.98	3.02	1.45	0.24	0.04	0.01	0.01		0.02	0.01	0.01	0.02	0.03	0.02	0.08				
JL-87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.33	0.36	0.79	1.07	1.60	7.50	30.30	41.26	5.91	0.86		0.58	0.38	0.67	1.05	1.32	1.51		1.09	1.09	1.09	1.09
JL-88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.11		4.55	6.00	11.45	11.86	10.90	11.59		10.38	10.38	10.38	10.38
JL-89	0.00	0.00	0.00	0.00	0.00	0.00	2.23	0.00	1.97	1.25	1.28	2.23	5.52	12.81	21.53	25.16	16.32	6.24	1.06	0.41	2.01											
JL-90	0.00	0.00	0.00	0.00	0.00	20.11	22.55	24.44	16.14	5.81	2.77	1.83	1.50	1.25	1.24	1.50	0.70	0.13	0.03	0.01												
JL-91	0.00	49.48	16.54	0.00	0.00	0.00	0.48	1.42	1.54	1.38	2.01	3.29	4.87	5.75	5.61	4.05	1.36	0.33	0.05	0.05		0.07	0.08	0.13	0.19	0.26	0.29	0.79				
JL-92	0.00	0.00	26.87	30.02	12.79	8.20	4.92	2.02	1.14	1.17	1.59	1.89	2.00	1.98	2.21	1.79	0.82	0.15	0.02	0.02		0.03	0.02	0.03	0.02	0.09	0.04	0.20				
JL-93	0.00	0.00	0.00	0.00	0.00	1.10	0.00	0.00	0.00	0.06	0.30	0.32	0.35	0.45	0.77	6.32	31.06	43.06	7.55	1.04		0.55	0.37	0.44	0.72	1.07	1.37		0.78	0.78	0.78	0.78
JL-94	0.00	0.00	0.00	0.00	7.75	0.00	0.00	0.28	0.10	0.53	0.85	1.14	1.49	1.76	1.80	3.30	14.82	43.70	12.39	1.76		0.51	0.38	0.48	0.62	1.37	1.30		0.92	0.92	0.92	0.92
JL-95	0.00	0.00	0.00	0.00	0.00	7.51	0.00	0.00	0.42	0.19	1.00	1.54	1.75	1.91	2.33	3.69	12.85	34.33	12.47	2.73		1.20	0.41	1.52	1.89	2.28	2.48		1.87	1.87	1.87	1.87
JL-96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65		0.31	7.00	10.73	14.58	11.16	10.57		11.25	11.25	11.25	11.25
JL-97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.05	0.07	0.35	0.95	2.67		7.97	8.41	10.41	10.46	10.27	10.81		9.39	9.39	9.39	9.39
JL-98	0.00	44.78	24.81	9.21	0.00	4.06	3.85	1.49	0.83	0.35	0.68	0.91	1.40	1.71	1.80	1.75	1.02	0.45	0.09	0.05		0.05	0.05	0.07	0.07	0.10	0.16	0.28				
JL-99	0.00	30.43	36.23	0.00	1.66	3.92	2.07	1.53	1.22	0.89	0.87	1.29	1.97	2.28	2.44	2.96	3.72	1.82	0.37	0.22		0.22	0.27	0.34	0.46	0.79	0.42	1.63				
JL-100	0.00	24.59	11.56	8.81	18.78	5.06	3.86	3.04	2.07	2.17	2.80	3.91	4.73	4.72	2.55	0.72	0.16	0.05	0.02	0.01		0.02	0.02	0.02	0.03	0.05	0.05	0.22				
JL-101	0.00	0.00	0.00	0.00	0.00	0.00	2.86	4.64	3.06	3.79	6.38	9.08	12.84	14.13	15.75	16.03	5.10	1.09	0.19	0.12		0.22	0.32	0.10	0.26	0.68	0.56		0.70	0.70	0.70	0.70
JL-102	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.25	0.30	0.34	0.49	3.46	17.30	45.01	20.37	4.28		0.86	0.48	0.40	0.64	0.90	1.14		0.89	0.89	0.89	0.89
JL-103	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.12	0.13	0.25	1.35	8.36	31.18	32.45	12.04		2.07	0.71	0.84	1.37	1.37	1.80		1.47	1.47	1.47	1.47
JL-104	0.00	0.00	0.00	12.65	0.00	1.01	1.06	0.69	0.59	0.41	0.62	0.59	0.70	0.73	0.89	1.63	5.92	25.12	24.27	9.03		2.69	0.81	0.81	1.25	2.20	1.04		1.33	1.33	1.33	1.33

Jeffreys Ledge Survey (2002-2005) (6): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type	Total Wt (gm)
JL-105	JL162b	42.833030	-70.113800	1	131	11/17/2004	BC	24.80
JL-106	JL162c	42.833920	-70.113880	1	133	7/26/2005	SH	23.50
JL-107	JL163	42.820810	-70.396390	1	135	9/13/2002	BC	9.60
JL-108	JL164	42.820800	-70.380070	1	134	9/13/2002	BC	6.80
JL-109	JL165	42.820750	-70.363450	1	124	9/13/2002	BC	10.30
JL-110	JL174	42.820430	-70.213750	1	56	9/23/2004	SH	273.40
JL-111	JL178	42.820870	-70.147060	1	112	10/8/2002	BC	69.90
JL-112	JL181	42.808310	-70.396540	1	112	9/13/2002	BC	12.50
JL-113	JL182a	42.808340	-70.379820	1	119	9/13/2002	BC	9.40
JL-114	JL182b	42.808200	-70.380380	1	120	11/17/2004	BC	11.30
JL-115	JL183a	42.808270	-70.363370	1	124	9/13/2002	BC	10.00
JL-116	JL183b	42.808320	-70.363950	1	128	11/17/2004	BC	9.90
JL-117	JL184	42.808370	-70.346870	1	113	9/13/2002	BC	11.60
JL-118	JL186b	42.807780	-70.313470	1	54	9/21/2004	SH	392.60
JL-119	JL191	42.808080	-70.229900	1	56	9/23/2004	SH	176.20
JL-120	JL192	42.807980	-70.213750	1	85	9/23/2004	SH	99.00
JL-121	JL200b	42.796020	-70.380130	1	89	8/12/2002	BC	24.70
JL-122	JL201	42.796240	-70.363640	1	106	8/12/2002	BC	16.00
JL-123	JL202	42.796240	-70.346780	1	110	8/12/2002	BC	10.80
JL-124	JL203b	42.795970	-70.330040	1	91	8/12/2002	BC	60.90

Jeffreys Ledge Survey (2002-2005) (6): Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
JL-105	Slightly Pebbly	Slightly Pebbly Silty-Clayey Very Fine Sand	Slightly Gravelly Muddy Sand	N/A	Slightly Medium Gravelly Muddy Very Fine Sand	Slightly Pebbly Muddy Very Fine Sand	Very Coarse Silt	Coarse Silt	Very Poorly Sorted
JL-106	Slightly Granuley	Slightly Granuley Silty-Clayey Very Fine Sand	Slightly Gravelly Muddy Sand	Muddy Sand	Slightly Very Fine Gravelly Muddy Very Fine Sand	Slightly Granular Muddy Very Fine Sand	Very Fine Sand	Very Fine Sand	Poorly Sorted
JL-107	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-108	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-109	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Very Fine Silt	Clay	Very Poorly Sorted
JL-110	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	N/A	Sandy Coarse Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
JL-111	Pebbly	Pebbly Clayey Fine Sand	Gravelly Muddy Sand	N/A	Medium Gravelly Muddy Fine Sand	Pebbly Muddy Fine Sand	Fine Sand	Fine Sand	Very Poorly Sorted
JL-112	Sandy Mud	Sandy Silt-Clay	Sandy Mud	Sandy Mud	Very Fine Sandy Mud	Very Fine Sandy Mud	Medium Silt	Fine Silt	Very Poorly Sorted
JL-113	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Very Fine Silt	Clay	Very Poorly Sorted
JL-114	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Very Fine Silt	Clay	Very Poorly Sorted
JL-115	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-116	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Clay	Clay	Very Poorly Sorted
JL-117	Sandy Mud	Sandy Silt-Clay	Sandy Mud	Sandy Mud	Very Fine Sandy Mud	Very Fine Sandy Mud	Very Fine Silt	Clay	Very Poorly Sorted
JL-118	Gravel	Pebble Gravel	Gravel	N/A	Very Coarse Gravel	Pebble Gravel	Very Coarse Gravel	Pebble Gravel	Moderately Sorted
JL-119	Pebbly	Pebbly Coarse Gravel	Gravelly Sand	N/A	Coarse Gravelly Coarse Sand	Pebbly Coarse Sand	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted
JL-120	Slightly Granuley	Slightly Granuley Coarse Sand	Slighty Gravelly Sand	N/A	Slightly Very Fine Gravelly Coarse Sand	Slightly Granular Coarse Sand	Coarse Sand	Coarse Sand	Poorly Sorted
JL-121	Slightly Granuley	Slightly Granuley Silty-Clayey Fine Sand	Slightly Gravelly Muddy Sand	N/A	Slightly Very Fine Gravelly Muddy Fine Sand	Slightly Granular Muddy Fine Sand	Very Fine Sand	Very Fine Sand	Very Poorly Sorted
JL-122	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Very Fine Silt	Clay	Very Poorly Sorted
JL-123	Mud	Silt-Clay	Mud	Mud	Mud	Mud	Very Fine Silt	Clay	Very Poorly Sorted
JL-124	Pebbly	Pebbly Medium Sand	Gravelly Sand	N/A	Medium Gravelly Medium Sand	Pebbly Medium Sand	Medium Sand	Medium Sand	Poorly Sorted

Jeffreys Ledge Survey (2002-2005) (6): Grain Size Statistics

Sample ID	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
JL-105	4.2	70.9	24.9	70.9	10.1	14.8	B	3.24	-3.24	2.26	0.21	3.26	0.10	4.43	0.05	2.98	0.60	3.84	2.70
JL-106	0.1	84.6	15.3	84.6	6.2	9.1	U	2.74		2.53	0.17	3.14	0.11	3.24	0.11	1.58	0.52	4.00	2.00
JL-107	0.0	0.0	100.0	0.0	34.4	65.6	U	9.48		5.86	0.02	9.58	0.00	9.54	0.00	2.79	-0.04	0.78	8.00
JL-108	0.0	1.0	99.0	1.0	35.7	63.3	U	7.50		5.80	0.02	9.20	0.00	9.36	0.00	2.81	0.05	0.79	13.20
JL-109	0.0	6.1	93.9	6.1	34.6	59.3	U	8.48		4.53	0.04	8.73	0.00	8.78	0.00	3.21	0.00	0.81	10.00
JL-110	63.5	35.6	0.8	35.6			B	-5.24	0.25	-5.23	37.45	-2.77	6.83	-2.44	5.44	2.41	0.20	0.58	0.50
JL-111	9.2	74.4	16.3	74.4	4.7	11.6	B	2.74	-3.74	-0.61	1.53	2.82	0.14	2.63	0.16	3.10	-0.01	4.52	1.90
JL-112	0.0	43.7	56.3	43.7	23.0	33.3	B	3.24	7.50	2.80	0.14	4.86	0.03	6.31	0.01	3.60	0.54	0.74	4.10
JL-113	0.0	4.3	95.8	4.2	37.2	58.6	U	8.48		4.97	0.03	8.73	0.00	8.81	0.00	3.15	0.03	0.78	6.80
JL-114	0.0	4.3	95.8	4.2	37.0	58.8	U	8.48		4.67	0.04	8.78	0.00	8.85	0.00	3.16	0.02	0.79	7.10
JL-115	0.0	1.5	98.5	1.5	35.4	63.1	U	8.48		5.50	0.02	9.08	0.00	9.24	0.00	2.90	0.05	0.80	7.80
JL-116	0.0	1.9	98.1	1.9	34.1	64.0	U	7.50		5.54	0.02	9.29	0.00	9.34	0.00	2.90	0.00	0.78	8.00
JL-117	0.0	13.1	86.9	13.1	36.6	50.3	U	3.73		3.74	0.07	8.05	0.00	8.12	0.00	3.48	0.04	0.72	6.30
JL-118	96.8	3.1	0.1	3.1			U	-5.74		-5.87	58.53	-5.39	41.96	-5.17	36.03	0.88	0.56	1.34	0.80
JL-119	25.2	74.7	0.1	74.7			B	0.25	-4.73	-4.62	24.64	0.03	0.98	-0.89	1.85	2.08	-0.58	1.47	0.40
JL-120	2.6	94.9	2.5	94.9	0.6	1.9	U	0.75		-0.38	1.30	0.84	0.56	0.87	0.55	1.02	0.06	1.01	0.60
JL-121	2.9	74.0	23.1	74.0	7.9	15.2	U	2.74		-0.14	1.10	2.12	0.23	3.38	0.10	3.77	0.53	1.88	2.50
JL-122	0.0	9.2	90.8	9.2	37.6	53.2	B	3.73	8.48	4.08	0.06	8.33	0.00	8.40	0.00	3.38	0.04	0.73	7.55
JL-123	0.0	8.6	91.4	8.5	37.7	53.8	U	5.51		4.19	0.05	8.37	0.00	8.51	0.00	3.29	0.05	0.73	7.39
JL-124	6.3	88.7	5.0	88.7	1.8	3.2	B	1.75	-3.24	-0.29	1.22	1.49	0.36	1.39	0.38	1.40	-0.11	1.59	0.91

Jeffreys Ledge Survey (2002-2005) (6): Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0	Class % phi 5.0	Class % phi 6.0	Class % phi 7.0	Class % phi 8.0	Class % phi 9.0	Class % phi 10.0	Class % phi > 10.0	Class % phi 11.0	Class % phi 12.0	Class % phi 13.0	Class % phi 14.0
JL-105	0.00	0.00	0.00	0.00	0.00	4.24	0.00	0.00	0.00	0.00	0.04	0.19	0.86	0.33	0.41	1.19	5.06	24.03	25.10	13.67		4.87	1.33	1.57	2.28	2.88	2.70		2.31	2.31	2.31	2.31
JL-106	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.05	0.08	0.14	0.20	0.32	0.94	4.61	34.80	30.81	12.65		3.45	0.94	0.62	1.21	1.66	1.70		1.44	1.44	1.44	1.44
JL-107	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		3.95	7.07	10.55	12.79	5.72	16.53		10.85	10.85	10.85	10.85
JL-108	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.19	0.23	0.19	0.28		4.13	6.19	11.65	13.79	10.69	11.43		10.29	10.29	10.29	10.29
JL-109	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.78	0.01	0.02	0.05	0.18	0.80	1.36	2.80		7.53	7.72	9.71	9.66	12.43	10.15		9.19	9.19	9.19	9.19
JL-110	0.00	19.46	11.38	7.98	4.62	4.19	5.31	3.72	3.83	3.03	4.38	6.85	8.96	8.25	4.90	1.84	0.35	0.08	0.02	0.01		0.03	0.02	0.06	0.08	0.11	0.15	0.39				
JL-111	0.00	0.00	0.00	0.00	6.35	0.00	1.18	1.72	0.00	0.00	1.00	1.42	2.27	2.72	3.12	4.51	9.77	24.22	19.96	5.44		1.64	0.60	0.92	1.53	1.99	1.94		1.93	1.93	1.93	1.93
JL-112	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.15	0.38	0.44	0.77	1.40	2.38	6.77	15.88	15.26		7.48	4.60	4.80	6.20	5.88	6.24		5.29	5.29	5.29	5.29
JL-113	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.03	0.03	0.05	0.17	0.35	0.82	2.72		8.39	8.77	9.67	10.37	11.65	9.62		9.33	9.33	9.33	9.33
JL-114	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.02	0.02	0.07	0.49	0.81	2.72		8.76	7.47	9.38	11.34	11.03	9.74		9.53	9.53	9.53	9.53
JL-115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.47		4.79	7.68	10.87	12.07	11.97	10.62		10.14	10.14	10.14	10.14
JL-116	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.83		3.79	8.23	10.45	11.71	10.45	11.11		10.61	10.61	10.61	10.61
JL-117	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.04	0.02	0.01	0.02	0.07	0.35	2.30	3.94	6.17		11.17	7.66	8.57	9.26	8.18	9.87		8.08	8.08	8.08	8.08
JL-118	45.69	22.07	12.10	11.81	0.00	2.15	1.36	0.84	0.51	0.27	0.28	0.23	0.31	0.38	0.47	0.67	0.56	0.16	0.02	0.01		0.01	0.01	0.01	0.01	0.02	0.02	0.04				
JL-119	0.00	0.00	13.87	0.00	2.98	0.00	1.15	1.21	2.23	3.77	9.25	14.50	18.44	18.72	10.93	2.62	0.17	0.02	0.00	0.00	0.14											
JL-120	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.07	0.70	1.55	4.86	11.48	17.71	19.77	17.24	12.87	7.51	3.05	0.28	0.09		0.17	0.09	0.15	0.24	0.51	0.40	0.98				
JL-121	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	1.65	3.49	5.11	7.34	8.92	9.44	10.43	9.61	11.06	6.08	2.45		1.80	1.50	2.02	2.55	2.73	2.81		2.43	2.43	2.43	2.43
JL-122	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.03	0.05	0.09	0.11	0.54	1.79	6.45		10.59	8.19	9.03	9.84	9.59	8.16		8.87	8.87	8.87	8.87
JL-123	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.11	0.03	0.02	0.03	0.07	0.27	0.90	2.51	4.45		7.71	16.98	2.85	10.19	10.10	9.27		8.61	8.61	8.61	8.61
JL-124	0.00	0.00	0.00	0.00	0.00	3.55	0.00	0.31	1.26	1.14	2.17	3.84	7.47	13.44	16.97	20.48	14.72	7.57	1.55	0.49		0.44	0.29	0.43	0.65	0.63	0.63	1.98				

Section 4: Cutter Thesis Survey (2002)

Cutter Thesis Survey (2002): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type
01_2	200209_01_2	43.072333	-70.699850	Unknown		9/4/2002	Shipek
01_4	200209_01_4	43.066250	-70.706217	Unknown		9/4/2002	Shipek
01_5	200209_01_5	43.070050	-70.706433	Unknown		9/4/2002	Shipek
01_7	200209_01_7	43.069450	-70.701583	Unknown		9/5/2002	Shipek
02_1	200209_02_1	43.065817	-70.706500	Unknown		9/4/2002	Boxcorer
02_10	200209_02_10	43.066267	-70.703200	Unknown		9/5/2002	Shipek
02_2	200209_02_2	43.065167	-70.706033	Unknown		9/4/2002	Shipek
02_7	200209_02_7	43.071850	-70.702750	Unknown		9/5/2002	Shipek
02_7	200209_02_7rl			Unknown			
03_1	200209_03_1	43.076200	-70.704250	Unknown		9/4/2002	Shipek
03_10	200209_03_10	43.068833	-70.701650	Unknown		9/5/2002	Shipek
03_2	200209_03_2	43.063600	-70.700583	Unknown		9/4/2002	Shipek
04.1_2	200209_04.1_2	43.069517	-70.705467	Unknown		9/4/2002	Shipek
04.1_3	200209_04.1_3	43.065200	-70.707350	Unknown		9/4/2002	Shipek
04.1_4	200209_04.1_4	43.070417	-70.701767	Unknown		9/5/2002	Shipek
04.1_5	200209_04.1_5	43.066267	-70.703233	Unknown		9/5/2002	Shipek
04_1	200209_04_1	43.066033	-70.704150	Unknown		9/4/2002	Boxcorer
04_2	200209_04_2	43.069283	-70.705233	Unknown		9/4/2002	Shipek
04_3	200209_04_3	43.066150	-70.704250	Unknown		9/5/2002	Shipek
04_5	200209_04_5	43.069267	-70.704067	Unknown		9/4/2002	Shipek
05_3	200209_05_3	43.064450	-70.700233	Unknown		9/5/2002	Shipek
05_8	200209_05_8	43.067133	-70.702233	Unknown		9/5/2002	Shipek
05_9	200209_05_9	43.064017	-70.699783	Unknown		9/5/2002	Shipek
06_1	200209_06_1	43.069667	-70.707200	Unknown		9/4/2002	Shipek
06_2	200209_06_2	43.070983	-70.705367	Unknown		9/4/2002	Shipek
06_3	200209_06_3	43.065900	-70.700683	Unknown		9/4/2002	Shipek
06_4	200209_06_4	43.070383	-70.703633	Unknown		9/4/2002	Shipek
06_5	200209_06_5	43.071883	-70.702517	Unknown		9/4/2002	Shipek
06_8	200209_06_8	43.069133	-70.703283	Unknown		9/4/2002	Shipek
07_11	200209_07_11	43.066533	-70.707500	Unknown		9/5/2002	Diver
07_3	200209_07_3	43.065050	-70.703850	Unknown		9/4/2002	Shipek
07_5	200209_07_5	43.068300	-70.700200	Unknown		9/4/2002	Shipek
07_9	200209_07_9	43.065150	-70.700267	Unknown		9/5/2002	Shipek

Section 5: OOA Survey (1997-2005)

OOA Survey (1997-2005) (1): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type
OOA_1	A1097G01	42.947000	-70.633333	1	50	10/21/1997	BC
OOA_2	A1097G02	42.947000	-70.632833	1	50	10/21/1997	BC
OOA_4	A1097G04	42.949167	-70.619167	1	53	10/21/1997	BC
OOA_6	A1097G06	42.944167	-70.631833	1	56	10/21/1997	BC
OOA_7	A1097G07	42.943167	-70.633500	1	41	10/21/1997	BC
OOA_8	A1197G01	42.949000	-70.619000	1	55	11/26/1997	BC
OOA_10	A1197G03	42.948167	-70.618167	1	57	11/26/1997	BC
OOA_13	A1197G06	42.943333	-70.620333	1	58	11/26/1997	BC
OOA_14	A1197G07	42.947000	-70.620167	1	53	11/26/1997	BC
OOA_15	A1197G08	42.941000	-70.623833	1	56	11/26/1997	BC
OOA_17	A1297G01	42.940833	-70.619167	1		12/18/1997	BC
OOA_18	A1297G02	42.947000	-70.633333	1		12/18/1997	BC
OOA_19	A1297G03	42.943333	-70.620500	1		12/18/1997	BC
OOA_21	A1297G05	42.927333	-70.611333	1		12/18/1997	BC
OOA_22	A1297G06	42.941167	-70.623500	1		12/18/1997	BC
OOA_23	A0398G01	42.947333	-70.620500	1	55	3/23/1998	BC
OOA_24	A0398G02	42.948000	-70.618333	1	56	3/23/1998	BC
OOA_25	A0398G03	42.946833	-70.615667	1	57	3/23/1998	BC
OOA_26	A0398G04	42.946667	-70.614000	1	58	3/23/1998	BC
OOA_27	A0398G05	42.946167	-70.611833	1	60	3/23/1998	BC
OOA_28	A0498G01	42.946500	-70.619000	1		4/18/1998	BC
OOA_29	A0498G02	42.945833	-70.615833	1		4/18/1998	BC
OOA_30	A0498G03	42.945667	-70.614500	1		4/18/1998	BC
OOA_31	A0498G04	42.944833	-70.613167	1		4/18/1998	BC
OOA_32	A0498G05	42.944333	-70.611500	1		4/18/1998	BC
OOA_33	A0598G01	42.939833	-70.624833	1		5/15/1998	BC
OOA_35	A0698G02	42.952767	-70.623717	1	49	6/26/1998	BC
OOA_36	A0698G03	42.951750	-70.623233	1	50	6/26/1998	BC
OOA_37	A0698G04	42.951383	-70.623983	1	50	6/26/1998	BC
OOA_39	A0698G06	42.950733	-70.622400	1	52	6/26/1998	BC
OOA_41	A0698G08	42.951233	-70.623167	1	50	6/26/1998	BC
OOA_43	A0798G02	42.952933	-70.623883	1	49	7/22/1998	BC
OOA_45	A0798G04	42.940600	-70.629867	1	56	7/22/1998	BC
OOA_47	A0798G06	42.940583	-70.619667	1	59	7/22/1998	BC
OOA_48	A0798G07	42.920350	-70.617333	1	67	7/22/1998	BC
OOA_52	A0798G11	42.950500	-70.633000	1	53	7/22/1998	BC

OOA Survey (1997-2005) (1): Sediment Classifications and Grain Size Statistics

Sample ID	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Classification from Mean Phi (Wentworth)	Sorting (Gradistat)	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
OOA_1	Muddy Sandy Gravel				55.0	37.0	8.0									
OOA_2	Muddy Sand	Muddy Sand	Coarse Silt	Very Poorly Sorted	0.0	65.0	35.0	65.0	17.0	18.0	4.57	0.04	3.33	0.65	1.34	2.20
OOA_4	Muddy Sand	Muddy Sand	Very Fine Sand	Very Poorly Sorted	0.0	79.0	21.0	79.0	11.0	10.0	3.53	0.09	2.42	0.31	5.33	1.60
OOA_6	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	81.0	19.0	81.0	12.0	7.0	3.67	0.08	1.41	0.70	4.78	1.20
OOA_7	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	84.0	16.0	84.0	8.0	8.0	3.13	0.11	1.64	0.48	4.80	1.30
OOA_8	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	88.0	12.0	88.0	7.0	5.0	3.33	0.10	1.07	0.39	3.83	1.20
OOA_10	Muddy Sand	Muddy Sand	Coarse Silt	Very Poorly Sorted	0.0	69.0	31.0	69.0	17.0	14.0	4.13	0.06	2.99	0.49	2.05	2.40
OOA_13	Muddy Sand	Muddy Sand	Very Fine Sand	Very Poorly Sorted	0.0	74.0	26.0	74.0	13.0	13.0	3.77	0.07	2.98	0.62	2.46	2.10
OOA_14	Muddy Sand	Muddy Sand	Medium Silt	Very Poorly Sorted	0.0	63.0	37.0	63.0	21.0	16.0	5.10	0.03	2.85	0.74	1.90	1.60
OOA_15	Muddy Sand	Muddy Sand	Coarse Silt	Poorly Sorted	0.0	78.0	22.0	78.0	13.0	9.0	4.03	0.06	1.85	0.75	8.81	1.40
OOA_17	Muddy Sandy Gravel				46.0	44.0	10.0									1.40
OOA_18	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	80.0	20.0	80.0	10.0	10.0	3.67	0.08	1.75	0.62	5.04	1.70
OOA_19	Muddy Sand	Muddy Sand	Very Fine Sand	Very Poorly Sorted	0.0	78.0	22.0	78.0	12.0	10.0	3.63	0.08	2.03	0.45	3.61	1.30
OOA_21	Muddy Sand	Muddy Sand	Coarse Silt	Poorly Sorted	0.0	71.0	29.0	71.0	18.0	11.0	4.13	0.06	1.98	0.65	3.61	1.90
OOA_22	Muddy Sand	Silty Sand	Very Fine Sand	Poorly Sorted	0.0	80.0	20.0	80.0	16.0	4.0	3.73	0.08	1.16	0.56	4.26	1.40
OOA_23	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	5.0	80.0	15.0	84.0	10.0	6.0	3.34	0.10	1.70	-0.07	4.41	1.90
OOA_24	Muddy Sand	Muddy Sand	Coarse Silt	Very Poorly Sorted	7.0	66.0	27.0	73.0	15.0	12.0	4.03	0.06	2.90	0.31	2.63	4.60
OOA_25	Gravelly Muddy Sand	Silty Sand	Very Fine Sand	Very Poorly Sorted	7.0	68.0	25.0	75.0	23.0	2.0	3.53	0.09	2.78	0.24	1.93	2.60
OOA_26	Gravelly Muddy Sand		Fine Sand	Very Poorly Sorted	17.0	62.0	21.0				2.13	0.23	3.48	-0.12	1.88	3.70
OOA_27	Muddy Sand	Muddy Sand	Very Fine Sand	Very Poorly Sorted	0.0	76.0	24.0	76.0	13.0	11.0	3.60	0.08	2.44	0.47	2.84	2.20
OOA_28	Gravelly Muddy Sand		Fine Sand	Extremely Poorly Sorted	25.0	39.0	36.0				2.73	0.15	4.28	-0.06	0.64	2.80
OOA_29	Gravelly Muddy Sand		Very Fine Sand	Very Poorly Sorted	15.0	52.0	33.0				3.40	0.09	3.88	0.12	1.25	1.90
OOA_30	Gravelly Muddy Sand		Very Fine Sand	Very Poorly Sorted	14.0	58.0	28.0				3.27	0.10	3.63	0.06	1.42	2.00
OOA_31	Gravelly Muddy Sand		Very Fine Sand	Very Poorly Sorted	9.0	68.0	23.0				3.33	0.10	2.66	0.03	3.02	1.40
OOA_32	Muddy Sand	Silty Sand	Coarse Silt	Very Poorly Sorted	0.0	73.0	27.0	73.0	19.0	8.0	4.37	0.05	2.18	0.53	2.32	1.90
OOA_33	Gravelly Muddy Sand	Silty Sand	Very Fine Sand	Very Poorly Sorted	5.0	72.0	23.0	77.0	19.0	4.0	3.50	0.09	2.52	0.13	1.79	1.60
OOA_35	Muddy Sand	Silty Sand	Very Fine Sand	Very Poorly Sorted	0.0	78.0	22.0	78.0	19.0	3.0	3.54	0.09	2.05	0.62	1.94	2.30
OOA_36	Muddy Sand	Silty Sand	Very Fine Sand	Very Poorly Sorted	5.0	74.0	21.0	79.0	17.0	4.0	3.79	0.07	2.53	0.41	2.88	2.30
OOA_37	Muddy Sand	Silty Sand	Fine Sand	Poorly Sorted	4.0	80.0	16.0	84.0	12.0	4.0	2.98	0.13	1.75	0.32	2.99	1.70
OOA_39	Muddy Sand	Silty Sand	Very Fine Sand	Poorly Sorted	0.0	81.0	19.0	81.0	14.0	5.0	3.37	0.10	1.80	0.56	2.47	1.90
OOA_41	Muddy Sand	Silty Sand	Very Fine Sand	Poorly Sorted	0.0	78.0	22.0	78.0	18.0	4.0	3.77	0.07	1.93	0.63	2.28	2.00
OOA_43	Sand	Sand	Fine Sand	Poorly Sorted	1.0	89.0	10.0	90.0	9.0	1.0	2.50	0.18	1.17	0.26	2.77	1.10
OOA_45	Muddy Sand	Silty Sand	Very Fine Sand	Poorly Sorted	0.0	84.0	16.0	84.0	11.0	5.0	3.47	0.09	1.05	0.45	4.34	1.30
OOA_47	Muddy Sand	Silty Sand	Fine Sand	Poorly Sorted	3.0	82.0	15.0	85.0	14.0	1.0	2.97	0.13	1.72	-0.18	2.53	1.20
OOA_48	Sandy Mud	Sandy Silt	Coarse Silt	Very Poorly Sorted	0.0	42.0	58.0	42.0	52.0	6.0	4.70	0.04	2.19	0.02	0.99	4.80
OOA_52	Sandy Mud	Sandy Silt	Coarse Silt	Very Poorly Sorted	3.0	47.0	50.0	50.0	46.0	4.0	4.47	0.05	2.03	0.13	0.77	3.90

OOA Survey (1997-2005) (2): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type
OOA_53	A0798G12	42.959667	-70.647833	1	45	7/22/1998	BC
OOA_54	A0798G13	42.940000	-70.649500	1	54	7/22/1998	BC
OOA_57	A0798G16	43.016667	-70.628833	1	32	7/22/1998	BC
OOA_58	A0798G17	43.053333	-70.670000	1	22	7/22/1998	BC
OOA_59	A0798G18	43.053667	-70.666833	1	18	7/22/1998	BC
OOA_61	A0798G20	43.066667	-70.701000	1	21	7/22/1998	BC
OOA_62	A0898G01	42.960500	-70.649500	1	41	8/25/1998	BC
OOA_64	A0898G03	42.950833	-70.651333	1	46	8/25/1998	BC
OOA_66	A0898G05	42.940000	-70.650500	1	51	8/25/1998	BC
OOA_70	A0898G09	42.920500	-70.650500	1	58	8/25/1998	BC
OOA_74	A0898G13	42.930667	-70.635833	1	57	8/25/1998	BC
OOA_76	A0898G15	42.940667	-70.635000	1	53	8/25/1998	BC
OOA_77	A0898G16	42.951333	-70.635333	1	51	8/25/1998	BC
OOA_78	A0898G17	42.960333	-70.620500	1	37	8/25/1998	BC
OOA_80	A0898G19	42.950500	-70.620333	1	52	8/25/1998	BC
OOA_81	A0898G20	42.939833	-70.620500	1	58	8/25/1998	BC
OOA_84	A0898G23	42.920667	-70.621000	1	66	8/25/1998	BC
OOA_85	A0998G01	43.076667	-70.700333	1	17	9/15/1998	BC
OOA_86	A0998G02	42.960833	-70.559667	1	74	9/15/1998	BC
OOA_90	A0998G06	42.925667	-70.642167	1	52	9/15/1998	BC
OOA_93	A0998G09	42.942333	-70.642167	1	51	9/15/1998	BC
OOA_94	A0998G10	42.950167	-70.642333	1		9/15/1998	BC
OOA_95	A1098G01	42.918333	-70.627333	1	64	10/23/1998	BC
OOA_96	A1098G02	42.920667	-70.650500	1	57	10/23/1998	BC
OOA_97	A1098G03	42.940667	-70.638333	1	50	10/23/1998	BC
OOA_98	A1098G04	42.943333	-70.630500	1	52	10/23/1998	BC
OOA_100	A1098G06	42.950333	-70.599667	1	62	10/23/1998	BC
OOA_101	A0399G01	42.938667	-70.648333	1	51	3/25/1999	BC
OOA_102	A0399G02	42.940000	-70.620167	1	58	3/25/1999	BC
OOA_103	A0399G03	42.941667	-70.629833	1	54	3/25/1999	BC
OOA_104	A0399G04	42.941333	-70.633167	1	52	3/25/1999	BC
OOA_105	A0399G05	42.945833	-70.633000	1	51	3/25/1999	BC
OOA_109	G3	42.941667	-70.629667	1	54	3/25/1999	BC
OOA_110	G5	42.946000	-70.633333	1	50	3/26/1999	BC
OOA_111	G7	42.943667	-70.631500	1	52	3/27/1999	BC
OOA_113	A0499G02	42.941000	-70.633333	1	55	4/15/1999	BC

OOA Survey (1997-2005) (2): Sediment Classifications and Grain Size Statistics

Sample ID	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Classification from Mean Phi (Wentworth)	Sorting (Gradistat)	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
OOA_53	Muddy Sand	Silty Sand	Very Fine Sand	Poorly Sorted	4.0	76.0	20.0	80.0	18.0	2.0	3.73	0.08	1.89	0.29	3.05	2.20
OOA_54	Muddy Sand	Silty Sand	Very Fine Sand	Poorly Sorted	0.0	78.0	22.0	79.0	19.0	2.0	3.80	0.07	1.28	0.53	3.10	1.50
OOA_57	Gravel		Pebble Gravel	Moderately Well Sorted	98.0	1.0	1.0				-4.03	16.37	0.56	0.52	1.30	
OOA_58	Gravel															
OOA_59	Gravel															
OOA_61	Sandy Gravel		Pebble Gravel	Very Poorly Sorted	77.0	22.0	1.0				-2.33	5.04	2.46	0.78	0.87	
OOA_62	Sand	Sand	Fine Sand	Moderately Well Sorted	3.0	93.0	4.0	96.0	2.0	2.0	2.93	0.13	0.64	-0.29	1.52	0.70
OOA_64	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	81.0	18.0	82.0	9.0	9.0	3.53	0.09	1.60	0.63	5.53	1.50
OOA_66	Muddy Sand	Muddy Sand	Coarse Silt	Very Poorly Sorted	1.0	67.0	32.0	68.0	17.0	15.0	4.60	0.04	2.69	0.69	2.48	2.20
OOA_70	Gravelly Muddy Sand		Very Fine Sand	Very Poorly Sorted	13.0	60.0	27.0				3.73	0.08	3.98	0.13	2.74	2.10
OOA_74	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	2.0	83.0	15.0	85.0	8.0	7.0	3.27	0.10	1.61	0.25	4.98	1.30
OOA_76	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	82.0	18.0	82.0	11.0	7.0	3.60	0.08	1.41	0.65	4.99	1.30
OOA_77	Muddy Sand	Muddy Sand	Coarse Silt	Very Poorly Sorted	0.0	76.0	24.0	76.0	11.0	13.0	4.00	0.06	2.52	0.73	3.06	2.40
OOA_78	Sandy Gravel		Granule Gravel	Poorly Sorted	52.0	47.0	1.0				-1.40	2.64	1.73	-0.18	1.07	0.90
OOA_80	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	86.0	14.0	86.0	6.0	8.0	3.80	0.07	1.66	0.46	3.87	1.30
OOA_81	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	82.0	18.0	82.0	10.0	8.0	3.57	0.08	1.63	0.48	8.81	1.40
OOA_84	Gravelly Muddy Sand		Very Fine Sand	Very Poorly Sorted	14.0	56.0	30.0				3.13	0.11	3.86	0.06	1.99	2.90
OOA_85	Gravelly Sand		Coarse Sand	Poorly Sorted	10.0	88.0	2.0				0.17	0.89	1.12	0.21	1.29	1.10
OOA_86	Sandy Mud	Sandy Mud	Fine Silt	Very Poorly Sorted	0.0	32.0	68.0	32.0	40.0	28.0	6.30	0.01	3.18	0.61	0.87	4.00
OOA_90	Gravel		Pebble Gravel	Poorly Sorted	87.0	9.0	3.0				-3.10	8.59	1.44	0.89	7.38	
OOA_93	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	80.0	19.0	81.0	10.0	9.0	3.50	0.09	1.79	0.39	4.61	1.70
OOA_94	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	81.0	19.0	81.0	9.0	10.0	3.57	0.08	1.83	0.65	5.04	1.80
OOA_95	Muddy Sand	Muddy Sand	Coarse Silt	Very Poorly Sorted	1.0	64.0	35.0	65.0	22.0	13.0	4.50	0.04	2.38	0.64	3.09	2.10
OOA_96	Muddy Sand	Muddy Sand	Coarse Silt	Very Poorly Sorted	0.0	71.0	29.0	71.0	16.0	13.0	4.50	0.04	2.41	0.76	3.46	2.10
OOA_97	Muddy Sand	Muddy Sand	Coarse Silt	Very Poorly Sorted	0.0	75.0	25.0	75.0	13.0	12.0	4.17	0.06	2.05	0.76	4.56	2.00
OOA_98	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	80.0	19.0	81.0	11.0	8.0	3.63	0.08	1.52	0.66	6.48	1.50
OOA_100	Muddy Sand	Muddy Sand	Very Fine Sand	Very Poorly Sorted	0.0	77.0	23.0	77.0	12.0	11.0	3.83	0.07	2.21	0.67	3.89	2.00
OOA_101	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	77.0	23.0	77.0	13.0	10.0	3.87	0.07	1.65	0.75	4.74	1.87
OOA_102	Muddy Sand	Muddy Sand	Very Fine Sand	Very Poorly Sorted	4.0	75.0	21.0	79.0	11.0	10.0	3.43	0.09	2.67	0.16	3.37	1.67
OOA_103	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	81.0	19.0	81.0	12.0	7.0	3.70	0.08	1.40	0.49	4.85	1.47
OOA_104	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	3.0	77.0	20.0	80.0	12.0	8.0	3.63	0.08	1.50	0.49	4.63	1.55
OOA_105	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	2.0	85.0	13.0	87.0	7.0	6.0	3.37	0.10	1.39	0.32	4.27	1.34
OOA_109	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	82.0	18.0	82.0	12.0	6.0	3.67	0.08	1.20	0.46	4.30	1.00
OOA_110	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	83.0	17.0	83.0	10.0	7.0	3.50	0.09	1.37	0.35	4.67	1.40
OOA_111	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	86.0	14.0	86.0	8.0	6.0	3.53	0.09	1.26	0.42	4.64	1.40
OOA_113	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	85.0	15.0	85.0	8.0	7.0	3.53	0.09	1.34	0.40	5.48	1.50

OOA Survey (1997-2005) (3): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type
OOA_115	A0499G04	42.943000	-70.634167	1	53	4/15/1999	BC
OOA_116	A0499G05	42.945667	-70.632500	1	53	4/15/1999	BC
OOA_117	A0499G06	42.945833	-70.629500	1	53	4/15/1999	BC
OOA_118	A0499G07	42.942833	-70.627500	1	56	4/15/1999	BC
OOA_119	A0499G08	42.941167	-70.629833	1	56	4/15/1999	BC
OOA_120	A0599G01	42.932333	-70.631833	1	64	5/21/1999	BC
OOA_121	A0599G02	42.923000	-70.651833	1	65	5/21/1999	BC
OOA_122	A0599G03	42.927167	-70.612833	1	71	5/21/1999	BC
OOA_123	A0599G04	42.934833	-70.602333	1	74	5/21/1999	BC
OOA_124	A0599G05	42.938333	-70.602000	1	73	5/21/1999	BC
OOA_127	A0599G08	42.946000	-70.632167	1	53	5/26/1999	BC
OOA_132	A0599G13	42.945833	-70.629333	1	53	5/26/1999	BC
OOA_133	A0599G14	42.943667	-70.632000	1	53	5/26/1999	BC
OOA_134	A0599G15	42.943667	-70.629167	1	55	5/26/1999	BC
OOA_135	A0599G16	42.943333	-70.631833	1	53	5/26/1999	BC
OOA_136	A0599G17	42.943667	-70.629167	1	53	5/26/1999	BC
OOA_137	A0599G18	42.941500	-70.632000	1	53	5/26/1999	BC
OOA_138	A0599G19	42.941500	-70.628833	1		5/26/1999	BC
OOA_139	A0699G01	42.941167	-70.631000	1	53	6/7/1999	BC
OOA_142	A0699G04	42.942500	-70.631000	1	52	6/7/1999	BC
OOA_143	A0699G05	42.943333	-70.630667	1	52	6/7/1999	BC
OOA_144	A0699G06	42.942500	-70.628667	1	53	6/7/1999	BC
OOA_146	A0699G08	42.943333	-70.632833	1	51	6/7/1999	BC
OOA_148	A0799G03	42.945333	-70.629167	1	53	7/12/1999	BC
OOA_149	A0799G04	42.944333	-70.630167	1	54	7/12/1999	BC
OOA_150	A0799G05	42.944500	-70.631500	1	53	7/12/1999	BC
OOA_152	A0799C01	42.943500	-70.630667	1	54	7/12/1999	BC
OOA_153	A0799C02	42.943333	-70.631000	1	54	7/12/1999	BC
OOA_154	A0799C03	42.941667	-70.630833	1	55	7/12/1999	BC
OOA_155	A0799C04	42.940833	-70.630333	1	55	7/12/1999	BC
OOA_156	A0799C05	42.943333	-70.634167	1	52	7/12/1999	BC
OOA_157	A0799C06	42.942833	-70.626167	1	56	7/12/1999	BC
OOA_158	A0899G01	42.945000	-70.630667	1	51	8/3/1999	BC
OOA_159	A0899G02	42.943833	-70.631000	1	51	8/3/1999	BC
OOA_160	A0899C01	42.945167	-70.630833	1	51	8/3/1999	BC
OOA_161	A0899C02	42.944000	-70.631000	1	51	8/3/1999	BC

OOA Survey (1997-2005) (3): Sediment Classifications and Grain Size Statistics

Sample ID	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Classification from Mean Phi (Wentworth)	Sorting (Gradistat)	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
OOA_115	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	83.0	16.0	84.0	9.0	7.0	3.57	0.08	1.29	0.48	4.32	1.60
OOA_116	Gravelly Muddy Sand		Very Fine Sand	Very Poorly Sorted	7.0	81.0	12.0				3.10	0.12	2.36	-0.12	5.81	1.60
OOA_117	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	86.0	13.0	87.0	8.0	5.0	3.23	0.11	1.25	0.26	4.17	1.70
OOA_118	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	82.0	17.0	83.0	10.0	7.0	3.52	0.09	1.34	0.44	4.41	1.60
OOA_119	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	80.0	20.0	80.0	12.0	8.0	3.70	0.08	1.42	0.67	4.41	1.50
OOA_120	Muddy Sand	Muddy Sand	Coarse Silt	Very Poorly Sorted	3.0	61.0	36.0	64.0	19.0	17.0	4.77	0.04	3.07	0.62	1.84	2.61
OOA_121	Muddy Sand	Muddy Sand	Very Fine Sand	Very Poorly Sorted	1.0	75.0	24.0	76.0	12.0	12.0	3.98	0.06	2.59	0.58	3.05	1.88
OOA_122	Muddy Sand	Muddy Sand	Coarse Silt	Very Poorly Sorted	1.0	66.0	33.0	67.0	20.0	13.0	4.57	0.04	2.58	0.58	2.66	1.87
OOA_123	Sandy Mud	Sandy Mud	Medium Silt	Very Poorly Sorted	3.0	39.0	58.0	42.0	32.0	26.0	5.75	0.02	3.78	0.40	0.98	3.35
OOA_124	Sandy Mud	Sandy Mud	Fine Silt	Very Poorly Sorted	2.0	38.0	60.0	40.0	30.0	30.0	6.00	0.02	3.79	0.32	0.89	5.29
OOA_127	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	84.0	15.0	85.0	8.0	7.0	3.38	0.10	1.45	0.38	4.15	1.42
OOA_132	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	81.0	18.0	82.0	9.0	9.0	3.33	0.10	1.98	0.37	3.55	1.61
OOA_133	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	81.0	19.0	81.0	11.0	8.0	3.63	0.08	1.46	0.66	4.39	1.53
OOA_134	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	81.0	19.0	81.0	11.0	8.0	3.67	0.08	1.43	0.58	4.99	1.40
OOA_135	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	81.0	19.0	81.0	11.0	8.0	3.65	0.08	1.53	0.65	4.85	1.41
OOA_136	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	82.0	18.0	82.0	10.0	8.0	3.67	0.08	1.34	0.67	4.47	1.37
OOA_137	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	79.0	20.0	80.0	12.0	8.0	3.77	0.07	1.52	0.58	4.39	1.52
OOA_138	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	80.0	20.0	80.0	12.0	8.0	3.70	0.08	1.43	0.69	4.54	1.52
OOA_139	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	84.0	16.0	84.0	10.0	6.0	3.53	0.09	1.22	0.43	4.47	1.22
OOA_142	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	3.0	81.0	16.0	84.0	10.0	6.0	3.68	0.08	1.48	0.58	3.28	1.39
OOA_143	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	80.0	19.0	81.0	11.0	8.0	3.75	0.07	1.58	0.62	2.78	1.79
OOA_144	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	81.0	19.0	81.0	12.0	7.0	3.67	0.08	1.36	0.59	4.29	1.36
OOA_146	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	80.0	20.0	80.0	12.0	8.0	3.72	0.08	1.43	0.57	5.86	1.47
OOA_148	Muddy Sand	Muddy Sand	Very Fine Sand		0.0	84.0	16.0	84.0	9.0	7.0	3.47	0.09		0.46	4.41	1.50
OOA_149	Muddy Sand	Muddy Sand	Very Fine Sand		0.0	86.0	14.0	86.0	8.0	6.0	3.47	0.09		0.43	4.68	1.50
OOA_150	Muddy Sand	Muddy Sand	Very Fine Sand		3.0	81.0	16.0	84.0	10.0	6.0	3.43	0.09		0.37	5.02	1.80
OOA_152	Muddy Sand	Muddy Sand	Very Fine Sand		0.0	84.0	16.0	84.0	9.0	7.0	3.70	0.08		0.70	2.89	1.50
OOA_153	Muddy Sand	Muddy Sand	Very Fine Sand		0.0	83.0	17.0	83.0	10.0	7.0	3.62	0.08		0.54	4.48	1.70
OOA_154	Muddy Sand	Muddy Sand	Very Fine Sand		0.0	81.0	19.0	81.0	12.0	7.0	3.67	0.08		0.57	4.22	1.60
OOA_155	Muddy Sand	Muddy Sand	Very Fine Sand		0.0	82.0	18.0	82.0	11.0	7.0	3.75	0.07		0.60	2.59	1.40
OOA_156	Muddy Sand	Muddy Sand	Very Fine Sand		0.0	84.0	16.0	84.0	10.0	6.0	3.53	0.09		0.52	4.51	1.30
OOA_157	Muddy Sand	Muddy Sand	Very Fine Sand		0.0	81.0	12.0	81.0	12.0	7.0	3.68	0.08		0.66	4.51	1.70
OOA_158	Muddy Sand	Muddy Sand	Very Fine Sand		0.0	78.0	22.0	78.0	12.0	10.0	3.93	0.07		0.68	4.46	1.90
OOA_159	Muddy Sand	Muddy Sand	Very Fine Sand		2.0	80.0	18.0	82.0	10.0	8.0	3.62	0.08		0.43	4.57	1.60
OOA_160	Muddy Sand	Muddy Sand	Very Fine Sand		0.0	80.0	20.0	80.0	11.0	9.0	3.73	0.08		0.67	4.29	1.90
OOA_161	Muddy Sand	Muddy Sand	Very Fine Sand		0.0	83.0	17.0	83.0	10.0	7.0	3.63	0.08		0.60	4.63	1.70

OOA Survey (1997-2005) (4): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type
OOA_162	A0899C03	42.942500	-70.631167	1	51	8/3/1999	BC
OOA_163	A0899C04	42.941667	-70.630833	1	52	8/3/1999	BC
OOA_164	A0899C05	42.945500	-70.632833	1	50	8/3/1999	BC
OOA_165	A0899C06	42.942833	-70.626833	1	53	8/3/1999	BC
OOA_168	A0500C01	42.947167	-70.633000	1	50	5/6/2000	BC
OOA_169	A0500C02	42.945000	-70.633333	1	51	5/6/2000	BC
OOA_170	A0500C03	42.943833	-70.630333	1	53	5/6/2000	BC
OOA_171	A0500C04	42.943500	-70.627333	1	54	5/6/2000	BC
OOA_172	A0500C05	42.944333	-70.625500	1	54	5/6/2000	BC
OOA_173	A0500C06	42.941167	-70.630333	1	54	5/6/2000	BC
OOA_174	A0500C07	42.946333	-70.628333	1	53	5/6/2000	BC
OOA_175	A0600C01	42.946667	-70.628500	1	52	6/26/2000	BC
OOA_176	A0600C02	42.944667	-70.640667	1	50	6/26/2000	BC
OOA_177	A0600C03	42.943833	-70.633833	1	51	6/26/2000	BC
OOA_178	A0600C04	42.943833	-70.630667	1	52	6/26/2000	BC
OOA_179	A0600C05	42.944000	-70.627333	1	53	6/26/2000	BC
OOA_180	A0600C06	42.944000	-70.621000	1	56	6/26/2000	BC
OOA_181	A0600C07	42.941667	-70.630167	1	53	6/26/2000	BC
OOA_182	A0600C08	42.937000	-70.630167	1	52	6/26/2000	BC
OOA_183	A0801CO1	42.947933	-70.628100	1	50.4	8/14/2001	BC
OOA_184	A0801CO2	42.944650	-70.640717	1	49.3	8/14/2001	BC
OOA_185	A0801CO3	42.944133	-70.633983	1	50.3	8/14/2001	BC
OOA_186	A0801CO4	42.943967	-70.630667	1	51.7	8/14/2001	BC
OOA_187	A0801CO5	42.944267	-70.627183	1	52	8/14/2001	BC
OOA_188	A0801CO6	42.943717	-70.621900	1	54.3	8/14/2001	BC
OOA_189	A0801CO7	42.941317	-70.631417	1	52.1	8/14/2001	BC
OOA_190	A0801CO8	42.938283	-70.630567	1	52	8/14/2001	BC
OOA_191	A0702CO1	42.947167	-70.628733	1	53	7/19/2002	BC
OOA_192	A0702CO2	42.943617	-70.641400	1	51	7/19/2002	BC
OOA_193	A0702CO3	42.942783	-70.633967	1	52	7/19/2002	BC
OOA_194	A0702CO4	42.943700	-70.631100	1	53	7/19/2002	BC
OOA_195	A0702CO5	42.942867	-70.627983	1	54	7/19/2002	BC
OOA_196	A0702CO6	42.943233	-70.621250	1	57	7/19/2002	BC
OOA_197	A0702CO7	42.941017	-70.631183	1	54	7/19/2002	BC
OOA_198	A0702CO8	42.937417	-70.630467	1	49	7/19/2002	BC

OOA Survey (1997-2005) (4): Sediment Classifications and Grain Size Statistics

Sample ID	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Classification from Mean Phi (Wentworth)	Sorting (Gradistat)	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
OOA_162	Muddy Sand	Muddy Sand	Very Fine Sand		0.0	84.0	16.0	84.0	11.0	5.0	3.52	0.09		0.35	3.31	1.50
OOA_163	Muddy Sand	Muddy Sand	Very Fine Sand		0.0	88.0	12.0	88.0	5.0	7.0	3.53	0.09		0.46	4.92	1.60
OOA_164	Muddy Sand	Muddy Sand	Very Fine Sand		0.0	87.0	13.0	87.0	7.0	6.0	3.30	0.10		0.32	3.61	1.60
OOA_165	Muddy Sand	Muddy Sand	Very Fine Sand		0.0	84.0	16.0	84.0	11.0	5.0	3.47	0.09		0.45	3.85	1.60
OOA_168	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	84.0	16.0	84.0	8.0	8.0	3.40	0.09	1.49	0.49	4.51	1.47
OOA_169	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	84.0	16.0	84.0	8.0	8.0	3.45	0.09	1.39	0.66	7.19	1.38
OOA_170	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	2.0	81.0	17.0	83.0	10.0	7.0	3.48	0.09	1.37	0.46	4.13	1.37
OOA_171	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	77.0	23.0	77.0	13.0	10.0	3.90	0.07	1.77	0.69	4.92	1.73
OOA_172	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	84.0	16.0	84.0	9.0	7.0	3.34	0.10	1.51	0.34	4.96	1.35
OOA_173	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	77.0	23.0	77.0	13.0	10.0	3.83	0.07	1.58	0.72	4.64	1.75
OOA_174	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	82.0	18.0	82.0	9.0	9.0	3.42	0.09	1.56	0.55	5.04	1.53
OOA_175	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	82.0	17.0	83.0	9.0	8.0	3.41	0.09	1.60	0.54	5.16	1.44
OOA_176	Muddy Sand	Muddy Sand	Very Fine Sand	Very Poorly Sorted	2.0	78.0	20.0	80.0	10.0	10.0	3.43	0.09	2.20	0.38	3.92	1.82
OOA_177	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	78.0	22.0	78.0	13.0	9.0	3.78	0.07	1.63	0.71	4.69	1.68
OOA_178	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	80.0	19.0	81.0	11.0	8.0	3.62	0.08	1.52	0.64	5.17	1.48
OOA_179	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	81.0	19.0	81.0	10.0	9.0	3.56	0.08	1.54	0.56	5.04	1.24
OOA_180	Muddy Sand	Muddy Sand	Coarse Silt	Very Poorly Sorted	0.0	70.0	30.0	70.0	15.0	15.0	4.13	0.06	3.05	0.55	1.76	2.26
OOA_181	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	80.0	20.0	80.0	12.0	8.0	3.68	0.08	1.46	0.68	4.73	1.54
OOA_182	Gravelly Muddy Sand		Very Fine Sand	Very Poorly Sorted	8.0	71.0	21.0				3.50	0.09	2.58	0.05	5.59	2.35
OOA_183	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	85.0	15.0	85.0	8.0	7.0	3.25	0.11	1.50	0.41	4.21	1.50
OOA_184	Muddy Sand		Very Fine Sand	Very Poorly Sorted	4.0	76.0	20.0				3.43	0.09	2.36	0.31	3.96	2.00
OOA_185	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	83.0	17.0	83.0	10.0	7.0	3.52	0.09	1.34	0.57	4.24	1.40
OOA_186	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	79.0	21.0	79.0	12.0	9.0	3.73	0.08	1.67	0.67	4.12	2.10
OOA_187	Muddy Sand		Very Fine Sand	Poorly Sorted	5.0	78.0	17.0				3.38	0.10	1.80	0.31	5.22	1.60
OOA_188	Muddy Sand	Muddy Sand	Very Fine Sand	Very Poorly Sorted	0.0	77.0	23.0	77.0	13.0	10.0	3.55	0.09	2.10	0.47	3.30	2.00
OOA_189	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	81.0	19.0	81.0	12.0	7.0	3.65	0.08	1.42	0.61	4.22	1.50
OOA_190	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	81.0	19.0	81.0	11.0	8.0	3.65	0.08	1.48	0.63	4.45	1.60
OOA_191	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	82.0	18.0	82.0	9.0	9.0	3.47	0.09	1.63	0.64	4.74	1.80
OOA_192	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	80.0	20.0	80.0	11.0	9.0	3.63	0.08	1.75	0.53	4.30	1.70
OOA_193	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	80.0	20.0	80.0	12.0	8.0	3.72	0.08	1.46	0.65	5.05	1.50
OOA_194	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	83.0	17.0	83.0	10.0	7.0	3.54	0.09	1.39	0.56	4.23	1.40
OOA_195	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	80.0	19.0	81.0	11.0	8.0	3.63	0.08	1.56	0.48	4.68	1.50
OOA_196	Muddy Sand	Muddy Sand	Very Fine Sand	Very Poorly Sorted	0.0	80.0	20.0	80.0	11.0	9.0	3.50	0.09	2.04	0.41	3.89	1.80
OOA_197	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	80.0	20.0	80.0	12.0	8.0	3.70	0.08	1.53	0.57	4.57	1.50
OOA_198	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	78.0	22.0	78.0	13.0	9.0	3.87	0.07	1.60	0.66	5.40	1.80

OOA Survey (1997-2005) (5): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type
OOA_199	1	42.947250	-70.636367	1	50	7/25/2002	BC
OOA_201	2	42.944983	-70.634717	1	51	7/25/2002	BC
OOA_203	3	42.944300	-70.635517	1	51	7/25/2002	BC
OOA_204	4	42.945300	-70.632933	1	52	7/25/2002	BC
OOA_206	5	42.945250	-70.625233	1	54	7/25/2002	BC
OOA_208	6	42.948400	-70.624317	1	53	7/25/2002	BC
OOA_209	7	42.944550	-70.624067	1	55	7/25/2002	BC
OOA_210	8	42.942617	-70.637000	1	52	7/25/2002	BC
OOA_211	9	42.942117	-70.634767	1	53	7/25/2002	BC
OOA_212	10	42.941933	-70.628617	1	54	7/25/2002	BC
OOA_213	11	42.942017	-70.629167	1	55	7/25/2002	BC
OOA_214	12	42.941100	-70.628200	1	56	7/25/2002	BC
OOA_215	13	42.939667	-70.632033	1	55	7/25/2002	BC
OOA_216	A0803CO1	42.947400	-70.629067	1	52	8/11/2003	BC
OOA_217	A0803CO2	42.944333	-70.640750	1	52	8/11/2003	BC
OOA_218	A0803CO3	42.944850	-70.635517	1	51	8/11/2003	BC
OOA_219	A0803CO4	42.944817	-70.630683	1	54	8/11/2003	BC
OOA_220	A0803CO5	42.943717	-70.628383	1	55	8/11/2003	BC
OOA_221	A0803CO6	42.944633	-70.621700	1	57	8/11/2003	BC
OOA_222	A0803CO7	42.941200	-70.630933	1	55	8/11/2003	BC
OOA_223	A0803CO8	42.938550	-70.630950	1	55	8/11/2003	BC
OOA_224	A0204C01	42.947717	-70.628367	1	53	2/3/2004	BC
OOA_225	A0204C02	42.944767	-70.640767	1	51	2/3/2004	BC
OOA_226	A0204C03	42.936317	-70.635217	1	52	2/3/2004	BC
OOA_227	A0204C04	42.944700	-70.630367	1	54	2/3/2004	BC
OOA_228	A0204C05	42.943767	-70.628233	1	55	2/3/2004	BC
OOA_229	A0204C06	42.944867	-70.621417	1	58	2/3/2004	BC
OOA_230	A0204C07	42.941267	-70.631317	1	55	2/3/2004	BC
OOA_231	A0204C08	42.938667	-70.630567	1	55	2/3/2004	BC
OOA_232	A0804C01	42.947633	-70.629383	1	49	8/4/2004	BC

OOA Survey (1997-2005) (5): Sediment Classifications and Grain Size Statistics

Sample ID	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Classification from Mean Phi (Wentworth)	Sorting (Gradistat)	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
OOA_199	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	82.0	18.0	82.0	10.0	8.0	3.60	0.08	1.53	0.60	4.57	1.60
OOA_201	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	82.0	17.0	82.0	9.0	8.0	3.60	0.08	1.58	0.57	5.53	1.60
OOA_203	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	83.0	17.0	83.0	9.0	8.0	3.53	0.09	1.45	0.56	5.19	1.70
OOA_204	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	84.0	16.0	84.0	9.0	7.0	3.37	0.10	1.38	0.43	3.64	1.40
OOA_206	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	82.0	18.0	82.0	10.0	8.0	3.40	0.09	1.60	0.45	4.74	1.60
OOA_208	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	83.0	17.0	83.0	9.0	8.0	3.33	0.10	1.76	0.54	3.87	1.50
OOA_209	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	82.0	18.0	82.0	10.0	8.0	3.37	0.10	1.72	0.38	3.83	1.80
OOA_210	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	80.0	20.0	80.0	11.0	9.0	3.67	0.08	1.45	0.57	4.67	1.60
OOA_211	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	79.0	21.0	79.0	13.0	8.0	3.80	0.07	1.50	0.61	5.19	1.70
OOA_212	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	82.0	18.0	82.0	12.0	6.0	3.63	0.08	1.19	0.59	4.23	1.50
OOA_213	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	77.0	23.0	77.0	14.0	9.0	3.87	0.07	1.58	0.65	4.57	1.80
OOA_214	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	78.0	22.0	78.0	13.0	9.0	3.83	0.07	1.56	0.63	5.33	1.60
OOA_215	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	79.0	21.0	79.0	13.0	8.0	3.77	0.07	1.46	0.57	5.12	1.50
OOA_216	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	81.0	19.0	81.0	10.0	9.0	3.55	0.09	1.78	0.56	3.87	1.87
OOA_217	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	84.0	16.0	84.0	9.0	7.0	3.27	0.10	1.61	0.25	3.71	1.71
OOA_218	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	80.0	20.0	80.0	11.0	9.0	3.68	0.08	1.59	0.67	4.34	1.80
OOA_219	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	79.0	21.0	79.0	12.0	9.0	3.67	0.08	1.70	0.61	4.23	2.08
OOA_220	Muddy Sand	Muddy Sand	Coarse Silt	Very Poorly Sorted	0.0	74.0	26.0	74.0	14.0	12.0	4.32	0.05	2.16	0.81	3.61	2.42
OOA_221	Muddy Sand	Muddy Sand	Very Fine Sand	Very Poorly Sorted	0.0	76.0	24.0	76.0	13.0	11.0	3.72	0.08	2.39	0.51	3.06	2.20
OOA_222	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	76.0	24.0	76.0	14.0	10.0	3.87	0.07	1.68	0.67	5.17	2.15
OOA_223	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	82.0	18.0	82.0	11.0	8.0	3.65	0.08	1.46	0.63	4.39	2.06
OOA_224	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	86.0	14.0	86.0	8.0	6.0	3.27	0.10	1.41	0.43	4.27	1.10
OOA_225	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	3.0	81.0	16.0	84.0	9.0	7.0	3.10	0.12	1.98	0.13	3.58	1.50
OOA_226	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	80.0	19.0	81.0	10.0	9.0	3.67	0.08	1.60	0.61	4.63	1.50
OOA_227	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	82.0	18.0	82.0	10.0	8.0	3.60	0.08	1.55	0.64	5.05	1.30
OOA_228	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	83.0	17.0	83.0	10.0	7.0	3.53	0.09	1.38	0.54	4.85	1.30
OOA_229	Muddy Sand	Muddy Sand	Coarse Silt	Very Poorly Sorted	0.0	70.0	30.0	70.0	16.0	14.0	4.43	0.05	2.79	0.64	2.35	2.30
OOA_230	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	84.0	16.0	84.0	10.0	6.0	3.53	0.09	1.16	0.41	4.23	1.20
OOA_231	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	83.0	17.0	83.0	10.0	7.0	3.57	0.08	1.39	0.46	4.92	1.30
OOA_232	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	80.1	19.9	80.1	11.3	8.6	3.60	0.08	1.68	0.53	4.43	1.80

OOA Survey (1997-2005) (6): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type
OOA_233	A0804C02	42.944267	-70.640617	1	49	8/4/2004	BC
OOA_236	A0804C03	42.944700	-70.635083	1	49	8/4/2004	BC
OOA_237	A0804C04	42.944950	-70.630617	1	51	8/4/2004	BC
OOA_238	A0804C05	42.944100	-70.629150	1	52	8/4/2004	BC
OOA_239	A0804C06	42.944550	-70.622150	1	54	8/4/2004	BC
OOA_240	A0804C07	42.941350	-70.630950	1	52	8/4/2004	BC
OOA_241	A0804C08	42.938817	-70.631267	1	53	8/4/2004	BC
OOA_242	A0705C01	42.941483	-70.631283	1		7/6/2005	BC
OOA_243	A0705C02	42.941817	-70.630883	1		7/6/2005	BC
OOA_244	A0705C03	42.943883	-70.634167	1		7/6/2005	BC
OOA_245	A0705C04	42.943883	-70.634200	1		7/6/2005	BC
OOA_246	A0605C05	42.943950	-70.634333	1	50.8	6/5/2005	BC
OOA_247	A0605C06	42.944033	-70.631617	1	51.5	6/5/2005	BC
OOA_248	A0605C07	42.941250	-70.631100	1	53	6/5/2005	BC
OOA_249	A0605C08	42.941300	-70.634067	1	52	6/5/2005	BC
OOA_251	A0605C10	42.945067	-70.630417	1	52	6/5/2005	BC
OOA_252	A0605C11	42.940417	-70.630567	1	54	6/5/2005	BC
OOA_253	A0605C12	42.940483	-70.635683	1	53	6/5/2005	BC
OOA_254	A0605C13	42.947483	-70.638317	1	50	6/5/2005	BC
OOA_255	A0605C14	42.947450	-70.629100	1	51.5	6/5/2005	BC
OOA_256	A0605C15	42.943950	-70.628417	1	54	6/5/2005	BC
OOA_257	A0605C16	42.938300	-70.628467	1	57	6/5/2005	BC
OOA_258	A0605C17	42.938533	-70.631067	1	55	6/5/2005	BC
OOA_259	A0605C18	42.938767	-70.638467	1	55	6/5/2005	BC
OOA_260	A0605C19	42.944317	-70.641667	1	54	6/5/2005	BC
OOA_261	A0605C20	42.944883	-70.621817	1	50	6/5/2005	BC

OOA Survey (1997-2005) (6): Sediment Classifications and Grain Size Statistics

Sample ID	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Classification from Mean Phi (Wentworth)	Sorting (Gradistat)	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
OOA_233	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	2.1	82.3	15.6	84.4	9.1	6.5	3.27	0.10	1.58	0.21	4.07	1.50
OOA_236	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.2	81.5	17.3	82.7	10.4	6.9	3.53	0.09	1.38	0.53	4.48	1.70
OOA_237	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.3	83.7	16.0	84.0	9.9	6.1	3.43	0.09	1.32	0.39	4.04	1.40
OOA_238	Sandy Mud	Sandy Mud	Very Fine Silt	Very Poorly Sorted	0.8	18.0	81.2	18.8	31.4	49.8	7.90	0.00	3.62	-0.02	0.72	8.90
OOA_239	Muddy Sand	Muddy Sand	Very Fine Sand	Very Poorly Sorted	0.3	80.1	19.6	80.4	11.2	9.0	3.30	0.10	2.04	0.36	2.84	1.70
OOA_240	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	79.7	20.3	79.7	13.4	6.9	3.77	0.07	1.39	0.56	4.78	1.50
OOA_241	Muddy Sand	Muddy Sand	Coarse Silt	Very Poorly Sorted	0.0	70.7	29.3	70.7	16.5	12.8	4.50	0.04	2.20	0.74	3.17	2.50
OOA_242	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	76.0	24.0	76.0	15.0	9.0	3.85	0.07	1.71	0.64	4.42	2.52
OOA_243	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	81.0	19.0	81.0	13.0	9.0	3.65	0.08	1.35	0.56	3.94	1.66
OOA_244	Slightly Gravelly Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	85.0	14.0	86.0	6.0	9.0	3.45	0.09	1.45	0.49	4.96	1.86
OOA_245	Slightly Gravelly Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	83.0	17.0	83.0	11.0	6.0	3.54	0.09	1.29	0.54	3.90	1.83
OOA_246	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	79.0	21.0	79.0	13.0	8.0	3.69	0.08	1.50	0.64	4.07	1.34
OOA_247	Muddy Sand	Muddy Sand	Coarse Silt	Poorly Sorted	0.0	73.0	27.0	73.0	18.0	9.0	4.05	0.06	1.97	0.73	3.34	2.00
OOA_248	Slightly Gravelly Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	4.0	78.0	18.0	82.0	11.0	7.0	3.58	0.08	1.55	0.45	4.53	1.55
OOA_249	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	75.0	25.0	75.0	15.0	10.0	3.88	0.07	1.69	0.64	4.30	1.78
OOA_251	Gravelly Muddy Sand		Very Fine Sand	Very Poorly Sorted	11.0	74.0	14.0				3.18	0.11	2.36	-0.11	6.09	1.58
OOA_252	Muddy Sand	Muddy Sand	Coarse Silt	Poorly Sorted	0.0	72.0	28.0	72.0	17.0	11.0	4.19	0.05	2.00	0.71	3.18	2.41
OOA_253	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	79.0	21.0	79.0	13.0	8.0	3.72	0.08	1.50	0.57	4.11	1.46
OOA_254	Slightly Gravelly Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	2.0	82.0	16.0	84.0	9.0	7.0	3.33	0.10	1.54	0.37	4.76	1.57
OOA_255	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	83.0	17.0	83.0	10.0	7.0	3.38	0.10	1.57	0.49	3.96	1.59
OOA_256	Slightly Gravelly Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	76.0	23.0	77.0	14.0	9.0	3.73	0.08	1.81	0.62	4.19	2.05
OOA_257	Muddy Sand	Muddy Sand	Coarse Silt	Very Poorly Sorted	0.0	73.0	27.0	73.0	15.0	12.0	4.83	0.04	2.72	0.85	1.87	2.17
OOA_258	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	76.0	24.0	76.0	15.0	10.0	3.81	0.07	1.63	0.64	4.16	1.56
OOA_259	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	74.0	26.0	74.0	17.0	9.0	3.88	0.07	1.67	0.62	3.86	1.51
OOA_260	Slightly Gravelly Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	1.0	83.0	16.0	84.0	9.0	7.0	3.22	0.11	1.74	0.27	3.81	1.50
OOA_261	Muddy Sand	Muddy Sand	Very Fine Sand	Very Poorly Sorted	0.0	76.0	24.0	76.0	14.0	10.0	3.52	0.09	2.15	0.44	3.22	1.80

Section 6: MMS Year 2 Survey (1985), Year 4 Survey (1988), Year 8 Survey (1992), and Year 10 Survey (1994)

MMS Year 2 Survey (1985): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type
MMS_Y2_1	1	42.994833	-70.632333	3	19	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_2	2	42.990500	-70.627667	3	23	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_3	3	42.987000	-70.665500	3	24	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_4	4	42.990167	-70.637667	3	15	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_5	5	42.988000	-70.638833	3	20	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_6	6	42.992167	-70.642500	3	20	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_7	7	42.987833	-70.646000	3	20	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_8	8	42.998667	-70.649000	3	23	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_9	9	42.984333	-70.648833	3	24	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_10	10	42.989167	-70.652500	3	24	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_11	11	42.993667	-70.656333	3	26	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_12	12	42.989000	-70.659333	3	28	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_13	13	42.985167	-70.655167	3	23	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_14	14	42.981833	-70.659500	3	26	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_15	15	42.986000	-70.662833	3	30	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_16	16	42.981833	-70.666500	3	27	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_17	18	42.990000	-70.666000	3	24	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_18	20	42.996667	-70.659167	3	26	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_19	22	42.996000	-70.645167	3	27	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_20	25	42.987500	-70.625333	3	9	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_21	26	42.983833	-70.628833	3		8/12/1985 or 8/14/1985	Shipek
MMS_Y2_22	28	42.985000	-70.642667	3		8/12/1985 or 8/14/1985	Shipek
MMS_Y2_23	30	42.981667	-70.653167	3		8/12/1985 or 8/14/1985	Shipek
MMS_Y2_24	32	42.929667	-70.773000	3	25	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_25	34	42.929167	-70.765833	3		8/12/1985 or 8/14/1985	Shipek
MMS_Y2_26	36	42.932333	-70.755667	3	25	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_27	38	42.939833	-70.749500	3	25	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_28	40	42.947667	-70.750333	3	25	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_29	42A	42.979000	-70.719500	3	24	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_30	42B	42.979167	-70.719667	3	24	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_31	44	42.988000	-70.701333	3	24	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_32	46A	42.984167	-70.692667	3	25	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_33	46B	42.980333	-70.689333	3	27	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_34	48	43.037000	-70.662500	3	24	8/12/1985 or 8/14/1985	Shipek
MMS_Y2_35	50	43.039333	-70.677333	3	23	8/12/1985 or 8/14/1985	Shipek

MMS Year 2 Survey (1985): Sediment Classifications and Grain Size Statistics

Sample ID	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Classification from Mean Phi (Wentworth)	Sorting (Gradistat)	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
MMS_Y2_1	Muddy Sandy Gravel		Coarse Sand	Extremely Poorly Sorted	31.0	54.0	15.0				0.10	0.93	4.15	-0.02	1.25	
MMS_Y2_2	Sand	Sand	Medium Sand	Moderately Sorted	2.0	96.0	2.0	98.0			1.43	0.37	0.77	-0.45	1.51	
MMS_Y2_3	Sand	Sand	Medium Sand	Moderately Well Sorted	2.0	97.0	2.0	99.0			1.07	0.48	0.56	0.06	1.26	
MMS_Y2_4	Sand	Sand	Medium Sand	Well Sorted	1.0	98.0	1.0	99.0			1.05	0.48	0.48	-0.03	1.55	
MMS_Y2_5	Sand	Sand	Coarse Sand	Moderately Well Sorted	1.0	98.0	1.0	99.0			0.97	0.51	0.63	0.07	1.70	
MMS_Y2_6	Gravelly Sand		Coarse Sand	Poorly Sorted	12.0	87.0	1.0				0.58	0.67	1.12	-0.40	1.80	
MMS_Y2_7	Gravelly Sand		Very Coarse Sand	Poorly Sorted	22.0	78.0	1.0				-0.12	1.09	1.51	-0.56	1.46	
MMS_Y2_8	Sandy Gravel		Very Coarse Sand	Very Poorly Sorted	44.0	55.0	1.0				-0.60	1.52	2.07	-0.38	0.55	
MMS_Y2_9	Sand	Sand	Medium Sand	Moderately Well Sorted	2.0	96.0	2.0	98.0			1.50	0.35	0.63	-0.21	1.38	
MMS_Y2_10	Gravelly Sand		Coarse Sand	Poorly Sorted	16.0	81.0	3.0				0.92	0.53	1.70	-0.53	1.55	
MMS_Y2_11	Gravelly Sand		Coarse Sand	Very Poorly Sorted	28.0	69.0	3.0				0.25	0.84	2.10	-0.26	0.76	
MMS_Y2_12	Sand		Fine Sand	Poorly Sorted	5.0	88.0	7.0				2.15	0.23	1.26	0.19	2.84	
MMS_Y2_13	Sand		Medium Sand	Moderately Sorted	3.0	95.0	2.0				1.12	0.46	0.85	-0.11	1.10	
MMS_Y2_14	Sand		Medium Sand	Moderately Sorted	0.0	98.0	2.0	98.0			1.58	0.33	0.73	-0.21	1.12	
MMS_Y2_15	Muddy Sand		Fine Sand	Poorly Sorted	3.0	82.0	15.0				2.93	0.13	1.52	0.35	5.51	
MMS_Y2_16	Sand		Fine Sand	Moderately Well Sorted	1.0	95.0	4.0				2.33	0.20	0.68	-0.02	1.21	
MMS_Y2_17	Sand		Medium Sand	Moderately Sorted	1.0	97.0	2.0				1.83	0.28	0.77	-0.21	1.33	
MMS_Y2_18	Sandy Gravel		Very Coarse Sand	Very Poorly Sorted	50.0	49.0	1.0				-0.78	1.72	2.25	0.13	0.58	
MMS_Y2_19	Gravelly Sand		Very Coarse Sand	Very Poorly Sorted	27.0	70.0	3.0				-0.22	1.16	2.24	-0.42	0.81	
MMS_Y2_20	Gravel											1.00				
MMS_Y2_21	Sandy Gravel		Very Coarse Sand	Very Poorly Sorted	39.0	60.0	1.0				-0.07	1.05	2.49	-0.27	0.62	
MMS_Y2_22	Sand		Medium Sand	Moderately Well Sorted	3.0	95.0	2.0				1.22	0.43	0.55	-0.17	1.14	
MMS_Y2_23	Gravelly Sand		Medium Sand	Poorly Sorted	14.0	86.0	0.0				1.23	0.43	1.33	-0.64	2.42	
MMS_Y2_24	Sand	Sand	Fine Sand	Moderately Sorted	0.0	97.0	3.0	97.0			2.10	0.23	0.80	0.25	1.13	
MMS_Y2_25	Sand	Sand	Fine Sand	Moderately Well Sorted	1.0	98.0	1.0	98.0			2.20	0.22	0.65	-0.04	1.11	
MMS_Y2_26	Sand	Sand	Fine Sand	Moderately Sorted	1.0	96.0	4.0	96.0			2.67	0.16	0.70	0.07	1.18	
MMS_Y2_27	Sandy Gravel		Granule Gravel	Poorly Sorted	69.0	31.0	0.0				-1.75	3.36	1.69	0.29	0.85	
MMS_Y2_28	Muddy Sand		Fine Sand	Poorly Sorted	1.0	88.0	11.0				2.90	0.13	1.07	0.13	1.84	
MMS_Y2_29	Gravelly Sand		Coarse Sand	Poorly Sorted	22.0	75.0	3.0				0.43	0.74	1.86	-0.35	1.00	
MMS_Y2_30	Gravelly Sand		Medium Sand	Poorly Sorted	8.0	91.0	1.0				1.55	0.34	1.45	-0.37	1.82	
MMS_Y2_31	Sandy Gravel		Very Coarse Sand	Very Poorly Sorted	43.0	56.0	1.0				-0.28	1.21	2.37	-0.41	0.50	
MMS_Y2_32	Gravel											1.00				
MMS_Y2_33	Gravelly Sand		Coarse Sand	Very Poorly Sorted	26.0	72.0	2.0				0.70	0.62	2.01	-0.46	0.69	
MMS_Y2_34	Gravel		Pebble Gravel	Poorly Sorted	83.0	17.0	0.0				-2.70	6.50	1.82	0.72	1.60	
MMS_Y2_35	Gravelly Sand		Coarse Sand	Very Poorly Sorted	22.0	77.0	1.0				0.30	0.81	2.54	-0.72	1.86	

MMS Year 4 Survey; Core Tops (1988): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type
MMS_Y4_1	A1	42.995000	-70.643333	3	21	10/1/1988	Vibracore
MMS_Y4_2	A2	42.986667	-70.646667	3	22	10/1/1988	Vibracore
MMS_Y4_3	A3	42.983333	-70.660000	3	25	10/1/1988	Vibracore
MMS_Y4_4	A6(2)	42.931667	-70.763333	3	23	10/1/1988	Vibracore
MMS_Y4_5	A7(1)	42.948333	-70.755000	3	24	10/1/1988	Vibracore

MMS Year 8 Survey (1992): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type
MMS_Y8_1	NHS-1	42.836833	-70.812833	3		~1992	Shipek
MMS_Y8_2	NHS-2	42.837000	-70.801667	3		~1992	Shipek
MMS_Y8_3	NHS-3	42.836333	-70.789000	3		~1992	Shipek
MMS_Y8_4	NHS-4	42.835667	-70.778167	3		~1992	Shipek
MMS_Y8_5	NHS-5	42.833833	-70.766667	3		~1992	Shipek
MMS_Y8_6	NHS-6	42.850167	-70.767667	3		~1992	Shipek
MMS_Y8_7	NHS-7	42.850500	-70.784500	3		~1992	Shipek
MMS_Y8_8	NHS-8	42.851167	-70.799833	3		~1992	Shipek
MMS_Y8_9	NHS-9	42.851333	-70.811833	3		~1992	Shipek
MMS_Y8_10	NHS-10	42.884500	-70.810167	3		~1992	Shipek
MMS_Y8_11	NHS-11	42.884500	-70.794833	3		~1992	Shipek
MMS_Y8_12	NHS-12	42.883833	-70.781500	3		~1992	Shipek
MMS_Y8_15	NHS-15	42.915333	-70.749667	3		~1992	Shipek
MMS_Y8_18	NHS-18	42.949333	-70.778333	3		~1992	Shipek
MMS_Y8_19	NHS-19	42.951500	-70.760667	3		~1992	Shipek
MMS_Y8_20	NHS-20	42.952000	-70.744333	3		~1992	Shipek
MMS_Y8_21	NHS-21	42.951167	-70.727333	3		~1992	Shipek
MMS_Y8_22	NHS-22	42.950167	-70.708333	3		~1992	Shipek

MMS Year 4 Survey; Core Tops (1988): Sediment Classifications and Grain Size Statistics

Sample ID	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Classification from Mean Phi (Wentworth)	Sorting (Gradistat)	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
MMS_Y4_1	Sand				2.0	97.0	1.0									
MMS_Y4_2	Sand				1.0	98.0	1.0									
MMS_Y4_3	Sand				0.0	99.0	1.0									
MMS_Y4_4	Sand				3.0	95.0	2.0									
MMS_Y4_5	Sand				3.0	92.0	5.0									

MMS Year 8 Survey (1992): Sediment Classifications and Grain Size Statistics

Sample ID	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Classification from Mean Phi (Wentworth)	Sorting (Gradistat)	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
MMS_Y8_1	Sand	Sand	Medium Sand	Moderately Well Sorted	0.0	99.0	1.0	99.0			1.62	0.33	0.62	-0.32	0.86	
MMS_Y8_2	Sand	Sand	Fine Sand	Well Sorted	0.0	98.0	2.0	98.0			2.67	0.16	0.37	-0.03	1.07	
MMS_Y8_3	Gravelly Sand		Coarse Sand	Moderately Sorted	5.0	93.0	2.0				0.62	0.65	0.86	-0.02	1.23	
MMS_Y8_4	Gravelly Sand		Coarse Sand	Poorly Sorted	13.0	86.0	1.0				0.42	0.75	1.07	-0.42	1.31	
MMS_Y8_5	Gravelly Sand		Coarse Sand	Moderately Sorted	7.0	92.0	1.0				0.57	0.67	0.96	-0.14	1.01	
MMS_Y8_6	Slightly Gravelly Sand	Sand	Coarse Sand	Moderately Sorted	4.0	96.0	0.0	100.0	0.0	0.0	0.65	0.64	0.73	-0.13	1.18	
MMS_Y8_7	Gravelly Sand		Coarse Sand	Poorly Sorted	17.0	83.0	0.0				0.73	0.60	1.00	-0.03	1.10	
MMS_Y8_8	Sand	Sand	Fine Sand	Moderately Well Sorted	0.0	95.0	5.0	95.0			2.95	0.13	0.53	0.16	1.20	
MMS_Y8_9	Sand	Sand	Fine Sand	Moderately Sorted	0.0	98.0	2.0	98.0			2.20	0.22	0.72	-0.11	1.43	
MMS_Y8_10	Slightly Gravelly Sand	Sand	Fine Sand	Moderately Well Sorted	1.0	97.0	2.0	97.0			2.52	0.17	0.67	-0.28	1.38	
MMS_Y8_11	Sand	Sand	Very Fine Sand	Moderately Well Sorted	0.0	93.0	7.0	93.0	4.0	3.0	3.15	0.11	0.51	0.25	1.45	
MMS_Y8_12	Sandy Gravel		Granule Gravel	Very Poorly Sorted	59.0	40.0	1.0				-1.37	2.58	2.21	0.30	0.55	
MMS_Y8_15	Gravelly Muddy Sand		Medium Sand	Very Poorly Sorted	10.0	78.0	12.0				1.53	0.35	2.83	0.19	3.01	
MMS_Y8_18	Sand	Sand	Fine Sand	Well Sorted	0.0	98.0	2.0	98.0			2.85	0.14	0.47	0.12	1.27	
MMS_Y8_19	Sandy Gravel		Granule Gravel	Very Poorly Sorted	59.0	40.0	1.0				-1.60	3.03	2.02	0.19	0.65	
MMS_Y8_20	Gravel		Pebble Gravel	Very Poorly Sorted	80.0	16.0	4.0				-2.95	7.73	2.43	0.94	1.08	
MMS_Y8_21	Gravel		Pebble Gravel	Very Poorly Sorted	80.0	17.0	3.0				-2.43	5.39	2.08	0.59	1.56	
MMS_Y8_22	Slightly Gravelly Sand		Fine Sand	Poorly Sorted	4.0	88.0	8.0	92.0	4.0	4.0	2.93	0.13	1.30	0.12	4.85	

MMS Year 10 Survey (1994): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type
MMS_Y10_1	NHS-101	42.930667	-70.711000	3	39	8/11/1994	Shipek
MMS_Y10_3	NHS-103	42.946000	-70.724833	3	34	8/11/1994	Shipek
MMS_Y10_5	NHS-105	42.961333	-70.737833	3	24	8/11/1994	Shipek
MMS_Y10_6	NHS-106	42.969167	-70.744500	3	16	8/11/1994	Shipek
MMS_Y10_7	NHS-107	42.961833	-70.751167	3	20	8/11/1994	Shipek
MMS_Y10_8	NHS-108A	42.954167	-70.744167	3	27	8/11/1994	Shipek
MMS_Y10_9	NHS-108B	42.954667	-70.744000	3	27	8/11/1994	Shipek
MMS_Y10_10	NHS-109	42.946333	-70.737500	3	33	8/11/1994	Shipek
MMS_Y10_13	NHS-111	42.930667	-70.724500	3	37	8/11/1994	Shipek
MMS_Y10_14	NHS-112	42.923167	-70.717833	3	41	8/11/1994	Shipek
MMS_Y10_18	NHS-115	42.932000	-70.737833	3	36	8/11/1994	Shipek
MMS_Y10_21	NHS-116C	42.940000	-70.744667	3	30	8/11/1994	Shipek
MMS_Y10_22	NHS-117	42.946833	-70.751000	3	27	8/11/1994	Shipek
MMS_Y10_28	NHS-120B	42.939667	-70.757833	3	27	8/11/1994	Shipek
MMS_Y10_29	NHS-121	42.932333	-70.751500	3	29	8/11/1994	Shipek
MMS_Y10_33	NHS-123B	42.916667	-70.751167	3	32	8/11/1994	Shipek
MMS_Y10_35	NHS-124B	42.925167	-70.757833	3	28	8/11/1994	Shipek
MMS_Y10_36	NHS-125	42.932667	-70.764500	3	25	8/11/1994	Shipek
MMS_Y10_38	NHS-126B	42.944500	-70.774000	3	16	8/11/1994	Shipek
MMS_Y10_39	NHS-127	42.949000	-70.777333	3	11	8/11/1994	Shipek
MMS_Y10_40	NHS-128	42.935167	-70.779333	3	15	8/11/1994	Shipek
MMS_Y10_41	NHS-129	42.925667	-70.770167	3	22	8/11/1994	Shipek
MMS_Y10_44	NHS-131	42.918833	-70.777167	3	21	8/11/1994	Shipek
MMS_Y10_45	NHS-132A	42.929000	-70.787333	3	10	8/11/1994	Shipek
MMS_Y10_46	NHS-132B	42.929667	-70.786500	3	9	8/11/1994	Shipek
MMS_Y10_47	NHS-133A	42.911500	-70.784500	3	17	8/11/1994	Shipek
MMS_Y10_48	NHS-133B	42.911500	-70.784500	3	17	8/11/1994	Shipek
MMS_Y10_49	NHS-134	42.911833	-70.797667	3	7	8/11/1994	Shipek
MMS_Y10_50	NHS-135	42.900500	-70.800500	3	9	8/11/1994	Shipek
MMS_Y10_51	NHS-136A	42.904667	-70.790333	3	12	8/11/1994	Shipek
MMS_Y10_52	NHS-136B	42.905167	-70.789833	3	12	8/11/1994	Shipek

MMS Year 10 Survey (1994): Sediment Classifications and Grain Size Statistics

Sample ID	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Classification from Mean Phi (Wentworth)	Sorting (Gradistat)	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
MMS_Y10_1	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	78.0	22.0	78.0	11.0	11.0	3.93	0.07	1.75	0.78	3.01	1.30
MMS_Y10_3	Sand		Very Fine Sand	Moderately Well Sorted	0.0	95.0	5.0				3.20	0.11	0.62	-1.63	3.55	0.30
MMS_Y10_5	Sandy Gravel		Very Coarse Sand	Very Poorly Sorted	65.0	32.0	3.0				-0.80	1.74	2.43	0.54	0.86	1.20
MMS_Y10_6	Sandy Gravel		Granule Gravel	Poorly Sorted	72.0	27.0	1.0				-1.87	3.66	1.13	0.00	0.80	0.30
MMS_Y10_7	Sandy Gravel		Very Coarse Sand	Poorly Sorted	52.0	45.0	3.0				-0.87	1.83	1.99	0.29	1.25	0.90
MMS_Y10_8	Sandy Gravel		Granule Gravel	Very Poorly Sorted	60.0	38.0	2.0				-1.43	2.69	2.33	0.42	0.71	0.50
MMS_Y10_9	Muddy Sand	Silty Sand	Very Fine Sand	Poorly Sorted	0.0	76.0	24.0	76.0	21.0	3.0	3.60	0.08	1.84	0.51	1.69	2.40
MMS_Y10_10	Muddy Sandy Gravel		Granule Gravel	Very Poorly Sorted	70.0	20.0	10.0				-1.37	2.58	3.43	0.72	0.79	1.30
MMS_Y10_13	Muddy Sandy Gravel		Granule Gravel	Very Poorly Sorted	72.0	23.0	5.0				-1.23	2.35	2.55	0.69	1.15	1.00
MMS_Y10_14	Muddy Sandy Gravel		Pebble Gravel	Very Poorly Sorted	71.0	25.0	4.0				-2.53	5.78	2.54	0.41	0.97	1.50
MMS_Y10_18	Muddy Sandy Gravel		Medium Sand	Very Poorly Sorted	34.0	45.0	21.0				1.50	0.35	3.88	0.12	0.97	2.00
MMS_Y10_21	Sand	Sand	Fine Sand	Moderately Sorted	4.0	92.0	4.0	96.0	3.0	1.0	2.80	0.14	0.95	-0.27	2.52	0.80
MMS_Y10_22	Sand	Sand	Fine Sand	Moderately Sorted	0.0	95.0	5.0	95.0	4.0	1.0	2.43	0.19	0.77	0.11	1.07	0.90
MMS_Y10_28	Gravelly Sand		Medium Sand	Poorly Sorted	13.0	86.0	1.0				1.50	0.35	1.48	-0.47	2.42	0.50
MMS_Y10_29	Sand	Sand	Fine Sand	Moderately Sorted	4.0	90.0	6.0	94.0	5.0	1.0	2.50	0.18	0.94	-0.11	1.78	1.00
MMS_Y10_33	Gravelly Muddy Sand		Medium Sand	Very Poorly Sorted	26.0	64.0	10.0				1.00	0.50	3.17	-0.31	1.16	1.30
MMS_Y10_35	Sand	Sand	Fine Sand	Moderately Well Sorted	0.0	98.0	2.0	98.0	1.0	1.0	2.33	0.20	0.58	0.10	1.17	0.50
MMS_Y10_36	Gravelly Sand		Very Coarse Sand	Poorly Sorted	27.0	72.0	1.0				-0.47	1.39	1.12	0.21	1.29	0.40
MMS_Y10_38	Sand	Sand	Fine Sand	Moderately Sorted	0.0	96.0	4.0	96.0	3.0	1.0	2.90	0.13	0.70	-0.26	1.14	0.60
MMS_Y10_39	Sand	Sand	Very Fine Sand	Well Sorted	0.0	98.0	2.0	98.0	2.0	0.0	3.00	0.13	0.44	0.00	1.09	0.50
MMS_Y10_40	Sand	Sand	Fine Sand	Moderately Well Sorted	0.0	98.0	2.0	98.0	2.0	0.0	2.87	0.14	0.61	-0.18	1.50	0.50
MMS_Y10_41	Sand	Sand	Fine Sand	Moderately Well Sorted	0.0	98.0	2.0	98.0	1.0	1.0	2.57	0.17	0.58	-0.10	1.17	0.50
MMS_Y10_44	Sand	Sand	Fine Sand	Moderately Well Sorted	0.0	97.0	3.0	97.0	2.0	1.0	2.63	0.16	0.66	0.08	1.00	0.60
MMS_Y10_45	Sand	Sand	Very Fine Sand	Well Sorted	0.0	95.0	5.0				3.07	0.12	0.39	-0.14	1.15	0.40
MMS_Y10_46	Sand	Sand	Fine Sand	Well Sorted	0.0	98.0	2.0	98.0	1.0	1.0	2.90	0.13	0.36	0.00	1.43	0.60
MMS_Y10_47	Sand	Sand	Very Fine Sand	Moderately Well Sorted	0.0	95.0	5.0				3.17	0.11	0.50	-0.11	1.48	0.50
MMS_Y10_48	Sandy Gravel		Granule Gravel	Poorly Sorted	63.0	35.0	2.0				-1.57	2.97	1.87	0.28	1.14	0.60
MMS_Y10_49	Sand	Sand	Fine Sand	Moderately Well Sorted	0.0	99.0	1.0	99.0	0.5	0.5	2.93	0.13	0.64	-0.33	1.78	0.40
MMS_Y10_50	Sandy Gravel		Granule Gravel	Very Poorly Sorted	48.0	52.0	0.0				-1.43	2.69	2.03	0.44	0.54	0.60
MMS_Y10_51	Sand	Sand	Very Fine Sand	Well Sorted	0.0	98.0	2.0				3.17	0.11	0.37	-0.11	1.33	0.50
MMS_Y10_52	Sand	Sand	Very Fine Sand	Well Sorted	0.0	98.0	2.0	98.0	1.0	1.0	3.13	0.11	0.37	0.11	1.07	0.60

Section 7: Flight Survey (1972)

Flight Survey (1972) (1): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type
WFS_1	101	42.975000	-70.275000	4		5/18/1971	Gravity Corer
WFS_2	102	42.983333	-70.216667	4		5/18/1971	Gravity Corer
WFS_3	103	43.000000	-70.158333	4		5/18/1971	Gravity Corer
WFS_4	104	43.008333	-70.133333	4		5/18/1971	Gravity Corer
WFS_5	105	43.063333	-70.480000	4		5/19/1971	Gravity Corer
WFS_6	106	43.050000	-70.433333	4		5/19/1971	Gravity Corer
WFS_7	107	43.041667	-70.405000	4		5/19/1971	Gravity Corer
WFS_8	108	43.008333	-70.383333	4		5/19/1971	Gravity Corer
WFS_9	109	42.980000	-70.353333	4		5/19/1971	Gravity Corer
WFS_10	202	42.998333	-70.503333	4		6/18/1971	Gravity Corer
WFS_11	203	42.983333	-70.458333	4		6/18/1971	Gravity Corer
WFS_12	204	42.971667	-70.416667	4		6/18/1971	Gravity Corer
WFS_13	206	42.950000	-70.320000	4		6/18/1971	Gravity Corer
WFS_14	207	42.953333	-70.371667	4		6/18/1971	Gravity Corer
WFS_15	208	42.958333	-70.416667	4		6/18/1971	Gravity Corer
WFS_16	210	42.966667	-70.505000	4		6/18/1971	Gravity Corer
WFS_17	211	43.021667	-70.275000	4		6/19/1971	Gravity Corer
WFS_18	212	43.043333	-70.316667	4		6/19/1971	Gravity Corer
WFS_19	213	43.063333	-70.358333	4		6/19/1971	Gravity Corer
WFS_20	214	43.080000	-70.395000	4		6/19/1971	Gravity Corer
WFS_21	215	43.096667	-70.421667	4		6/19/1971	Gravity Corer
WFS_22	216	43.086667	-70.458333	4		6/19/1971	Gravity Corer
WFS_23	301	42.938333	-70.275000	4		7/1/1971	Gravity Corer
WFS_24	302	42.925000	-70.230000	4		7/1/1971	Gravity Corer
WFS_25	304	42.905000	-70.150000	4		7/1/1971	Gravity Corer
WFS_26	305	42.893333	-70.103333	4		7/2/1971	Gravity Corer
WFS_27	306	42.888333	-70.088333	4		7/2/1971	Gravity Corer
WFS_28	307	42.886667	-70.075000	4		7/2/1971	Gravity Corer
WFS_29	401	43.111667	-70.388333	4		7/15/1971	Gravity Corer
WFS_30	402	43.096667	-70.351667	4		7/15/1971	Gravity Corer

Flight Survey (1972) (1): Sediment Classifications and Grain Size Statistics

Sample ID	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Classification from Mean Phi (Wentworth)	Sorting (Gradistat)	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
WFS_1	Mud	Mud	Clay	Very Poorly Sorted	0.0	1.0	99.0	1.0	43.0	56.0	8.65	0.00	2.06			
WFS_2	Mud	Mud	Clay	Very Poorly Sorted	0.0	2.0	98.0	2.0	41.0	57.0	8.55	0.00	2.04			
WFS_3	Mud	Mud	Clay	Very Poorly Sorted	0.0	2.0	98.0	2.0	41.0	57.0	9.15	0.00	2.13			
WFS_4	Mud	Mud	Clay	Very Poorly Sorted	0.0	2.0	98.0	2.0	44.0	54.0	8.38	0.00	2.15			
WFS_5	Sandy Mud	Sandy Silt	Medium Silt	Poorly Sorted	0.0	25.0	75.0	25.0	62.0	13.0	5.47	0.02	1.88			
WFS_6	Sandy Mud	Sandy Silt	Medium Silt	Very Poorly Sorted	0.0	25.0	75.0	25.0	60.0	15.0	5.49	0.02	2.03			
WFS_7	Mud	Mud	Very Fine Silt	Very Poorly Sorted	0.0	9.0	91.0	9.0	54.0	37.0	7.10	0.01	2.59			
WFS_8	Mud	Mud	Very Fine Silt	Very Poorly Sorted	0.0	1.0	99.0	1.0	64.0	35.0	7.38	0.01	2.04			
WFS_9	Mud	Mud	Very Fine Silt	Very Poorly Sorted	0.0	1.0	99.0	1.0	51.0	48.0	7.90	0.00	2.07			
WFS_10	Mud	Mud	Very Fine Silt	Very Poorly Sorted	0.0	6.0	94.0	6.0	60.0	34.0	7.03	0.01	2.60			
WFS_11	Mud	Mud	Very Fine Silt	Very Poorly Sorted	0.0	2.0	98.0	2.0	67.0	31.0	7.10	0.01	2.27			
WFS_12	Mud	Mud	Very Fine Sand	Moderately Sorted	0.0	2.0	98.0	2.0	51.0	47.0	3.75	0.07	0.89			
WFS_13	Mud	Mud	Very Fine Silt	Very Poorly Sorted	0.0	2.0	98.0	2.0	52.0	46.0	7.88	0.00	2.05			
WFS_14	Gravelly Muddy Sand		Medium Silt	Very Poorly Sorted	19.0	55.0	26.0				5.24	0.03	2.30			
WFS_15	Sandy Mud	Sandy Mud	Fine Silt	Very Poorly Sorted	3.0	22.0	75.0	25.0	47.0	28.0	6.42	0.01	2.51			
WFS_16	Sandy Mud	Sandy Silt	Medium Silt	Very Poorly Sorted	0.0	13.0	87.0	13.0	70.0	17.0	5.84	0.02	2.07			
WFS_17	Mud	Mud	Very Fine Silt	Very Poorly Sorted	0.0	1.0	99.0	1.0	47.0	52.0	7.52	0.01	2.96			
WFS_18	Mud	Mud	Very Fine Silt	Very Poorly Sorted	0.0	5.0	95.0	5.0	50.0	45.0	7.86	0.00	2.37			
WFS_19	Sandy Mud	Sandy Mud	Very Fine Silt	Very Poorly Sorted	0.0	20.0	80.0	20.0	44.0	36.0	7.25	0.01	2.69			
WFS_20	Gravelly Mud		Fine Silt	Very Poorly Sorted	20.0	23.0	57.0				6.17	0.01	2.72			
WFS_21	Muddy Sand	Muddy Sand	Coarse Silt	Poorly Sorted	1.0	61.0	38.0	62.0	25.0	13.0	4.80	0.04	1.88			
WFS_22	Sandy Mud	Sandy Silt	Medium Silt	Very Poorly Sorted	0.0	21.0	79.0	21.0	62.0	17.0	5.64	0.02	2.15			
WFS_23	Sandy Mud	Sandy Mud	Very Fine Silt	Very Poorly Sorted	3.0	20.0	77.0	23.0	34.0	43.0	7.25	0.01	2.73			
WFS_24	Gravelly Mud	Sandy Mud	Very Fine Silt	Very Poorly Sorted	9.0	17.0	74.0	24.0	30.0	46.0	7.40	0.01	2.81			
WFS_25	Mud	Mud	Very Fine Silt	Very Poorly Sorted	0.0	1.0	99.0	1.0	58.0	41.0	7.76	0.00	2.20			
WFS_26	Sandy Gravel		Fine Silt	Very Poorly Sorted	45.0	54.0	1.0				6.22	0.01	2.34			
WFS_27	Sandy Mud	Sandy Mud	Medium Silt	Very Poorly Sorted	2.0	27.0	71.0	28.0	47.0	25.0	5.94	0.02	2.40			
WFS_28	Sandy Mud	Sandy Mud	Medium Silt	Very Poorly Sorted	1.0	44.0	55.0	45.0	36.0	19.0	5.54	0.02	2.28			
WFS_29	Sandy Mud	Sandy Mud	Fine Silt	Very Poorly Sorted	0.0	12.0	88.0	11.0	60.0	29.0	6.60	0.01	2.45			
WFS_30	Gravelly Mud		Fine Silt	Very Poorly Sorted	25.0	24.0	51.0				6.00	0.02	2.71			

Flight Survey (1972) (2): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type
WFS_31	403	43.080000	-70.316667	4		7/15/1971	Gravity Corer
WFS_32	404	43.063333	-70.283333	4		7/15/1971	Gravity Corer
WFS_33	405	43.041667	-70.236667	4		7/15/1971	Gravity Corer
WFS_34	406	43.068333	-70.200000	4		7/15/1971	Gravity Corer
WFS_35	407	43.088333	-70.241667	4		7/15/1971	Gravity Corer
WFS_36	408	43.103333	-70.276667	4		7/15/1971	Gravity Corer
WFS_37	409	43.120000	-70.311667	4		7/16/1971	Gravity Corer
WFS_38	410	43.136667	-70.341667	4		7/16/1971	Gravity Corer
WFS_39	411	43.156667	-70.308333	4		7/16/1971	Gravity Corer
WFS_40	412	43.140000	-70.266667	4		7/16/1971	Gravity Corer
WFS_41	413	43.123333	-70.233333	4		7/16/1971	Gravity Corer
WFS_42	415	43.106667	-70.196667	4		7/16/1971	Gravity Corer
WFS_43	416	43.090000	-70.163333	4		7/16/1971	Gravity Corer
WFS_44	501	43.005000	-70.245000	4		7/29/1971	Gravity Corer
WFS_45	502	43.025000	-70.200000	4		7/29/1971	Gravity Corer
WFS_46	503	43.050000	-70.158333	4		7/29/1971	Gravity Corer
WFS_47	504	43.068333	-70.120000	4		7/29/1971	Gravity Corer
WFS_48	506	43.103333	-70.120000	4		7/29/1971	Gravity Corer
WFS_49	507	43.123333	-70.158333	4		7/29/1971	Gravity Corer
WFS_50	508	43.160000	-70.225000	4		7/29/1971	Gravity Corer
WFS_51	509	43.183333	-70.263333	4		7/30/1971	Gravity Corer
WFS_52	510	42.948333	-70.471667	4		7/30/1971	Gravity Corer
WFS_53	513	42.895000	-70.355000	4		7/30/1971	Gravity Corer
WFS_54	514	42.875000	-70.316667	4		7/30/1971	Gravity Corer
WFS_55	601	42.953333	-70.215000	4		8/12/1971	Gravity Corer
WFS_56	603	42.970000	-70.138333	4		8/12/1971	Gravity Corer
WFS_57	604	42.978333	-70.105000	4		8/12/1971	Gravity Corer
WFS_58	605	42.941667	-70.105000	4		8/12/1971	Gravity Corer
WFS_59	607	42.925000	-70.343333	4		8/13/1971	Gravity Corer
WFS_60	608	42.906667	-70.305000	4		8/13/1971	Gravity Corer
WFS_61	609	42.888333	-70.266667	4		8/13/1971	Gravity Corer

Flight Survey (1972) (2): Sediment Classifications and Grain Size Statistics

Sample ID	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Classification from Mean Phi (Wentworth)	Sorting (Gradistat)	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
WFS_31	Mud	Mud	Clay	Very Poorly Sorted	0.0	0.0	100.0	0.0	45.0	55.0	8.51	0.00	2.18			
WFS_32	Mud	Mud	Clay	Very Poorly Sorted	0.0	1.0	99.0	1.0	46.0	53.0	8.40	0.00	2.05			
WFS_33	Mud	Mud	Clay	Poorly Sorted	0.0	1.0	99.0	1.0	41.0	58.0	8.70	0.00	1.97			
WFS_34	Mud	Mud	Clay	Poorly Sorted	0.0	0.0	100.0	0.0	42.0	58.0	8.74	0.00	1.90			
WFS_35	Sandy Mud	Sandy Mud	Clay	Very Poorly Sorted	1.0	10.0	89.0	11.0	34.0	55.0	8.09	0.00	2.64			
WFS_36	Mud	Mud	Clay	Very Poorly Sorted	0.0	1.0	99.0	1.0	46.0	53.0	8.30	0.00	2.36			
WFS_37	Gravelly Mud		Very Fine Silt	Very Poorly Sorted	12.0	19.0	69.0				7.21	0.01	2.91			
WFS_38	Mud	Mud	Fine Silt	Very Poorly Sorted	0.0	1.0	99.0	1.0	48.0	51.0	6.51	0.01	2.32			
WFS_39	Mud	Mud	Fine Silt	Very Poorly Sorted	0.0	8.0	92.0	8.0	70.0	22.0	6.32	0.01	2.76			
WFS_40	Muddy Gravel		Fine Silt	Very Poorly Sorted	35.0	11.0	54.0				6.27	0.01	2.76			
WFS_41	Gravelly Mud		Clay	Very Poorly Sorted	12.0	28.0	60.0				8.11	0.00	2.41			
WFS_42	Mud	Mud	Clay	Very Poorly Sorted	0.0	8.0	92.0	8.0	37.0	55.0	8.30	0.00	2.35			
WFS_43	Mud	Mud	Clay	Poorly Sorted	0.0	1.0	99.0	1.0	40.0	59.0	8.63	0.00	1.91			
WFS_44	Mud	Clay	Clay	Very Poorly Sorted	0.0	1.0	99.0	1.0	28.0	71.0	9.03	0.00	2.83			
WFS_45	Mud	Clay	Clay	Poorly Sorted	0.0	0.0	100.0	0.0	37.0	63.0	8.88	0.00	1.87			
WFS_46	Mud	Clay	Clay	Poorly Sorted	0.0	0.0	100.0	0.0	37.0	63.0	8.90	0.00	1.87			
WFS_47	Mud	Clay	Clay	Very Poorly Sorted	0.0	1.0	99.0	1.0	37.0	62.0	8.74	0.00	2.07			
WFS_48	Sandy Mud	Sandy Clay	Very Fine Silt	Very Poorly Sorted	0.0	16.0	84.0	16.0	31.0	53.0	7.51	0.01	2.82			
WFS_49	Gravelly Mud	Sandy Clay	Clay	Very Poorly Sorted	5.0	9.0	86.0	14.0	29.0	57.0	8.13	0.00	2.80			
WFS_50	Mud	Mud	Very Fine Silt	Very Poorly Sorted	0.0	2.0	98.0	2.0	49.0	49.0	7.86	0.00	2.46			
WFS_51	Mud	Mud	Clay	Very Poorly Sorted	0.0	0.0	100.0	0.0	53.0	47.0	8.00	0.00	2.25			
WFS_52	Mud	Mud	Very Fine Silt	Very Poorly Sorted	0.0	2.0	98.0	2.0	67.0	31.0	7.11	0.01	2.31			
WFS_53	Muddy Sandy Gravel		Very Fine Sand	Poorly Sorted	50.0	35.0	15.0				3.78	0.07	1.06			
WFS_54	Gravelly Muddy Sand		Medium Silt	Very Poorly Sorted	6.0	66.0	28.0				5.03	0.03	2.11			
WFS_55	Mud	Mud	Clay	Very Poorly Sorted	0.0	1.0	99.0	1.0	39.0	60.0	8.77	0.00	2.03			
WFS_56	Mud	Mud	Clay	Very Poorly Sorted	0.0	9.0	91.0	9.0	36.0	55.0	8.10	0.00	2.68			
WFS_57	Muddy Sandy Gravel		Coarse Silt	Poorly Sorted	32.0	48.0	20.0				4.68	0.04	1.91			
WFS_58	Gravelly Mud		Fine Silt	Very Poorly Sorted	8.0	43.0	49.0				6.00	0.02	2.78			
WFS_59	Mud	Mud	Clay	Poorly Sorted	0.0	0.0	100.0	0.0	41.0	59.0	8.68	0.00	1.99			
WFS_60	Mud	Mud	Clay	Very Poorly Sorted	0.0	0.0	100.0	0.0	41.0	59.0	8.52	0.00	2.24			
WFS_61	Sandy Mud	Sandy Mud	Very Fine Silt	Very Poorly Sorted	0.0	26.0	74.0	26.0	30.0	44.0	7.32	0.01	2.82			

Section 8: Mills Survey (1971)

Mills Survey (1971) (1): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type
MS_1	1	43.046667	-70.698333	4	12	6/5/1972 - 11/30/1972	Shipek
MS_2	2	43.046667	-70.690000	4	14	6/5/1972 - 11/30/1972	Shipek
MS_3	3	43.038333	-70.668333	4	24	6/5/1972 - 11/30/1972	Shipek
MS_4	4	43.031667	-70.646667	4	27	6/5/1972 - 11/30/1972	Shipek
MS_5	5	43.026667	-70.630000	4	33	6/5/1972 - 11/30/1972	Shipek
MS_6	6	43.021667	-70.605000	4	37	6/5/1972 - 11/30/1972	Shipek
MS_7	8	42.993333	-70.626667	4	17	6/5/1972 - 11/30/1972	Shipek
MS_8	9	43.008333	-70.645000	4	24	6/5/1972 - 11/30/1972	Shipek
MS_9	10	43.018333	-70.653333	4	23	6/5/1972 - 11/30/1972	Shipek
MS_10	11	43.030000	-70.676667	4	17	6/5/1972 - 11/30/1972	Shipek
MS_11	12	43.041667	-70.691667	4	14	6/5/1972 - 11/30/1972	Shipek
MS_12	13	43.040000	-70.696667	4	14	6/5/1972 - 11/30/1972	Shipek
MS_13	14	43.025000	-70.688333	4	19	6/5/1972 - 11/30/1972	Shipek
MS_14	15	43.008333	-70.680000	4	24	6/5/1972 - 11/30/1972	Shipek
MS_15	16	42.993333	-70.671667	4	26	6/5/1972 - 11/30/1972	Shipek
MS_16	17	42.978333	-70.665000	4	23	6/5/1972 - 11/30/1972	Shipek
MS_17	18	42.971667	-70.703333	4	26	6/5/1972 - 11/30/1972	Shipek
MS_18	19	42.988333	-70.705000	4	20	6/5/1972 - 11/30/1972	Shipek
MS_19	20	43.005000	-70.701667	4	22	6/5/1972 - 11/30/1972	Shipek
MS_20	21	43.025000	-70.700000	4	15	6/5/1972 - 11/30/1972	Shipek
MS_21	22	43.038333	-70.700000	4	15	6/5/1972 - 11/30/1972	Shipek
MS_22	25	43.038333	-70.508333	4	26	6/5/1972 - 11/30/1972	Shipek
MS_23	26	43.040000	-70.703333	4	13	6/5/1972 - 11/30/1972	Shipek
MS_24	27	43.023333	-70.711667	4	16	6/5/1972 - 11/30/1972	Shipek
MS_25	28	43.008333	-70.720000	4	18	6/5/1972 - 11/30/1972	Shipek
MS_26	29	42.998333	-70.715000	4	21	6/5/1972 - 11/30/1972	Shipek
MS_27	30	42.991667	-70.726667	4	19	6/5/1972 - 11/30/1972	Shipek
MS_28	31	43.045000	-70.641667	4	27	6/5/1972 - 11/30/1972	Shipek
MS_29	32	43.046667	-70.665000	4	22	6/5/1972 - 11/30/1972	Shipek
MS_30	33	43.046667	-70.688333	4	9	6/5/1972 - 11/30/1972	Shipek
MS_31	34	42.976667	-70.735000	4	10	6/5/1972 - 11/30/1972	Shipek
MS_32	35	42.965000	-70.740000	4	20	6/5/1972 - 11/30/1972	Shipek

Mills Survey (1971) (1): Sediment Classifications and Grain Size Statistics

Sample ID	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Classification from Mean Phi (Wentworth)	Sorting (Gradistat)	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
MS_1	Gravelly Sand		Medium Sand	Poorly Sorted	7.0	92.0	1.0				1.20	0.44	1.21	-0.13		
MS_2	Gravelly Sand		Medium Sand	Poorly Sorted	17.0	82.0	1.0				1.10	0.47	1.82	-0.38		
MS_3	Sandy Gravel		Very Coarse Sand	Very Poorly Sorted	42.0	57.0	1.0				-0.50	1.41	2.36	-0.34		
MS_4	Sandy Gravel		Granule Gravel	Very Poorly Sorted	63.0	35.0	2.0				-1.50	2.83	2.32	0.43		
MS_5	Sandy Gravel		Granule Gravel	Poorly Sorted	70.0	29.0	1.0				-1.50	2.83	1.50	0.46		
MS_6	Sandy Gravel		Granule Gravel	Very Poorly Sorted	59.0	39.0	2.0				-1.50	2.83	2.61	0.35		
MS_7	Gravelly Sand		Fine Sand	Poorly Sorted	7.0	90.0	3.0				2.10	0.23	1.31	-0.34		
MS_8	Gravelly Muddy Sand		Coarse Sand	Very Poorly Sorted	28.0	64.0	8.0				0.30	0.81	2.57	-0.01		
MS_9	Sandy Gravel		Very Coarse Sand	Poorly Sorted	42.0	57.0	1.0				-0.50	1.41	1.90	-0.03		
MS_10	Gravelly Sand		Coarse Sand	Poorly Sorted	11.0	88.0	1.0				0.20	0.87	1.08	-0.10		
MS_11	Sand	Sand	Very Fine Sand	Very Well Sorted	0.0	99.0	1.0	99.0	0.0	1.0	3.00	0.13	0.34	-0.19		
MS_12	Sand	Sand	Very Fine Sand	Well Sorted	0.0	99.0	1.0	99.0	1.0	0.0	3.00	0.13	0.36	-0.01		
MS_13	Sandy Gravel		Granule Gravel	Very Poorly Sorted	68.0	31.0	1.0				-1.90	3.73	2.27	0.35		
MS_14	Sandy Gravel		Granule Gravel	Very Poorly Sorted	66.0	31.0	2.0				-1.80	3.48	2.48	0.50		
MS_15	Gravelly Sand		Coarse Sand	Very Poorly Sorted	23.0	75.0	2.0				0.60	0.66	2.09	-0.52		
MS_16	Gravelly Sand		Medium Sand	Poorly Sorted	15.0	83.0	2.0				1.40	0.38	1.62	-0.66		
MS_17	Sandy Gravel		Very Coarse Sand	Very Poorly Sorted	53.0	45.0	2.0				-0.70	1.62	2.54	0.34		
MS_18	Gravelly Sand		Medium Sand	Poorly Sorted	5.0	91.0	4.0				1.10	0.47	1.20	-0.31		
MS_19	Sandy Gravel		Very Coarse Sand	Very Poorly Sorted	46.0	52.0	2.0				-0.20	1.15	2.39	0.00		
MS_20	Sand	Sand	Very Fine Sand	Very Well Sorted	0.0	99.0	1.0	99.0	1.0	0.0	3.10	0.12	0.29	-0.50		
MS_21	Sand	Sand	Fine Sand	Moderately Well Sorted	0.0	98.0	2.0	98.0	1.0	1.0	2.70	0.15	0.50	0.09		
MS_22	Muddy Sandy Gravel		Coarse Sand	Extremely Poorly Sorted	51.0	29.0	20.0				0.70	0.62	4.07	0.68		
MS_23	Muddy Sand		Fine Sand	Poorly Sorted	2.0	83.0	15.0	83.0	12.0	3.0	2.90	0.13	1.30	0.10		
MS_24	Muddy Sandy Gravel		Very Coarse Sand	Very Poorly Sorted	63.0	29.0	8.0				-1.00	2.00	2.95	0.62		
MS_25	Gravelly Muddy Sand		Medium Sand	Very Poorly Sorted	22.0	69.0	9.0				1.20	0.44	2.59	-0.23		
MS_26	Sand		Very Fine Sand	Moderately Well Sorted	2.0	91.0	7.0	91.0	6.0	2.0	3.10	0.12	0.68	0.10		
MS_27	Gravel		Granule Gravel	Poorly Sorted	80.0	17.0	3.0				-2.00	4.00	1.37	0.26		
MS_28	Sandy Gravel		Granule Gravel	Very Poorly Sorted	67.0	29.0	4.0				-1.90	3.73	2.60	0.73		
MS_29	Muddy Sandy Gravel		Granule Gravel	Very Poorly Sorted	75.0	20.0	5.0				-1.70	3.25	2.24	0.52		
MS_30	Sand	Sand	Fine Sand	Moderately Well Sorted	0.0	97.0	3.0	97.0	3.0	0.0	2.50	0.18	0.58	0.17		
MS_31	Sand		Fine Sand	Moderately Well Sorted	1.0	97.0	2.0	97.0	1.0	1.0	2.50	0.18	0.59	0.04		
MS_32	Sandy Gravel		Granule Gravel	Very Poorly Sorted	65.0	31.0	4.0				-1.60	3.03	2.33	0.48		

Mills Survey (1971) (2): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type
MS_33	36	42.948333	-70.748333	4	24	6/5/1972 - 11/30/1972	Shipek
MS_34	37	42.946667	-70.705000	4	38	6/5/1972 - 11/30/1972	Shipek
MS_35	38	42.955000	-70.705000	4	34	6/5/1972 - 11/30/1972	Shipek
MS_36	39	42.961667	-70.651667	4	38	6/5/1972 - 11/30/1972	Shipek
MS_37	40	42.956667	-70.651667	4	37	6/5/1972 - 11/30/1972	Shipek
MS_38	41	42.946667	-70.645000	4	44	6/5/1972 - 11/30/1972	Shipek
MS_39	42	42.968333	-70.595000	4	56	6/5/1972 - 11/30/1972	Shipek
MS_40	43	42.965000	-70.580000	4	59	6/5/1972 - 11/30/1972	Shipek
MS_41	44	42.945000	-70.565000	4	78	6/5/1972 - 11/30/1972	Shipek
MS_42	46	42.990000	-70.558333	4	66	6/5/1972 - 11/30/1972	Shipek
MS_43	47	42.975000	-70.543333	4	72	6/5/1972 - 11/30/1972	Shipek
MS_44	48	42.961667	-70.528333	4	75	6/5/1972 - 11/30/1972	Shipek
MS_45	49	42.960000	-70.516667	4	76	6/5/1972 - 11/30/1972	Shipek
MS_46	50	42.943333	-70.508333	4	84	6/5/1972 - 11/30/1972	Shipek
MS_47	51	43.040000	-70.531667	4	62	6/5/1972 - 11/30/1972	Shipek
MS_48	52	43.040000	-70.553333	4	61	6/5/1972 - 11/30/1972	Shipek
MS_49	53	43.041667	-70.575000	4	40	6/5/1972 - 11/30/1972	Shipek
MS_50	56	43.048333	-70.623333	4	32	6/5/1972 - 11/30/1972	Shipek
MS_51	58	43.048333	-70.686667	4	20	6/5/1972 - 11/30/1972	Shipek
MS_52	60	43.053333	-70.651667	4	21	6/5/1972 - 11/30/1972	Shipek
MS_53	61	43.056667	-70.633333	4	14	6/5/1972 - 11/30/1972	Shipek
MS_54	62	43.058333	-70.620000	4	24	6/5/1972 - 11/30/1972	Shipek
MS_55	63	43.058333	-70.601667	4	34	6/5/1972 - 11/30/1972	Shipek
MS_56	64	43.061667	-70.578333	4	40	6/5/1972 - 11/30/1972	Shipek
MS_57	65	43.068333	-70.551667	4	53	6/5/1972 - 11/30/1972	Shipek
MS_58	66	43.070000	-70.528333	4	53	6/5/1972 - 11/30/1972	Shipek
MS_59	70	43.105000	-70.611667	4	15	6/5/1972 - 11/30/1972	Shipek
MS_60	72	43.106667	-70.565000	4	31	6/5/1972 - 11/30/1972	Shipek
MS_61	75	43.090000	-70.498333	4	62	6/5/1972 - 11/30/1972	Shipek
MS_62	76	43.090000	-70.475000	4	62	6/5/1972 - 11/30/1972	Shipek
MS_63	77	43.090000	-70.451667	4	75	6/5/1972 - 11/30/1972	Shipek
MS_64	78	43.090000	-70.440000	4	75	6/5/1972 - 11/30/1972	Shipek

Mills Survey (1971) (2): Sediment Classifications and Grain Size Statistics

Sample ID	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Classification from Mean Phi (Wentworth)	Sorting (Gradistat)	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
MS_33	Sand	Sand	Fine Sand	Poorly Sorted	0.0	90.0	9.0	90.0	8.0	1.0	2.80	0.14	1.05	0.23		
MS_34	Sand	Sand	Fine Sand	Moderately Sorted	0.0	93.0	6.0	93.0	4.0	2.0	2.70	0.15	0.93	-0.15		
MS_35	Sandy Gravel		Coarse Sand	Poorly Sorted	47.0	52.0	1.0				0.90	0.54	1.08	0.01		
MS_36	Sand	Sand	Very Fine Sand	Well Sorted	0.0	92.0	8.0	92.0	5.0	3.0	3.20	0.11	0.47	0.14		
MS_37	Muddy Sand	Silty Sand	Very Fine Sand	Moderately Sorted	0.0	89.0	11.0	89.0	10.0	1.0	3.30	0.10	0.75	0.30		
MS_38	Muddy Sand		Very Fine Sand	Poorly Sorted	3.0	80.0	17.0	80.0	11.0	6.0	3.30	0.10	1.41	0.39		
MS_39	Muddy Sandy Gravel		Very Coarse Sand	Extremely Poorly Sorted	57.0	27.0	16.0				-0.80	1.74	4.20	0.58		
MS_40	Gravelly Muddy Sand		Medium Sand	Very Poorly Sorted	26.0	57.0	17.0				1.30	0.41	3.50	0.15		
MS_41	Gravelly Mud		Medium Silt	Very Poorly Sorted	11.0	23.0	66.0				5.50	0.02	3.76	0.05		
MS_42	Muddy Sand		Coarse Silt	Very Poorly Sorted	1.0	58.0	41.0	58.0	26.0	15.0	4.80	0.04	2.83	0.57		
MS_43	Sandy Mud	Sandy Mud	Fine Silt	Very Poorly Sorted	0.0	18.0	82.0	18.0	52.0	30.0	6.60	0.01	2.61	0.15		
MS_44	Sandy Gravel		Pebble Gravel	Very Poorly Sorted	78.0	19.0	3.0				-2.60	6.06	2.36	0.78		
MS_45	Muddy Sandy Gravel		Granule Gravel	Extremely Poorly Sorted	65.0	20.0	15.0				-1.40	2.64	4.18	0.91		
MS_46	Sandy Mud	Sandy Silt	Fine Silt	Very Poorly Sorted	0.0	14.0	86.0	14.0	66.0	20.0	6.20	0.01	2.17	-0.01		
MS_47	Muddy Sand	Muddy Sand	Very Fine Sand	Poorly Sorted	0.0	77.0	23.0	77.0	14.0	9.0	3.90	0.07	1.80	0.70		
MS_48	Sandy Mud	Sandy Mud	Medium Silt	Very Poorly Sorted	0.0	47.0	53.0	47.0	28.0	25.0	5.60	0.02	3.42	0.58		
MS_49	Sandy Gravel		Granule Gravel	Poorly Sorted	67.0	30.0	3.0				-1.80	3.48	1.72	0.34		
MS_50	Gravelly Sand		Coarse Sand	Poorly Sorted	13.0	83.0	4.0				0.80	0.57	1.69	0.12		
MS_51	Sand	Sand	Fine Sand	Moderately Well Sorted	0.0	97.0	3.0	97.0	2.0	1.0	2.30	0.20	0.65	0.11		
MS_52	Gravel		Pebble Gravel	Poorly Sorted	87.0	13.0	0.0				-2.70	6.50	1.34	0.42		
MS_53	Gravel		Pebble Gravel	Poorly Sorted	83.0	14.0	3.0				-2.50	5.66	1.63	0.72		
MS_54	Gravel		Pebble Gravel	Moderately Sorted	96.0	3.0	1.0				-3.00	8.00	0.84	0.53		
MS_55	Muddy Sandy Gravel		Granule Gravel	Very Poorly Sorted	63.0	30.0	7.0				-1.90	3.73	2.52	0.59		
MS_56	Muddy Sandy Gravel		Very Coarse Sand	Very Poorly Sorted	51.0	41.0	8.0				-0.70	1.62	3.10	0.31		
MS_57	Muddy Sand		Very Fine Sand	Poorly Sorted	3.0	72.0	25.0	72.0	23.0	2.0	3.50	0.09	1.58	0.47		
MS_58	Muddy Sandy Gravel		Very Coarse Sand	Very Poorly Sorted	45.0	45.0	10.0				-0.40	1.32	3.11	0.23		
MS_59	Muddy Sandy Gravel		Pebble Gravel	Very Poorly Sorted	79.0	17.0	4.0				-2.30	4.92	2.53	0.82		
MS_60	Sandy Gravel		Medium Sand	Very Poorly Sorted	61.0	35.0	4.0				1.00	0.50	2.51	0.47		
MS_61	Muddy Sand	Silty Sand	Very Fine Sand	Moderately Well Sorted	0.0	87.0	13.0	87.0	10.0	3.0	3.30	0.10	0.61	0.33		
MS_62	Muddy Sandy Gravel		Very Coarse Sand	Very Poorly Sorted	66.0	20.0	14.0				-0.90	1.87	3.67	0.69		
MS_63	Sandy Mud	Sandy Silt	Coarse Silt	Very Poorly Sorted	0.0	44.0	56.0	44.0	42.0	14.0	4.90	0.03	2.19	0.67		
MS_64	Muddy Sand	Silty Sand	Coarse Silt	Poorly Sorted	0.0	63.0	37.0	63.0	28.0	9.0	4.00	0.06	1.52	0.70		

Mills Survey (1971) (3): Identification, Location, and Description

Sample ID	Original Sample ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Sampler Type
MS_65	79	43.090000	-70.416667	4	81	6/5/1972 - 11/30/1972	Shipek
MS_66	80	43.090000	-70.388333	4	90	6/5/1972 - 11/30/1972	Shipek
MS_67	81	43.091667	-70.366667	4	93	6/5/1972 - 11/30/1972	Shipek
MS_68	Sta 2-1	43.075000	-70.396667	4	62	6/5/1972 - 11/30/1972	Shipek
MS_69	Sta 2-2	42.998333	-70.503333	4	85	6/5/1972 - 11/30/1972	Shipek
MS_70	Sta 2-3	42.983333	-70.458333	4	95	6/5/1972 - 11/30/1972	Shipek
MS_71	Sta 2-8	42.958333	-70.416667	4	107	6/5/1972 - 11/30/1972	Shipek
MS_72	Sta 2-9	42.963333	-70.461667	4	97	6/5/1972 - 11/30/1972	Shipek
MS_73	Sta 2-10	42.966667	-70.505000	4	87	6/5/1972 - 11/30/1972	Shipek
MS_74	Sta 4-1	43.111667	-70.388333	4	70	6/5/1972 - 11/30/1972	Shipek
MS_75	Sta 4-2	43.096667	-70.351667	4	117	6/5/1972 - 11/30/1972	Shipek
MS_76	Sta 7-6	43.036667	-70.385000	4	109	6/5/1972 - 11/30/1972	Shipek
MS_77	Sta 7-7	43.055000	-70.421667	4	101	6/5/1972 - 11/30/1972	Shipek
MS_78	Sta 7-8	43.051667	-70.336667	4	87	6/5/1972 - 11/30/1972	Shipek
MS_80	Sta 3	43.005000	-70.473333	4	91	6/5/1972 - 11/30/1972	Shipek
MS_81	Sta 4	43.020000	-70.461667	4	91	6/5/1972 - 11/30/1972	Shipek
MS_82	Sta 5	43.015000	-70.445000	4	94	6/5/1972 - 11/30/1972	Shipek
MS_83	Sta 6	43.006667	-70.421667	4	99	6/5/1972 - 11/30/1972	Shipek
MS_84	Sta 8	43.030000	-70.435000	4	91	6/5/1972 - 11/30/1972	Shipek
MS_85	Sta 9	43.034167	-70.453333	4	91	6/5/1972 - 11/30/1972	Shipek

Mills Survey (1971) (3): Sediment Classifications and Grain Size Statistics

Sample ID	Textural Group from %GSM (Gradistat)	Textural Group from %SZC (Gradistat)	Sediment Classification from Mean Phi (Wentworth)	Sorting (Gradistat)	Gravel %	Sand %	Mud %	Sand %	Silt %	Clay %	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI %
MS_65	Muddy Sand		Coarse Silt	Very Poorly Sorted	4.0	58.0	38.0	58.0	21.0	17.0	4.60	0.04	3.12	0.59		
MS_66	Sandy Mud	Sandy Mud	Fine Silt	Very Poorly Sorted	0.0	20.0	80.0	20.0	52.0	28.0	6.20	0.01	2.70	0.43		
MS_67	Muddy Gravel		Fine Silt	Extremely Poorly Sorted	41.0	7.0	52.0				6.70	0.01	5.15	0.74		
MS_68	Muddy Sand		Fine Sand	Very Poorly Sorted	5.0	78.0	17.0	78.0	9.0	8.0	2.70	0.15	2.48	0.43		
MS_69	Mud	Mud	Very Fine Silt	Very Poorly Sorted	0.0	7.0	93.0	7.0	54.0	39.0	7.10	0.01	2.94	0.32		
MS_70	Mud	Mud	Very Fine Silt	Very Poorly Sorted	0.0	4.0	96.0	4.0	57.0	39.0	7.30	0.01	3.04	0.48		
MS_71	Sandy Mud		Fine Silt	Very Poorly Sorted	2.0	17.0	81.0	17.0	50.0	31.0	6.60	0.01	3.29	0.27		
MS_72	Muddy Sand		Fine Sand	Poorly Sorted	3.0	84.0	13.0	84.0	7.0	6.0	2.50	0.18	1.93	0.32		
MS_73	Sandy Mud		Medium Silt	Very Poorly Sorted	1.0	39.0	60.0	39.0	39.0	21.0	5.40	0.02	3.13	0.43		
MS_74	Sandy Mud		Fine Silt	Very Poorly Sorted	1.0	15.0	84.0	15.0	53.0	31.0	6.70	0.01	2.74	0.46		
MS_75	Sandy Mud	Sandy Mud	Very Fine Silt	Very Poorly Sorted	0.0	12.0	88.0	12.0	46.0	42.0	7.50	0.01	3.33	0.18		
MS_76	Muddy Gravel		Medium Silt	Extremely Poorly Sorted	32.0	18.0	50.0				5.00	0.03	4.13	0.28		
MS_77	Sandy Mud		Medium Silt	Very Poorly Sorted	3.0	40.0	57.0	40.0	37.0	20.0	5.30	0.03	3.16	0.41		
MS_78	Muddy Sand		Medium Silt	Very Poorly Sorted	2.0	52.0	46.0	52.0	26.0	20.0	5.10	0.03	2.97	0.58		
MS_80	Mud	Mud	Fine Silt	Very Poorly Sorted	0.0	10.0	90.0	10.0	60.0	30.0	6.80	0.01	2.79	0.31		
MS_81	Mud	Mud	Very Fine Silt	Very Poorly Sorted	0.0	5.0	95.0	5.0	56.0	39.0	7.30	0.01	2.77	0.26		
MS_82	Mud	Mud	Very Fine Silt	Very Poorly Sorted	0.0	3.0	97.0	3.0	52.0	45.0	7.60	0.01	2.66	0.26		
MS_83	Sandy Mud	Sandy Mud	Fine Silt	Very Poorly Sorted	0.0	17.0	83.0	17.0	48.0	35.0	6.40	0.01	2.84	0.33		
MS_84	Sandy Mud	Sandy Mud	Fine Silt	Very Poorly Sorted	0.0	16.0	84.0	16.0	56.0	28.0	6.20	0.01	2.78	0.63		
MS_85	Gravelly Mud		Coarse Silt	Extremely Poorly Sorted	18.0	17.0	65.0				4.80	0.04	5.03	-0.12		

Appendix B: New Hampshire Continental Shelf 2016-2017 Field Campaign Station Locations

The stations sampled during the New Hampshire Continental Shelf 2016-2017 Field Campaign were targeted at locations where there was high-resolution bathymetry available and also where ground truth was most needed. The bathymetry includes MBES surveys conducted by the UNH CCOM/JHC Hydrographic Field Course (Ocean Engineering 972) (all GSH or SH), NOS surveys (NSBE), and lidar surveys by the USGS (Shoals) (**see Ward et al., 2021h**). Here, the stations are grouped by survey or location and year the bathymetry was run. The Station IDs indicate the type of survey (e.g., SH, GSH, Shoals) and/or location (NSBE), the year of the bathymetry survey (i.e., 06, 07, etc.), and the station number (e.g., T03, T04, etc. or S01, S02, etc.). The "Y" in the "Video Recorded" and "Sample Collected" columns indicates video or bottom sediment samples were taken at that station. The "Y" below the "Analyzed (Reported)" column indicates that grain size analysis was run on the sample and is available in the database. Not all samples were analyzed due to size or redundancy at a station.

The sediment grain size data and seafloor photographs from the New Hampshire Continental Shelf 2016-2017 Field Campaign are also available for viewing at the UNH CCOM/JHC web site: (https://maps.ccom.unh.edu/portal/apps/webappviewer/index.html?id=aecfde28e84340b49b45029e6418c02f)

The sediment grain size data for the New Hampshire Continental Shelf 2016-2017 Field Campaign is shown in Appendix C. The database ***New Hampshire Continental Shelf Geophysical Database: 2016-2017 Field Campaign - Stations and Sediment Data*** is also available as a Microsoft Excel file at the UNH Scholars Repository (https://dx.doi.org/10.34051/d/2021.2).

All stations with video had seafloor photographs extracted. The seafloor and sample photographs from each station where sediment samples were collected and analyzed are not included in this report due to the size of the databases, but are available at the UNH Scholars Repository: ***New Hampshire Continental Shelf Geophysical Database: 2016-2017 Field Campaign – Seafloor and Sample Photographs and Sediment Data*** (https://dx.doi.org/10.34051/d/2021.1) and ***New Hampshire Continental Shelf Geophysical Database: 2016-2017 Field Campaign – Seafloor Photographs*** (https://dx.doi.org/10.34051/d/2021.5).

Appendix B: *(continued)*

Station ID	Latitude WGS84	Longitude WGS84	Water Depth (m)	Sample Collected	Video Recorded	Sample Collected	Analyzed (Reported)
GSH06_T03	43.066875	-70.670733	11.0	8/1/2017	Y	Y	Y
GSH06_T04	43.071793	-70.660163	15.2	8/1/2017	Y	Y	Y
GSH06_T06	43.078768	-70.656497	10.0	8/1/2017	Y		
GSH06_T07	43.088600	-70.653268	8.5	8/1/2017	Y	Y	Y
Shoals07_S01	42.872299	-70.805992	9.4	10/13/2016	Y		
Shoals07_S02	42.868036	-70.810027	8.5	10/13/2016	Y	Y	Y
Shoals07_S03	42.868160	-70.803958	9.1	10/13/2016	Y		
Shoals07_S04	42.864090	-70.806587	14.6	10/13/2016	Y		
Shoals07_S05	42.861377	-70.806588	9.1	10/13/2016	Y		
Shoals07_S06	42.858927	-70.806217	15.8	10/13/2016	Y		
Shoals07_S07	42.855850	-70.807233	13.4	10/13/2016	Y	Y	Y
Shoals07_S08	42.855847	-70.803396	16.8	10/13/2016	Y	Y	Y
Shoals07_S09	42.854926	-70.805300	12.0	10/6/2016	Y	Y	Y
Shoals07_S09-2	42.854691	-70.805010	11.9	10/13/2016	Y		
Shoals07_S11	42.849072	-70.805784	13.4	10/6/2016	Y	Y	Y
Shoals07_S11-2	42.849118	-70.805506	12.2	10/13/2016	Y		
Shoals07_S12	42.846389	-70.805687	11.3	10/6/2016	Y		
Shoals07_S13	42.843429	-70.801355	15.2	10/6/2016	Y	Y	Y
Shoals07_S13-2	42.843243	-70.801207	14.0	10/13/2016	Y		
Shoals07_S14	42.829714	-70.805199	8.8	10/6/2016	Y	Y	Y
Shoals07_S14-3	42.829303	-70.805617	7.6	10/13/2016	Y		
GSH12_T01	43.061225	-70.665870	20.1	8/1/2017	Y		
GSH12_T02	43.065934	-70.661847	16.8	8/1/2017	Y		
GSH12_T03	43.062239	-70.659768	14.9	8/1/2017	Y		
GSH12_T05	43.054176	-70.655580	18.9	8/1/2017	Y		
GSH12_T06	43.050548	-70.655044	29.9	8/1/2017	Y	Y	Y
GSH12_T08	43.065093	-70.650458	12.8	8/1/2017	Y		
GSH12_T09	43.060070	-70.648875	20.7	7/19/2017	Y		
GSH12_T10	43.053340	-70.643997	26.8	7/19/2017	Y	Y	Y
GSH12_T11	43.047794	-70.642528	29.0	7/19/2017	Y		
GSH12_T12	43.044385	-70.635119	32.0	7/19/2017	Y	Y	Y

***Appendix B**: Continued*

Station ID	Latitude WGS84	Longitude WGS84	Water Depth (m)	Sample Collected	Video Recorded	Sample Collected	Analyzed (Reported)
GSH12_T13	43.074722	-70.651201	10.7	7/19/2017	Y		
GSH12_T14	43.068737	-70.643519	16.8	8/1/2017	Y		
GSH12_T15	43.063468	-70.640147	14.6	8/1/2017	Y		
GSH12_T16	43.050815	-70.631221	20.4	7/19/2017	Y		
GSH12_T17	43.062383	-70.631459	26.5	7/19/2017	Y	Y	Y
GSH12_T18	43.078743	-70.645144	15.2	8/1/2017	Y	Y	Y
GSH12_T19	43.082730	-70.646555	10.1	8/1/2017	Y		
GSH12_T20	43.082758	-70.650398	14.3	8/1/2017	Y	Y	Y
GSH12_T21	43.088377	-70.645729	18.3	8/1/2017	Y	Y	Y
GSH12_T22	43.091586	-70.650512	9.4	7/19/2017	Y	Y	Y
GSH12_T23	43.095915	-70.645111	12.2	7/19/2017	Y	Y	Y
GSH12_T24	43.089942	-70.655696	7.3	8/1/2017	Y	Y	Y
GSH12_T50	43.055388	-70.628376	30.5	7/19/2017	Y		
GSH12_T51	43.055253	-70.623333	33.2	7/19/2017	Y	Y	Y
GSH12_T52	43.056485	-70.632533	18.3	7/19/2017	Y		
SH12-01-A	43.048528	-70.649317	27.1	6/28/2012	Y	Y	
SH12-02	43.053003	-70.644819	23.5	6/28/2012	Y	Y	Y
SH12-03-A	43.052022	-70.641728	17.1	6/28/2012	Y		
SH12-03-B	43.051731	-70.641808	17.1	6/28/2012	Y		
SH12-03-C	43.052122	-70.641561	N/A	6/28/2012	Y		
SH12-04	43.048156	-70.639286	24.4	6/28/2012	Y	Y	Y
SH12-05	43.043894	-70.634703	32.6	6/28/2012	Y	Y	Y
SH12-06-A	43.050539	-70.632264	21.6	6/28/2012	Y		
SH12-06-B	43.050553	-70.632428	N/A	6/28/2012	Y		
SH12-07	43.050233	-70.629839	N/A	6/28/2012	Y		
SH12-08	43.052706	-70.624306	33.2	6/28/2012	Y	Y	
SH12-09	43.055544	-70.623825	33.5	6/28/2012	Y	Y	Y
SH12-10	43.061981	-70.649350	N/A	6/28/2012	Y	Y	
SH12-11	43.057017	-70.650367	N/A	6/28/2012	Y	Y	Y
SH12-12	43.094919	-70.639372	N/A	6/28/2012	Y	Y	Y
SH12-13	43.097294	-70.648036	10.1	6/28/2012	Y	Y	Y
SH12-14	43.096169	-70.646881	11.3	6/28/2012	Y	Y	Y
SH12-15-A	43.093869	-70.648525	8.2	6/28/2012	Y		
SH12-15-B	43.093020	-70.647627	13.7	6/28/2012	Y	Y	Y
SH12-16	43.091936	-70.651581	8.8	6/28/2012	Y	Y	Y
SH12-17	43.063233	-70.663283	22.6	6/28/2012	Y	Y	Y

***Appendix B**: Continued*

Station ID	Latitude WGS84	Longitude WGS84	Water Depth (m)	Sample Collected	Video Recorded	Sample Collected	Analyzed (Reported)
GSH13-T10	43.026381	-70.714468	11.0	7/17/2017	Y		
GSH13-T11	43.024318	-70.713641	13.4	7/17/2017	Y	Y	Y
GSH13-T13	43.022075	-70.719898	11.0	7/17/2017	Y	Y	Y
GSH13-T14	43.020354	-70.722841	9.4	7/17/2017	Y	Y	Y
GSH13-T15	43.017187	-70.719325	15.5	7/17/2017	Y	Y	Y
GSH13-T16	43.014625	-70.722427	13.4	7/17/2017	Y		
GSH13-T17	43.014386	-70.726680	8.5	7/17/2017	Y	Y	Y
GSH14_T12	42.992188	-70.726966	17.1	7/18/2017	Y		
GSH14_T14	42.983649	-70.738158	15.8	7/18/2017	Y	Y	Y
GSH14_T15	42.982267	-70.736127	18.9	7/18/2017	Y	Y	Y
GSH14_T16	42.978441	-70.736979	19.8	7/18/2017	Y	Y	Y
GSH14_T17	42.977165	-70.740457	19.5	11/1/2016	Y	Y	Y
GSH14_T18	42.974451	-70.743121	17.4	11/1/2016	Y		
GSH14_T19	42.972294	-70.745278	16.2	11/1/2016	Y		
GSH14_T20	42.974777	-70.749365	17.4	11/1/2016	Y	Y	Y
GSH14_T21	42.974018	-70.750086	15.8	7/18/2017	Y		
GSH14_T23	42.978113	-70.746629	15.8	11/1/2016	Y		
GSH14_T24	42.979850	-70.745290	14.9	7/18/2017	Y	Y	Y
GSH14_T25	42.981999	-70.745452	15.2	11/1/2016	Y		
GSH14_T27	42.986960	-70.743435	12.2	7/18/2017	Y		
GSH14_T35	42.979467	-70.742292	16.5	7/18/2017	Y	Y	Y
GSH14_T36	42.979925	-70.752487	8.2	7/18/2017	Y	Y	Y
SH14_BS-01A	42.972965	-70.743245	15.8	6/30/2014	Y		
SH14_BS-02	42.979475	-70.741855	18.3	6/30/2014	Y	Y	Y
SH14_BS-Extra	42.983121	-70.752974	8.1	6/30/2014	Y	Y	
SH14_BS-03A	42.983972	-70.736481	20.3	6/30/2014	Y	Y	Y
SH14_BS-03B	42.983936	-70.736288	20.9	6/30/2014	Y	Y	Y
SH14_BS-04A	42.990993	-70.731050	16.9	6/30/2014	Y	Y	
SH14_BS-04B	42.991207	-70.731278	16.8	6/30/2014	Y		
SH14_BS-05	42.996231	-70.740064	10.6	6/30/2014	Y	Y	Y
SH14_BS-06	42.995856	-70.728489	17.7	7/1/2014	Y	Y	Y
SH14_BS-07	43.000470	-70.727247	16.5	7/1/2014	Y	Y	Y
SH14_BS-08	43.000737	-70.722898	19.8	7/1/2014	Y	Y	Y
SH14_BS-09	43.006318	-70.720523	8.8	7/1/2014	Y	Y	Y
SH14_BS-10	43.008803	-70.714451	20.7	7/1/2014	Y	Y	Y
SH14_BS-11	42.996592	-70.727623	17.4	7/1/2014	Y	Y	
GSH15_T01	42.930871	-70.790805	7.6	11/1/2016	Y	Y	Y

***Appendix B**: Continued*

Station ID	Latitude WGS84	Longitude WGS84	Water Depth (m)	Sample Collected	Video Recorded	Sample Collected	Analyzed (Reported)
GSH15_T02	42.926577	-70.790042	8.8	11/1/2016	Y	Y	Y
GSH15_T04	42.943020	-70.777881	14.3	11/1/2016	Y		
GSH15_T05	42.947430	-70.775635	13.1	11/1/2016	Y	Y	Y
GSH15_T06	42.941297	-70.771655	15.2	11/1/2016	Y		
GSH15_T07	42.935006	-70.767757	21.9	10/6/2016	Y	Y	Y
GSH15_T08	42.932906	-70.773033	20.1	11/1/2016	Y	Y	Y
GSH15_T09	42.927505	-70.777355	18.3	11/1/2016	Y		
GSH15_T10	42.922464	-70.780157	15.8	10/6/2016	Y	Y	Y
GSH15_T12	42.924009	-70.786317	12.2	11/1/2016	Y		
GSH15_T14	42.944763	-70.761670	23.5	11/1/2016	Y	Y	Y
GSH15_T15	42.941103	-70.762389	82.0	11/1/2016	Y	Y	Y
GSH15_T17	42.951865	-70.764080	14.3	11/1/2016	Y		
GSH15_T18	42.957298	-70.767873	9.8	11/1/2016	Y		
GSH15_T19	42.955194	-70.761460	12.8	11/1/2016	Y		
GSH16-T01	43.045297	-70.697871	16.8	7/10/2017	Y	Y	Y
GSH16-T02	43.042899	-70.697748	17.1	7/10/2017	Y	Y	Y
GSH16-T03	43.041998	-70.694267	16.2	7/10/2017	Y	Y	Y
GSH16-T04	43.039079	-70.686425	21.3	7/10/2017	Y	Y	Y
GSH16-T05	43.035313	-70.683228	25.9	7/10/2017	Y	Y	Y
GSH16-T06	43.031908	-70.682273	27.7	7/10/2017	Y	Y	Y
GSH16-T07	43.026767	-70.677968	25.9	7/11/2017	Y	Y	Y
GSH16-T08	43.022048	-70.682323	23.5	7/11/2017	Y		
GSH16-T09	43.018776	-70.687632	18.3	7/11/2017	Y		
GSH16-T10	43.021826	-70.702667	8.8	7/11/2017	Y		
GSH16-T11	43.024464	-70.704939	18.9	7/11/2017	Y	Y	Y
GSH16-T12	43.025693	-70.710856	15.8	7/11/2017	Y	Y	Y
GSH16-T13	43.030201	-70.708662	16.5	7/11/2017	Y		
GSH16-T14	43.030153	-70.702878	17.7	7/11/2017	Y	Y	Y
GSH16-T15	43.031050	-70.698484	17.7	7/11/2017	Y	Y	Y
GSH16-T16	43.033065	-70.698736	16.8	7/11/2017	Y		
GSH16-T17	43.033956	-70.693845	18.3	7/11/2017	Y	Y	Y
GSH16-T18	43.036400	-70.695581	16.8	7/11/2017	Y	Y	Y
GSH16-TS06	42.855997	-70.794752	18.0	10/13/2016	Y	Y	Y
GSH16-TS09	42.857124	-70.799412	16.5	10/13/2016	Y	Y	Y
GSH16-TS10	42.853463	-70.799742	17.4	10/13/2016	Y	Y	Y
SH18-T01	43.110880	70.621355	25.0	7/9/2018	Y	Y	Y
SH18-T02	43.111675	70.624758	18.2	7/9/2018	Y	Y	

***Appendix B**: Continued*

Station ID	Latitude WGS84	Longitude WGS84	Water Depth (m)	Sample Collected	Video Recorded	Sample Collected	Analyzed (Reported)
SH18-T03	43.112021	70.617811	22.5	7/9/2018	Y	Y	
SH18-T04	43.115655	70.625815	13.6	7/9/2018	Y	Y	
SH18-T05	43.097957	70.635421	14.7	7/9/2018	Y	Y	
SH18-T06	43.098228	70.630833	14.7	7/9/2018	Y	Y	
SH18-T07	43.100331	70.629278	21.3	7/9/2018	Y	Y	Y
SH18-T08	43.098002	70.625083	22.3	7/9/2018	Y		
SH18-T09	43.095290	70.627049	20.0	7/9/2018	Y	Y	Y
SH18-T10	43.085579	70.636676	27.1	7/9/2018	Y	Y	Y
SH18-T11	43.078903	70.640364	13.9	7/9/2018	Y	Y	
SH18-T12	43.075575	70.638538	10.3	7/9/2018	Y		
NSBE-T01	42.968322	-70.660788	43.6	8/8/2017	Y	Y	Y
NSBE-T02	42.971764	-70.653901	40.5	8/8/2017	Y	Y	Y
NSBE-T03	42.976383	-70.643870	35.7	8/7/2017	Y	Y	Y
NSBE-T04	42.990159	-70.638573	20.7	8/7/2017	Y	Y	Y
NSBE-T05	42.986699	-70.645589	24.4	8/7/2017	Y	Y	Y
NSBE-T06	42.981125	-70.655257	26.8	8/7/2017	Y		
NSBE-T06a	42.980573	-70.655550	27.1	8/7/2017	Y	Y	Y
NSBE-T07	42.977264	-70.669788	24.7	8/7/2017	Y		
NSBE-T08	42.980381	-70.672999	21.0	8/7/2017	Y		
NSBE-T09a	42.981201	-70.677443	21.9	8/7/2017	Y		
NSBE-T10	42.976370	-70.678328	37.5	8/7/2017	Y	Y	Y
NSBE-T11	42.981649	-70.686066	30.8	8/8/2017	Y		
NSBE-T12	42.984786	-70.685358	32.3	8/8/2017	Y	Y	Y
NSBE-T13	42.987658	-70.660873	30.5	8/8/2017	Y	Y	Y
NSBE-T14	42.990282	-70.668139	26.8	8/8/2017	Y	Y	Y
NSBE-T15	42.991793	-70.674793	29.9	8/8/2017	Y	Y	Y
NSBE-T16	42.996550	-70.670892	33.5	8/8/2017	Y		
NSBE-T17	42.991445	-70.689473	19.5	8/16/2017	Y		
NSBE-T18	42.990468	-70.695505	17.4	8/16/2017	Y		
NSBE-T19	42.989167	-70.699695	21.3	8/8/2017	Y		
NSBE-T20	42.987371	-70.694519	25.3	8/8/2017	Y	Y	Y
NSBE-T21a	42.991405	-70.702695	27.4	8/8/2017	Y	Y	Y
NSBE-T22	43.001453	-70.657417	19.2	8/15/2017	Y		
NSBE-T23	43.005541	-70.668076	17.1	8/15/2017	Y		
NSBE-T24	43.011734	-70.676721	18.9	8/16/2017	Y		
NSBE-T25	43.009708	-70.664556	27.7	8/15/2017	Y		
NSBE-T26	43.003448	-70.672623	26.8	8/15/2017	Y		
NSBE-T27	43.015685	-70.676396	27.4	8/16/2017	Y		

***Appendix B**: Continued*

Station ID	Latitude WGS84	Longitude WGS84	Water Depth (m)	Sample Collected	Video Recorded	Sample Collected	Analyzed (Reported)
NSBE-T28	42.978978	-70.674840	19.8	8/15/2017	Y		
NSBE-T29	42.979621	-70.679554	26.5	8/15/2017	Y	Y	Y
NSBE-T30	42.985811	-70.671644	26.2	8/15/2017	Y	Y	Y
NSBE-T31	42.987403	-70.669282	33.5	8/15/2017	Y		
NSBE-T32	42.985106	-70.663309	34.7	8/15/2017	Y	Y	Y
NSBE-T33	42.984001	-70.673906	20.1	8/15/2017	Y		
NSBE-T34	42.982058	-70.702832	18.9	8/16/2017	Y		
NSBE-T35	42.990936	-70.712882	13.7	8/16/2017	Y		
NSBE-T36	42.995784	-70.710278	25.6	8/16/2017	Y	Y	Y
NSBE-T37	42.997882	-70.688657	14.3	8/16/2017	Y		
NSBE-T38	43.000245	-70.701154	14.6	8/16/2017	Y		
NSBE-T39	43.005076	-70.694332	23.5	8/16/2017	Y	Y	Y
NSBE-T40	42.973863	-70.698420	32.9	8/16/2017	Y	Y	Y
NSBE-T41	42.983621	-70.710607	16.8	8/16/2017	Y		
NSBE-T42	42.971760	-70.670194	37.2	8/16/2017	Y	Y	Y
NSBE-T43	43.007699	-70.664900	27.4	8/15/2017	Y		
NSBE-T45	43.026969	-70.648673	33.5	8/16/2017	Y	Y	Y
NSBE-T47	43.006194	-70.679682	26.8	8/16/2017	Y		
NSBE-T52	43.022767	-70.666995	21.6	8/16/2017	Y		
NSBE-T59	42.998502	-70.648205	27.4	8/15/2017	Y		
NSBE-T60	42.995995	-70.652881	21.9	8/15/2017	Y		
NSBE-T61	42.992317	-70.659907	30.2	8/16/2017	Y	Y	Y
NSBE-T62	42.985456	-70.653036	23.8	8/15/2017	Y	Y	Y
NSBE-T64	42.978964	-70.663495	25.6	8/15/2017	Y	Y	Y

Appendix C: New Hampshire Continental Shelf 2016-2017 Field Campaign: Grain Size Data

Sediment grain size data from the major field campaign conducted in 2016-2017 on the NH continental shelf are presented here, along with grain size data from the UNH Ocean Engineering 972 Hydrographic Field Course classes in 2012, 2014, and 2018. In total, thirteen one-day cruises provided 150 samples for grain size analysis.

This appendix provides complete descriptions for each sample including identification, station and sample characteristics, sediment classifications, grain size statistics, and grain size distribution. Samples were analyzed with standard sieve and pipette analyses after Folk (1980). The sediment grain size classifications include: CMECS (Coastal and Marine Ecological Classification Standard; FGDC, 2012); Gradistat (Blott and Pye, 2001); and Wentworth (Wentworth, 1922; described in Folk, 1954, 1980). Statistics are based on the phi scale and include the graphic mean, sorting, skewness, and kurtosis (Folk, 1980).

The grain size data is grouped by survey or location and year the bathymetry was run. The Station IDs indicate the type of survey (e.g., SH, GSH, Shoals) and/or location (NSBE), the year of the bathymetry survey (i.e., 06, 07, etc.), and the station number (e.g., T03, T04, etc. or S01, S02, etc.). If needed, the cruises are divided into separate sections [e.g., NSBE (1), NSBE (2), etc.]. Data for each cruise is spread across four pages, with each sample identified in the first column by the Sample ID. Each sample has a "Reliability Ranking for Positioning" which gives an estimate of the uncertainty of the location of the sample classified from 1 to 4. Explanation of uncertainty and the numbering system is given in "Positioning Uncertainty of Station Locations" and in Table 3.

The sediment grain size data and seafloor photographs from the New Hampshire Continental Shelf 2016-2017 Field Campaign are also available for viewing at the UNH CCOM/JHC web site: (https://maps.ccom.unh.edu/portal/apps/webappviewer/index.html?id=aecfde28e84340b49b45029e6418c02f).

The sediment grain size database ***New Hampshire Continental Shelf Geophysical Database: 2016-2017 Field Campaign - Stations and Sediment Data*** is also available as a Microsoft Excel file at the UNH Scholars Repository (https://dx.doi.org/10.34051/d/2021.2).

"Single sample summaries" presenting the grain size data along with photographs of the seafloor and the sediment samples are also available through the UNH Scholars Repository: ***New Hampshire Continental Shelf Geophysical Database: 2016-2017 Field Campaign – Seafloor and Sample Photographs and Sediment Data*** (https://dx.doi.org/10.34051/d/2021.1) .

Section 1: GSH12

GSH12: Identification, Location, and Description

Sample ID	Global Sample ID	Station ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Total Wt (gm)
GSH12-T06-S1	GSH12-T06-S1_8/7/2017	GSH12-T06	43.050548	-70.655044	1	29.9	8/7/2017	1071.1
GSH12-T06-S2	GSH12-T06-S2_8/7/2017	GSH12-T06	43.050665	-70.654846	1	29.3	8/7/2017	861.1
GSH12-T10-S1	GSH12-T10-S1_7/19/2017	GSH12-T10	43.053340	-70.643997	1	26.8	7/19/2017	301.2
GSH12-T10-S2	GSH12-T10-S2_7/19/2017	GSH12-T10	43.053312	-70.643906	1	26.5	7/19/2017	381.8
GSH12-T12-S1	GSH12-T12-S1_7/19/2017	GSH12-T12	43.044385	-70.635119	1	32.0	7/19/2017	259.0
GSH12-T12-S2	GSH12-T12-S2_7/19/2017	GSH12-T12	43.044436	-70.635434	1	32.0	7/19/2017	361.0
GSH12-T17-S1	GSH12-T17-S1_7/19/2017	GSH12-T17	43.062383	-70.631459	1	26.5	7/19/2017	307.1
GSH12-T17-S2	GSH12-T17-S2_7/19/2017	GSH12-T17	43.062393	-70.631335	1	26.8	7/19/2017	249.5
GSH12-T18-S1	GSH12-T18-S1_8/1/2017	GSH12-T18	43.078743	-70.645144	1	15.2	8/1/2017	336.7
GSH12-T18-S2	GSH12-T18-S2_8/1/2017	GSH12-T18	43.078727	-70.645136	1	15.2	8/1/2017	598.9
GSH12-T20-S1	GSH12-T20-S1_8/1/2017	GSH12-T20	43.082758	-70.650398	2	14.3	8/1/2017	305.2
GSH12-T20-S2	GSH12-T20-S2_8/1/2017	GSH12-T20	43.082805	-70.650454	1	13.7	8/1/2017	263.3
GSH12-T21-S1	GSH12-T21-S1_8/1/2017	GSH12-T21	43.088377	-70.645729	1	18.3	8/1/2017	458.9
GSH12-T21-S2	GSH12-T21-S2_8/1/2017	GSH12-T21	43.088509	-70.645753	1	18.3	8/1/2017	1068.9
GSH12-T22-S1	GSH12-T22-S1_7/19/2017	GSH12-T22	43.091586	-70.650512	1	9.4	7/19/2017	95.7
GSH12-T22-S2	GSH12-T22-S2_7/19/2017	GSH12-T22	43.091839	-70.651043	1	9.1	7/19/2017	89.3
GSH12-T23-S1	GSH12-T23-S1_7/19/2017	GSH12-T23	43.095915	-70.645111	1	12.2	7/19/2017	105.9
GSH12-T23-S2	GSH12-T23-S2_7/19/2017	GSH12-T23	43.096115	-70.645381	1	12.2	7/19/2017	89.4
GSH12-T24-S1	GSH12-T24-S1_8/1/2017	GSH12-T24	43.089942	-70.655696	1	7.3	8/1/2017	87.0
GSH12-T24-S2	GSH12-T24-S2_8/1/2017	GSH12-T24	43.089975	-70.655647	1	7.3	8/1/2017	111.2
GSH12-T51-S1	GSH12-T51-S1_7/19/2017	GSH12-T51	43.055253	-70.623333	1	33.2	7/19/2017	549.6
GSH12-T51-S2	GSH12-T51-S2_7/19/2017	GSH12-T51	43.055192	-70.623168	1	33.5	7/19/2017	411.4

GSH12: Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
GSH12-T06-S1	Gravel	Pebble Gravel	Gravel	Medium Gravel	Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
GSH12-T06-S2	Gravel	Pebble Gravel	Gravel	Very Coarse Gravel	Pebble Gravel	Medium Gravel	Pebble Gravel	Very Poorly Sorted
GSH12-T10-S1	Gravel	Pebble Gravel	Gravel	Medium Gravel	Pebble Gravel	Fine Gravel	Pebble Gravel	Poorly Sorted
GSH12-T10-S2	Gravel	Pebble Gravel	Gravel	Medium Gravel	Pebble Gravel	Medium Gravel	Pebble Gravel	Very Poorly Sorted
GSH12-T12-S1	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted
GSH12-T12-S2	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
GSH12-T17-S1	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
GSH12-T17-S2	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Fine Gravel	Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted
GSH12-T18-S1	Gravel	Pebble Gravel	Gravel	Coarse Gravel	Pebble Gravel	Medium Gravel	Pebble Gravel	Moderately Sorted
GSH12-T18-S2	Gravel	Pebble Gravel	Gravel	Coarse Gravel	Pebble Gravel	Medium Gravel	Pebble Gravel	Moderately Sorted
GSH12-T20-S1	Gravel	Pebble Gravel	Gravel	Coarse Gravel	Pebble Gravel	Coarse Gravel	Pebble Gravel	Poorly Sorted
GSH12-T20-S2	Gravel	Pebble Gravel	Gravel	Coarse Gravel	Pebble Gravel	Coarse Gravel	Pebble Gravel	Moderately Sorted
GSH12-T21-S1	Gravel	Pebble Gravel	Gravel	Medium Gravel	Pebble Gravel	Medium Gravel	Pebble Gravel	Very Poorly Sorted
GSH12-T21-S2	Gravel	Pebble Gravel	Gravel	Medium Gravel	Pebble Gravel	Medium Gravel	Pebble Gravel	Poorly Sorted
GSH12-T22-S1	Sand	Very Fine Sand	Sand	Very Fine Sand	Very Fine Sand	Very Fine Sand	Very Fine Sand	Well Sorted
GSH12-T22-S2	Sand	Very Fine Sand	Sand	Very Fine Sand	Very Fine Sand	Very Fine Sand	Very Fine Sand	Well Sorted
GSH12-T23-S1	Sand	Very Fine Sand	Sand	Very Fine Sand	Very Fine Sand	Very Fine Sand	Very Fine Sand	Well Sorted
GSH12-T23-S2	Sand	Very Fine Sand	Sand	Very Fine Sand	Very Fine Sand	Very Fine Sand	Very Fine Sand	Well Sorted
GSH12-T24-S1	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Well Sorted
GSH12-T24-S2	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Well Sorted
GSH12-T51-S1	Pebble Mixes	Silty-Clayey Sandy Pebble Gravel	Muddy Sandy Gravel	Muddy Sandy Fine Gravel	Muddy Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
GSH12-T51-S2	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted

GSH12: Grain Size Statistics

Sample ID	Gravel %	Pebble %	Granule %	Sand %	Mud %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI % 450° C
GSH12-T06-S1	80.11	77.08	3.03	17.85	2.04	1.27	0.77	B	-4.73	2.24	-5.09	34.13	-3.72	13.15	-2.69	6.47	2.55	0.58	1.41	N/A
GSH12-T06-S2	84.81	83.37	1.44	13.59	1.60	N/A	N/A	B	-5.38	2.24	-5.74	53.52	-4.06	16.71	-3.74	13.34	2.26	0.40	1.63	0.86
GSH12-T10-S1	84.31	83.75	0.56	15.09	0.60	N/A	N/A	U	-3.24	N/A	-3.24	9.47	-3.06	8.32	-2.80	6.97	1.31	0.54	2.58	0.73
GSH12-T10-S2	83.17	77.71	5.45	16.33	0.50	N/A	N/A	B	-5.24	-3.24	-5.29	39.23	-3.40	10.54	-3.14	8.80	2.11	0.30	1.04	0.46
GSH12-T12-S1	45.04	39.65	5.39	51.67	3.29	1.65	1.64	B	-3.24	1.75	-3.62	12.26	-0.20	1.15	-0.42	1.34	2.48	-0.08	0.57	0.64
GSH12-T12-S2	74.74	70.16	4.59	24.00	1.26	N/A	N/A	B	-3.74	2.24	-4.33	20.11	-3.18	9.09	-2.05	4.14	2.38	0.63	1.01	0.57
GSH12-T17-S1	60.62	51.29	9.32	38.31	1.07	N/A	N/A	B	-3.74	0.75	-4.10	17.14	-2.13	4.36	-1.67	3.18	2.19	0.30	0.66	0.55
GSH12-T17-S2	34.50	24.18	10.32	62.74	2.76	1.43	1.33	B	0.75	-3.24	-3.27	9.67	-0.01	1.01	-0.37	1.29	2.14	-0.22	0.87	0.82
GSH12-T18-S1	99.04	98.48	0.55	0.58	0.38	N/A	N/A	B	-4.73	-2.74	-4.80	27.80	-3.42	10.70	-3.59	12.06	0.90	-0.19	0.64	N/A
GSH12-T18-S2	97.99	94.83	3.16	1.69	0.32	N/A	N/A	U	-4.73	N/A	-4.78	27.46	-3.95	15.48	-3.87	14.65	0.86	0.26	1.03	N/A
GSH12-T20-S1	90.81	87.47	3.34	8.37	0.82	N/A	N/A	U	-5.24	N/A	-5.28	38.72	-4.29	19.62	-4.01	16.11	1.68	0.51	1.70	N/A
GSH12-T20-S2	96.32	95.20	1.12	3.10	0.58	N/A	N/A	U	-4.73	N/A	-5.30	39.26	-4.76	27.13	-4.69	25.75	0.76	0.41	2.91	N/A
GSH12-T21-S1	85.58	82.24	3.34	12.95	1.47	N/A	N/A	B	-3.74	-5.24	-5.17	36.08	-3.60	12.11	-3.38	10.44	2.10	0.38	2.22	0.67
GSH12-T21-S2	85.73	83.83	1.90	12.97	1.30	0.97	0.33	B	-3.74	-4.73	-4.87	29.32	-3.67	12.70	-3.44	10.82	1.90	0.45	2.26	N/A
GSH12-T22-S1	0.01	0.00	0.01	98.40	1.59	N/A	N/A	U	3.24	N/A	2.58	0.17	3.12	0.12	3.08	0.12	0.40	-0.03	0.98	0.49
GSH12-T22-S2	0.01	0.00	0.01	96.91	3.08	N/A	N/A	U	3.24	N/A	2.58	0.17	3.12	0.11	3.09	0.12	0.41	-0.01	1.02	0.75
GSH12-T23-S1	0.00	0.00	0.00	97.15	2.85	N/A	N/A	U	3.24	N/A	2.61	0.16	3.18	0.11	3.16	0.11	0.43	-0.01	1.08	0.61
GSH12-T23-S2	0.00	0.00	0.00	94.18	5.82	4.67	1.15	U	3.24	N/A	2.64	0.16	3.24	0.11	3.25	0.11	0.49	0.09	1.34	0.72
GSH12-T24-S1	0.15	0.00	0.15	99.10	0.75	N/A	N/A	U	2.74	N/A	2.48	0.18	2.82	0.14	2.86	0.14	0.37	0.08	1.11	0.45
GSH12-T24-S2	0.04	0.00	0.04	99.08	0.88	N/A	N/A	U	2.74	N/A	2.50	0.18	2.86	0.14	2.90	0.13	0.35	0.13	0.91	0.40
GSH12-T51-S1	69.54	52.43	17.11	27.18	3.28	1.85	1.43	U	-3.24	N/A	-3.49	11.27	-2.11	4.32	-1.51	2.86	2.05	0.45	1.05	0.67
GSH12-T51-S2	57.88	43.08	14.80	38.59	3.53	2.02	1.51	U	-2.24	N/A	-3.75	13.42	-1.57	2.97	-1.10	2.15	2.32	0.28	0.79	0.37

GSH12: Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0	Class % phi 5.0	Class % phi 6.0	Class % phi 7.0	Class % phi 8.0	Class % phi 9.0	Class % phi 10.0	Class % phi > 10.0
GSH12-T06-S1	0.00	12.91	21.45	4.27	20.70	10.25	5.09	2.41	1.73	1.31	1.29	1.09	1.29	2.24	2.65	2.87	3.11	2.26	0.66	0.39	N/A	0.60	0.31	0.19	0.17	0.16	0.14	0.47
GSH12-T06-S2	20.63	7.13	10.70	13.26	13.91	12.22	4.38	1.15	0.72	0.72	0.77	0.67	0.79	1.28	1.91	2.68	2.71	1.92	0.58	0.27	1.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH12-T10-S1	0.00	0.00	0.00	2.75	18.89	32.10	25.29	4.72	0.44	0.13	1.64	2.36	2.38	2.17	2.04	2.24	1.50	0.53	0.11	0.11	0.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH12-T10-S2	0.00	25.95	5.99	2.55	12.14	18.63	8.21	4.23	2.94	2.51	2.69	2.59	2.56	2.32	2.10	2.36	1.20	0.39	0.06	0.05	0.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH12-T12-S1	0.00	0.00	0.00	0.00	13.41	16.07	7.05	3.17	3.09	2.31	2.94	3.29	4.16	5.85	6.90	9.50	8.90	7.97	1.75	0.49	N/A	0.60	0.30	0.32	0.30	0.29	0.73	0.63
GSH12-T12-S2	0.00	0.00	6.08	12.25	20.17	18.49	9.11	4.05	2.36	2.22	2.26	1.67	1.74	2.76	3.31	4.16	3.92	3.31	0.66	0.21	1.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH12-T17-S1	0.00	0.00	0.00	12.56	16.29	12.71	4.74	5.00	4.89	4.44	5.38	5.17	5.84	6.87	5.49	5.14	3.11	0.92	0.23	0.16	1.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH12-T17-S2	0.00	0.00	0.00	5.47	1.59	6.73	5.89	4.50	4.92	5.41	7.46	8.28	9.71	11.20	9.07	8.59	5.61	2.05	0.46	0.31	N/A	0.43	0.35	0.34	0.31	0.32	0.36	0.64
GSH12-T18-S1	0.00	0.00	27.35	12.92	6.82	21.61	23.76	6.03	0.49	0.06	0.01	0.02	0.02	0.02	0.02	0.03	0.03	0.07	0.14	0.22	0.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH12-T18-S2	0.00	0.00	24.78	23.14	22.26	14.02	7.87	2.76	1.62	1.54	0.85	0.22	0.12	0.08	0.06	0.06	0.07	0.06	0.07	0.10	0.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH12-T20-S1	0.00	23.77	20.99	13.31	14.32	6.63	6.25	2.20	2.09	1.24	0.84	0.60	0.67	0.90	1.16	1.30	1.08	0.77	0.69	0.35	0.82	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH12-T20-S2	0.00	26.09	54.63	4.36	3.60	3.86	1.83	0.83	0.62	0.50	0.51	0.35	0.28	0.28	0.28	0.31	0.28	0.33	0.28	0.20	0.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH12-T21-S1	0.00	16.15	7.66	5.39	26.61	17.60	5.64	3.21	2.12	1.22	0.78	0.38	0.37	0.55	0.98	2.17	2.47	2.06	2.07	1.11	1.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH12-T21-S2	0.00	5.98	19.09	9.71	23.52	18.47	4.72	2.34	1.13	0.78	0.63	0.39	0.35	0.64	1.11	2.18	2.40	1.96	2.17	1.12	N/A	0.63	0.16	0.10	0.08	0.13	0.09	0.11
GSH12-T22-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.02	0.02	0.03	0.08	0.29	2.32	35.50	47.95	12.20	1.59	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH12-T22-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.03	0.09	0.30	2.28	34.94	47.48	11.77	3.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH12-T23-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.05	0.06	0.09	0.40	2.02	28.30	49.21	16.94	2.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH12-T23-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.04	0.07	0.12	0.19	0.42	1.79	22.99	48.63	19.86	N/A	4.30	0.18	0.08	0.10	0.13	0.21	0.82
GSH12-T24-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.04	0.03	0.02	0.04	0.12	0.25	1.73	7.17	61.30	25.63	2.80	0.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH12-T24-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.02	0.03	0.09	0.19	0.44	5.76	59.76	29.56	3.23	0.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH12-T51-S1	0.00	0.00	0.00	2.80	7.33	17.43	14.29	10.59	9.97	7.14	5.62	3.43	2.98	3.09	2.25	2.91	4.13	1.98	0.47	0.32	N/A	0.75	0.49	0.32	0.28	0.28	0.70	0.45
GSH12-T51-S2	0.00	0.00	0.00	6.63	6.83	13.24	8.31	8.07	8.33	6.47	6.53	5.06	4.81	4.86	3.50	4.20	6.13	2.64	0.53	0.34	N/A	0.80	0.63	0.33	0.27	0.28	0.61	0.61

Section 2: SH12, GSH06, and GSH13

SH12, GSH06, and GSH13: Identification, Location, and Description

Sample ID	Global Sample ID	Station ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Total Wt (gm)
SH12-02	SH12-02_6/28/2012	SH12-02	43.053003	-70.644819	1	23.5	6/28/2012	693.5
SH12-04	SH12-04_6/28/2012	SH12-04	43.048156	-70.639286	1	24.4	6/28/2012	696.9
SH12-05	SH12-05_6/28/2012	SH12-05	43.043894	-70.634703	1	32.6	6/28/2012	221.2
SH12-09	SH12-09_6/28/2012	SH12-09	43.055544	-70.623825	1	33.5	6/28/2012	324.9
SH12-11	SH12-11_6/28/2012	SH12-11	43.057017	-70.650367	1	N/A	6/28/2012	71.7
SH12-12	SH12-12_6/28/2012	SH12-12	43.094919	-70.639372	1	N/A	6/28/2012	280.4
SH12-13	SH12-13_6/28/2012	SH12-13	43.097294	-70.648036	1	10.1	6/28/2012	84.2
SH12-14	SH12-14_6/28/2012	SH12-14	43.096169	-70.646881	1	11.3	6/28/2012	99.8
SH12-15-B	SH12-15-B_6/28/2012	SH12-15-B	43.093020	-70.647627	1	13.7	6/28/2012	317.6
SH12-16	SH12-16_6/28/2012	SH12-16	43.091936	-70.651581	1	8.8	6/28/2012	132.6
SH12-17	SH12-17_6/28/2012	SH12-17	43.063233	-70.663283	1	22.6	6/28/2012	201.9
GSH06-T03-S1	GSH06-T03-S1_8/1/2017	GSH06-T03	43.066875	-70.670733	1	11.0	8/1/2017	79.8
GSH06-T04-S1	GSH06-T04-S1_8/1/2017	GSH06-T04	43.071793	-70.660163	1	15.2	8/1/2017	495.7
GSH06-T04-S2	GSH06-T04-S2_8/1/2017	GSH06-T04	43.071747	-70.660160	1	15.2	8/1/2017	334.8
GSH06-T07-S1	GSH06-T07-S1_8/1/2017	GSH06-T07	43.088600	-70.653268	1	8.5	8/1/2017	135.4
GSH06-T07-S2	GSH06-T07-S2_8/1/2017	GSH06-T07	43.088606	-70.653326	1	8.5	8/1/2017	98.3
GSH13-T11-S1	GSH13-T11-S1_7/17/2017	GSH13-T11	43.024318	-70.713641	1	13.4	7/17/2017	123.7
GSH13-T13-S1	GSH13-T13-S1_7/17/2017	GSH13-T13	43.022075	-70.719898	1	11.0	7/17/2017	144.4
GSH13-T14-S1	GSH13-T14-S1_7/17/2017	GSH13-T14	43.020354	-70.722841	1	9.4	7/17/2017	123.9
GSH13-T15-S1	GSH13-T15-S1_7/17/2017	GSH13-T15	43.017187	-70.719325	1	15.5	7/17/2017	281.5
GSH13-T15-S2	GSH13-T15-S2_7/17/2017	GSH13-T15	43.017226	-70.719428	1	15.5	7/17/2017	421.3
GSH13-T17-S1	GSH13-T17-S1_7/17/2017	GSH13-T17	43.014386	-70.726680	1	8.5	7/17/2017	89.5

SH12, GSH06, and GSH13: Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
SH12-02	Gravel	Pebble Gravel	Gravel	Coarse Gravel	Pebble Gravel	Medium Gravel	Pebble Gravel	Poorly Sorted
SH12-04	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Very Coarse Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
SH12-05	Pebble Mixes	Silty-Clayey Sandy Pebble Gravel	Muddy Sandy Gravel	Muddy Sandy Coarse Gravel	Muddy Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted
SH12-09	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
SH12-11	Gravel	Pebble Gravel	Gravel	Coarse Gravel	Pebble Gravel	Coarse Gravel	Pebble Gravel	Poorly Sorted
SH12-12	Gravel	Pebble Gravel	Gravel	Very Coarse Gravel	Pebble Gravel	Coarse Gravel	Pebble Gravel	Poorly Sorted
SH12-13	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Well Sorted
SH12-14	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Well Sorted
SH12-15-B	Gravel	Pebble Gravel	Gravel	Medium Gravel	Pebble Gravel	Fine Gravel	Pebble Gravel	Poorly Sorted
SH12-16	Sand	Very Fine Sand	Sand	Fine Sand	Fine Sand	Very Fine Sand	Very Fine Sand	Well Sorted
SH12-17	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
GSH06-T03-S1	Slightly Granuley	Slightly Granuley Very Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Very Fine Sand	Slightly Granular Very Fine Sand	Very Fine Sand	Very Fine Sand	Well Sorted
GSH06-T04-S1	Gravel	Pebble Gravel	Gravel	Very Coarse Gravel	Pebble Gravel	Coarse Gravel	Pebble Gravel	Poorly Sorted
GSH06-T04-S2	Gravel	Pebble Gravel	Gravel	Medium Gravel	Pebble Gravel	Fine Gravel	Pebble Gravel	Poorly Sorted
GSH06-T07-S1	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Medium Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Well Sorted
GSH06-T07-S2	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Well Sorted
GSH13-T11-S1	Slightly Granuley	Slightly Granuley Very Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Very Fine Sand	Slightly Granular Very Fine Sand	Very Fine Sand	Very Fine Sand	Well Sorted
GSH13-T13-S1	Slightly Granuley	Slightly Granuley Very Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Very Fine Sand	Slightly Granular Very Fine Sand	Fine Sand	Fine Sand	Well Sorted
GSH13-T14-S1	Slightly Granuley	Slightly Granuley Very Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Very Fine Sand	Slightly Granular Very Fine Sand	Fine Sand	Fine Sand	Well Sorted
GSH13-T15-S1	Gravel	Pebble Gravel	Gravel	Coarse Gravel	Pebble Gravel	Medium Gravel	Pebble Gravel	Poorly Sorted
GSH13-T15-S2	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
GSH13-T17-S1	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Well Sorted

SH12, GSH06, and GSH13: Grain Size Statistics

Sample ID	Gravel %	Pebble %	Granule %	Sand %	Mud %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI % 450° C
SH12-02	86.52	82.33	4.19	12.98	0.50	N/A	N/A	B	-5.24	-3.24	-5.25	38.08	-3.92	15.16	-3.55	11.69	1.80	0.42	1.23	0.82
SH12-04	64.43	58.59	5.84	33.87	1.70	N/A	N/A	P	-5.24	-3.24	-5.24	37.82	-2.98	7.87	-2.24	4.71	2.79	0.36	0.62	0.70
SH12-05	38.14	29.75	8.39	55.38	6.48	3.48	3.00	B	2.24	-4.73	-4.55	23.49	0.77	0.59	-0.02	1.01	3.04	-0.26	0.82	0.98
SH12-09	60.69	52.11	8.58	36.18	3.13	N/A	N/A	B	-4.73	2.24	-4.73	26.48	-2.17	4.50	-1.56	2.95	2.86	0.30	0.64	0.80
SH12-11	93.07	91.03	2.04	6.82	0.11	N/A	N/A	N/A	N/A	N/A	-4.83	28.48	-4.10	17.12	-4.01	16.14	1.05	0.40	1.79	N/A
SH12-12	91.86	89.53	2.33	7.76	0.38	N/A	N/A	N/A	N/A	N/A	-5.41	42.43	-5.07	33.59	-4.47	22.15	1.57	0.82	1.94	N/A
SH12-13	0.01	0.00	0.01	98.99	1.00	N/A	N/A	U	2.74	N/A	2.51	0.18	2.95	0.13	2.96	0.13	0.40	0.05	0.95	0.48
SH12-14	0.07	0.00	0.07	98.33	1.60	N/A	N/A	U	3.24	N/A	2.50	0.18	2.98	0.13	2.98	0.13	0.43	-0.01	1.04	0.52
SH12-15-B	85.82	79.66	6.17	13.45	0.73	N/A	N/A	U	-4.24	N/A	-4.39	20.91	-3.23	9.36	-2.97	7.83	1.85	0.46	1.84	2.16
SH12-16	0.00	0.00	0.00	98.62	1.38	N/A	N/A	U	2.74	N/A	2.55	0.17	3.00	0.12	3.00	0.12	0.38	0.10	0.90	0.47
SH12-17	63.46	52.96	10.50	35.32	1.22	N/A	N/A	B	-3.74	1.75	-3.96	15.53	-2.22	4.67	-1.54	2.91	2.27	0.39	0.61	0.63
GSH06-T03-S1	0.06	0.00	0.06	96.26	3.68	N/A	N/A	U	3.24	N/A	2.74	0.15	3.28	0.10	3.32	0.10	0.41	0.06	1.20	0.53
GSH06-T04-S1	90.52	88.56	1.97	9.08	0.40	N/A	N/A	N/A	N/A	N/A	-5.88	58.93	-5.50	45.10	-4.74	26.78	1.75	0.82	1.21	N/A
GSH06-T04-S2	80.35	67.19	13.17	18.94	0.71	N/A	N/A	N/A	N/A	N/A	-4.66	25.25	-3.04	8.23	-2.70	6.48	1.99	0.38	1.18	0.49
GSH06-T07-S1	0.69	0.69	0.00	98.83	0.48	N/A	N/A	U	2.74	N/A	2.46	0.18	2.82	0.14	2.87	0.14	0.38	0.06	1.10	0.44
GSH06-T07-S2	0.49	0.19	0.30	98.89	0.62	N/A	N/A	U	2.74	N/A	2.48	0.18	2.86	0.14	2.90	0.13	0.39	0.04	0.99	0.34
GSH13-T11-S1	0.01	0.00	0.01	97.64	2.35	N/A	N/A	U	3.24	N/A	2.53	0.17	3.06	0.12	3.03	0.12	0.41	-0.07	1.00	0.68
GSH13-T13-S1	0.03	0.00	0.03	97.21	2.76	N/A	N/A	U	3.24	N/A	2.32	0.20	3.03	0.12	2.99	0.13	0.50	-0.09	1.11	0.59
GSH13-T14-S1	0.07	0.00	0.07	98.03	1.90	N/A	N/A	U	3.24	N/A	2.32	0.20	3.04	0.12	2.99	0.13	0.49	-0.14	1.10	0.59
GSH13-T15-S1	91.95	90.06	1.90	7.38	0.67	N/A	N/A	U	-4.24	N/A	-4.72	26.32	-3.99	15.93	-3.78	13.75	1.35	0.54	2.07	N/A
GSH13-T15-S2	65.46	57.71	7.74	33.10	1.44	N/A	N/A	B	-4.73	2.74	-4.64	24.93	-2.72	6.58	-1.54	2.91	2.95	0.50	0.66	0.41
GSH13-T17-S1	0.04	0.00	0.04	98.63	1.33	N/A	N/A	U	2.74	N/A	2.48	0.18	2.94	0.13	2.95	0.13	0.43	0.01	1.03	0.43

SH12, GSH06, and GSH13: Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0	Class % phi 5.0	Class % phi 6.0	Class % phi 7.0	Class % phi 8.0	Class % phi 9.0	Class % phi 10.0	Class % phi > 10.0
SH12-02	0.00	21.37	14.14	13.01	9.73	14.44	6.46	3.18	2.22	1.97	2.44	2.54	2.51	2.07	1.28	1.07	0.63	0.29	0.08	0.07	0.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SH12-04	0.00	20.55	4.47	8.31	6.35	10.10	4.66	4.15	3.30	2.54	2.58	2.62	3.60	5.99	6.53	6.09	4.00	1.87	0.38	0.20	1.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SH12-05	0.00	0.00	11.61	0.00	5.13	5.46	3.12	4.44	4.48	3.91	4.00	3.12	2.88	3.41	5.00	10.18	11.99	10.90	2.83	1.07	N/A	1.63	0.74	0.58	0.52	0.55	0.50	1.94
SH12-09	0.00	0.00	19.66	0.00	13.30	7.84	5.33	5.98	4.58	4.00	2.93	1.65	1.93	4.45	5.64	5.84	6.88	4.66	1.53	0.67	3.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SH12-11	0.00	0.00	33.89	20.17	27.65	3.82	3.80	1.69	0.96	1.08	2.02	1.87	1.31	0.63	0.38	0.19	0.11	0.20	0.07	0.04	0.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SH12-12	0.00	60.96	0.00	12.85	7.32	2.75	3.27	2.38	1.15	1.18	0.92	0.59	0.56	1.03	1.49	1.55	0.74	0.42	0.30	0.16	0.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SH12-13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.06	0.16	0.83	5.97	47.69	38.15	6.10	1.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SH12-14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.06	0.02	0.01	0.08	0.31	0.73	1.60	5.08	44.06	39.89	6.54	1.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SH12-15-B	0.00	0.00	6.35	17.81	16.54	17.38	13.33	8.24	4.24	1.93	0.96	0.51	0.45	0.60	0.75	0.85	0.96	3.74	3.72	0.90	0.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SH12-16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.06	0.25	3.21	46.24	41.13	7.70	1.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SH12-17	0.00	0.00	0.00	8.15	21.88	11.15	5.36	6.41	5.64	4.86	4.18	3.07	3.06	4.54	6.82	9.06	2.80	0.78	0.60	0.42	1.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH06-T03-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.04	0.01	0.01	0.02	0.08	0.22	0.39	0.96	16.09	54.43	24.05	3.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH06-T04-S1	50.31	0.00	15.16	0.00	8.86	9.05	3.52	1.64	1.18	0.79	0.78	0.95	1.54	1.96	1.58	0.85	0.38	0.38	0.46	0.19	0.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH06-T04-S2	0.00	0.00	15.42	3.46	16.37	16.12	9.37	6.45	6.93	6.24	5.24	2.93	1.81	1.62	1.41	1.42	1.15	1.25	1.41	0.70	0.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH06-T07-S1	0.00	0.00	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.00	0.01	0.07	0.09	0.22	0.47	1.33	7.37	59.67	26.99	2.61	0.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH06-T07-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.26	0.05	0.03	0.06	0.10	0.28	0.55	1.09	7.31	54.51	30.80	4.17	0.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH13-T11-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.14	0.16	0.24	0.42	0.90	3.88	37.82	47.81	6.19	2.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH13-T13-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.04	0.07	0.23	0.69	2.85	9.05	34.92	40.26	9.09	2.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH13-T14-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.03	0.08	0.13	0.42	0.72	2.67	8.86	33.80	42.50	8.82	1.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH13-T15-S1	0.00	0.00	18.96	30.84	16.69	14.88	6.33	2.35	0.96	0.93	0.73	0.70	0.68	0.76	0.69	0.82	0.63	1.02	0.97	0.36	0.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH13-T15-S2	0.00	0.00	14.59	7.81	13.53	10.86	5.83	5.09	4.06	3.69	3.16	1.99	1.88	2.05	2.08	3.58	3.58	7.32	5.95	1.52	1.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH13-T17-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.09	0.20	0.46	0.44	1.25	7.26	45.84	37.04	6.00	1.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Section 3: GSH14 and SH14

GSH14 and SH14: Identification, Location, and Description

Sample ID	Global Sample ID	Station ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Total Wt (gm)
GSH14-T14-S1	GSH14-T14-S1_7/18/2017	GSH14-T14	42.983649	-70.738158	1	15.8	7/18/2017	581.6
GSH14-T14-S2	GSH14-T14-S2_7/18/2017	GSH14-T14	42.983600	-70.738090	1	15.8	7/18/2017	357.8
GSH14-T15-S1	GSH14-T15-S1_7/18/2017	GSH14-T15	42.982267	-70.736127	1	18.9	7/18/2017	157.9
GSH14-T16-S1	GSH14-T16-S1_7/18/2017	GSH14-T16	42.978441	-70.736979	1	19.8	7/18/2017	166.0
GSH14-T17-S1	GSH14-T17-S1_11/1/2016	GSH14-T17	42.977165	-70.740457	1	19.5	11/1/2016	45.5
GSH14-T17-S2	GSH14-T17-S2_11/1/2016	GSH14-T17	42.977288	-70.740452	1	19.2	11/1/2016	255.1
GSH14-T20-S2	GSH14-T20-S2_11/1/2016	GSH14-T20	42.974750	-70.748936	1	18.0	11/1/2016	176.0
GSH14-T24-S1	GSH14-T24-S1_7/18/2017	GSH14-T24	42.979850	-70.745290	1	14.9	7/18/2017	93.9
GSH14-T35-S1	GSH14-T35-S1_7/18/2017	GSH14-T35	42.979467	-70.742292	1	16.5	7/18/2017	114.7
GSH14-T36-S1	GSH14-T36-S1_7/18/2017	GSH14-T36	42.979925	-70.752487	1	8.2	7/18/2017	137.8
SH14-BS-02	SH14_BS-02_6/30/2014	SH14-BS-02	42.979475	-70.741855	1	18.3	6/30/2014	36.7
SH14-BS-03A	SH14_BS-03A_6/30/2014	SH14-BS-03A	42.983972	-70.736481	1	20.3	6/30/2014	484.1
SH14-BS-03B	SH14_BS-03B_6/30/2014	SH14-BS-03B	42.983936	-70.736288	1	20.9	6/30/2014	385.9
SH14-BS-05	SH14_BS-05_6/30/2014	SH14-BS-05	42.996231	-70.740064	1	10.6	6/30/2014	100.2
SH14-BS-06	SH14_BS-06_7/1/2014	SH14-BS-06	42.995856	-70.728489	1	17.7	7/1/2014	149.1
SH14-BS-07	SH14_BS-07_7/1/2014	SH14-BS-07	43.000470	-70.727247	1	16.5	7/1/2014	130.5
SH14-BS-08	SH14_BS-08_7/1/2014	SH14-BS-08	43.000737	-70.722898	1	19.8	7/1/2014	174.5
SH14-BS-09	SH14_BS-09_7/1/2014	SH14-BS-09	43.006318	-70.720523	1	8.8	7/1/2014	390.5
SH14-BS-10	SH14_BS-10_7/1/2014	SH14-BS-10	43.008803	-70.714451	1	20.7	7/1/2014	112.0

GSH14 and SH14: Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
GSH14-T14-S1	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
GSH14-T14-S2	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Fine Gravel	Pebble Gravel	Poorly Sorted
GSH14-T15-S1	Pebbly	Pebbly Sand	Gravelly Sand	Fine Gravelly Very Fine Sand	Pebbly Very Fine Sand	Fine Sand	Fine Sand	Poorly Sorted
GSH14-T16-S1	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Medium Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Moderately Sorted
GSH14-T17-S1	Slightly Pebbly	Slightly Pebbly Muddy Fine Sand	Slightly Gravelly Muddy Sand	Slightly Fine Gravelly Muddy Fine Sand	Slightly Pebbly Muddy Fine Sand	Fine Sand	Fine Sand	Poorly Sorted
GSH14-T17-S2	Pebbly	Pebbly Fine Sand	Gravelly Sand	Medium Gravelly Fine Sand	Pebbly Fine Sand	Fine Sand	Fine Sand	Poorly Sorted
GSH14-T20-S2	Slightly Granuley	Slightly Granuley Silty Very Fine Sand	Slightly Gravelly Muddy Sand	Slightly Very Fine Gravelly Very Coarse Silty Very Fine Sand	Slightly Granular Very Coarse Silty Very Fine Sand	Very Fine Sand	Very Fine Sand	Poorly Sorted
GSH14-T24-S1	Slightly Granuley	Slightly Granuley Very Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Very Fine Sand	Slightly Granular Very Fine Sand	Fine Sand	Fine Sand	Moderately Sorted
GSH14-T35-S1	Slightly Granuley	Slightly Granuley Silty Fine Sand	Slightly Gravelly Muddy Sand	Slightly Very Fine Gravelly Very Coarse Silty Very Fine Sand	Slightly Granular Very Coarse Silty Fine Sand	Very Fine Sand	Very Fine Sand	Poorly Sorted
GSH14-T36-S1	Slightly Pebbly	Slightly Pebbly Very Fine Sand	Slightly Gravelly Sand	Slightly Fine Gravelly Very Fine Sand	Slightly Pebbly Very Fine Sand	Very Fine Sand	Very Fine Sand	Moderately Well Sorted
SH14-BS-02	Slightly Granuley	Slightly Granuley Silty Very Fine Sand	Slightly Gravelly Muddy Sand	Slightly Very Fine Gravelly Very Coarse Silty Very Fine Sand	Slightly Granular Very Coarse Silty Very Fine Sand	Very Fine Sand	Very Fine Sand	Poorly Sorted
SH14-BS-03A	Gravel	Pebble Gravel	Gravel	Medium Gravel	Pebble Gravel	Medium Gravel	Pebble Gravel	Poorly Sorted
SH14-BS-03B	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
SH14-BS-05	Sand	Very Fine Sand	Sand	Well Sorted Very Fine Sand	Very Fine Sand	Very Fine Sand	Very Fine Sand	Well Sorted
SH14-BS-06	Slightly Pebbly	Slightly Pebbly Very Fine Sand	Slightly Gravelly Sand	Slightly Medium Gravelly Very Fine Sand	Slightly Pebbly Very Fine Sand	Very Fine Sand	Very Fine Sand	Moderately Well Sorted
SH14-BS-07	Pebbly	Pebbly Very Fine Sand	Gravelly Sand	Medium Gravelly Very Fine Sand	Pebbly Very Fine Sand	Fine Sand	Fine Sand	Poorly Sorted
SH14-BS-08	Pebbly	Pebbly Fine Sand	Gravelly Sand	Medium Gravelly Fine Sand	Pebbly Fine Sand	Coarse Sand	Coarse Sand	Very Poorly Sorted
SH14-BS-09	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted
SH14-BS-10	Pebbly	Pebbly Very Fine Sand	Gravelly Sand	Medium Gravelly Very Fine Sand	Pebbly Very Fine Sand	Medium Sand	Medium Sand	Very Poorly Sorted

GSH14 and SH14: Grain Size Statistics

Sample ID	Gravel %	Pebble %	Granule %	Sand %	Mud %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI % 450° C
GSH14-T14-S1	60.12	53.62	6.50	38.50	1.38	N/A	N/A	T	-3.74	-0.24	-4.20	18.39	-2.40	5.26	-1.83	3.57	2.36	0.41	0.82	0.59
GSH14-T14-S2	68.21	57.99	10.22	31.18	0.61	N/A	N/A	B	-3.74	-0.24	-4.69	25.78	-2.90	7.44	-2.54	5.80	1.88	0.26	0.68	0.32
GSH14-T15-S1	6.84	5.22	1.62	88.39	4.77	3.57	1.20	U	3.24	N/A	0.61	0.66	2.79	0.14	2.59	0.17	1.37	-0.47	2.04	0.65
GSH14-T16-S1	2.60	2.49	0.10	95.91	1.49	N/A	N/A	U	2.74	N/A	1.35	0.39	2.52	0.17	2.46	0.18	0.80	-0.20	1.01	0.40
GSH14-T17-S1	1.86	1.73	0.14	84.90	13.24	N/A	N/A	U	2.24	N/A	1.36	0.39	2.55	0.17	2.63	0.16	1.91	0.37	2.70	1.78
GSH14-T17-S2	6.84	6.23	0.61	88.60	4.56	3.36	1.20	U	3.24	N/A	1.11	0.46	2.61	0.16	2.54	0.17	1.43	-0.36	2.17	0.50
GSH14-T20-S2	0.03	0.00	0.03	58.08	41.89	37.62	4.27	U	3.24	N/A	2.91	0.13	3.81	0.07	3.94	0.07	1.14	0.33	1.41	1.44
GSH14-T24-S1	1.83	0.88	0.95	92.94	5.23	4.24	0.99	U	3.24	N/A	1.52	0.35	2.84	0.14	2.69	0.15	0.89	-0.24	1.08	0.62
GSH14-T35-S1	0.39	0.09	0.30	78.26	21.35	19.56	1.79	U	3.24	N/A	2.09	0.24	3.31	0.10	3.39	0.10	1.04	0.11	1.50	0.88
GSH14-T36-S1	0.48	0.48	0.00	96.22	3.30	N/A	N/A	U	3.24	N/A	2.50	0.18	3.14	0.11	3.10	0.12	0.53	-0.17	1.30	0.49
SH14-BS-02	0.05	0.00	0.05	73.00	26.95	22.70	4.25	U	3.24	N/A	2.03	0.24	3.34	0.10	3.43	0.09	1.37	0.24	1.53	N/A
SH14-BS-03A	88.03	81.23	6.79	11.00	0.97	N/A	N/A	U	-4.24	N/A	-4.36	20.49	-3.37	10.33	-3.09	8.49	1.61	0.49	1.69	N/A
SH14-BS-03B	70.08	57.19	12.89	28.48	1.44	N/A	N/A	U	-3.74	N/A	-3.75	13.47	-2.41	5.32	-1.79	3.45	2.08	0.50	0.97	0.37
SH14-BS-05	0.00	0.00	0.00	93.47	6.53	5.97	0.56	U	3.24	N/A	2.72	0.15	3.25	0.10	3.28	0.10	0.47	0.15	1.64	0.64
SH14-BS-06	2.62	1.90	0.72	92.60	4.78	3.13	1.65	U	3.24	N/A	2.26	0.21	3.09	0.12	3.03	0.12	0.67	-0.31	1.90	0.71
SH14-BS-07	6.24	5.52	0.72	88.76	5.00	3.52	1.48	U	3.24	N/A	1.78	0.29	3.02	0.12	2.90	0.13	1.31	-0.49	3.24	0.73
SH14-BS-08	29.57	25.72	3.85	67.08	3.35	N/A	N/A	B	3.24	-3.74	-3.64	12.44	2.11	0.23	0.72	0.61	2.79	-0.61	0.62	0.75
SH14-BS-09	43.47	37.10	6.36	54.55	1.98	N/A	N/A	B	-3.74	1.75	-3.84	14.30	0.08	0.95	-0.25	1.19	2.71	-0.01	0.58	0.61
SH14-BS-10	17.36	15.51	1.84	78.24	4.40	2.99	1.41	B	3.24	-3.24	-3.02	8.09	2.92	0.13	1.52	0.35	2.42	-0.76	1.82	0.70

GSH14 and SH14: Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0	Class % phi 5.0	Class % phi 6.0	Class % phi 7.0	Class % phi 8.0	Class % phi 9.0	Class % phi 10.0	Class % phi > 10.0
GSH14-T14-S1	0.00	0.00	2.84	12.24	15.61	13.36	5.12	4.44	3.43	3.07	4.73	8.10	7.95	4.24	2.24	1.34	1.06	2.90	4.78	1.16	1.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH14-T14-S2	0.00	0.00	17.02	0.00	22.02	10.08	4.26	4.60	4.43	5.79	9.06	11.44	6.98	1.47	0.32	0.17	0.13	0.38	0.85	0.38	0.61	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH14-T15-S1	0.00	0.00	0.00	0.00	0.00	1.04	2.85	1.32	0.84	0.78	1.01	0.88	0.97	1.35	3.30	9.64	11.67	23.93	28.60	7.04	N/A	2.85	0.39	0.18	0.14	0.14	0.18	0.87
GSH14-T16-S1	0.00	0.00	0.00	0.00	1.34	0.92	0.23	0.00	0.09	0.01	0.08	0.24	0.71	2.24	5.84	14.85	21.24	26.20	21.51	3.00	1.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH14-T17-S1	0.00	0.00	0.00	0.00	0.00	0.00	1.67	0.05	0.00	0.14	0.21	0.45	0.83	2.44	5.82	15.61	20.85	12.60	20.91	5.18	N/A	2.20	1.78	1.30	1.09	0.77	0.83	5.08
GSH14-T17-S2	0.00	0.00	0.00	0.00	3.46	0.96	0.75	1.06	0.23	0.38	0.30	0.34	0.51	1.21	3.59	13.01	19.39	18.89	24.66	6.69	N/A	2.70	0.41	0.12	0.13	0.11	0.21	0.89
GSH14-T20-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.09	0.07	0.05	0.11	0.25	0.97	2.44	7.24	23.67	23.17	N/A	28.87	6.86	1.11	0.77	0.73	1.02	2.52
GSH14-T24-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.75	0.20	0.41	0.56	0.77	1.54	4.21	11.65	14.81	20.60	28.86	9.53	N/A	3.69	0.30	0.14	0.11	0.15	0.24	0.59
GSH14-T35-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.20	0.10	0.28	0.27	0.36	0.63	1.69	5.11	7.11	12.75	32.33	17.74	N/A	14.67	4.21	0.41	0.27	0.33	0.50	0.96
GSH14-T36-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.03	0.08	0.24	0.59	1.21	2.56	3.68	27.25	45.66	14.93	3.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SH14-BS-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.10	0.17	0.18	0.43	1.53	6.89	10.16	12.46	25.40	15.69	N/A	17.22	3.79	1.05	0.64	0.65	0.59	3.01
SH14-BS-03A	0.00	0.00	3.96	22.83	18.63	19.15	10.43	6.23	4.16	2.64	1.99	1.33	1.13	0.97	0.85	0.84	0.83	1.13	1.42	0.52	0.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SH14-BS-03B	0.00	0.00	0.00	0.00	20.71	17.34	10.66	8.48	6.82	6.07	5.39	3.95	3.54	3.43	2.98	2.46	1.82	2.01	2.16	0.74	1.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SH14-BS-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.02	0.02	0.07	0.28	0.97	18.78	55.60	17.68	N/A	5.46	0.32	0.10	0.09	0.03	0.10	0.43
SH14-BS-06	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.67	0.18	0.53	0.43	0.46	0.66	0.80	0.96	1.72	4.24	29.44	45.88	8.01	N/A	2.05	0.51	0.29	0.29	0.22	0.24	1.19
SH14-BS-07	0.00	0.00	0.00	0.00	0.00	2.93	2.34	0.24	0.53	0.19	0.08	0.13	0.16	0.29	0.81	4.11	10.36	26.69	34.88	11.25	N/A	2.56	0.54	0.25	0.18	0.18	0.25	1.05
SH14-BS-08	0.00	0.00	0.00	4.45	7.87	6.24	3.98	3.18	1.95	1.90	1.71	1.21	1.09	1.62	3.20	8.56	12.54	15.43	17.23	4.48	3.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SH14-BS-09	0.00	0.00	0.00	6.48	11.20	10.31	5.60	3.51	3.23	3.14	3.10	2.95	3.16	3.92	5.59	9.71	8.15	8.28	7.86	1.82	1.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SH14-BS-10	0.00	0.00	0.00	0.00	4.17	6.03	3.52	1.79	1.19	0.66	0.89	0.76	0.79	1.10	2.42	5.47	6.20	17.65	34.79	8.15	N/A	2.19	0.43	0.21	0.16	0.21	0.22	0.98

Section 4: GSH15

GSH15: Identification, Location, and Description

Sample ID	Global Sample ID	Station ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Total Wt (gm)
GSH15-T01-S1	GSH15-T01-S1_11/1/2016	GSH15-T01	42.930871	-70.790805	1	7.6	11/1/2016	210.6
GSH15-T01-S2	GSH15-T01-S2_11/1/2016	GSH15-T01	42.930622	-70.791069	1	7.6	11/1/2016	21.5
GSH15-T02-S1	GSH15-T02-S1_11/1/2016	GSH15-T02	42.926577	-70.790042	1	8.8	11/1/2016	79.5
GSH15-T02-S2	GSH15-T02-S2_11/1/2016	GSH15-T02	42.926825	-70.790057	1	8.8	11/1/2016	62.5
GSH15-T05-S1	GSH15-T05-S1_11/1/2016	GSH15-T05	42.947430	-70.775635	1	13.1	11/1/2016	119.0
GSH15-T05-S2	GSH15-T05-S2_11/1/2016	GSH15-T05	42.947053	-70.775637	1	13.7	11/1/2016	59.3
GSH15-T07-S1	GSH15-T07-S1_10/6/2016	GSH15-T07	42.935006	-70.767757	1	21.9	10/6/2016	270.6
GSH15-T07-S2	GSH15-T07-S2_10/6/2016	GSH15-T07	42.935032	-70.768204	1	21.9	10/6/2016	294.3
GSH15-T08-S1	GSH15-T08-S1_11/1/2016	GSH15-T08	42.932906	-70.773033	1	20.1	11/1/2016	207.0
GSH15-T08-S2	GSH15-T08-S2_11/1/2016	GSH15-T08	42.932895	-70.772589	1	20.1	11/1/2016	156.5
GSH15-T10-S1	GSH15-T10-S1_10/6/2016	GSH15-T10	42.922464	-70.780157	1	15.8	10/6/2016	157.9
GSH15-T10-S2	GSH15-T10-S2_10/6/2016	GSH15-T10	42.922273	-70.779691	1	15.8	10/6/2016	191.9
GSH15-T14-S2	GSH15-T14-S2_11/1/2016	GSH15-T14	42.944854	-70.761584	1	23.8	11/1/2016	102.6
GSH15-T15-S1	GSH15-T15-S1_11/1/2016	GSH15-T15	42.941103	-70.762389	1	25.0	11/1/2016	335.3
GSH15-T15-S2	GSH15-T15-S2_11/1/2016	GSH15-T15	42.941348	-70.762455	1	25.0	11/1/2016	193.5

GSH15: Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
GSH15-T01-S1	Slightly Granuley	Slightly Granuley Very Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Very Fine Sand	Slightly Granular Very Fine Sand	Very Fine Sand	Very Fine Sand	Well Sorted
GSH15-T01-S2	Slightly Pebbly	Slightly Pebbly Very Fine Sand	Slightly Gravelly Sand	Slightly Fine Gravelly Very Fine Sand	Slightly Pebbly Very Fine Sand	Very Fine Sand	Very Fine Sand	Well Sorted
GSH15-T02-S1	Sand	Fine Sand	Sand	Fine Sand	Fine Sand	Fine Sand	Fine Sand	Well Sorted
GSH15-T02-S2	Sand	Very Fine Sand	Sand	Very Fine Sand	Very Fine Sand	Very Fine Sand	Very Fine Sand	Well Sorted
GSH15-T05-S1	Sand	Very Fine Sand	Sand	Very Fine Sand	Very Fine Sand	Very Fine Sand	Very Fine Sand	Moderately Well Sorted
GSH15-T05-S2	Sand	Very Fine Sand	Sand	Very Fine Sand	Very Fine Sand	Very Fine Sand	Very Fine Sand	Moderately Well Sorted
GSH15-T07-S1	Granuley	Granuley Very Coarse Sand	Gravelly Sand	Very Fine Gravelly Very Coarse Sand	Granular Very Coarse Sand	Very Coarse Sand	Very Coarse Sand	Moderately Sorted
GSH15-T07-S2	Slightly Granuley	Slightly Granuley Coarse Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Coarse Sand	Slightly Granular Coarse Sand	Coarse Sand	Coarse Sand	Moderately Well Sorted
GSH15-T08-S1	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Moderately Sorted
GSH15-T08-S2	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Moderately Sorted
GSH15-T10-S1	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Fine Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Moderately Well Sorted
GSH15-T10-S2	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Moderately Well Sorted
GSH15-T14-S2	Pebbly	Pebbly Silty Very Fine Sand	Gravelly Muddy Sand	Coarse Gravelly Very Coarse Silty Very Fine Sand	Pebbly Very Coarse Silty Very Fine Sand	Fine Sand	Fine Sand	Poorly Sorted
GSH15-T15-S1	Granule Mixes	Sandy Granule Gravel	Sandy Gravel	Sandy Very Fine Gravel	Sandy Granule	Very Coarse Sand	Very Coarse Sand	Poorly Sorted
GSH15-T15-S2	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Fine Gravel	Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted

GSH15: Grain Size Statistics

Sample ID	Gravel %	Pebble %	Granule %	Sand %	Mud %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI % 450° C
GSH15-T01-S1	0.08	0.00	0.08	97.66	2.26	N/A	N/A	U	3.24	N/A	2.60	0.17	3.18	0.11	3.12	0.11	0.39	-0.11	1.20	0.50
GSH15-T01-S2	1.45	0.74	0.71	96.19	2.36	N/A	N/A	U	3.24	N/A	2.52	0.17	3.19	0.11	3.12	0.12	0.47	-0.26	1.64	0.54
GSH15-T02-S1	0.00	0.00	0.00	98.70	1.30	N/A	N/A	U	3.24	N/A	2.38	0.19	2.95	0.13	2.95	0.13	0.44	-0.01	1.00	0.40
GSH15-T02-S2	0.00	0.00	0.00	97.98	2.02	N/A	N/A	U	3.24	N/A	2.38	0.19	3.07	0.12	3.01	0.12	0.47	-0.16	1.09	0.40
GSH15-T05-S1	0.00	0.00	0.00	93.25	6.75	5.94	0.81	U	3.24	N/A	2.51	0.18	3.12	0.12	3.12	0.12	0.57	0.09	1.29	0.60
GSH15-T05-S2	0.01	0.00	0.01	94.02	5.97	4.80	1.17	U	3.24	N/A	2.45	0.18	3.11	0.12	3.12	0.12	0.59	0.04	1.19	0.54
GSH15-T07-S1	8.31	2.56	5.75	90.82	0.87	N/A	N/A	U	-0.24	N/A	-0.95	1.94	-0.17	1.12	-0.13	1.10	0.82	0.16	1.54	0.50
GSH15-T07-S2	1.18	0.31	0.87	97.92	0.90	N/A	N/A	U	0.25	N/A	-0.47	1.38	0.11	0.92	0.17	0.89	0.64	0.20	1.35	0.40
GSH15-T08-S1	0.03	0.00	0.03	97.86	2.11	N/A	N/A	U	2.74	N/A	1.55	0.34	2.54	0.17	2.52	0.17	0.77	-0.05	1.04	0.40
GSH15-T08-S2	0.10	0.04	0.06	96.85	3.05	N/A	N/A	U	2.74	N/A	1.55	0.34	2.56	0.17	2.55	0.17	0.80	-0.03	1.06	0.40
GSH15-T10-S1	0.16	0.12	0.04	96.97	2.87	N/A	N/A	U	3.24	N/A	1.85	0.28	2.85	0.14	2.79	0.14	0.69	-0.11	1.00	0.40
GSH15-T10-S2	0.02	0.00	0.02	97.77	2.21	N/A	N/A	U	3.24	N/A	1.92	0.26	2.84	0.14	2.79	0.14	0.65	-0.12	1.03	0.40
GSH15-T14-S2	5.05	2.91	2.14	83.10	11.85	10.10	1.75	U	3.24	N/A	0.97	0.51	3.03	0.12	2.83	0.14	1.45	-0.33	1.66	0.90
GSH15-T15-S1	38.59	16.82	21.77	61.14	0.27	N/A	N/A	B	-0.74	N/A	-2.59	6.01	-0.76	1.69	-0.80	1.74	1.33	0.00	1.36	0.60
GSH15-T15-S2	45.96	32.69	13.27	50.63	3.41	N/A	N/A	B	-2.74	1.25	-3.22	9.31	-0.68	1.60	-0.57	1.48	2.26	0.13	0.80	0.57

GSH15: Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0	Class % phi 5.0	Class % phi 6.0	Class % phi 7.0	Class % phi 8.0	Class % phi 9.0	Class % phi 10.0	Class % phi > 10.0
GSH15-T01-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.09	0.06	0.11	0.15	0.23	0.71	2.68	24.97	56.13	12.52	2.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH15-T01-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.62	0.09	0.09	0.28	0.34	0.46	0.50	1.15	4.04	18.71	57.92	12.69	2.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH15-T02-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.12	0.33	0.80	10.78	42.16	38.08	6.38	1.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH15-T02-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.05	0.25	0.24	0.29	1.35	9.60	31.05	46.29	8.77	2.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH15-T05-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.13	0.30	1.55	5.57	32.69	39.85	13.10	N/A	5.24	0.41	0.16	0.12	0.03	0.14	0.64
GSH15-T05-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.08	0.07	0.30	2.11	7.70	30.93	36.69	16.08	N/A	4.44	0.32	0.02	0.03	0.03	0.14	1.00
GSH15-T07-S1	0.00	0.00	0.00	0.00	0.51	1.06	0.36	0.62	1.45	4.30	18.96	34.62	21.33	6.58	3.21	2.99	1.66	0.96	0.35	0.17	0.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH15-T07-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.11	0.17	0.70	7.60	33.08	35.29	12.75	4.52	2.70	1.08	0.57	0.22	0.10	0.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH15-T08-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.03	0.23	0.93	2.07	4.89	15.70	22.88	26.77	18.36	5.98	2.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH15-T08-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.06	0.06	0.24	0.97	2.20	4.81	14.68	22.67	26.19	17.57	7.46	3.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH15-T10-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.02	0.02	0.04	0.07	0.14	0.74	2.49	9.13	17.30	28.10	27.96	10.99	2.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH15-T10-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.03	0.11	0.50	1.87	8.78	17.24	30.63	29.84	8.75	2.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH15-T14-S2	0.00	0.00	0.00	2.15	0.00	0.00	0.76	0.00	1.08	1.06	1.07	1.11	1.26	1.61	3.69	9.68	12.24	12.81	25.47	14.16	N/A	8.18	1.32	0.33	0.28	0.11	0.18	1.47
GSH15-T15-S1	0.00	0.00	0.00	0.00	2.17	2.57	6.57	5.51	8.11	13.65	23.94	14.78	7.91	5.22	3.54	2.51	0.97	0.48	0.93	0.86	0.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH15-T15-S2	0.00	0.00	0.00	0.00	5.78	7.70	11.09	8.12	7.02	6.25	6.54	6.46	6.51	6.73	7.02	6.61	3.06	2.78	3.07	1.86	3.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Section 5: GSH16

GSH16: Identification, Location, and Description

Sample ID	Global Sample ID	Station ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Total Wt (gm)
GSH16-T01-S1	GSH16-T01-S1-7/10/2017	GSH16-T01	43.045297	-70.697871	1	16.8	7/10/2017	103.6
GSH16-T02-S1	GSH16-T02-S1-7/10/2017	GSH16-T02	43.042899	-70.697748	1	17.1	7/10/2017	109.5
GSH16-T03-S1	GSH16-T03-S1-7/10/2017	GSH16-T03	43.041998	-70.694267	1	16.2	7/10/2017	102.7
GSH16-T04-S1	GSH16-T04-S1-7/10/2017	GSH16-T04	43.039079	-70.686425	1	21.3	7/10/2017	176.0
GSH16-T05-S1	GSH16-T05-S1-7/10/2017	GSH16-T05	43.035313	-70.683228	1	25.9	7/10/2017	195.0
GSH16-T06-S1	GSH16-T06-S1-7/10/2017	GSH16-T06	43.031908	-70.682273	1	27.7	7/10/2017	319.3
GSH16-T07-S1	GSH16-T07-S1-7/11/2017	GSH16-T07	43.026767	-70.677968	1	25.9	7/11/2017	282.9
GSH16-T11-S1	GSH16-T11-S1-7/11/2017	GSH16-T11	43.024464	-70.704939	1	18.9	7/11/2017	84.9
GSH16-T12-S1	GSH16-T12-S1-7/11/2017	GSH16-T12	43.025693	-70.710856	1	15.8	7/11/2017	101.9
GSH16-T14-S1	GSH16-T14-S1-7/11/2017	GSH16-T14	43.030153	-70.702878	1	17.7	7/11/2017	122.5
GSH16-T15-S1	GSH16-T15-S1-7/11/2017	GSH16-T15	43.031050	-70.698484	1	17.7	7/11/2017	124.1
GSH16-T17-S2	GSH16-T17-S2-7/11/2017	GSH16-T17	43.033956	-70.693845	1	18.3	7/11/2017	103.3
GSH16-T18-S1	GSH16-T18-S1-7/11/2017	GSH16-T18	43.036400	-70.695581	1	16.8	7/11/2017	120.8
GSH16-TS06-S1	GSH16-TS06-S1-10/13/2016	GSH16-TS06	42.855997	-70.794752	1	18.0	10/13/2016	55.1
GSH16-TS06-S2	GSH16-TS06-S2-10/13/2016	GSH16-TS06	42.855877	-70.794708	1	18.0	10/13/2016	32.2
GSH16-TS09-S1	GSH16-TS09-S1-10/13/2016	GSH16-TS09	42.857124	-70.799412	1	16.5	10/13/2016	67.8
GSH16-TS09-S2	GSH16-TS09-S2-10/13/2016	GSH16-TS09	42.857120	-70.799449	1	16.5	10/13/2016	168.4
GSH16-TS10-S1	GSH16-TS10-S1-10/13/2016	GSH16-TS10	42.853463	-70.799742	1	17.4	10/13/2016	209.3
GSH16-TS10-S2	GSH16-TS10-S2-10/13/2016	GSH16-TS10	42.853333	-70.799738	1	17.4	10/13/2016	63.9

GSH16: Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
GSH16-T01-S1	Sand	Fine Sand	Sand	Fine Sand	Fine Sand	Fine Sand	Fine Sand	Well Sorted
GSH16-T02-S1	Sand	Fine Sand	Sand	Fine Sand	Fine Sand	Fine Sand	Fine Sand	Well Sorted
GSH16-T03-S1	Sand	Fine Sand	Sand	Fine Sand	Fine Sand	Fine Sand	Fine Sand	Moderately Well Sorted
GSH16-T04-S1	Pebbly	Pebbly Fine Sand	Gravelly Sand	Medium Gravelly Fine Sand	Pebbly Fine Sand	Medium Sand	Medium Sand	Very Poorly Sorted
GSH16-T05-S1	Pebbly	Pebbly Fine Sand	Gravelly Sand	Medium Gravelly Fine Sand	Pebbly Fine Sand	Fine Sand	Fine Sand	Poorly Sorted
GSH16-T06-S1	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Coarse Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
GSH16-T07-S1	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted
GSH16-T11-S1	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Fine Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Well Sorted
GSH16-T12-S1	Sand	Fine Sand	Sand	Fine Sand	Fine Sand	Fine Sand	Fine Sand	Very Well Sorted
GSH16-T14-S1	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Well Sorted
GSH16-T15-S1	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Fine Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Well Sorted
GSH16-T17-S2	Slightly Granuley	Slightly Granuley Very Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Very Fine Sand	Slightly Granular Very Fine Sand	Very Fine Sand	Very Fine Sand	Well Sorted
GSH16-T18-S1	Sand	Fine Sand	Sand	Fine Sand	Fine Sand	Fine Sand	Fine Sand	Well Sorted
GSH16-TS06-S1	Sand	Fine Sand	Sand	Fine Sand	Fine Sand	Fine Sand	Fine Sand	Moderately Well Sorted
GSH16-TS06-S2	Slightly Granuley	Slightly Granuley Very Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Very Fine Sand	Slightly Granular Very Fine Sand	Fine Sand	Fine Sand	Moderately Sorted
GSH16-TS09-S1	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Moderately Sorted
GSH16-TS09-S2	Slightly Pebbley	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Fine Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Moderately Well Sorted
GSH16-TS10-S1	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Moderately Sorted
GSH16-TS10-S2	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Medium Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Moderately Sorted

GSH16: Grain Size Statistics

Sample ID	Gravel %	Pebble %	Granule %	Sand %	Mud %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI % 450° C
GSH16-T01-S1	0.00	0.00	0.00	98.78	1.22	N/A	N/A	U	2.74	N/A	2.35	0.20	2.80	0.14	2.84	0.14	0.38	0.07	1.22	0.60
GSH16-T02-S1	0.00	0.00	0.00	99.19	0.81	N/A	N/A	U	2.74	N/A	2.27	0.21	2.77	0.15	2.80	0.14	0.37	0.05	1.33	0.52
GSH16-T03-S1	0.00	0.00	0.00	98.72	1.28	N/A	N/A	U	2.74	N/A	1.95	0.26	2.89	0.14	2.86	0.14	0.53	-0.24	1.22	0.67
GSH16-T04-S1	15.66	15.11	0.55	82.87	1.47	N/A	N/A	B	2.74	-3.74	-3.51	11.42	2.46	0.18	1.65	0.32	2.07	-0.67	2.00	0.69
GSH16-T05-S1	7.70	5.88	1.81	90.82	1.48	N/A	N/A	U	2.74	N/A	-0.02	1.02	2.31	0.20	2.08	0.24	1.44	-0.47	1.78	0.55
GSH16-T06-S1	51.74	48.31	3.43	45.87	2.39	N/A	N/A	B	-4.73	1.25	-4.63	24.74	-1.51	2.85	-1.18	2.26	2.89	0.17	0.61	0.80
GSH16-T07-S1	52.53	43.01	9.52	43.15	4.32	2.76	1.56	B	-3.74	1.75	-3.80	13.88	-1.27	2.41	-0.94	1.91	2.58	0.24	0.68	0.74
GSH16-T11-S1	0.44	0.31	0.14	96.91	2.65	N/A	N/A	U	3.24	N/A	2.49	0.18	2.98	0.13	2.97	0.13	0.45	-0.07	1.15	0.40
GSH16-T12-S1	0.00	0.00	0.00	98.38	1.62	N/A	N/A	U	2.74	N/A	2.52	0.17	2.86	0.14	2.91	0.13	0.33	0.19	0.81	0.63
GSH16-T14-S1	0.04	0.00	0.04	98.31	1.65	N/A	N/A	U	2.74	N/A	2.49	0.18	2.85	0.14	2.89	0.13	0.38	0.06	1.01	0.58
GSH16-T15-S1	0.23	0.16	0.06	97.64	2.13	N/A	N/A	U	2.74	N/A	2.53	0.17	2.93	0.13	2.96	0.13	0.36	0.13	0.81	0.70
GSH16-T17-S2	0.04	0.00	0.04	97.46	2.50	N/A	N/A	U	3.24	N/A	2.54	0.17	3.04	0.12	3.02	0.12	0.40	0.00	0.95	0.60
GSH16-T18-S1	0.00	0.00	0.00	98.77	1.23	N/A	N/A	U	2.74	N/A	2.51	0.18	2.94	0.13	2.95	0.13	0.36	-0.01	0.84	0.57
GSH16-TS06-S1	0.00	0.00	0.00	96.13	3.87	N/A	N/A	U	2.74	N/A	2.03	0.24	2.92	0.13	2.88	0.14	0.65	-0.11	1.18	0.61
GSH16-TS06-S2	0.73	0.22	0.51	96.43	2.84	N/A	N/A	U	3.24	N/A	1.74	0.30	2.96	0.13	2.81	0.14	0.73	-0.31	1.08	0.50
GSH16-TS09-S1	0.24	0.00	0.24	95.90	3.86	N/A	N/A	U	3.24	N/A	1.79	0.29	2.86	0.14	2.79	0.14	0.73	-0.16	1.10	0.48
GSH16-TS09-S2	0.09	0.08	0.01	96.25	3.66	N/A	N/A	U	2.74	N/A	2.03	0.24	2.85	0.14	2.82	0.14	0.64	-0.07	1.14	0.44
GSH16-TS10-S1	0.02	0.00	0.02	96.70	3.28	N/A	N/A	U	2.74	N/A	1.76	0.30	2.80	0.14	2.76	0.15	0.72	-0.09	1.06	0.46
GSH16-TS10-S2	0.94	0.71	0.23	95.62	3.44	N/A	N/A	U	2.74	N/A	1.47	0.36	2.63	0.16	2.58	0.17	0.87	-0.12	1.13	0.46

GSH16: Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0	Class % phi 5.0	Class % phi 6.0	Class % phi 7.0	Class % phi 8.0	Class % phi 9.0	Class % phi 10.0	Class % phi > 10.0
GSH16-T01-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.04	0.06	0.24	2.14	10.23	61.10	22.86	2.06	1.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH16-T02-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.06	0.20	0.50	2.85	11.19	63.26	19.70	1.40	0.81	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH16-T03-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.10	0.18	0.74	3.16	6.42	7.17	41.11	36.38	3.40	1.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH16-T04-S1	0.00	0.00	0.00	0.00	10.57	3.88	0.00	0.66	0.28	0.27	0.61	0.61	1.01	2.22	4.66	10.73	15.09	25.05	19.93	2.95	1.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH16-T05-S1	0.00	0.00	0.00	0.00	1.36	1.70	1.86	0.97	1.04	0.77	0.91	1.47	2.66	4.52	7.38	14.26	16.99	26.07	14.38	2.18	1.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH16-T06-S1	0.00	0.00	14.13	6.40	10.26	9.76	4.39	3.37	1.77	1.66	1.66	1.67	3.60	6.55	7.78	7.04	5.74	6.93	3.76	1.13	2.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH16-T07-S1	0.00	0.00	0.00	2.43	19.03	6.91	8.36	6.28	4.97	4.55	4.79	4.37	5.05	5.20	4.59	6.34	5.55	4.14	2.13	1.00	N/A	0.92	0.77	0.87	0.19	0.48	0.31	0.77
GSH16-T11-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.05	0.09	0.26	0.28	0.43	0.60	0.85	1.70	4.00	43.11	41.19	4.49	2.65	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH16-T12-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.02	0.03	0.05	0.03	0.58	4.29	60.58	30.01	2.76	1.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH16-T14-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.07	0.11	0.18	0.30	0.55	1.35	6.23	57.34	29.46	2.71	1.65	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH16-T15-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.06	0.00	0.01	0.05	0.08	0.17	0.61	3.67	51.77	37.75	3.53	2.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH16-T17-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.03	0.03	0.04	0.07	0.20	1.02	3.79	40.51	45.68	6.08	2.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH16-T18-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.05	0.17	1.35	4.89	49.07	39.62	3.56	1.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH16-TS06-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.29	0.43	0.61	1.72	5.82	13.05	32.96	29.64	11.30	3.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH16-TS06-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.18	0.32	0.30	0.47	0.81	0.99	2.81	7.99	15.86	21.76	36.45	8.99	2.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH16-TS09-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.10	0.18	0.29	0.65	1.55	2.94	7.15	17.63	26.62	29.56	9.31	3.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH16-TS09-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.01	0.07	0.15	0.33	0.62	1.68	5.87	16.90	33.72	28.13	8.78	3.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH16-TS10-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.13	0.66	1.65	2.88	8.90	16.88	30.68	24.31	10.59	3.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GSH16-TS10-S2	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.23	0.15	0.07	0.14	0.21	1.27	3.02	4.67	12.27	19.38	27.41	18.03	9.23	3.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Section 6: SH18 and Shoals07

SH18 and Shoals07: Identification, Location, and Description

Sample ID	Global Sample ID	Station ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Total Wt (gm)
SH18-T01	SH18-T01-7/10/2018	SH18-T01	43.110750	-70.620768	1	25.0	7/10/2018	141.0
SH18-T07	SH18-T07-7/10/2018	SH18-T07	43.100621	-70.629160	1	21.3	7/10/2018	549.9
SH18-T09	SH18-T09-7/10/2018	SH18-T09	43.095376	-70.626840	1	20.0	7/10/2018	424.1
SH18-T10	SH18-T10-7/10/2018	SH18-T10	43.085480	-70.636550	1	27.1	7/10/2018	93.4
Shoals07-S02-S1	Shoals07-S02-S1_10/13/2016	Shoals07-S02	42.868036	-70.810027	1	8.5	10/13/2016	232.7
Shoals07-S02-S2	Shoals07-S02-S2_10/13/2016	Shoals07-S02	42.868029	-70.809822	1	8.5	10/13/2016	119.5
Shoals07-S07-S1	Shoals07-S07-S1_10/13/2016	Shoals07-S07	42.855850	-70.807233	1	13.4	10/13/2016	401.3
Shoals07-S07-S2	Shoals07-S07-S2_10/13/2016	Shoals07-S07	42.855950	-70.807259	1	13.4	10/13/2016	201.4
Shoals07-S08-S1	Shoals07-S08-S1_10/13/2016	Shoals07-S08	42.855847	-70.803396	1	16.8	10/13/2016	367.5
Shoals07-S08-S2	Shoals07-S08-S2_10/13/2016	Shoals07-S08	42.855587	-70.802909	1	16.8	10/13/2016	209.8
Shoals07-S09-S1	Shoals07-S09-S1_10/6/2016	Shoals07-S09	42.854926	-70.805300	1		10/6/2016	306.0
Shoals07-S09-S2	Shoals07-S09-S2_10/6/2016	Shoals07-S09	42.854867	-70.804997	1		10/6/2016	136.9
Shoals07-S11-S1	Shoals07-S11-S1_10/6/2016	Shoals07-S11	42.849072	-70.805784	1	13.4	10/6/2016	358.6
Shoals07-S11-S2	Shoals07-S11-S2_10/6/2016	Shoals07-S11	42.849135	-70.805405	1	13.4	10/6/2016	145.7
Shoals07-S13-S1	Shoals07-S13-S1_10/6/2016	Shoals07-S13	42.843429	-70.801355	1	15.2	10/6/2016	175.1
Shoals07-S13-S2	Shoals07-S13-S2_10/6/2016	Shoals07-S13	42.843461	-70.801725	1	15.2	10/6/2016	189.6
Shoals07-S14-S1	Shoals07-S14-S1_10/6/2016	Shoals07-S14	42.829714	-70.805199	1	8.8	10/6/2016	321.6
Shoals07-S14-S2	Shoals07-S14-S2_10/6/2016	Shoals07-S14	42.829566	-70.805736	1	8.8	10/6/2016	145.9

SH18 and Shoals07: Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
SH18-T01	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Fine Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Moderately Well Sorted
SH18-T07	Gravel	Pebble Gravel	Gravel	Medium Gravel	Pebble Gravel	Fine Gravel	Pebble Gravel	Very Poorly Sorted
SH18-T09	Gravel	Pebble Gravel	Gravel	Very Coarse Gravel	Pebble Gravel	Very Coarse Gravel	Pebble Gravel	Poorly Sorted
SH18-T10	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Fine Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Moderately Well Sorted
Shoals07-S02-S1	Slightly Granuley	Slightly Granuley Very Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Very Fine Sand	Slightly Granular Very Fine Sand	Very Fine Sand	Very Fine Sand	Well Sorted
Shoals07-S02-S2	Slightly Granuley	Slightly Granuley Very Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Very Fine Sand	Slightly Granular Very Fine Sand	Very Fine Sand	Very Fine Sand	Well Sorted
Shoals07-S07-S1	Granuley	Granuley Coarse Sand	Gravelly Sand	Very Fine Gravelly Coarse Sand	Granular Coarse Sand	Coarse Sand	Coarse Sand	Poorly Sorted
Shoals07-S07-S2	Granuley	Granuley Coarse Sand	Gravelly Sand	Very Fine Gravelly Coarse Sand	Granular Coarse Sand	Coarse Sand	Coarse Sand	Poorly Sorted
Shoals07-S08-S1	Slightly Granuley	Slightly Granuley Coarse Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Coarse Sand	Slightly Granular Coarse Sand	Coarse Sand	Coarse Sand	Moderately Well Sorted
Shoals07-S08-S2	Granuley	Granuley Coarse Sand	Gravelly Sand	Very Fine Gravelly Coarse Sand	Granular Coarse Sand	Very Coarse Sand	Very Coarse Sand	Poorly Sorted
Shoals07-S09-S1	Sand	Very Fine Sand	Sand	Very Fine Sand	Very Fine Sand	Fine Sand	Fine Sand	Moderately Sorted
Shoals07-S09-S2	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Moderately Sorted
Shoals07-S11-S1	Slightly Granuley	Slightly Granuley Coarse Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Coarse Sand	Slightly Granular Coarse Sand	Coarse Sand	Coarse Sand	Moderately Sorted
Shoals07-S11-S2	Slightly Granuley	Slightly Granuley Coarse Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Coarse Sand	Slightly Granular Coarse Sand	Coarse Sand	Coarse Sand	Moderately Sorted
Shoals07-S13-S1	Slightly Granuley	Slightly Granuley Coarse Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Coarse Sand	Slightly Granular Coarse Sand	Coarse Sand	Coarse Sand	Moderately Sorted
Shoals07-S13-S2	Slightly Granuley	Slightly Granuley Coarse Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Coarse Sand	Slightly Granular Coarse Sand	Coarse Sand	Coarse Sand	Moderately Well Sorted
Shoals07-S14-S1	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Fine Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Moderately Well Sorted
Shoals07-S14-S2	Sand	Fine Sand	Sand	Fine Sand	Fine Sand	Fine Sand	Fine Sand	Moderately Well Sorted

SH18 and Shoals07: Grain Size Statistics

Sample ID	Gravel %	Pebble %	Granule %	Sand %	Mud %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI % 450° C
SH18-T01	1.39	1.37	0.02	96.16	2.45	N/A	N/A	U	2.74	N/A	1.88	0.27	2.74	0.15	2.73	0.15	0.66	-0.03	1.04	0.77
SH18-T07	81.40	70.84	10.56	17.53	1.07	N/A	N/A	B	-5.24	-3.24	-5.19	36.58	-3.13	8.76	-2.92	7.55	2.17	0.26	0.95	0.83
SH18-T09	92.42	91.83	0.58	7.05	0.53	N/A	N/A	U	-5.74	N/A	-5.87	58.44	-5.39	41.79	-5.23	37.61	1.40	0.60	3.22	N/A
SH18-T10	1.07	0.89	0.18	97.07	1.86	N/A	N/A	U	2.24	N/A	1.72	0.30	2.41	0.19	2.45	0.18	0.55	0.09	1.06	0.75
Shoals07-S02-S1	0.07	0.00	0.07	98.49	1.44	N/A	N/A	U	3.24	N/A	2.49	0.18	3.09	0.12	3.03	0.12	0.45	-0.16	1.09	0.40
Shoals07-S02-S2	0.10	0.00	0.10	98.43	1.47	N/A	N/A	U	3.24	N/A	2.48	0.18	3.07	0.12	3.02	0.12	0.45	-0.14	1.08	N/A
Shoals07-S07-S1	9.29	3.68	5.60	90.29	0.42	N/A	N/A	U	0.75	N/A	-0.96	1.95	0.39	0.76	0.35	0.78	1.06	-0.07	1.19	0.30
Shoals07-S07-S2	14.53	3.83	10.71	85.01	0.46	N/A	N/A	U	0.25	N/A	-1.29	2.44	0.14	0.91	0.06	0.96	1.02	-0.11	1.06	N/A
Shoals07-S08-S1	1.25	0.03	1.22	98.21	0.54	N/A	N/A	U	0.25	N/A	-0.35	1.28	0.45	0.73	0.42	0.75	0.60	-0.02	1.12	0.30
Shoals07-S08-S2	19.06	8.65	10.41	80.52	0.42	N/A	N/A	B	0.25	-4.24	-1.84	3.57	0.11	0.93	-0.09	1.07	1.23	-0.35	1.42	N/A
Shoals07-S09-S1	0.01	0.00	0.01	98.18	1.81	N/A	N/A	U	3.24	N/A	1.61	0.33	2.90	0.13	2.78	0.15	0.76	-0.31	1.37	0.30
Shoals07-S09-S2	0.05	0.00	0.05	98.90	1.05	N/A	N/A	U	3.24	N/A	1.51	0.35	2.87	0.14	2.76	0.15	0.79	-0.34	1.39	N/A
Shoals07-S11-S1	4.98	1.09	3.89	94.66	0.36	N/A	N/A	U	0.25	N/A	-0.71	1.63	0.28	0.82	0.28	0.82	0.77	0.02	1.13	0.30
Shoals07-S11-S2	0.14	0.00	0.14	99.45	0.41	N/A	N/A	U	0.75	N/A	0.08	0.95	0.78	0.58	0.84	0.56	0.77	0.26	1.40	N/A
Shoals07-S13-S1	2.06	0.28	1.78	97.53	0.41	N/A	N/A	U	0.75	N/A	-0.48	1.40	0.56	0.68	0.54	0.69	0.84	-0.01	0.93	0.30
Shoals07-S13-S2	0.22	0.03	0.19	99.41	0.37	N/A	N/A	U	0.75	N/A	-0.15	1.11	0.73	0.60	0.72	0.61	0.66	-0.01	0.97	N/A
Shoals07-S14-S1	0.18	0.14	0.04	99.25	0.57	N/A	N/A	U	2.74	N/A	1.57	0.34	2.54	0.17	2.47	0.18	0.64	-0.19	1.15	0.30
Shoals07-S14-S2	0.00	0.00	0.00	99.53	0.47	N/A	N/A	U	2.24	N/A	1.63	0.32	2.45	0.18	2.43	0.19	0.58	-0.08	1.10	N/A

SH18 and Shoals07: Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0	Class % phi 5.0	Class % phi 6.0	Class % phi 7.0	Class % phi 8.0	Class % phi 9.0	Class % phi 10.0	Class % phi > 10.0
SH18-T01	0.00	0.00	0.00	0.00	0.00	0.00	1.03	0.34	0.00	0.02	0.11	0.26	0.31	0.44	1.35	8.02	21.51	32.94	23.42	7.80	2.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SH18-T07	0.00	17.24	14.90	0.00	9.97	10.80	10.28	7.64	6.46	4.10	3.37	2.16	2.15	2.27	2.45	2.62	1.20	0.60	0.45	0.26	1.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SH18-T09	44.92	24.53	15.29	0.00	2.24	3.43	1.08	0.34	0.30	0.28	0.40	0.49	0.65	0.70	0.84	1.83	1.29	0.59	0.18	0.09	0.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SH18-T10	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.16	0.00	0.18	0.08	0.10	0.15	0.35	1.99	14.12	36.77	29.77	11.19	2.55	1.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Shoals07-S02-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.03	0.08	0.18	0.33	0.37	1.16	6.59	32.42	48.51	8.80	1.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Shoals07-S02-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.06	0.06	0.18	0.30	0.30	1.11	7.60	33.65	46.21	8.98	1.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Shoals07-S07-S1	0.00	0.00	0.00	0.00	0.00	1.54	0.54	1.60	1.68	3.92	10.14	14.95	19.60	21.69	13.00	5.59	2.73	1.52	0.93	0.15	0.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Shoals07-S07-S2	0.00	0.00	0.00	0.00	0.00	0.36	1.06	2.41	3.10	7.61	13.70	16.28	20.12	20.00	8.97	3.31	1.42	0.66	0.48	0.08	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Shoals07-S08-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.25	0.97	4.66	14.76	32.60	32.15	9.47	2.26	0.95	0.71	0.54	0.13	0.54	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Shoals07-S08-S2	0.00	0.00	0.00	4.64	0.00	0.55	1.20	2.26	4.20	6.21	10.31	15.21	24.89	20.30	5.53	1.67	0.71	0.72	1.01	0.17	0.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Shoals07-S09-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.26	1.58	3.17	3.63	6.00	11.46	29.71	33.95	8.39	1.81	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Shoals07-S09-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.02	0.14	0.57	2.55	3.62	2.91	5.31	12.67	29.29	33.98	7.86	1.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Shoals07-S11-S1	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.59	1.05	2.85	8.79	19.27	29.47	21.84	9.22	3.32	1.31	0.96	0.40	0.08	0.36	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Shoals07-S11-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.10	0.63	5.51	23.04	36.71	17.61	5.95	2.89	4.24	2.66	0.22	0.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Shoals07-S13-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.25	0.39	1.39	7.79	16.75	20.73	22.16	18.60	8.35	1.61	1.01	0.45	0.08	0.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Shoals07-S13-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.16	2.27	10.95	22.34	30.64	23.33	7.97	1.12	0.46	0.29	0.05	0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Shoals07-S14-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.04	0.04	0.21	0.77	2.26	4.91	11.17	26.19	36.68	15.34	1.66	0.57	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Shoals07-S14-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.10	0.38	1.58	4.44	12.62	32.55	33.70	13.10	1.04	0.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Section 7: NSBE

NSBE (1): Identification, Location, and Description

Sample ID	Global Sample ID	Station ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Total Wt (gm)
NSBE-T01-S2	NSBE-T01-S2_8/8/2017	NSBE-T01	42.968322	-70.660788	1	43.6	8/8/2017	53.9
NSBE-T02-S1	NSBE-T02-S1_8/8/2017	NSBE-T02	42.971764	-70.653901	1	40.5	8/8/2017	90.0
NSBE-T03-S1	NSBE-T03-S1_8/7/2017	NSBE-T03	42.976383	-70.643870	1	35.7	8/7/2017	103.4
NSBE-T04-S1	NSBE-T04-S1_8/7/2017	NSBE-T04	42.990159	-70.638573	1	20.7	8/7/2017	173.3
NSBE-T04-S2	NSBE-T04-S2_8/7/2017	NSBE-T04	42.990297	-70.638753	1	20.7	8/7/2017	200.7
NSBE-T05-S1	NSBE-T05-S1_8/7/2017	NSBE-T05	42.986699	-70.645589	1	24.4	8/7/2017	169.4
NSBE-T06a-S1	NSBE-T06a-S1_8/7/2017	NSBE-T06a	42.980573	-70.655550	1	27.1	8/7/2017	160.5
NSBE-T10-S1	NSBE-T10-S1_8/7/2017	NSBE-T10	42.976370	-70.678328	1	37.5	8/7/2017	52.7
NSBE-T12-S1	NSBE-T12-S1_8/8/2017	NSBE-T12	42.984786	-70.685358	1	32.3	8/8/2017	193.8
NSBE-T13-S1	NSBE-T13-S1_8/8/2017	NSBE-T13	42.987658	-70.660873	1	30.5	8/8/2017	141.8
NSBE-T13-S2	NSBE-T13-S2_8/8/2017	NSBE-T13	42.987847	-70.660993	1	30.5	8/8/2017	157.1
NSBE-T14-S1	NSBE-T14-S1_8/8/2017	NSBE-T14	42.990282	-70.668139	1	26.8	8/8/2017	208.8
NSBE-T15-S2	NSBE-T15-S2_8/8/2017	NSBE-T15	42.991793	-70.674793	1	29.9	8/8/2017	140.4
NSBE-T20-S1	NSBE-T20-S1_8/8/2017	NSBE-T20	42.987371	-70.694519	1	25.3	8/8/2017	358.1
NSBE-T20-S2	NSBE-T20-S2_8/8/2017	NSBE-T20	42.987267	-70.694491	1	25.3	8/8/2017	251.8
NSBE-T21a-S1	NSBE-T21a-S1_8/8/2017	NSBE-T21a	42.991405	-70.702695	1	27.4	8/8/2017	300.2
NSBE-T21a-S2	NSBE-T21a-S2_8/8/2017	NSBE-T21a	42.991447	-70.702537	1	27.4	8/8/2017	297.6
NSBE-T29-S1	NSBE-T29-S1_8/15/2017	NSBE-T29	42.979621	-70.679554	1	26.5	8/15/2017	318.5

NSBE (1): Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
NSBE-T01-S2	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Fine Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Well Sorted
NSBE-T02-S1	Slightly Pebbly	Slightly Pebbly Very Fine Sand	Slightly Gravelly Sand	Slightly Fine Gravelly Very Fine Sand	Slightly Pebbly Very Fine Sand	Very Fine Sand	Very Fine Sand	Moderately Sorted
NSBE-T03-S1	Slightly Pebbly	Slightly Pebbly Very Fine Sand	Slightly Gravelly Sand	Slightly Fine Gravelly Very Fine Sand	Slightly Pebbly Very Fine Sand	Very Fine Sand	Very Fine Sand	Well Sorted
NSBE-T04-S1	Pebbly	Pebbly Medium Sand	Gravelly Sand	Medium Gravelly Medium Sand	Pebbly Medium Sand	Coarse Sand	Coarse Sand	Poorly Sorted
NSBE-T04-S2	Pebbly	Pebbly Medium Sand	Gravelly Sand	Coarse Gravelly Medium Sand	Pebbly Medium Sand	Coarse Sand	Coarse Sand	Moderately Sorted
NSBE-T05-S1	Slightly Granuley	Slightly Granuley Medium Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Medium Sand	Slightly Granular Medium Sand	Medium Sand	Medium Sand	Moderately Well Sorted
NSBE-T06a-S1	Sand	Medium Sand	Sand	Moderately Well Sorted Medium Sand	Medium Sand	Medium Sand	Medium Sand	Moderately Well Sorted
NSBE-T10-S1	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Fine Gravelly Fine Sand	Slightly Pebbly Fine Sand	Medium Sand	Medium Sand	Poorly Sorted
NSBE-T12-S1	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Fine Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Moderately Sorted
NSBE-T13-S1	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Medium Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Moderately Well Sorted
NSBE-T13-S2	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Medium Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Moderately Sorted
NSBE-T14-S1	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Medium Sand	Medium Sand	Poorly Sorted
NSBE-T15-S2	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Medium Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Moderately Well Sorted
NSBE-T20-S1	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted
NSBE-T20-S2	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Fine Gravel	Sandy Pebble Gravel	Coarse Sand	Coarse Sand	Very Poorly Sorted
NSBE-T21a-S1	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Coarse Sand	Coarse Sand	Very Poorly Sorted
NSBE-T21a-S2	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Coarse Sand	Coarse Sand	Very Poorly Sorted
NSBE-T29-S1	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted

NSBE (1): Grain Size Statistics

Sample ID	Gravel %	Pebble %	Granule %	Sand %	Mud %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI % 450° C
NSBE-T01-S2	1.21	1.09	0.12	95.00	3.79	N/A	N/A	U	2.74	N/A	2.48	0.18	2.94	0.13	2.96	0.13	0.46	0.07	1.14	N/A
NSBE-T02-S1	3.13	2.80	0.33	89.60	7.27	4.03	3.24	U	3.24	N/A	2.48	0.18	3.10	0.12	3.05	0.12	0.72	0.00	2.12	0.98
NSBE-T03-S1	0.54	0.42	0.12	95.68	3.78	N/A	N/A	U	3.24	N/A	2.49	0.18	3.05	0.12	3.02	0.12	0.48	-0.09	1.19	0.72
NSBE-T04-S1	5.62	5.11	0.52	94.28	0.10	N/A	N/A	U	1.25	N/A	0.07	0.95	1.01	0.50	0.94	0.52	1.04	-0.47	3.11	0.31
NSBE-T04-S2	6.18	5.46	0.72	93.69	0.13	N/A	N/A	U	1.25	N/A	1.25	0.42	1.02	0.49	0.92	0.53	0.95	-0.47	2.44	0.32
NSBE-T05-S1	1.22	0.41	0.80	98.54	0.24	N/A	N/A	U	1.25	N/A	0.35	0.78	1.21	0.43	1.18	0.44	0.59	-0.15	0.97	0.32
NSBE-T06a-S1	0.00	0.00	0.00	99.56	0.44	N/A	N/A	U	1.75	N/A	0.83	0.56	1.70	0.31	1.65	0.32	0.56	-0.17	1.18	0.42
NSBE-T10-S1	3.75	2.82	0.93	92.40	3.85	N/A	N/A	U	2.24	N/A	0.46	0.73	2.06	0.24	1.88	0.27	1.08	-0.26	1.07	0.85
NSBE-T12-S1	3.89	3.18	0.71	90.21	5.90	3.11	2.79	U	2.74	N/A	1.69	0.31	2.71	0.15	2.68	0.16	0.93	-0.10	3.21	0.76
NSBE-T13-S1	2.02	1.26	0.76	95.91	2.07	N/A	N/A	U	2.24	N/A	1.12	0.46	2.18	0.22	2.14	0.23	0.69	-0.25	1.53	0.91
NSBE-T13-S2	0.99	0.65	0.34	95.57	3.44	N/A	N/A	U	2.24	N/A	1.10	0.47	2.21	0.22	2.17	0.22	0.76	-0.17	1.57	0.97
NSBE-T14-S1	4.37	1.42	2.95	94.49	1.14	N/A	N/A	U	2.24	N/A	0.13	0.91	1.96	0.26	1.79	0.29	1.06	-0.36	1.31	0.48
NSBE-T15-S2	1.60	1.55	0.05	95.70	2.70	N/A	N/A	U	2.24	N/A	1.54	0.34	2.33	0.20	2.31	0.20	0.62	-0.07	1.17	0.77
NSBE-T20-S1	51.93	48.90	3.04	46.72	1.35	N/A	N/A	B	-3.24	2.24	-3.46	11.00	-1.64	3.12	-0.86	1.81	2.45	0.39	0.51	0.53
NSBE-T20-S2	31.17	27.82	3.35	66.67	2.16	N/A	N/A	B	2.24	-3.24	-3.17	9.03	1.83	0.28	0.53	0.69	2.36	-0.66	0.56	0.56
NSBE-T21a-S1	40.50	38.08	2.42	57.48	2.02	N/A	N/A	B	1.75	-3.74	-3.70	13.03	1.33	0.40	0.05	0.97	2.49	-0.59	0.52	0.54
NSBE-T21a-S2	31.90	29.63	2.27	64.83	3.27	N/A	N/A	B	1.75	-3.24	-3.44	10.82	1.64	0.32	0.30	0.81	2.47	-0.63	0.57	0.84
NSBE-T29-S1	48.74	39.38	9.37	48.53	2.73	N/A	N/A	B	-3.74	1.25	-3.75	13.49	-0.84	1.79	-0.74	1.67	2.50	0.09	0.64	0.62

NSBE (1): Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0	Class % phi 5.0	Class % phi 6.0	Class % phi 7.0	Class % phi 8.0	Class % phi 9.0	Class % phi 10.0	Class % phi > 10.0
NSBE-T01-S2	0.00	0.00	0.00	0.00	0.00	0.00	1.09	0.00	0.00	0.12	0.12	0.11	0.11	0.24	0.54	0.07	6.85	45.88	36.67	4.41	3.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T02-S1	0.00	0.00	0.00	0.00	0.00	0.00	2.44	0.36	0.10	0.23	0.17	0.12	0.14	0.24	0.47	1.39	4.22	30.29	44.56	8.00	N/A	2.25	0.68	0.57	0.53	0.42	0.68	2.14
NSBE-T03-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.07	0.05	0.17	0.12	0.17	0.37	0.74	1.71	5.13	36.13	43.90	7.23	3.78	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T04-S1	0.00	0.00	0.00	0.00	5.11	0.00	0.00	0.00	0.22	0.29	0.86	2.30	8.62	31.41	42.80	7.95	0.28	0.04	0.01	0.01	0.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T04-S2	0.00	0.00	0.00	3.07	1.13	0.48	0.42	0.36	0.24	0.48	0.91	2.66	10.28	27.94	41.48	9.90	0.36	0.09	0.07	0.02	0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T05-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.29	0.52	0.90	2.43	7.64	23.06	34.39	27.52	2.38	0.17	0.03	0.01	0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T06a-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.43	2.98	9.80	17.91	45.83	18.40	3.76	0.31	0.05	0.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T10-S1	0.00	0.00	0.00	0.00	0.00	0.00	2.51	0.31	0.64	0.28	0.69	1.51	4.34	10.67	12.46	13.49	23.11	20.96	4.18	0.98	3.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T12-S1	0.00	0.00	0.00	0.00	0.00	1.56	1.07	0.55	0.34	0.37	0.35	0.45	0.55	0.98	2.07	4.46	13.86	51.15	13.34	3.01	N/A	1.47	0.71	0.51	0.43	0.36	0.50	1.93
NSBE-T13-S1	0.00	0.00	0.00	0.00	0.00	1.09	0.17	0.00	0.19	0.57	0.53	1.05	1.82	3.12	5.92	19.46	41.52	19.76	2.42	0.31	2.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T13-S2	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.08	0.10	0.24	0.91	1.62	2.04	3.28	5.94	18.22	39.07	21.07	2.94	0.48	3.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T14-S1	0.00	0.00	0.00	0.00	0.00	0.54	0.43	0.45	1.21	1.74	2.22	2.52	3.30	6.94	11.94	20.53	25.48	18.46	2.80	0.30	1.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T15-S2	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.03	0.02	0.07	0.09	0.18	1.09	5.38	17.65	34.17	31.18	5.24	0.66	2.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T20-S1	0.00	0.00	0.00	2.05	6.62	24.54	10.88	4.80	1.59	1.45	1.63	1.58	1.85	2.32	2.37	6.60	18.14	10.42	1.52	0.28	1.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T20-S2	0.00	0.00	0.00	0.00	3.50	10.14	9.58	4.60	1.82	1.53	1.51	1.77	2.38	2.85	3.52	10.39	25.20	15.97	2.66	0.42	2.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T21a-S1	0.00	0.00	0.00	0.00	17.37	14.56	4.70	1.45	1.31	1.11	1.20	0.99	1.22	2.32	5.69	20.26	16.58	7.25	1.57	0.40	2.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T21a-S2	0.00	0.00	0.00	0.00	8.61	13.32	6.23	1.47	1.23	1.05	1.18	0.96	1.22	2.11	5.65	23.58	17.83	9.33	2.42	0.54	3.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T29-S1	0.00	0.00	0.00	2.05	16.63	5.69	8.24	6.78	4.90	4.47	4.04	3.76	4.30	6.15	7.42	6.70	6.91	6.49	2.14	0.61	2.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A

NSBE (2): Identification, Location, and Description

Sample ID	Global Sample ID	Station ID	Latitude WGS84	Longitude WGS84	Reliability Ranking for Positioning	Water Depth (m)	Sample Collected	Total Wt (gm)
NSBE-T30-S1	NSBE-T30-S1_8/15/2017	NSBE-T30	42.985811	-70.671644	1	26.2	8/15/2017	154.7
NSBE-T32-S1	NSBE-T32-S1_8/15/2017	NSBE-T32	42.985106	-70.663309	1	34.7	8/15/2017	112.7
NSBE-T36-S1	NSBE-T36-S1_8/16/2017	NSBE-T36	42.995784	-70.710278	1	25.6	8/16/2017	205.3
NSBE-T36-S2	NSBE-T36-S2_8/16/2017	NSBE-T36	42.995662	-70.710267	1	25.6	8/16/2017	205.5
NSBE-T39-S1	NSBE-T39-S1_8/16/2017	NSBE-T39	43.005076	-70.694332	1	23.5	8/16/2017	362.2
NSBE-T39-S2	NSBE-T39-S2_8/16/2017	NSBE-T39	43.004815	-70.694574	1	23.8	8/16/2017	312.0
NSBE-T40-S1	NSBE-T40-S1_8/16/2017	NSBE-T40	42.973863	-70.698420	1	32.9	8/16/2017	809.3
NSBE-T40-S2	NSBE-T40-S2_8/16/2017	NSBE-T40	42.973978	-70.698061	1	32.9	8/16/2017	462.5
NSBE-T42-S1	NSBE-T42-S1_8/16/2017	NSBE-T42	42.971760	-70.670194	1	37.2	8/16/2017	130.0
NSBE-T45-S1	NSBE-T45-S1_8/16/2017	NSBE-T45	43.026969	-70.648673	1	33.5	8/16/2017	230.6
NSBE-T45-S2	NSBE-T45-S2_8/16/2017	NSBE-T45	43.026608	-70.649007	1	33.5	8/16/2017	318.4
NSBE-T61-S1	NSBE-T61-S1_8/16/2017	NSBE-T61	42.992317	-70.659907	1	30.2	8/16/2017	213.6
NSBE-T61-S2	NSBE-T61-S2_8/16/2017	NSBE-T61	42.992124	-70.660016	1	30.2	8/16/2017	183.3
NSBE-T62-S1	NSBE-T62-S1_8/15/2017	NSBE-T62	42.985456	-70.653036	1	23.8	8/15/2017	328.7
NSBE-T62-S2	NSBE-T62-S2_8/15/2017	NSBE-T62	42.985586	-70.652722	1	23.8	8/15/2017	195.4
NSBE-T64-S1	NSBE-T64-S1_8/15/2017	NSBE-T64	42.978964	-70.663495	1	25.6	8/15/2017	182.2
NSBE-T64-S2	NSBE-T64-S2_8/15/2017	NSBE-T64	42.979064	-70.663322	1	25.6	8/15/2017	112.7

NSBE (2): Sediment Classifications

Sample ID	CMECS Substrate Component Group (Specific)	CMECS Substrate Component Subgroup (Specific)	Textural Group from %GSM (Gradistat)	Sediment Name from %GSM and Mode (Gradistat)	Sediment Name from %GSM and Mode (Wentworth Scale)	Sediment Classification from Mean Phi (Gradistat)	Classification from Mean Phi (Wentworth)	Sorting (Gradistat)
NSBE-T30-S1	Slightly Granuley	Slightly Granuley Fine Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Fine Sand	Slightly Granular Fine Sand	Fine Sand	Fine Sand	Moderately Sorted
NSBE-T32-S1	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Medium Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Poorly Sorted
NSBE-T36-S1	Pebbly	Pebbly Silty-Clayey Fine Sand	Gravelly Muddy Sand	Medium Gravelly Very Coarse Silty Fine Sand	Pebbly Very Coarse Silty Fine Sand	Fine Sand	Fine Sand	Very Poorly Sorted
NSBE-T36-S2	Pebbly	Pebbly Fine Sand	Gravelly Sand	Medium Gravelly Fine Sand	Pebbly Fine Sand	Medium Sand	Medium Sand	Very Poorly Sorted
NSBE-T39-S1	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Very Coarse Sand	Very Coarse Sand	Very Poorly Sorted
NSBE-T39-S2	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Coarse Sand	Coarse Sand	Very Poorly Sorted
NSBE-T40-S1	Gravel	Pebble Gravel	Gravel	Very Coarse Gravel	Pebble Gravel	Medium Gravel	Pebble Gravel	Very Poorly Sorted
NSBE-T40-S2	Pebble Mixes	Silty-Clayey Sandy Pebble Gravel	Muddy Sandy Gravel	Muddy Sandy Very Coarse Gravel	Muddy Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
NSBE-T42-S1	Slightly Pebbly	Slightly Pebbly Fine Sand	Slightly Gravelly Sand	Slightly Medium Gravelly Fine Sand	Slightly Pebbly Fine Sand	Fine Sand	Fine Sand	Well Sorted
NSBE-T45-S1	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Coarse Sand	Coarse Sand	Very Poorly Sorted
NSBE-T45-S2	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Very Fine Gravel	Granule Gravel	Very Poorly Sorted
NSBE-T61-S1	Pebble Mixes	Sandy Pebble Gravel	Sandy Gravel	Sandy Medium Gravel	Sandy Pebble Gravel	Coarse Sand	Coarse Sand	Very Poorly Sorted
NSBE-T61-S2	Pebbly	Pebbly Fine Sand	Gravelly Sand	Medium Gravelly Fine Sand	Pebbly Fine Sand	Medium Sand	Medium Sand	Poorly Sorted
NSBE-T62-S1	Pebbly	Pebbly Coarse Sand	Gravelly Sand	Medium Gravelly Coarse Sand	Pebbly Coarse Sand	Coarse Sand	Coarse Sand	Poorly Sorted
NSBE-T62-S2	Slightly Pebbly	Slightly Pebbly Coarse Sand	Slightly Gravelly Sand	Slightly Medium Gravelly Coarse Sand	Slightly Pebbly Coarse Sand	Coarse Sand	Coarse Sand	Moderately Sorted
NSBE-T64-S1	Slightly Granuley	Slightly Granuley Medium Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Medium Sand	Slightly Granular Medium Sand	Medium Sand	Medium Sand	Moderately Well Sorted
NSBE-T64-S2	Slightly Granuley	Slightly Granuley Medium Sand	Slightly Gravelly Sand	Slightly Very Fine Gravelly Medium Sand	Slightly Granular Medium Sand	Medium Sand	Medium Sand	Moderately Well Sorted

NSBE (2): Grain Size Statistics

Sample ID	Gravel %	Pebble %	Granule %	Sand %	Mud %	Silt %	Clay %	Modes	Mode 1 (phi)	Mode 2 (phi)	D_{10} (phi)	D_{10} (mm)	D_{50} (phi)	D_{50} (mm)	Mean Size (phi)	Mean Size (mm)	Sorting (phi)	Skewness	Kurtosis	LOI % 450° C
NSBE-T30-S1	1.26	0.16	1.10	96.50	2.24	N/A	N/A	U	2.24	N/A	1.25	0.42	2.28	0.21	2.25	0.21	0.78	-0.22	1.43	0.49
NSBE-T32-S1	1.19	0.80	0.39	90.03	8.78	4.32	4.46	U	2.74	N/A	2.06	0.24	2.76	0.15	2.78	0.15	1.18	0.34	3.95	0.90
NSBE-T36-S1	11.76	7.87	3.88	74.77	13.47	8.41	5.06	U	2.74	N/A	-1.47	2.76	2.63	0.16	2.20	0.22	2.55	-0.18	2.61	1.40
NSBE-T36-S2	18.38	13.08	5.30	77.93	3.69	N/A	N/A	B	2.74	-3.24	-2.56	5.89	2.01	0.25	1.20	0.44	2.18	-0.53	1.11	0.79
NSBE-T39-S1	50.86	49.30	1.56	47.33	1.81	N/A	N/A	B	-3.24	2.24	-3.90	14.91	-1.59	3.00	-0.96	1.95	2.61	0.30	0.53	0.54
NSBE-T39-S2	41.46	40.84	0.62	55.54	3.00	N/A	N/A	B	-3.24	2.24	-3.75	13.44	1.45	0.37	0.20	0.87	2.65	-0.55	0.53	0.61
NSBE-T40-S1	82.27	77.93	4.34	16.10	1.63	N/A	N/A	B	-5.74	-3.74	-5.81	55.99	-4.76	27.08	-3.66	12.68	2.57	0.68	1.12	0.75
NSBE-T40-S2	55.82	50.13	5.69	39.61	4.57	2.28	2.29	P	-5.24	-3.74	-5.24	37.87	-2.02	4.06	-1.64	3.12	3.19	0.21	0.69	0.91
NSBE-T42-S1	1.63	1.60	0.04	94.78	3.59	N/A	N/A	U	2.24	N/A	1.80	0.29	2.43	0.19	2.45	0.18	0.50	0.07	1.17	0.68
NSBE-T45-S1	31.90	29.25	2.65	66.01	2.09	N/A	N/A	B	2.24	-3.74	-3.66	12.62	1.84	0.28	0.37	0.78	2.59	-0.68	0.53	0.73
NSBE-T45-S2	61.00	53.05	7.95	37.78	1.22	N/A	N/A	B	-3.24	2.24	-4.06	16.66	-2.30	4.93	-1.36	2.56	2.54	0.46	0.64	0.54
NSBE-T61-S1	30.89	26.88	4.02	66.23	2.88	N/A	N/A	B	2.24	-3.24	-3.18	9.07	1.41	0.38	0.30	0.81	2.30	-0.56	0.57	0.75
NSBE-T61-S2	12.17	10.54	1.63	85.42	2.41	N/A	N/A	U	2.24	N/A	-2.20	4.60	2.01	0.25	1.58	0.34	1.61	-0.56	1.88	0.75
NSBE-T62-S1	13.55	9.02	4.53	86.22	0.23	N/A	N/A	U	0.75	N/A	-1.77	3.41	0.70	0.62	0.53	0.69	1.28	-0.38	1.68	0.57
NSBE-T62-S2	3.72	2.53	1.19	95.44	0.84	N/A	N/A	U	0.75	N/A	-0.11	1.08	0.82	0.56	0.83	0.56	0.74	-0.07	1.07	0.46
NSBE-T64-S1	0.05	0.00	0.05	99.37	0.58	N/A	N/A	U	1.75	N/A	0.66	0.63	1.75	0.30	1.66	0.32	0.66	-0.26	1.01	0.46
NSBE-T64-S2	0.04	0.00	0.04	99.17	0.79	N/A	N/A	U	1.75	N/A	1.00	0.50	1.90	0.27	1.87	0.27	0.61	-0.14	1.29	0.45

NSBE (2): Grain Size Distribution

Sample ID	Class % phi -5.5	Class % phi -5.0	Class % phi -4.5	Class % phi -4.0	Class % phi -3.5	Class % phi -3.0	Class % phi -2.5	Class % phi -2.0	Class % phi -1.5	Class % phi -1.0	Class % phi -0.5	Class % phi 0.0	Class % phi 0.5	Class % phi 1.0	Class % phi 1.5	Class % phi 2.0	Class % phi 2.5	Class % phi 3.0	Class % phi 3.5	Class % phi 4.0	Class % phi > 4.0	Class % phi 5.0	Class % phi 6.0	Class % phi 7.0	Class % phi 8.0	Class % phi 9.0	Class % phi 10.0	Class % phi > 10.0
NSBE-T30-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.29	0.81	1.23	1.74	1.55	1.97	4.52	19.29	30.67	29.49	5.34	0.70	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T32-S1	0.00	0.00	0.00	0.00	0.00	0.63	0.00	0.17	0.22	0.17	0.12	0.24	0.31	0.68	1.54	3.82	16.35	47.50	16.14	3.34	N/A	1.79	1.00	0.38	1.15	0.75	0.69	3.01
NSBE-T36-S1	0.00	0.00	0.00	0.00	1.72	2.49	2.24	1.42	2.09	1.79	1.87	1.63	2.03	2.92	3.66	6.36	12.87	23.07	14.22	6.14	N/A	3.36	2.40	1.64	1.01	0.84	2.63	1.60
NSBE-T36-S2	0.00	0.00	0.00	0.00	3.50	4.89	1.88	2.81	2.62	2.69	2.81	2.64	3.24	4.77	7.05	10.93	12.95	20.95	10.24	2.36	3.69	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T39-S1	0.00	0.00	0.00	6.69	16.69	17.31	7.21	1.40	0.87	0.69	0.90	0.88	1.13	2.35	5.35	11.17	13.08	9.72	2.20	0.56	1.81	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T39-S2	0.00	0.00	0.00	2.56	15.19	16.58	5.61	0.91	0.29	0.33	0.57	0.56	0.82	1.81	5.23	13.14	14.97	14.02	3.68	0.75	3.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T40-S1	28.45	18.31	7.28	1.04	8.99	6.87	4.01	2.98	2.48	1.87	1.89	1.47	1.51	1.91	1.79	1.96	2.09	2.54	0.74	0.22	1.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T40-S2	0.00	20.66	0.00	7.49	8.49	6.43	4.08	2.98	2.94	2.75	3.33	3.56	4.83	5.78	4.98	4.14	4.02	5.85	2.35	0.78	N/A	0.79	0.57	0.46	0.46	0.40	0.35	1.55
NSBE-T42-S1	0.00	0.00	0.00	0.00	0.00	1.30	0.30	0.00	0.00	0.04	0.07	0.12	0.15	0.41	1.39	10.43	39.87	36.88	4.90	0.56	3.59	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T45-S1	0.00	0.00	0.00	0.00	15.06	9.68	2.38	2.12	1.50	1.15	1.46	1.48	1.50	1.95	3.66	11.67	23.37	17.00	3.43	0.49	2.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T45-S2	0.00	0.00	0.00	11.36	14.05	14.49	8.25	4.89	4.30	3.65	4.44	3.81	3.23	2.66	2.45	5.21	8.97	5.78	1.02	0.21	1.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T61-S1	0.00	0.00	0.00	0.00	1.63	13.34	8.76	3.13	1.96	2.06	2.64	3.04	3.46	4.58	6.42	13.83	20.87	9.65	1.41	0.32	2.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T61-S2	0.00	0.00	0.00	0.00	2.43	3.28	3.54	1.30	0.94	0.69	1.42	2.21	3.51	4.44	7.43	18.33	27.33	17.30	2.93	0.53	2.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T62-S1	0.00	0.00	0.00	0.00	2.56	2.69	1.95	1.83	2.18	2.35	3.33	6.64	15.94	26.33	18.04	13.46	2.19	0.24	0.03	0.01	0.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T62-S2	0.00	0.00	0.00	0.00	0.00	1.37	0.40	0.77	0.35	0.83	1.78	5.82	19.24	29.82	22.08	15.12	1.26	0.19	0.09	0.03	0.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T64-S1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.19	0.95	5.08	11.26	13.92	36.19	27.24	4.32	0.19	0.03	0.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NSBE-T64-S2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.16	0.71	3.04	5.99	10.13	37.10	31.65	9.74	0.60	0.05	0.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A