

**D4. Lease Area and Offshore Export  
Cable Corridors Benthic Report**



# Lease Area and Offshore Export Cable Corridors Benthic Report, 2021

Maryland Offshore Wind Project  
Lease Area and Offshore Export Cable Corridors  
Offshore of MD and DE

**PREPARED FOR:**

US Wind, Inc.  
401 East Pratt Street  
Baltimore, Maryland 21202

**PREPARED BY:**

ESS Group, LLC, A TRC Company  
10 Hemingway Drive, 2<sup>nd</sup> Floor  
East Providence, Rhode Island 02915

Project No. U167-080/ 016310

August 2022







## TABLE OF CONTENTS

| <u>SECTION</u>                                | <u>PAGE</u> |
|---|-------------|
| EXECUTIVE SUMMARY                             |             |
| 1.0 INTRODUCTION.....                         | 1           |
| 2.0 APPROACH .....                            | 1           |
| 2.1 Benthic Imagery .....                     | 3           |
| 2.1.1 Benthic Transect Imagery .....          | 3           |
| 2.1.2 Benthic Grab Imagery .....              | 4           |
| 2.1.3 Imagery Analysis.....                   | 4           |
| 2.2 Benthic Macrofaunal Grab Sampling.....    | 6           |
| 2.2.1 Sample Collection .....                 | 6           |
| 2.2.2 Laboratory Analysis.....                | 8           |
| 2.2.3 Data Analysis .....                     | 8           |
| 3.0 RESULTS.....                              | 10          |
| 3.1 Benthic Imagery .....                     | 10          |
| 3.1.1 Lease Area .....                        | 24          |
| 3.1.2 Common Export Cable Corridor.....       | 25          |
| 3.1.3 Offshore Export Cable Corridor 1 .....  | 25          |
| 3.1.4 Offshore Export Cable Corridor 2 .....  | 26          |
| 3.1.5 Offshore Export Cable Corridor 2a ..... | 27          |
| 3.2 Benthic Grab Sampling.....                | 28          |
| 3.2.1 Lease Area .....                        | 28          |
| 3.2.2 Common Export Cable Corridor.....       | 39          |
| 3.2.3 Offshore Export Cable Corridor 1 .....  | 42          |
| 3.2.4 Offshore Export Cable Corridor 2 .....  | 45          |
| 3.2.5 Offshore Export Cable Corridor 2a ..... | 48          |
| 3.2.6 Statistical Comparisons .....           | 51          |
| 4.0 SUMMARY AND CONCLUSIONS.....              | 54          |
| 5.0 REFERENCES.....                           | 56          |

### TABLES

|  |    |
|--|----|
| Table 1. Benthic Imagery Transect Substrate Group Classifications .....                                | 10 |
| Table 2. Benthic Grab Sample Substrate Classifications .....   | 24 |
| Table 3. Lease Area Benthic Imagery Transect Substrate Group Classifications .....                     | 24 |
| Table 4. Lease Area Benthic Grab Sample Substrate Classifications.....                                 | 24 |
| Table 5. Common Export Cable Corridor Benthic Imagery Transect Substrate Group Classifications.....    | 25 |
| Table 6. Common Export Cable Corridor Benthic Grab Sample Substrate Classifications .....              | 25 |
| Table 7. Offshore Export Cable Corridor 1 Benthic Imagery Transect Substrate Group Classifications ... | 26 |
| Table 8. Offshore Export Cable Corridor 1 Benthic Grab Sample Substrate Classifications .....          | 26 |
| Table 9. Offshore Export Cable Corridor 2 Benthic Imagery Transect Substrate Group Classifications ... | 26 |
| Table 10. Offshore Export Cable Corridor 2 Benthic Grab Sample Substrate Classifications .....         | 27 |
| Table 11. Offshore Export Cable Corridor 2a Benthic Imagery Transect Substrate Group Classifications   | 27 |
| Table 12. Offshore Export Cable Corridor 2a Benthic Grab Sample Substrate Classifications .....        | 28 |
| Table 13. Summary of Key Statistics from the Lease Area Benthic Sample Analysis .....                  | 28 |
| Table 14. Relative Abundance of Taxa Encountered in Lease Area Samples.....                            | 37 |
| Table 15. Most Widespread Taxa Encountered in Lease Area Samples .....                                 | 38 |
| Table 16. Summary of Key Statistics from the Common Export Cable Corridor Benthic Sample Analysis      | 39 |
| Table 17. Relative Abundance of Taxa Encountered in Common Export Cable Corridor Area Samples..        | 40 |
| Table 18. Most Widespread Taxa Encountered Common Export Cable Corridor Area Samples .....             | 41 |



Table 19. Summary of Key Statistics from the Offshore Export Cable Corridor 1 Benthic Sample Analysis ..... 42

Table 20. Relative Abundance of Taxa Encountered in Offshore Export Cable Corridor 1 Samples ..... 43

Table 21. Most Widespread Taxa Encountered in Offshore Export Cable Corridor 1 Samples..... 44

Table 22. Summary of Key Statistics from the Offshore Export Cable Corridor 2 Benthic Sample Analysis ..... 45

Table 23. Relative Abundance of Taxa Encountered in Offshore Export Cable Corridor 2 Samples ..... 47

Table 24. Most Widespread Taxa Encountered in Offshore Export Cable Corridor 2 Samples..... 47

Table 25. Summary of Key Statistics from Offshore Export Cable Corridor 2a Benthic Sample Analysis . 48

Table 26. Relative Abundance of Taxa Encountered in Offshore Export Cable Corridor 2a Samples ..... 50

Table 27. Most Widespread Taxa Encountered in Offshore Export Cable Corridor 2a Samples..... 50

**FIGURES**

Figure 1. Benthic Sampling Location Selection Process Example ..... 2

Figure 2. Benthic Sampling Locations and Project Component Areas..... 5

Figure 3. Benthic Imagery and Grab Sample CMECS Groups..... 11

Figure 4. Representative Benthic Transect Imagery ..... 22

Figure 5. Additional Representative Benthic Transect Imagery..... 23

Figure 6. Benthic Taxa Richness by Project Component Area..... 29

Figure 7. Benthic Taxa Total Density by Project Component Area ..... 3333

Figure 8. Average Organism Density of Benthic Samples by Project Component Area ..... 51

Figure 9. Average Taxa Richness of Benthic Samples by Project Component Area ..... 52

Figure 10. NMDS Ordination of Benthic Community Composition by Project Component Area..... 53

Figure 11. NMDS Ordination of Benthic Community Composition by Gravel Percentage ..... 54

**ATTACHMENTS**

- Attachment A Characterizations for Benthic Imagery Transects
- Attachment B Benthic Sample Taxonomy and Enumeration Results
- Attachment C Benthic Macrofaunal Grab Logs



## **EXECUTIVE SUMMARY**

ESS Group, LLC., a TRC Company (ESS), conducted a benthic community and habitat assessment survey in July and August of 2021 to characterize seafloor habitats and biological communities associated with the Maryland Offshore Wind Project (the Project), leased by US Wind, Inc. (US Wind). The results of these surveys have been used to support the development of a Construction and Operations Plan (COP) for the Project.

### **Approach – Data Collection**

The 2021 benthic community and habitat assessment survey included the collection of oblique underwater video imagery along transects, planview (downward-facing) imagery, and benthic macrofaunal grabs from both the US Wind Lease area and the Offshore Export Cable Corridors (which includes the Common Export Cable Corridor and Offshore Export Cable Corridors 1, 2, and 2a). Offshore Export Cable Corridor 2a is a formerly planned cable corridor that was included in the 2021 benthic survey but is no longer located within the Project Design Envelope (PDE).

A total of 110 benthic imagery transects were collected as part of this survey to obtain oblique imagery of seafloor habitats. Of these, 70 were collected within the Lease area and 40 were collected within the Offshore Export Cable Corridors. Within the Lease area, 60 of the 70 imagery transects were selected to target potential complex habitat, as identified using existing information from prior studies as well as preliminary seafloor interpretation derived from US Wind's 2021 acoustic surveys. The other 10 imagery transects were selected to provide geographic representation in portions of the Lease area that were not anticipated to contain potentially complex habitat. Of the 70 collected transects in the Lease area, 68 were successfully processed. Within the Offshore Export Cable Corridors, all benthic imagery transects were planned at discrete intervals of approximately 1 km to provide geographic coverage for characterization of benthic habitats. Due to unfavorable environmental conditions, particularly in the shallowest portions of the Offshore Export Cable Corridors, some of the planned transects could not be processed. Additionally, some of the benthic imagery transects successfully collected during field operations are located to the north of the PDE and therefore no longer fall within the Offshore Export Cable Corridors. Of the 40 collected benthic imagery transects in the Offshore Export Cable Corridors, 30 were successfully processed.

Furthermore, planview imagery of seafloor habitats was collected at 198 locations. Of these, 120 were collected within the Lease area and 78 were collected within the Offshore Export Cable Corridors.

In addition to seafloor imagery, benthic grab samples were obtained at 198 locations (co-located with planview imagery locations). Within the Lease area, 120 benthic grab samples were collected. Sixty of these were selected to target potential complex habitat. The other 60 grab samples were selected to provide geographic representation in portions of the Lease area that were not anticipated to contain potentially complex habitat. Within the Offshore Export Cable Corridors, 78 benthic grab samples were collected. These were targeted for intervals of approximately 0.5 km to provide geographic coverage for characterization of benthic habitats in the Offshore Export Cable Corridors.

### **Approach – Imagery and Data Analysis**

For oblique imagery transect analysis, benthic mapping was completed using video time stamps and associated ROV/UTV USBL positional data provided by the survey contractor. The imagery analyst noted the position each time a difference in habitat was observed. These breaks in habitat were associated with timestamped points on each transect.

Each of these positions was annotated with information on NMFS-modified CMECS simplified substrate classes and groups present. Fine-scale habitat characteristics were also noted using substrate subgroups. Associated biological assemblages (e.g., sand dollar fields, tunicate mats) were also noted along with benthic features such as ripples, burrows, tubes, and shell deposits.

Planview grab imagery was used to validate the physical description of each macrofaunal grab sample made in the field as well as to provide context for the community composition identified through the taxonomic identification and enumeration conducted in the laboratory.

Benthic grain size laboratory results were used to confirm the NMFS-modified CMECS substrate subclass, group, and subgroup classifications for each grab sample location and inform the final CMECS classifications for each benthic imagery transect.

Benthic macrofaunal grab samples were sorted in their entirety and identified by qualified taxonomists to the lowest practicable taxonomic level.

Univariate statistics, including taxa richness and macrofaunal density were calculated for each sample and used to compare diversity and abundance of benthic macrofauna between samples and component areas of the Project, including the Lease area, the Common Export Cable Corridor, Offshore Export Cable Corridor 1, Offshore Export Cable Corridor 2, and Offshore Export Cable Corridor 2a. Additionally, multivariate statistics were used to assess similarities in community composition between CMECS substrate subclasses and Project component areas.

## Key Findings

The NMFS-modified CMECS substrate groups predominantly observed in the benthic imagery transects were sand, gravelly, and gravel mixes. Sand substrates often hosted sand dollars (*Echinarachnius parma*) at the sediment water interface. Hermit crabs (*Pagurus* spp.) and sea robins (*Prionotus carolinus*) were frequently observed in all of these substrate groups.

However, patches of shell hash and gravel (including pebble/granule, cobble, and boulder clasts) were also documented in some of the transects. Larger solitary boulders and mounds of smaller boulders and cobbles were rare but sometimes harbored stony corals (*Astrangia poculata*), sea whips (*Leptogorgia virgulata*), and other sessile epifauna, as well as megafauna, such as black sea bass (*Centropristis striata*) and American lobster (*Homarus americanus*).

Based on the benthic grab sample data, the benthic macrofaunal community was similar across most of the sampled locations in the Survey Area and there were few discernable geographic trends in multivariate community composition at a larger scale. However, macrofaunal density tended to be higher in Offshore Export Cable Corridor 1 than in certain other Project component areas included in the 2021 benthic survey.

Differences in the macrofaunal community between grab samples collected in coarse unconsolidated substrates (i.e., containing more than 5% gravel by weight) and fine unconsolidated substrates were statistically significant, but potentially not biologically relevant. However, benthic transect imagery confirmed that areas of gravel substrate (particularly those dominated by cobble or boulder) appear to host different macrofaunal communities than sand, gravelly substrates, and gravel mixes.



## **1.0 INTRODUCTION**

ESS Group, LLC., a TRC Company (ESS), conducted a benthic community and habitat assessment survey to support the Construction and Operations Plan (COP) for the Maryland Offshore Wind Project leased by US Wind, Inc. (US Wind). This survey included the collection of underwater video transects, still imagery, and benthic grabs from both the US Wind Lease area and the Offshore Export Cable Corridor (which includes Offshore Export Cable Corridors 1, 2, and 2a<sup>1</sup>) in July and August of 2021. These were collected as part of a larger survey effort that also included the collection of high resolution geophysical and geotechnical data by others. The results of those surveys are presented in their respective reports under separate cover (COP Volume II, Appendices A1 and A2).

The *Lease Area and Offshore Export Cable Corridors Benthic Report, 2021* documents the approach and methodology used to collect the benthic imagery and macrofaunal grab samples. Additionally, it compiles the benthic imagery and macrofaunal grab sampling results for the purpose of characterizing the benthic macrofaunal community and habitat in the sampled locations.

The results of this report are integrated with the fully processed acoustic seafloor mapping to produce final map products that include characterization and delineation of benthic habitat for the surveyed extent of the Lease area and Offshore Export Cable Corridors. These have been developed according to the NOAA Fisheries (NMFS)-modified Coastal and Marine Ecological Classification System (CMECS) taxonomic framework identified in the Greater Atlantic Regional Fisheries Office's March 29, 2021 "Updated Recommendations for Mapping Fish Habitat" and presented under separate cover as part of the Essential Fish Habitat Assessment report (COP Volume II, Appendix E1).

## **2.0 APPROACH**

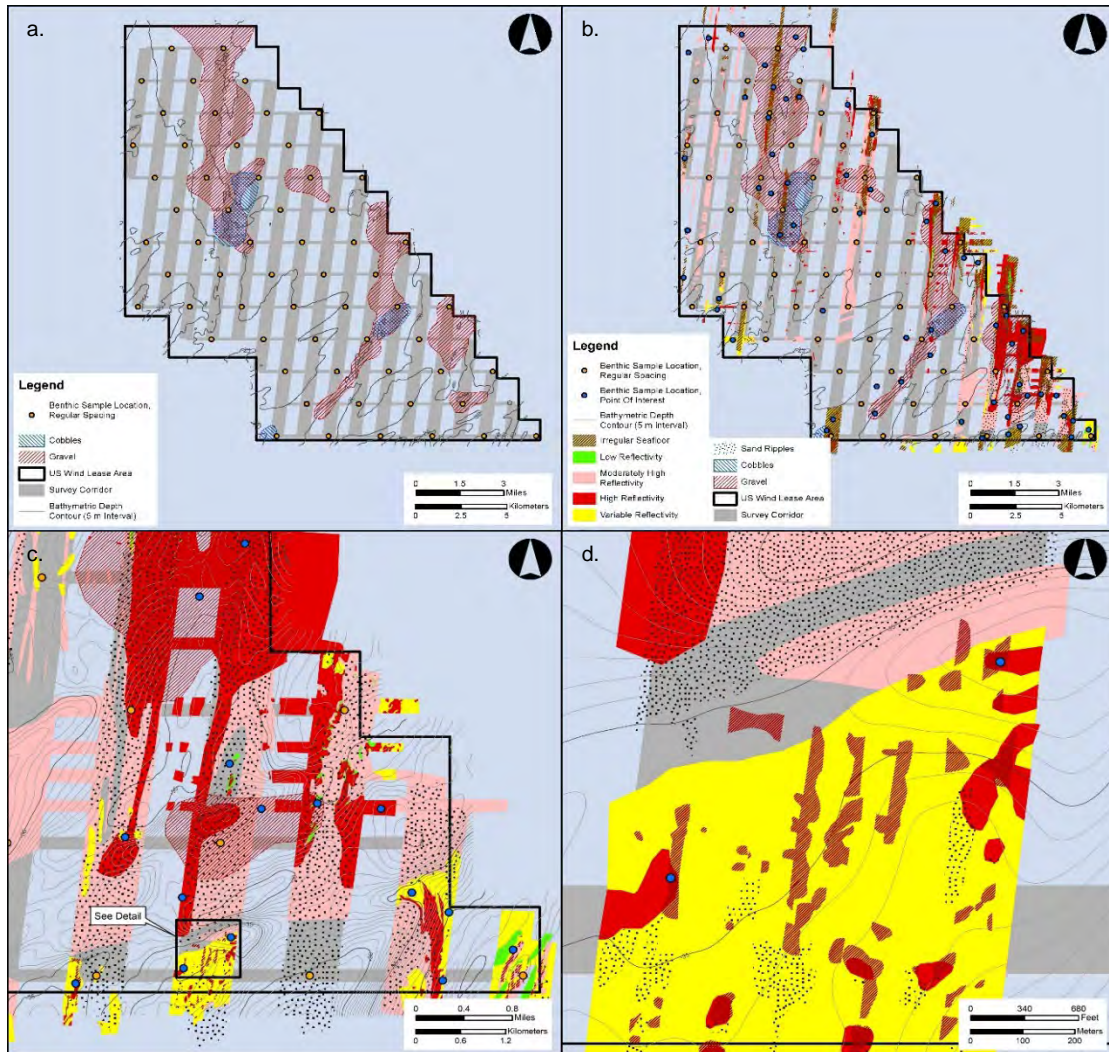
US Wind and ESS initially relied on guidance from the BOEM June 2019 "Guidelines for Providing Benthic Habitat Survey Information for Renewable Energy Development on the Atlantic Outer Continental Shelf Pursuant to 30 CFR Part 585" (BOEM 2019) in developing the benthic habitat assessment and mapping approach for the Maryland Offshore Wind Project. However, following issuance of the Greater Atlantic Regional Fisheries Office's (GARFO) May 27, 2020 "Updated Recommendations of Mapping Fish Habitat" and subsequent consultations with BOEM and GARFO on June 15, 2020, US Wind revised its benthic habitat assessment and mapping approach. US Wind provided a preliminary outline of the revised approach for GARFO's review on July 15, 2020, and received comments from GARFO on August 12, 2020. GARFO later released new guidance ("Updated Recommendations for Mapping Fish Habitat") on March 29, 2021. US Wind subsequently refined its benthic habitat assessment and mapping approach to incorporate these comments and the updated guidance from GARFO.

This approach commenced with the review of earlier Lease area geophysical and seafloor sampling surveys by US Wind (Alpine 2015) and others (CB&I 2014; Guida et al. 2017), which were used to provide initial context for coarse-scale identification of potentially complex seafloor habitat locations (Figure 1a). Following this, US Wind initiated acoustic surveys, the preliminary results of which were then used in tandem with previously existing data to select locations for targeted seafloor sampling in the Lease area (Figures 1b through 1d).

---

<sup>1</sup>Offshore Export Cable Corridor 2a is a formerly planned cable corridor that was included in the 2021 benthic survey but is no longer located within the Project Design Envelope (PDE) due, in part, to proximity to Indian River Inlet and sand resources in the area.





**Figure 1. Benthic Sampling Location Selection Process Example**

Blue points represent locations selected for sampling based on habitat. **Panel a:** Coarse-scale identification of areas with higher frequency of cobble and gravel based on existing data sources. **Panel b:** Preliminary 2021 acoustic data overlaid on existing data. **Panel c:** Same as top right map but scale and extent adjusted to show additional detail in southeastern portion of Lease area, including sand ripples (stippled areas) and more detailed bathymetry. **Panel d:** Detail of inset from bottom left map, showing locations of two benthic grab sample locations (blue points) selected to characterize potentially complex benthic habitats. Benthic imagery transects (not shown) were also targeted to obtain oblique imagery for these two locations.

Benthic field surveys of the Lease area and Offshore Export Cable Corridors (collectively, the Survey Area) were conducted from the *RV Brooks McCall* in July and August of 2021. To obtain site-specific information on the benthic community, the survey was composed of two primary elements: 1) collection of benthic imagery, and 2) collection of benthic grab samples. Benthic transect imagery was analyzed for habitat complexity and substrate type. Benthic grab samples were processed for bulk physical and macrofaunal analysis at each sampling location.

## 2.1 Benthic Imagery

Seventy benthic imagery transects were completed within the Lease area (Figure 2). Ten of these were fixed locations co-located with proposed WTG or OSS locations. The remaining 60 imagery transects were selected to characterize areas of potential complex habitat, based on preliminary interpretation of the 2021 acoustic data and supplemented by other existing sources of data (CB&I 2014; Alpine 2015; Guida et al. 2017). The axes of these transects were generally aligned west to east, except where alignment was altered to capture potential features of interest (e.g., high-relief objects, areas of higher reflectivity or rugosity) noted in the preliminary interpretation of the 2021 acoustic data.

Within the Offshore Export Cable Corridors, 50 benthic imagery transects were planned for collection. Preliminary acoustic survey results were not available prior to initiating selection of the benthic imagery transects in the Offshore Export Cable Corridors. Therefore, benthic imagery transects were selected at discrete intervals of approximately 1 km to provide geographic coverage for characterization of benthic habitats. Each video transect was aligned to be perpendicular to the Offshore Export Cable Corridors axis.

### 2.1.1 Benthic Transect Imagery

Underwater video transects were collected at 70 locations within the Lease area, and at 40 locations within the Offshore Export Cable Corridors. Due to unfavorable environmental conditions, particularly in the shallowest portions of the Offshore Export Cable Corridors, some of the planned transects could not be completed. Additionally, some of the benthic imagery transects successfully collected during field operations no longer fall within the Offshore Export Cable Corridors. Of the 70 benthic imagery transects collected in the Lease area, 68 were successfully processed. Of the 40 benthic imagery transects collected within the Offshore Export Cable Corridors, 30 were successfully processed, including an unplanned transect (VT-AC-79\_R) that was the result of a successful transect rerun (Figure 2).

Video transects were planned to be 180 m in length but actual transect length ranged from approximately 120 m to 700 m in length. Longer transects were typically associated with difficult environmental conditions, complexity of the seafloor features encountered, and vessel survey operations. The associated video lengths ranged from 7 to 47 minutes. Navigation and positioning systems from the boat and ROV USBL provided locational data for each transect.

Benthic video imagery was initially collected using a BlueROV2 equipped with a built-in 1080p digital camera and an attached GoPro series camera. The oblique imagery captured footage of the seabed along planned transects. The ROV was piloted using a hover and drift technique that allowed the device to move progressively along the seafloor as the vessel traversed the length of the transect. Footage from the ROV onboard camera was viewed in real time via an umbilical to allow for navigation, maintenance of appropriate distance from the substrate, and response to features of interest (e.g., hard bottom habitat). Higher quality video suitable for analysis was obtained using a GoPro camera mounted to the front



of the ROV. Adjustable intensity high pressure dive lights were affixed to the ROV frame to provide adequate lighting for video collection. This system was used to collect the first 50 video transects.

ROV equipment malfunctions resulted in switching to an improvised UTV (underwater towed vehicle) system to collect the remaining imagery transects. The UTV consisted of an ROV mounted to a static system and suspended from a side A-frame on the ship. Depth of the UTV was controlled via the A-frame winch to maintain appropriate distance from the seabed.

### **2.1.2 Benthic Grab Imagery**

Planview imagery of the seafloor at benthic grab locations was primarily collected using a Williamson & Associates Solo III camera and LED lighting mounted to the frame of the double Salish grab sampler. Video collected at each site included lowering the sampler through the water column, contact with the bottom and sample collection, and retrieval of the grab.

Due to malfunction of the original camera system and lighting, some of the Lease area benthic grab imagery was collected separately from the benthic grab sample collection itself. For these locations, a GoPro camera was mounted to the sampler frame and redeployed within 5m of the original grab sample location, solely for the purpose of obtaining planview benthic imagery. All benthic grab imagery from Offshore Export Cable Corridor sites was collected at the time of grab sample collection.

### **2.1.3 Imagery Analysis**

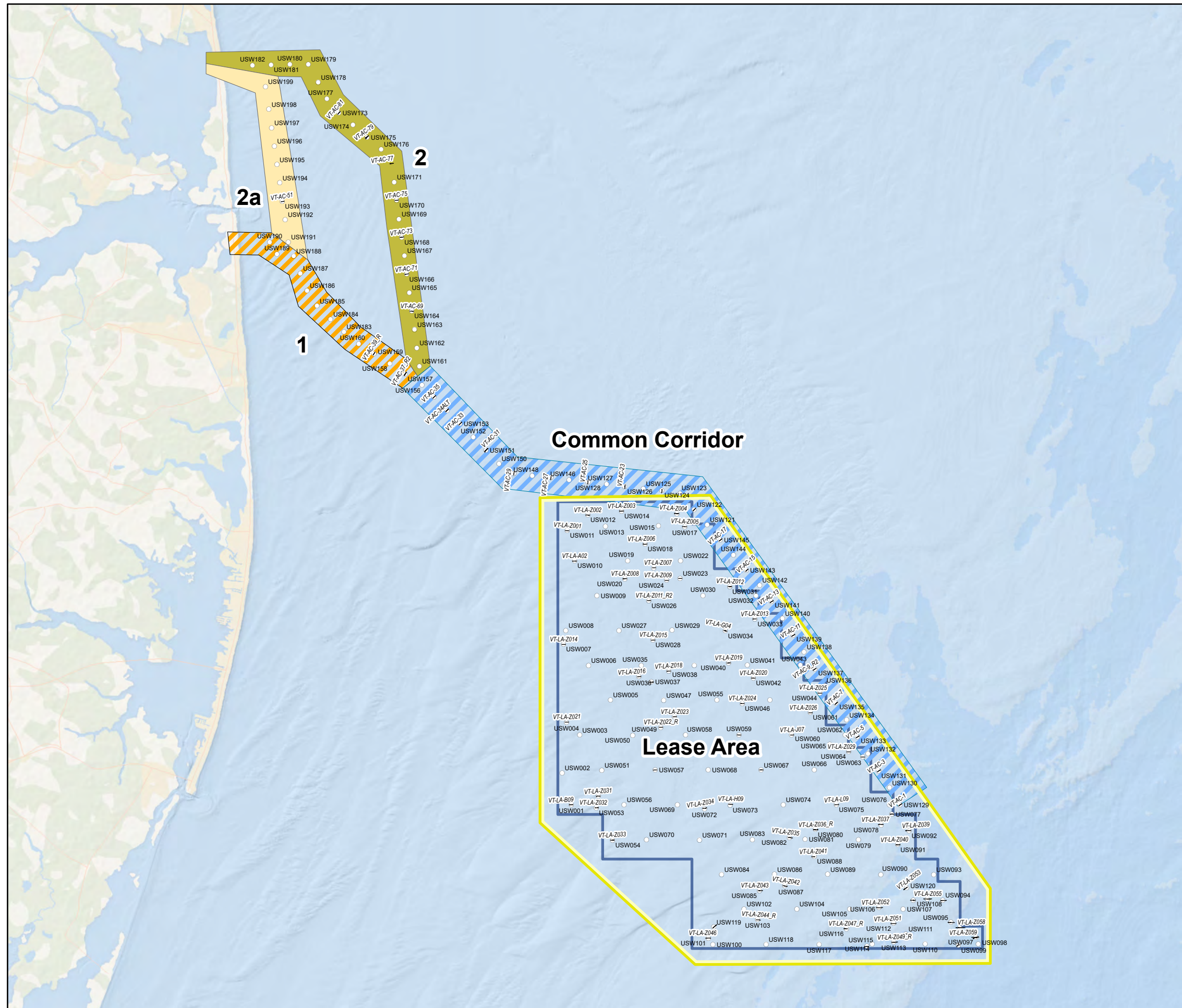
For oblique imagery transect analysis, benthic mapping was completed using video time stamps and associated ROV/UTV USBL positional data provided by the survey contractor. The imagery analyst noted the position each time a difference in habitat was observed. These breaks in habitat were associated with timestamped points on each transect.

Each of these positions was annotated with information on NMFS-modified CMECS simplified substrate classes and groups present. Fine-scale habitat characteristics were also noted using substrate subgroups. Associated biological assemblages (e.g., sand dollar fields, tunicate mats) were also noted along with benthic features such as ripples, burrows, tubes, and shell deposits.

Planview grab imagery was used to validate the physical description of each macrofaunal grab sample made in the field as well as to provide context for the community composition identified through the taxonomic identification and enumeration conducted in the laboratory.

To obtain the most uniform and consistent results, the imagery analysis was performed by a single analyst.



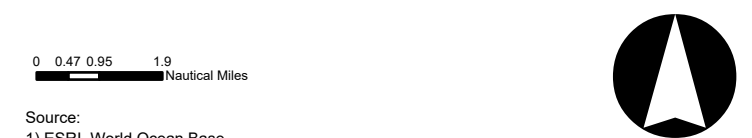
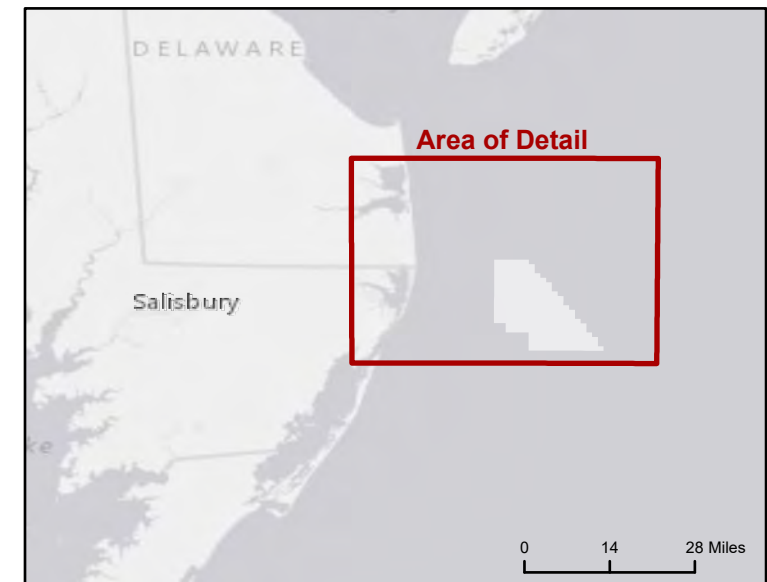


**Legend**

- ROV Track
- Benthic Sample Location

**Offshore Project Component Area**

- Offshore Export Cable Corridor 1
- Offshore Export Cable Corridor 2
- Offshore Export Cable Corridor 2a
- Common Corridor
- Lease Area



Source:  
1) ESRI, World Ocean Base

**Benthic Sampling Locations and  
Project Component Areas**

**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware



**Figure 2**

## **2.2 Benthic Grab Sampling**

One-hundred twenty benthic grab samples were collected within the Lease area (Figure 2), 60 of which were fixed locations co-located with proposed WTG or OSS locations. These locations were selected to ensure broad geographic characterization of portions of the Lease area that may be directly impacted by Project construction. An additional 60 locations were selected to characterize potential complex habitat, as identified by preliminary interpretation of the 2021 acoustic data and supplemented by other existing sources of data (CB&I 2014; Alpine 2015; Guida et al. 2017). Areas targeted as potential complex habitat were mapped by one or more of these sources as more likely to contain unconsolidated hard bottom, such as gravel, gravel mixes, and gravelly substrates.

Seventy-eight benthic grabs were collected within the Offshore Export Cable Corridors, located at intervals of approximately every 0.5 km (Figure 2).

### **2.2.1 Sample Collection**

Surface benthic grab samples were collected using a 0.04 m<sup>2</sup> double Salish grab sampler at 120 locations within the Lease area between July 21 and August 31, 2021, and 78 locations within the Offshore Export Cable Corridors between August 3, and August 17, 2021. After retrieval, each sample was examined for quality and a decision was made to accept or reject the sample based on representativeness of the grab. Sample grabs that did not retain at least 8 cm of material or showed evidence of uneven penetration (i.e. angled sample) were rejected as unrepresentative and the grab was redeployed until an acceptable sample was retained.



*Double Salish Grab Sampler on the RV Brooks  
McCall*

Once an acceptable sample was retrieved, descriptions of sample recovery and sediment type (i.e. grain size) were recorded in a custom form using the FastField application on a tablet computer. The top 10 cm of sediment in one side of the grab was then removed from the sampler using a stainless-steel spoon and sieved in the field. Sieving consisted of gently rinsing the sample material through a bucket sieve with 500- $\mu$ m mesh to remove fine sediments. Sieved samples were preserved in a solution containing 10% buffered formalin in seawater, which is consistent with prior benthic surveys conducted in the area (Volume II, Appendices D1 – D3). Preserved samples were stored in HDPE quart-size sample jars and labeled with the project name, sample identification code, sampling date, preservative, and the initials of the collector.

Sampled material from the other side of the grab was extracted separately by the survey contractor (TDI Brooks International, Inc.) for bulk physical analysis, including grain size. The bulk physical data analysis is provided by others under separate cover and is not part of this report.

Preserved samples were returned to ESS offices for storage and laboratory analysis of benthic infauna.





Date Submitted: 07-22-2021 08:49 PM  
Submitted By: sdehainaut@essgroup.com

## U167-080 US Wind Lease Area Survey

### Project Information

|                     |   |
|---------------------|---|
| Project Number:     | U167-080  |
| Date for This Entry | 07-22-2021  |
| Time for This Entry | 03:17 PM (0 GMT)  |
| Sample ID           | BG-LA-H05   |
|                     |  38.387347, -74.746048 |
| General Note        | 2 bottles   |

### Survey Information

|  |                    |
|--|--------------------|
| Number of Attempts (Select One)        | 1                  |
| Equipment Used (Select All That Apply) | Double Salish Grab |

### Sediment Info

|                          |  |
|--------------------------|--|
| Photo of Sediment Sample |  |
| Sediment Description     | 3.5inch from top, dark brown coarse sand, some shell and fine sand                   |

### Benthic Info

|                  |               |
|------------------|---------------|
| Photo of Benthic |               |
| Benthic Note     | Worms present |

*Representative screenshot of benthic macrofaunal grab sample field report form.*

### 2.2.2 Laboratory Analysis

Upon receipt at the laboratory, each sample was logged in and decanted through a 500- $\mu$ m sieve. Samples were gently rinsed in the sieve to remove the formalin fixative and any additional fine sediment that remained after the initial field sieving process. Once thoroughly rinsed, each sample was returned to a labeled jar and preserved with 70% ethanol for storage.

For sorting, the contents of each sample were examined using a high-power dissecting microscope (7X to 45X magnification) and high-intensity gooseneck fiber optic lamp. All samples were sorted in their entirety. Organisms found during the sorting process were removed with forceps and placed in 70% ethanol. Each vial was labeled with the project name, collection date and sample identification number. All residue (sediment and organic matter) from the sorted and unsorted portion of each sample was placed in a separate labeled container and re-preserved in 70% ethanol, which is consistent with prior benthic surveys conducted in the area (Volume II, Appendices D1 – D3).

Sorted organisms were subsequently identified by a qualified taxonomist to the lowest taxonomic level possible using a dissecting microscope and readily available taxonomic keys and references (e.g., Bartholomew, 2001; Martinez, 1999; Pollock, 1998; Abbott and Morris, 1995; Weiss, 1995; Gosner, 1978; Bousfield, 1973; Gosner, 1971; Smith, 1964; Pettibone, 1963). Temporary slide mounts were prepared for oligochaete worms, capitellid polychaetes, and certain amphipod taxa as necessary to improve the taxonomic precision of identification for these groups. Slide-mounted organisms were identified under a compound microscope capable of 64X to 1600X magnification.

For quality assurance and control (QA/QC) purposes, a second qualified staff member (quality assurance officer) resorted 10% of the samples (or one, whichever was greater) analyzed by each sorter to ensure organisms were being adequately removed from the samples. The quality assurance officer checked the sorted sample material for remaining organisms and calculated an efficiency rating ( $E$ ) using the following formula:

$$E = 100 \times \frac{n_a}{n_a + n_b}$$

Where  $n_a$  is the number of individuals originally sorted and verified as identifiable organisms by the QC checker and  $n_b$  is the number of organisms recovered by the QC checker. If the original sorter achieved  $E < 90\%$  (i.e., less than 90% of the organisms in the sample removed), corrective action was taken to ensure greater sorting efficiency for other samples sorted by the same individual. Corrective action includes but is not necessarily limited to, additional training on organism recognition and re-sorting of sample material.

### 2.2.3 Data Analysis

#### **Univariate Analyses**

Measures of benthic abundance, diversity, and community structure were selected to describe the affected environment. The rationale behind selection of each measure is as follows:

*Taxa richness* is the number of different taxa that are found within a given area or community and is widely accepted as a good assessment measure of diversity (Magurran 2003). Determination of taxa

richness from macroinvertebrate data is complicated by the presence of immature or damaged specimens, which often prevent the identification of all organisms to the same taxonomic level (Cuffney et al. 2007, Meredith et al., 2019). These conditions result in datasets that contain abundances associated with multiple levels within the taxonomic hierarchy (e.g. abundances associated with the amphipod genus *Ampelisca* sp. as well as the parent family of that genus, Ampeliscidae). To resolve these ambiguous parent-child pairs while preserving taxa richness and abundance to the extent possible, we employed the RPMC-G (Remove Parent or Merge Children – Group) method described in Cuffney et al. (2007). This method involves the removal of an ambiguous parent taxon if its abundance is less than the sum of abundance(s) reported from its taxonomic children. If abundance of a parent taxon exceeds that of its taxonomic children, then the children are merged with the parent. As the derivation of abundance and richness metrics should not be decoupled (Cuffney et al. 2007), the RPMC-G resolved dataset was used for calculation of all metrics presented below.

*Macrofaunal density* is a measure of abundance expressed as an estimate of the number of individuals per unit area. Although macrofaunal density can reflect the productivity of marine habitats (Taylor 1998), it may also serve as an indication of stress or disturbance at a location (Dean 2008). Consequently, the density of benthic organisms may increase or decrease in response to different types of stress (e.g., thermal or chemical pollution, sediment deposition, physical abrasion or displacement).

The density of benthic organisms responds to disturbance as mitigated by the tolerance (or preference) of a given organism to the particular source of disturbance. However, density may vary substantially over small areas or short periods of time and should therefore be interpreted cautiously. For this study, macrofaunal density is expressed as the number of organisms per square meter.

Analysis of variance (ANOVA) was used to compare average taxa richness and organism density between Project component areas. Density data were log transformed prior to analysis to better meet the assumptions of parametric statistical tests.

### **Multivariate Analyses**

*Community composition* describes the identity and relative abundance of each taxon within a community. Benthic community composition is dependent upon a variety of factors, including sediment grain size and disturbance regime, substrate type, above-sediment structure, and exposure to predation (Byers and Grabowski 2014).

Non-metric Multidimensional Scaling (NMDS) ordination was used to visualize divergence in community composition between samples. Samples were then grouped by Project component areas and NMFS-modified CMECS substrate subclass. NMDS is a non-parametric distance-preserving ordination approach that reduces the complexity of multivariate data and is well suited for use on sparse data sets (Kruskal 1964). NMDS results in the generation of a plot, which represents the community composition of each sample by its relative position in unitless ordination space. The relative distance between points is indicative of the similarity of sample communities; points that are closer together in ordination space indicate more similar communities, those that are farther apart indicate less similar communities. To decrease the influence of rare species, all taxa present in less than 5% of samples were excluded from analysis. Densities were then fourth root transformed to down-weight the influence of highly abundant species. All multivariate analyses were conducted in PRIMER version 6.1.18 (Clarke and Gorley 2006) using Bray-Curtis (Sorensen) distance measures (Bray and Curtis 1957)

Analysis of Similarity (ANOSIM), another non-parametric statistical approach, was used to test for differences in community composition between areas of CMECS-classified fine and coarse unconsolidated substrates as well as between samples collected from different Project component areas. ANOSIM tests for significant differences between specified groups of samples through permutation-based hypothesis testing. ANOSIM generates R statistics that represents the ratio between within-group and between-group dissimilarities; values close to 0 indicate a lack of separation of groups, and values close to 1 indicate complete segregation of groups. ANOSIM was run using default settings and included 999 permutations for each analysis. When ANOSIM revealed significant differences in community composition between groups, similarity percentages analysis (SIMPER) was performed to determine the contribution of individual species to observed differences in community composition between groups.

### **3.0 RESULTS**

#### **3.1 Benthic Imagery**

Ninety-eight benthic imagery transects were successfully classified by dominant substrate (Figure 3). Of these, 68 were obtained from the Lease area and 30 from the Offshore Export Cable Corridors. The resulting substrate classifications are summarized below and presented in greater detail in Attachment A.

The three NMFS-modified CMECS substrate groups observed to dominate the length of the benthic imagery transects were sand, gravelly, and gravel mixes (Table 1). Substrate subgroups are typically more challenging to identify from underwater imagery footage, particularly those that are dominated by sand. However, based on the bulk grain size analysis results for associated benthic grabs, the primary NMFS-modified CMECS substrate subgroups sampled in the Survey Area were very coarse/coarse sand and gravelly sand (Table 2 and Attachment C).

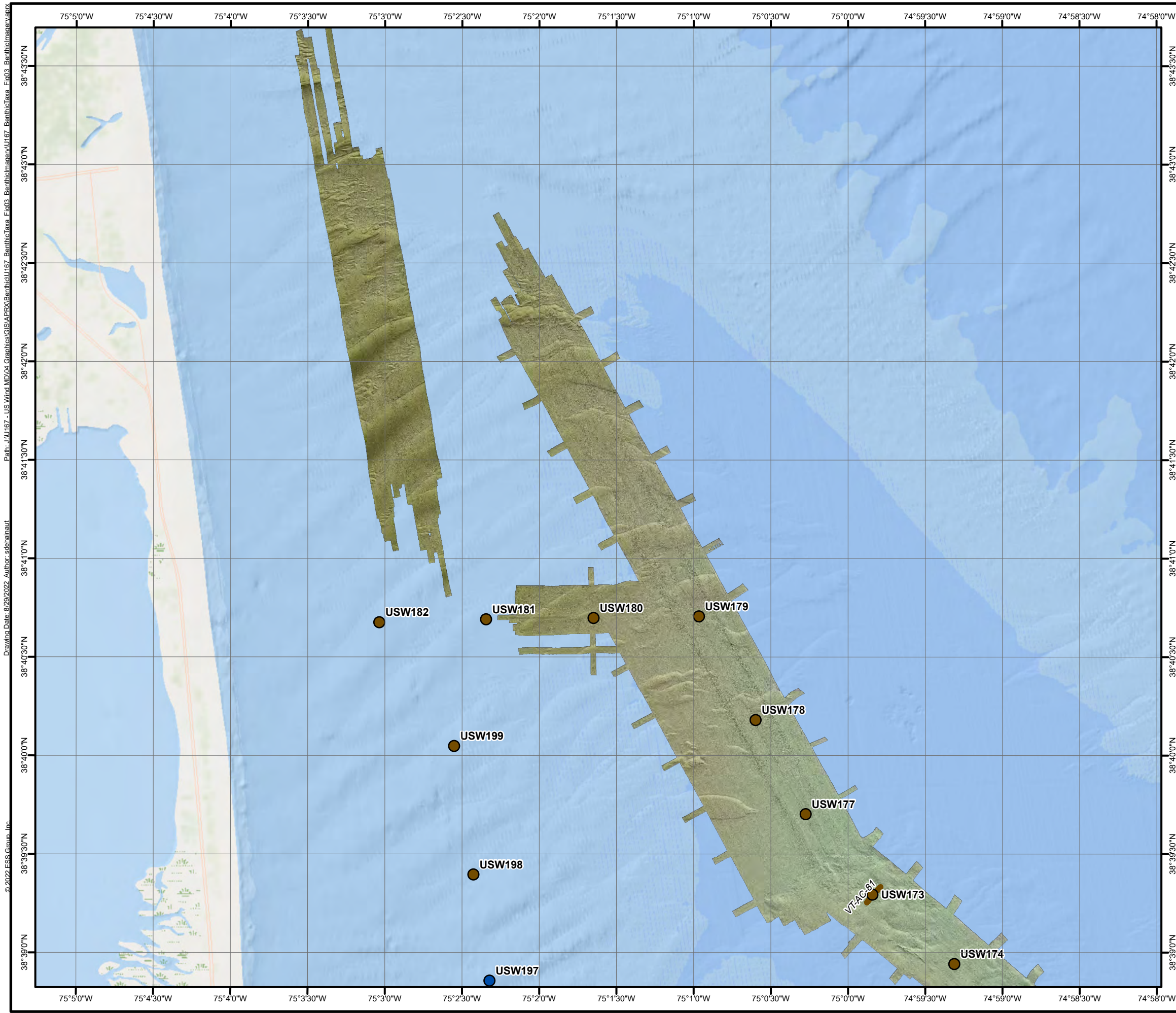
The majority of transects (81%) were dominated by sand substrate (Table 1), although patches of secondary substrate types, such as granules/pebbles or shell hash, were also sometimes observed on these transects. Similarly, transects dominated by gravelly substrates, which constituted approximately 18% of all benthic imagery transects, were frequently observed to contain patches of bare sand interspersed along the seafloor surface. Lone standing or scattered boulder- and cobble-sized clasts were also occasionally observed on transects dominated by sand, gravelly substrates, or gravel mixes. Boulders were observed on seven of the benthic imagery transects and cobbles were observed on an additional two transects.

**Table 1. Benthic Imagery Transect Substrate Group Classifications**

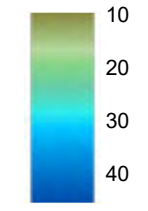
| <b>Dominant CMECS Substrate Group</b> | <b>Dominant CMECS Substrate Subgroup(s)</b>    | <b>No. of Transects</b> | <b>% of Transects</b> |
|---------------------------------------|--|-------------------------|-----------------------|
| Sand                                  | Fine/Very Fine Sand to Very Coarse/Coarse Sand | 79                      | 81%                   |
| Gravelly                              | Gravelly Sand                                  | 18                      | 18%                   |
| Gravel Mixes                          | Sandy Gravel                                   | 1                       | 1%                    |
| Gravel                                | Pebble/Granule                                 | 0                       | 0                     |
| <b>Total</b>                          |  | <b>98*</b>              | <b>100%</b>           |

\* Total is for all Project component areas (i.e., Lease area and Offshore Export Cable Corridors) but does not include transects that could not be classified due to environmental conditions (e.g., poor visibility).





**Bathymetry Depth (m)**



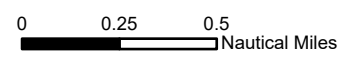
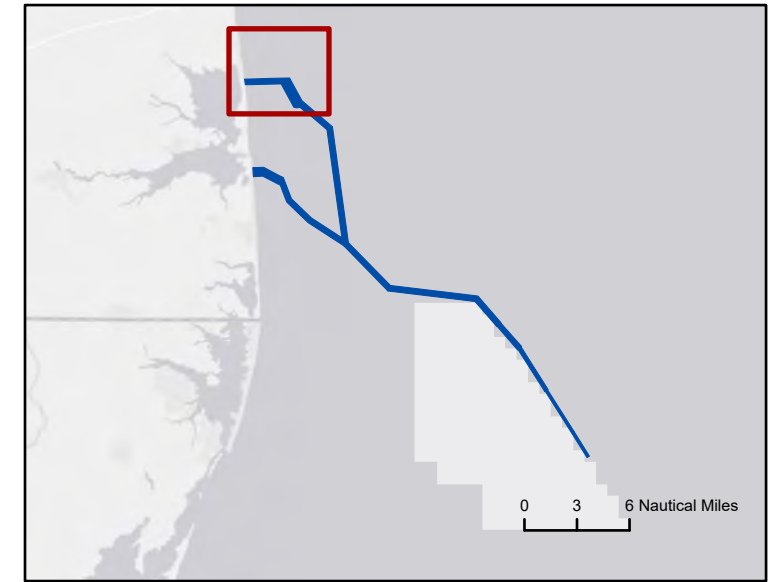
**Benthic Sample Locations**

- Gravelly
- Sand

**ROV Tracks**

- Sand

**Area of Detail**



Source:  
 1) ESRI, World Ocean Base  
 3) GEMS, Detailed Bathymetry, 2021

**Benthic Imagery and Grab Sample CMECS Substrate Groups**

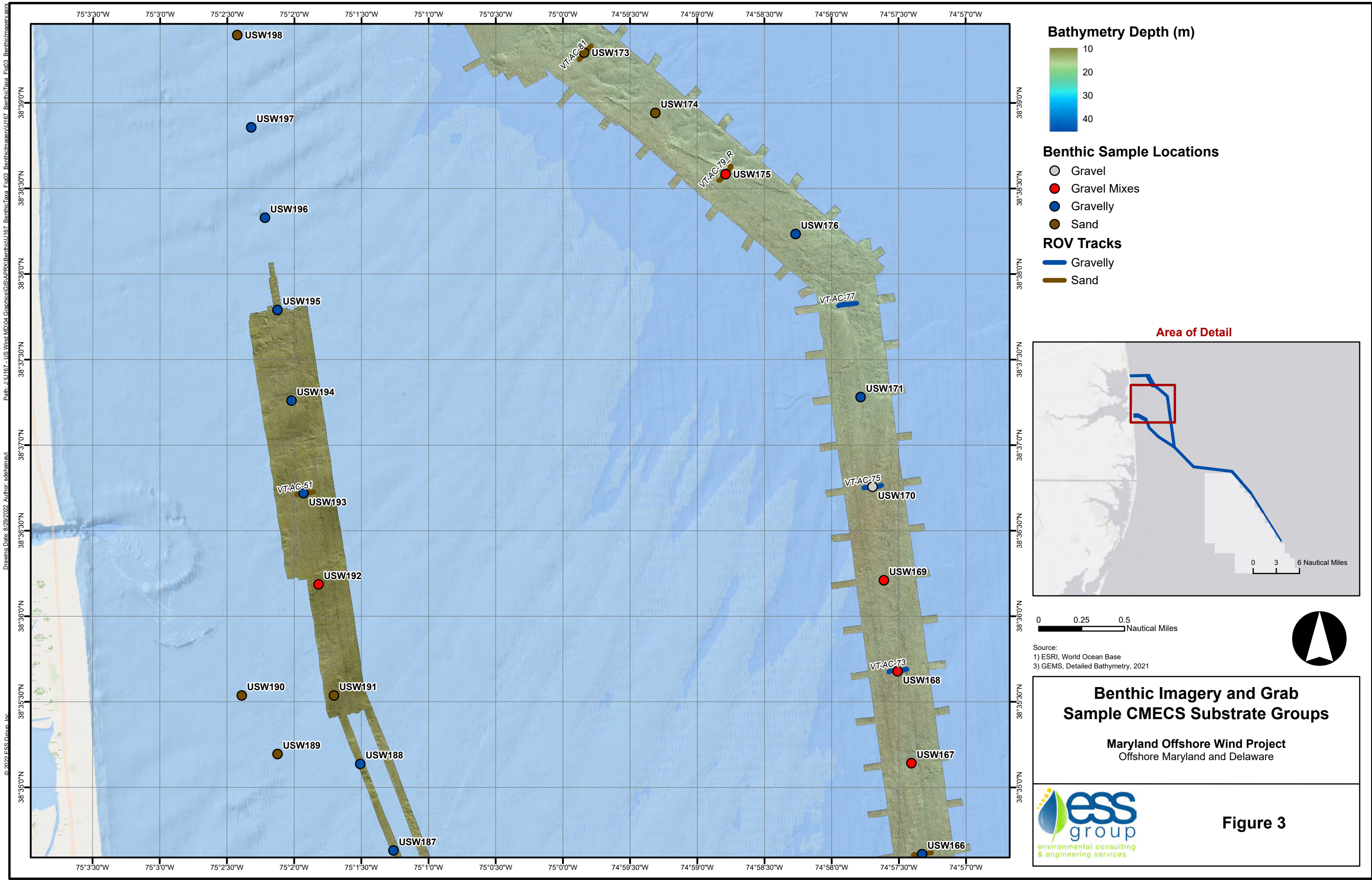
**Maryland Offshore Wind Project**  
 Offshore Maryland and Delaware



**Figure 3**

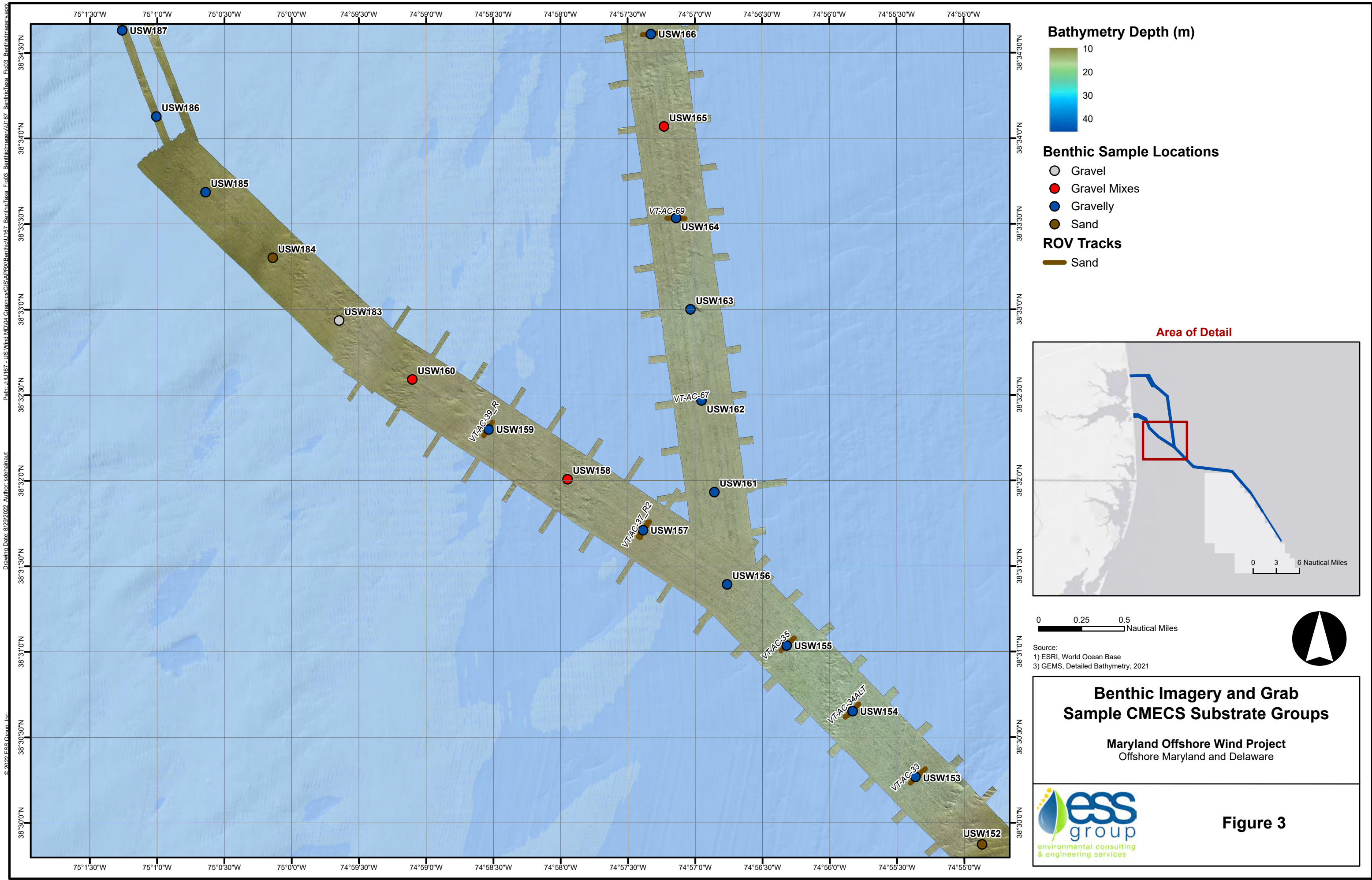
Drawing Date: 8/29/2022 Author: sdehairhaut  
 Path: J:\U167 - US Wind\MD\04\_Graphics\GIS\APRX\Benthic\U167\_BenthicTaxa\_Fig03\_BenthicImagery.aprx  
 © 2022 ESS Group, Inc.





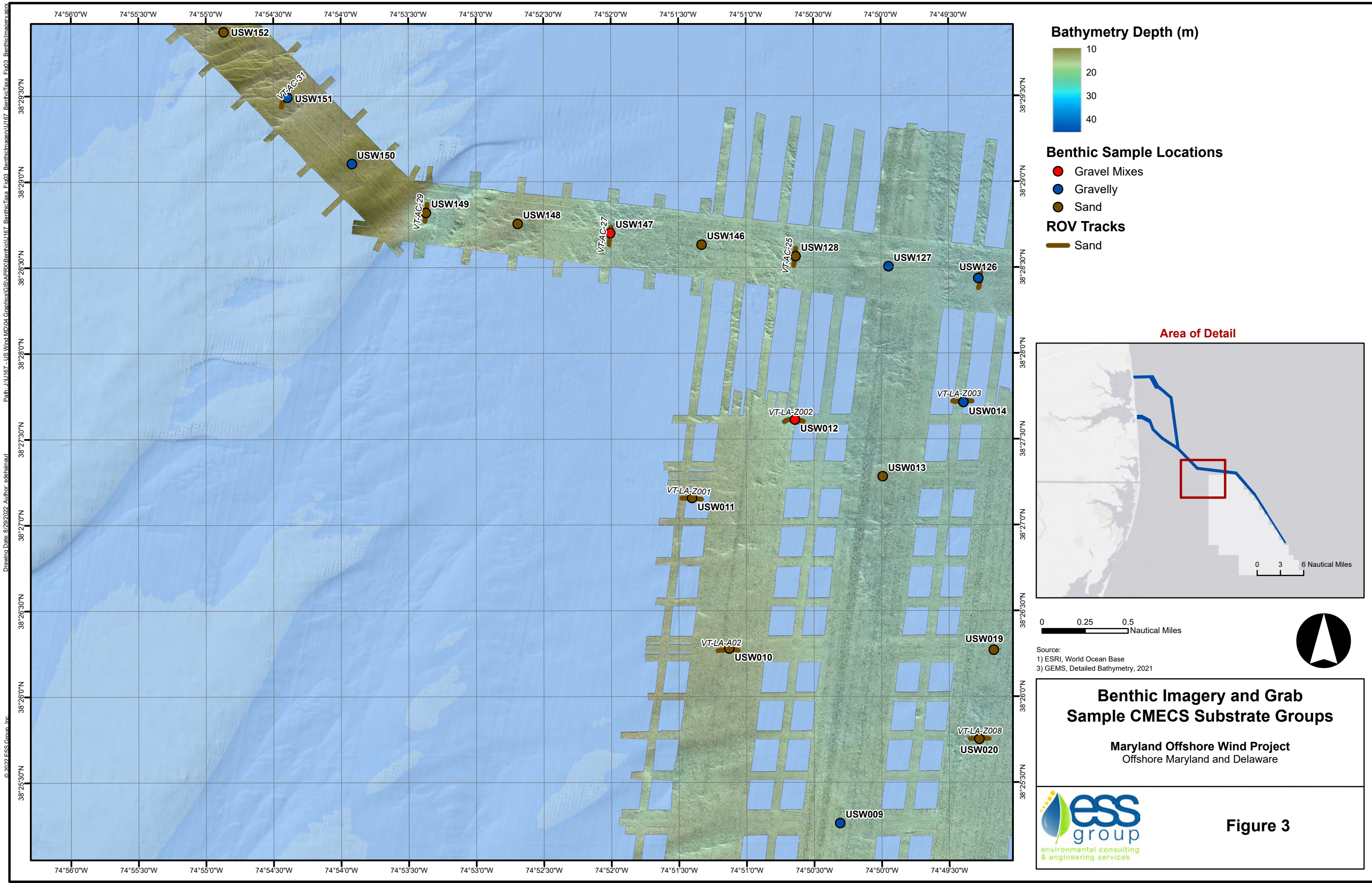
Drawing Date: 8/29/2022 Author: sdehainaut  
 Path: J:\U167 - US Wind\MD\04\_Graphics\GIS\APRX\Benthic\U167\_BenthicTaxa\_Fig03\_BenthicImagery.aprx  
 © 2022, ESS Group, Inc.





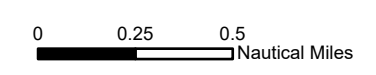
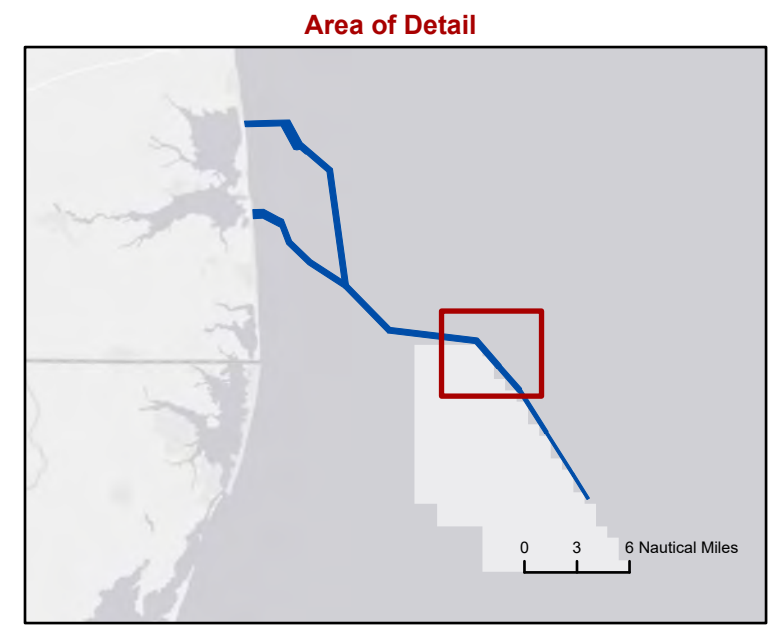
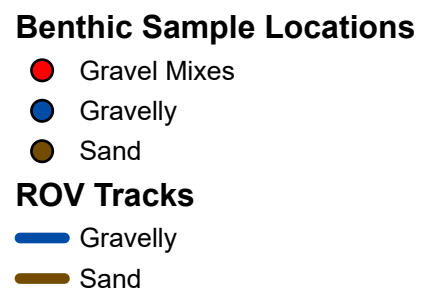
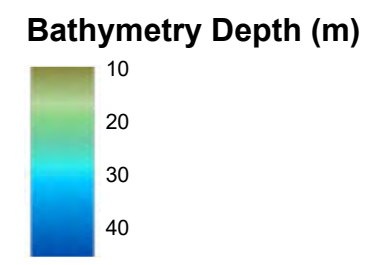
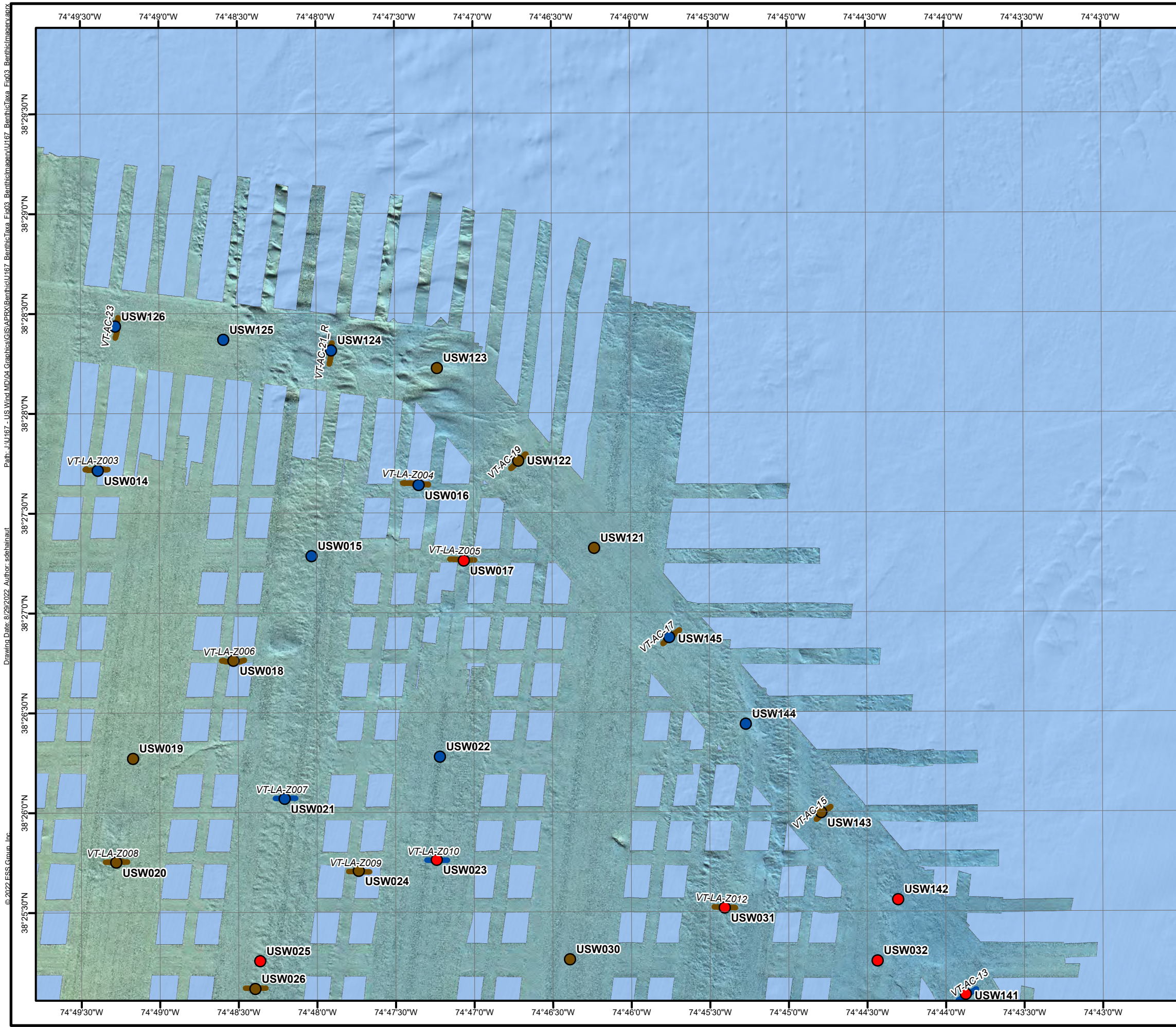
Drawing Date: 8/29/2022 Author: sdehainaut  
 Path: J:\U167 - US Wind\MDU04\_Graphics\GIS\APRX\Benthic\U167\_BenthicTaxa\_Fig03\_BenthicImagery.aprx  
 © 2022 ESS Group, Inc.





Drawing Date: 8/29/2022 Author: sdehainaut  
 Path: J:\U167 - US Wind\MD\04\_Graphics\GIS\APRX\Benthic\U167\_BenthicTaxa\_Fig03\_BenthicImagery.aprx  
 © 2022 ESS Group, Inc.





Source:  
 1) ESRI, World Ocean Base  
 3) GEMS, Detailed Bathymetry, 2021

**Benthic Imagery and Grab  
 Sample CMECS Substrate Groups**

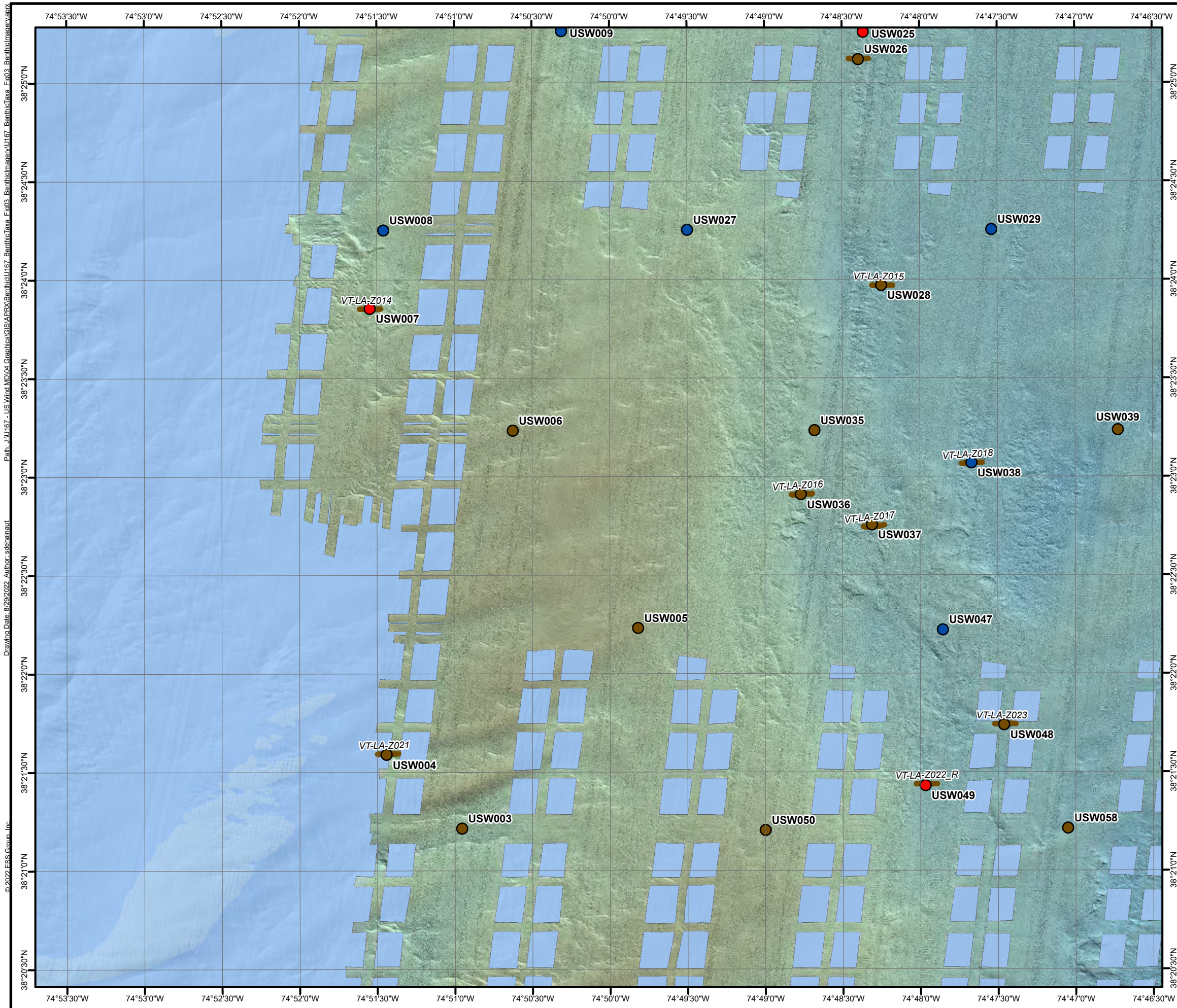
**Maryland Offshore Wind Project**  
 Offshore Maryland and Delaware



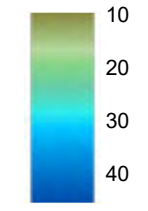
**Figure 3**

Drawing Date: 8/29/2022 Author: sdehairhaut  
 Path: J:\U167 - US Wind\MD\04\_Graphics\GIS\APRX\Benthic\U167\_BenthicTaxa\_Fig03\_BenthicImagery.aprx  
 © 2022 ESS Group, Inc.





**Bathymetry Depth (m)**



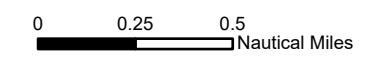
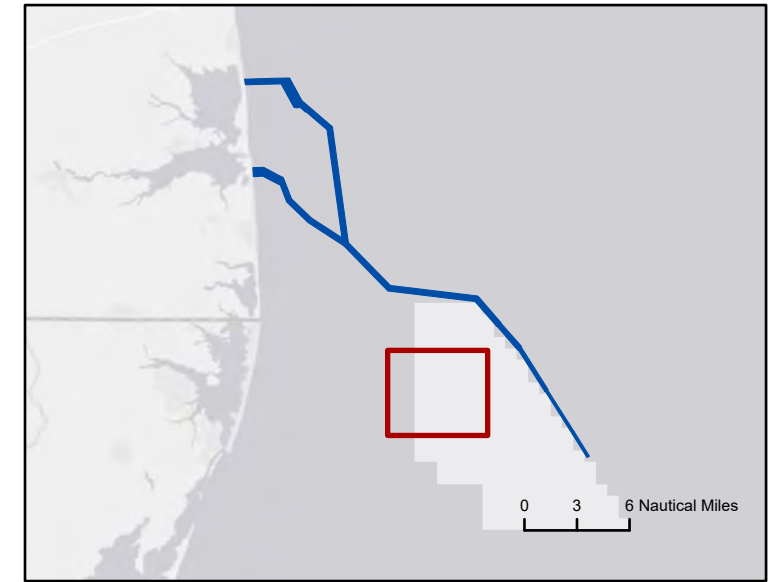
**Benthic Sample Locations**

- Gravel Mixes
- Gravelly
- Sand

**ROV Tracks**

- Sand

**Area of Detail**



Source:  
 1) ESRI, World Ocean Base  
 3) GEMS, Detailed Bathymetry, 2021

**Benthic Imagery and Grab  
 Sample CMECS Substrate Groups**

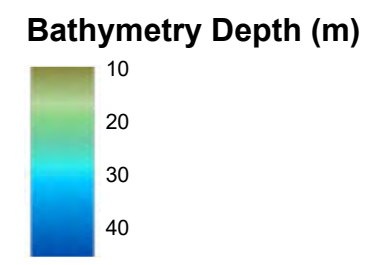
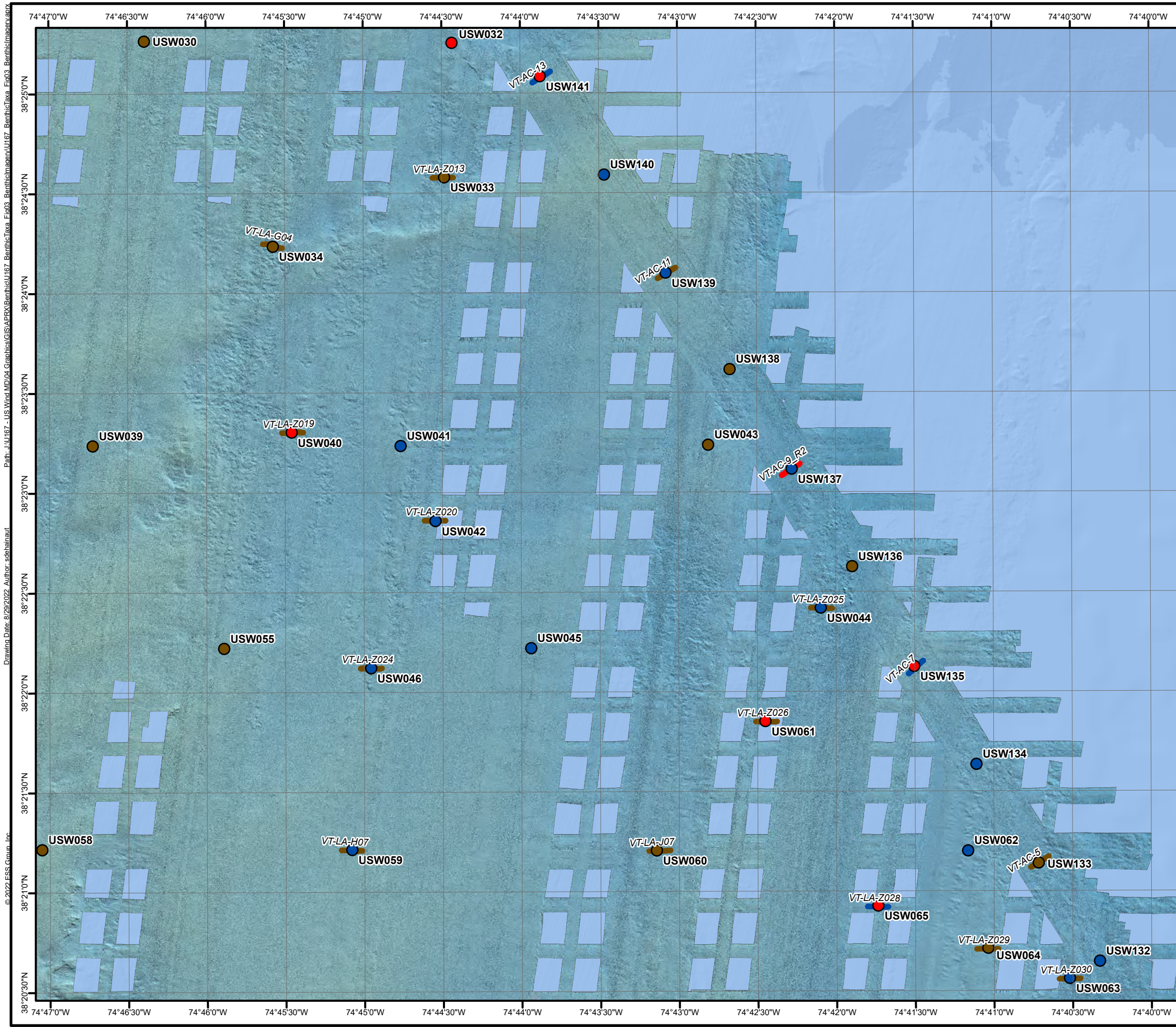
**Maryland Offshore Wind Project**  
 Offshore Maryland and Delaware



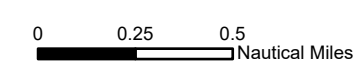
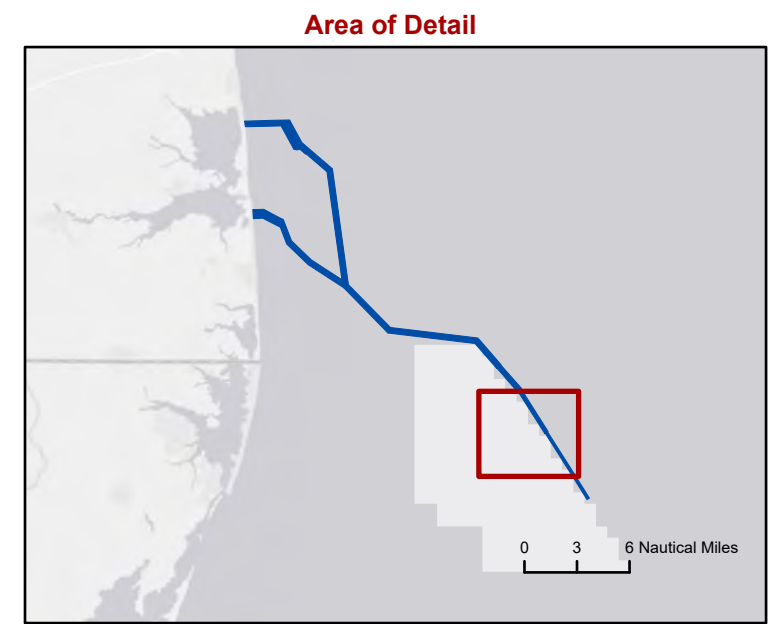
**Figure 3**

Drawing Date: 8/29/2022 Author: sdehainaut  
 Path: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\Benthic\U167\_BenthicTaxa\_Fig03\_BenthicImagery.aprx  
 © 2022 ESS Group, Inc.





- Benthic Sample Locations**
- Gravel Mixes
  - Gravelly
  - Sand
- ROV Tracks**
- Gravel Mixes
  - Gravelly
  - Sand



Source:  
 1) ESRI, World Ocean Base  
 3) GEMS, Detailed Bathymetry, 2021

**Benthic Imagery and Grab  
 Sample CMECS Substrate Groups**

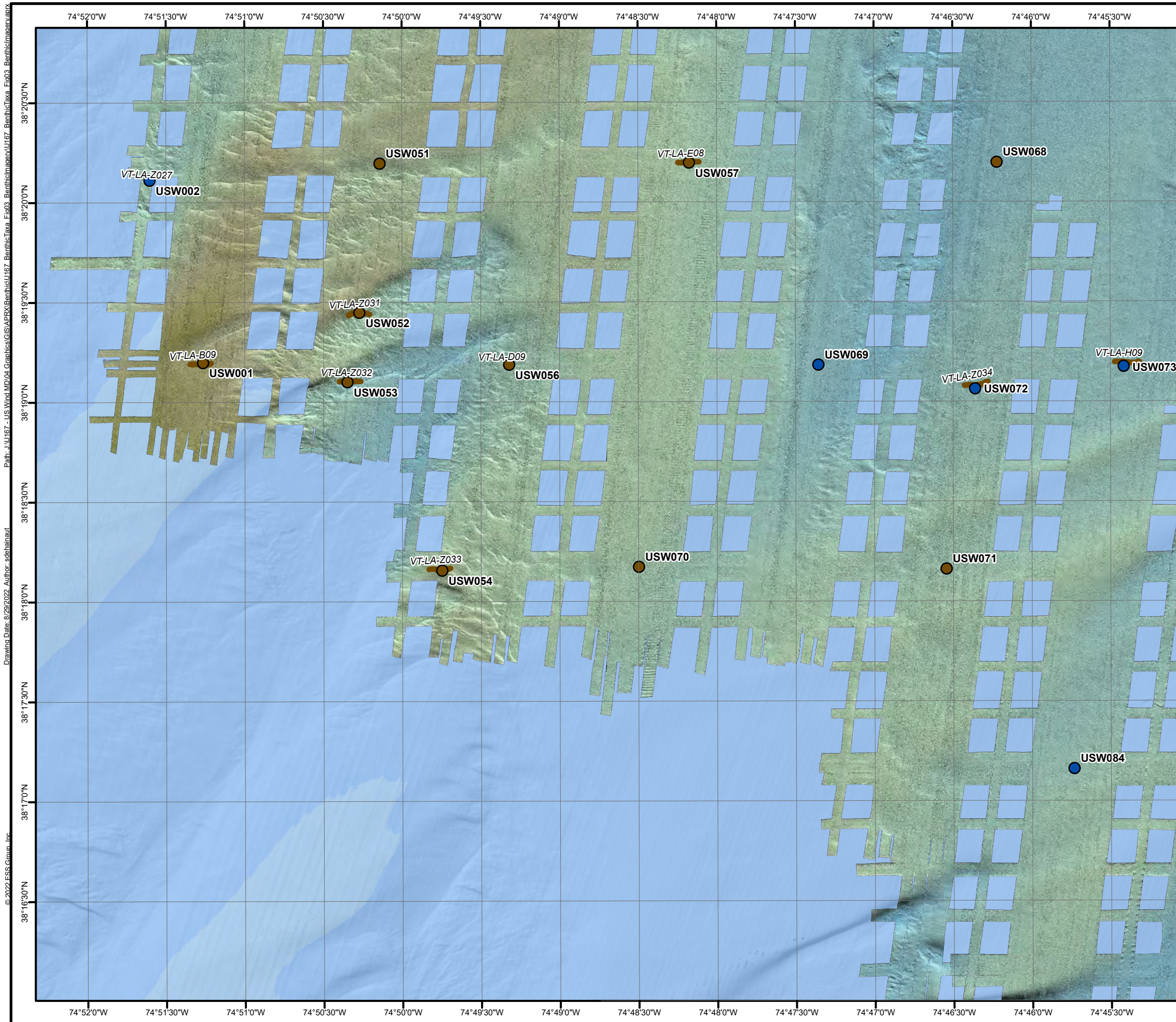
**Maryland Offshore Wind Project**  
 Offshore Maryland and Delaware



**Figure 3**

Drawing Date: 8/29/2022 Author: sdehairhaut  
 Path: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\Benthic\U167\_BenthicTaxa\_Fig03\_BenthicImagery.aprx  
 © 2022 ESS Group, Inc.





**Bathymetry Depth (m)**

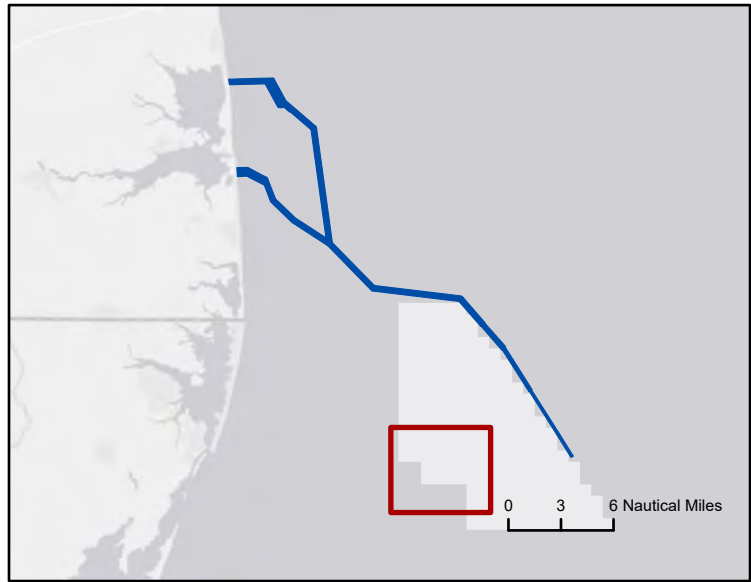
- 10
- 20
- 30
- 40

**Benthic Sample Locations**

- Gravelly
- Sand

**ROV Tracks**

- Sand



0 0.25 0.5 Nautical Miles

Source:

- 1) ESRI, World Ocean Base
- 2) GEMS, Detailed Bathymetry, 2021

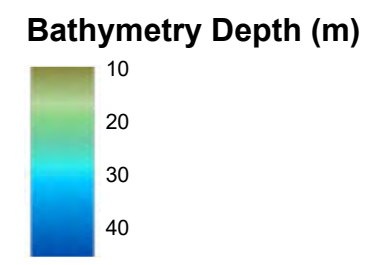
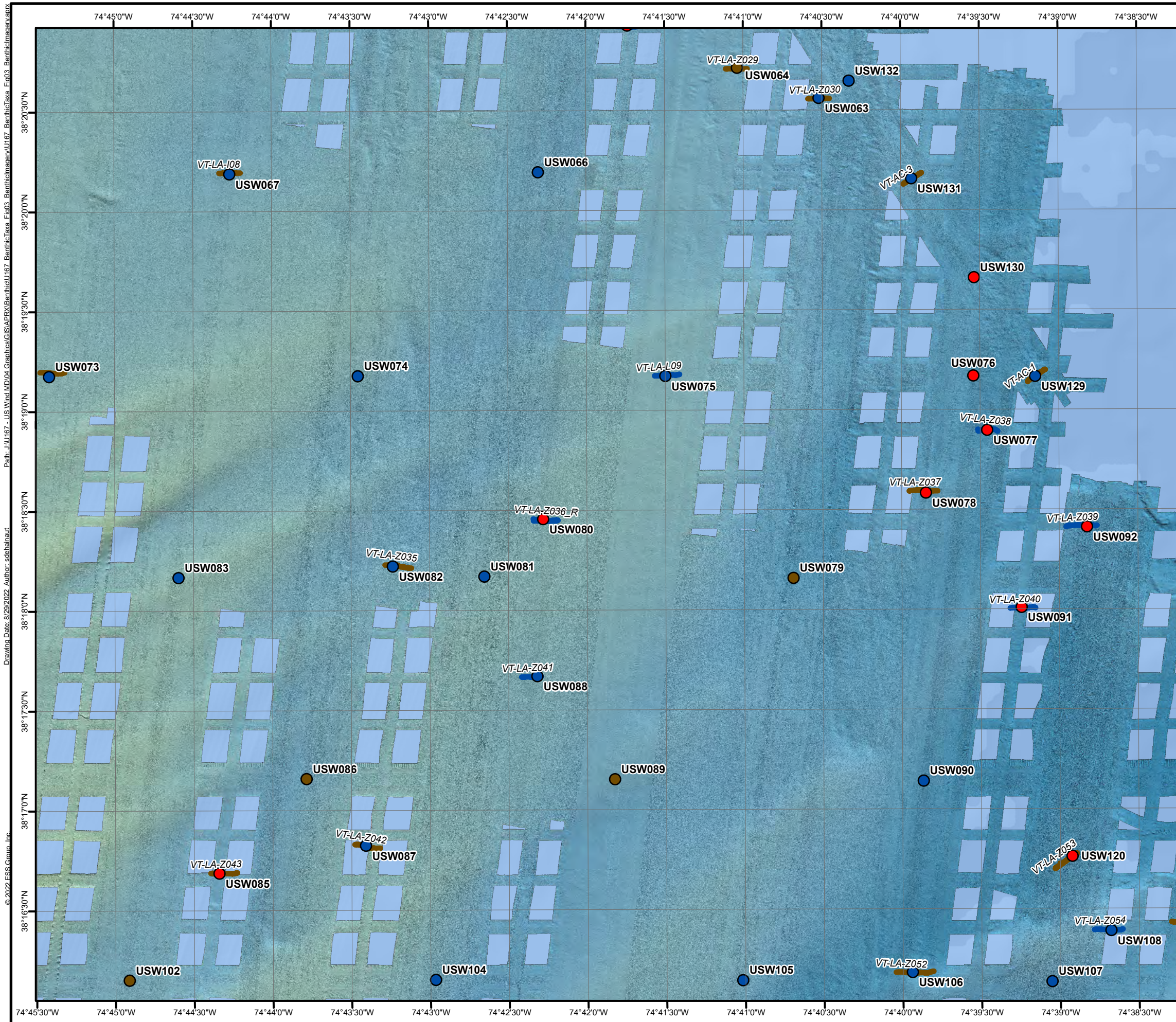
**Benthic Imagery and Grab Sample CMECS Substrate Groups**

**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

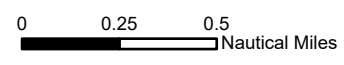
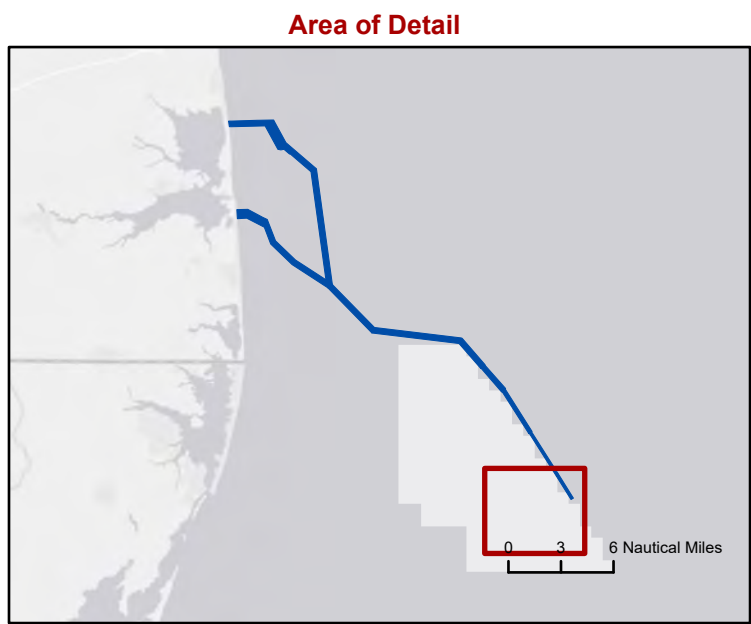
**Figure 3**

Drawing Date: 8/29/2022 Author: sdehainaut  
 Path: J:\U167 - US Wind\MD\04\_Graphics\GIS\APRX\Benthic\U167\_BenthicTaxa\_Fig03\_BenthicImagery.aprx  
 © 2022 ESS Group, Inc.






- Benthic Sample Locations**
- Gravel Mixes
  - Gravelly
  - Sand
- ROV Tracks**
- Gravelly
  - Sand



Source:  
 1) ESRI, World Ocean Base  
 3) GEMS, Detailed Bathymetry, 2021

**Benthic Imagery and Grab Sample CMECS Substrate Groups**

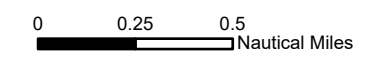
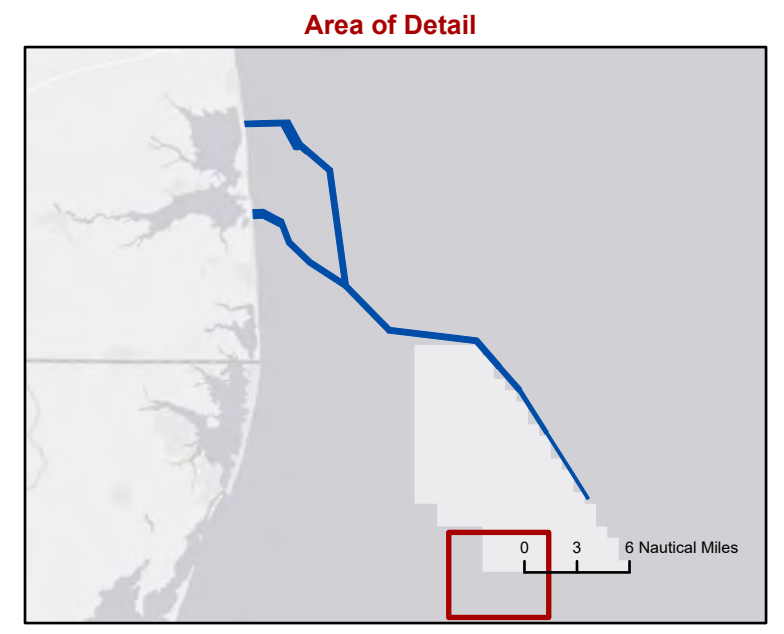
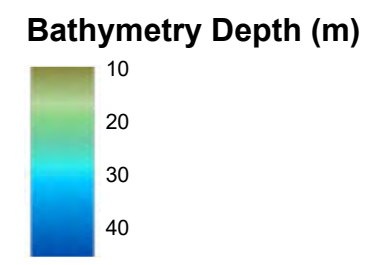
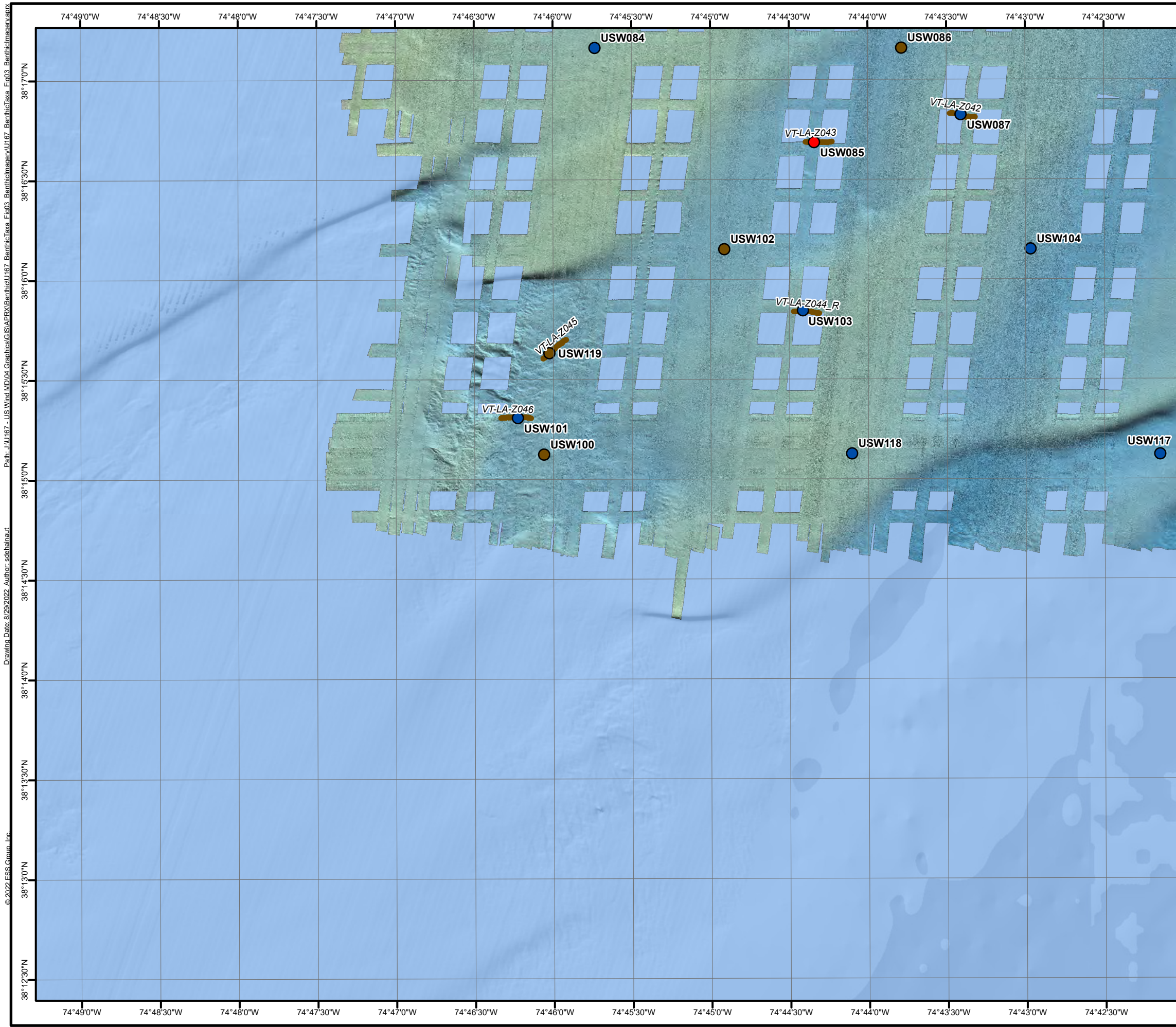
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware



**Figure 3**

Drawing Date: 8/29/2022 Author: sdehainaut  
 Path: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\Benthic\U167\_BenthicTaxa\_Fig03\_BenthicImagery.aprx  
 © 2022 ESS Group, Inc.





Source:  
 1) ESRI, World Ocean Base  
 3) GEMS, Detailed Bathymetry, 2021

**Benthic Imagery and Grab  
 Sample CMECS Substrate Groups**

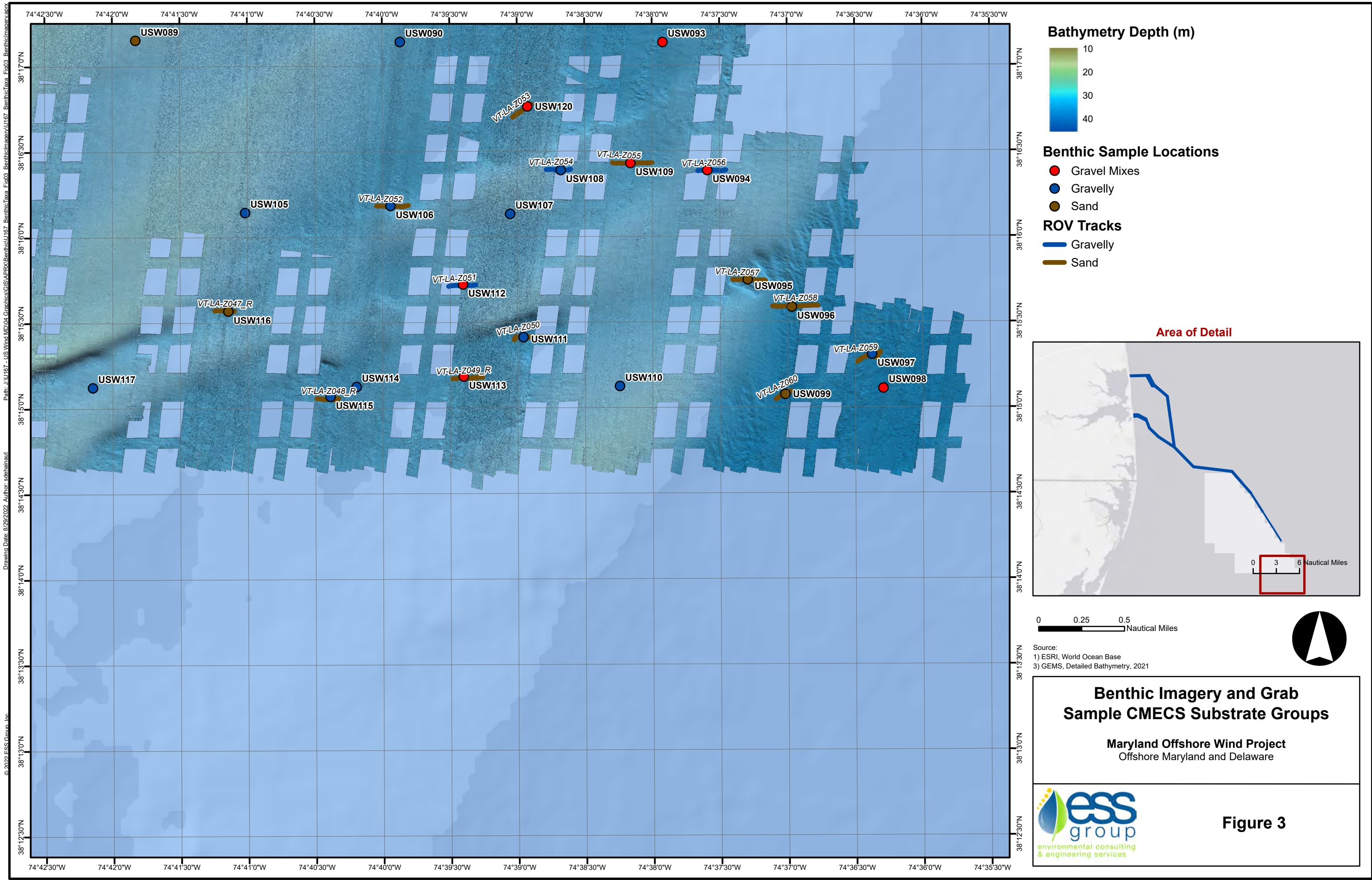
**Maryland Offshore Wind Project**  
 Offshore Maryland and Delaware



**Figure 3**

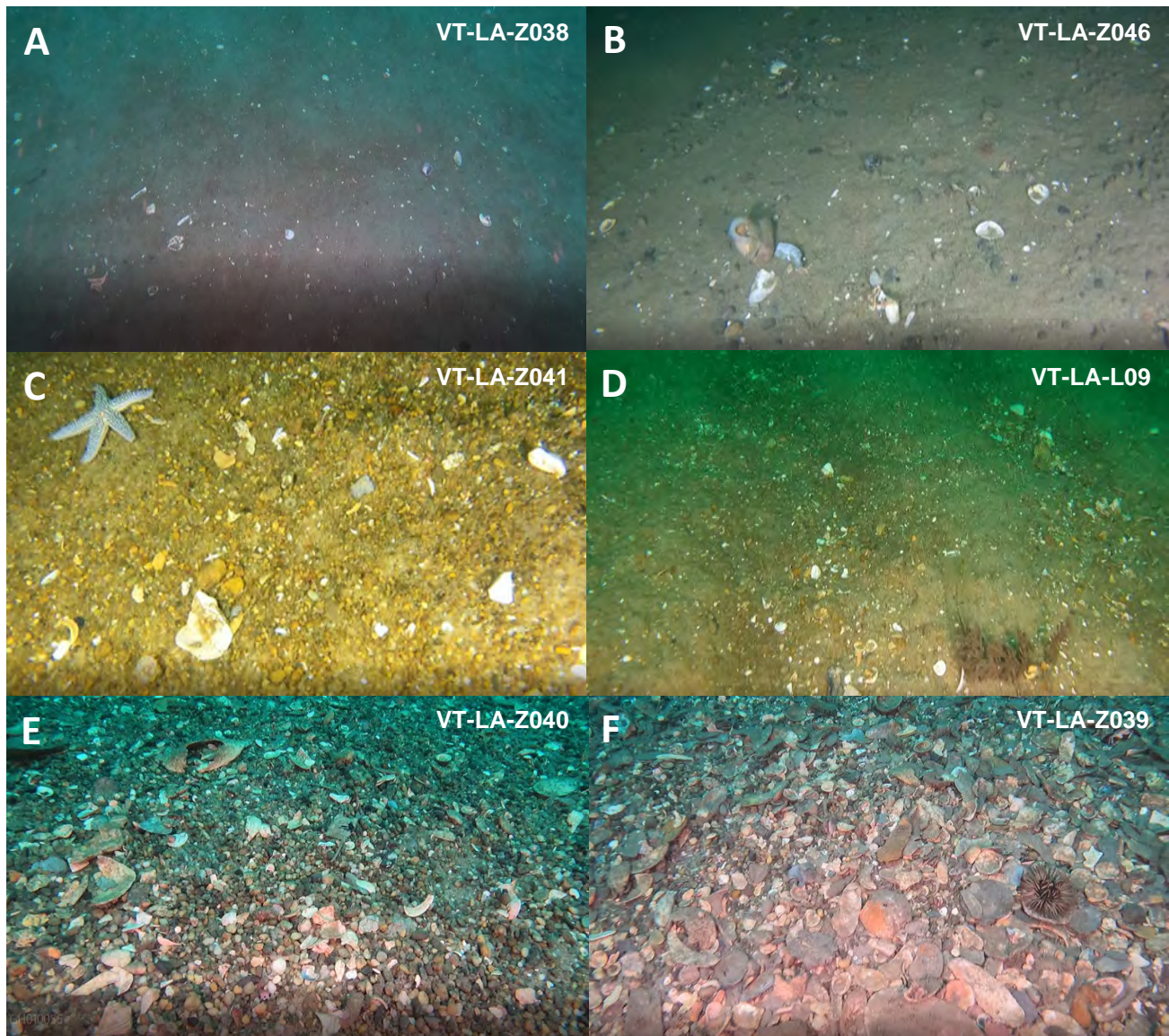
Path: J:\U167 - US Wind\MD\04\_Graphics\GIS\APRX\Benthic\U167\_BenthicTaxa\_Fig03\_BenthicImagery.aprx  
 Drawing Date: 8/29/2022 Author: sdehairhaut  
 © 2022 ESS Group, Inc.





Drawing Date: 8/29/2022 Author: sdehairhaut  
 Path: J:\U167 - US Wind\MD\04\_Graphics\GIS\APRX\Benthic\U167\_BenthicTaxa\_Fig03\_BenthicImagery.aprx  
 © 2022 ESS Group, Inc.



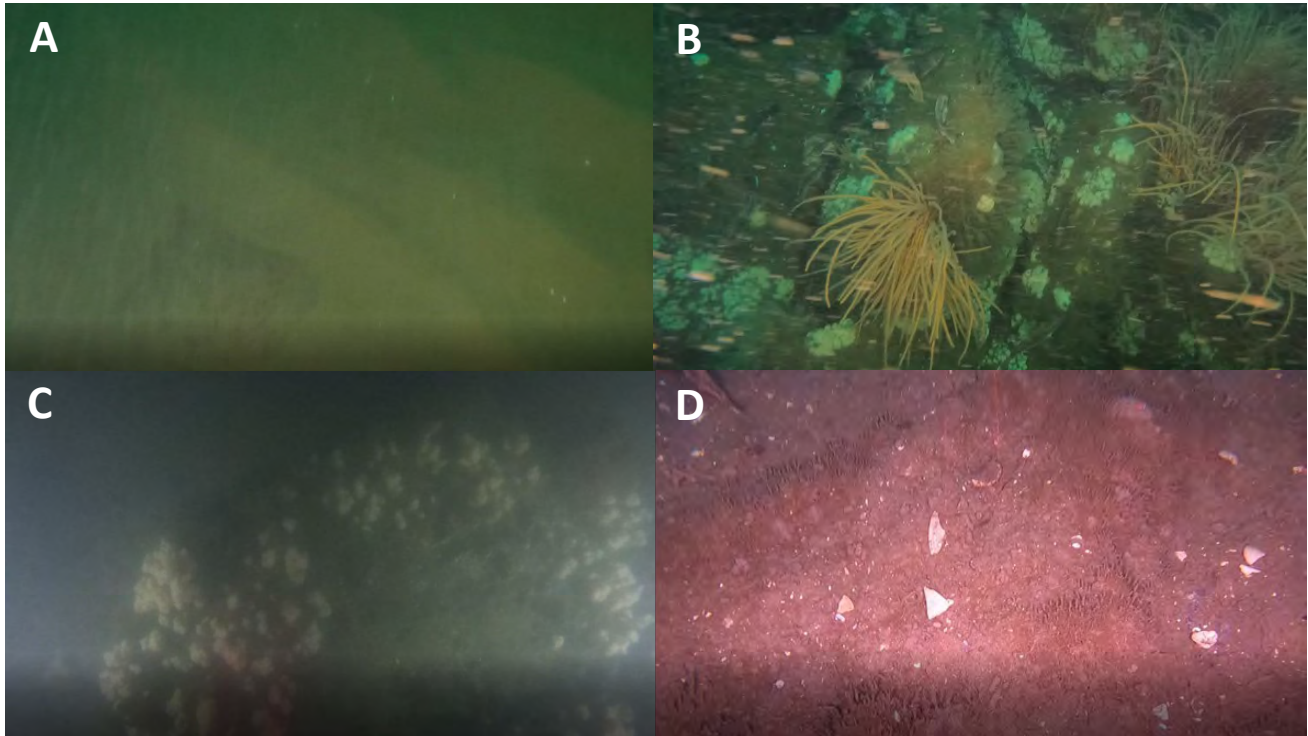


**Figure 4. Representative Benthic Transect Imagery**  
NMFS-modified CMECS substrate groups [subgroups] shown here include sand (A and B), gravelly [gravelly sand] (C and D) and gravel mixes [sandy gravel] (E and F).

Other observations of note include the following:

- A cobble pile of suspected anthropogenic origin (rock reef) was identified along one transect, VT-LA-Z053, in the southwest portion of the Lease area.
- A reattempt of one transect, VT-AC-79, within the Offshore Export Cable Corridors revealed two very different substrate classifications upon review of the footage, due to differing positions on the rerun.
- Footage from one Lease area transect, VT-LA-Z017, revealed the presence of a worm reef. These may have been formed by spionid polychaetes, which were identified in nearby benthic grab samples.

Benthic grab locations were also classified using the NMFS-modified CMECS taxonomic system, based upon review of grain size analysis results and video and still imagery. Full substrate group and subgroup classifications for each of the 120 benthic grab locations are presented in Attachment C, along with in situ and ex situ photographs.



**Figure 5. Additional Representative Benthic Transect Imagery**

*A variety of substrates were encountered during the 2021 survey although many were highly localized. Sand (A) and hard bottom habitat with stony coral growth (*Astrangia poculata*) (C) observed during separate runs of VT-AC-79 in the Offshore Export Cable Corridors. Although much of the Lease area was dominated by sand, other habitats were also present. For example, cobble piles formed a small rock reef (B) at VT-LA-Z053 in the southwest portion of the Lease area, which has been colonized by epifaunal growth, including sea whips (*Leptogorgia virgulata*). Biogenic reefs were also present but highly localized, such as this worm reef (D) at VT-LA-Z017 in the north central portion of the Lease area.*

Benthic grab locations were also classified using the NMFS-modified CMECS taxonomic system, based upon review of grain size analysis results and video and still imagery. The results for the Survey Area are summarized in Table 2. Substrate group and subgroup classifications for each of the 198 benthic grab locations are presented in Attachment C, along with in situ and ex situ photographs.

The most frequently observed substrate group classification in benthic grab samples was gravelly (43%), although sand (37%) and gravel mixes (19%) were also observed at a number of locations (Table 2). Gravel was the least frequently observed substrate group in the benthic grab samples. Finer substrates (muddy sands, sandy muds, and muds) were not observed in any samples.



**Table 2. Benthic Grab Sample Substrate Classifications**

| CMECS Substrate Group | CMECS Substrate Subgroup(s)                    | No. of Locations | % of Transects |
|-----------------------|--|------------------|----------------|
| Sand                  | Fine/Very Fine Sand to Very Coarse/Coarse Sand | 73               | 37%            |
| Gravelly              | Gravelly Sand                                  | 85               | 43%            |
| Gravel Mixes          | Sandy Gravel                                   | 38               | 19%            |
| Gravel                | Pebble/Granule                                 | 2                | 1%             |
| <b>Total</b>          |  | <b>198*</b>      | <b>100%</b>    |

\* Total is for all Project component areas (i.e., Lease area and Offshore Export Cable Corridors)

Benthic imagery results broken out by Project component area are presented in the following sections.

### 3.1.1 Lease Area

Results of the benthic transect imagery analysis from within the Lease area are presented in Table 3. The resulting substrate classifications are summarized below but presented in greater detail in Attachment A.

**Table 3. Lease Area Benthic Imagery Transect Substrate Group Classifications**

| CMECS Substrate Group | CMECS Substrate Subgroup(s)                    | No. of Transects | % of Transects |
|-----------------------|--|------------------|----------------|
| Sand                  | Fine/Very Fine Sand to Very Coarse/Coarse Sand | 56               | 82%            |
| Gravelly              | Gravelly Sand                                  | 12               | 18%            |
| Gravel Mixes          | Sandy Gravel                                   | 0                | 0%             |
| Gravel                | Pebble/Granule                                 | 0                | 0%             |
| <b>Total</b>          |  | <b>68*</b>       | <b>100%</b>    |

\* Total does not include those that could not be fully classified due to environmental conditions (e.g., poor visibility).

Results of the benthic grab NMFS-modified CMECS classifications within the Lease area are presented in Table 4. The resulting substrate classifications are summarized below but presented in greater detail in Attachment C.

**Table 4. Lease Area Benthic Grab Sample Substrate Classifications**

| CMECS Substrate Group | CMECS Substrate Subgroup(s)                    | No. of Locations | % of Locations |
|-----------------------|--|------------------|----------------|
| Sand                  | Fine/Very Fine Sand to Very Coarse/Coarse Sand | 47               | 39%            |
| Gravelly              | Gravelly Sand                                  | 48               | 40%            |
| Gravel Mixes          | Sandy Gravel                                   | 25               | 21%            |
| Gravel                | Pebble/Granule                                 | 0                | 0%             |
| <b>Total</b>          |  | <b>120</b>       | <b>100%</b>    |

### 3.1.2 Common Export Cable Corridor

Results of the benthic transect imagery analysis from within the Common Export Cable Corridor are presented in Table 5. The resulting substrate classifications are summarized below but presented in greater detail in Attachment A.

**Table 5. Common Export Cable Corridor Benthic Imagery Transect Substrate Group Classifications**

| <b>CMECS Substrate Group</b> | <b>CMECS Substrate Subgroup(s)</b>             | <b>No. of Transects</b> | <b>% of Transects</b> |
|------------------------------|--|-------------------------|-----------------------|
| Sand                         | Fine/Very Fine Sand to Very Coarse/Coarse Sand | 16                      | 84%                   |
| Gravelly                     | Gravelly Sand                                  | 2                       | 11%                   |
| Gravel Mixes                 | Sandy Gravel                                   | 1                       | 5%                    |
| Gravel                       | Pebble/Granule                                 | 0                       | 0%                    |
| <b>Total</b>                 |  | <b>19*</b>              | <b>100%</b>           |

\* Total does not include those that could not be classified due to environmental conditions (e.g., poor visibility).

Results of the benthic grab NMFS-modified CMECS classifications within the Common Export Cable Corridor are presented in Table 6. The resulting substrate classifications are summarized below but presented in greater detail in Attachment C.

**Table 6. Common Export Cable Corridor Benthic Grab Sample Substrate Classifications**

| <b>CMECS Substrate Group</b> | <b>CMECS Substrate Subgroup(s)</b>             | <b>No. of Locations</b> | <b>% of Transects</b> |
|------------------------------|--|-------------------------|-----------------------|
| Sand                         | Fine/Very Fine Sand to Very Coarse/Coarse Sand | 12                      | 33%                   |
| Gravelly                     | Gravelly Sand/ Gravelly Muddy Sand             | 19                      | 53%                   |
| Gravel Mixes                 | Sandy Gravel                                   | 5                       | 14%                   |
| Gravel                       | Pebble/Granule                                 | 0                       | 0%                    |
| <b>Total</b>                 |  | <b>36</b>               | <b>100%</b>           |

### 3.1.3 Offshore Export Cable Corridor 1

Results of the benthic transect imagery analysis from within Offshore Export Cable Corridor 1 are presented in Table 7. The resulting substrate classifications are summarized below but presented in greater detail in Attachment A.

**Table 7. Offshore Export Cable Corridor 1 Benthic Imagery Transect Substrate Group Classifications**

| CMECS Substrate Group | CMECS Substrate Subgroup(s)                    | No. of Transects | % of Transects |
|-----------------------|--|------------------|----------------|
| Sand                  | Fine/Very Fine Sand to Very Coarse/Coarse Sand | 2                | 100%           |
| Gravelly              | Gravelly Sand                                  | 0                | 0%             |
| Gravel Mixes          | Sandy Gravel                                   | 0                | 0%             |
| Gravel                | Pebble/Granule                                 | 0                | 0%             |
| <b>Total</b>          |  | <b>2*</b>        | <b>100%</b>    |

\* Total does not include those that could not be classified due to environmental conditions (e.g., poor visibility).

Results of the benthic grab NMFS-modified CMECS classifications within the Offshore Export Cable Corridor 1 are presented in Table 8. The resulting substrate classifications are summarized below but presented in greater detail in Attachment C.

**Table 8. Offshore Export Cable Corridor 1 Benthic Grab Sample Substrate Classifications**

| CMECS Substrate Group | CMECS Substrate Subgroup(s)                    | No. of Locations | % of Transects |
|-----------------------|--|------------------|----------------|
| Sand                  | Fine/Very Fine Sand to Very Coarse/Coarse Sand | 3                | 25%            |
| Gravelly              | Gravelly Sand                                  | 6                | 50%            |
| Gravel Mixes          | Sandy Gravel                                   | 2                | 17%            |
| Gravel                | Pebble/Granule                                 | 1                | 8%             |
| <b>Total</b>          |  | <b>12</b>        | <b>100%</b>    |

### 3.1.4 Offshore Export Cable Corridor 2

Results of the benthic transect imagery analysis from within Offshore Export Cable Corridor 2 are presented in Table 9. The resulting substrate classifications are summarized below but presented in greater detail in Attachment A.

**Table 9. Offshore Export Cable Corridor 2 Benthic Imagery Transect Substrate Group Classifications**

| CMECS Substrate Group | CMECS Substrate Subgroup(s)                    | No. of Transects | % of Transects |
|-----------------------|--|------------------|----------------|
| Sand                  | Fine/Very Fine Sand to Very Coarse/Coarse Sand | 4                | 50%            |
| Gravelly              | Gravelly Sand                                  | 4                | 50%            |
| Gravel Mixes          | Sandy Gravel                                   | 0                | 0%             |
| Gravel                | Pebble/Granule                                 | 0                | 0%             |
| <b>Total</b>          |  | <b>8*</b>        | <b>100%</b>    |

\* Includes both original and rerun of VT-AC-79. Total does not include those transects that could not be classified due to environmental conditions (e.g., poor visibility).

Results of the benthic grab NMFS-modified CMECS classifications within the Offshore Export Cable Corridor 2 are presented in Table 10. The resulting substrate classifications are summarized below but presented in greater detail in Attachment C.

**Table 10. Offshore Export Cable Corridor 2 Benthic Grab Sample Substrate Classifications**

| CMECS Substrate Group | CMECS Substrate Subgroup(s)                    | No. of Locations | % of Locations |
|-----------------------|--|------------------|----------------|
| Sand                  | Fine/Very Fine Sand to Very Coarse/Coarse Sand | 8                | 38%            |
| Gravelly              | Gravelly Sand                                  | 7                | 33%            |
| Gravel Mixes          | Sandy Gravel                                   | 5                | 24%            |
| Gravel                | Pebble/Granule                                 | 1                | 5%             |
| <b>Total</b>          |  | <b>21</b>        | <b>100%</b>    |

### 3.1.5 Offshore Export Cable Corridor 2a

Offshore Export Cable Corridor 2a is a formerly planned cable corridor that was included in the 2021 benthic survey but is no longer located within the PDE. Results of the benthic transect imagery analysis from within Offshore Export Cable Corridor 2a are presented in Table 11. The resulting substrate classifications are summarized below but presented in greater detail in Attachment A.

**Table 11. Offshore Export Cable Corridor 2a Benthic Imagery Transect Substrate Group Classifications**

| CMECS Substrate Group | CMECS Substrate Subgroup(s)                    | No. of Transects | % of Transects |
|-----------------------|--|------------------|----------------|
| Sand                  | Fine/Very Fine Sand to Very Coarse/Coarse Sand | 1                | 100%           |
| Gravelly              | Gravelly Sand                                  | 0                | 0%             |
| Gravel Mixes          | Sandy Gravel                                   | 0                | 0%             |
| Gravel                | Pebble/Granule                                 | 0                | 0%             |
| <b>Total</b>          |  | <b>1*</b>        | <b>100%</b>    |

\* Total does not include those that could not be classified due to environmental conditions (e.g., poor visibility).

Results of the benthic grab NMFS-modified CMECS classifications within the Offshore Export Cable Corridor 2a are presented in Table 12. The resulting substrate classifications are summarized below but presented in greater detail in Attachment C.

**Table 12. Offshore Export Cable Corridor 2a Benthic Grab Sample Substrate Classifications**

| CMECS Substrate Group | CMECS Substrate Subgroup(s)                    | No. of Locations | % of Transects |
|-----------------------|--|------------------|----------------|
| Sand                  | Fine/Very Fine Sand to Very Coarse/Coarse Sand | 3                | 33%            |
| Gravelly              | Gravelly Sand                                  | 5                | 56%            |
| Gravel Mixes          | Sandy Gravel                                   | 1                | 11%            |
| Gravel                | Pebble/Granule                                 | 0                | 0%             |
| <b>Total</b>          |  | <b>9</b>         | <b>100%</b>    |

### 3.2 Benthic Grab Sampling

#### 3.2.1 Lease Area

Results of the analysis of macrofaunal benthic grab samples collected from within the Lease area in 2021 are presented below (Table 13) and in Attachment B. Additionally, charts and tables describing the macrofaunal community composition and basic statistics for each sample are presented in Attachment C.

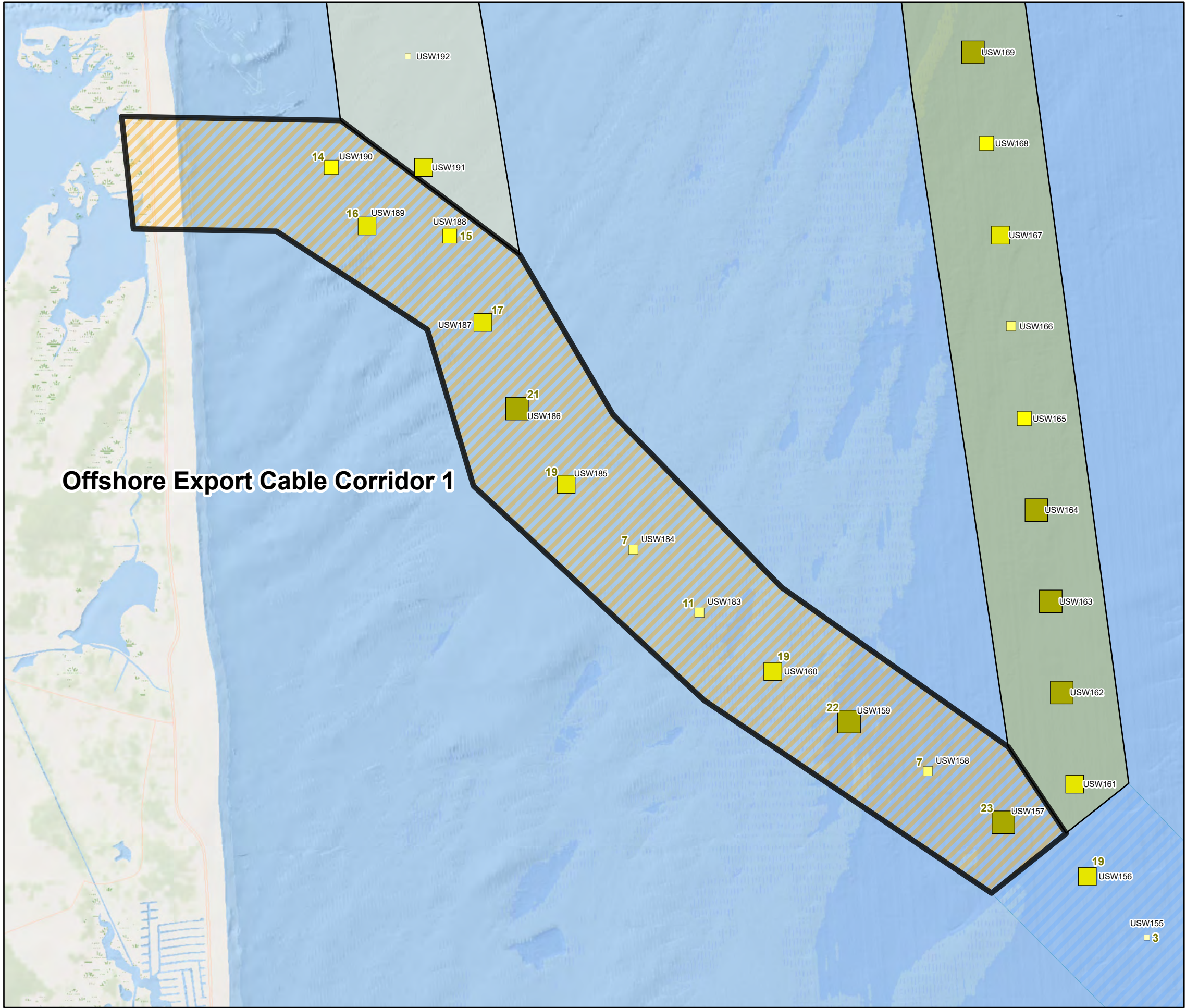
**Table 13. Summary of Key Statistics from the Lease Area Benthic Sample Analysis**

| Statistic  | Value         |
|--|---------------|
| Number of Samples                                    | 120           |
| Mean Density per Square Meter ( $\pm 1$ SD)          | 788 $\pm$ 738 |
| Mean Taxa Richness ( $\pm 1$ SD)                     | 11 $\pm$ 5.7  |
| Total Number of Taxa                                 | 99            |
| <b>Number of Taxa Observed by Taxonomic Group</b>    |               |
| Polychaete worms                                     | 37            |
| Crustaceans  | 26            |
| Mollusks   | 25            |
| Oligochaete worms                                    | 3             |
| Other  | 8             |
| <b>Percent of Total Abundance by Taxonomic Group</b> |               |
| Polychaete worms                                     | 56.7%         |
| Crustaceans  | 11.9%         |
| Mollusks   | 9.8%          |
| Oligochaete worms                                    | 19.3%         |
| Other  | 2.3%          |

\*All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007)



Path: J:\U167 - US Wind MD\04\_Graphics\GIS\APRX\BenthicTaxa\_Fin06\_TaxaRichnessU167\_BenthicTaxa\_Fin06\_TaxaRichness.aprx  
Drawing Date: 8/29/2022 Author: sdehainaut  
© 2022 ESS Group, Inc.



**Legend**

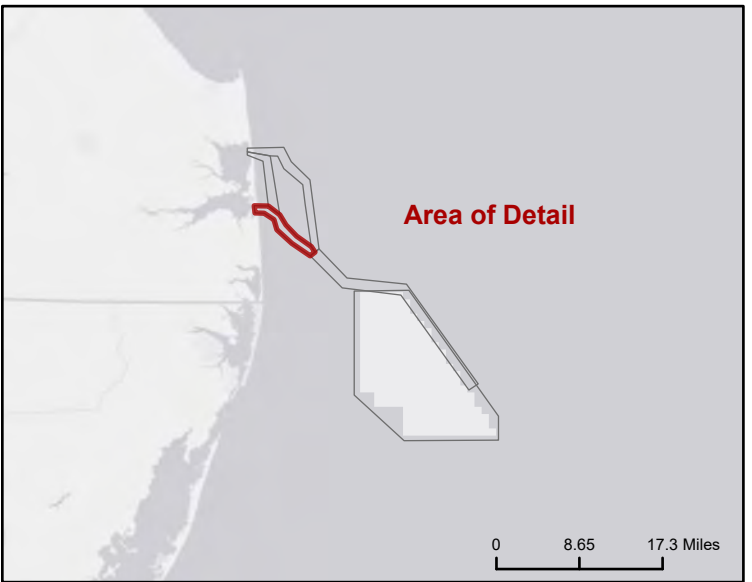
**Benthic Sample Location**

**Taxa Richness**

- 1 - 6
- 7 - 11
- 12 - 15
- 16 - 19
- 20 - 26

**Offshore Project Component Area**

- 1
- 2
- 2A
- Common Corridor



0 0.5 1 Nautical Miles

Source:  
1) ESRI, World Ocean Base

**Benthic Taxa Richness  
By Project Component Area  
Offshore Export Cable Corridor 1**

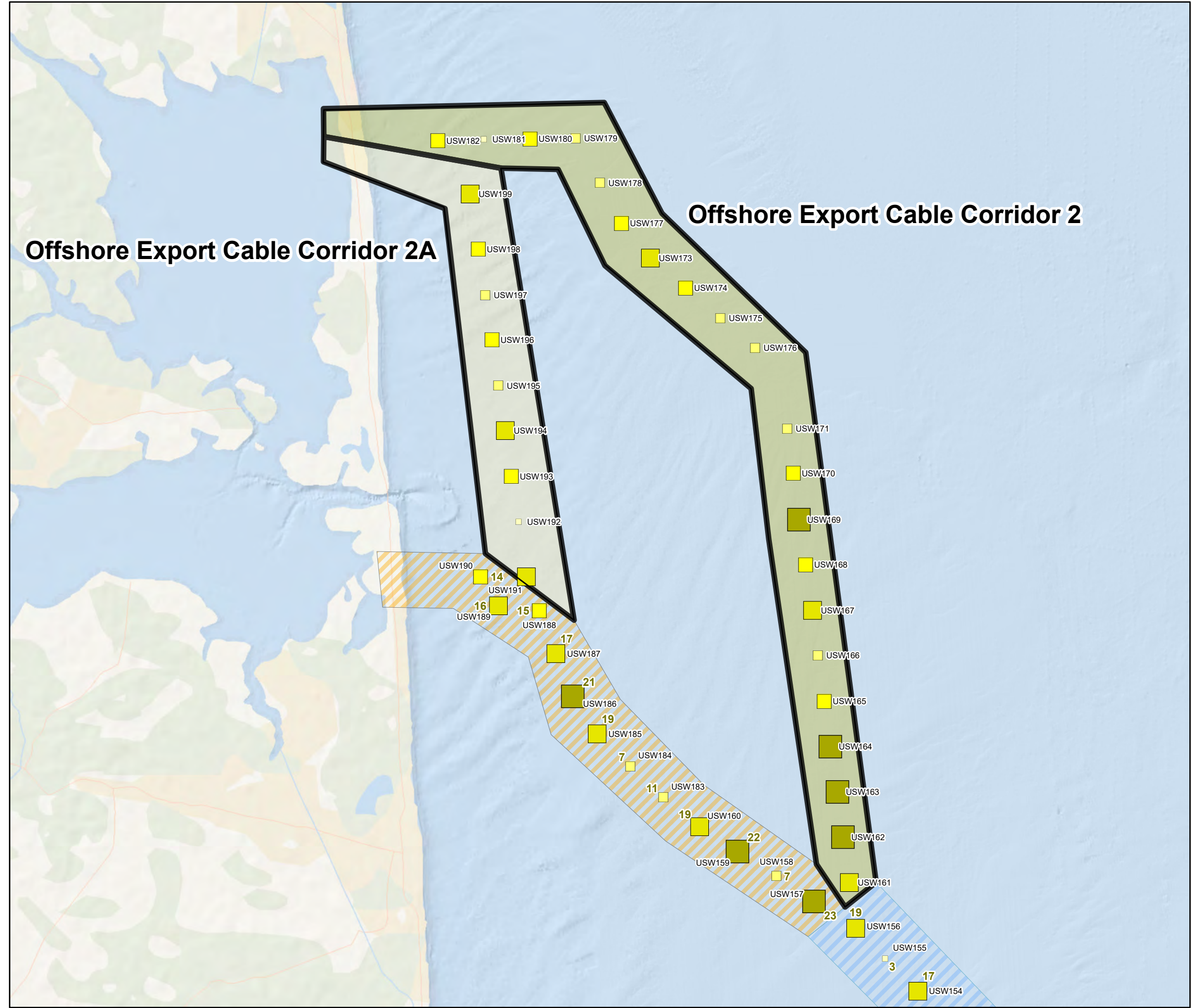
Maryland Offshore Wind Project  
Offshore Maryland and Delaware



**Figure 6**



Path: J:\U167 - US Wind MD\04\_Graphics\GIS\APRX\Benthic\Taxa\_Fin06\_TaxaRichnessU167\_BenthicTaxa\_Fin06\_TaxaRichness.aprx  
Drawing Date: 8/29/2022 Author: sdehainaut  
© 2022 ESS Group, Inc.



**Legend**

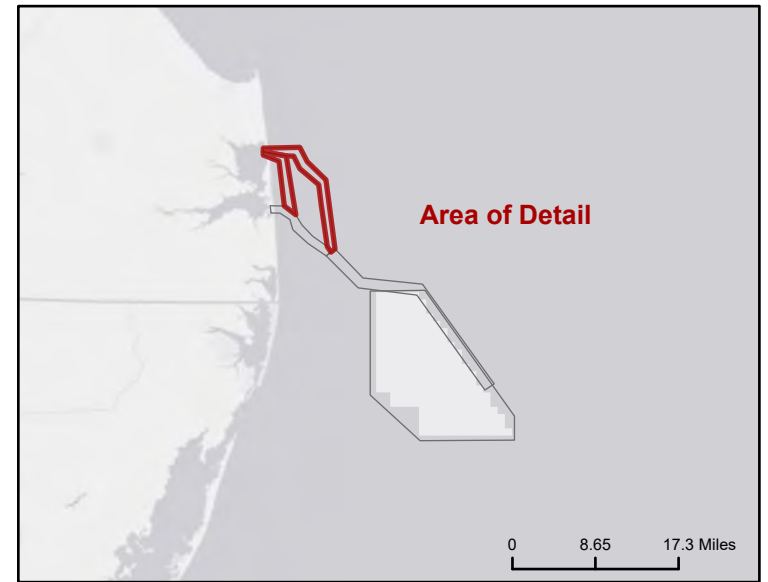
**Benthic Sample Location**

**Taxa Richness**

- 1 - 6
- 7 - 11
- 12 - 15
- 16 - 19
- 20 - 26

**Offshore Project Component Area**

- 1
- 2
- 2A
- Common Corridor



0 0.5 1 Nautical Miles

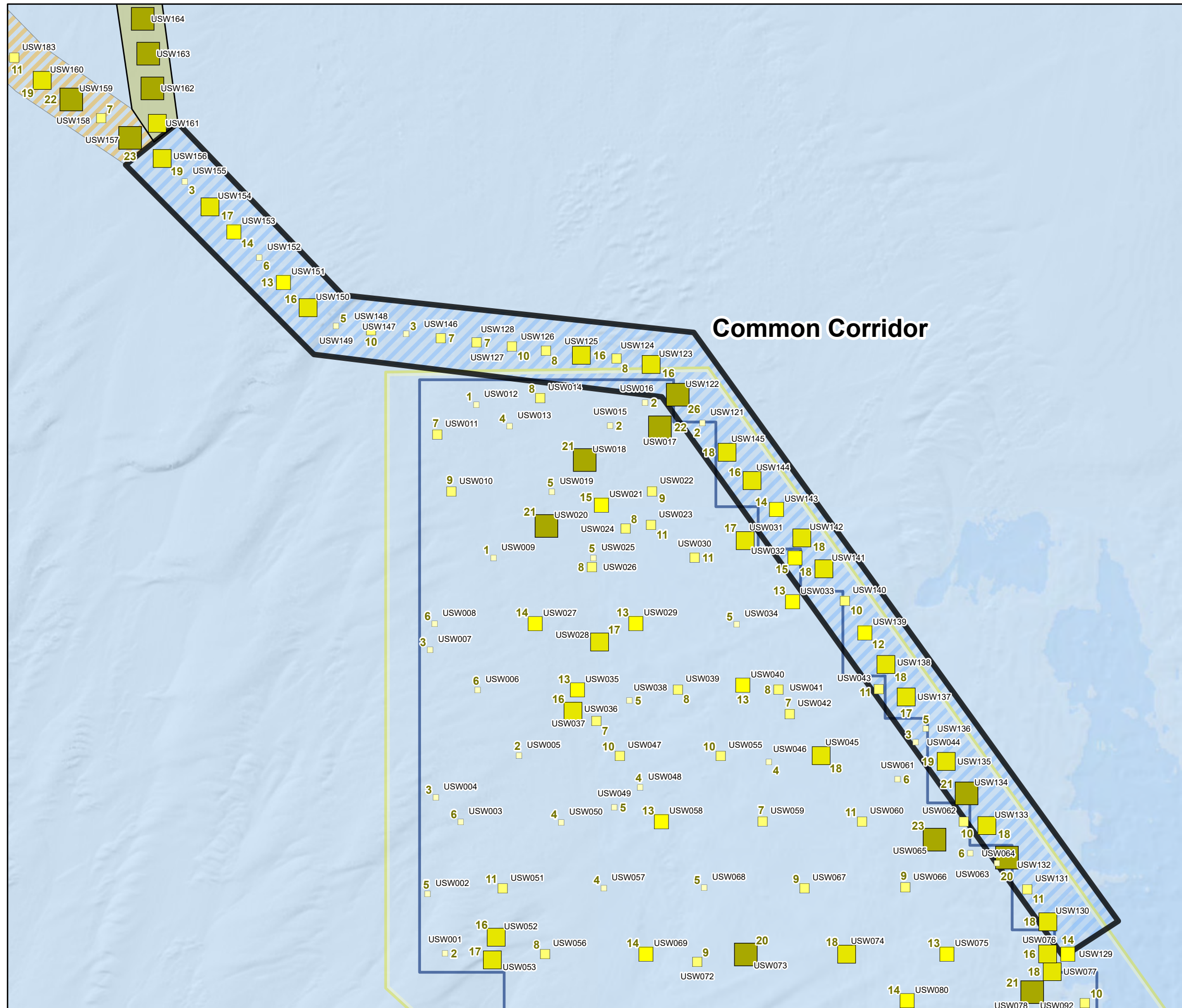
Source:  
1) ESRI, World Ocean Base

**Benthic Taxa Richness  
By Project Component Area  
Offshore Export Cable Corridor 2 and 2A  
Maryland Offshore Wind Project  
Offshore Maryland and Delaware**



**Figure 6**

Path: J:\U167 - US Wind MD\04\_Graphics\GIS\APRX\BenthicTaxa\_Fin06\_TaxaRichness.aprx  
Drawing Date: 8/29/2022 Author: sdehainaut  
© 2022 ESS Group, Inc.



**Legend**

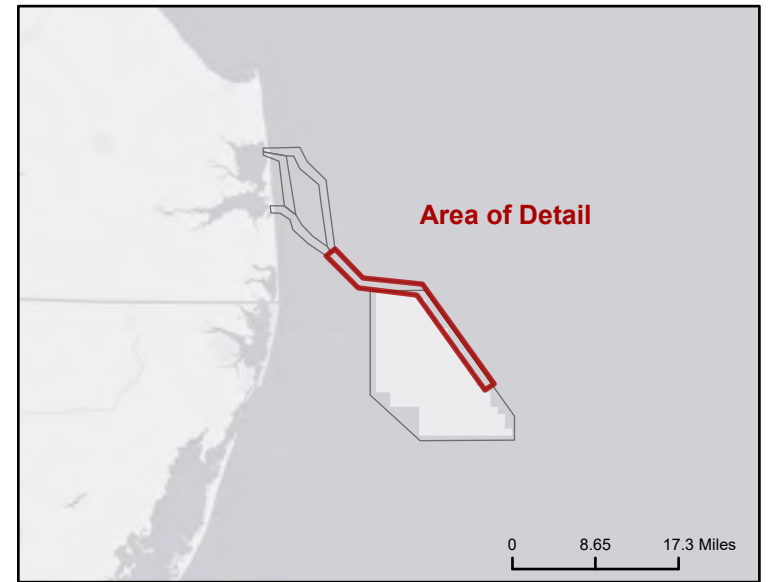
**Benthic Sample Location**

**Taxa Richness**

- 1 - 6
- 7 - 11
- 12 - 15
- 16 - 19
- 20 - 26

**Offshore Project Component Area**

- 1
- 2
- Common Corridor
- Lease Area



0 0.5 1 Nautical Miles

Source:  
1) ESRI, World Ocean Base

**Benthic Taxa Richness  
By Project Component Area  
Common Corridor**

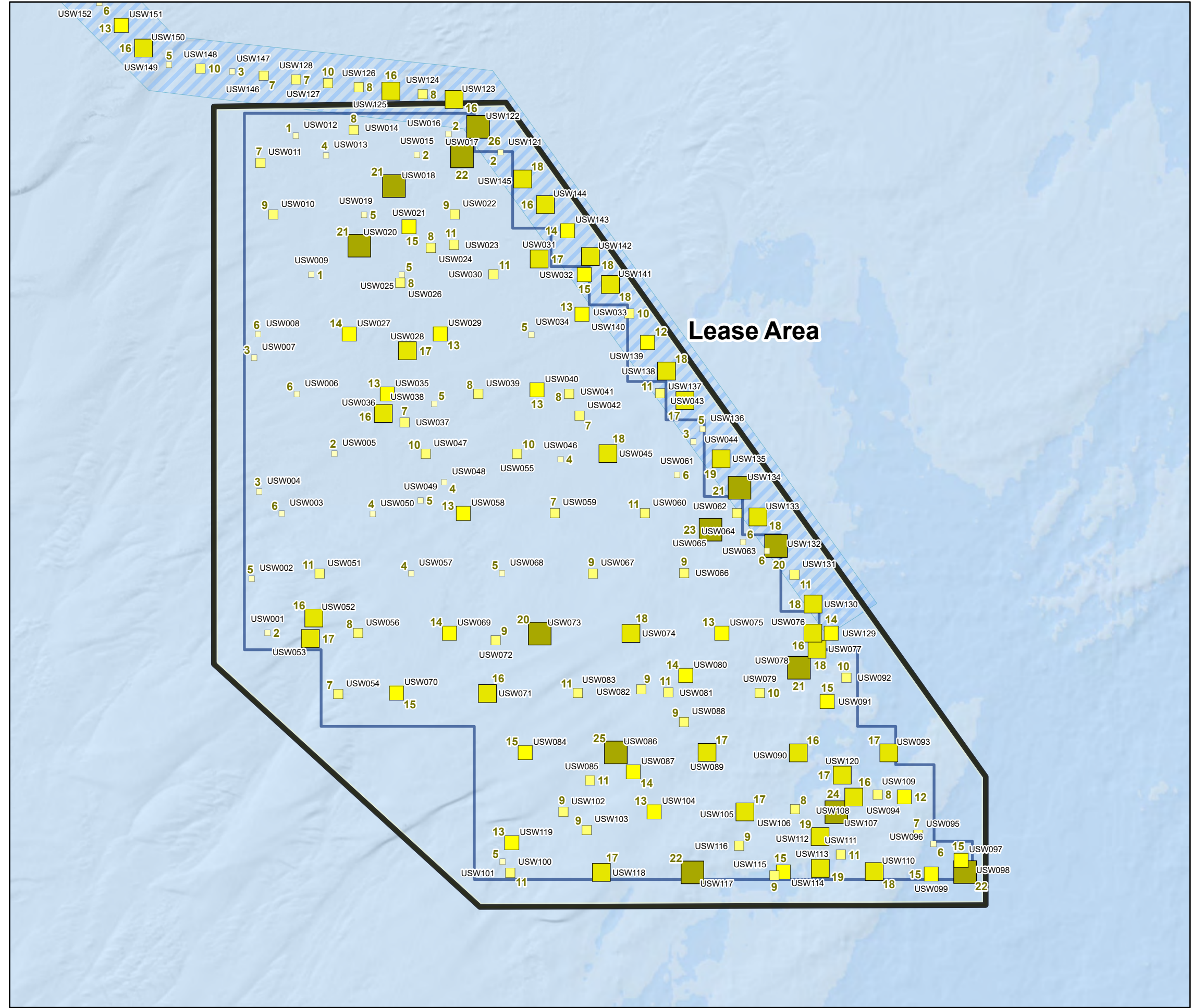
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware



**Figure 6**



Path: J:\U167 - US Wind.MD\04\_Graphics\GIS\APRX\BenthicTaxa\_Fin06\_TaxaRichness.aprx  
Drawing Date: 8/29/2022 Author: sdehainaut  
© 2022 ESS Group, Inc.



**Legend**

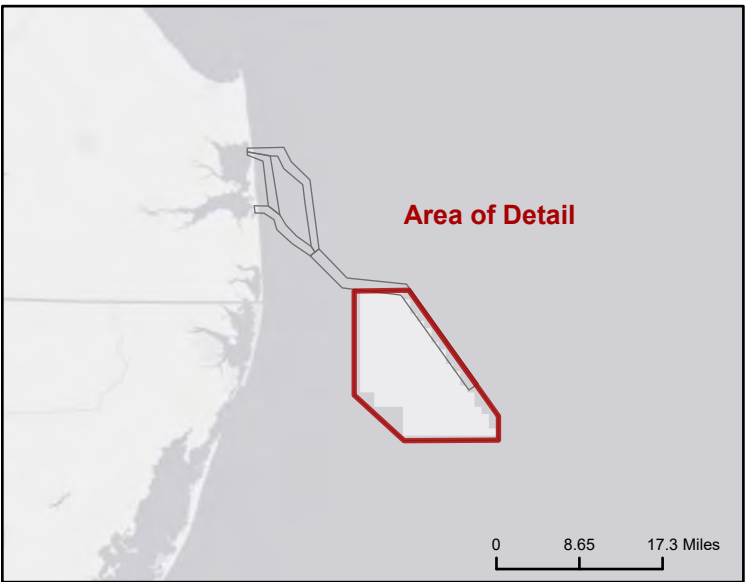
**Benthic Sample Location**

**Taxa Richness**

- 1 - 6
- 7 - 11
- 12 - 15
- 16 - 19
- 20 - 26

**Offshore Project Component Area**

- Common Corridor
- Lease Area



0 0.5 1 Nautical Miles

Source:  
1) ESRI, World Ocean Base

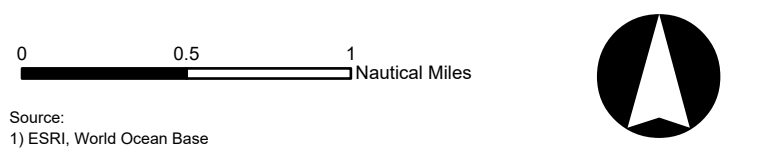
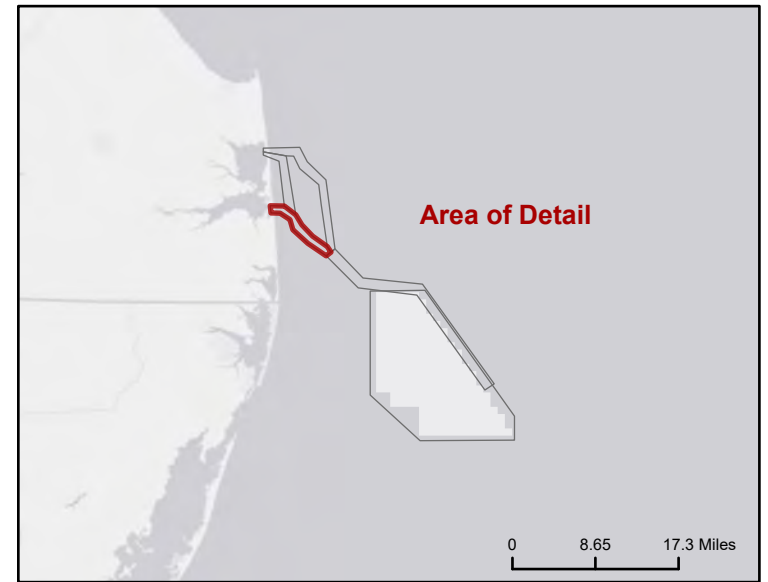
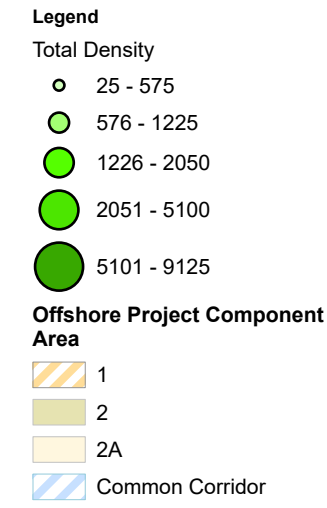
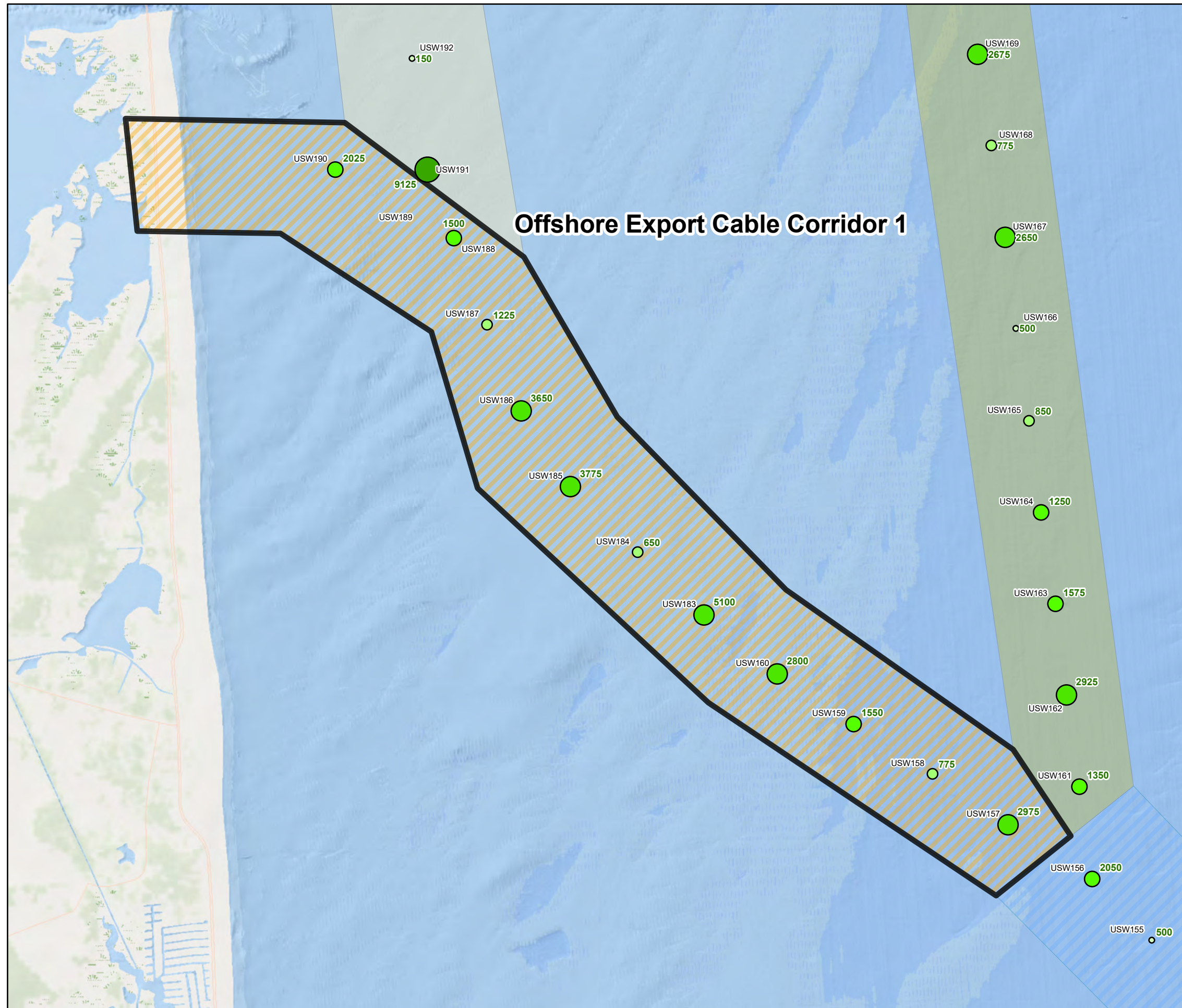
**Benthic Taxa Richness  
By Project Component Area  
Lease Area**

**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware



**Figure 6**





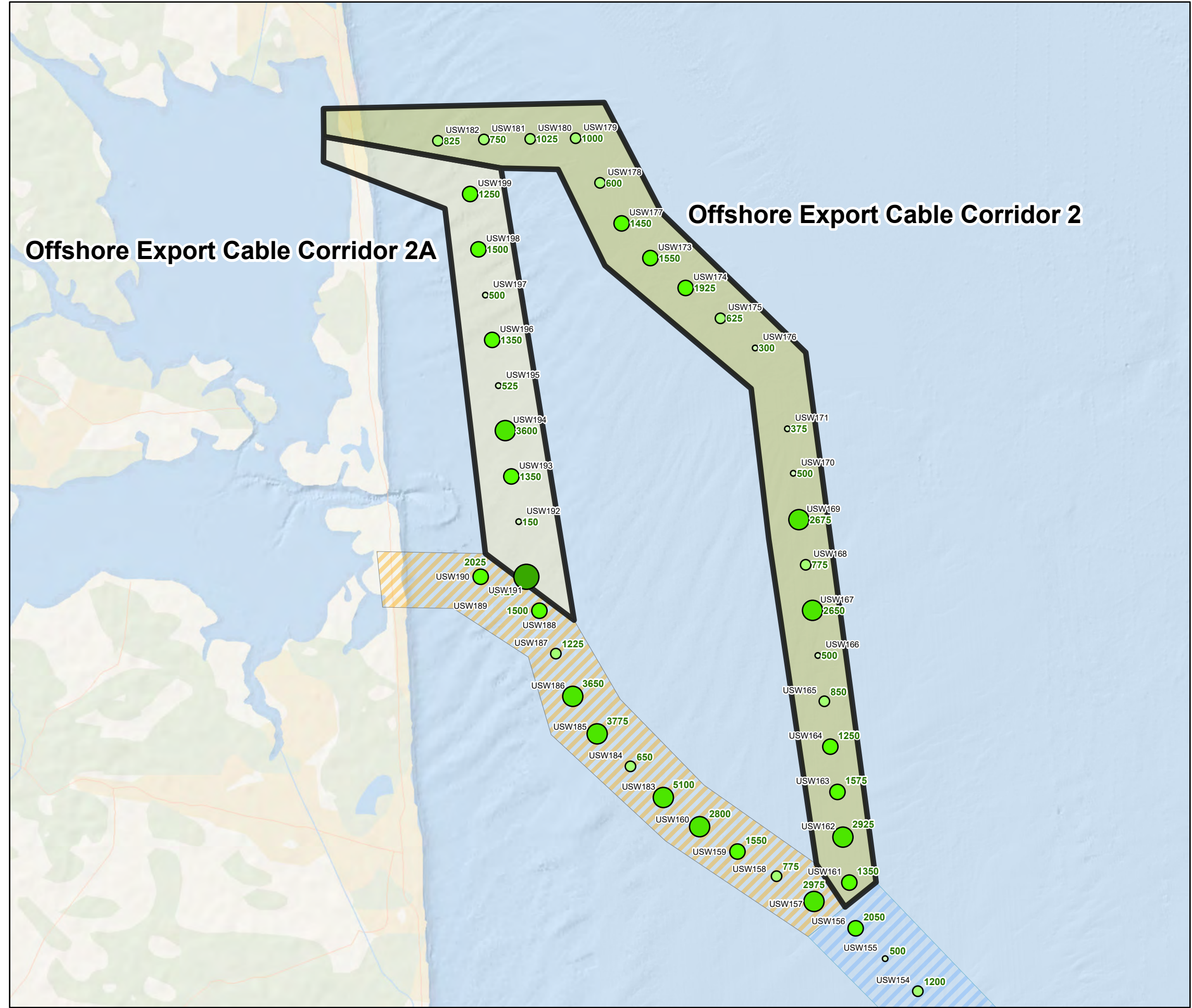
Source:  
1) ESRI, World Ocean Base

**Benthic Taxa Total Density  
By Project Component Area  
Offshore Export Cable Corridor 1**

Maryland Offshore Wind Project  
Offshore Maryland and Delaware



Path: J:\V167 - US Wind MD\04\_Graphics\GIS\APR\Benthic\U167\_BenthicTaxa\_Fig07\_TaxaDensity\U167\_BenthicTaxa\_Fig07\_TaxaDensity.aprx  
Drawing Date: 8/29/2022 Author: sdehainaut  
© 2022 ESS Group, Inc.



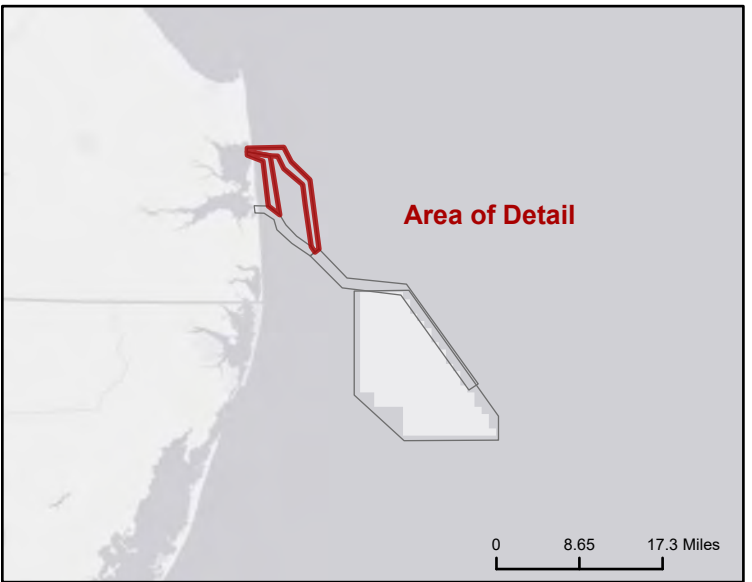
**Legend**

**Total Density**

- 25 - 575
- 576 - 1225
- 1226 - 2050
- 2051 - 5100
- 5101 - 9125

**Offshore Project Component Area**

- 1 (Hatched)
- 2 (Olive Green)
- 2A (Light Green)
- Common Corridor (Blue Hatched)



0 0.5 1 Nautical Miles

Source:  
1) ESRI, World Ocean Base

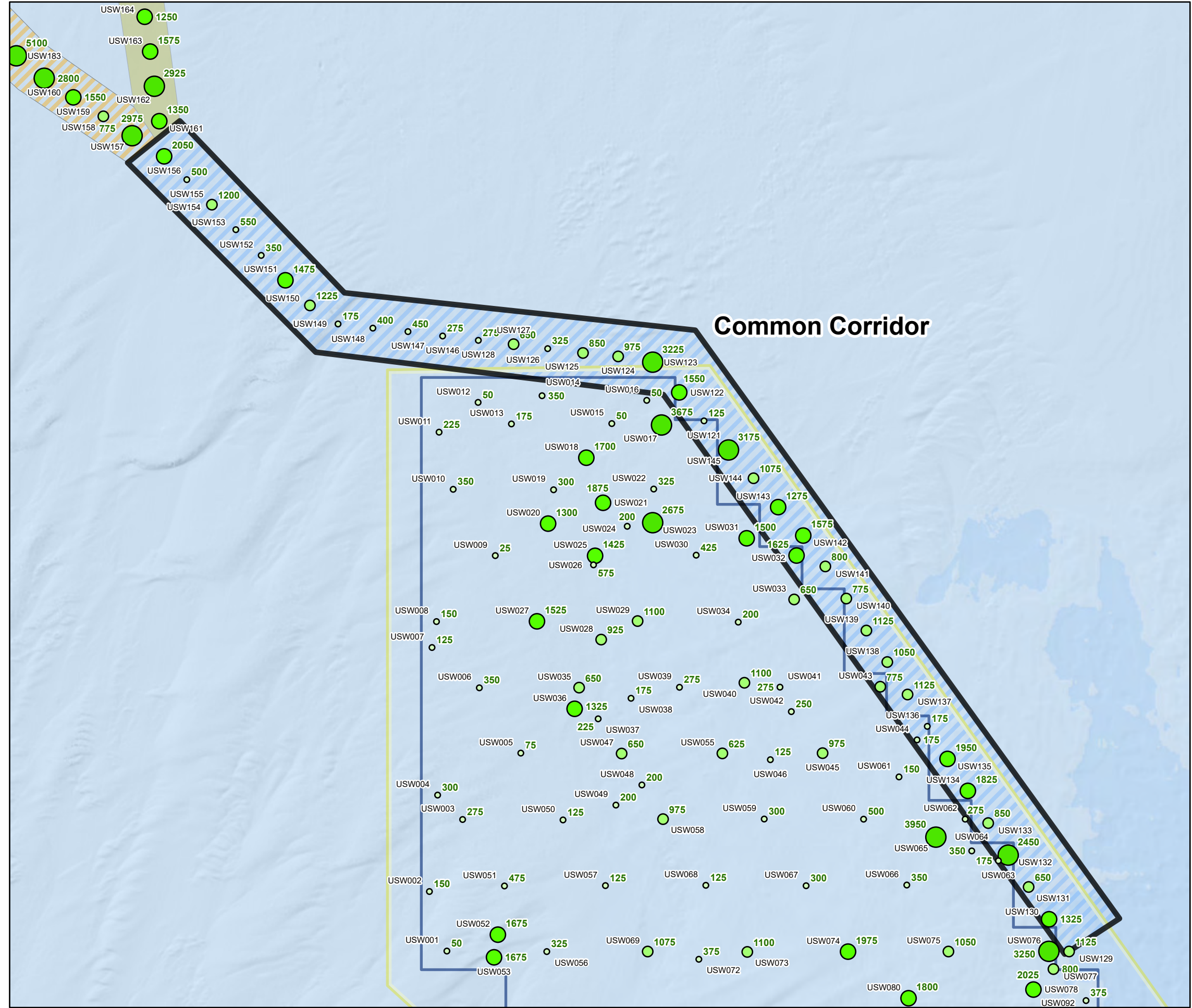
**Benthic Taxa Total Density  
By Project Component Area  
Offshore Export Cable Corridor 2 and 2A**  
Maryland Offshore Wind Project  
Offshore Maryland and Delaware



**Figure 7**



Path: J:\V167 - US Wind MD\04\_Graphics\GIS\APRX\Benthic\U167\_BenthicTaxa\_Fig07\_TaxaDensity.aprx  
Drawing Date: 8/29/2022 Author: sdehainaut  
© 2022 ESS Group, Inc.



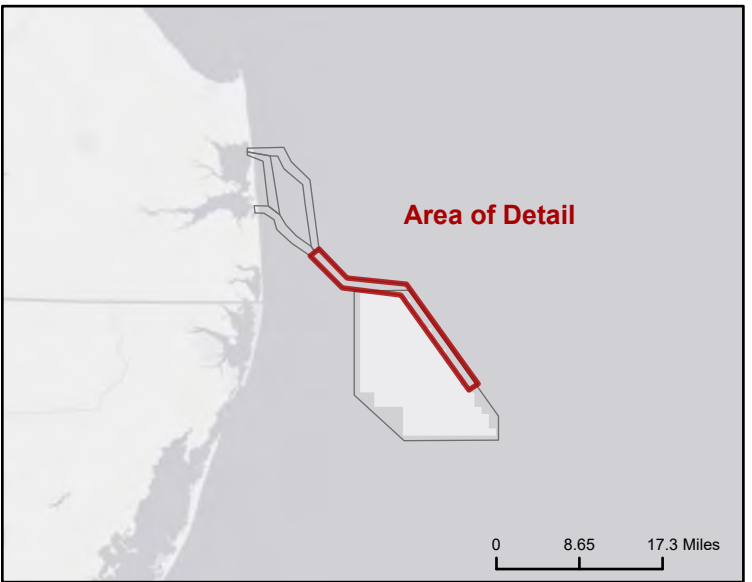
**Legend**

**Total Density**

- 25 - 575
- 576 - 1225
- 1226 - 2050
- 2051 - 5100
- 5101 - 9125

**Offshore Project Component Area**

- 1 (diagonal hatched)
- 2 (solid light blue)
- Common Corridor (blue hatched)
- Lease Area (yellow outline)



0 0.5 1 Nautical Miles

Source:  
1) ESRI, World Ocean Base

**Benthic Taxa Total Density  
By Project Component Area  
Common Corridor**

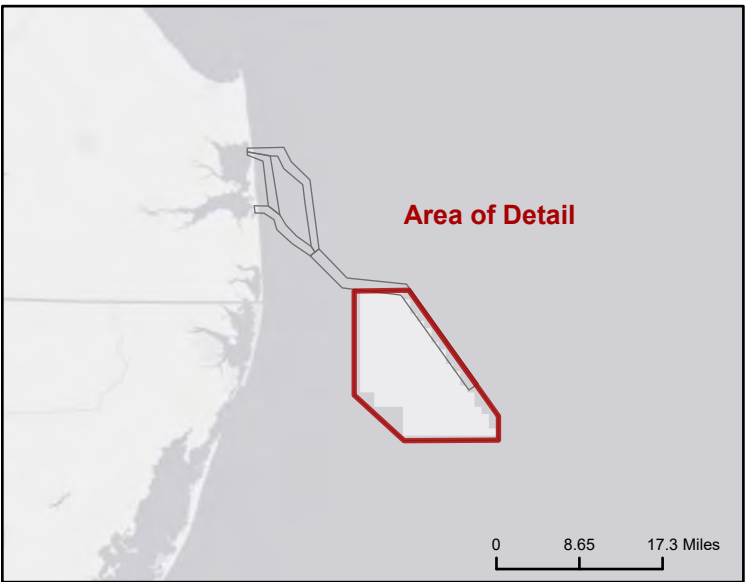
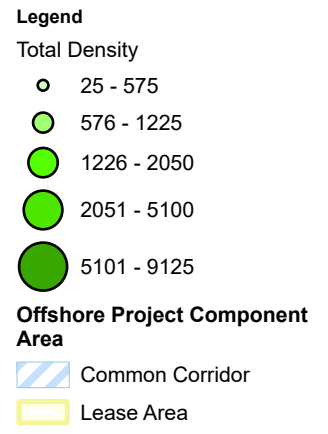
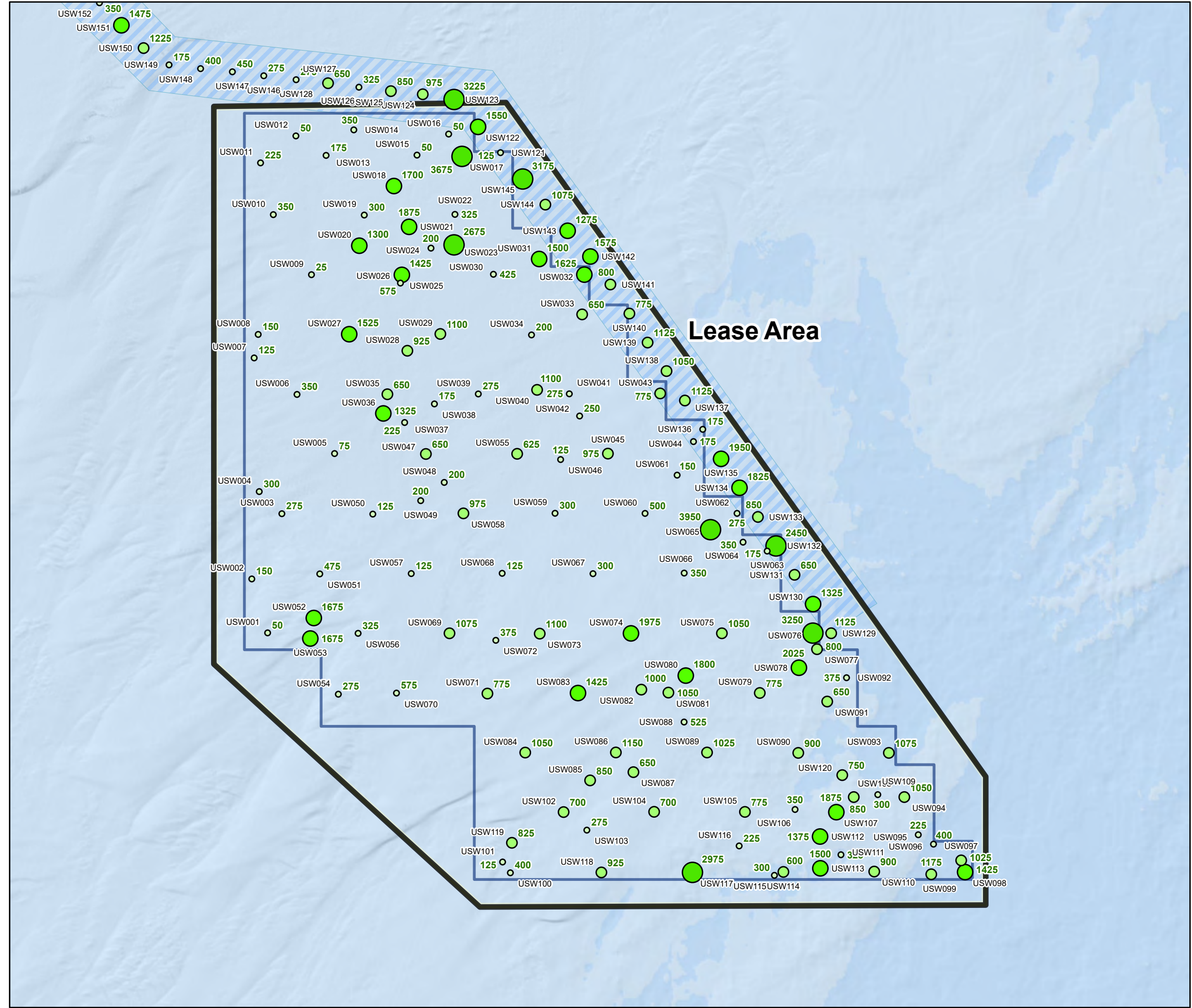
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware



**Figure 7**



Path: J:\U167 - US Wind MD\04\_Graphics\GIS\APR\Benthic\U167\_BenthicTaxa\_Fig07\_TaxaDensity.aprx  
Drawing Date: 8/29/2022 Author: sdehainaut  
© 2022 ESS Group, Inc.



Source:  
1) ESRI, World Ocean Base

**Benthic Taxa Total Density  
By Project Component Area  
Lease Area**

**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware



**Figure 7**



### Taxa Richness

Overall, 99 taxa of benthic fauna were observed in the 120 grab samples collected from the Lease area in 2021 (Table 13). Taxa richness per sample ranged from 1 to 25, and mean taxa richness was  $11 \pm 5.7$  (mean  $\pm$  SD) per site (Table 13 and Attachment B). Taxa richness per sample appeared to be greatest in the southeastern and northeastern portions of the Lease area (Figure 6)

### Macrofaunal Density

The mean macrofaunal density for samples collected from the Lease area was  $788 \pm 738$  (mean  $\pm$  SD) individuals/m<sup>2</sup> (Table 13). The highest macrofaunal density (3,950 individuals/m<sup>2</sup>) was found at BG-LA-Z028/USW065, while macrofaunal density was lowest (25 individuals/m<sup>2</sup>) at BG-LA-B03/USW009 (Attachment B). Of the 120 samples analyzed, 36 were characterized by densities of 1000 individuals/m<sup>2</sup> or more (30% of samples). Benthic organism density appeared to be greatest in the northeastern portion of the Lease area, and on sections of the eastern and southern borders of the Lease area (Figure 7).

### Community Composition

The benthic macrofaunal assemblage documented in the analyzed samples consisted of polychaete worms, crustaceans, mollusks, oligochaete worms, nemertean ribbon worms, sand dollars, ascidians, lancelets, sea anemones, flatworms, and sipunculids (Attachments B and C).

The most speciose taxonomic group was polychaete worms, which contributed over 37% of the taxa documented in the analyzed samples. Crustaceans and mollusks each accounted for approximately 25-26% of taxa in the Lease area samples. Polychaetes accounted for the greatest percentage of total organism abundance of any taxa group (over 56%), followed by oligochaete worms and crustaceans (over 19% and over 11%) (Table 13).

The most abundant taxon in Lease area samples was naidid oligochaete worms without hair chaetae, which accounted for over 10% of all individuals identified. Cirratulid polychaetes, enchytraeid oligochaete worms, polygordiid polychaetes, and phyllodocid polychaetes were the next most abundant taxa, each accounting for more than 5% of all organisms (Table 14).

Soft-shell clams (*Mya arenaria*), a shellfish species of potential commercial importance, were observed in low densities at 12 sites. No taxa indicative of sensitive habitats (hard bottom areas, cold water coral reefs, seagrass beds, etc.) were observed in benthic grab samples collected within the Lease area.

**Table 14. Relative Abundance of Taxa Encountered in Lease Area Samples**

| Scientific Name             | Common Name            | Relative Abundance (%) |
|-----------------------------|------------------------|------------------------|
| Naididae w/out hair chaetae | Oligochaete Worm       | 10.7                   |
| Cirratulidae                | Cirratulid Polychaete  | 8.3                    |
| Enchytraeidae               | Oligochaete Worm       | 8.3                    |
| <i>Polygordius sp.</i>      | Polygordiid Polychaete | 6.7                    |
| Phyllodocidae               | Phyllodocid Polychaete | 5.5                    |
| <i>Spio sp.</i>             | Spionid Polychaete     | 4.6                    |

| Scientific Name             | Common Name                     | Relative Abundance (%) |
|-----------------------------|---------------------------------|------------------------|
| <i>Scoletoma sp.</i>        | Lumbrinerid Polychaete          | 3.3                    |
| <i>Goniadella gracilis</i>  | Goniadid Polychaete             | 3.1                    |
| <i>Exogone sp.</i>          | Syllid Polychaete               | 3.1                    |
| Tanaidacea                  | Tanaid Crustacean               | 2.7                    |
| <i>Scalibregma inflatum</i> | Scalibregmatid Polychaete       | 2.7                    |
| <i>Glycera sp.</i>          | Bloodworm (Glycerid Polychaete) | 2.5                    |

\*Includes taxa accounting for  $\geq 2.5\%$  of total abundance

The most widespread taxa (i.e., observed in the most samples) was naidid oligochaete worms without hair chaetae, which were present in over 65% of samples collected within the Lease area (79 samples). Polygordiid polychaetes (*Polygordius sp.*), cirratulid polychaetes, and the lumbrinerid polychaete *Scoletoma sp.* were each observed in at least 46% of samples (56 or more samples) (Table 15). Other relatively widely distributed taxa included Enchytraeid oligochaete worms, tellin clams, the syllid polychaete *Exogone sp.*, the paranoid polychaete *Aricidea sp.*, and tanaid crustaceans (all found in at least 35 percent of samples).

**Table 15. Most Widespread Taxa Encountered in Lease Area Samples**

| Scientific Name             | Common Name            | Number of Samples Containing this Taxon |
|-----------------------------|------------------------|---|
| Naididae w/out hair chaetae | Oligochaete Worm       | 79                                      |
| <i>Polygordius sp.</i>      | Polygordiid Polychaete | 59                                      |
| Cirratulidae                | Cirratulid Polychaete  | 58                                      |
| <i>Scoletoma sp.</i>        | Lumbrinerid Polychaete | 56                                      |
| Enchytraeidae               | Oligochaete Worm       | 52                                      |
| Tellininae                  | Tellin Clam            | 48                                      |
| <i>Exogone sp.</i>          | Syllid Polychaete      | 47                                      |
| <i>Aricidea sp.</i>         | Paraonid Polychaete    | 47                                      |
| Tanaidacea                  | Tanaid Crustacean      | 42                                      |

\*Includes taxa observed in > 41 samples ( $\geq 35\%$  of samples)

Most of the taxa observed in grab samples collected from the Lease area are typical of soft-sediment habitats. *Polygordius* polychaetes are often dominant members of macrofaunal communities on inner continental shelf waters along the east coast of the United States and are associated with coarse sandy sediments (Ramey et al. 2006, Ramey 2008). Cirratulid worms are deposit feeders that reside in soft sediment habitats, and *Scoletoma sp.* are predatory worms which burrow in mud and mixed-bottom debris (Gosner 1978). Other common taxa like *Spio sp.* worms build tubes from sediment and are associated with sandy substrates (Gosner 1978). *Exogone sp.* worms can be found in a variety of habitats ranging from muddy sand to coarse gravel (Pettibone 1963). Similarly, tellin clams occur in a variety of soft sediment habitats (Mikkelsen and Bieler 2021), and *Scalibregma sp.* are associated with muddy sand (Gosner 1978).

The benthic community present in samples collected from within the Lease area aligns with expectations, given the mobile sand wave features known to comprise much of the region. The infaunal

sampling results also align with the CMECS habitat classifications for the area; of the 120 samples collected in the Lease area, 39% (47 samples) were classified as fine unconsolidated substrates under the CMECS framework, and 61% (73 samples) were classified as coarse unconsolidated substrates.

### 3.2.2 Common Export Cable Corridor

Results of the analysis of benthic grab samples collected from within the Common Export Cable Corridor in 2021 are presented below (Table 16) and Attachment B. Additionally, charts and tables describing the macrofaunal community composition and basic statistics for each sample are presented in Attachment C.

**Table 16. Summary of Key Statistics from the Common Export Cable Corridor Benthic Sample Analysis**

| Statistic  | Value           |
|--|-----------------|
| Number of Samples                                    | 36              |
| Mean Density per Square Meter ( $\pm 1$ SD)          | 1,082 $\pm$ 774 |
| Mean Taxa Richness ( $\pm 1$ SD)                     | 13 $\pm$ 5.9    |
| Total Number of Taxa                                 | 75              |
| <b>Number of Taxa Observed by Taxonomic Group</b>    |                 |
| Polychaete worms                                     | 35              |
| Crustaceans  | 18              |
| Mollusks   | 14              |
| Oligochaete worms                                    | 3               |
| Other  | 5               |
| <b>Percent of Total Abundance by Taxonomic Group</b> |                 |
| Polychaete worms                                     | 50.5%           |
| Crustaceans  | 19.5%           |
| Mollusks   | 5.6%            |
| Oligochaete worms                                    | 21.2%           |
| Other  | 3.1%            |

\*All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007)

#### *Taxa Richness*

Overall, 75 taxa of benthic fauna were observed in the 36 grab samples collected from the Common Export Cable Corridor in 2021 (Table 16). Taxa richness per sample ranged from 2 to 26, and mean taxa richness was 13  $\pm$  5.9 (mean  $\pm$  SD) per site (Table 16 and Attachment B). Taxa richness per sample was generally highest in the portion of the Common Export Cable Corridor located along the eastern border of the Lease area (Figure 6).

#### *Macrofaunal Density*

The mean macrofaunal density for samples collected from the Common Export Cable Corridor was 1,082  $\pm$  774 (mean  $\pm$  SD) individuals/m<sup>2</sup> (Table 16). The highest macrofaunal density (3,225



individuals/m<sup>2</sup>) was found at BG-AC-20/USW123, while macrofaunal density was lowest (125 individuals/m<sup>2</sup>) at BG-AC-18/USW121 (Attachment B). Of the 36 samples analyzed, 18 were characterized by densities of 1000 individuals/m<sup>2</sup> or more (50% of samples). Similar to taxa richness, total organism density was greatest in the portion of the Common Export Cable Corridor located along the eastern border of the Lease area (Figure 7).

### Community Composition

The benthic macrofaunal assemblage documented in the analyzed samples consisted of polychaete worms, crustaceans, oligochaete worms, mollusks, nemertean ribbon worms, lancelets, ascidians, and sand dollars (Attachment B).

The most speciose taxonomic group was polychaete worms, which contributed over 46% of the taxa documented in the analyzed samples. Crustaceans and mollusks accounted for approximately 24% and 19% of taxa in the Common Export Cable Corridor samples, respectively. Polychaetes accounted for the greatest percentage of total organism abundance of any taxa group (over 50%), followed by mollusks and oligochaete worms (approximately 20% and 21%, respectively) (Table 16).

The most abundant taxon in Lease area samples was naidid oligochaete worms without hair chaetae, which accounted for over 12% of all individuals identified. The ampeliscid amphipod *Byblis serrata*, enchytraeid oligochaete worms, and phyllodocid polychaetes, were the next most abundant taxa, each accounting for more than 8% of all organisms (Table 17).

Soft-shell clams, a shellfish species of potential commercial importance, were observed in low densities at two sites. Common Atlantic slippersnails, which are potentially indicative of hard bottom habitat, were observed in two benthic grab samples. However, no other taxa indicative of sensitive habitats (hard bottom areas, cold water coral reefs, seagrass beds, etc.) were observed in the benthic grab samples.

**Table 17. Relative Abundance of Taxa Encountered in Common Export Cable Corridor Area Samples**

| Scientific Name             | Common Name            | Relative Abundance (%) |
|-----------------------------|------------------------|------------------------|
| Naididae w/out hair chaetae | Oligochaete Worm       | 12.4                   |
| <i>Byblis serrata</i>       | Ampeliscid Amphipod    | 10.4                   |
| Enchytraeidae               | Oligochaete Worm       | 8.5                    |
| Phyllodocidae               | Phyllodocid Polychaete | 8.4                    |
| <i>Polygordius sp.</i>      | Polygordiid Polychaete | 6.2                    |
| Dorvilleidae                | Dorvilleid Polychaete  | 4.0                    |
| <i>Exogone sp.</i>          | Syllid Polychaete      | 3.1                    |
| Cirratulidae                | Cirratulid Polychaete  | 3.0                    |
| Syllidae                    | Syllid Polychaete      | 2.7                    |
| Tellininae                  | Tellin Clam            | 2.6                    |

\*Includes taxa accounting for ≥ 2.5% of total abundance

The most widespread taxa (i.e., observed in the most samples) was naidid oligochaete worms without hair chaetae, which were present in over 75% of samples collected within the Common Export Cable Corridor (27 samples). Polygordiid polychaetes (*Polygordius* sp.), cirratulid polychaetes, nemertean ribbon worms, enchytraeid oligochaete worms, and the syllid polychaete *Exogone* sp. were present in at least 50% of samples (18 or more samples) (Table 18). Other relatively widely distributed taxa included the ampeliscid amphipod *Byblis serrata*, dorvilleid polychaetes, phyllodocid polychaetes, the paranoid polychaete *Aricidea* sp., and the lumbrinerid polychaete *Scoletoma* sp. (all found in at least 42 percent of samples).

**Table 18. Most Widespread Taxa Encountered Common Export Cable Corridor Area Samples**

| Scientific Name             | Common Name            | Number of Samples Containing this Taxon |
|-----------------------------|------------------------|---|
| Naididae w/out hair chaetae | Oligochaete Worm       | 27                                      |
| <i>Polygordius</i> sp.      | Polygordiid Polychaete | 25                                      |
| Cirratulidae                | Cirratulid Polychaete  | 22                                      |
| Nemertea                    | Ribbon Worm            | 19                                      |
| Enchytraeidae               | Oligochaete Worm       | 18                                      |
| <i>Exogone</i> sp.          | Syllid Polychaete      | 18                                      |
| <i>Byblis serrata</i>       | Ampeliscid Amphipod    | 16                                      |
| Dorvilleidae                | Dorvilleid Polychaete  | 16                                      |
| Phyllodocidae               | Phyllodocid Polychaete | 16                                      |
| <i>Aricidea</i> sp.         | Paraonid Polychaete    | 16                                      |
| <i>Scoletoma</i> sp.        | Lumbrinerid Polychaete | 15                                      |

\*Includes taxa observed in  $\geq 15$  samples ( $\geq 42\%$  of samples)

Most of the taxa observed in the grab samples collected from the Common Export Cable Corridor were similar to those found in samples collected from the Lease area and are typical of soft-sediment habitats. In addition to the taxa described in Section 3.2.1 above, other soft sediment fauna present in Common Export Cable Corridor samples included *Byblis serrata* amphipods, which build tubes in medium to coarse sand (Bousfield 1973). Dorvilleidae polychaete worms, which create temporary mucus tubes, are also typical of unconsolidated substrates (Pettibone 1963).

The infaunal sampling results align with expectations, given the CMECS habitat classifications for samples collected within the Common Export Cable Corridor; of the 36 samples collected in the Common Export Cable Corridor, 33% (12 samples) were classified as fine unconsolidated substrates under the CMECS framework, and 67% (24 samples) were classified as coarse unconsolidated substrates. This breakdown of fine and coarse substrates is similar to that observed in samples collected from the Lease area and from Offshore Export Cable Corridors 2 and 2a (see section 3.2.4 below).



### 3.2.3 Offshore Export Cable Corridor 1

Results of the analysis of benthic grab samples collected from within the Offshore Export Cable Corridor 1 in 2021 are presented below (Table 19) and Attachment B. Charts and tables describing the macrofaunal community composition and basic statistics for each sample are presented in Attachment C.

**Table 19. Summary of Key Statistics from the Offshore Export Cable Corridor 1 Benthic Sample Analysis**

| Statistic  | Value             |
|--|-------------------|
| Number of Samples                                    | 12                |
| Mean Density per Square Meter ( $\pm 1$ SD)          | 2,314 $\pm$ 1,359 |
| Mean Taxa Richness ( $\pm 1$ SD)                     | 16 $\pm$ 5.4      |
| Total Number of Taxa                                 | 64                |
| <b>Number of Taxa Observed by Taxonomic Group</b>    |                   |
| Polychaete worms                                     | 29                |
| Crustaceans  | 15                |
| Mollusks   | 14                |
| Oligochaete worms                                    | 3                 |
| Other  | 3                 |
| <b>Percent of Total Abundance by Taxonomic Group</b> |                   |
| Polychaete worms                                     | 23.9%             |
| Crustaceans  | 11.1%             |
| Mollusks   | 36.9%             |
| Oligochaete worms                                    | 21.9%             |
| Other  | 6.3%              |

\*All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007)

#### *Taxa Richness*

Overall, 64 taxa of benthic fauna were observed in the 12 grab samples collected from within Offshore Export Cable Corridor 1 in 2021 (Table 19). Taxa richness per sample ranged from 7 to 23, and mean taxa richness was 16  $\pm$  5.4 (mean  $\pm$  SD) per site (Table 19 and Attachment B). No consistent spatial patterns in taxa richness per sample were observed along Offshore Export Cable Corridor 1 (Figure 6).

#### *Macrofaunal Density*

The mean macrofaunal density for samples collected from Offshore Export Cable Corridor 1 was 2,314  $\pm$  1,359 (mean  $\pm$  SD) individuals/m<sup>2</sup> (Table 19). The highest macrofaunal density (5,100 individuals/m<sup>2</sup>) was found at BG-AC-41/USW183, while macrofaunal density was lowest (650 individuals/m<sup>2</sup>) at BG-AC-42/USW184 (Attachment B). Of the 12 samples analyzed, 10 were characterized by densities of 1000 individuals/m<sup>2</sup> or more (83% of samples). No consistent spatial patterns in total organism density were observed in samples collected along Offshore Export Cable Corridor 1 (Figure 7).

### Community Composition

The benthic macrofaunal assemblage documented in the analyzed samples consisted of mollusks, polychaete worms, oligochaete worms, crustaceans, lancelets, nemertean ribbon worms, and ascidians (Attachment B).

The most speciose taxonomic group was polychaete worms, which contributed over 45% of the taxa documented in the analyzed samples. Crustaceans and mollusks each accounted for approximately 23% and 22% of taxa in the Offshore Export Cable Corridor 1 samples, respectively. Mollusks accounted for the greatest percentage of total organism abundance of any taxa group (over 36%), followed by polychaete worms (approximately 24%) and oligochaete worms (approximately 22%) (Table 19).

The most abundant taxon in the Offshore Export Cable Corridor 1 samples was the common Atlantic slippersnail (*Crepidula fornicata*), which accounted for nearly 25% of all individuals identified. Oligochaete worms (enchytraeid worms and naidid worms without hair chaetae), syllid polychaetes, and tellin clams were the next most abundant taxa, each accounting for more than 4% of all organisms (Table 20).

Soft-shell clams, a shellfish species of potential commercial importance, were not present in any of the Offshore Export Cable Corridor 1 samples. However, surf clams (*Spisula solidissima*), which are another shellfish species of potential commercial importance, were found in five samples. Common Atlantic slippersnails and eastern white slippersnails are potentially indicative of hard bottom habitat. However, these species may also be found in soft sediment habitats including mud and sand (CIESM 2000, SERC 2022). No other taxa indicative of sensitive habitats (hard bottom areas, cold water coral reefs, seagrass beds, etc.) were observed in the benthic grab samples.

**Table 20. Relative Abundance of Taxa Encountered in Offshore Export Cable Corridor 1 Samples**

| Scientific Name                | Common Name                  | Relative Abundance (%) |
|--------------------------------|------------------------------|------------------------|
| <i>Crepidula fornicata</i>     | Common Atlantic Slippersnail | 24.9                   |
| Enchytraeidae                  | Oligochaete Worm             | 11.1                   |
| Naididae w/out hair chaetae    | Oligochaete Worm             | 10.7                   |
| Syllidae                       | Syllid Polychaete            | 8.0                    |
| Tellininae                     | Tellin Clam                  | 4.6                    |
| <i>Branchiostoma caribaeum</i> | Lancelet                     | 3.7                    |
| <i>Crepidula plana</i>         | Eastern White Slippersnail   | 3.2                    |
| <i>Rhepoxynius epistomus</i>   | Phoxocephalid Amphipod       | 2.9                    |
| Tanaidacea                     | Tanaid Crustacean            | 2.9                    |
| Cirratulidae                   | Cirratulid Polychaete        | 2.3                    |
| Nemertea                       | Ribbon Worm                  | 1.9                    |

\*Includes taxa accounting for ≥ 1.6% of total abundance



The most widespread taxa (i.e., observed in the most samples) were naidid oligochaete worms without hair chaetae which were each present in 75% of samples collected within Offshore Export Cable Corridor 1 (9 samples). Nemertean ribbon worms, enchytraeid oligochaete worms, syllid polychaetes, tellin clams, and cirratulid polychaetes were each observed in at least 58% of samples (7 or more samples) (Table 21). Other relatively widely distributed taxa included the phoxocephalid amphipod *Rhepoxynius epistomus*, the unciolid amphipod *Unciola* sp., the common Atlantic slippersnail, and paranoid polychaetes (all found in at least 50 percent of samples).

**Table 21. Most Widespread Taxa Encountered in Offshore Export Cable Corridor 1 Samples**

| Scientific Name                | Common Name                  | Number of Samples Containing this Taxon |
|--------------------------------|------------------------------|---|
| Naididae w/out hair chaetae    | Oligochaete Worm             | 9                                       |
| Nemertea                       | Ribbon Worm                  | 8                                       |
| Enchytraeidae                  | Oligochaete Worm             | 8                                       |
| Syllidae                       | Syllid Polychaete            | 8                                       |
| Tellininae                     | Tellin Clam                  | 7                                       |
| Cirratulidae                   | Cirratulid Polychaete        | 7                                       |
| <i>Rhepoxynius epistomus</i>   | Phoxocephalid Amphipod       | 6                                       |
| <i>Unciola</i> sp.             | Unciolid Amphipod            | 6                                       |
| <i>Crepidula fornicata</i>     | Common Atlantic Slippersnail | 6                                       |
| Paraonidae                     | Paraonid Polychaete          | 6                                       |
| <i>Branchiostoma caribaeum</i> | Lancelet                     | 5                                       |
| <i>Spisula solidissima</i>     | Atlantic Surf Clam           | 5                                       |
| <i>Polygordius</i> sp.         | Polygordiid Polychaete       | 5                                       |

\*Includes taxa observed in  $\geq 5$  samples ( $\geq 35\%$  of samples)

Most of the taxa observed in the grab samples collected from Offshore Export Cable Corridor 1 were typical of soft-sediment habitats. Common Atlantic slippersnails, which were more abundant and widespread in Offshore Export Cable Corridor 1 samples compared to Lease area and Common Offshore Export Cable Corridor samples, are often found on low energy sand or gravel sediments where biogenic substrates (shell substrates) are present (CIESM 2003). Common and widespread taxa in Offshore Export Cable Corridor 1 samples include tellin clams and cirratulid polychaetes, which were also observed in previously described Project component areas (see Sections 3.2.1 and 3.2.2). Additional soft sediment organisms found in Offshore Export Cable Corridor 1 samples included *Unciola* sp. amphipods, which inhabit tubes in sandy mud to coarse sand (Bousfield 1973).

The infaunal sampling results for Offshore Export Cable Corridor 1 align with expectations based on the CMECS habitat classifications for the area; of the 12 samples collected in Offshore Export Cable Corridor 1, only 25% (3 samples) were classified as fine unconsolidated substrates under the CMECS framework, whereas 75% (9 samples) were classified as coarse unconsolidated substrates. Compared to samples collected from within the Lease area, Common Export Cable Corridor, and Offshore Export Cable Corridors 2 and 2a (see sections 3.2.4 and 3.2.5 below) the percentage of coarse unconsolidated substrate habitats in Offshore Export Cable Corridor 1 samples was greater. This difference in habitat was most notably reflected by the greater abundance and more frequent occurrence of common Atlantic

slippersnails and Eastern white slippersnails in Offshore Export Cable Corridor 1 samples. These species can occur on a variety of substrates, including coarse substrates. However, these species also prefer shallower waters; therefore, water depth, which is deeper in the Common Export Cable Corridor and Lease area, may also influence their distribution in the Survey Area.

### 3.2.4 Offshore Export Cable Corridor 2

Results of the analysis of benthic grab samples collected from within Offshore Export Cable Corridor 2 in 2021 are presented below (Table 22) and Attachment B. Additionally, charts and tables describing the macrofaunal community composition and basic statistics for each sample are presented in Attachment C.

**Table 22. Summary of Key Statistics from the Offshore Export Cable Corridor 2 Benthic Sample Analysis**

| Statistic  | Value           |
|--|-----------------|
| Number of Samples                                    | 21              |
| Mean Density per Square Meter ( $\pm 1$ SD)          | 1,213 $\pm$ 775 |
| Mean Taxa Richness ( $\pm 1$ SD)                     | 13 $\pm$ 5.0    |
| Total Number of Taxa                                 | 75              |
| <b>Number of Taxa Observed by Taxonomic Group</b>    |                 |
| Polychaete worms                                     | 34              |
| Crustaceans  | 13              |
| Mollusks   | 20              |
| Oligochaete worms                                    | 3               |
| Other  | 5               |
| <b>Percent of Total Abundance by Taxonomic Group</b> |                 |
| Polychaete worms                                     | 33.7%           |
| Crustaceans  | 7.3%            |
| Mollusks   | 19.2%           |
| Oligochaete worms                                    | 34.0%           |
| Other  | 5.9%            |

\*All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007)

#### *Taxa Richness*

Overall, 75 taxa of benthic fauna were observed in the 21 grab samples collected from Offshore Export Cable Corridor 2 in 2021 (Table 22). Taxa richness per sample ranged from 6 to 23, and mean taxa richness was 13  $\pm$  5.0 (mean  $\pm$  SD) per site (Table 22 and Attachment B). Taxa richness per sample was generally greatest at sites located in the southern portion of Offshore Export Cable Corridor 2 (Figure 6).



### *Macrofaunal Density*

The mean macrofaunal density for samples collected from the Offshore Export Cable Corridor 2 was  $1,213 \pm 775$  (mean  $\pm$  SD) individuals/m<sup>2</sup> (Table 22). The highest macrofaunal density (2,925 individuals/m<sup>2</sup>) was found at BG-AC-67/USW162, while macrofaunal density was lowest (300 individuals/m<sup>2</sup>) at BG-AC-78/USW176 (Attachment B). Of the 21 samples analyzed, 10 were characterized by densities of 1000 individuals/m<sup>2</sup> or more (48% of samples). Similar to taxa richness per sample, total organism density was generally lower at sites located in the northern portion of Offshore Export Cable Corridor 2 (Figure 7).

### *Community Composition*

The benthic macrofaunal assemblage documented in the analyzed samples consisted of oligochaete worms, polychaete worms, mollusks, crustaceans, nemertean ribbon worms, lancelets, sea anemones, ascidians, and sipunculids (Attachment B).

The most speciose taxonomic group was polychaete worms, which contributed over 45% of the taxa documented in the analyzed samples. Mollusks and crustaceans each accounted for approximately 27% and 17% of taxa in the Offshore Export Cable Corridor 2 samples, respectively. Oligochaete worms and polychaete worms accounted for the greatest percentages of total organism abundance (approximately 34% each), followed by mollusks (approximately 19%) (Table 22).

The most abundant taxa in Offshore Export Cable Corridor 2 samples were enchytraeid oligochaete worms and nauid oligochaete worms without hair chaetae, which accounted for nearly 18% and over 13% of all individuals identified, respectively. Tellin clams, the common Atlantic slippersnail, and syllid polychaetes, were the next most abundant taxa, each accounting for more than 4% of all organisms (Table 23).

Soft-shell clams, a shellfish species of potential commercial importance, were observed at low densities at three sites along Offshore Export Cable Corridor 2. Common Atlantic slippersnails, which are potentially indicative of hard bottom habitat, were observed in the benthic grab samples. However, these species may also be found in soft sediment habitats including mud and sand (CIESM 2000, SERC 2022). No other taxa indicative of sensitive habitats (hard bottom areas, cold water coral reefs, seagrass beds, etc.) were observed.

**Table 23. Relative Abundance of Taxa Encountered in Offshore Export Cable Corridor 2 Samples**

| Scientific Name             | Common Name                  | Relative Abundance (%) |
|-----------------------------|------------------------------|------------------------|
| Enchytraeidae               | Oligochaete Worm             | 17.8                   |
| Naididae w/out hair chaetae | Oligochaete Worm             | 13.4                   |
| Tellininae                  | Tellin Clam                  | 9.3                    |
| <i>Crepidula fornicata</i>  | Common Atlantic Slippersnail | 4.3                    |
| Syllidae                    | Syllid Polychaete            | 4.0                    |
| Nemertea                    | Ribbon Worm                  | 3.8                    |
| <i>Mediomastus sp.</i>      | Capitellid Polychaete        | 3.7                    |
| <i>Aricidea sp.</i>         | Paraonid Polychaete          | 3.3                    |
| Naididae w/ hair chaetae    | Oligochaete Worm             | 2.7                    |
| <i>Polygordius sp.</i>      | Polygordiid Polychaete       | 2.6                    |
| <i>Clymenella zonalis</i>   | Maldanid Polychaete          | 2.5                    |
| Phyllodocidae               | Phyllodocid Polychaete       | 2.2                    |

\*Includes taxa accounting for  $\geq 2\%$  of total abundance

The most widespread taxa (i.e., observed in the most samples) in Offshore Export Cable Corridor 2 samples were nemertean ribbon worms and naidid oligochaete worms without hair chaetae, which were each present in 81% of samples (17 samples). Enchytraeid oligochaete worms and syllid polychaetes were both observed in at least 50% of samples (14 or more samples) (Table 24). Other relatively widely distributed taxa included tellin clams, dorvilleid polychaetes, the capitellid polychaete *Mediomastus sp.*, and the paranoid polychaete *Aricidea sp.* (all found in at least 48 percent of samples).

**Table 24. Most Widespread Taxa Encountered in Offshore Export Cable Corridor 2 Samples**

| Scientific Name             | Common Name                     | Number of Samples Containing this Taxon |
|-----------------------------|---------------------------------|---|
| Nemertea                    | Ribbon Worm                     | 17                                      |
| Naididae w/out hair chaetae | Oligochaete Worm                | 17                                      |
| Enchytraeidae               | Oligochaete Worm                | 14                                      |
| Syllidae                    | Syllid Polychaete               | 14                                      |
| Tellininae                  | Tellin Clam                     | 10                                      |
| Dorvilleidae                | Dorvilleid Polychaete           | 10                                      |
| <i>Mediomastus sp.</i>      | Capitellid Polychaete           | 10                                      |
| <i>Aricidea sp.</i>         | Paraonid Polychaete             | 10                                      |
| <i>Glycera sp.</i>          | Bloodworm (Glycerid Polychaete) | 9                                       |
| <i>Unciola sp.</i>          | Unciolid Amphipod               | 8                                       |
| <i>Polygordius sp.</i>      | Polygordiid Polychaete          | 8                                       |

\*Includes taxa observed in  $\geq 8$  samples ( $\geq 35\%$  of samples)



Most of the taxa observed in the grab samples collected from Offshore Export Cable Corridor 2 are typical of soft-sediment habitats. Widespread and abundant taxa including tellin clams, common Atlantic slippersnails, *Polygordius* sp. and dorvilleid polychaetes, and *Unciola* sp. amphipods were similarly common in previously described areas (Sections 3.2.1, 3.2.2, 3.2.3).

The infaunal sampling results for Offshore Export Cable Corridor 2 align with expectations, given the CMECS habitat classifications for these samples; of the 21 samples collected in Offshore Export Cable Corridor 2, 38% (8 samples) were classified as fine unconsolidated substrates under the CMECS framework, and 62% (13 samples) were classified as coarse unconsolidated substrates. This breakdown of fine and coarse substrates is similar to that observed in samples collected from the Lease area and indicates a lower abundance of coarse substrate habitats than were observed in Offshore Export Cable Corridor 1. Consequently, certain species potentially indicative of coarse substrates (e.g. common Atlantic slippersnail) were less abundant and widespread in Offshore Export Cable Corridor 2 samples than in Offshore Export Cable Corridor 1 samples.

### **3.2.5 Offshore Export Cable Corridor 2a**

Offshore Export Cable Corridor 2a is a formerly planned cable corridor that was included in the 2021 benthic survey but is no longer located within the PDE. Results of the analysis of benthic grab samples collected from within Offshore Export Cable Corridor 2a in 2021 are presented below (Table 25) and Attachment B. Additionally, charts and tables describing macrofaunal community composition and statistics for each sample are presented in Attachment C.

**Table 25. Summary of Key Statistics from Offshore Export Cable Corridor 2a Benthic Sample Analysis**

| <b>Statistic</b>                                     | <b>Value</b>      |
|--|-------------------|
| Number of Samples                                    | 9                 |
| Mean Density per Square Meter ( $\pm 1$ SD)          | 2,150 $\pm$ 2,798 |
| Mean Taxa Richness ( $\pm 1$ SD)                     | 13 $\pm$ 4.6      |
| Total Number of Taxa                                 | 53                |
| <b>Number of Taxa Observed by Taxonomic Group</b>    |                   |
| Polychaete worms                                     | 24                |
| Crustaceans  | 14                |
| Mollusks   | 11                |
| Oligochaete worms                                    | 3                 |
| Other  | 1                 |
| <b>Percent of Total Abundance by Taxonomic Group</b> |                   |
| Polychaete worms                                     | 16.0%             |
| Crustaceans  | 10.5%             |
| Mollusks   | 47.2%             |
| Oligochaete worms                                    | 24.5%             |
| Other  | 1.8%              |

\*All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007)

### *Taxa Richness*

Overall, 53 taxa of benthic fauna were observed in the 9 grab samples collected from Offshore Export Cable Corridor 2a in 2021 (Table 25). Taxa richness per sample ranged from 4 to 18, and mean taxa richness was  $13 \pm 4.6$  (mean  $\pm$  SD) per site (Table 25 and Attachment B). No consistent spatial patterns in taxa richness per sample were observed along Offshore Export Cable Corridor 2a (Figure 6).

### *Macrofaunal Density*

The mean macrofaunal density for samples collected from Offshore Export Cable Corridor 2a was  $2,150 \pm 2,798$  (mean  $\pm$  SD) individuals/m<sup>2</sup> (Table 25). The highest macrofaunal density (9,125 individuals/m<sup>2</sup>) was found at BG-AC-48/USW191, while macrofaunal density was lowest (150 individuals/m<sup>2</sup>) at BG-AC-50/USW192 (Attachment B). Of the 9 samples analyzed, 6 were characterized by densities of 1000 individuals/m<sup>2</sup> or more (67% of samples). Consistent spatial patterns in total organism density were not observed in samples collected along Offshore Export Cable Corridor 2a (Figure 7).

### *Community Composition*

The benthic macrofaunal assemblage documented in the analyzed samples consisted of mollusks, oligochaete worms, polychaete worms, crustaceans, and nemertean ribbon worms (Attachment B).

The most speciose taxonomic group was polychaete worms, which contributed over 45% of the taxa documented in the analyzed samples. Crustaceans and mollusks each accounted for approximately 26% and 21% of taxa in Offshore Export Cable Corridor 2a samples, respectively. Mollusks accounted for the greatest percentage of total organism abundance of any taxa group (over 47%), followed by oligochaete worms (approximately 25%), and polychaete worms (approximately 16%) (Table 25).

The most abundant taxon in Offshore Export Cable Corridor 2a samples was the common Atlantic slippersnail, which accounted for over 40% of all individuals identified (though this species was found in only one of the nine samples collected from within Offshore Export Cable Corridor 2a). Oligochaete worms (naidid worms without hair chaetae and enchytraeid worms), the phoxocephalid amphipod *Rhepoxynius epistomus*, syllid polychaetes, the eastern white slippersnail, and the capitellid polychaete *Mediomastus* sp. were the next most abundant taxa, each accounting for more than 3% of all organisms (Table 26).

Soft-shell clams, a shellfish species of potential commercial importance, were observed in low densities at one site. Common Atlantic slippersnails and eastern white slippersnails, which are potentially indicative of hard bottom habitat, were observed in one benthic grab sample. Common Atlantic slippersnails and eastern white slippersnails are potentially indicative of hard bottom habitat. However, these species may also be found in soft sediment habitats including mud and sand (CIESM 2000, SERC 2022). No other taxa indicative of sensitive habitats (hard bottom areas, cold water coral reefs, seagrass beds, etc.) were observed.



**Table 26. Relative Abundance of Taxa Encountered in Offshore Export Cable Corridor 2a Samples**

| Scientific Name              | Common Name                  | Relative Abundance (%) |
|------------------------------|------------------------------|------------------------|
| <i>Crepidula fornicata</i>   | Common Atlantic Slippersnail | 40.2                   |
| Naididae w/out hair chaetae  | Oligochaete Worm             | 12.7                   |
| Enchytraeidae                | Oligochaete Worm             | 9.4                    |
| <i>Rhepoxynius epistomus</i> | Phoxocephalid Amphipod       | 4.5                    |
| Syllidae                     | Syllid Polychaete            | 4.4                    |
| <i>Crepidula plana</i>       | Eastern White Slippersnail   | 3.2                    |
| <i>Mediomastus sp.</i>       | Capitellid Polychaete        | 3.2                    |
| Tellininae                   | Tellin Clam                  | 2.5                    |
| Naididae w/ hair chaetae     | Oligochaete Worm             | 2.5                    |
| Tanaidacea                   | Tanaid Crustacean            | 1.8                    |
| Nemertea                     | Ribbon Worm                  | 1.8                    |

\*Includes taxa accounting for  $\geq 1.6\%$  of total abundance

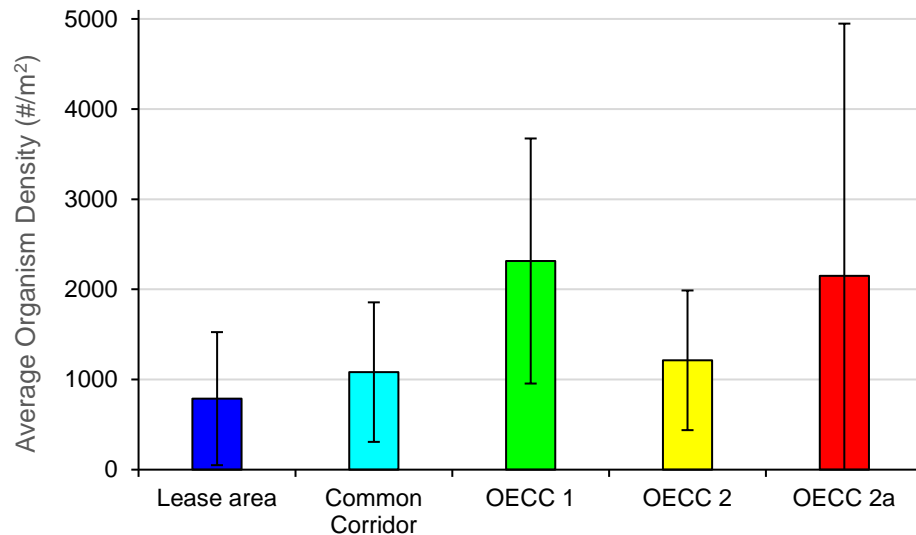
The most widespread taxon (i.e., observed in the most samples) was syllid polychaetes, which were both present in nearly 89% of samples collected within Offshore Export Cable Corridor 2a (8 samples). Enchytraeid oligochaete worms, naidid oligochaete worms without hair chaetae, and the capitellid polychaete *Mediomastus sp.* were each observed in at least 50% of samples (6 or more samples) (Table 27). Other relatively widely distributed taxa included the phoxocephalid amphipod *Rhepoxynius epistomus*, tanaid crustaceans, nemertean ribbon worms, naidid oligochaete worms with hair chaetae, and cirratulid polychaetes (all found in at least 44 percent of samples).

**Table 27. Most Widespread Taxa Encountered in Offshore Export Cable Corridor 2a Samples**

| Scientific Name              | Common Name            | Number of Samples Containing this Taxon |
|------------------------------|------------------------|---|
| Syllidae                     | Syllid Polychaete      | 8                                       |
| Enchytraeidae                | Oligochaete Worm       | 7                                       |
| Naididae w/out hair chaetae  | Oligochaete Worm       | 7                                       |
| <i>Mediomastus sp.</i>       | Capitellid Polychaete  | 6                                       |
| <i>Rhepoxynius epistomus</i> | Phoxocephalid Amphipod | 4                                       |
| Tanaidacea                   | Tanaid Crustacean      | 4                                       |
| Nemertea                     | Ribbon Worm            | 4                                       |
| Naididae w/ hair chaetae     | Oligochaete Worm       | 4                                       |
| Cirratulidae                 | Cirratulid Polychaete  | 4                                       |

\*Includes taxa observed in  $\geq 4$  samples ( $\geq 44\%$  of samples)

Most of the taxa observed in the grab samples collected from Offshore Export Cable Corridor 2a are typical of soft-sediment habitats. Abundant or widespread taxa including common Atlantic slippersnails, cirratulid worms, and tellin clams, were similarly common in previously described Project component



**Figure 8. Average Organism Density of Benthic Samples by Project Component Areas**

Log transformed organism density was significantly greater in samples collected from Offshore Export Cable Corridor 1 than in samples collected from the Lease area or the Common Export Cable Corridor (One-way ANOVA:  $F=8.67$ ,  $p<0.0001$ , Tukey's HSD:  $p<0.05$ ). Lease area  $N= 120$ , Common Corridor  $N= 36$ , Offshore Export Cable Corridor 1  $N= 12$ , Offshore Export Cable Corridor 2= 21, Offshore Export Cable Corridor 2a= 9. Offshore Export Cable Corridors are labeled as "OECC" for brevity

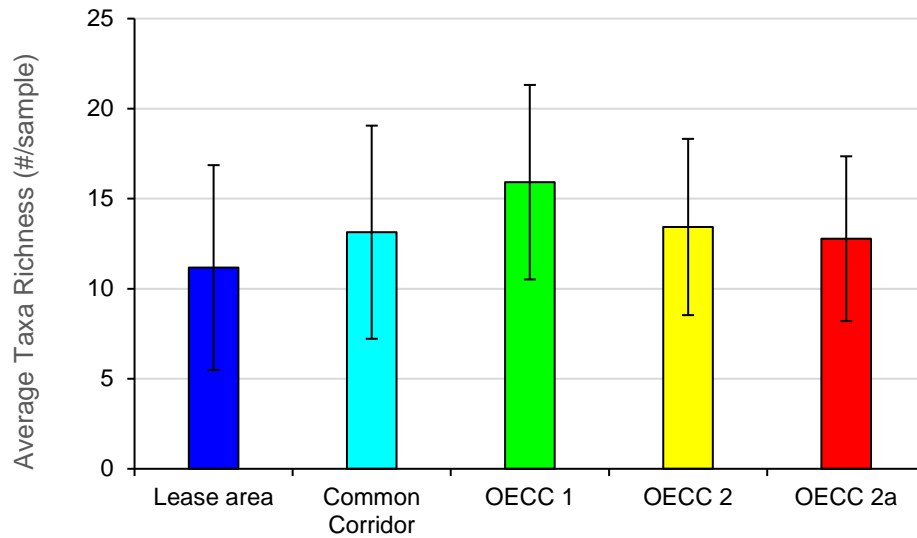
areas (Sections 3.2.1, 3.2.2, 3.2.3, 3.2.4). Other common taxa found in Offshore Export Cable Corridor 2a samples included the phoxocephalid amphipod *Rhepoxynius epistomus*, which inhabits medium to fine unstable sands (Bousfield 1973).

The infaunal sampling results for Offshore Export Cable Corridor 2a align with expectations based on the CMECS habitat classifications for the area; of the 9 samples collected in Offshore Export Cable Corridor 2a, 33% (3 samples) were classified as fine unconsolidated substrates under the CMECS framework, whereas 67% (6 samples) were classified as coarse unconsolidated substrates. This is similar to samples collected from the Common Export Cable Corridor, (see section 3.2.2 above) and indicates a lower percentage of coarse unconsolidated substrates than were present in samples collected from Offshore Export Cable Corridor 1. One sample composed of sandy gravel substrate (BG-AC-48/USW191) accounted for the entirety of common Atlantic slippersnail and eastern white slippersnail observations from Offshore Export Cable Corridor 2a.

### 3.2.6 Statistical Comparisons

Univariate comparison of Project component areas revealed some significant differences in average organism density. Log transformed average organism density was significantly greater in samples collected from Offshore Export Cable Corridor 1 than in samples collected from the Lease area or the Common Export Cable Corridor (Figure 8, one-way ANOVA,  $F=10.39$ ,  $P<0.0001$ , Tukey's HSD,  $P<0.05$ ).





**Figure 72. Average Taxa Richness of Benthic Samples by Project Component Areas**

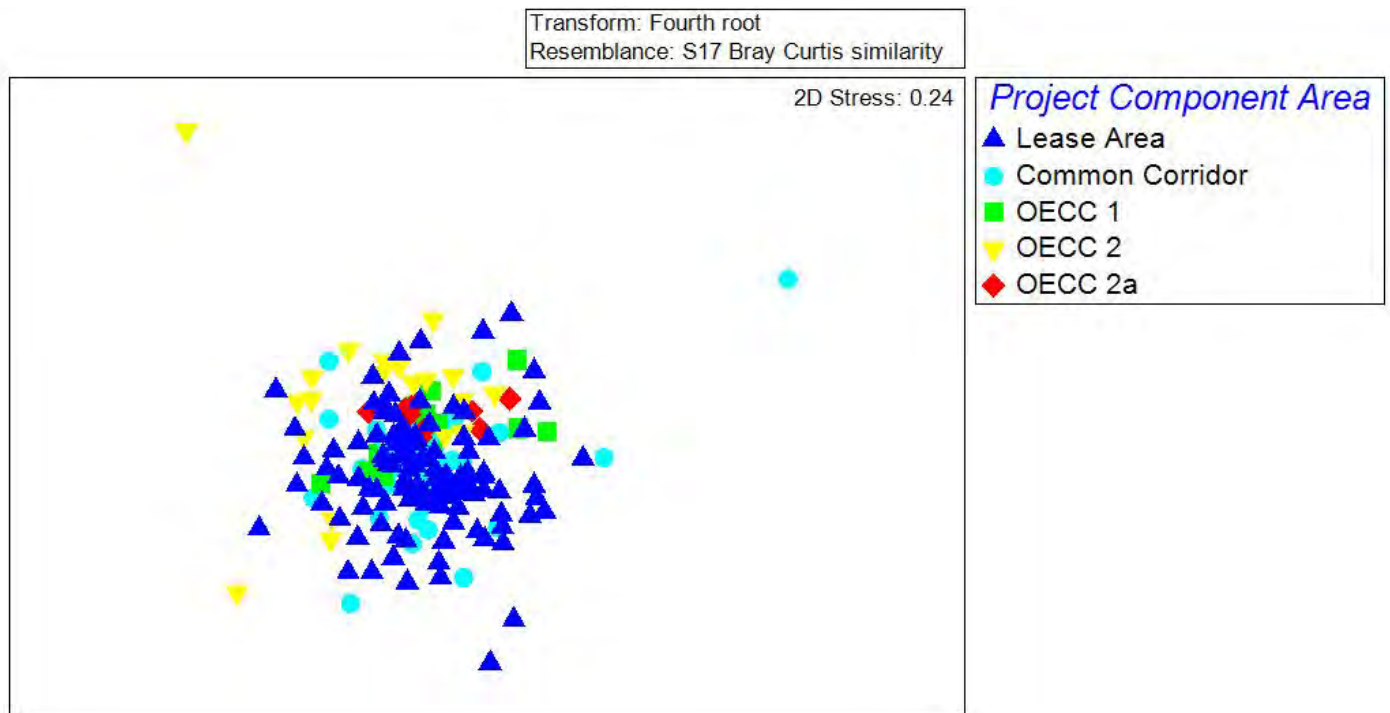
Taxa richness did not differ significantly between any of the Project component areas (One-way ANOVA,  $F=2.85$ ,  $p < 0.02$ , Tukey's HSD, all  $p > 0.05$ ). Lease area  $N= 120$ , Common Corridor  $N= 36$ , Offshore Export Cable Corridor 1  $N= 12$ , Offshore Export Cable Corridor 2= 21, Offshore Export Cable Corridor 2a= 9. Offshore Export Cable Corridors are labeled as "OECC" for brevity.

However, average taxa richness per sample did not differ significantly between samples collected from any of the five Project component areas (Figure 9, one-way ANOVA,  $F=2.85$ ,  $p<0.008$ , Tukey's HSD,  $P<0.05$ ).

Though univariate analyses indicated some differences between Offshore Export Cable Corridor 1 and certain other Project component areas, these patterns did not extend to overall community composition. ANOSIM indicated that significant differences in community composition did exist between certain Project component areas ( $p=0.017$ ), though the R value for this analysis was near zero (global R = 0.091), indicating low levels of separation between communities. Pairwise comparisons determined that the only significant differences in community composition existed between Offshore Export Cable Corridor 2 and Common Export Cable Corridor sites ( $p=0.001$ ,  $R=0.216$ ) and between Offshore Export Cable Corridor 2 and Lease Area sites ( $p=0.001$ ,  $R=0.301$ ). These findings are illustrated by the NMDS ordination, which demonstrates a general lack of consistent clustering of sample points by Project component areas in ordination space (Figure 10).

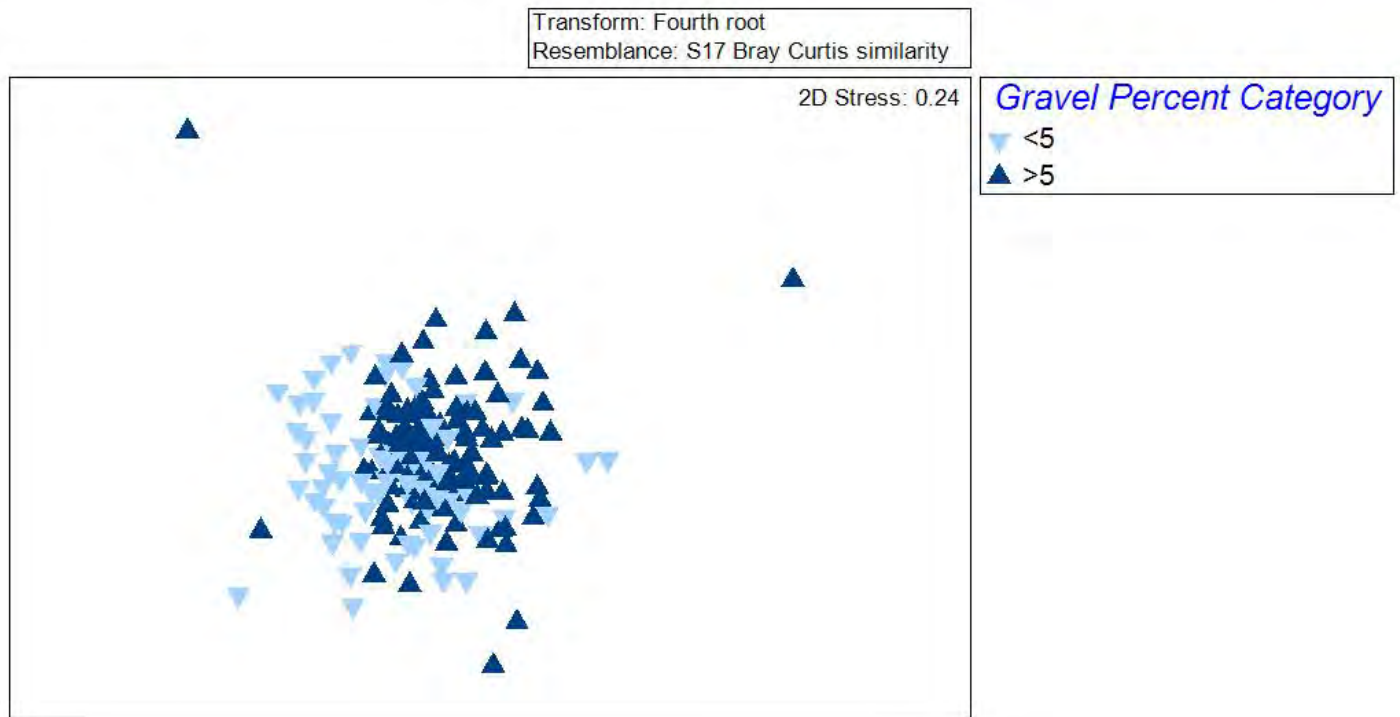
SIMPER analysis identified naidid oligochaete worms without hair chaetae, tellin clams, the polygordiid polychaete *Polygordius* sp., and enchytraeid oligochaete worms as the taxa most responsible for differences between Offshore Export Cable Corridor 2 sites and both Common Export Cable Corridor and Lease area sites (the contribution of each taxon to total dissimilarity between the benthic communities was at least 3.8%). Oligochaete worms (naidid worms without hair chaetae, and enchytraeid worms) and polygordiid polychaetes were generally present at lower densities, and tellin clams were generally present at higher densities, in Offshore Export Cable Corridor 2 samples than in Common Export Cable Corridor or Lease area samples.

Additionally, as illustrated by NMDS ordination (Figure 11) and confirmed by ANOSIM (global  $R = 0.154$ ,  $P=0.001$ ) differences in community composition between samples composed of greater than 5% gravel and less than 5% gravel were significant, but potentially not biologically relevant ( $P$  value  $>0.05$ , but  $R$  value near zero).



**Figure 10. NMDS Ordination of Benthic Community Composition by Project Component Area**





**Figure 136. NMDS Ordination of Benthic Community Composition by Gravel Percentage**

#### **4.0 SUMMARY AND CONCLUSIONS**

##### **Approach**

A benthic field survey was completed in July and August 2021 to collect site-specific benthic community and habitat data within the US Wind Lease area and Offshore Export Cable Corridors.

Benthic imagery transects were collected using an ROV or UTV at a total of 110 locations, of which environmental conditions severely limited the utility of 12 transects. Therefore, the benthic imagery transect results presented here are based on data from 98 transects. Additionally, 198 locations were sampled using collection of benthic grabs and video of the seafloor.

These data were used to characterize the benthic macrofaunal community and generate taxonomic classifications of benthic habitats in sampled portions of the US Wind Lease area, the Common Export Cable Corridor, and Offshore Export Cable Corridors 1, 2, and 2a under the NMFS-modified CMECS taxonomic classification system.

##### **Overall Conditions**

The benthic imagery transect results indicated seafloor habitats mostly dominated by sand substrates, although patches of secondary substrate types, such as granules/pebbles or shell hash, were also sometimes observed on these transects. A smaller number of benthic imagery transects were dominated by gravelly sand; these transects were often punctuated by patches of bare sand. Only one transect was dominated by a gravel mix substrate. Other notable but uncommon and highly localized benthic habitat

features included structure-forming polychaetes and larger gravel clasts, such as cobbles and boulders. No submerged aquatic vegetation (SAV) or other biogenic substrates were observed.

Based on the benthic imagery collected, sand substrates often hosted sand dollars (*Echinarachnius parma*) at the sediment water interface while hermit crabs (*Pagurus* spp.) and sea robins (*Prionotus carolinus*) were observed on a variety of fine and coarse unconsolidated substrate types. Larger gravel clasts (cobble and boulder) sometimes harbored stony corals (*Astrangia poculata*), sea whips (*Leptogorgia virgulata*), and other sessile epifauna. These localized cobble and boulder features were also observed to attract motile megafauna, such as black sea bass (*Centropristis striata*) and American lobster (*Homarus americanus*).

Benthic grab samples were primarily classified as gravelly or sand substrates. However, gravel mixes were observed at higher frequency in these samples than in the benthic imagery transects. Gravel was the least frequently observed substrate group in the benthic grab samples. Finer substrates (muddy sands, sandy muds, and muds) were not observed in any of the benthic imagery transects or grab samples. Therefore, these types of soft bottom habitats are anticipated to be very rare in the Survey Area.

A total of 131 marine invertebrate taxa, including polychaete worms, crustaceans, mollusks, oligochaete worms, nemertean ribbon worms, sand dollars, ascidians, lancelets, sea anemones, flatworms, and sipunculids were found in the 198 macrofaunal grab samples collected during the 2021 benthic survey program. Taxa identified in grab samples collected from both areas were typical of soft-sediment coastal shelf habitats of the mid-Atlantic U.S. coast. Widespread or abundant organisms included polychaete worms (e.g., *Polygordius* sp., Cirratulidae, *Scoletoma* sp., Syllidae), oligochaete worms, amphipods (e.g., *Unciola* sp., *Byblis serrata*), common Atlantic slippershells, and nemertean ribbon worms.

No biologically significant dissimilarity in the macrofaunal community was found between grab samples collected in coarse unconsolidated substrates (i.e., containing more than 5% gravel by weight) and fine unconsolidated substrates.

### **Comparisons between Project Component Areas**

The percentage of benthic grab samples classified as coarse unconsolidated substrate (i.e., gravel, gravel mixes, or gravelly substrates) was nominally greater in Offshore Export Cable Corridor 1 (75%) than in the Lease area, Common Export Cable Corridor, Offshore Export Cable Corridor 2, and Offshore Export Cable Corridor 2a (61%, 67%, 62%, and 67%, respectively). These habitat differences are potentially reflected to some degree in the infaunal data, with certain species indicative of coarse substrates (e.g. common Atlantic slippersnail and eastern white slippersnail) found in greater abundance in Offshore Export Cable Corridor 1 samples than in Lease area, Common Export Cable Corridor, and Offshore Export Cable Corridor 2 samples. Average organism density (log transformed) was also significantly greater in Offshore Export Cable Corridor 1 samples than in samples collected from the Lease area or Common Export Cable Corridor.

However, multivariate analyses (NMDS ordination and ANOSIM) indicated that benthic community composition only differed significantly between Offshore Export Cable Corridor 2 and Common Export Cable Corridor sites, and between Offshore Export Cable Corridor 2 and Lease Area sites. The taxa most responsible for differences between these communities were identified as oligochaete worms (naidid worms without hair chaetae, and enchytraeid worms) and polygordiid polychaetes, which were generally more abundant in Common Export Cable Corridor and Lease area sites than Offshore Export Cable Corridor 2 sites, and tellin clams, which were generally more abundant in Offshore Export Cable Corridor 2 sites.



In sum, despite the higher percentage of samples classified as coarse unconsolidated substrate in Offshore Export Cable Corridor 1, the benthic macrofaunal community appeared to be largely similar across most of the Project component areas in the Survey Area and there were few discernable geographic trends in multivariate community composition at a larger scale.

## **5.0 REFERENCES**

- Abbott, R.T. and P.A. Morris. 1995. Shells of the Atlantic and Gulf Coasts and the West Indies. Boston, MA: Houghton Mifflin Company.
- Alpine Ocean Seismic Survey (Alpine). 2015. Marine G&G Survey Report. Prepared for U.S. Wind.
- Bartholomew, A. 2001. Polychaete Key for Chesapeake Bay and Coastal Virginia.
- Bousfield, E.L. 1973. Shallow-water Gammaridean Amphipoda of New England. Ithaca, NY: Cornell University Press.
- Bray, J. R., and J. T. Curtis. 1957. An ordination of the upland forest communities of southern Wisconsin. *Ecological monographs*, 27(4), 325-349.
- Byers, J. E. and J.H. Grabowski. 2014. Soft-sediment communities. In: Marine Community Ecology. Eds.: M. D. Bertness, J. F. Bruno, B. R. Silliman & J. J. Stachowicz. Sinauer, p.227-249.
- CB&I. 2014. Maryland Energy Administration High Resolution Geophysical Resource Survey (Project Number DEXR240005). Coastal Planning & Engineering, Inc. (Boca Raton, FL).
- Clarke, K. R. and R. N. Gorley. 2006. PRIMER v6: User Manual/Tutorial. Plymouth, United Kingdom: PRIMER-E, Ltd.
- Cuffney, T. F., M.D. Bilger, and A. M. Haigler. 2007. Ambiguous taxa: effects on the characterization and interpretation of invertebrate assemblages. *Journal of the North American Benthological Society* 26, no. 2: 286-307.
- Dean, H. K. 2008. The use of polychaetes (Annelida) as indicator species of marine pollution: a review. *International Journal of Tropical Biology*, 56(Supplement 4): 11-38.
- Gosner, K.L. 1971. Guide to Identification of Marine and Estuarine Invertebrates: Cape Hatteras to the Bay of Fundy. New York: John Wiley and Sons, Inc.
- Gosner, K.L. 1978. The Peterson Field Guide Series. A Field Guide to the Atlantic Seashore from the Bay of Fundy to Cape Hatteras. Boston, MA: Houghton Mifflin Company.
- Guida, V., A. Drohan, H. Welch, J. McHenry, D. Johnson, V. Kentner, J. Brink, D. Timmons, J. Pessutti, S. Fromm, and E. Estela-Gomez. 2017. Habitat Mapping and Assessment of Northeast Wind Energy Areas. In OCS Study BOEM 2017-088. Sterling, VA: US Department of the Interior, Bureau of Ocean Energy Management.
- International Commission for the Scientific Exploration of the Mediterranean Sea (CIESM). 2003. *Crepidula fornicata* (Linnaeus, 1758). CIESM: Atlas of Exotic Species in the Mediterranean Sea. <https://www.ciesm.org/atlas/CrepidulForni.html>

- Kruskal, J. B. 1964. Multidimensional scaling by optimizing goodness of fit to a nonmetric hypothesis. *Psychometrika*, 29(1), 1-27.
- Magurran, A.E. 2003. *Measuring Biological Diversity*. Malden, MA: Blackwell Publishing Ltd.
- Martinez, A.J. 1999. *Marine Life of the North Atlantic, Canada to New England*. Rockport, ME: Down East Books.
- Meredith, C.S., A.S Trebitz, and J.C. Hoffman. 2019. Resolving taxonomic ambiguities: effects on rarity, projected richness, and indices in macroinvertebrate datasets. *Ecological indicators*, 98: 137-148.
- Mikkelsen, P. M., & Bieler, R. (2021). *Seashells of southern Florida: living marine mollusks of the Florida Keys and adjacent regions: bivalves*. Princeton University Press.
- Pettibone, M.H. 1963. Marine Polychaete Worms of the New England Region, Part 1, Families Aphroditidae through Trochochaetidae. *Bulletin of the U.S. National Museum*, 227: 1-356.
- Pollock, L.W. 1998. *A Practical Guide to the Marine Animals of Northeastern North America*. New Brunswick, NJ: Rutgers University Press.
- Ramey P.A. 2008. Life history and population dynamics of a dominant polychaete, *Polygordius jouinae*, in inner continental shelf sands of the Mid-Atlantic Bight, USA. *Marine Biology*, 154: 443–452.
- Ramey, P. A., Fiege, D., and B.S. Leander. 2006. A new species of *Polygordius* (Polychaeta: Polygordiidae): from the inner continental shelf and in bays and harbours of the north-eastern United States. *Journal of the Marine Biological Association of the United Kingdom*, 86(5), 1025-1034.
- Smith. R.I. 1964. *Keys to the Marine Invertebrates of the Woods Hole Region: a manual for the identification of the more common marine invertebrates*. Woods Hole, MA: Marine Biological Laboratory.
- [SERC] Smithsonian Environmental Research Center. 2022 *Crepidula fornicata*. National Estuarine and Marine Exotic Species Information System (NEMESIS). [https://invasions.si.edu/nemesis/species\\_summary/72623](https://invasions.si.edu/nemesis/species_summary/72623)
- Taylor, R.B. 1998. Density, biomass and productivity of animals on four subtidal rocky reef habitats: the importance of small mobile invertebrates. *Marine Ecology Progress Series*, 172(37): 37-51.
- Weiss, H.M. 1995. *Marine Animals of Southern New England and New York. Identification Keys to Common Nearshore and Shallow Water Macrofauna*. Bulletin 115 of the State Geological and Natural History Survey of Connecticut. Connecticut Department of Environmental Protection.



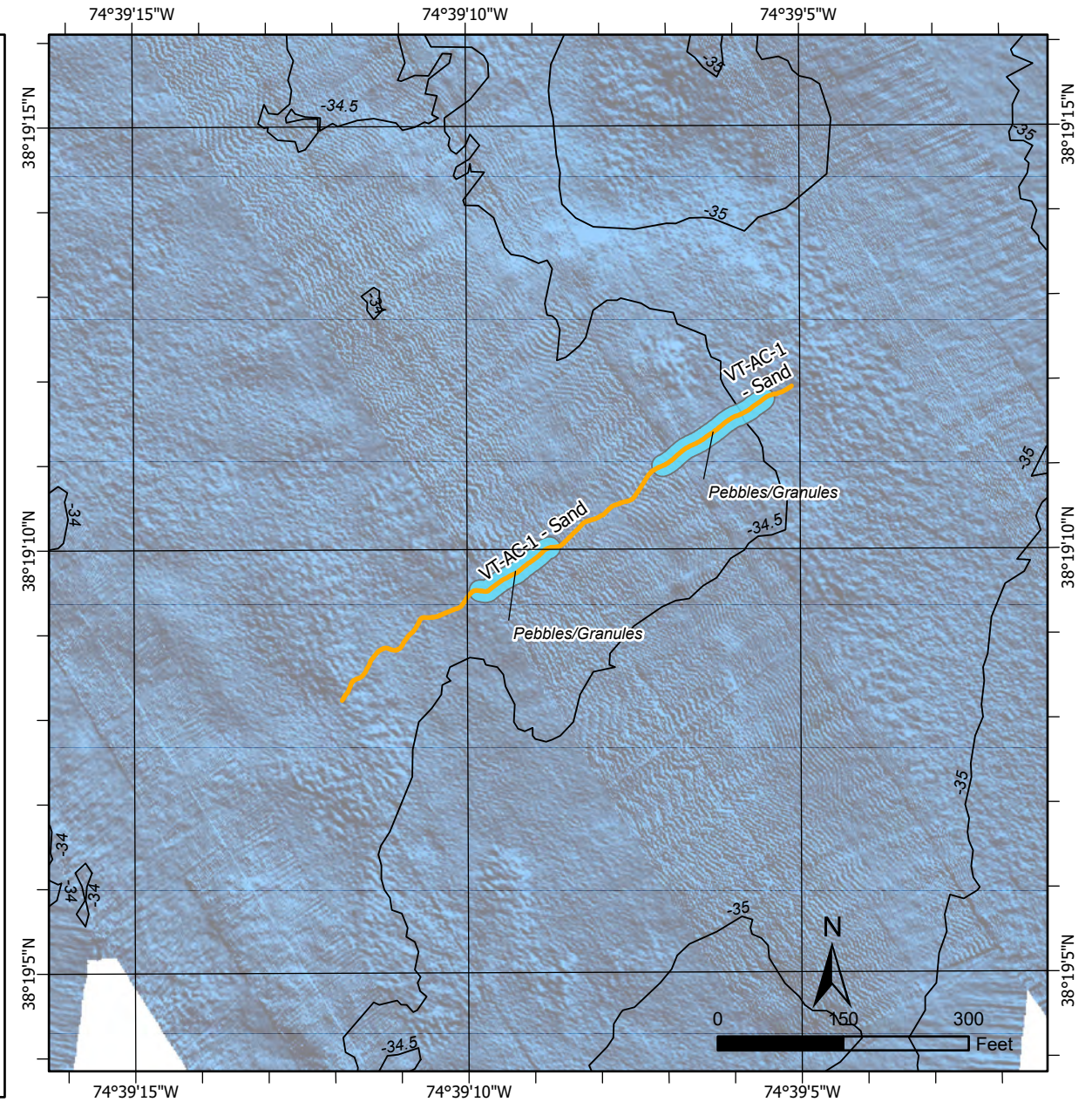
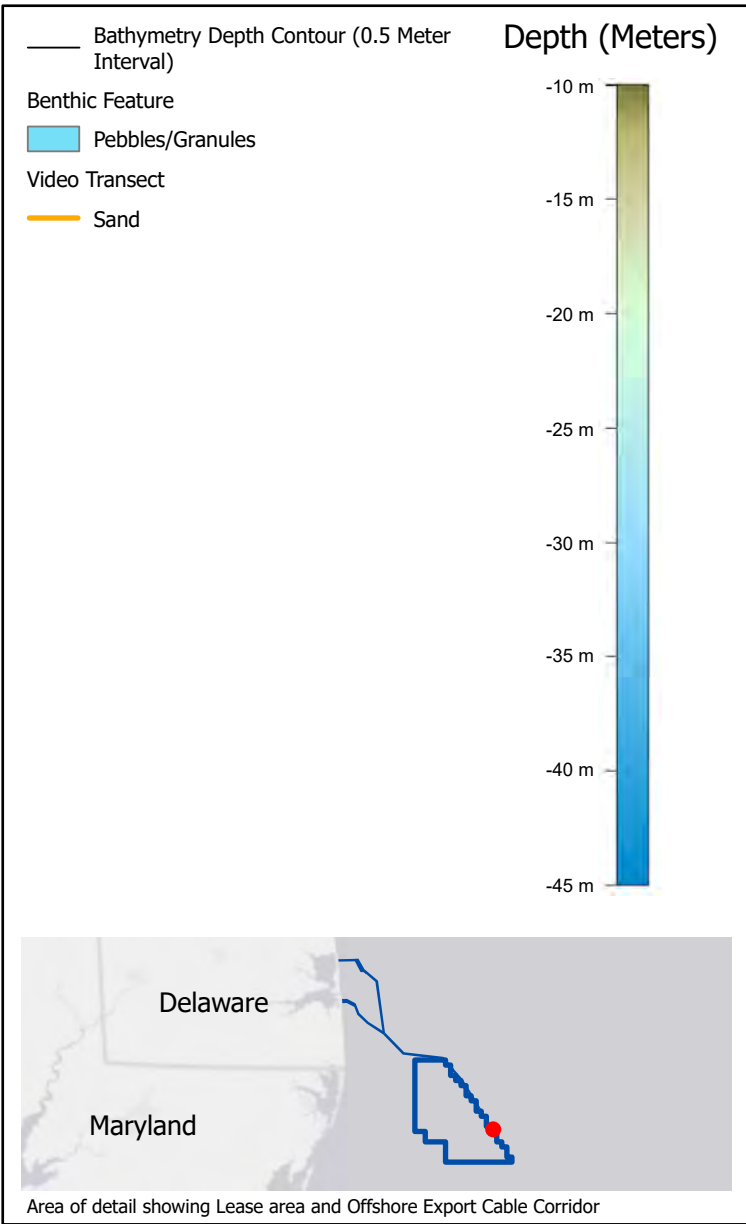
**Attachment A**

---

**Characterizations for Benthic Imagery Transects**



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



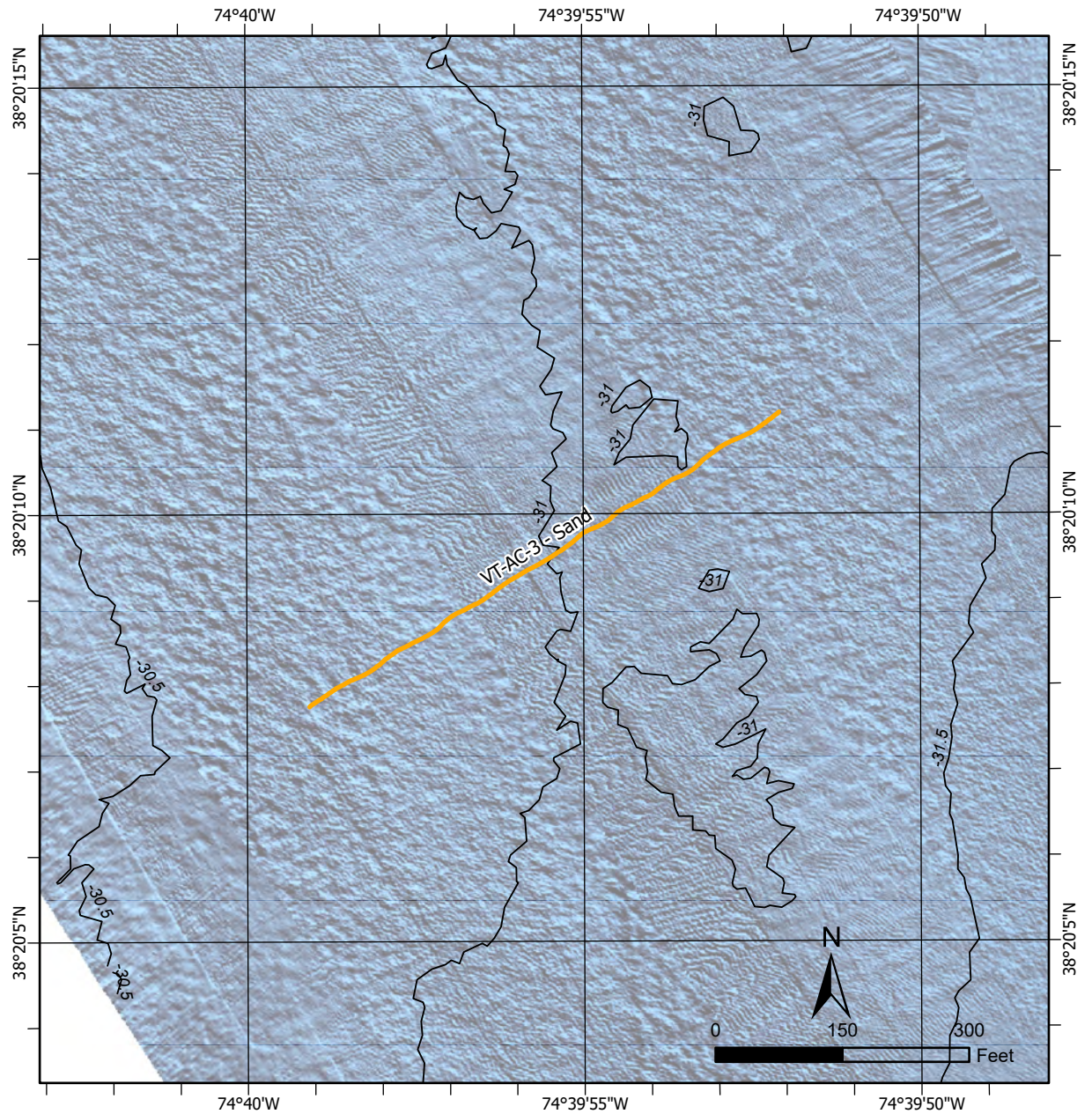
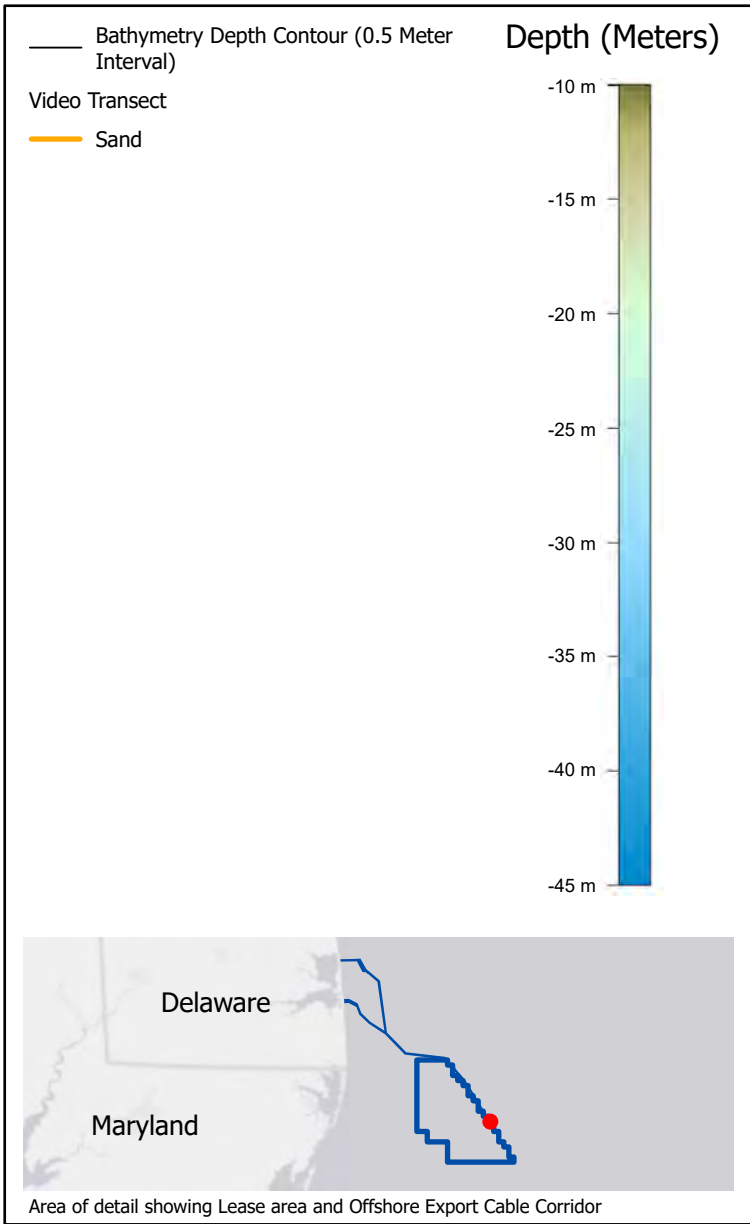
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-AC-1



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



### Maryland Offshore Wind Project

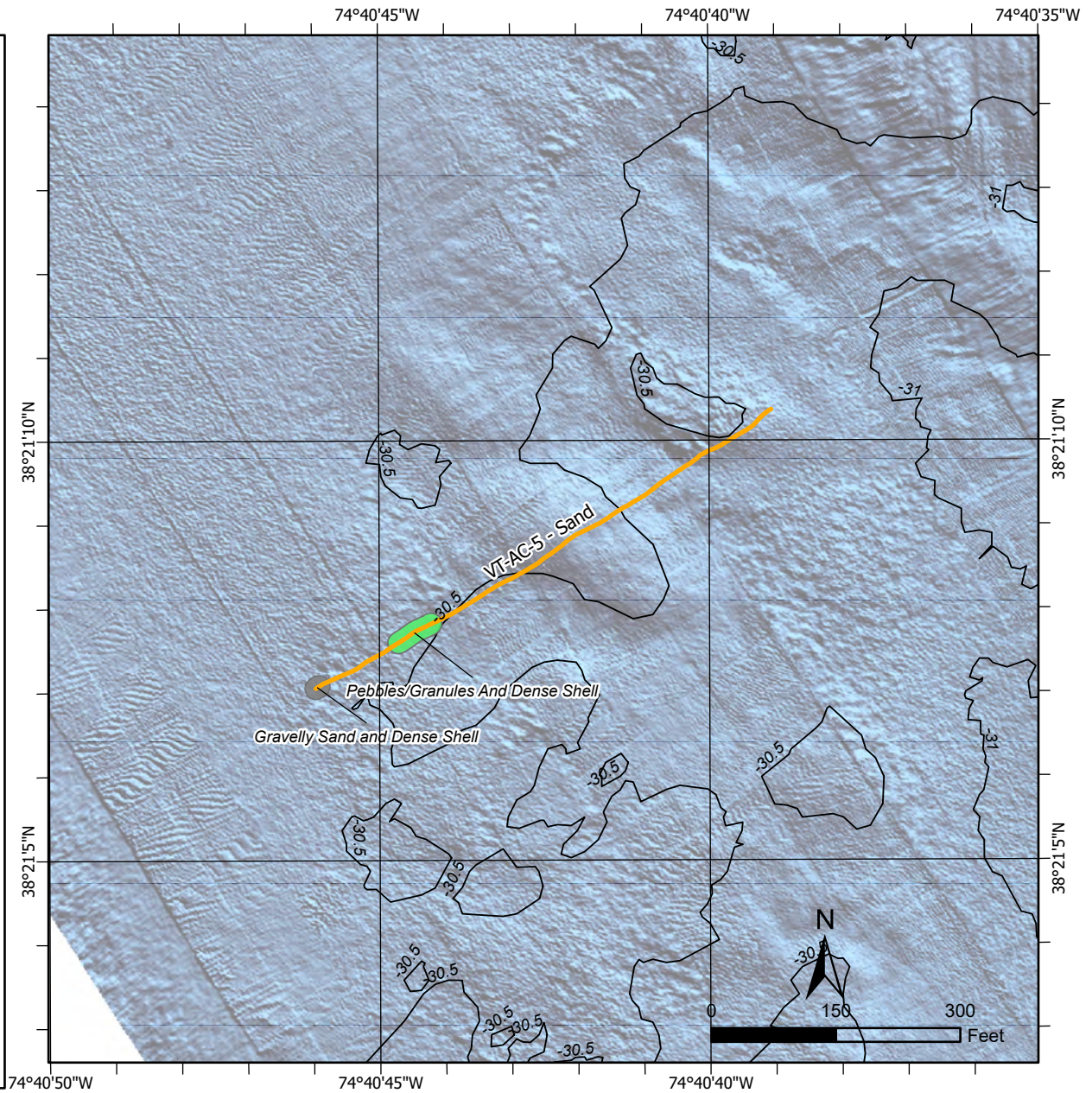
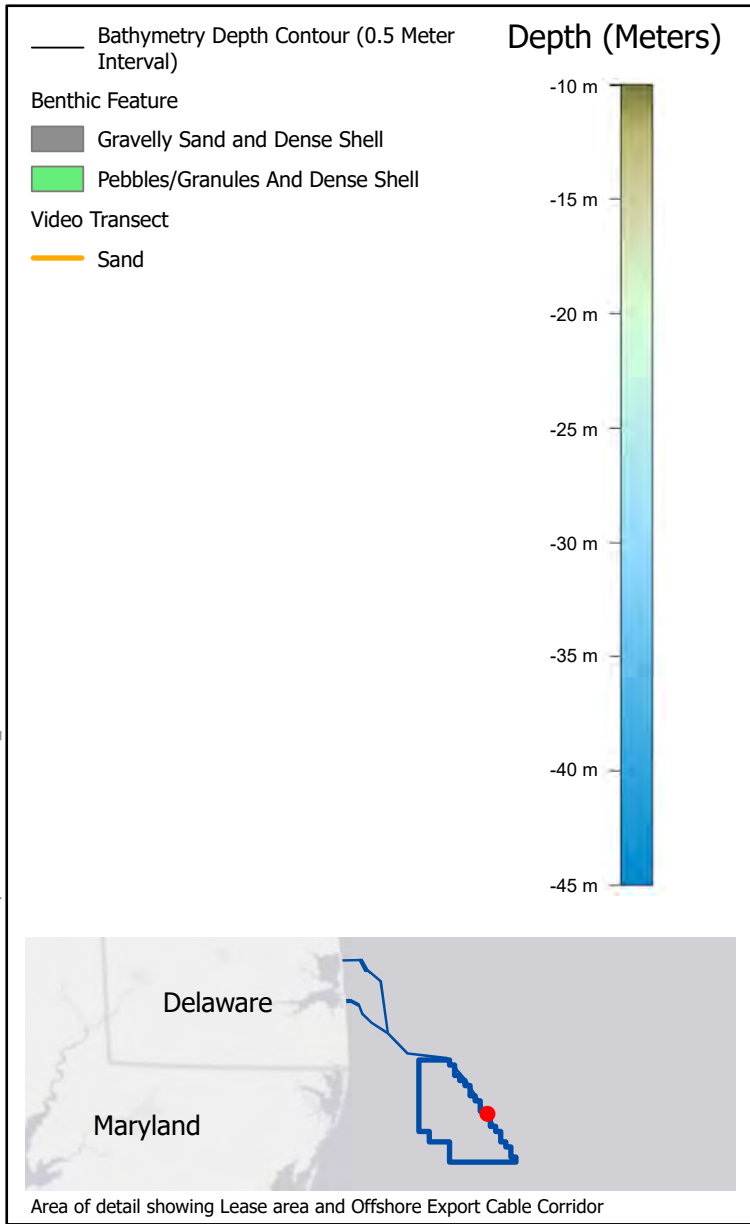
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-AC-3



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



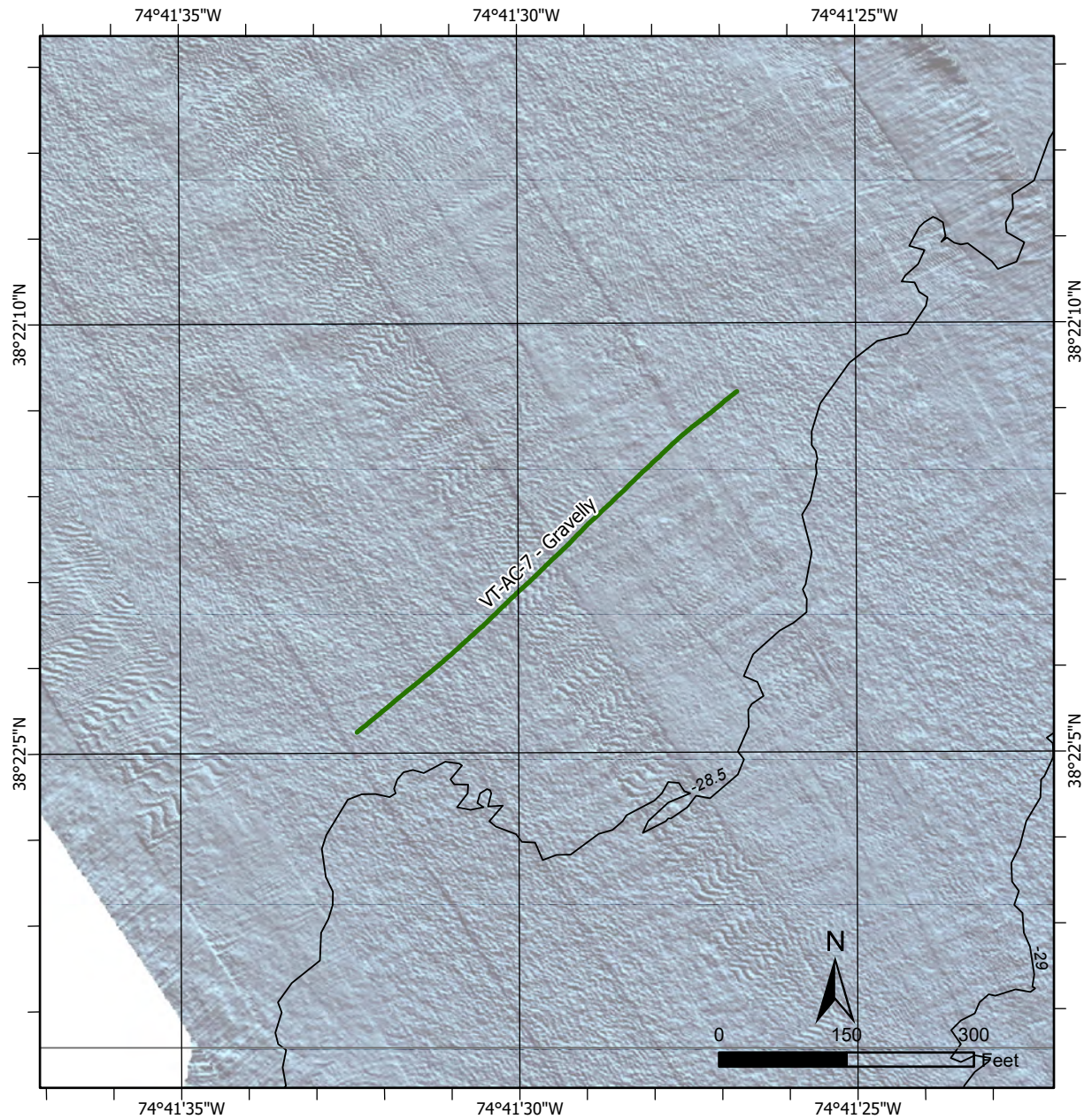
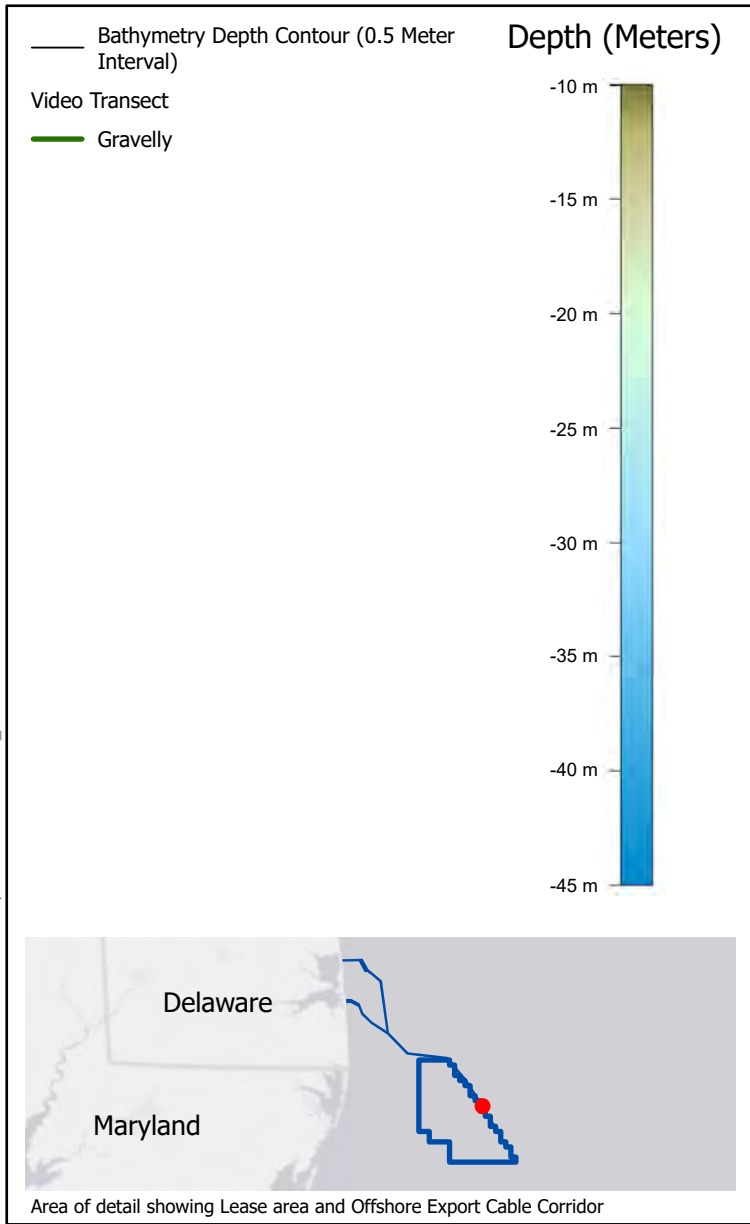
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-AC-5



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



### Maryland Offshore Wind Project

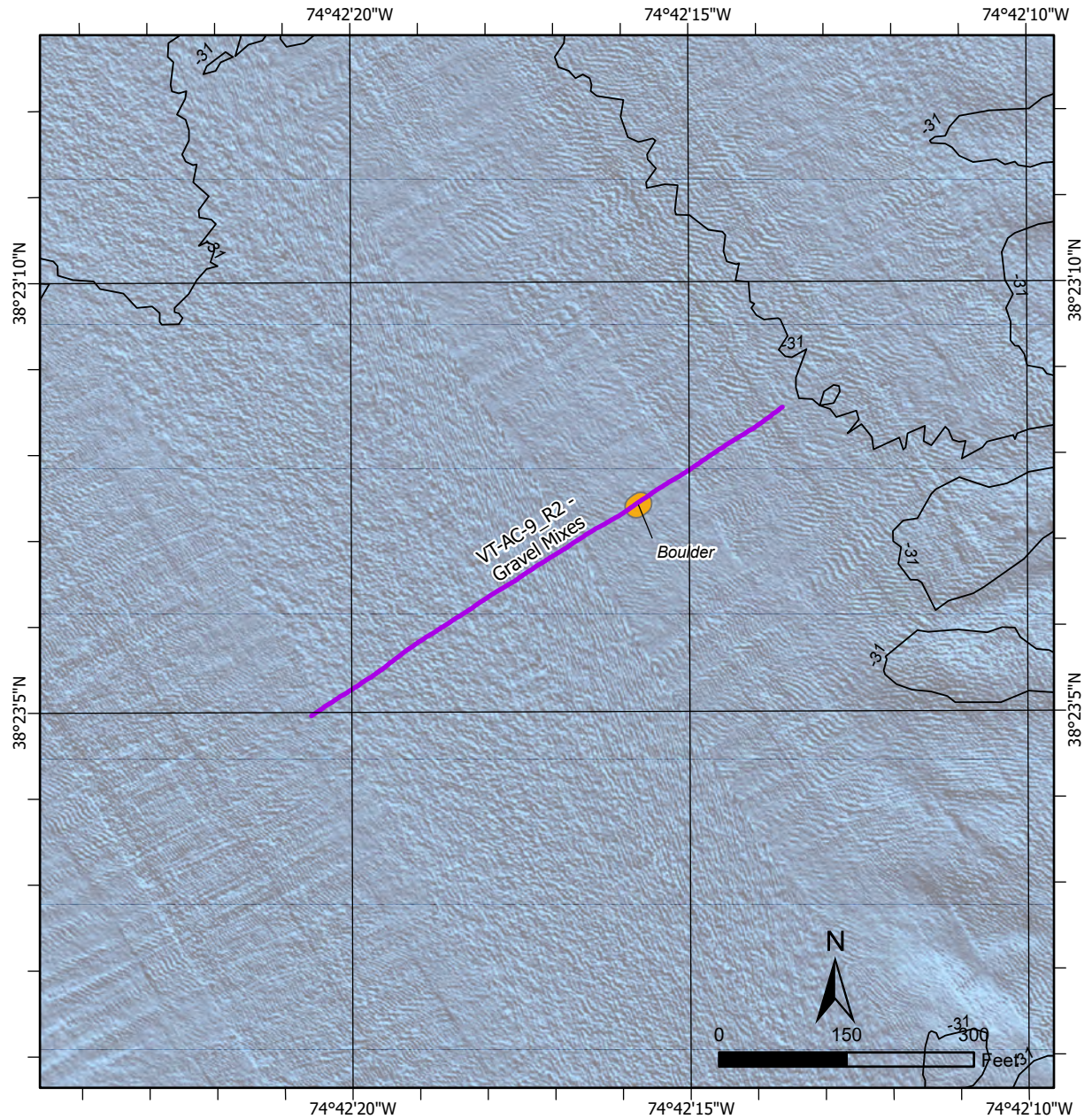
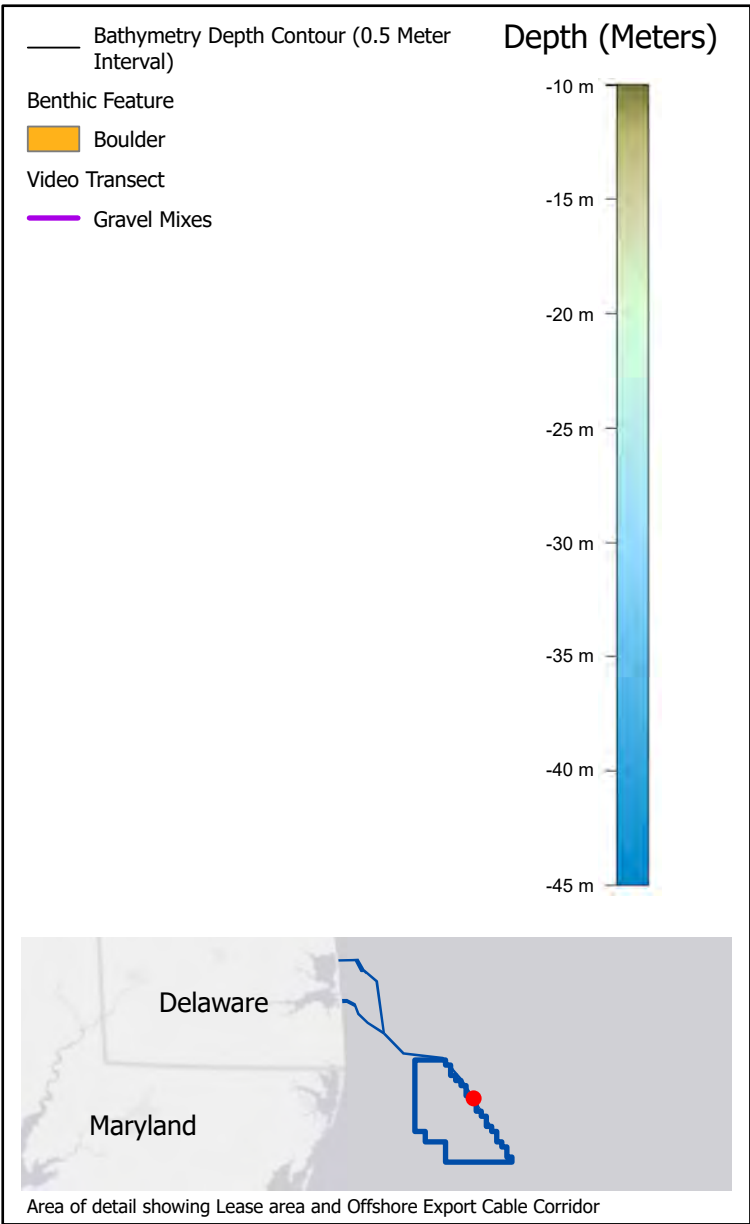
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-AC-7



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



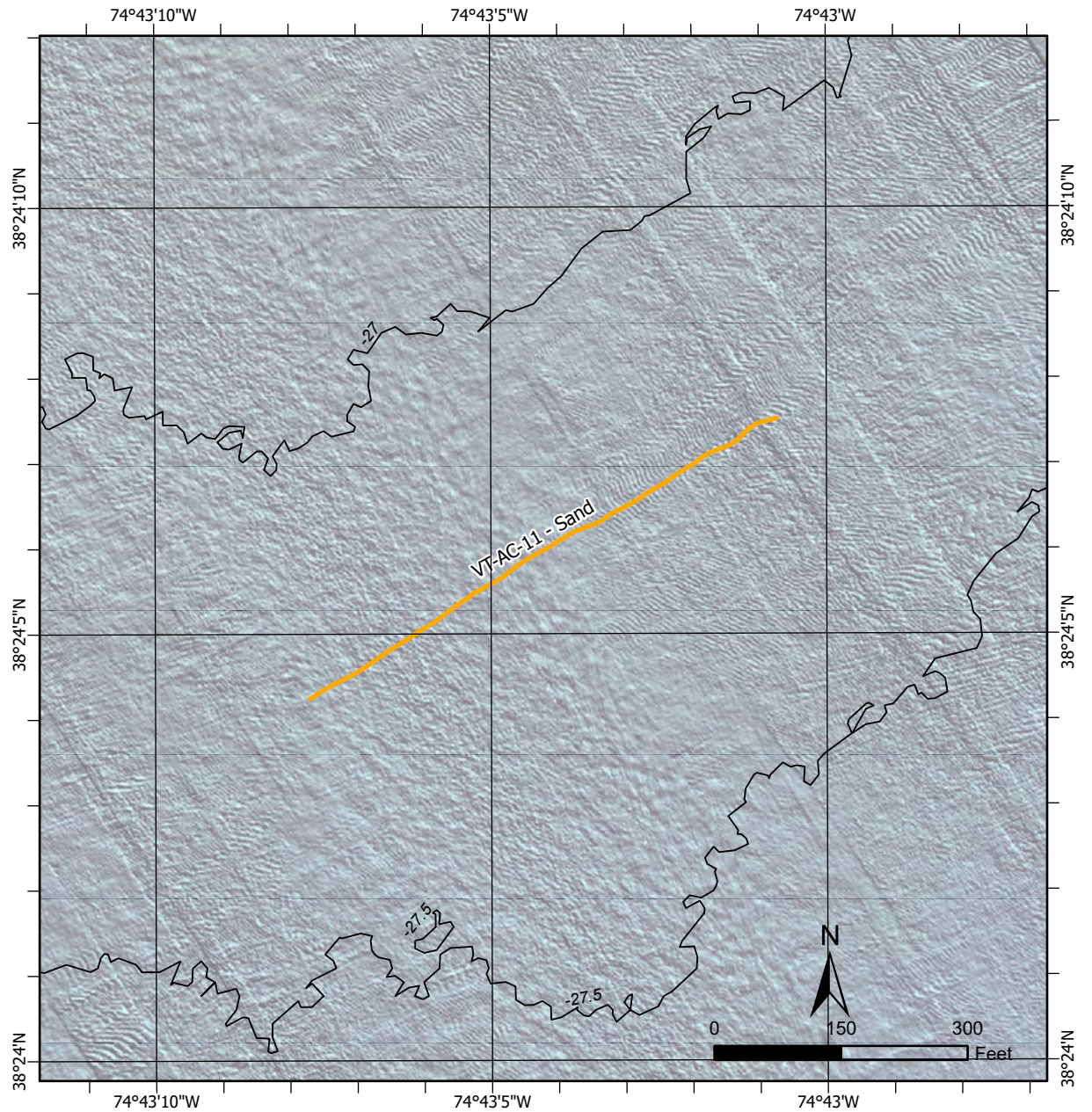
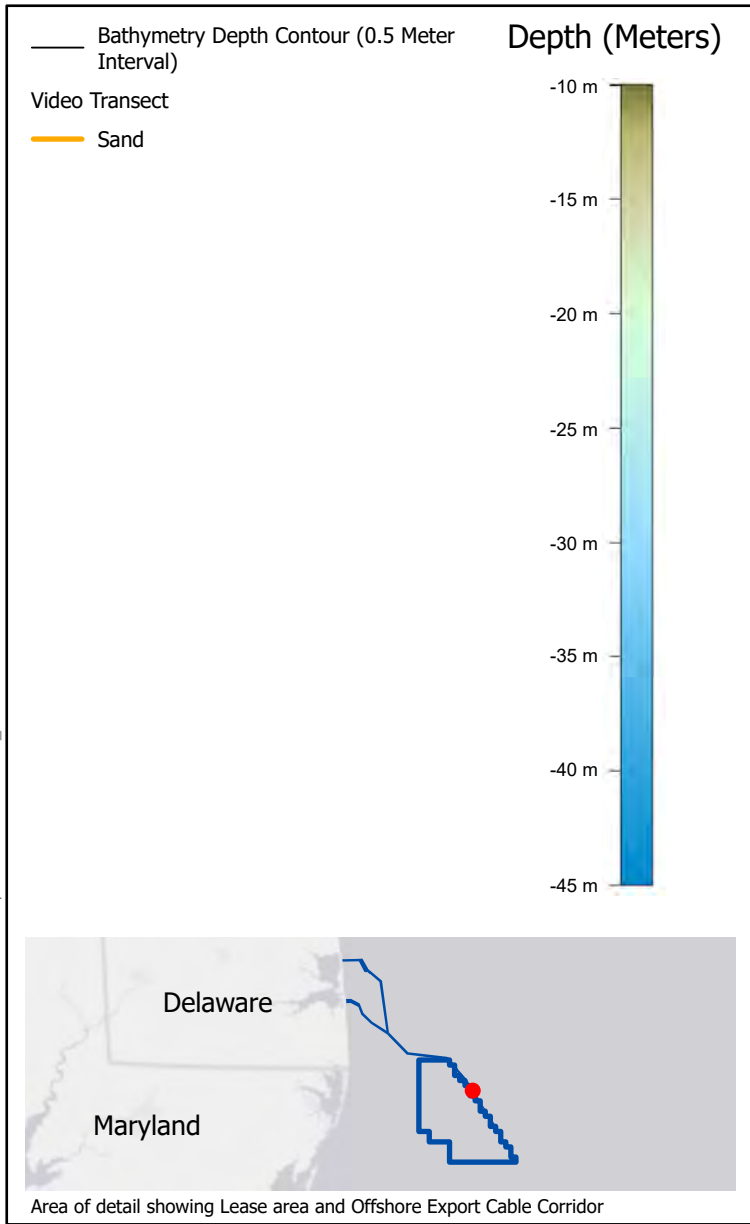
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
 1) GEMS, Bathymetry, 2022  
 2) TDI, Video Transect Position Data, 2021  
 3) ESS, Track Characterization, 2021

**Benthic Characterization for ROV Track**  
VT-AC-9\_R2



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



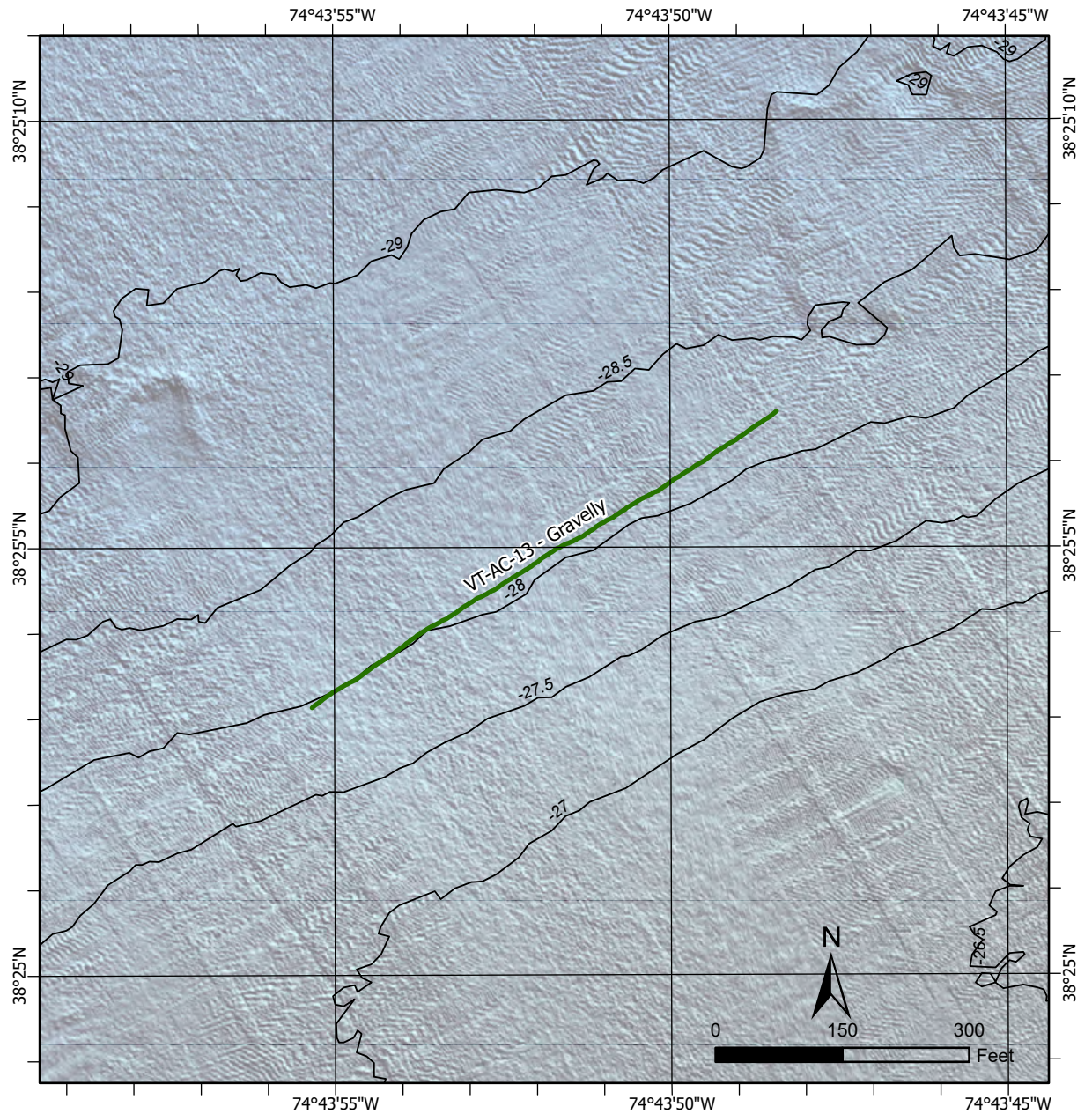
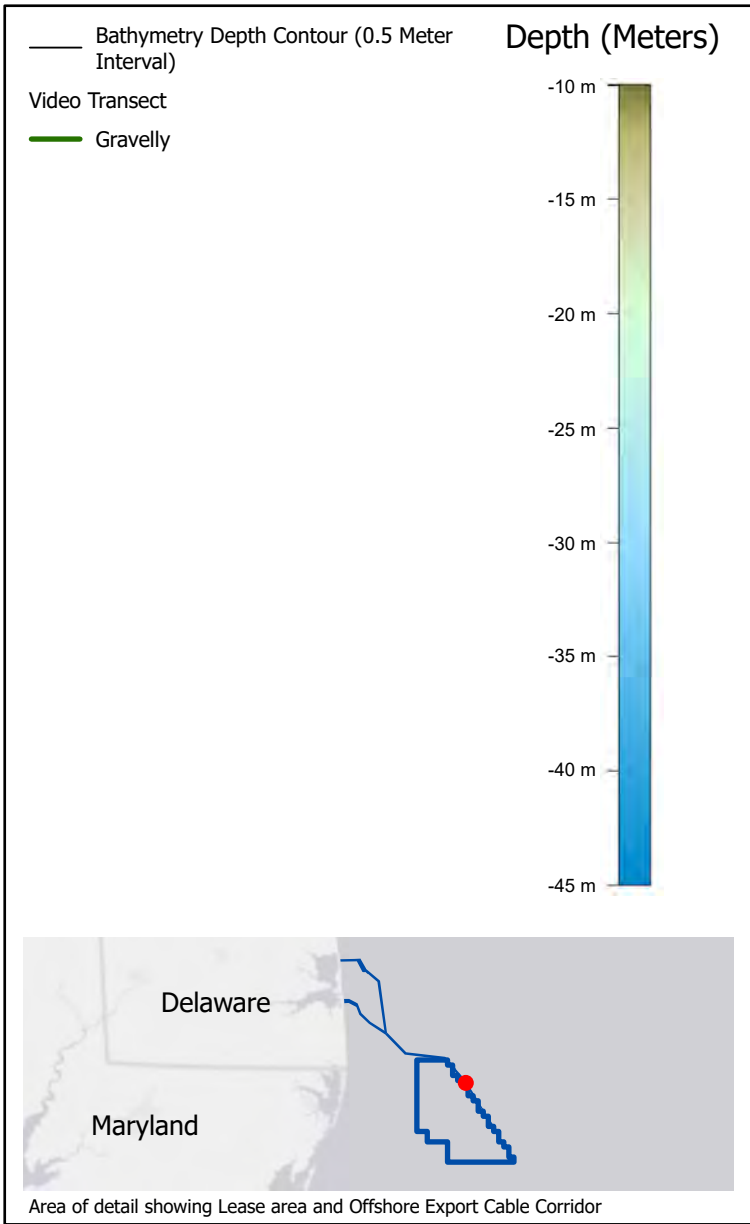
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Benthic Characterization for ROV Track  
VT-AC-11

- Source:
- 1) GEMS, Bathymetry, 2022
  - 2) TDI, Video Transect Position Data, 2021
  - 3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



## Maryland Offshore Wind Project

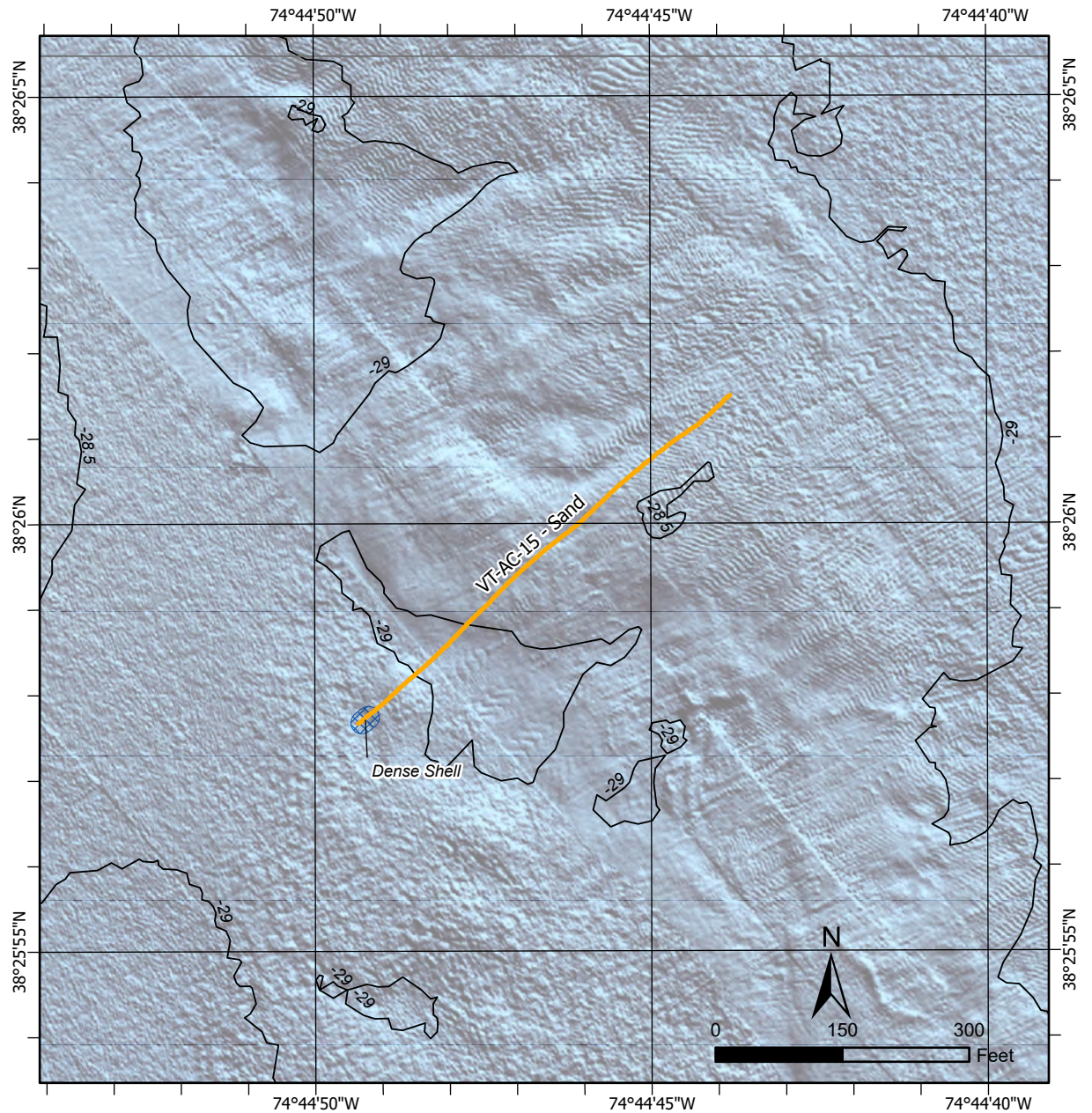
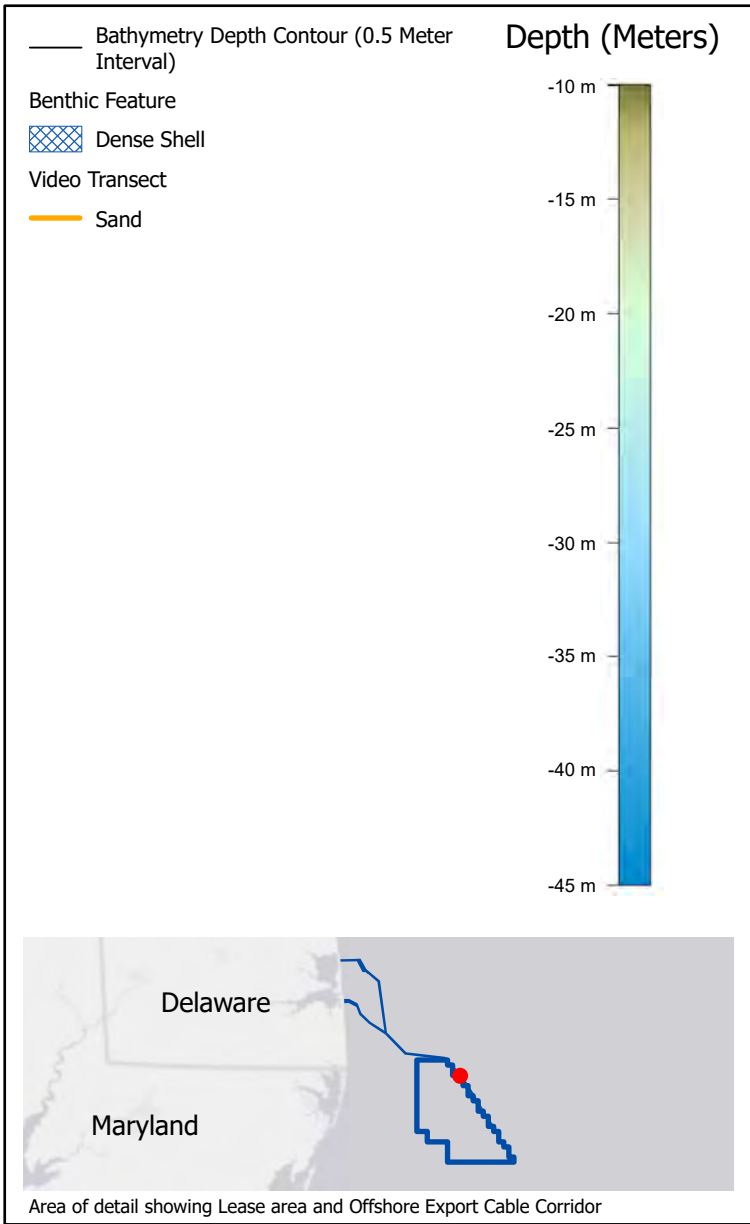
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-AC-13



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



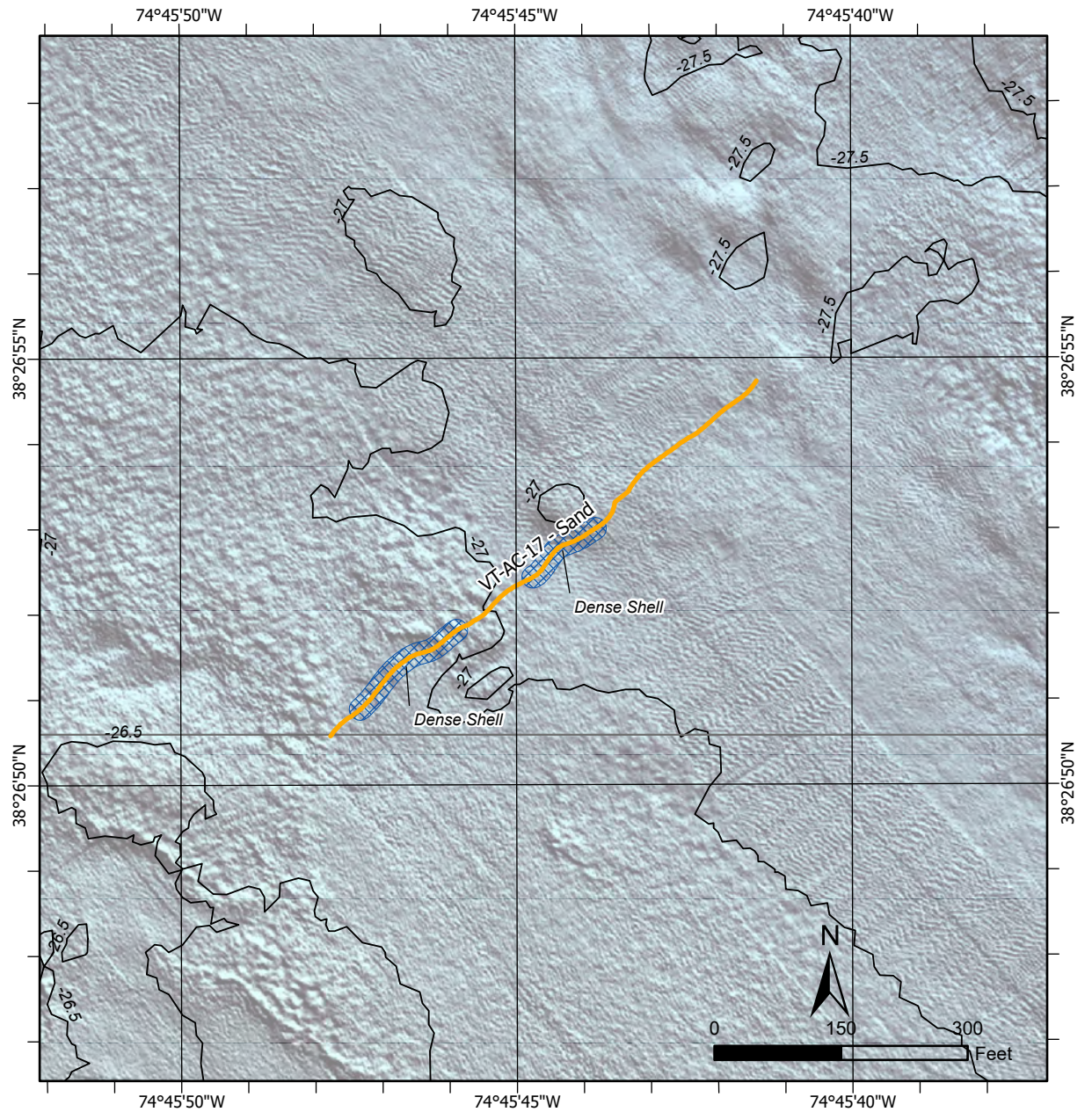
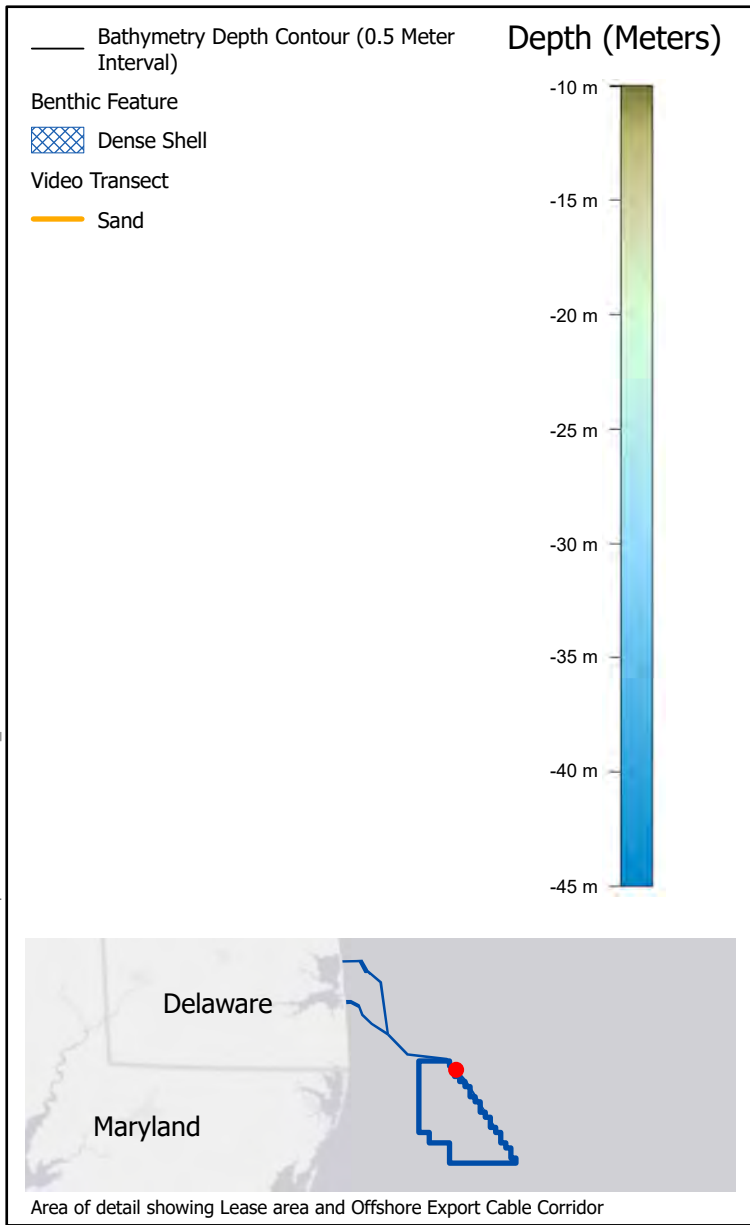
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-AC-15



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



### Maryland Offshore Wind Project

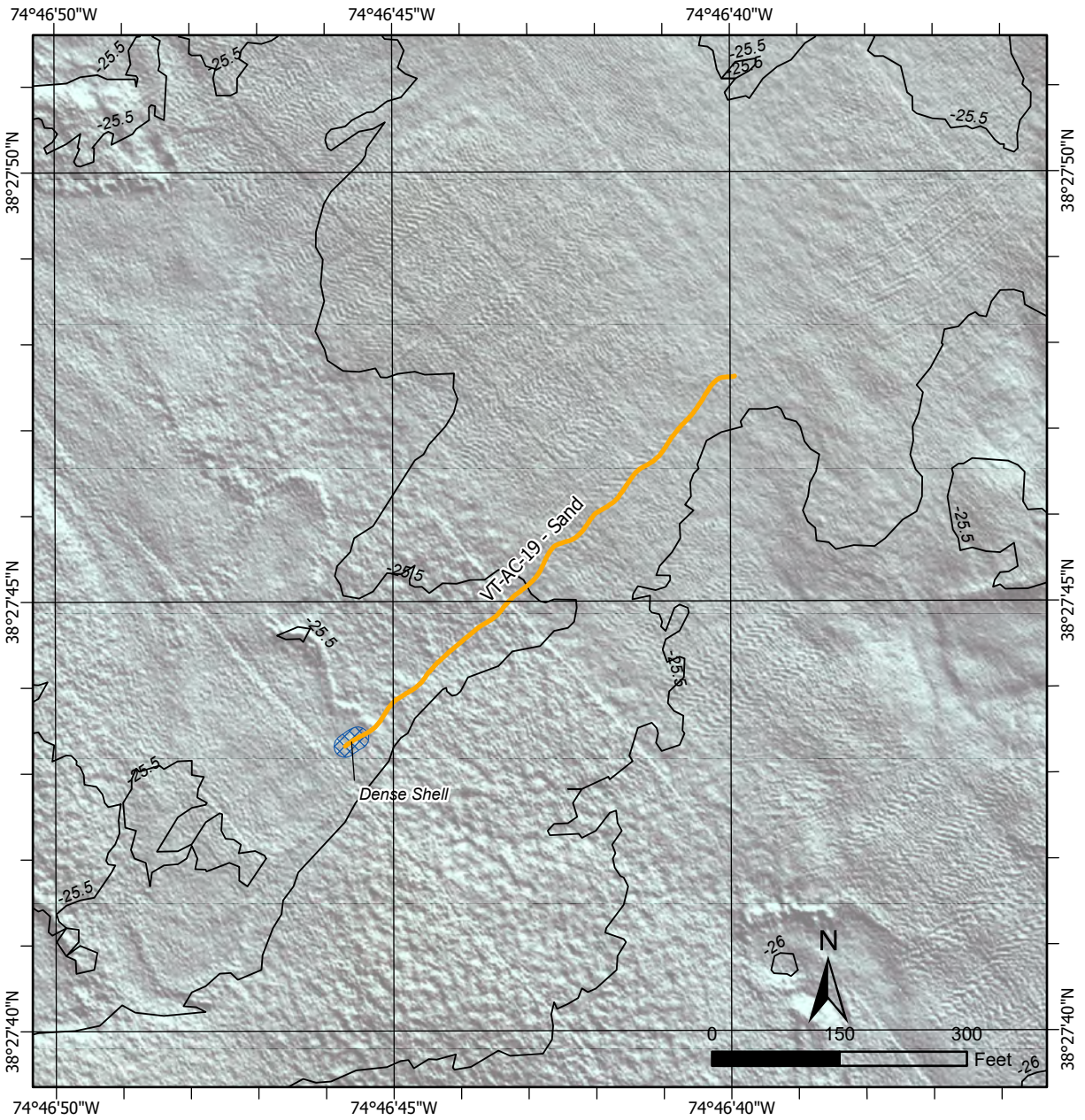
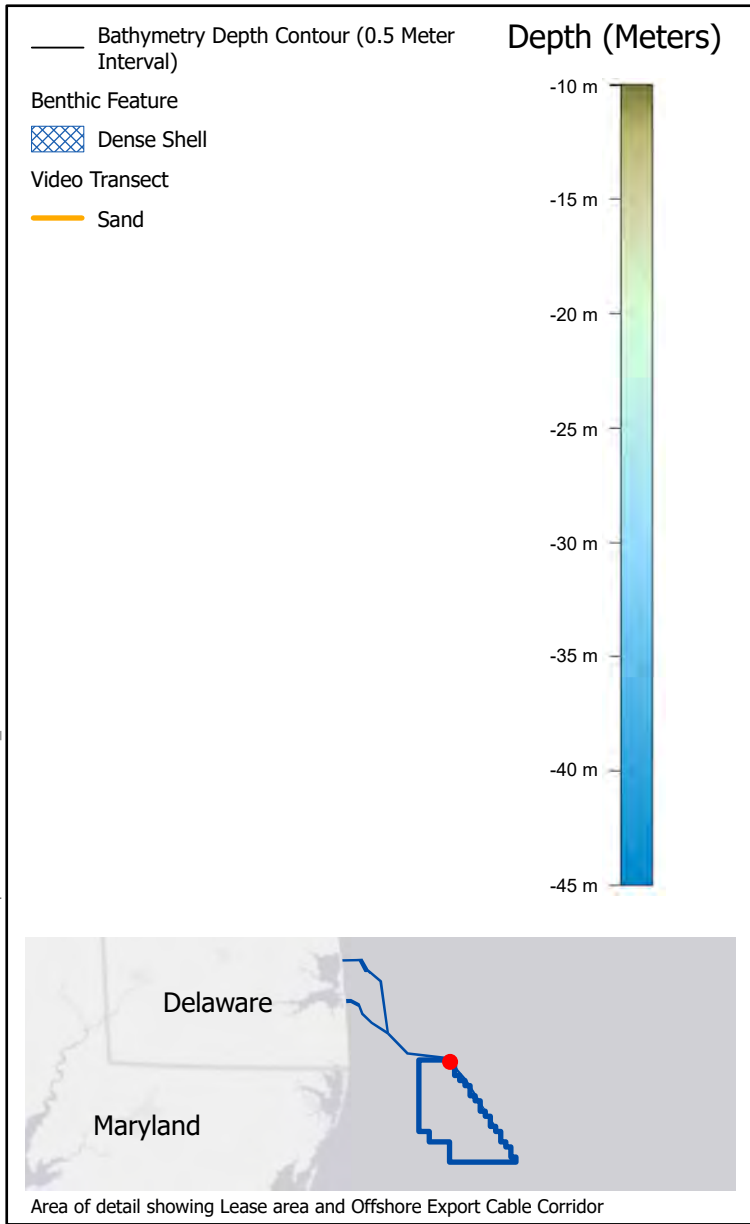
Offshore Maryland and Delaware

### Benthic Characterization for ROV Track VT-AC-17

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



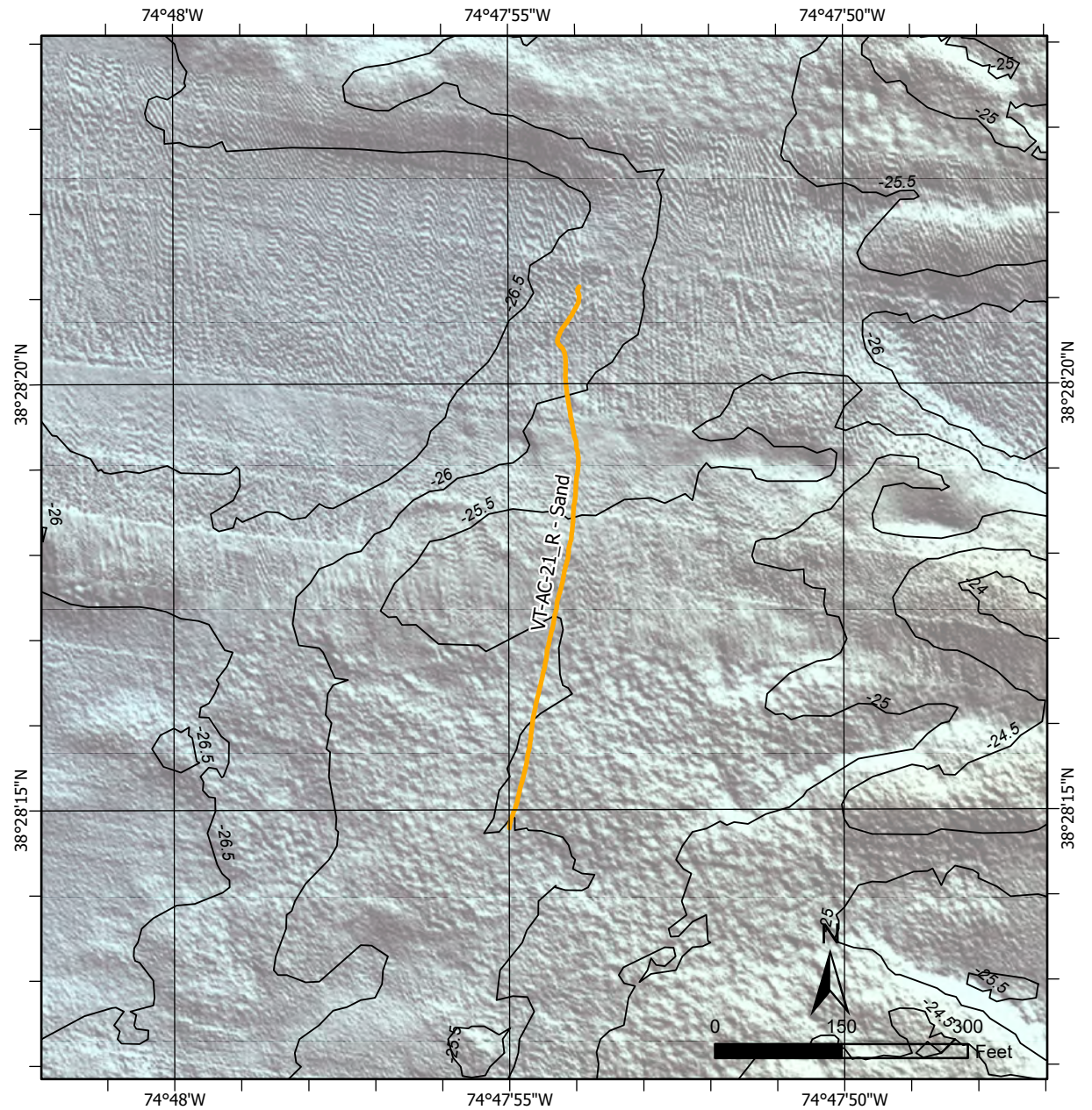
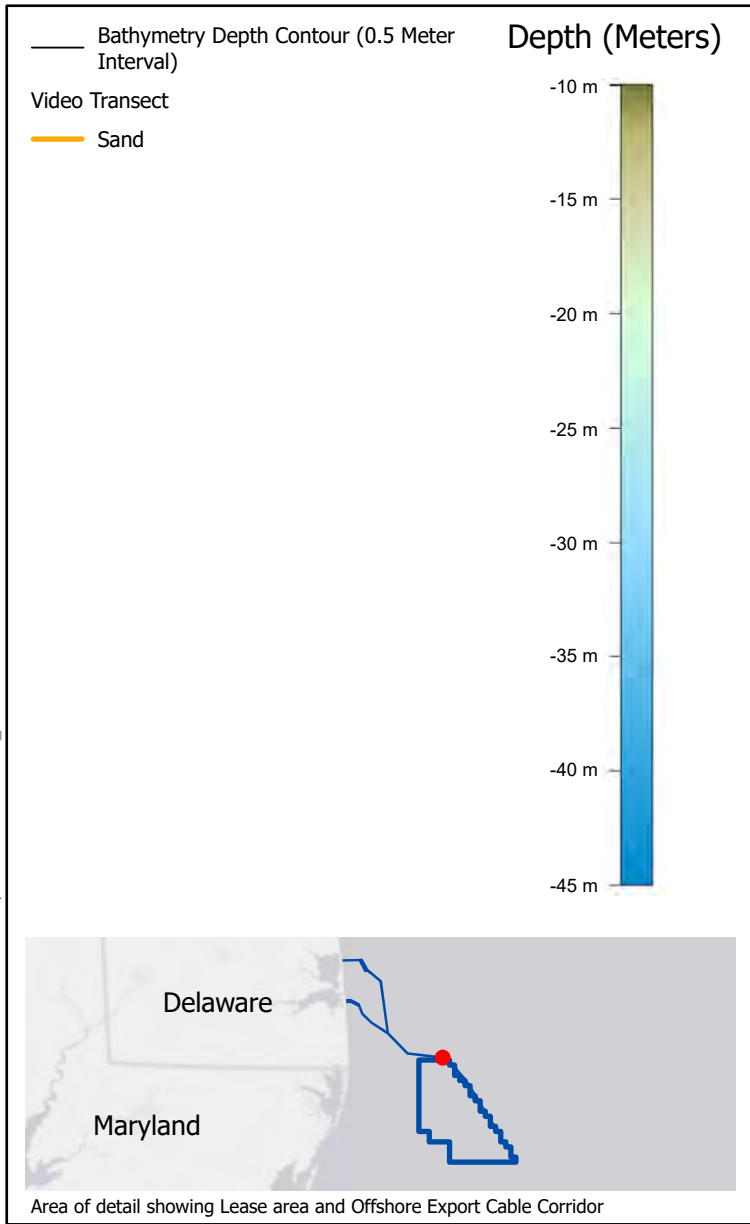
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-AC-19



Default Folder: J:\U167 - US Wind MD\04\_Graphics\GIS\APRX\U167\_ROV\tracks01



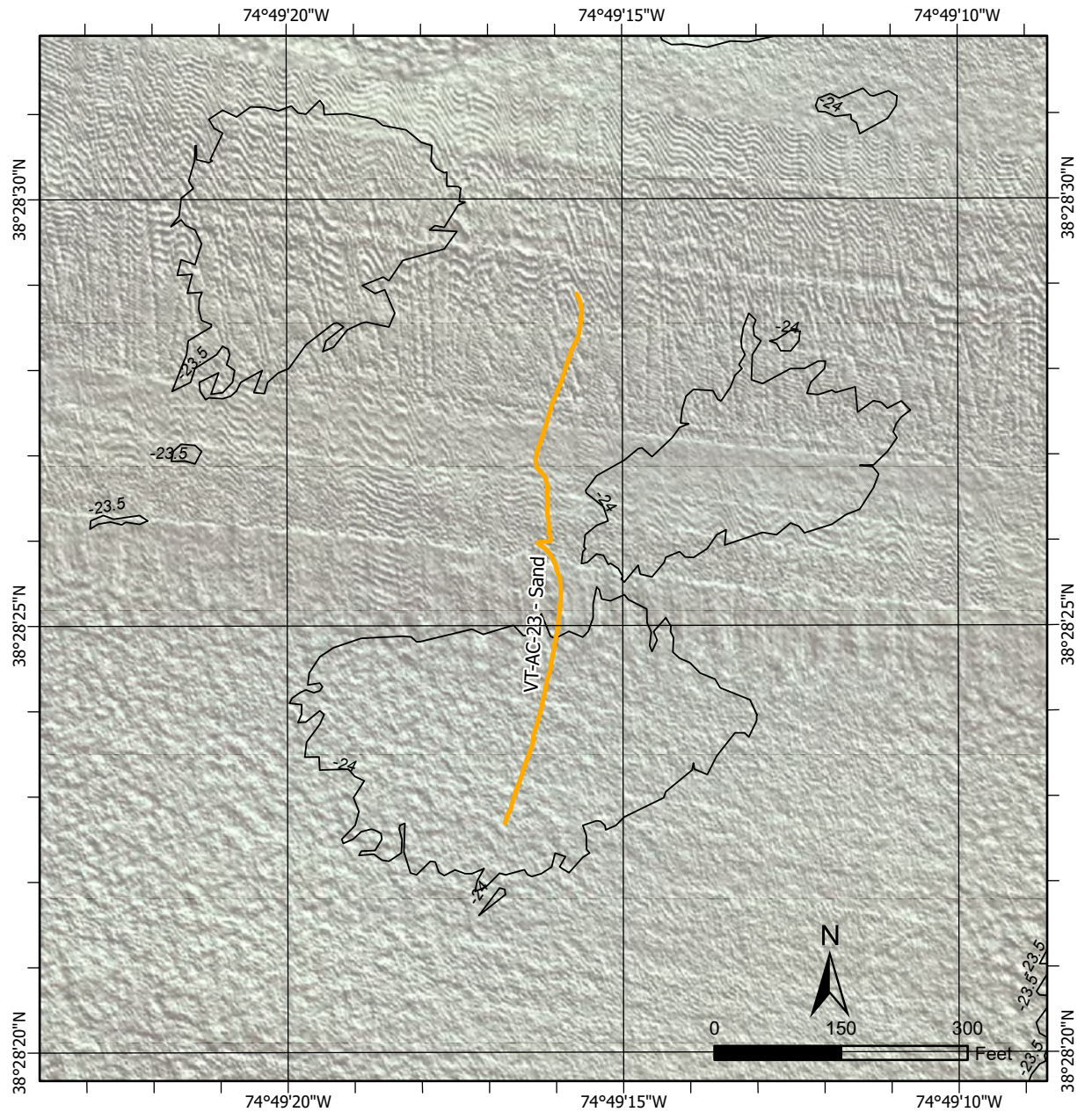
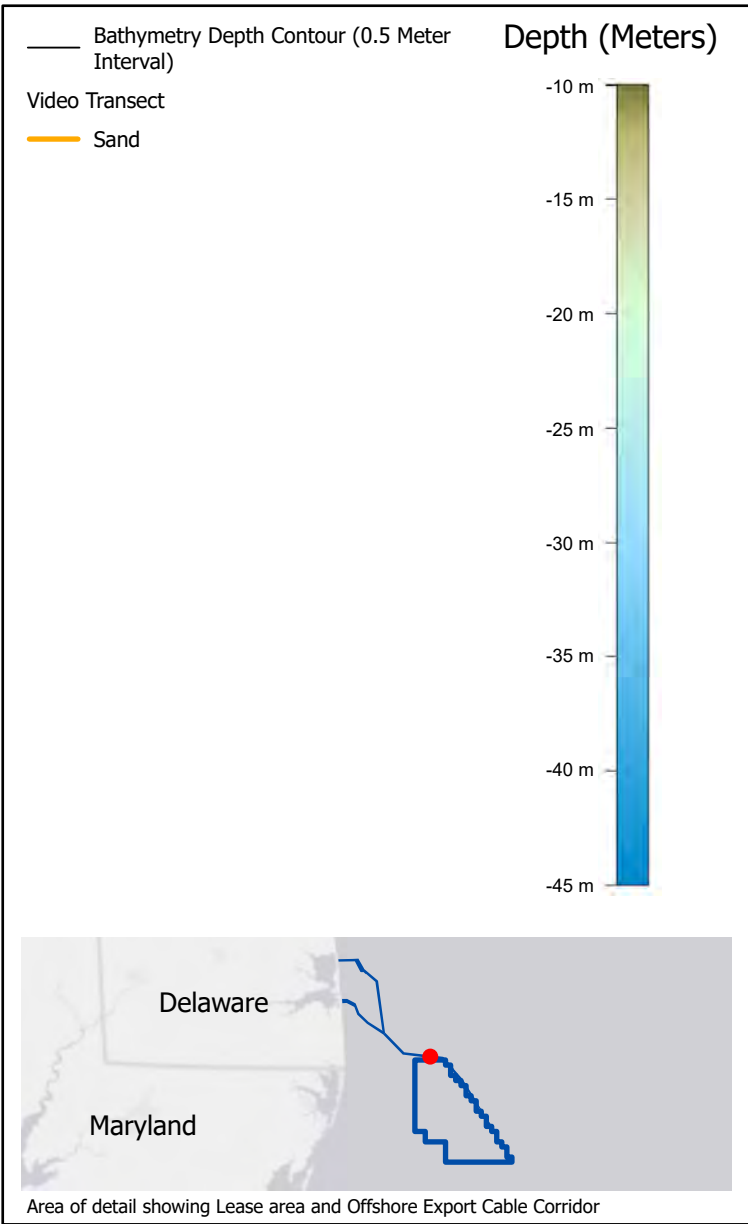
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
 1) GEMS, Bathymetry, 2022  
 2) TDI, Video Transect Position Data, 2021  
 3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-AC-21\_R



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



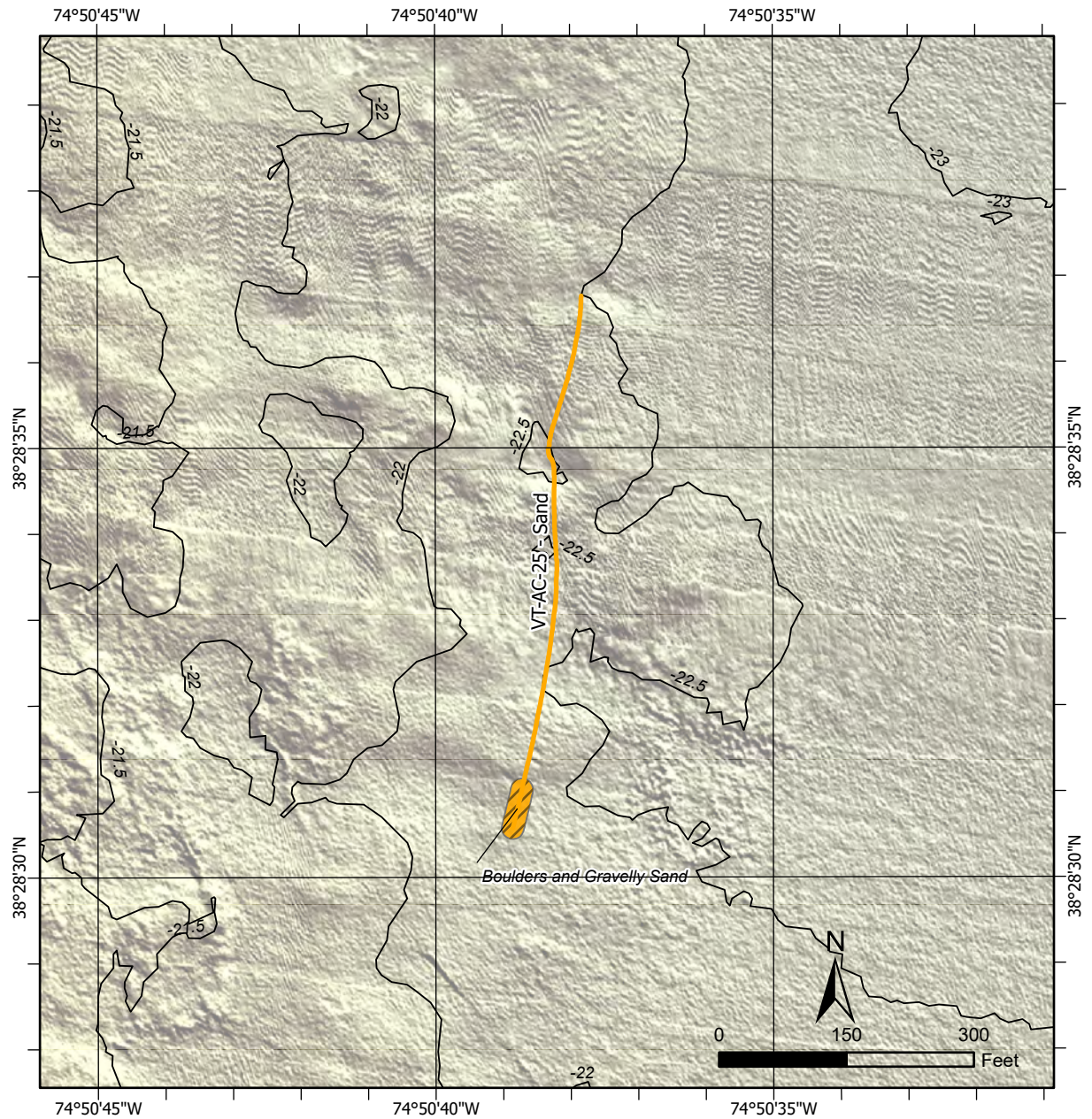
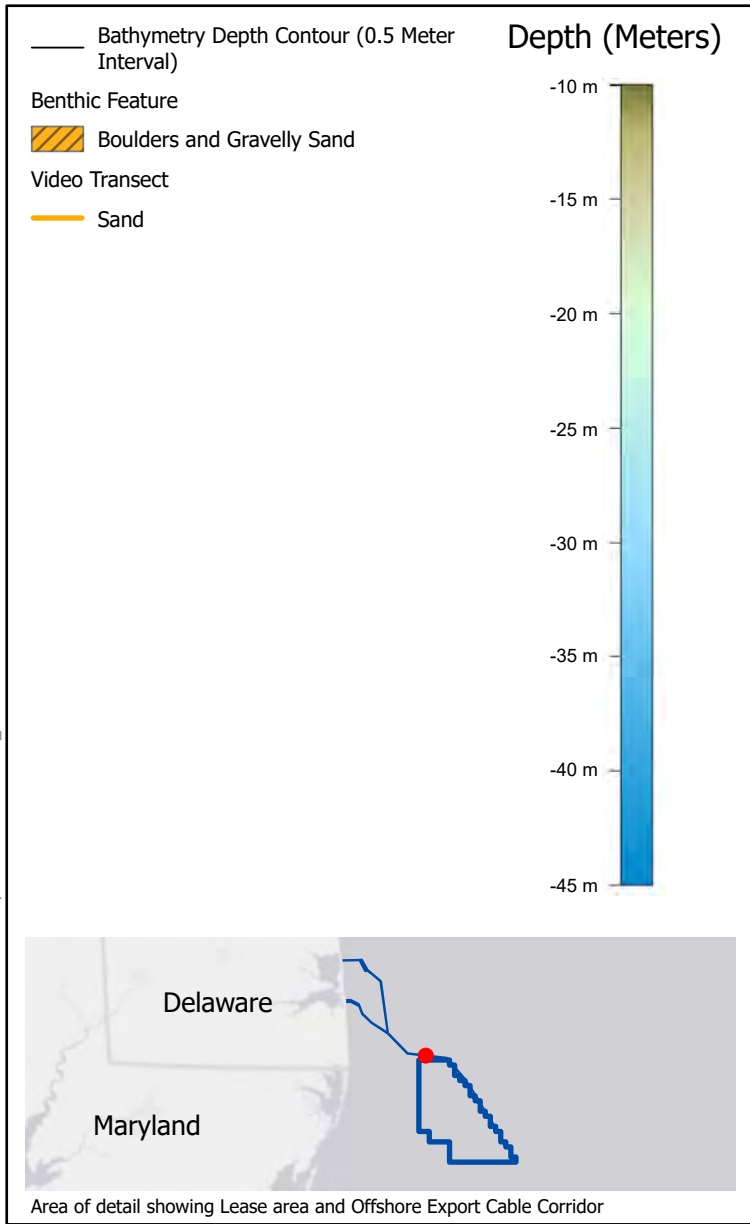
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
 1) GEMS, Bathymetry, 2022  
 2) TDI, Video Transect Position Data, 2021  
 3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-AC-23



Default Folder: J:\U167 - US Wind (MD)04 Graphics\GIS\APRXU167\_ROV\tracks01



### Maryland Offshore Wind Project

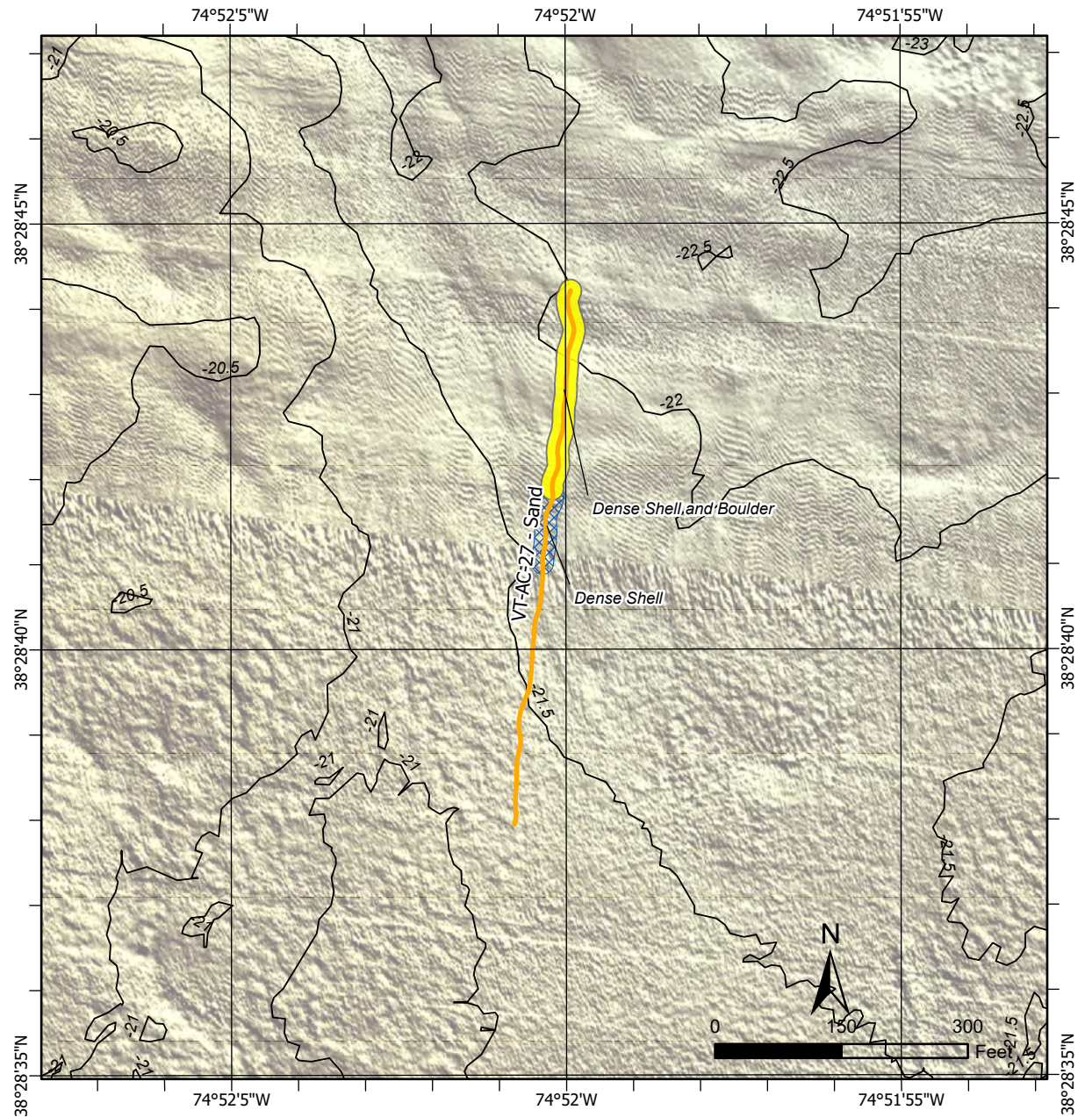
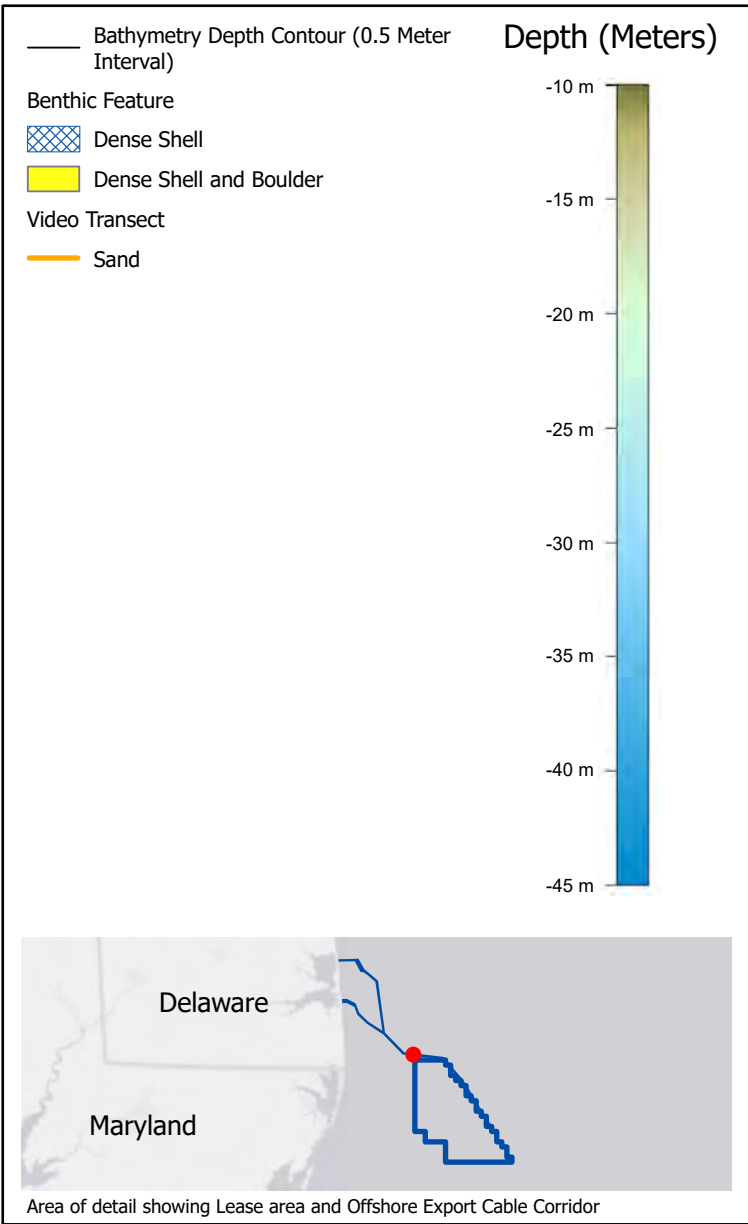
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track VT-AC-25



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



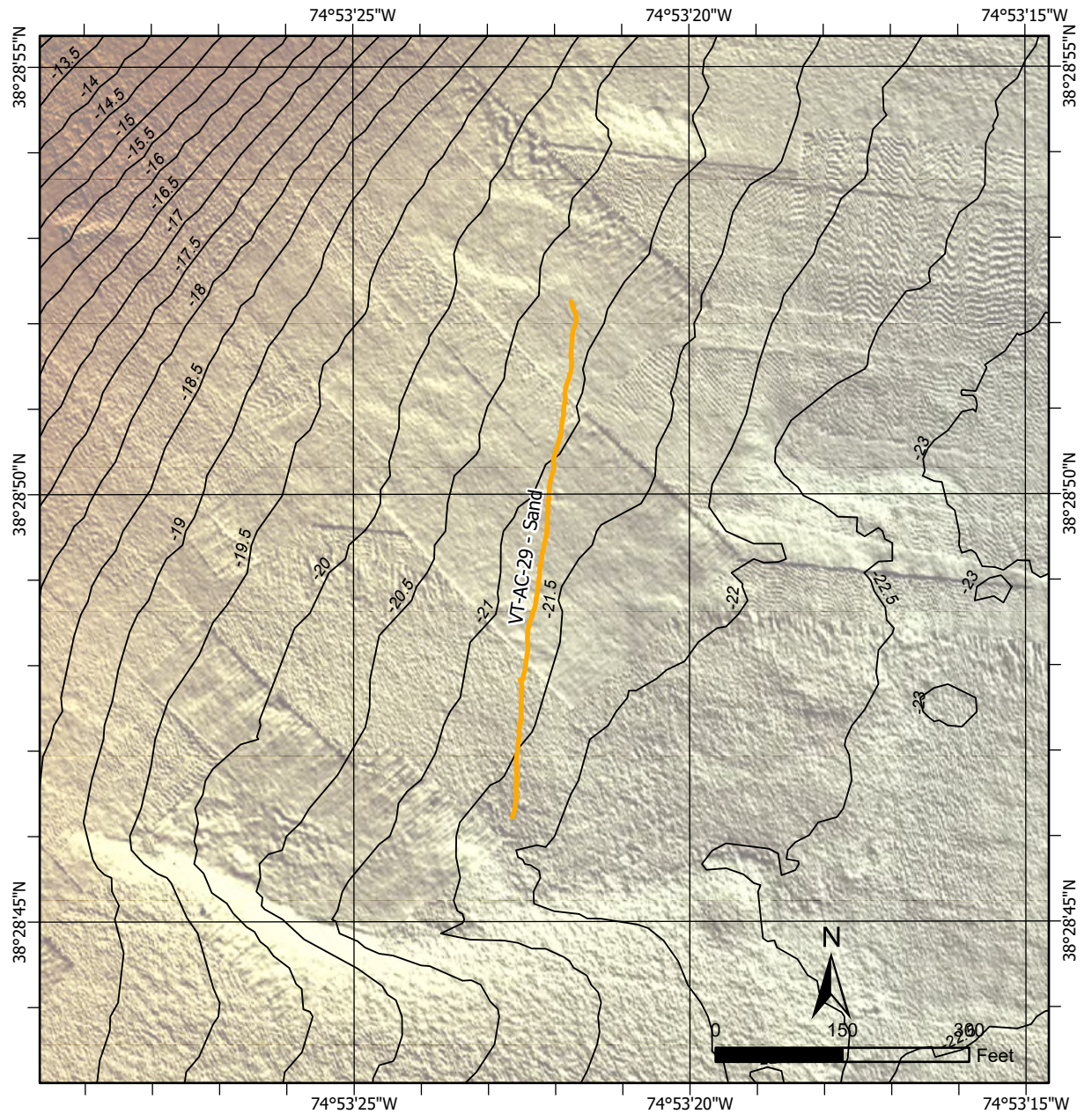
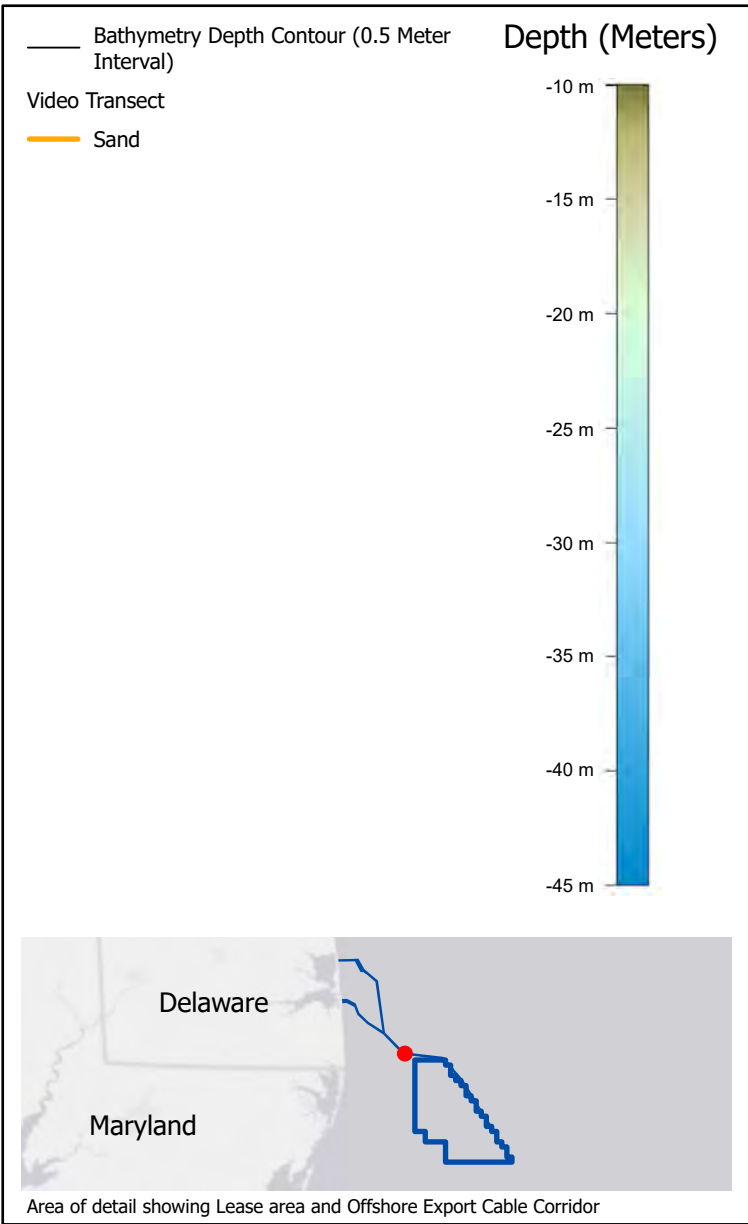
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

**Benthic Characterization for ROV Track**  
VT-AC-27



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

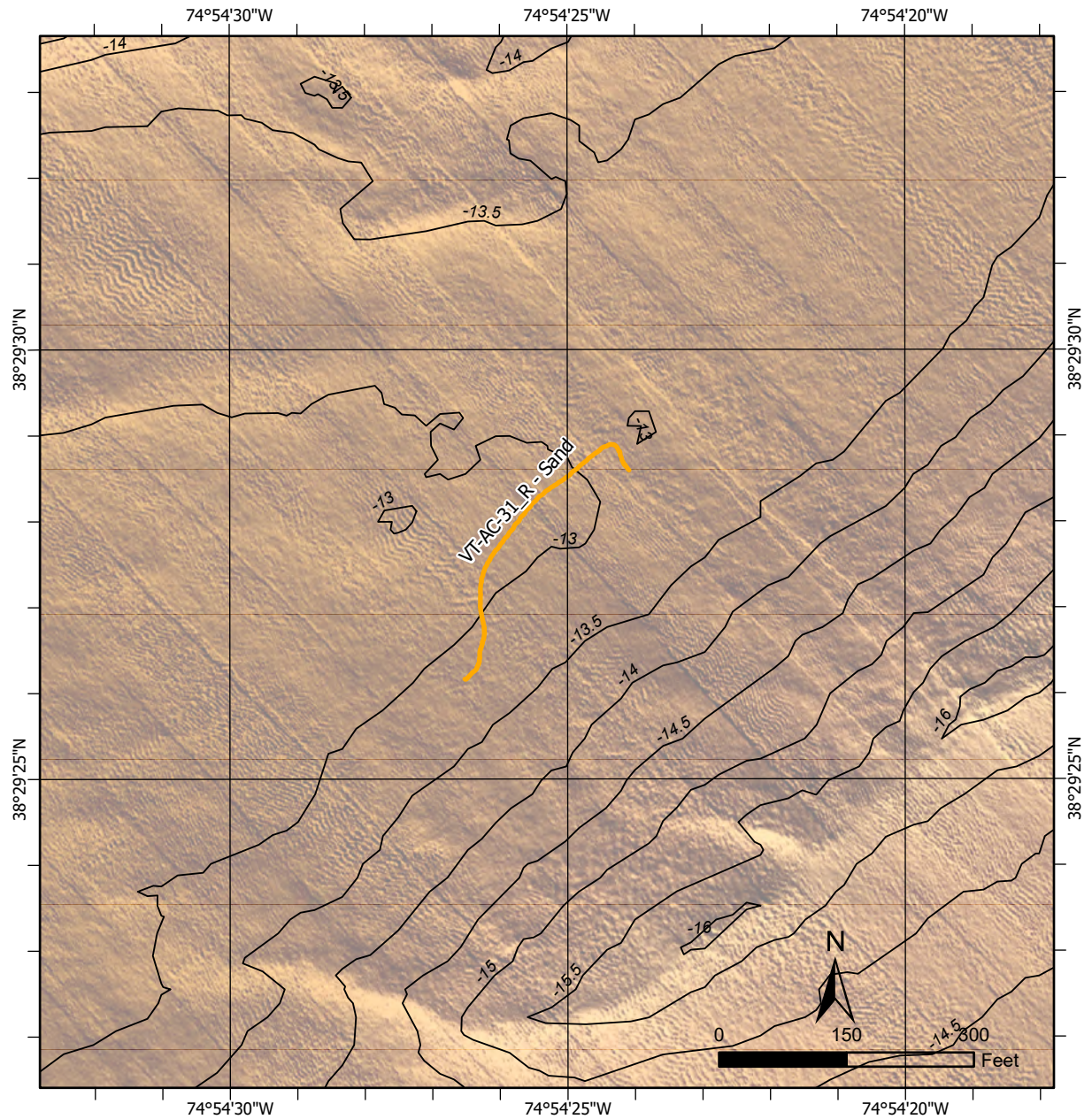
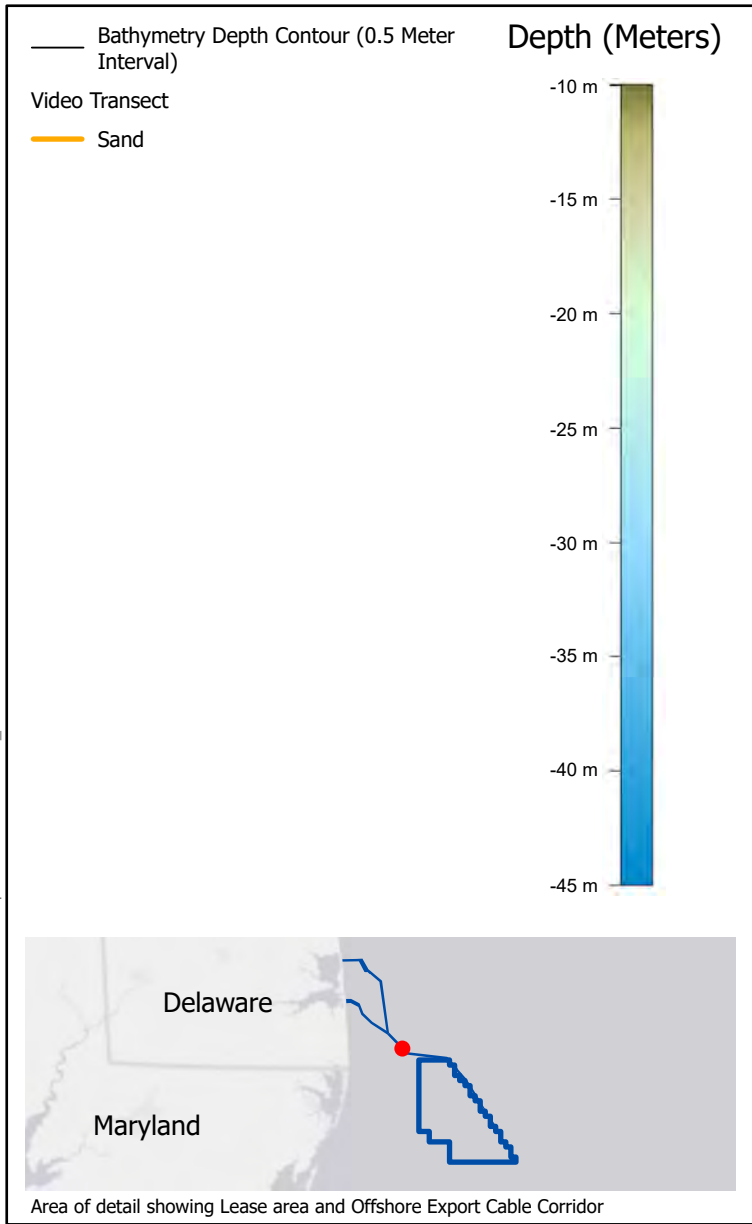
Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track

VT-AC-29



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



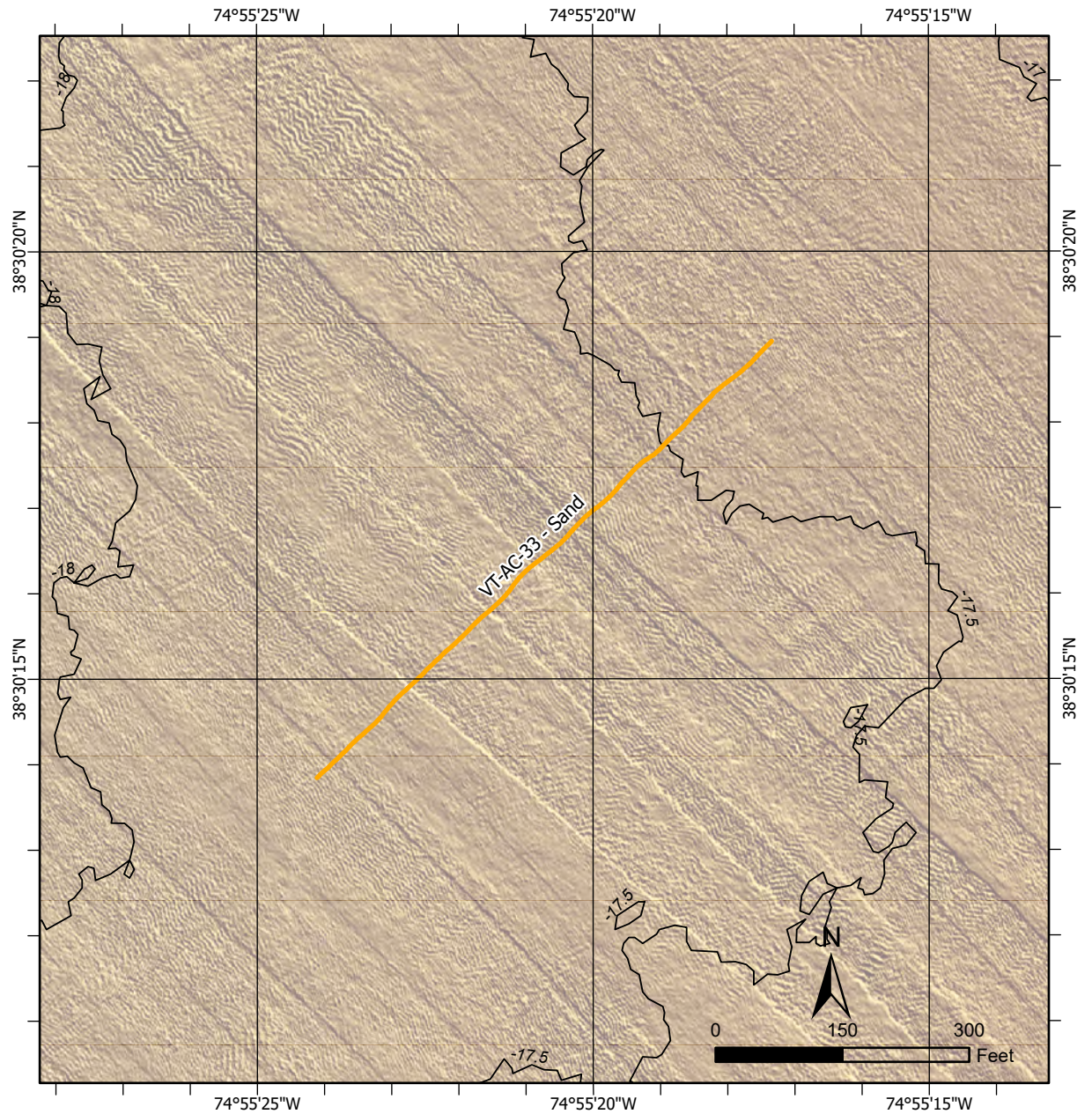
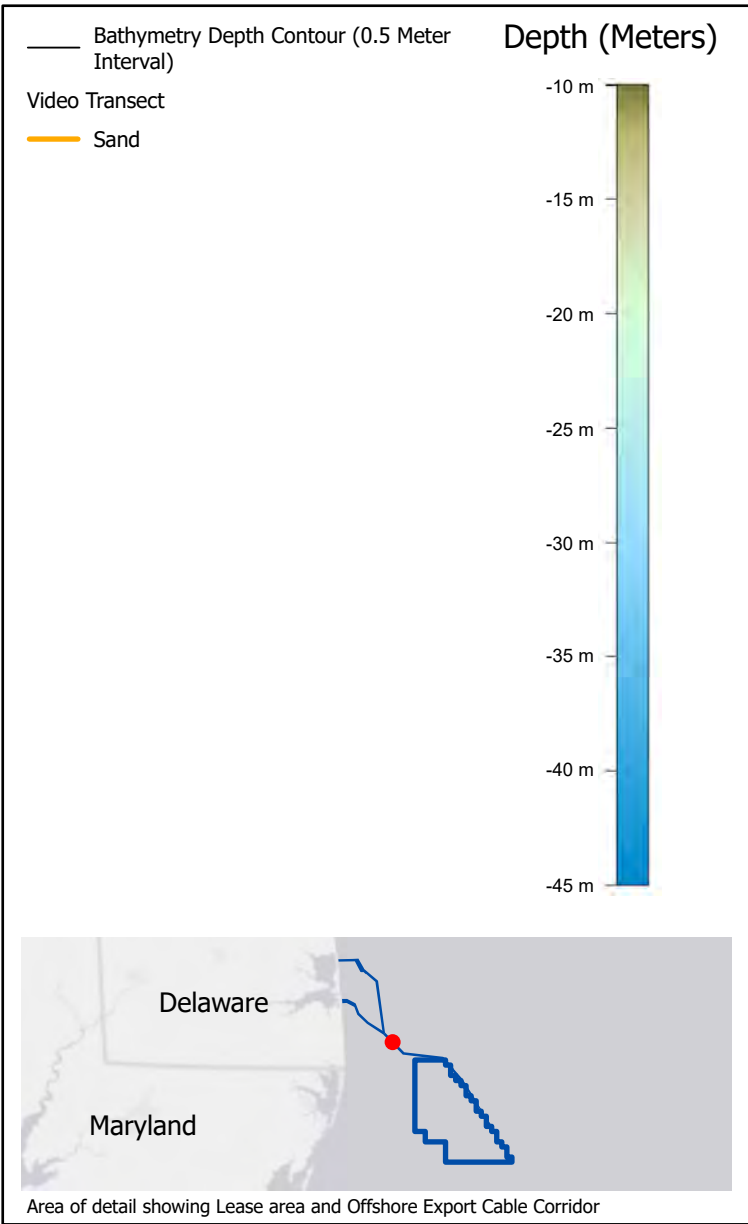
### Maryland Offshore Wind Project Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track VT-AC-31\_R



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



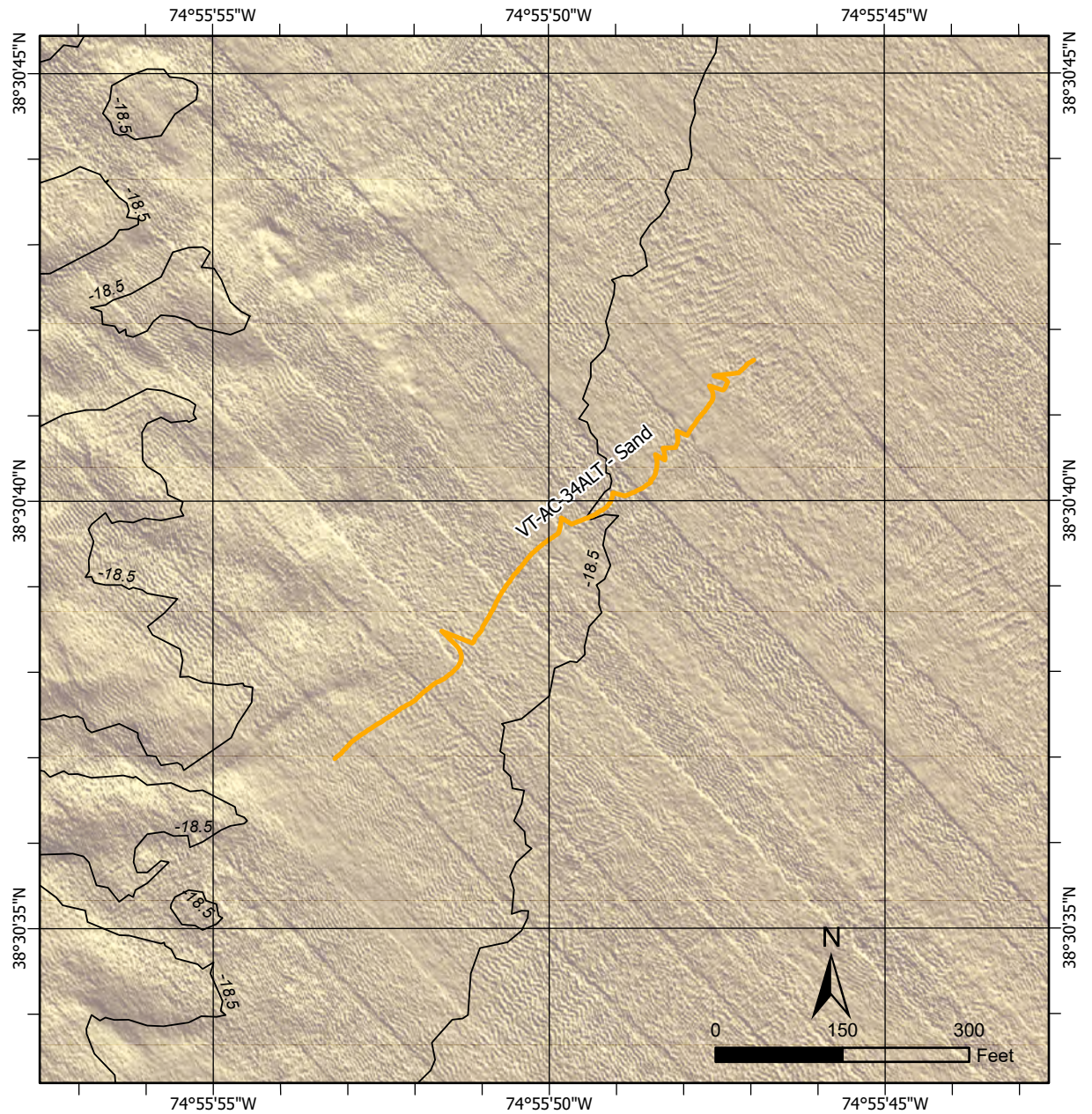
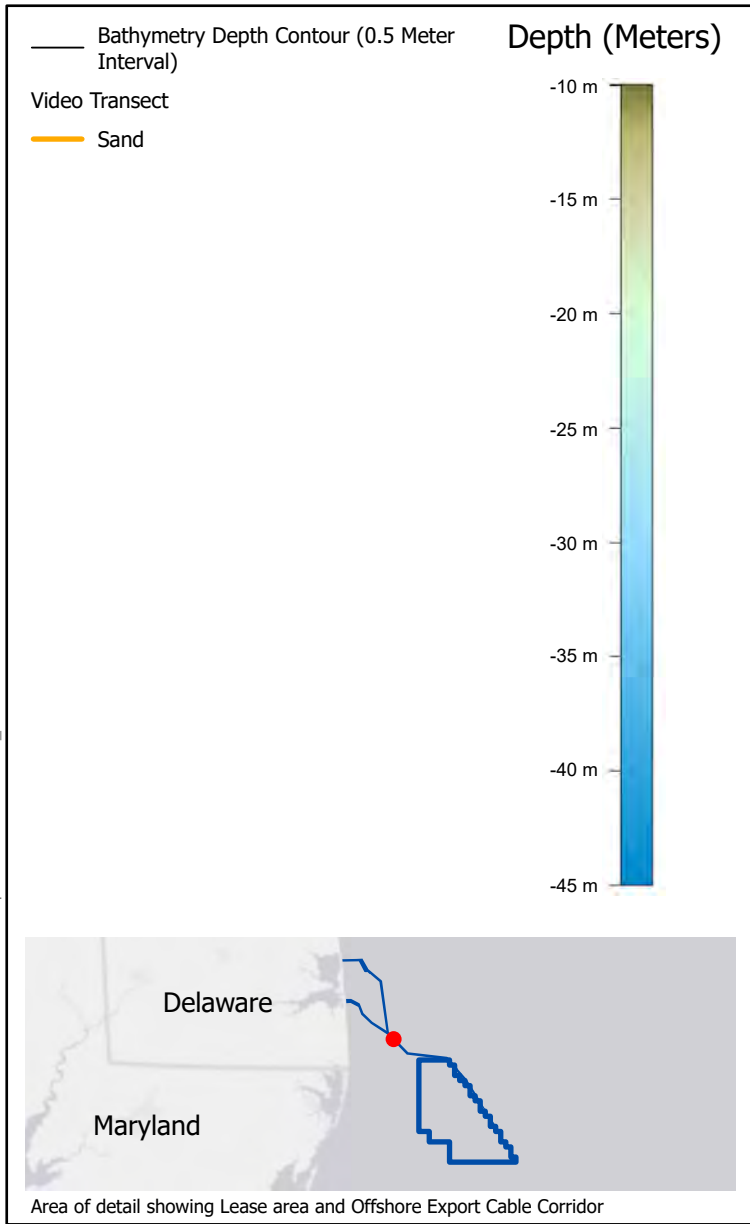
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-AC-33



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



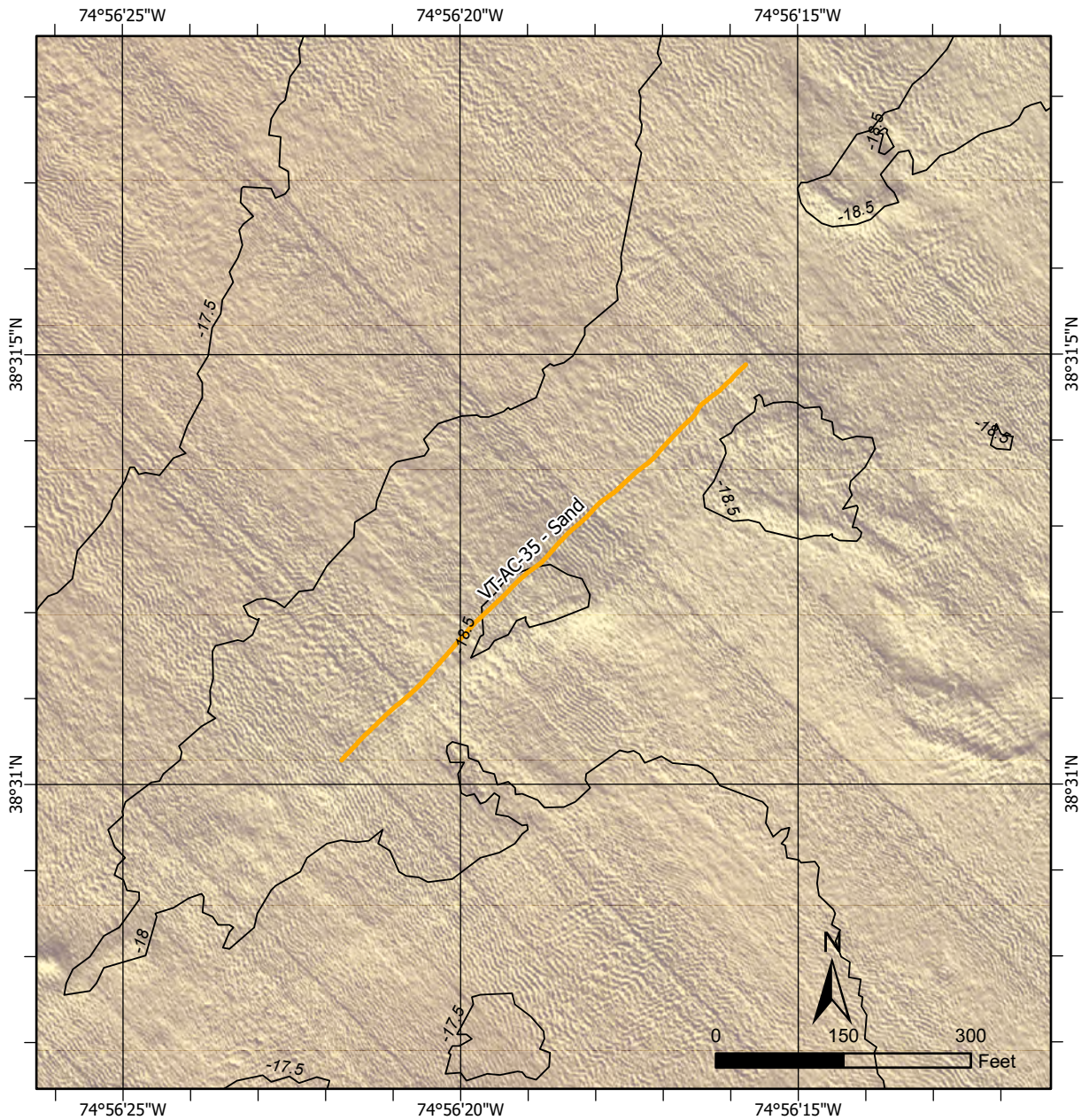
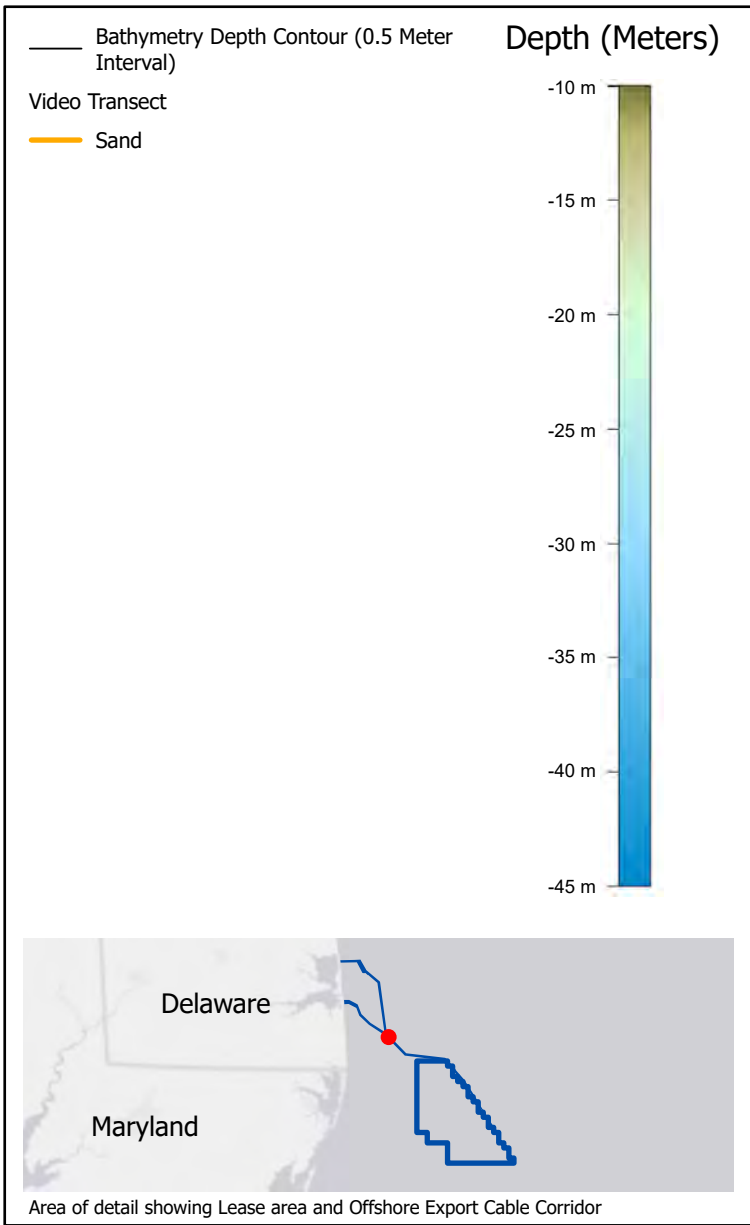
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-AC-34ALT



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



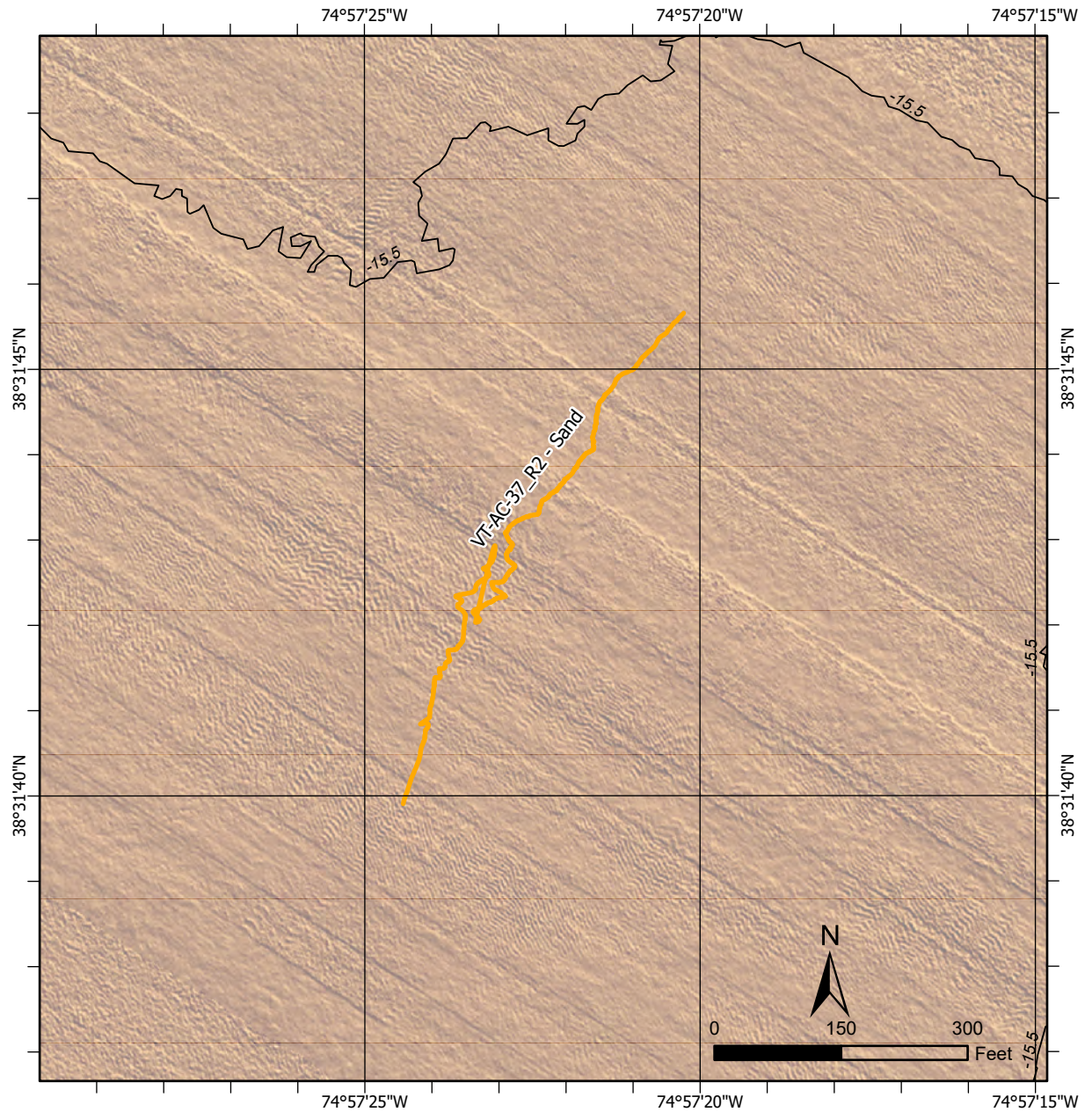
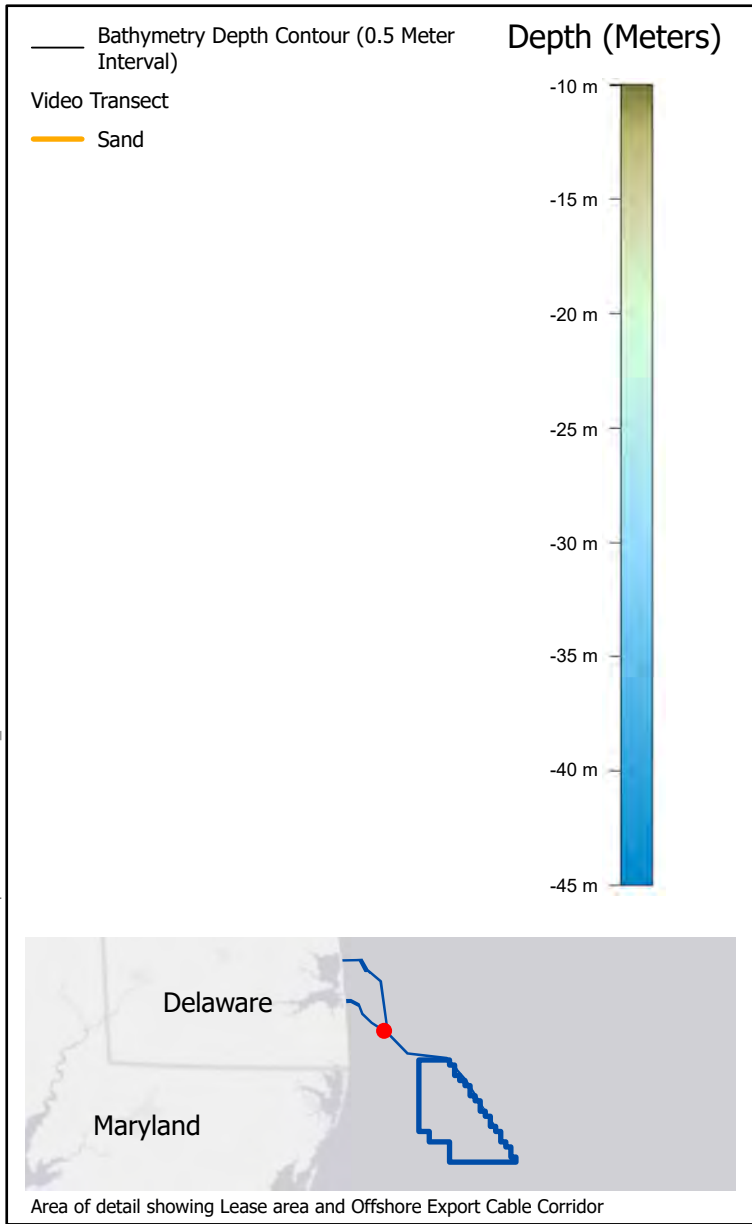
### Maryland Offshore Wind Project Offshore Maryland and Delaware

### Benthic Characterization for ROV Track VT-AC-35

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

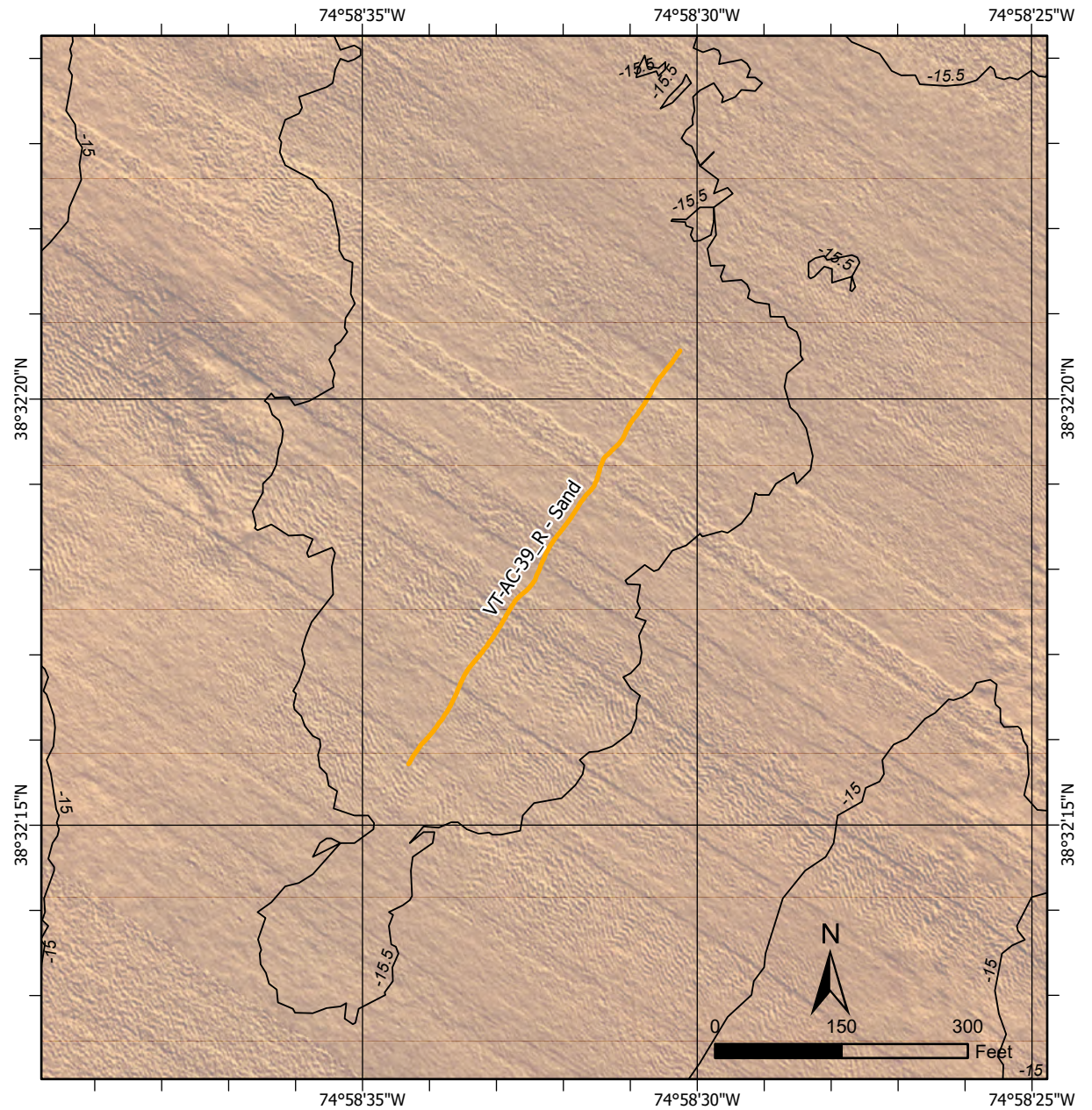
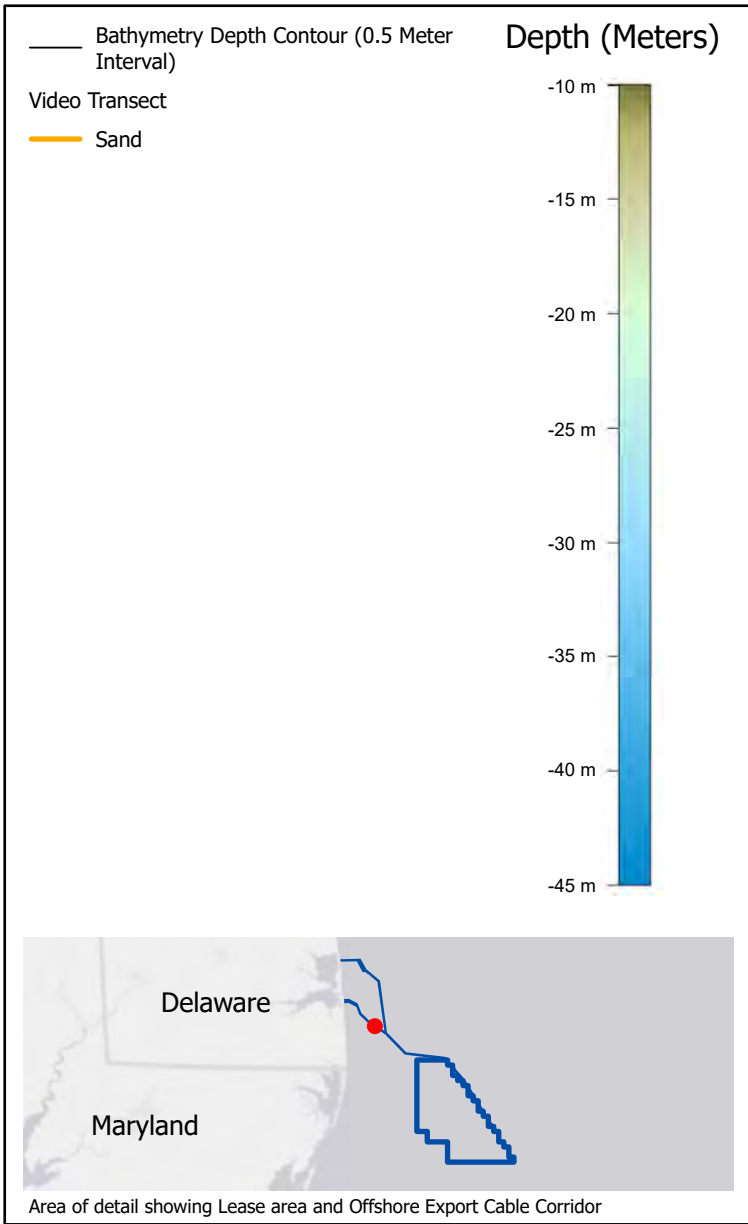
Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track

VT-AC-37\_R2



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



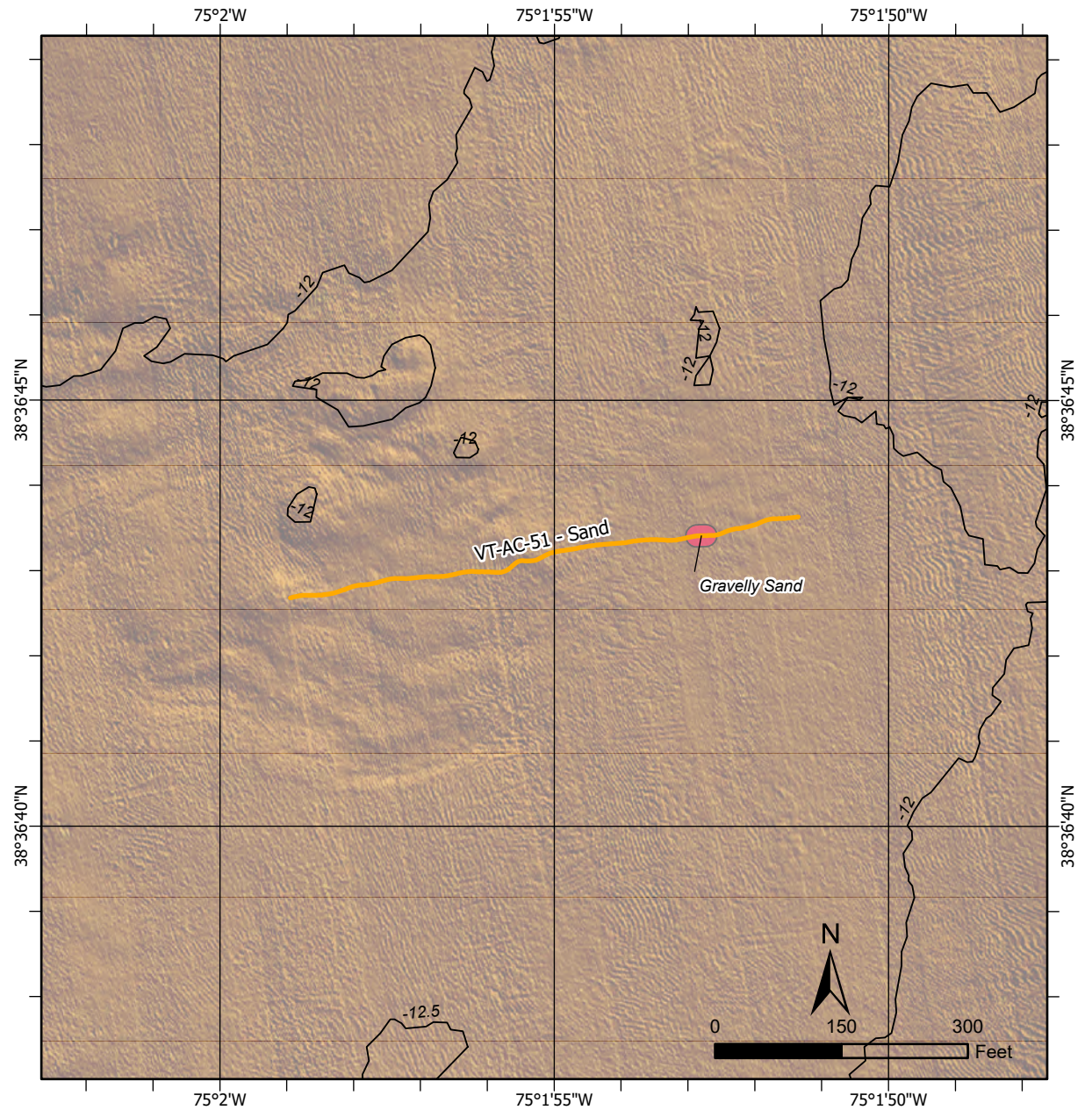
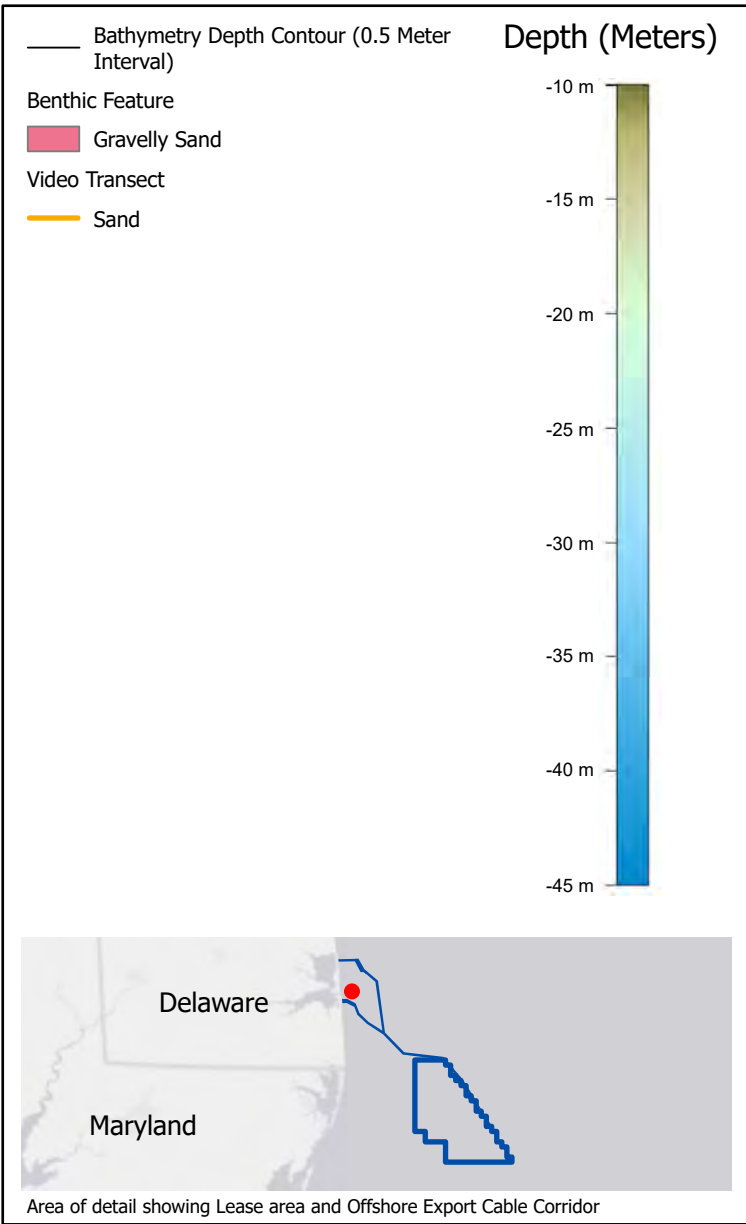
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

**Benthic Characterization for ROV Track**  
VT-AC-39\_R



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



### Maryland Offshore Wind Project

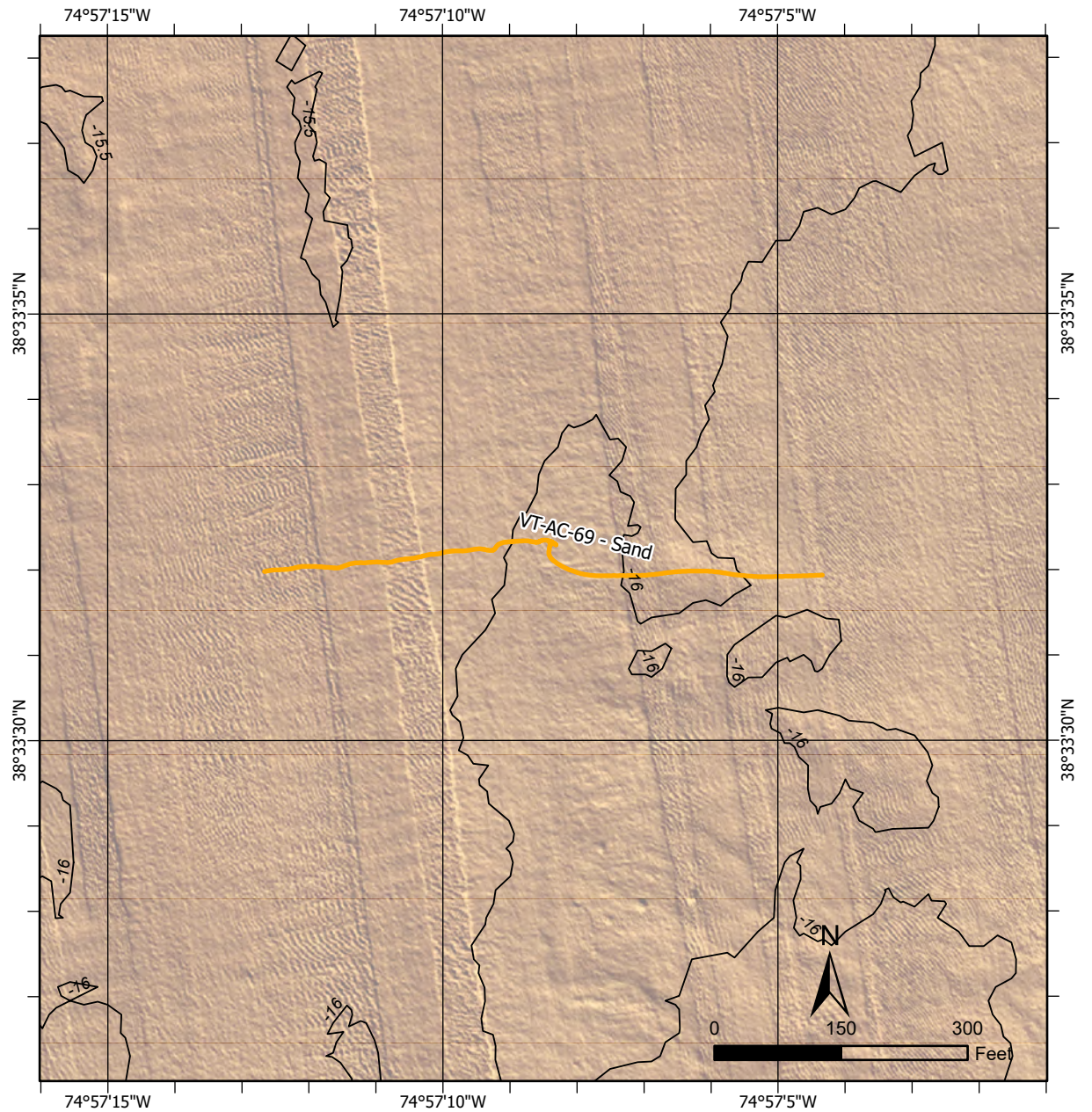
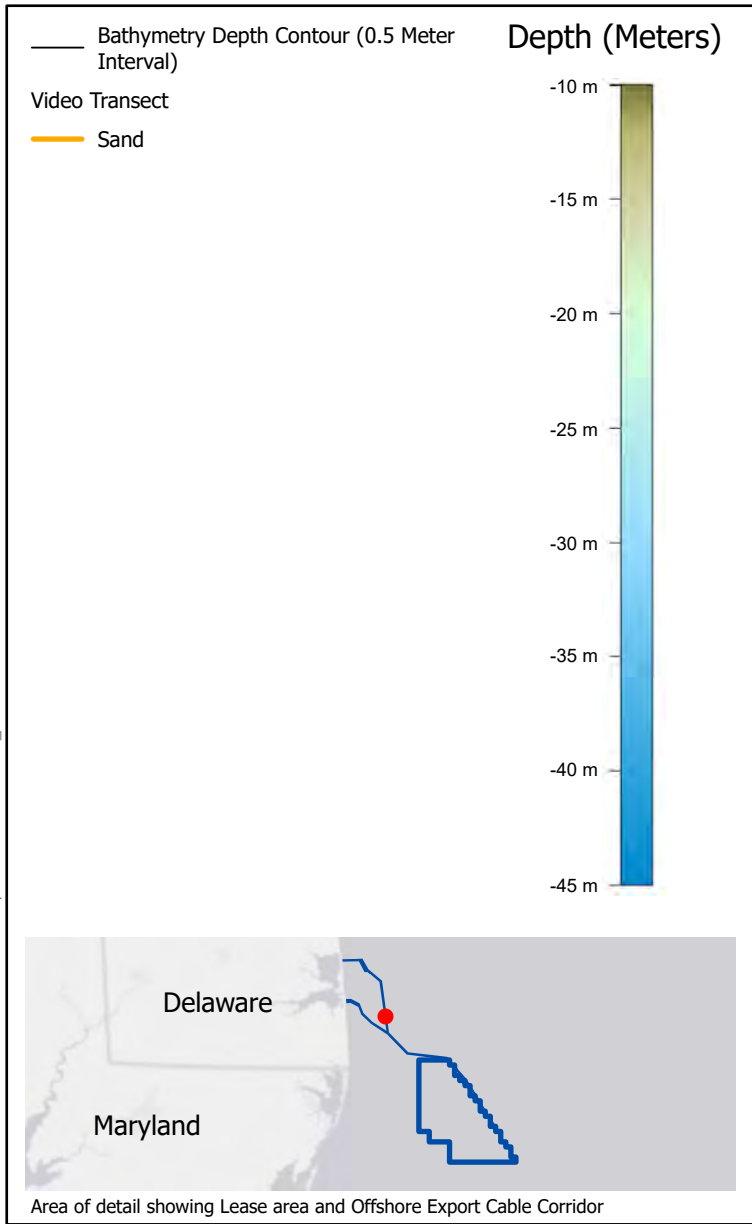
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track VT-AC-51



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



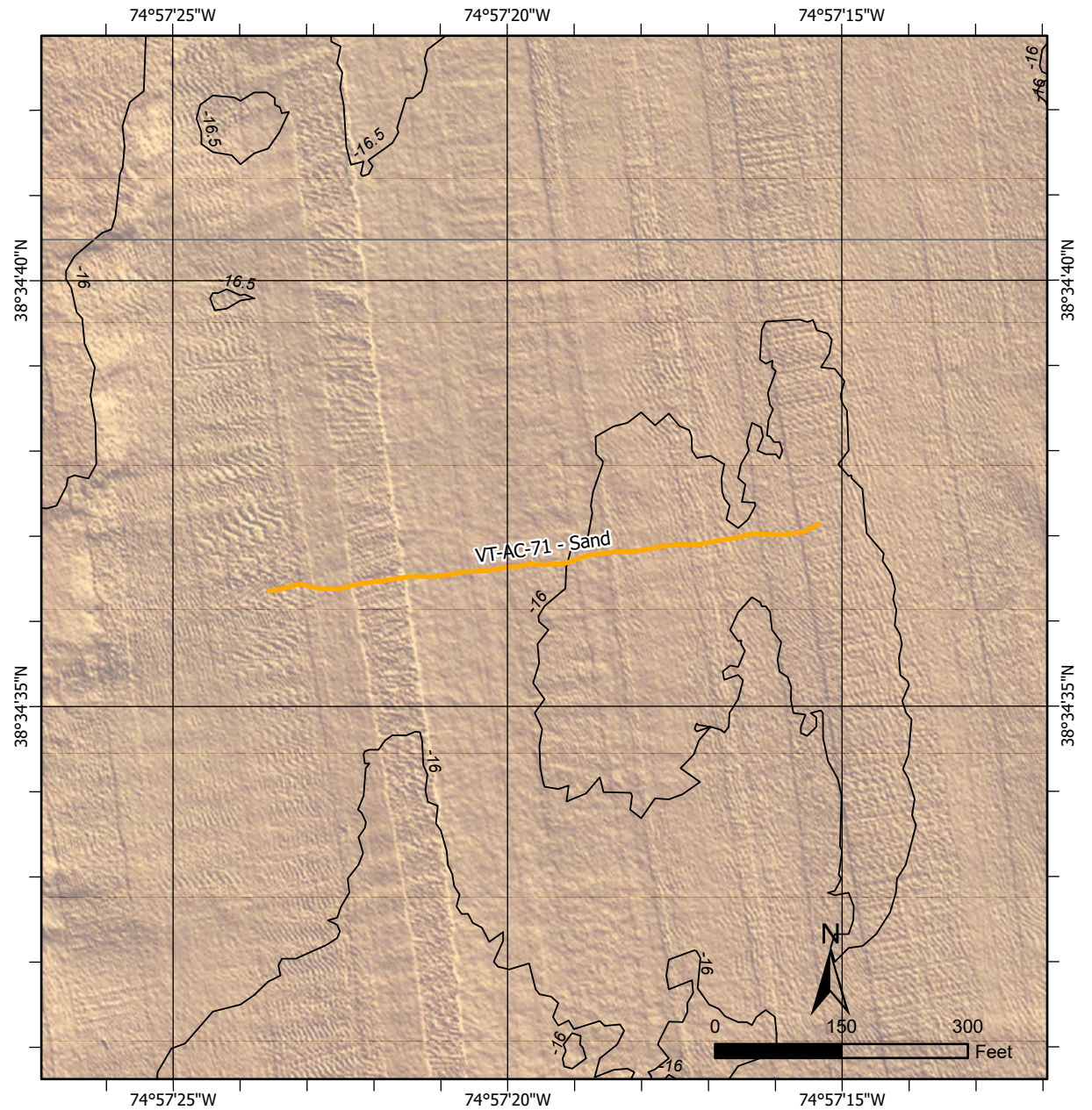
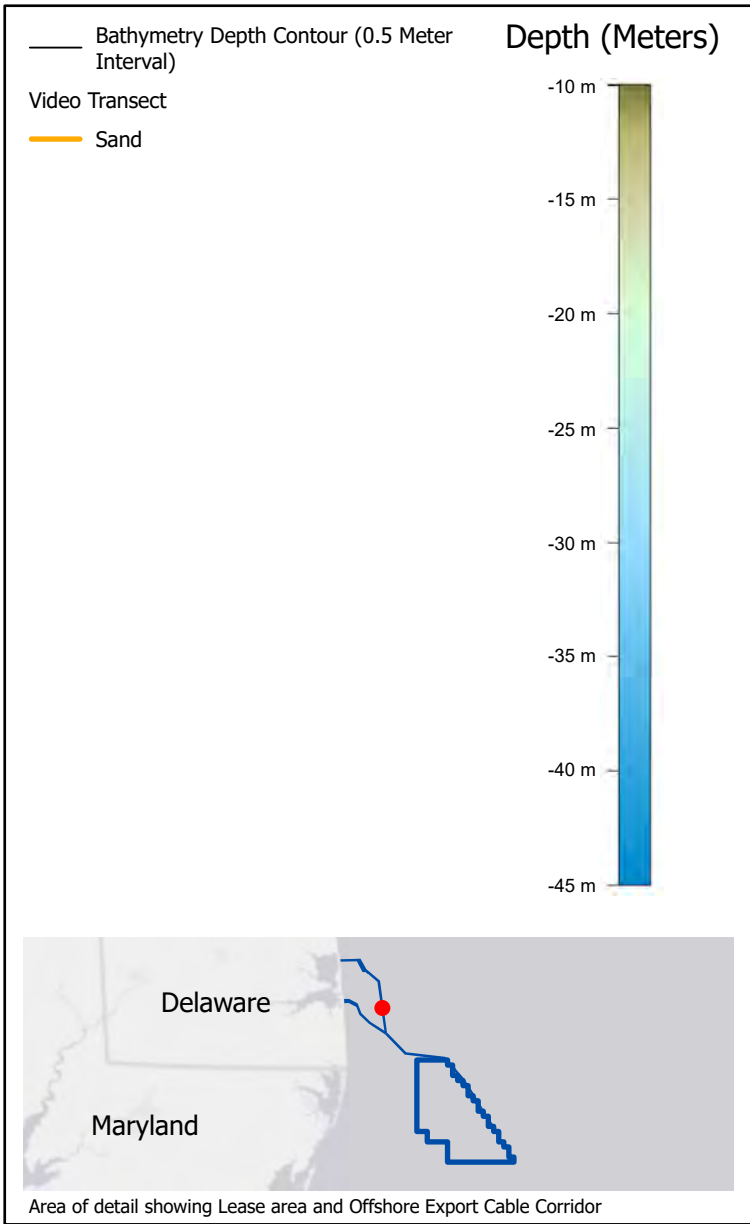
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Benthic Characterization for ROV Track  
VT-AC-69

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



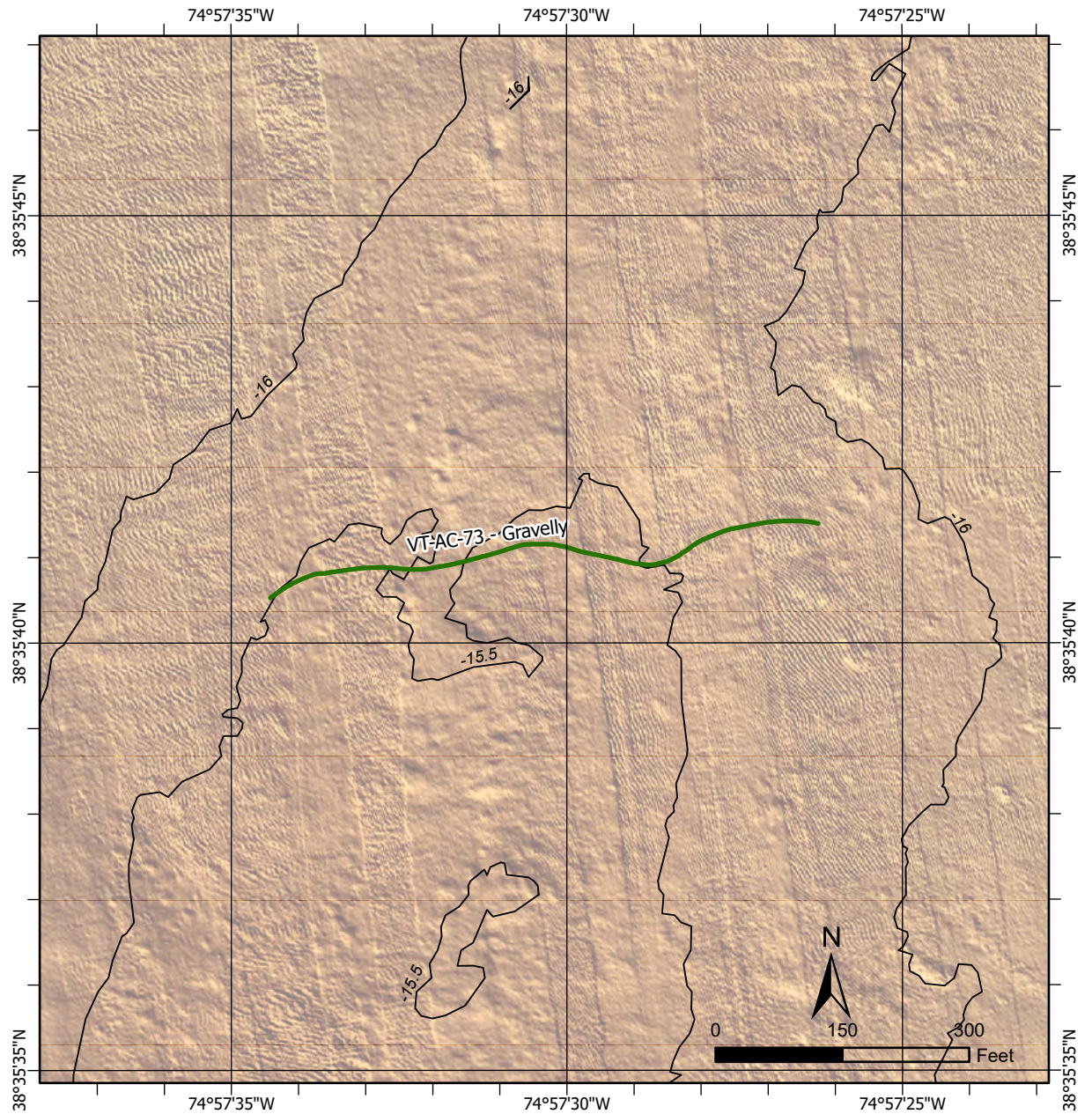
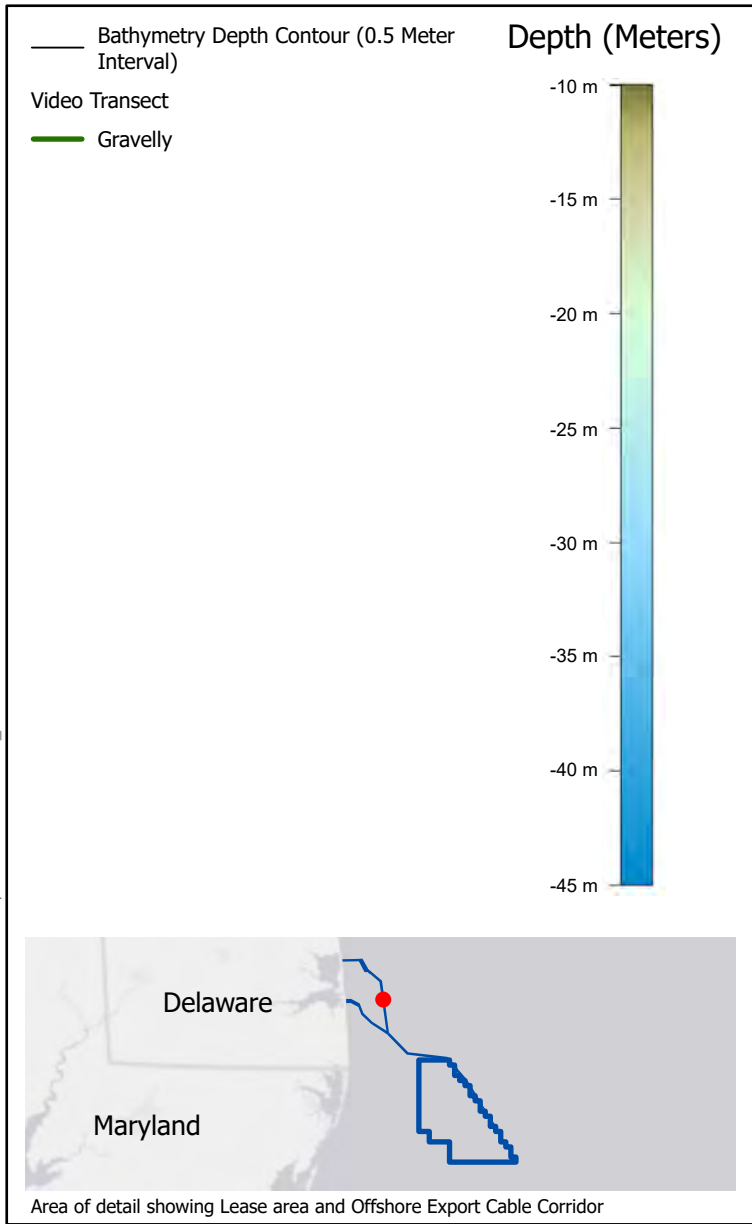
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
 1) GEMS, Bathymetry, 2022  
 2) TDI, Video Transect Position Data, 2021  
 3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-AC-71



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



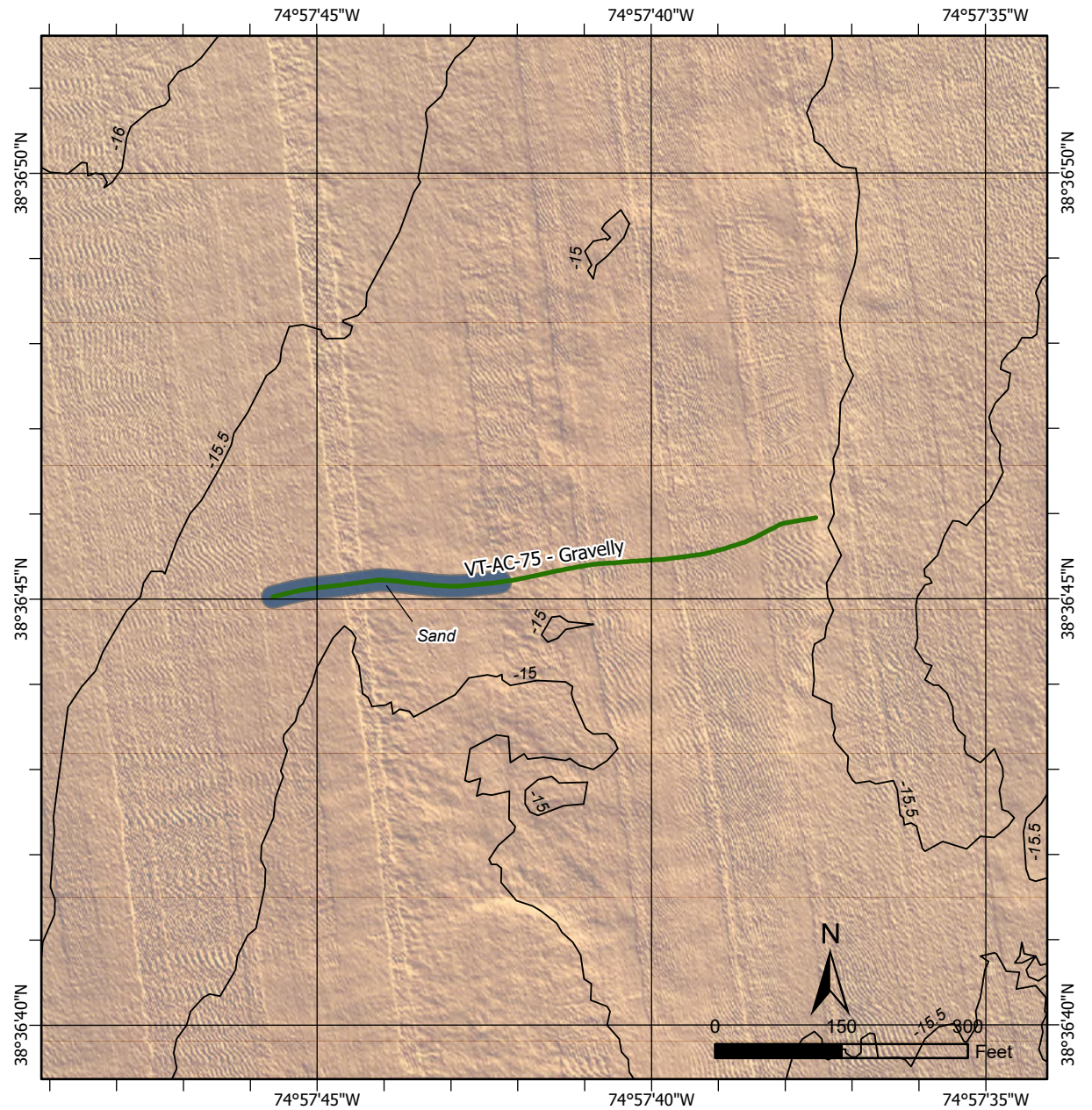
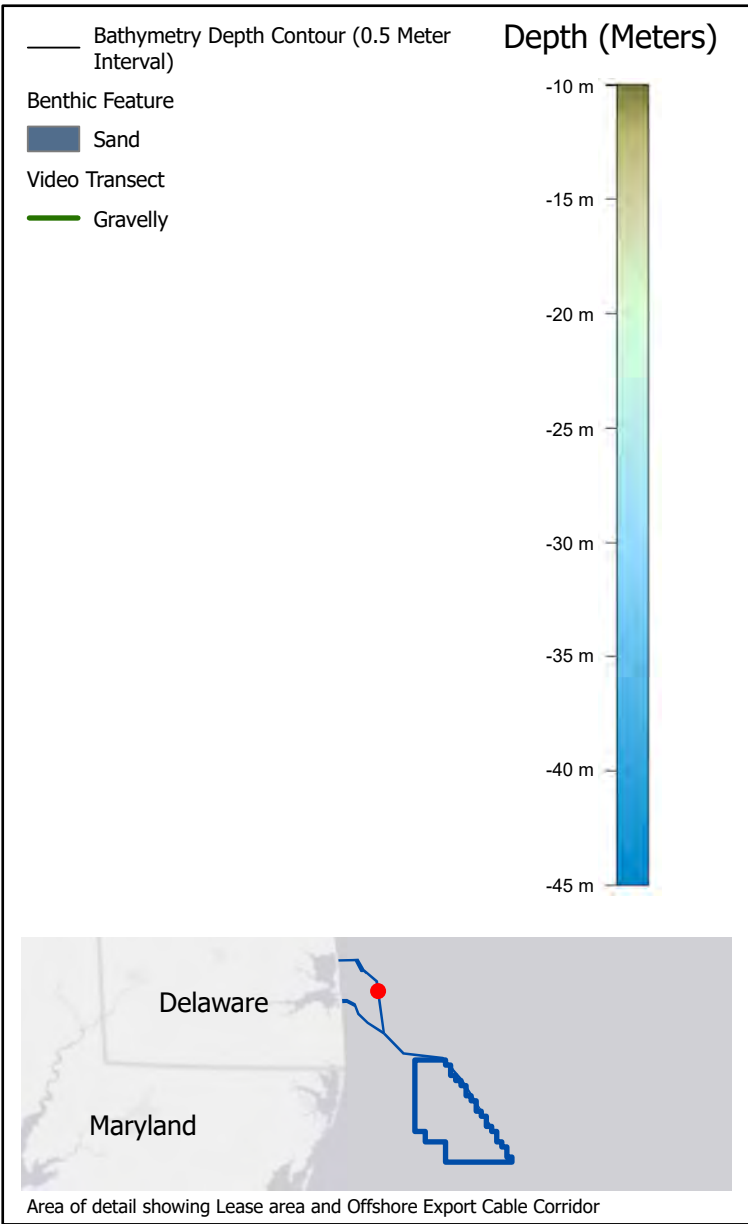
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-AC-73



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



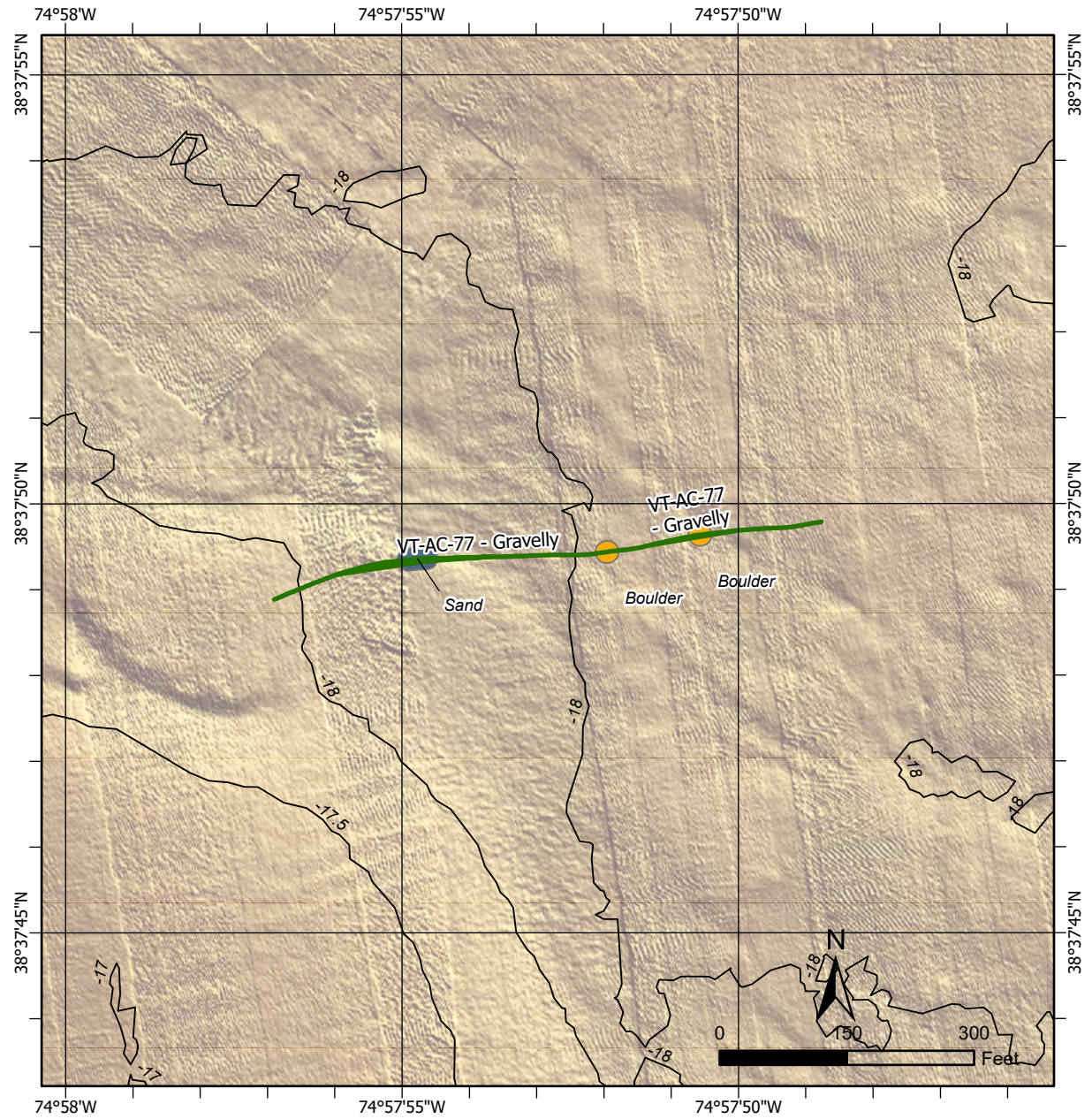
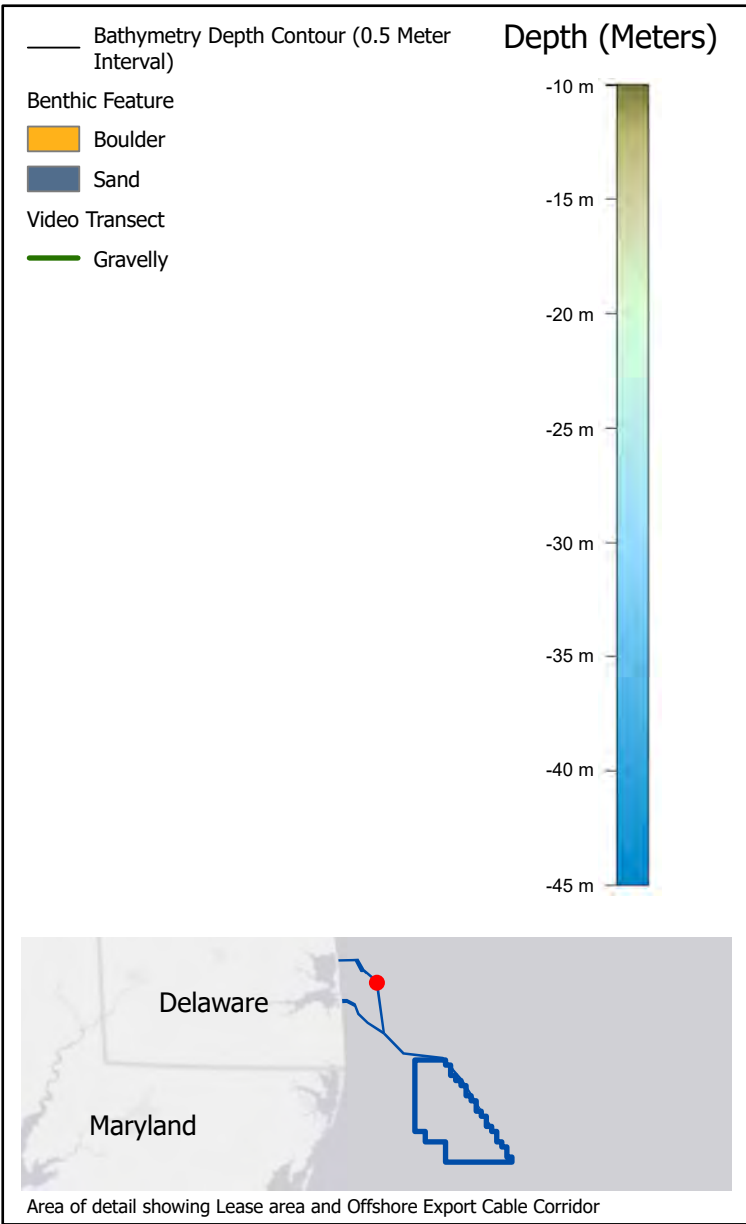
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-AC-75



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



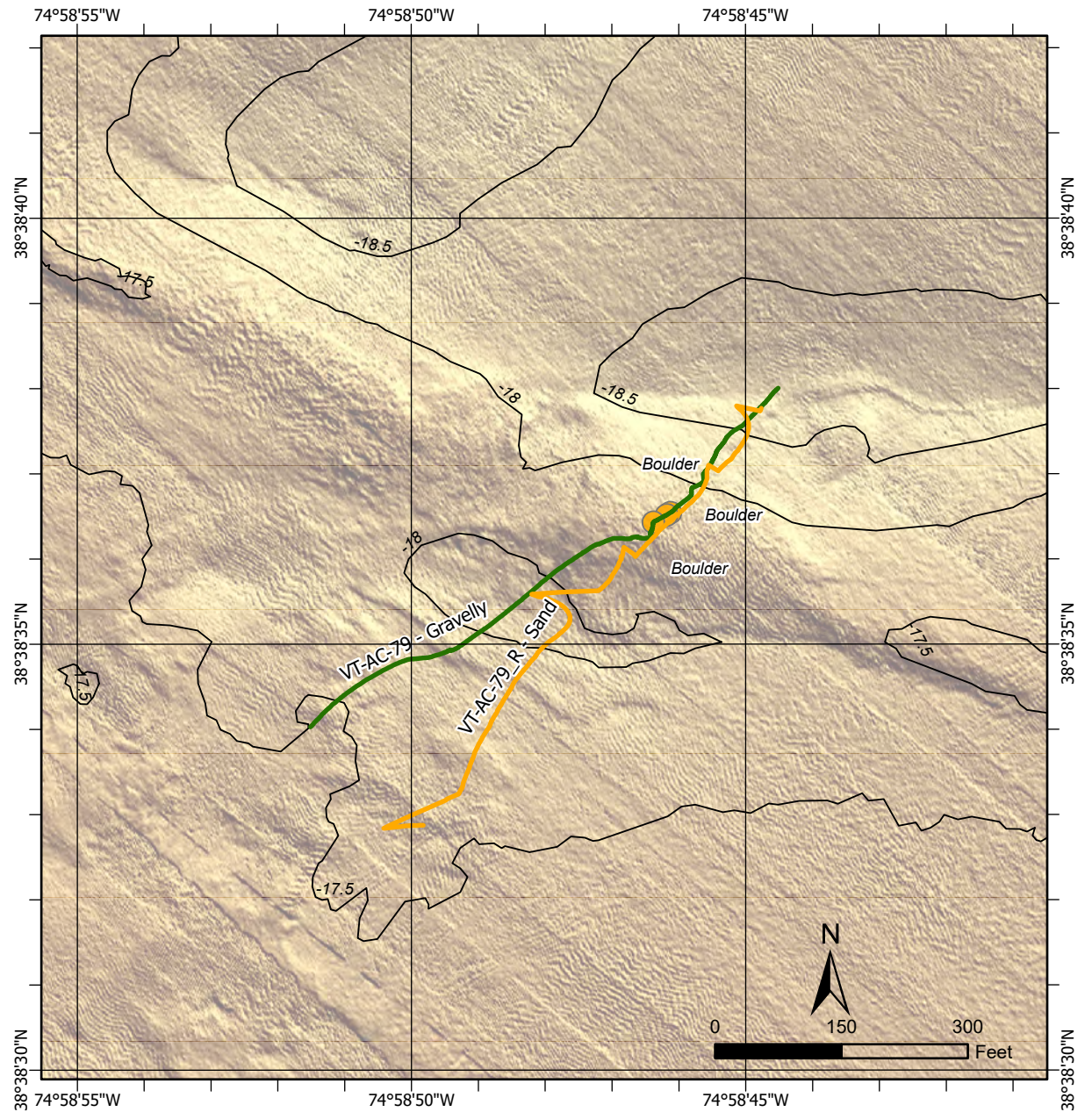
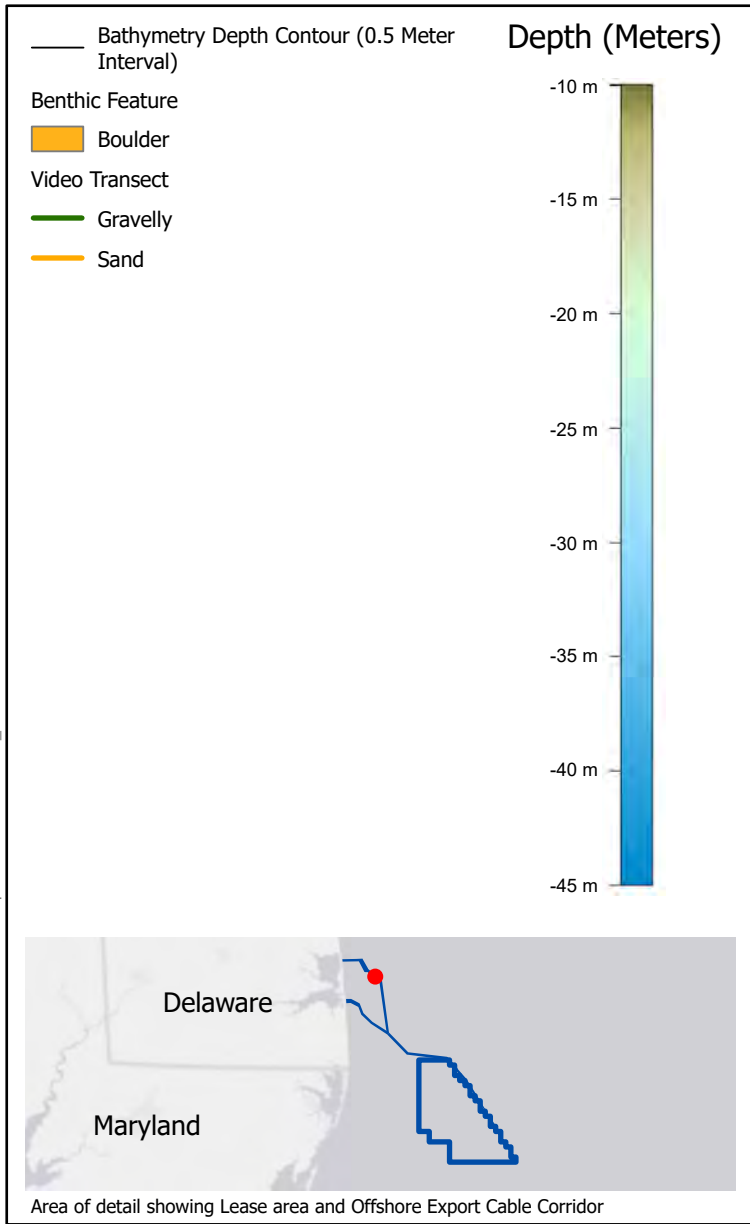
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Benthic Characterization for ROV Track  
VT-AC-77

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



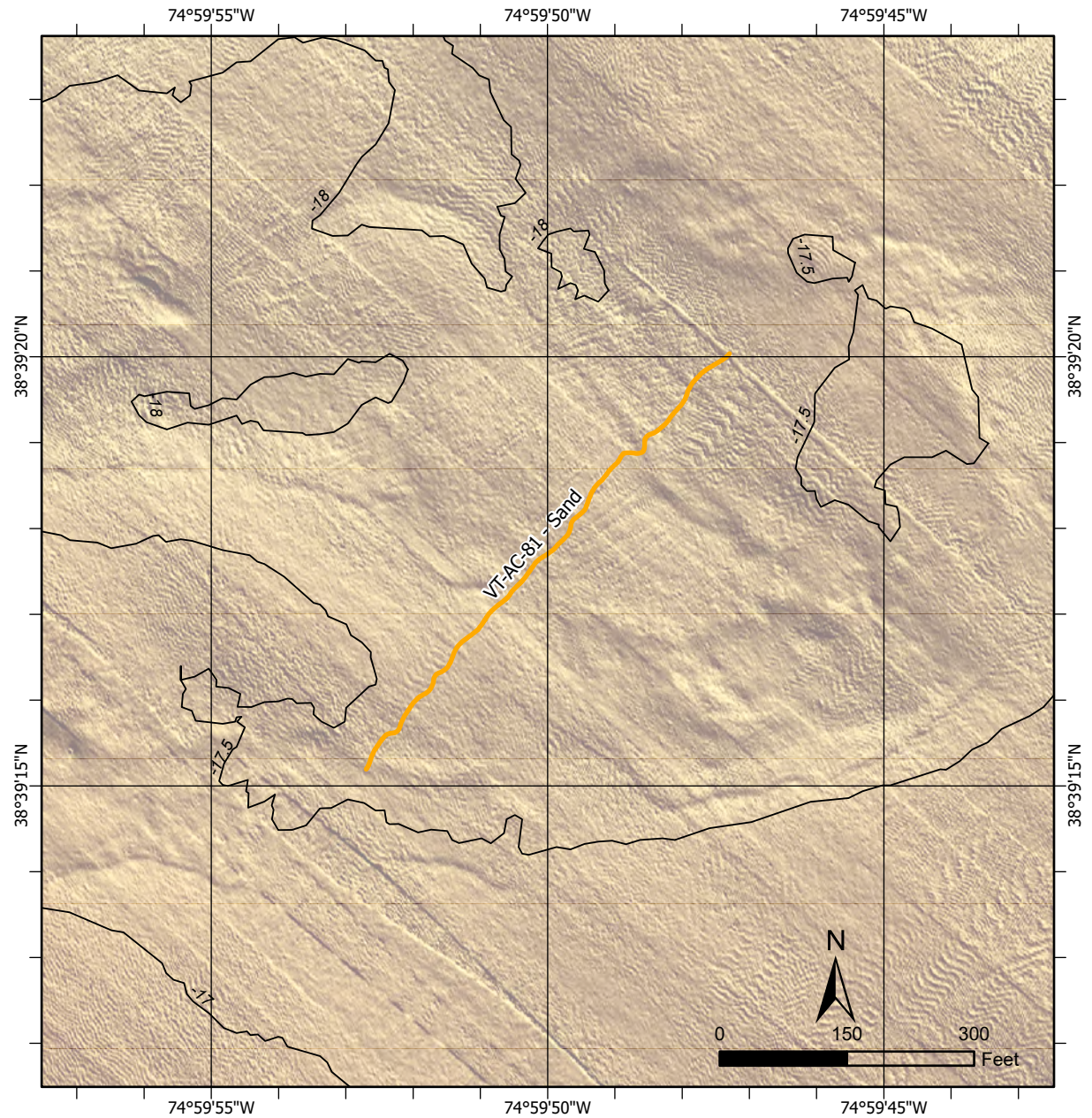
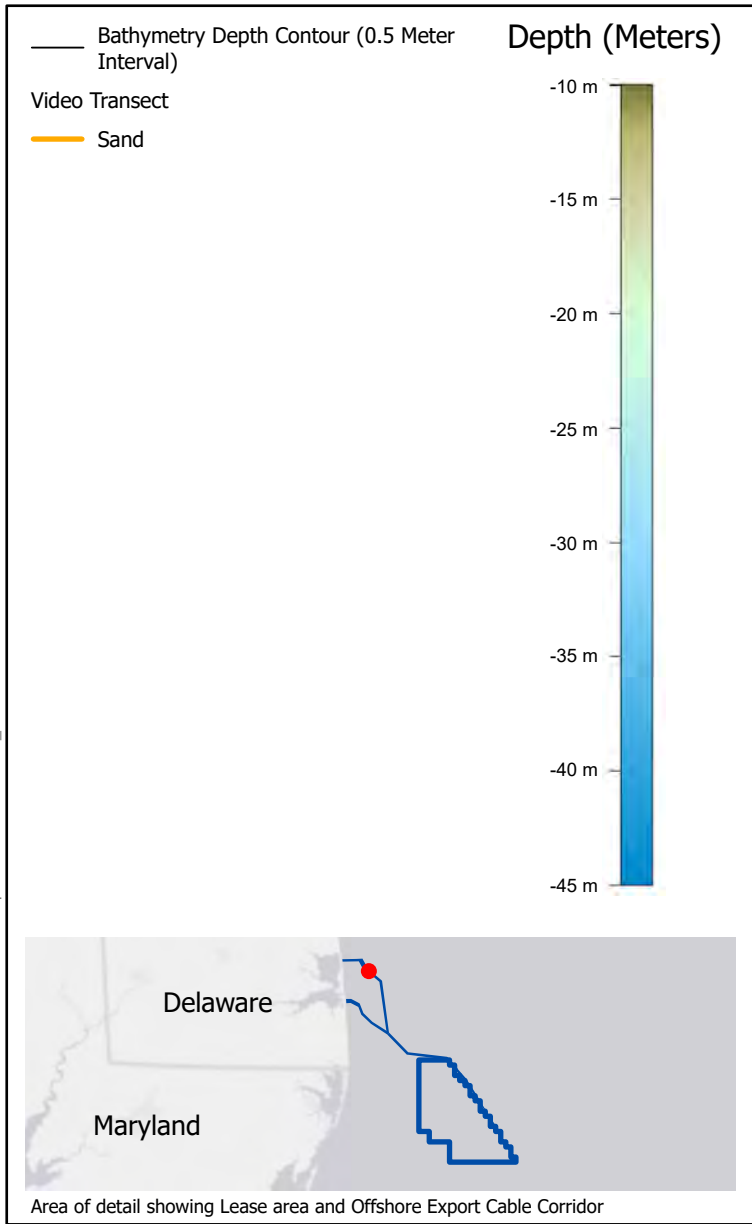
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
 1) GEMS, Bathymetry, 2022  
 2) TDI, Video Transect Position Data, 2021  
 3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-AC-79



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



### Maryland Offshore Wind Project

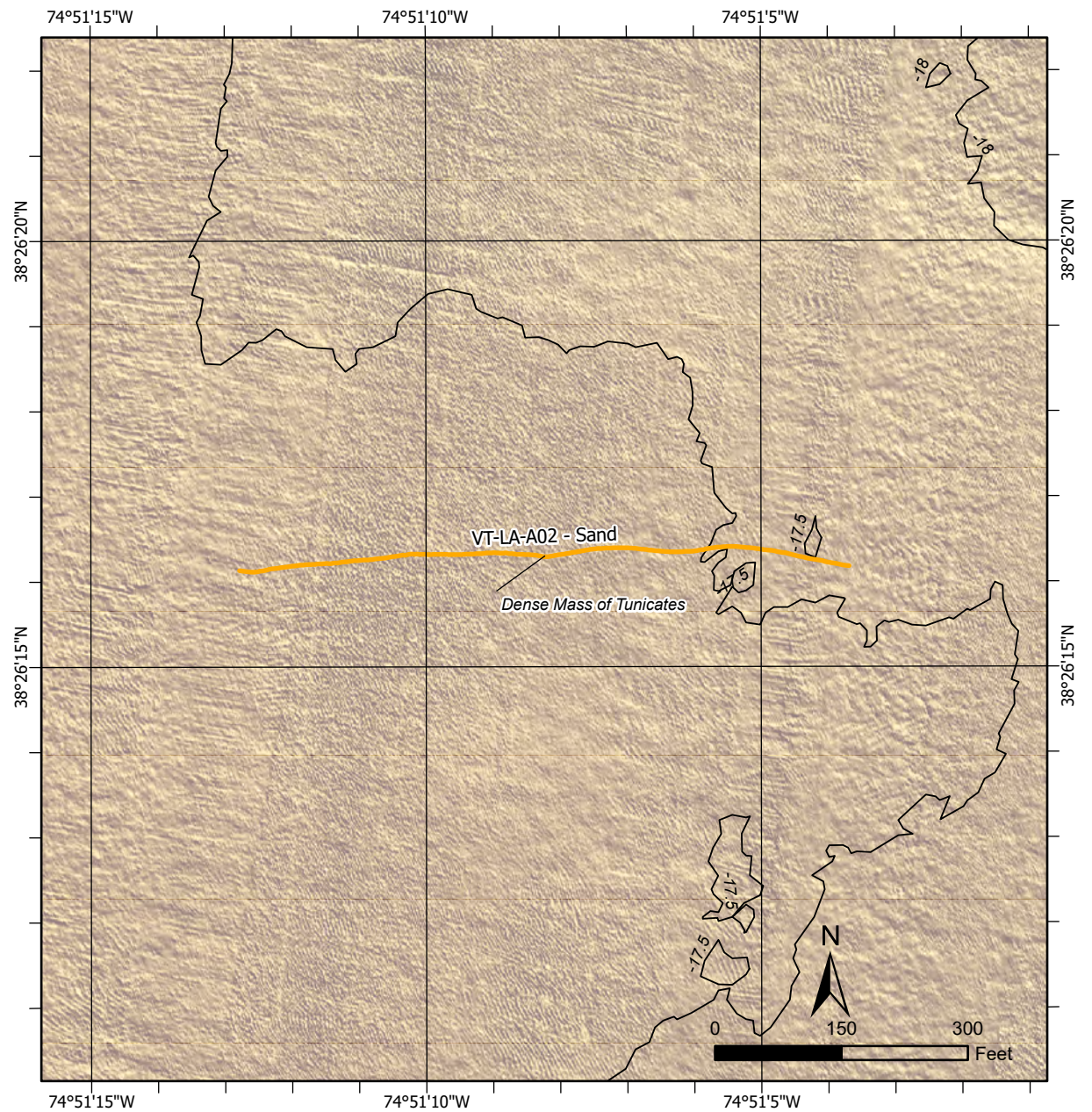
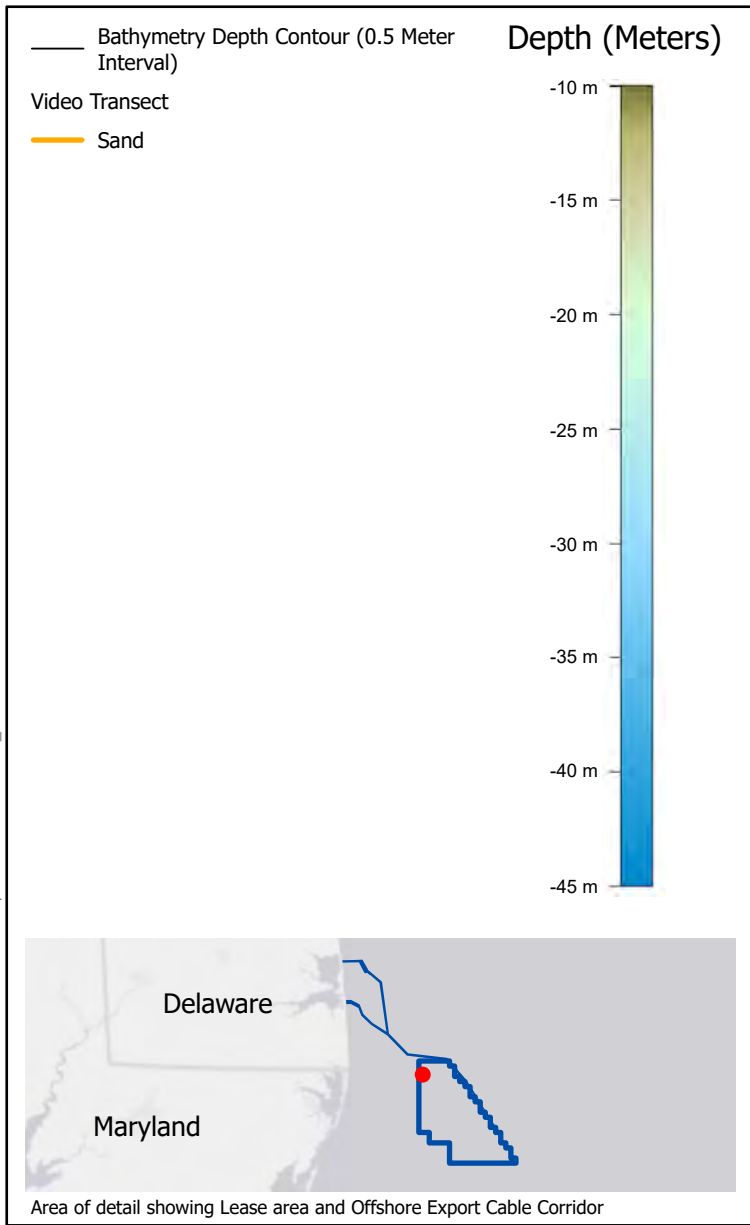
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-AC-81



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

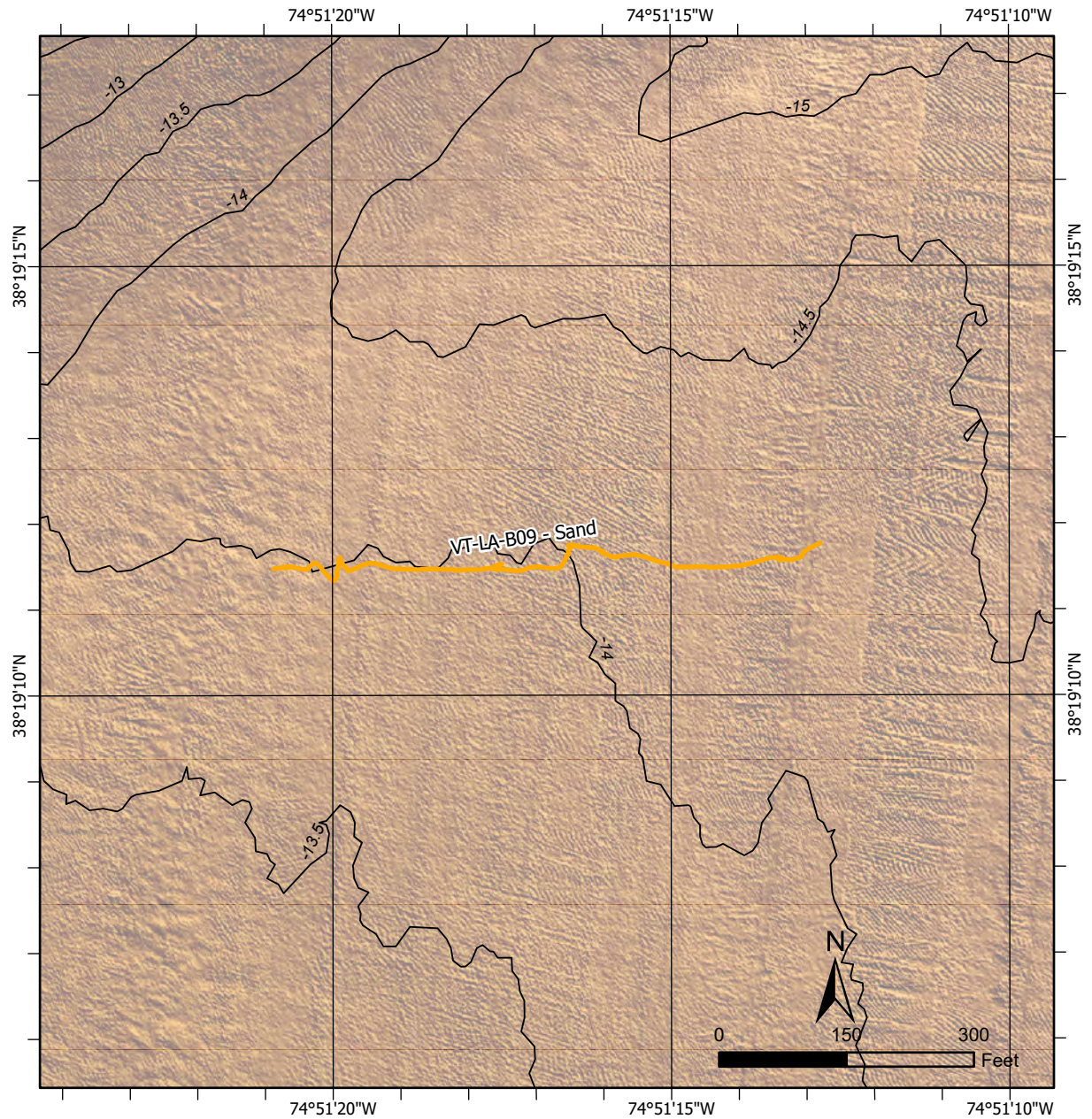
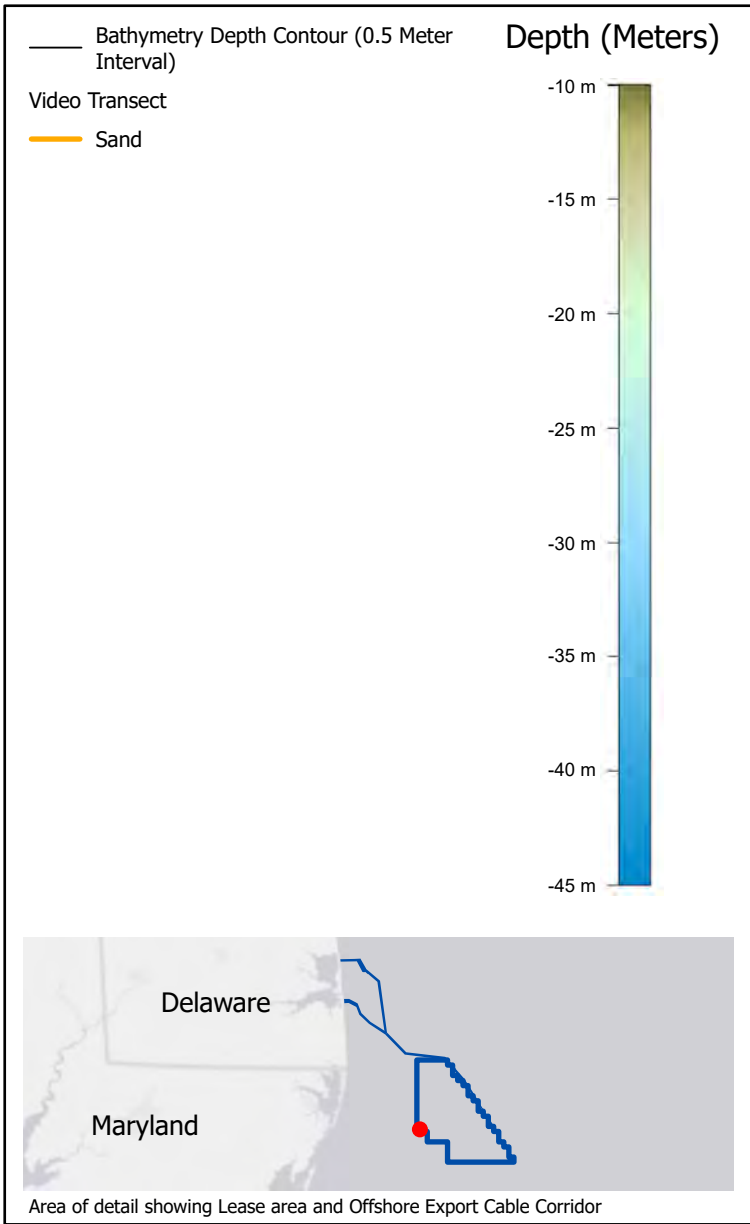
### Benthic Characterization for ROV Track

VT-LA-A02

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



### Maryland Offshore Wind Project

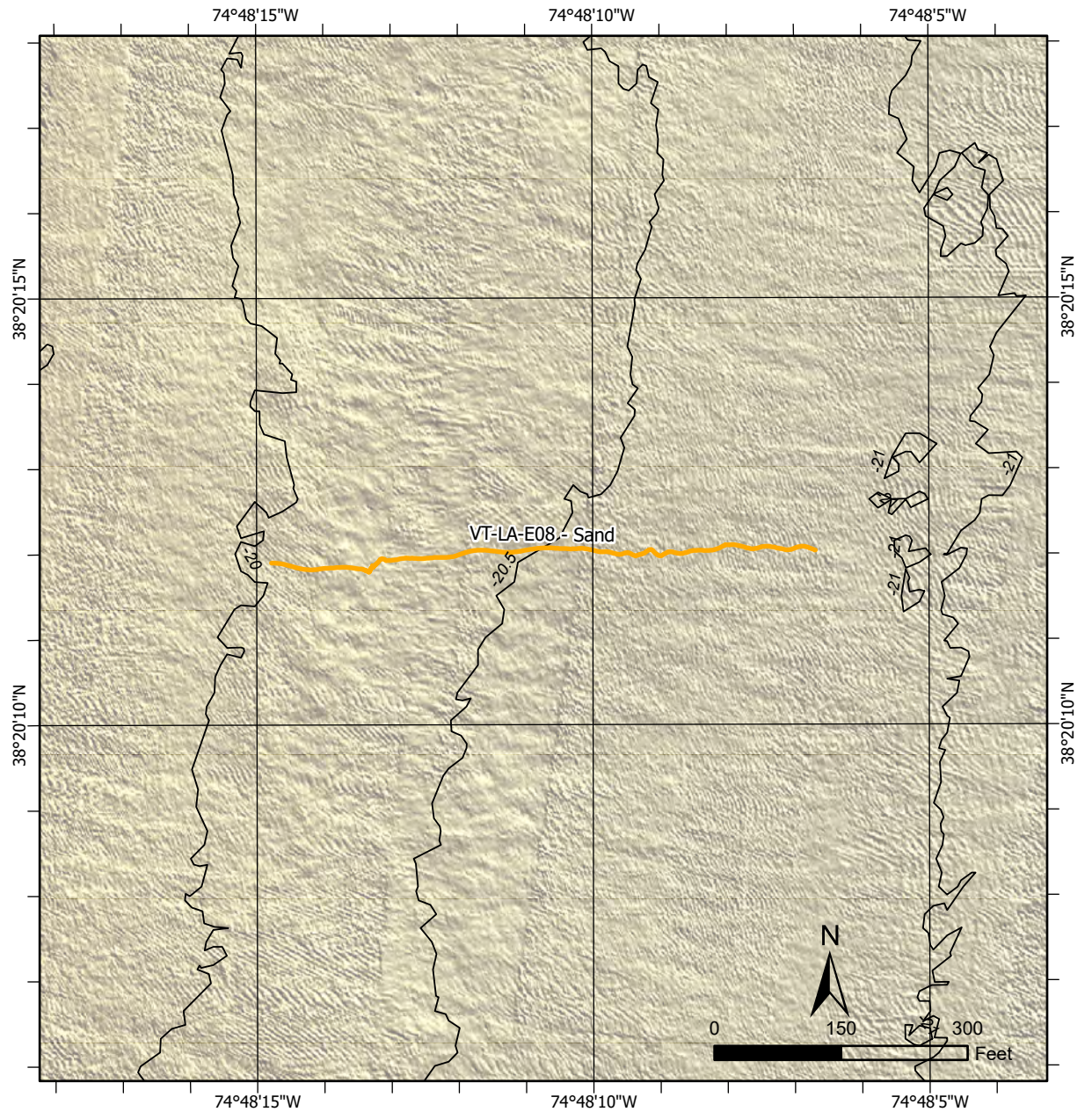
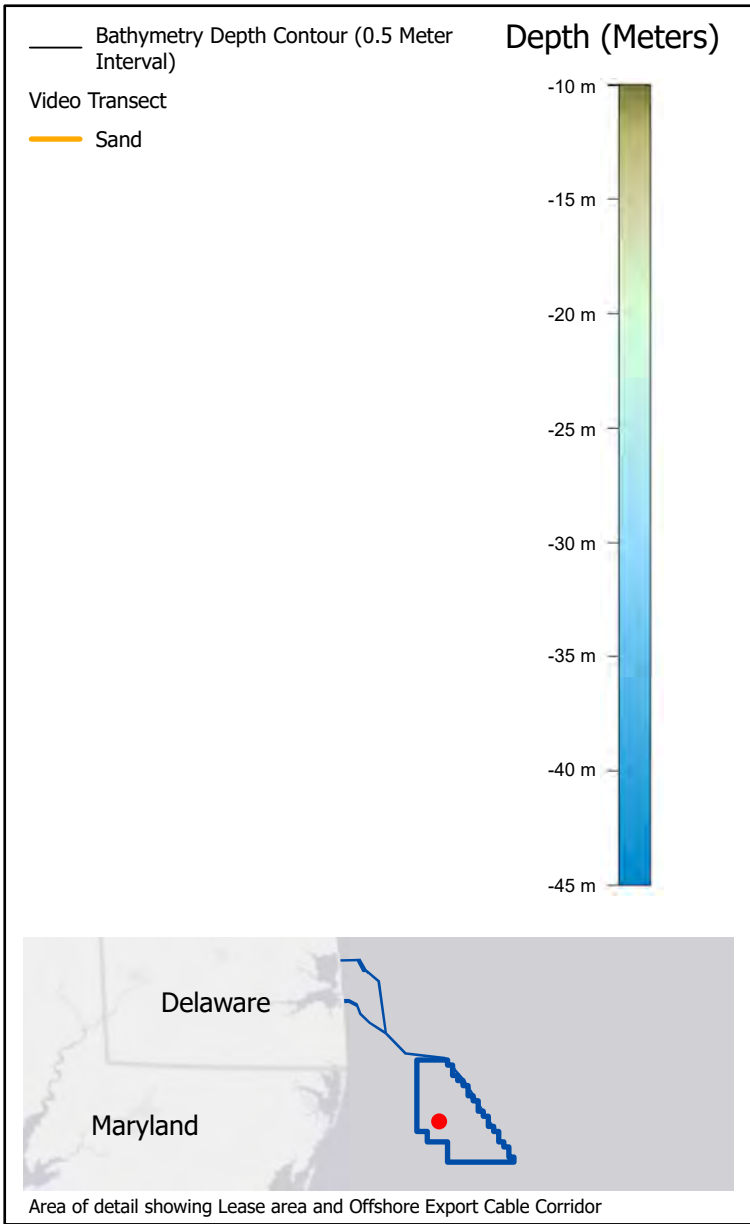
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-B09



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



### Maryland Offshore Wind Project

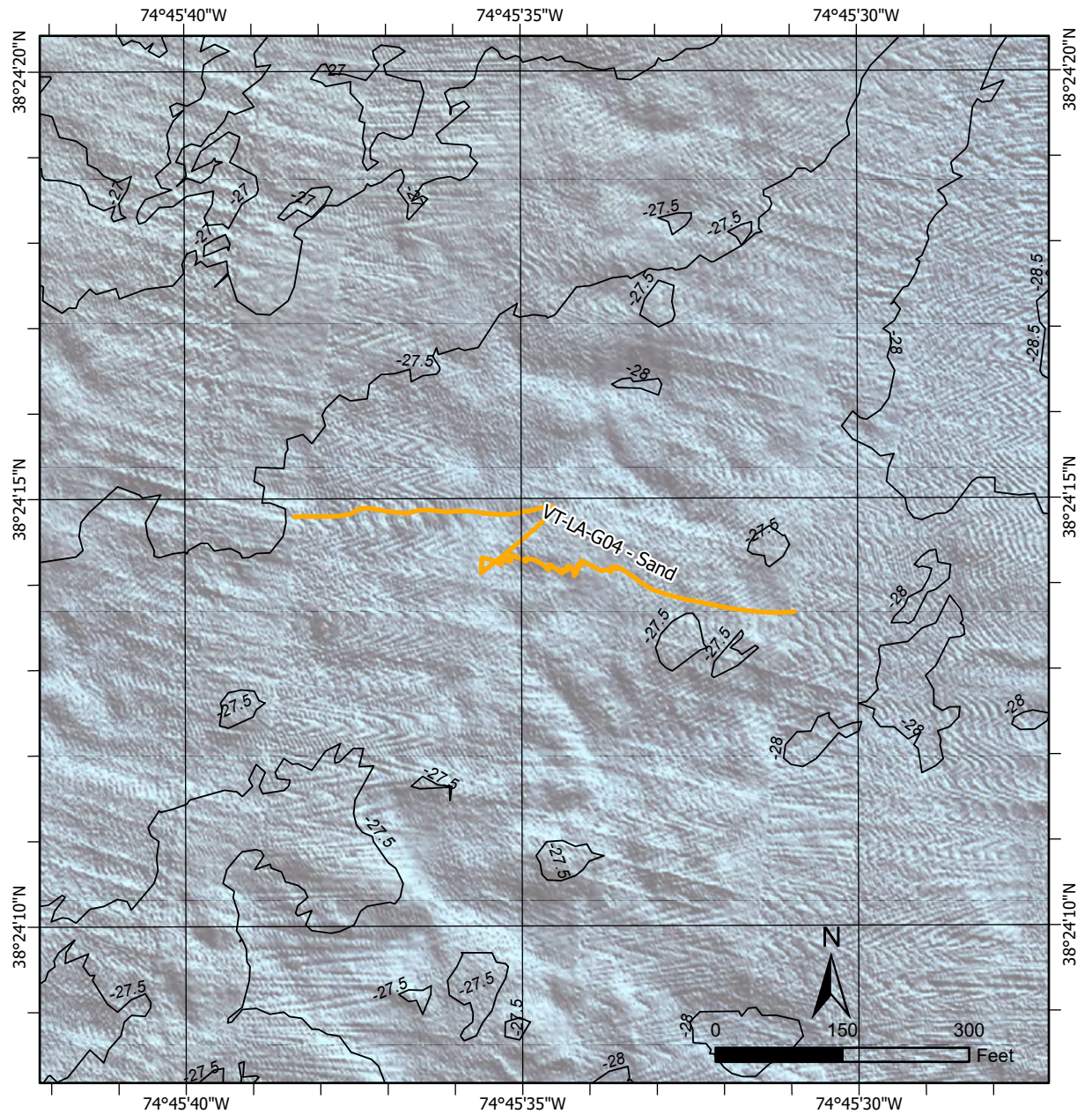
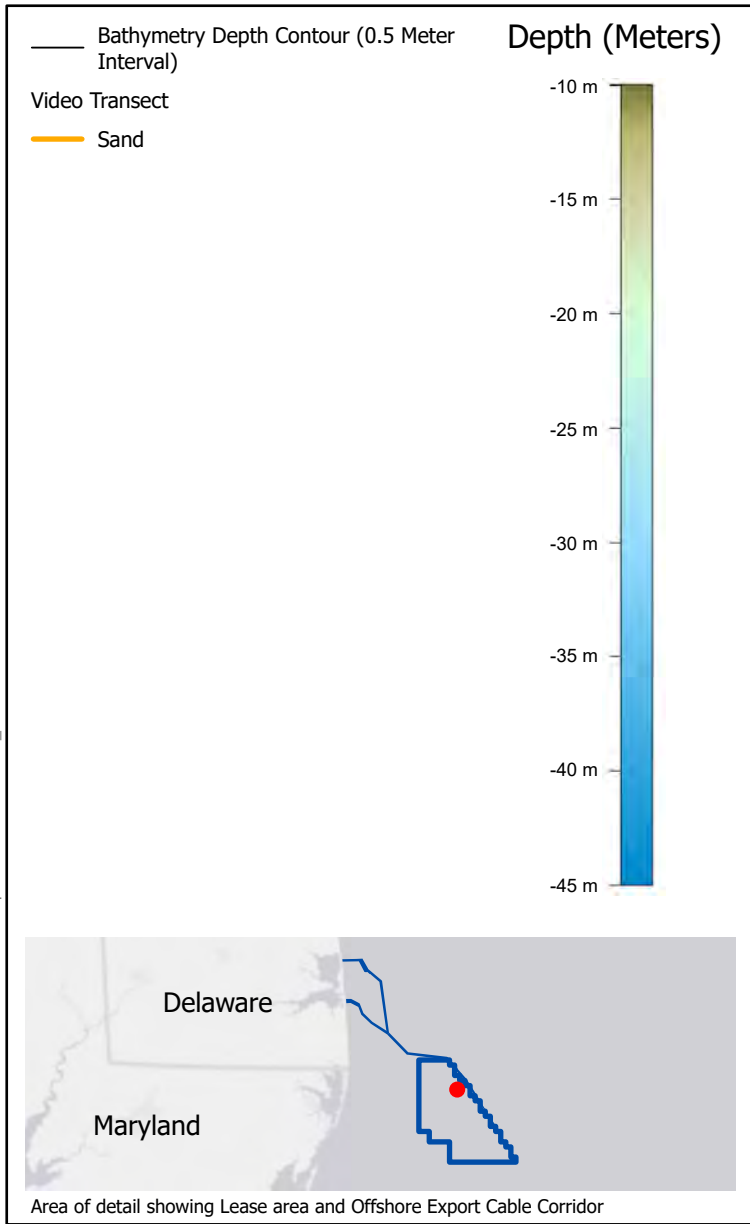
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-E08



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

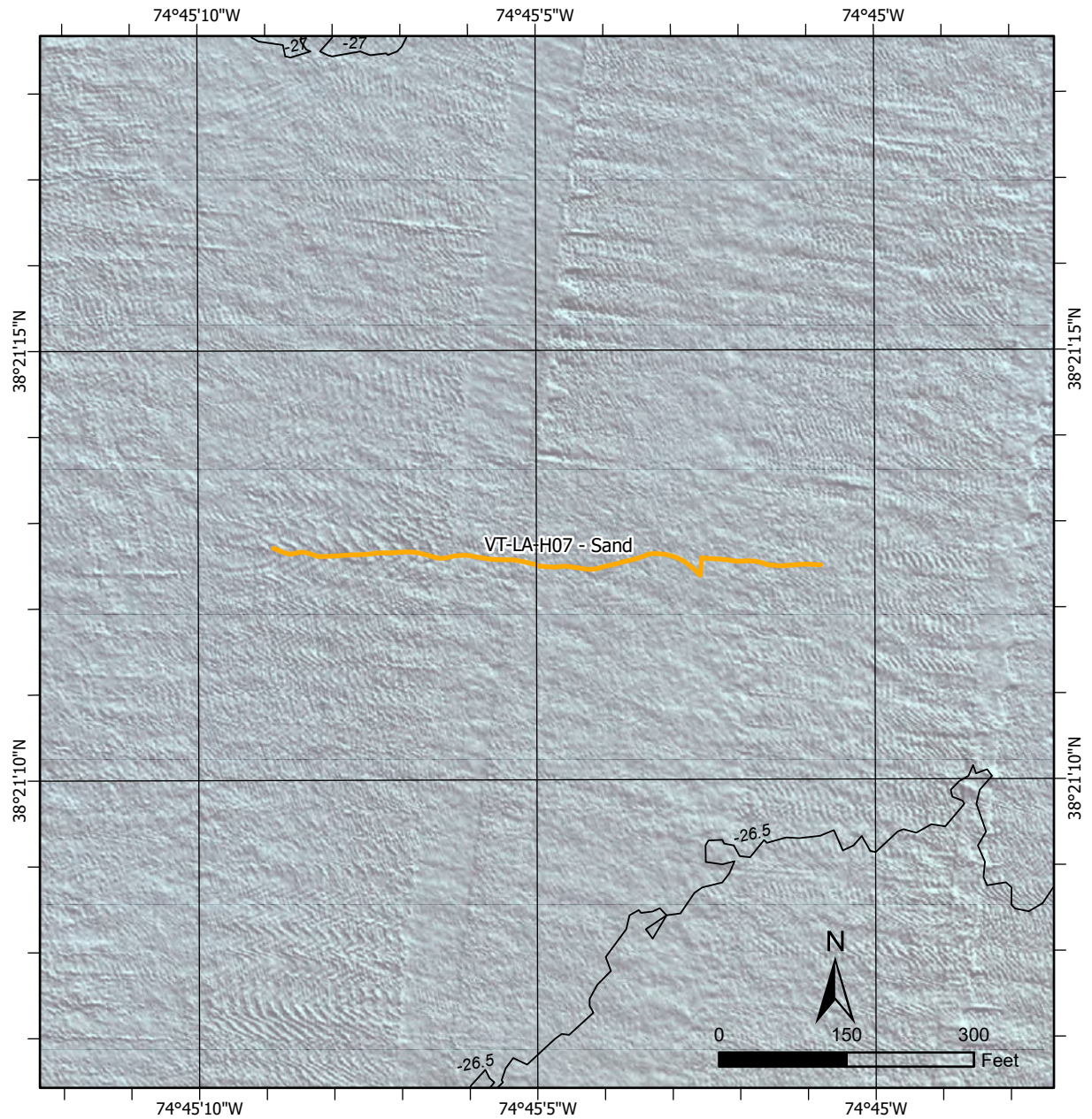
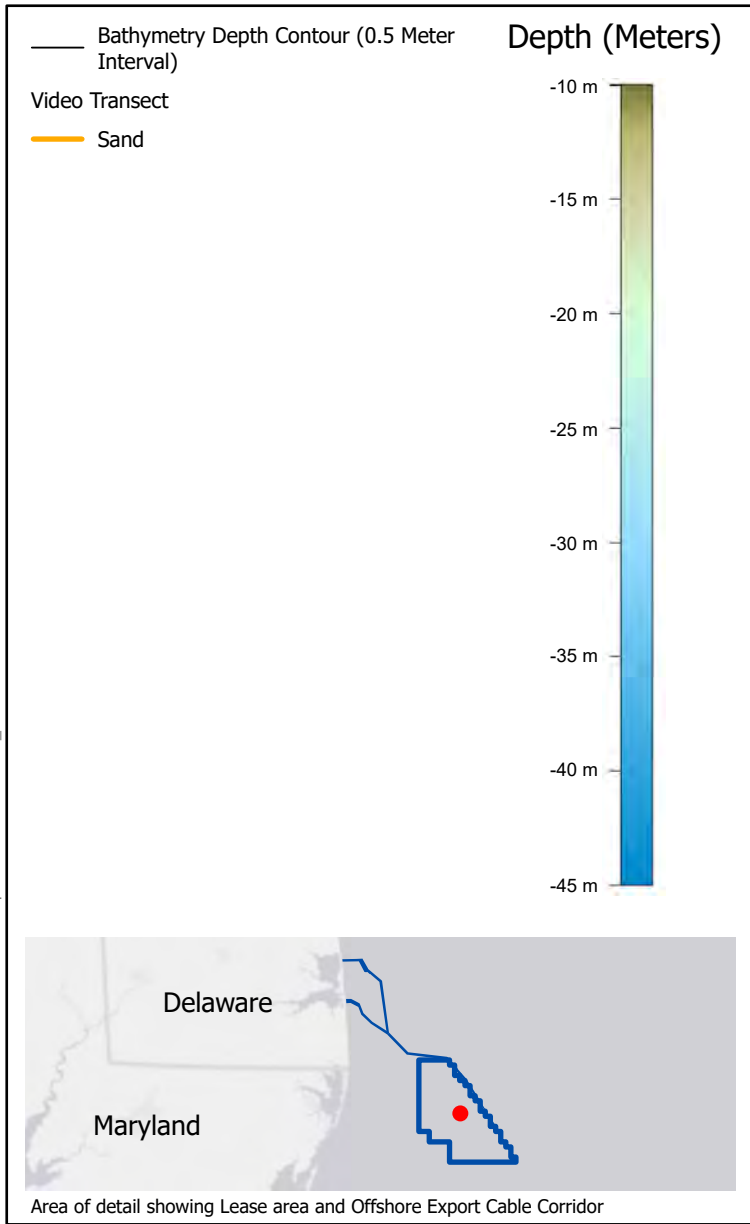
Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track

VT-LA-G04



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

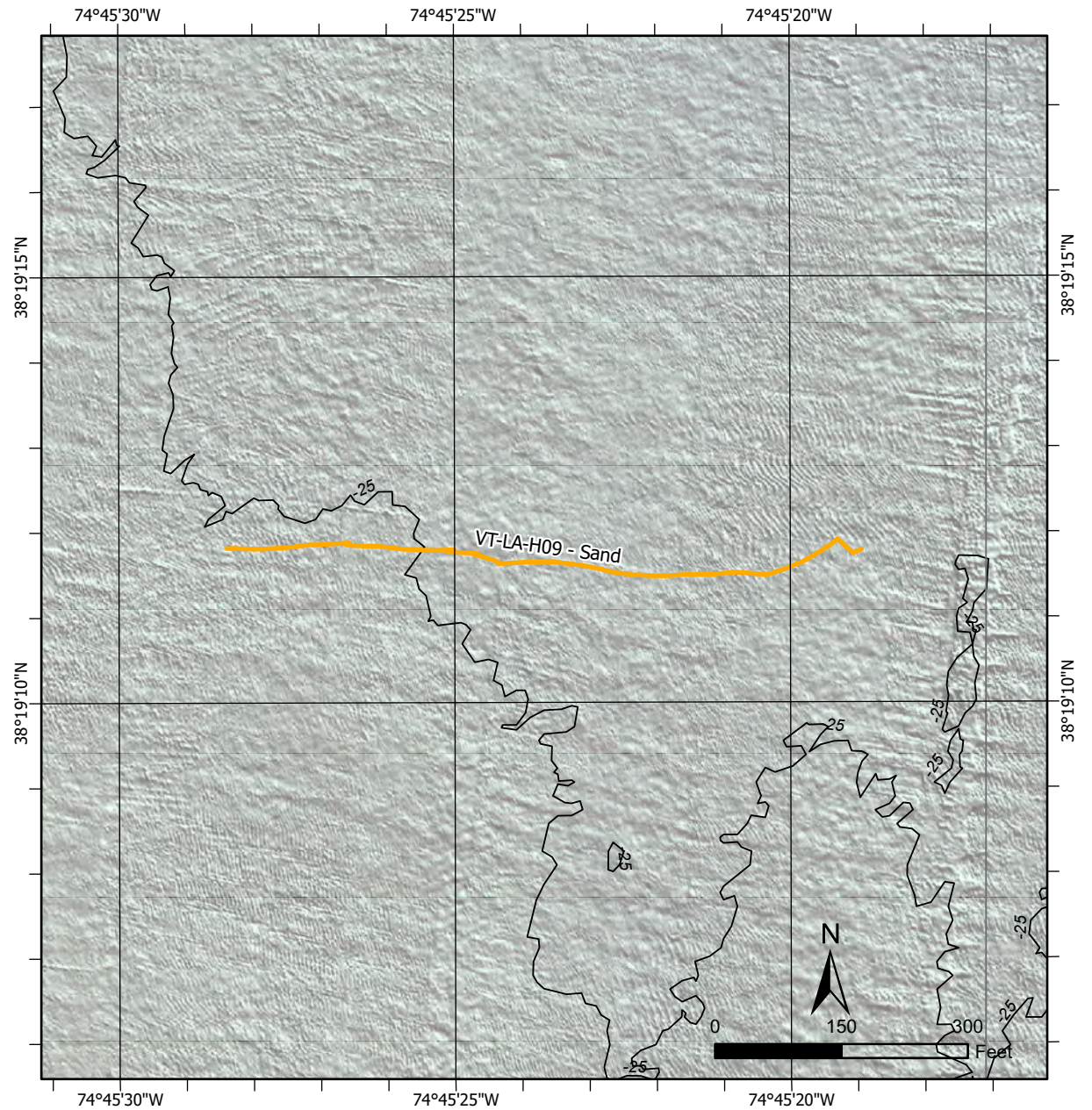
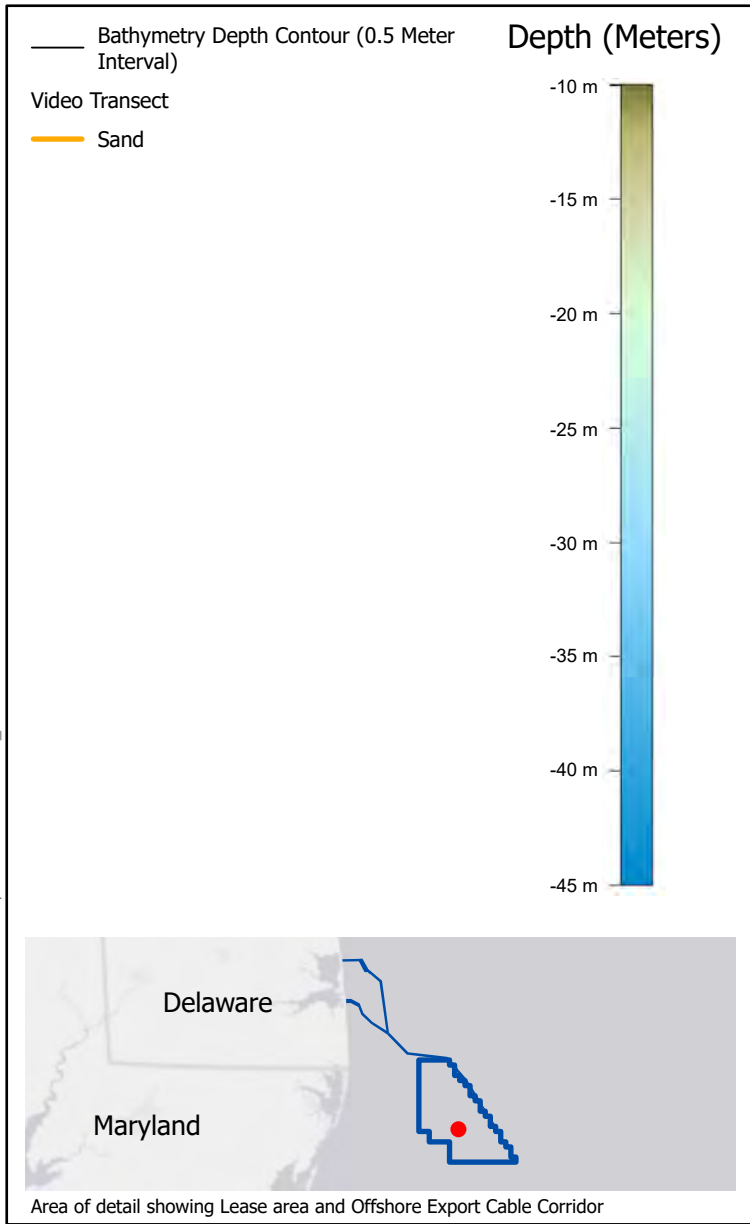
Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track

VT-LA-H07



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

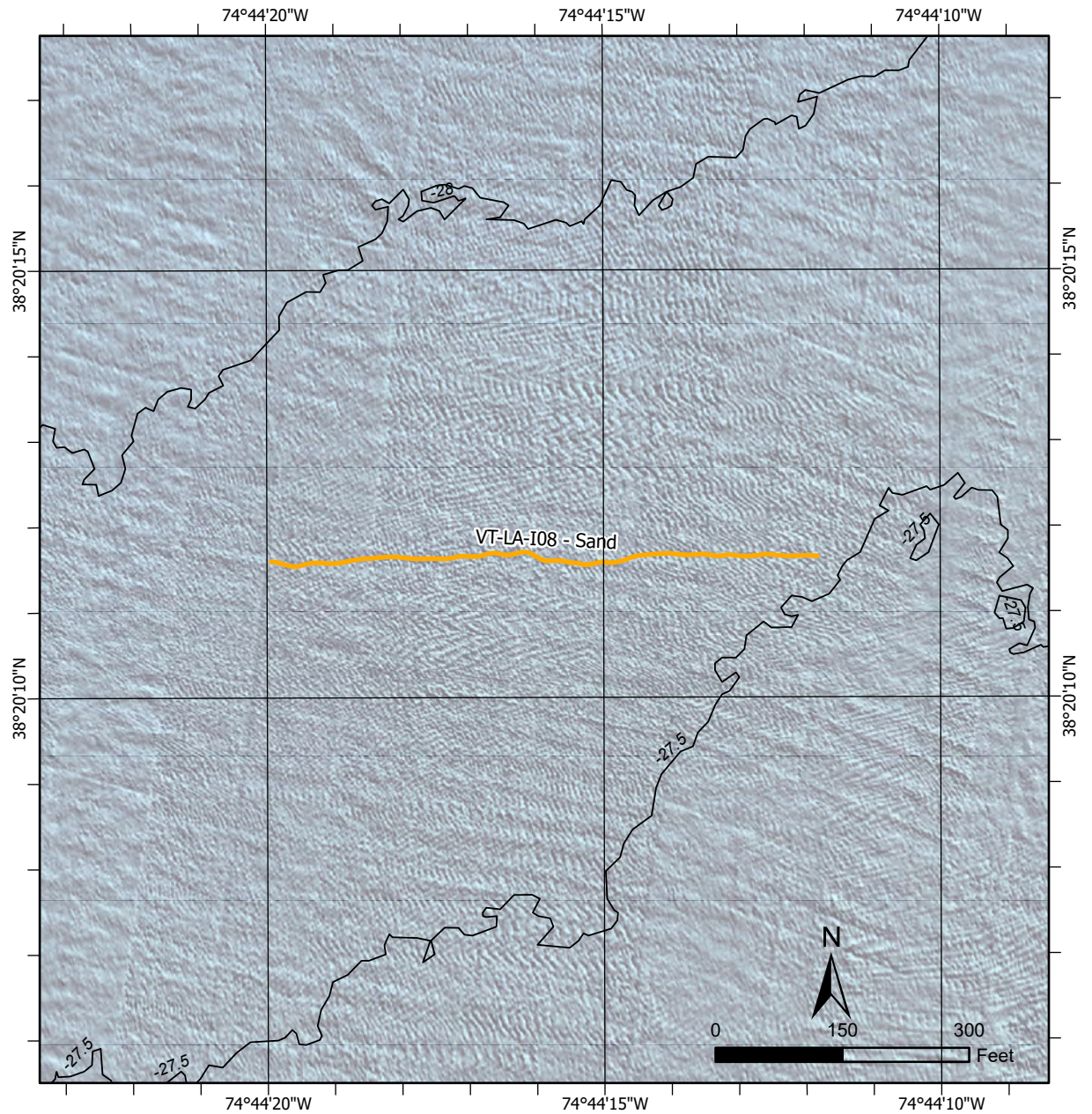
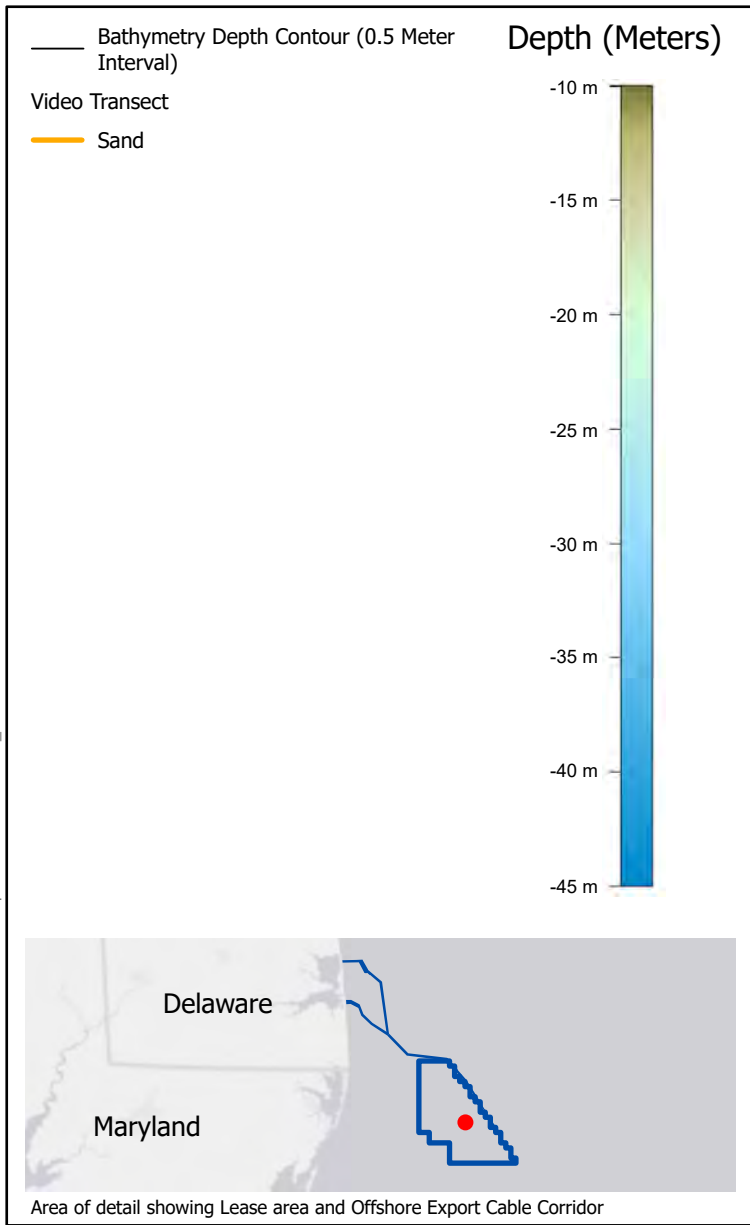
Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track

VT-LA-H09



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



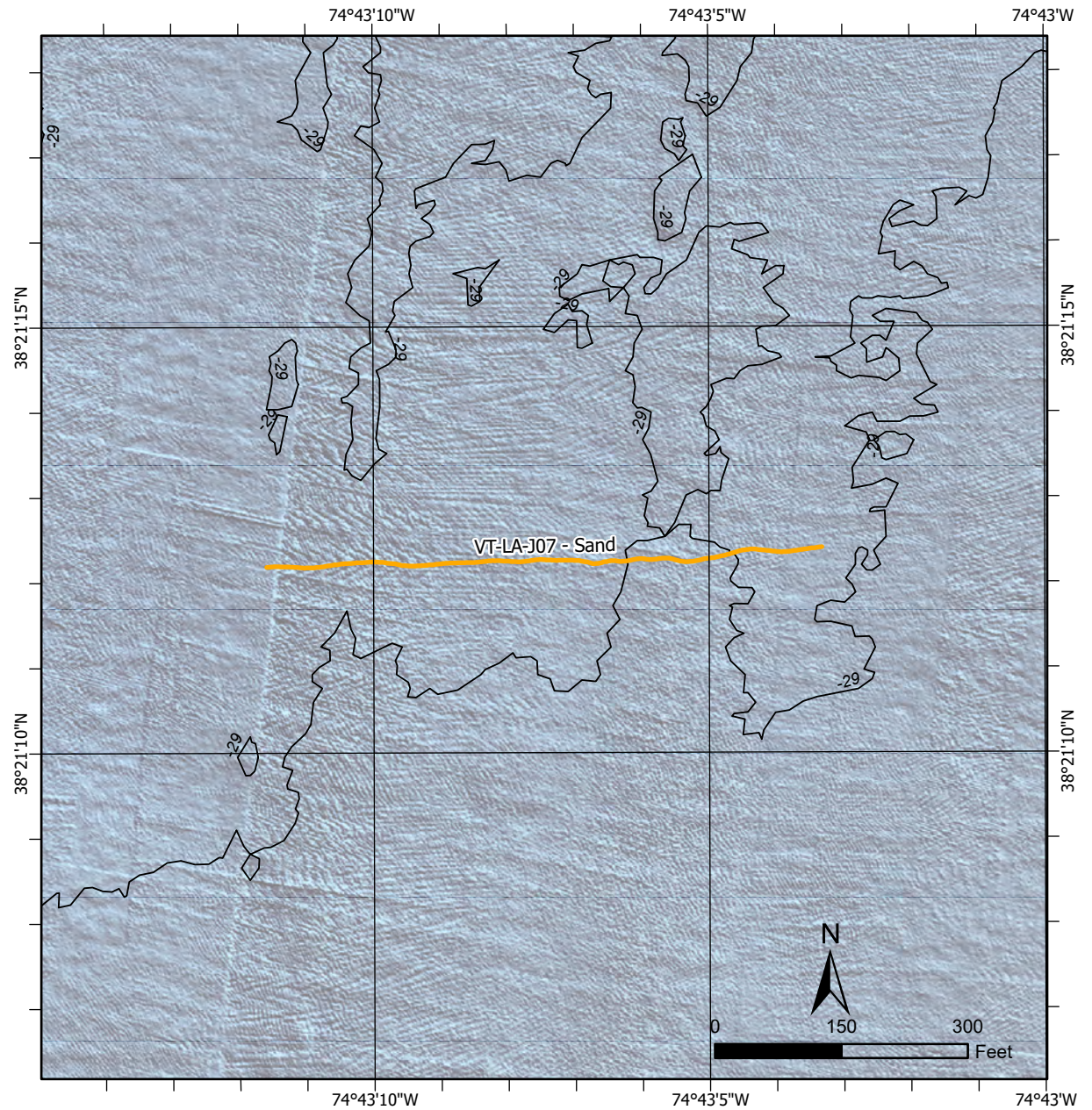
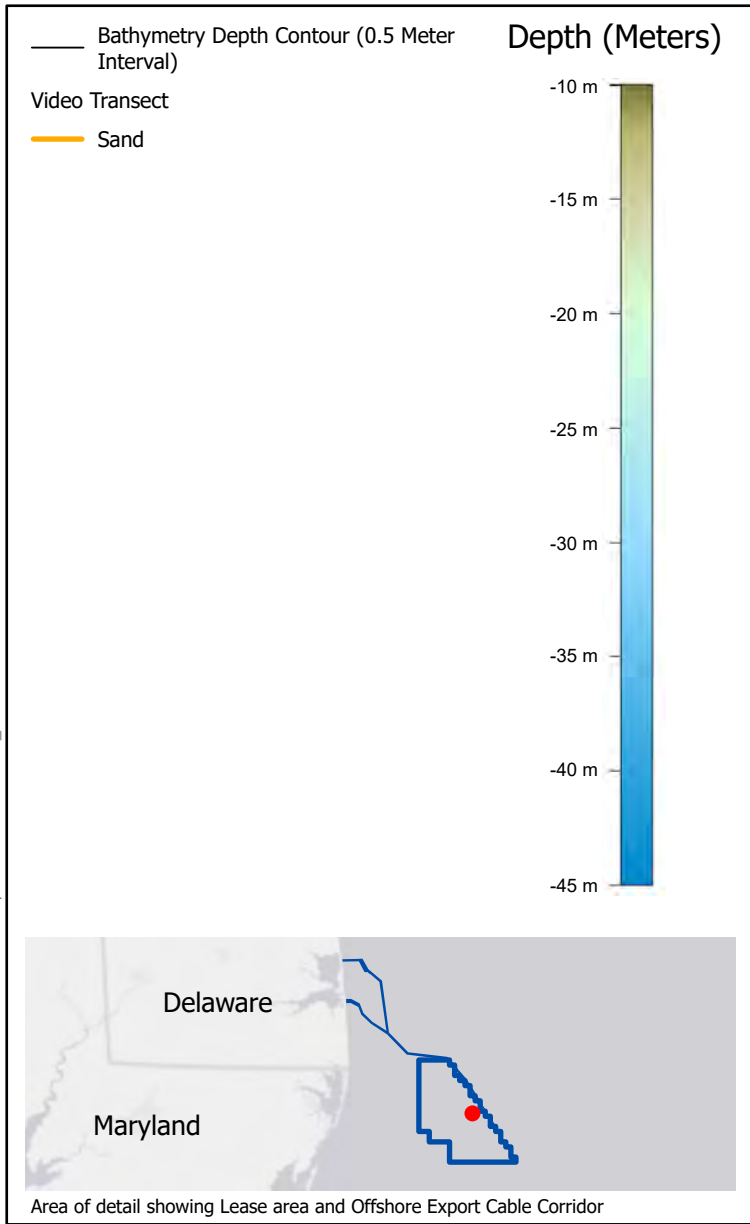
### Maryland Offshore Wind Project Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track VT-LA-I08



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

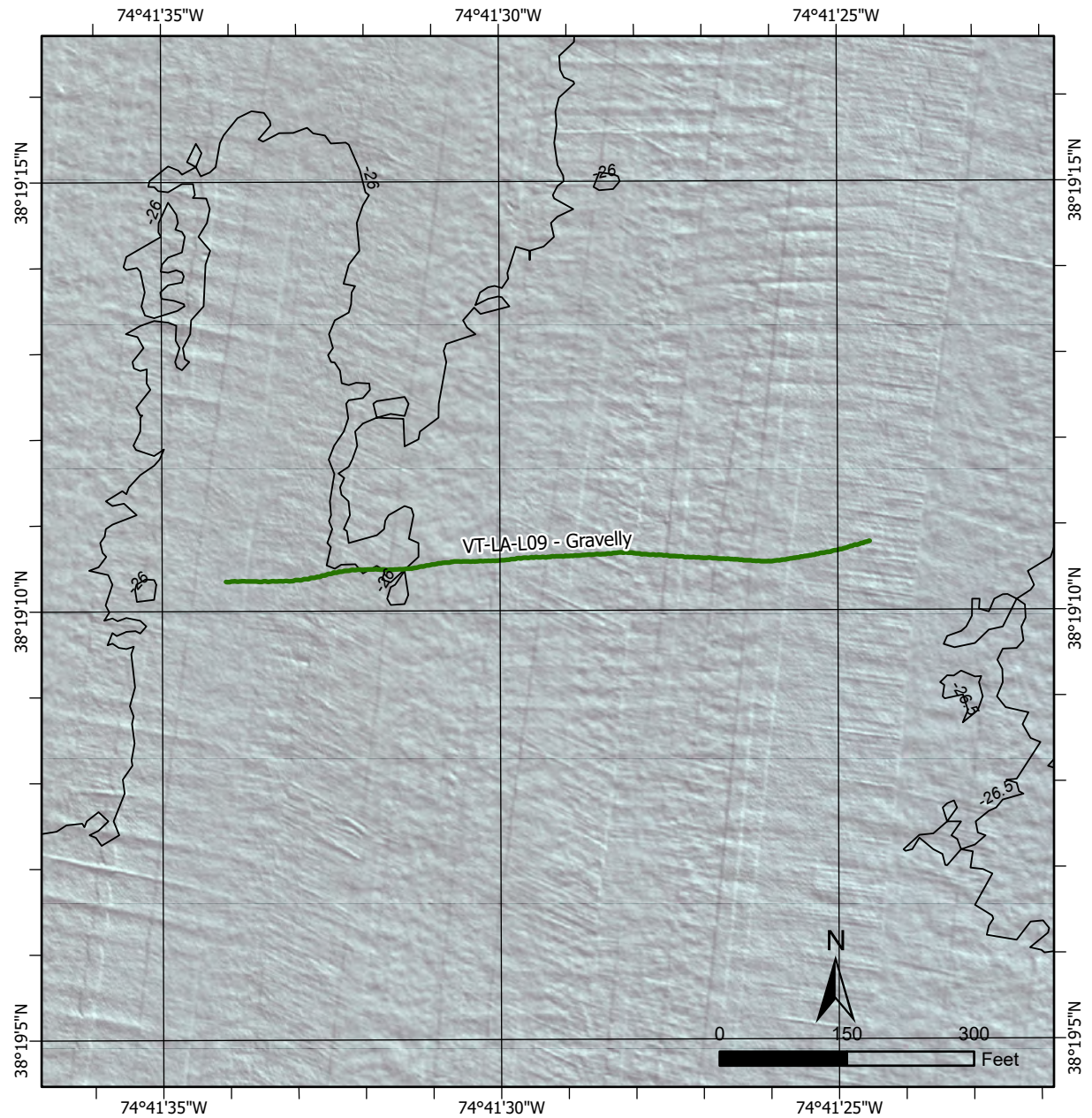
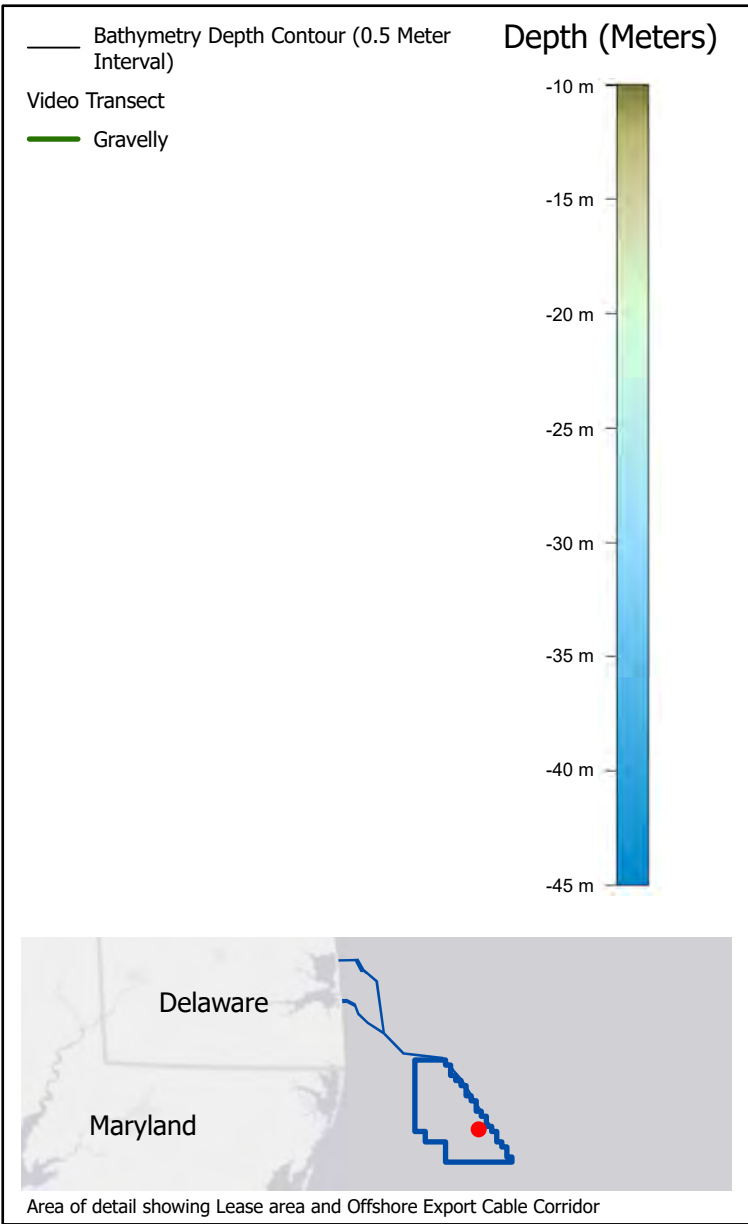
Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track

VT-LA-J07



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



### Maryland Offshore Wind Project

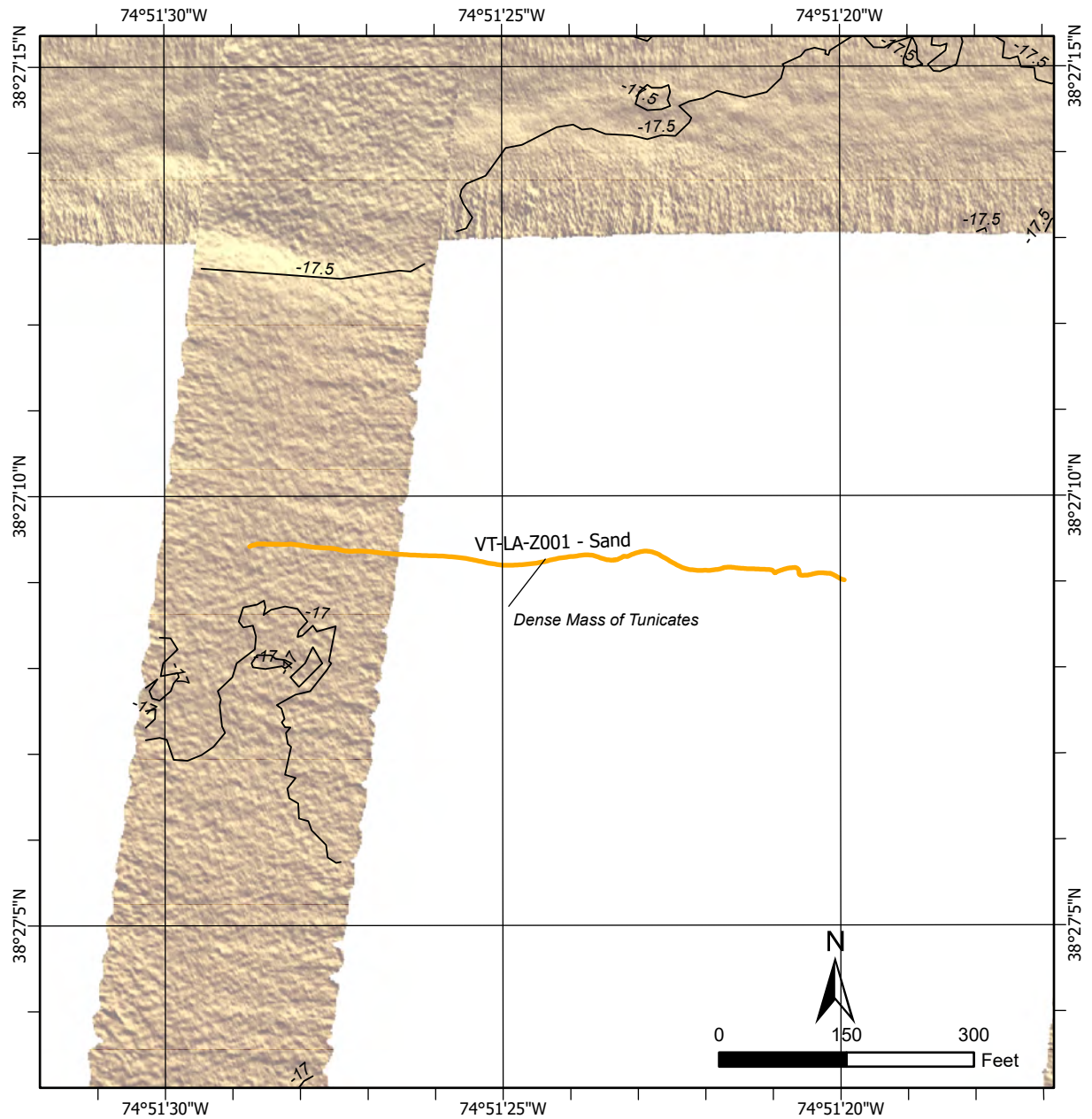
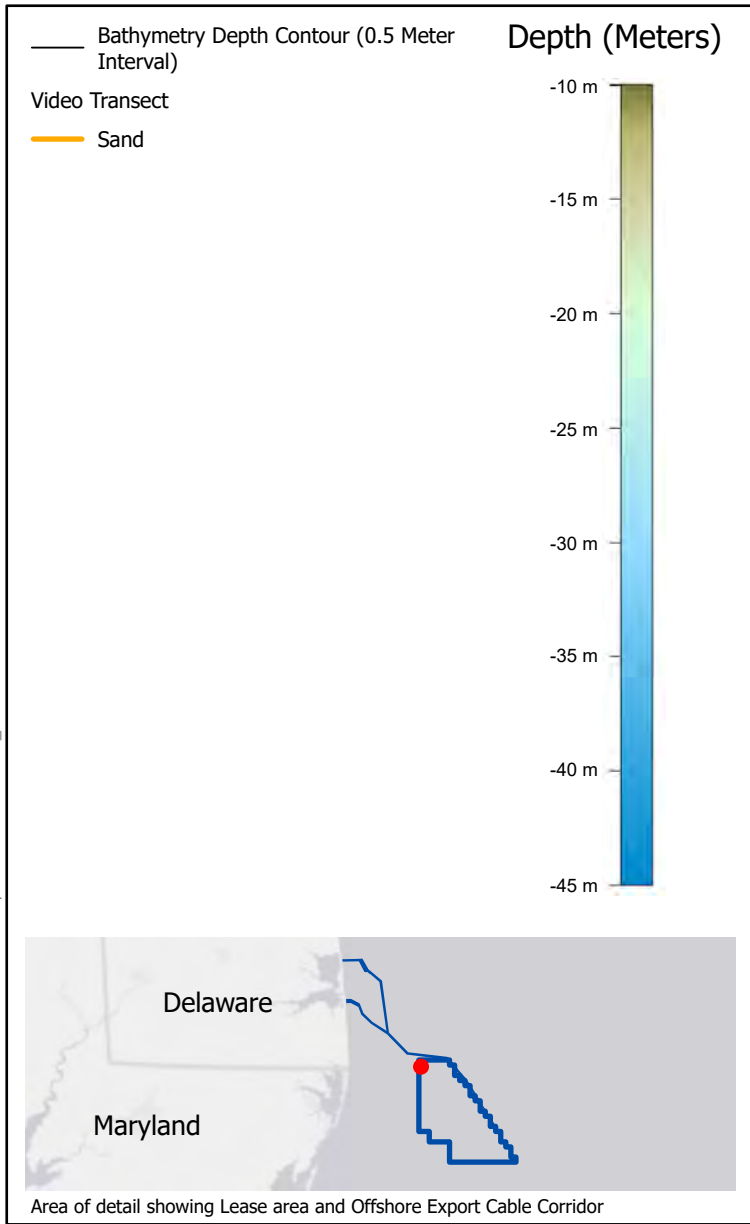
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track

VT-LA-L09

Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APR\XU167\_ROV\tracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

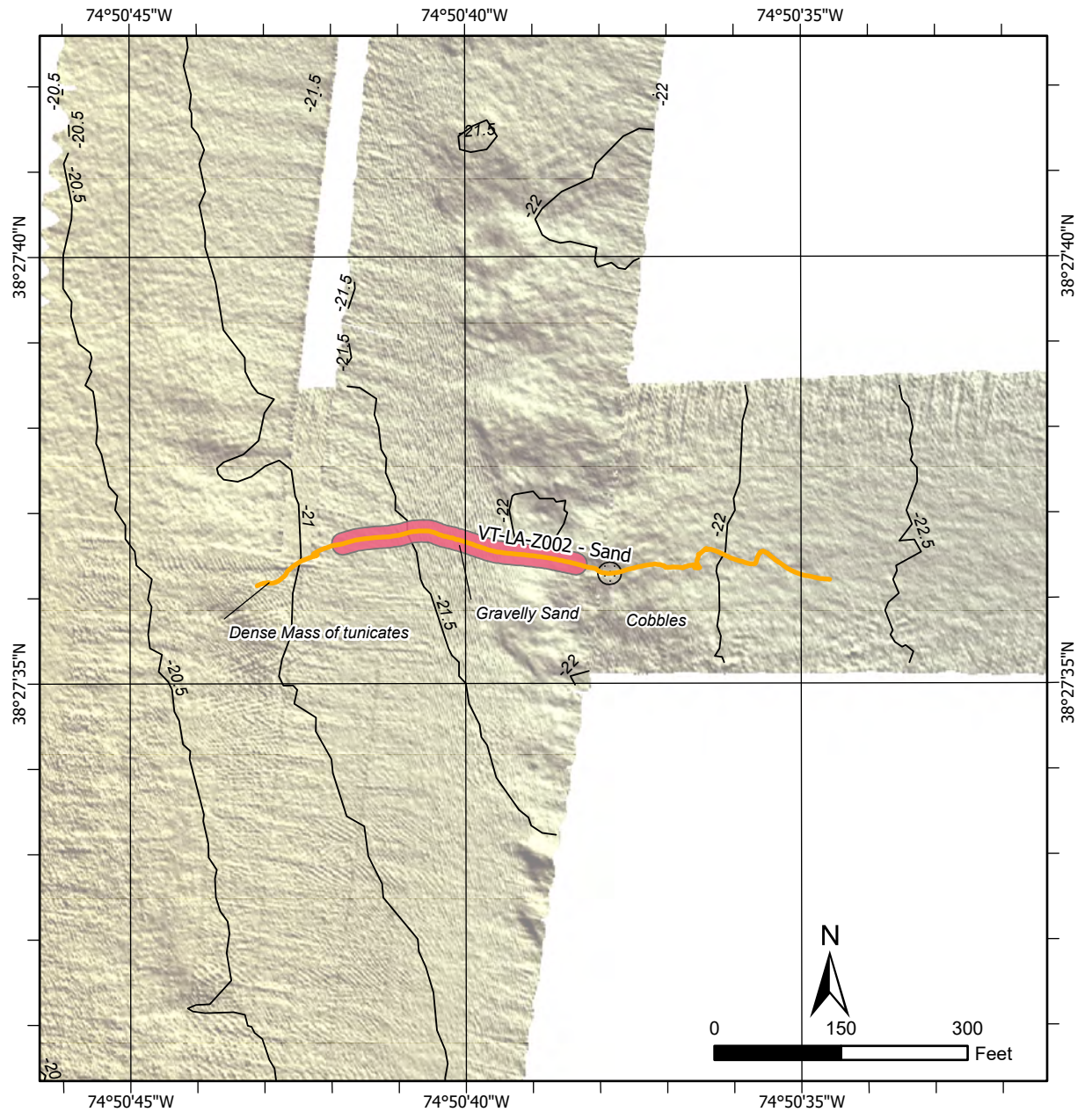
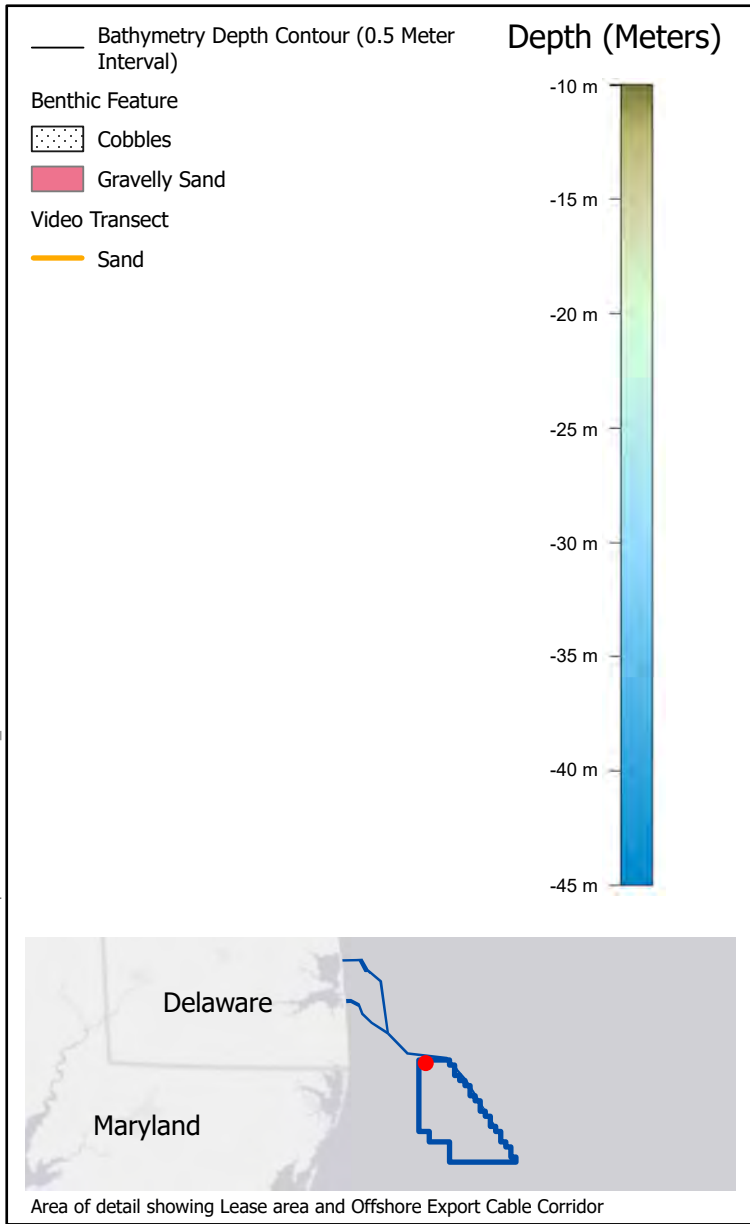
### Benthic Characterization for ROV Track

VT-LA-Z001

- Source:
- 1) GEMS, Bathymetry, 2022
  - 2) TDI, Video Transect Position Data, 2021
  - 3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01

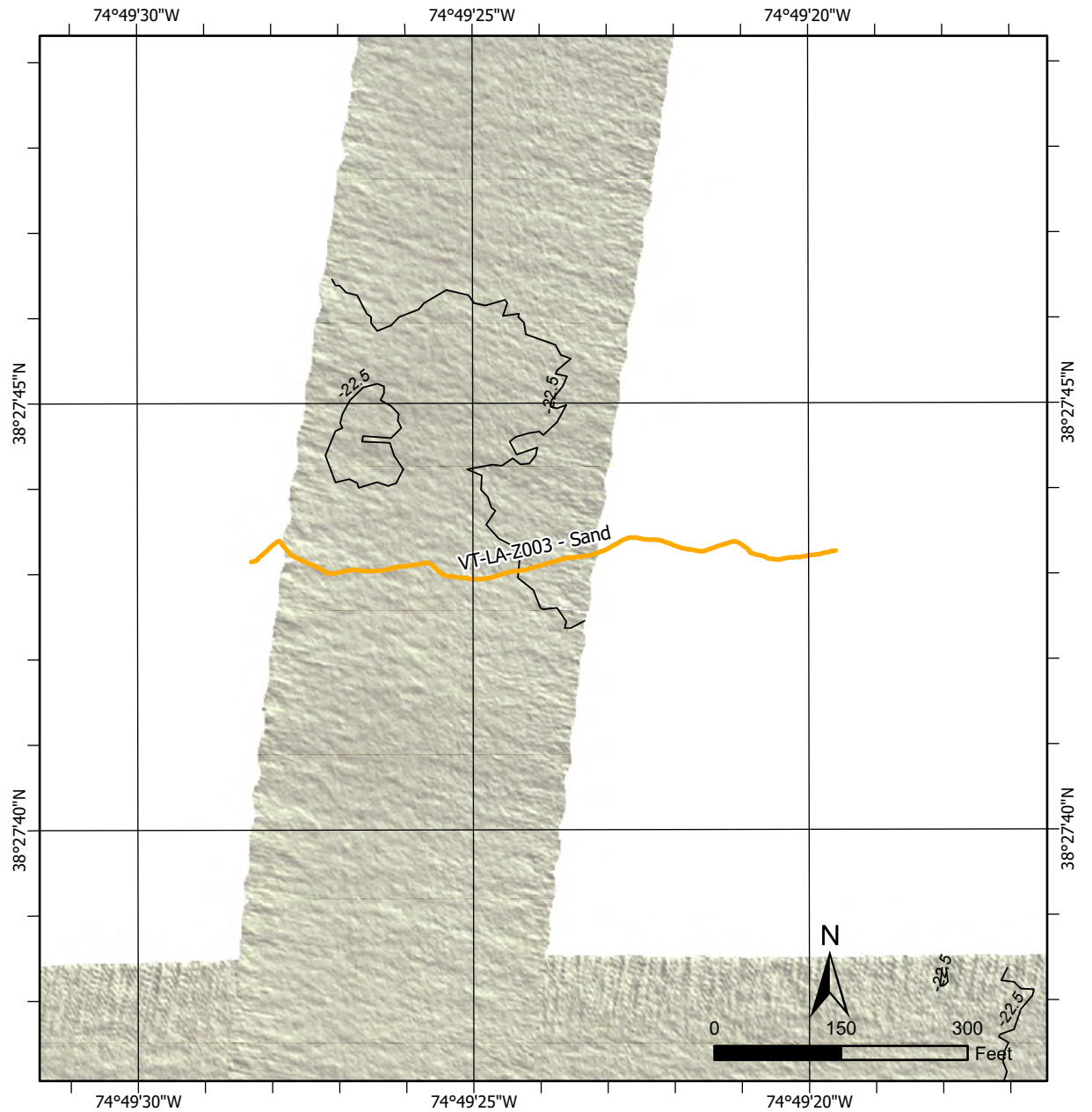
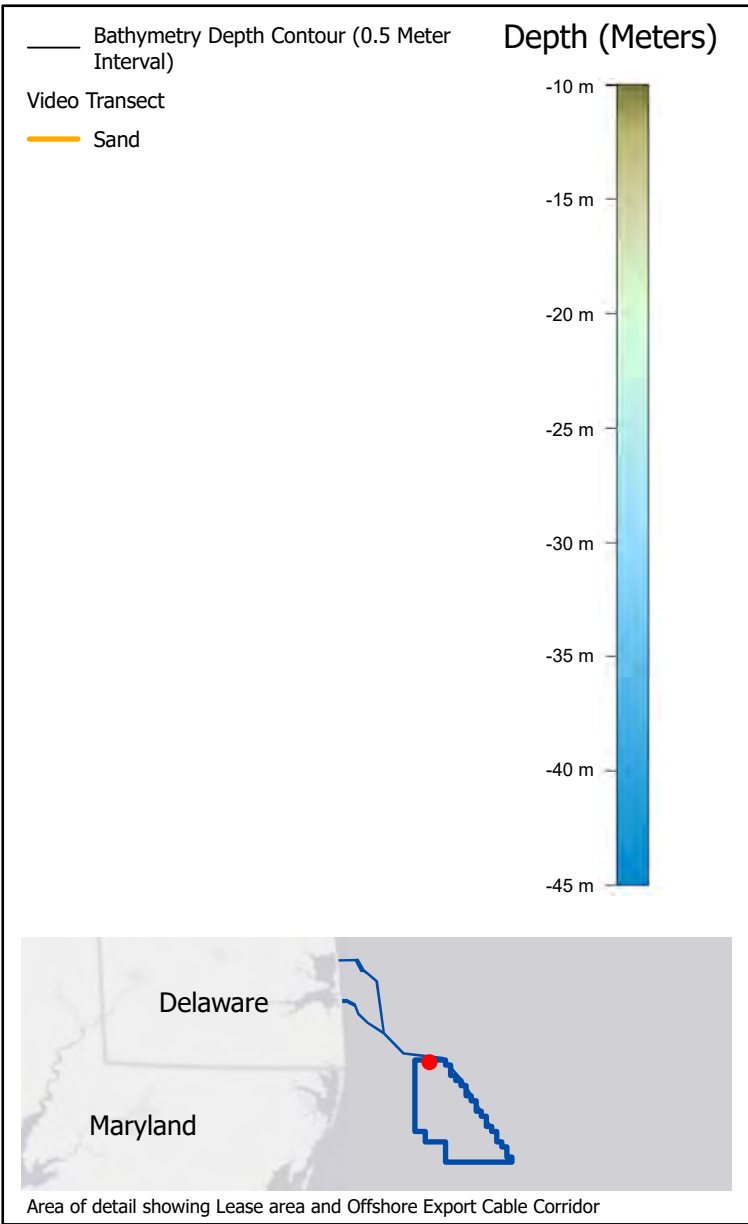


**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z002

Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



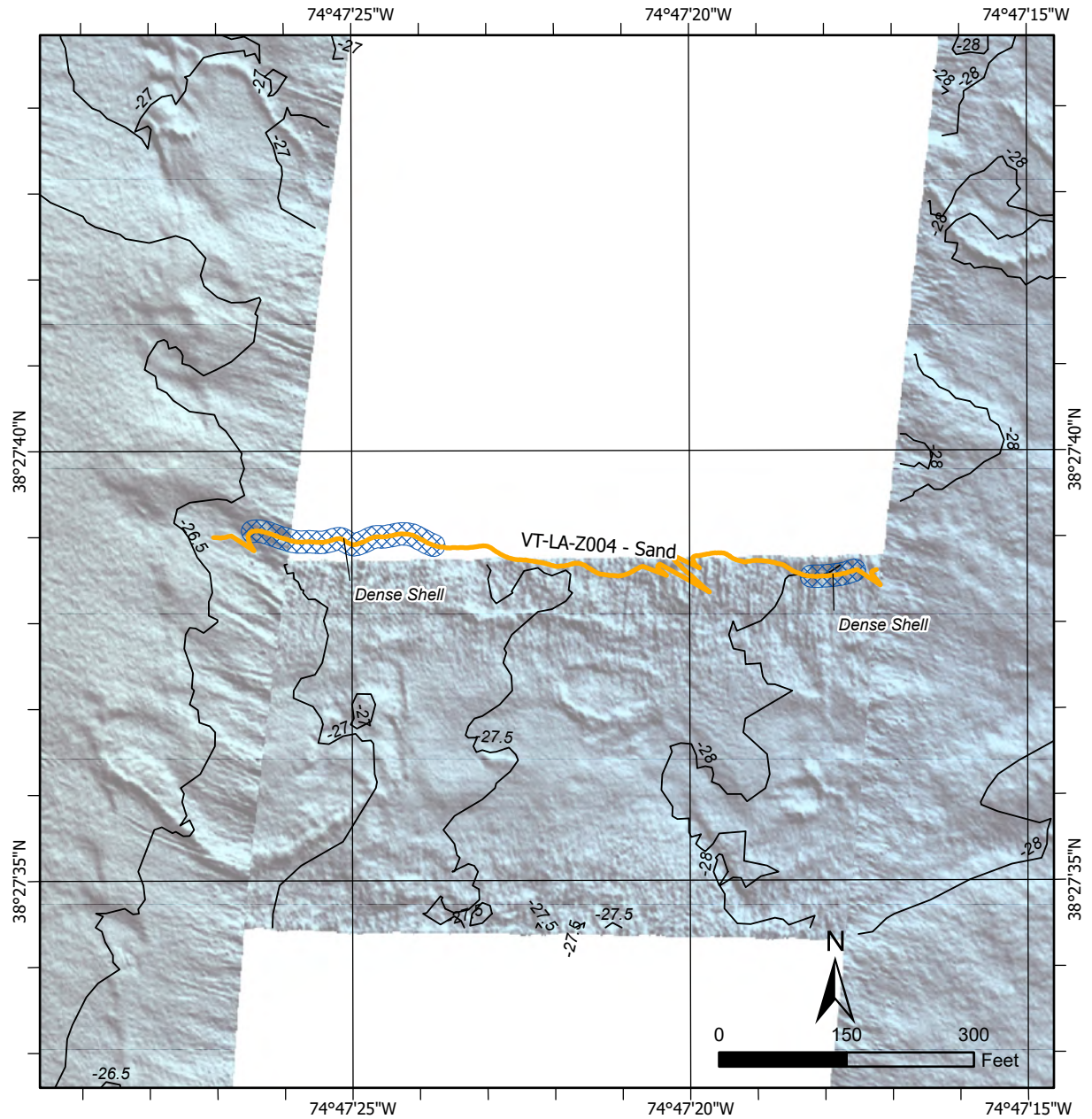
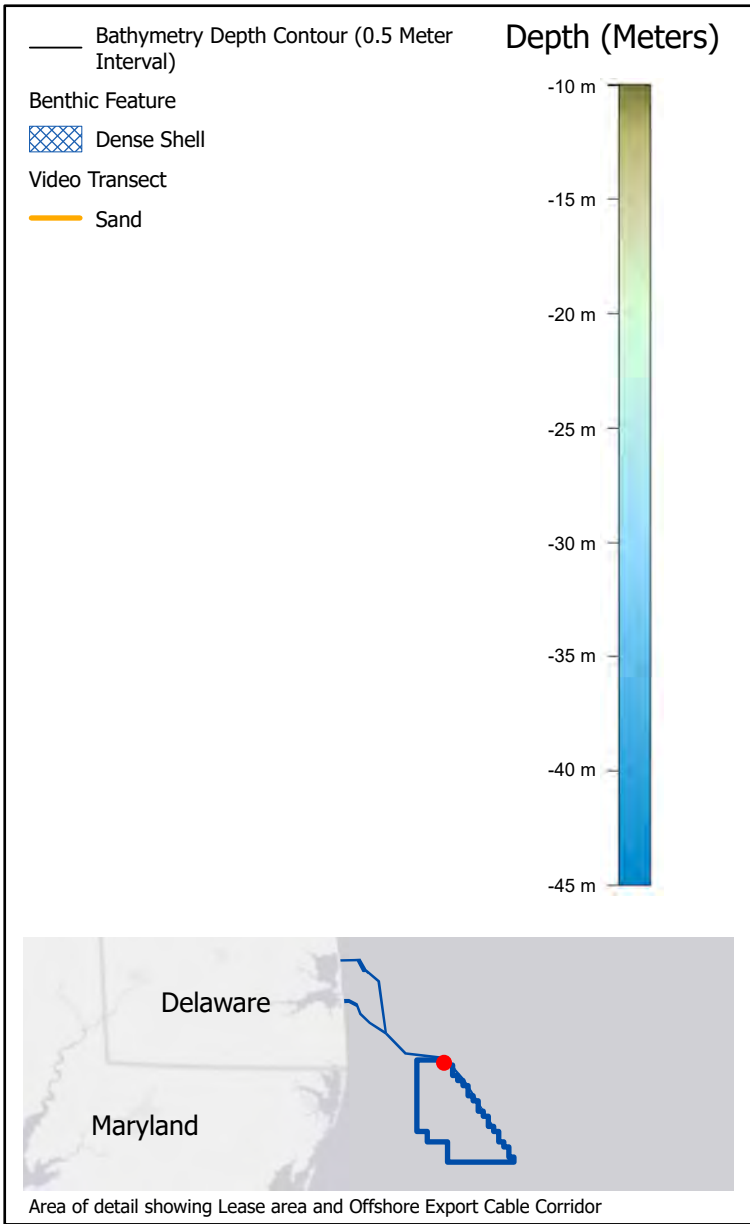
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
 1) GEMS, Bathymetry, 2022  
 2) TDI, Video Transect Position Data, 2021  
 3) ESS, Track Characterization, 2021

**Benthic Characterization for ROV Track**  
VT-LA-Z003



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



### Maryland Offshore Wind Project

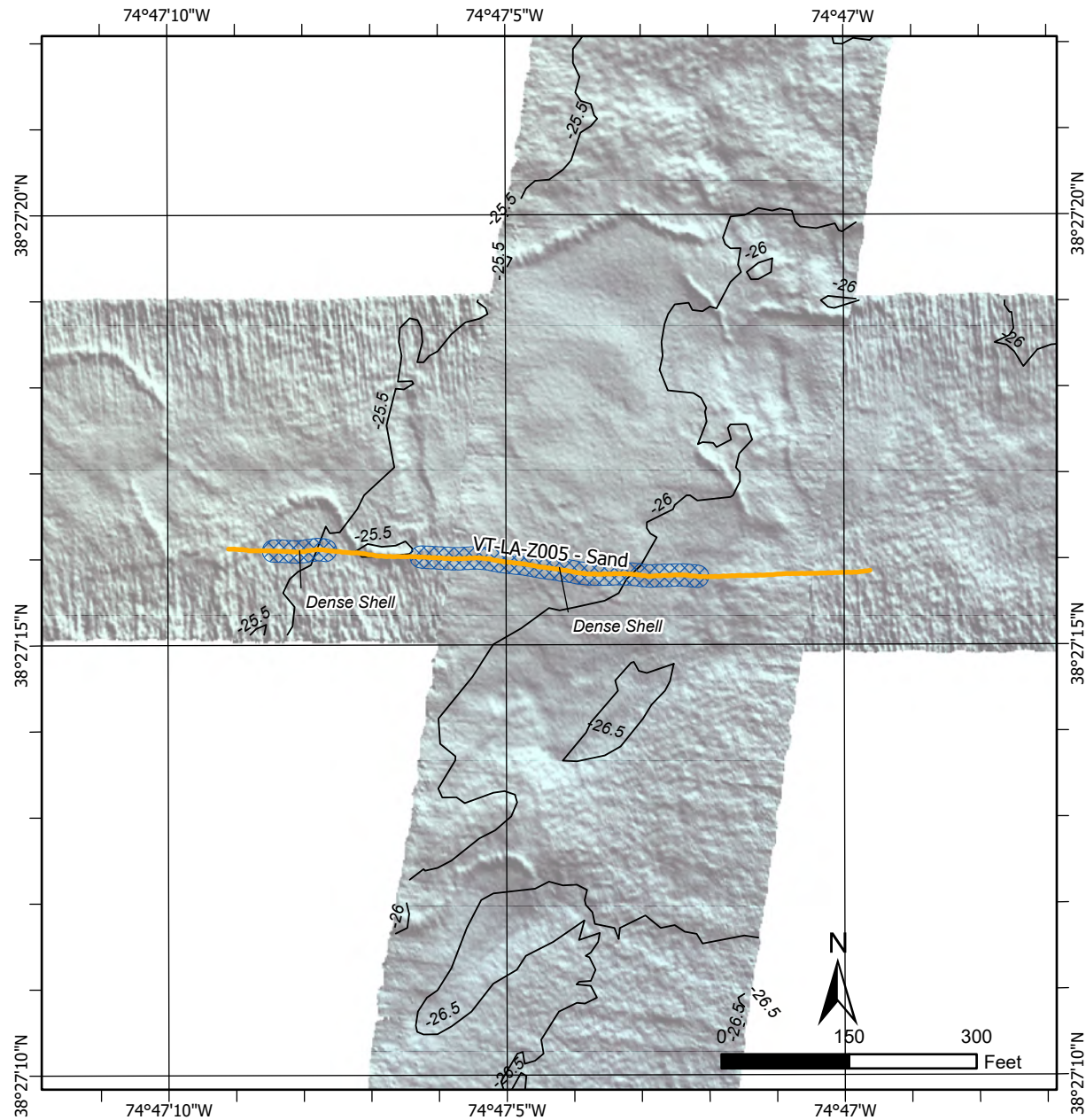
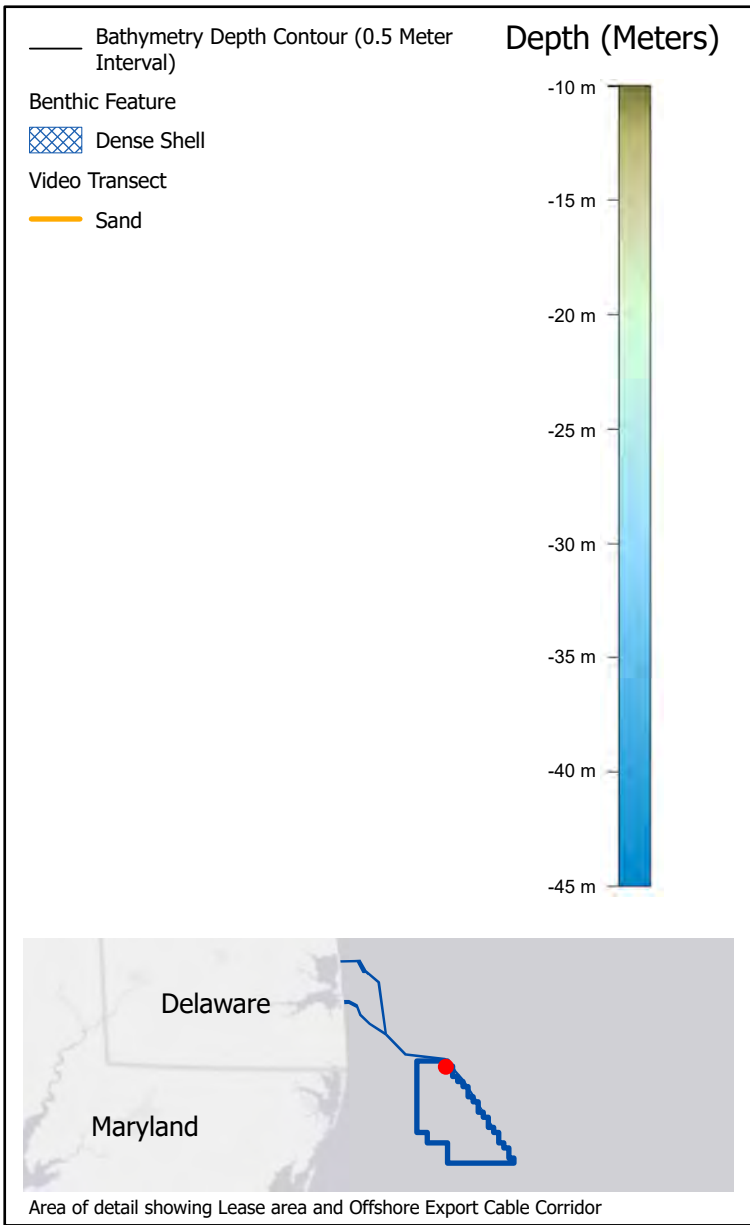
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track

VT-LA-Z004

Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



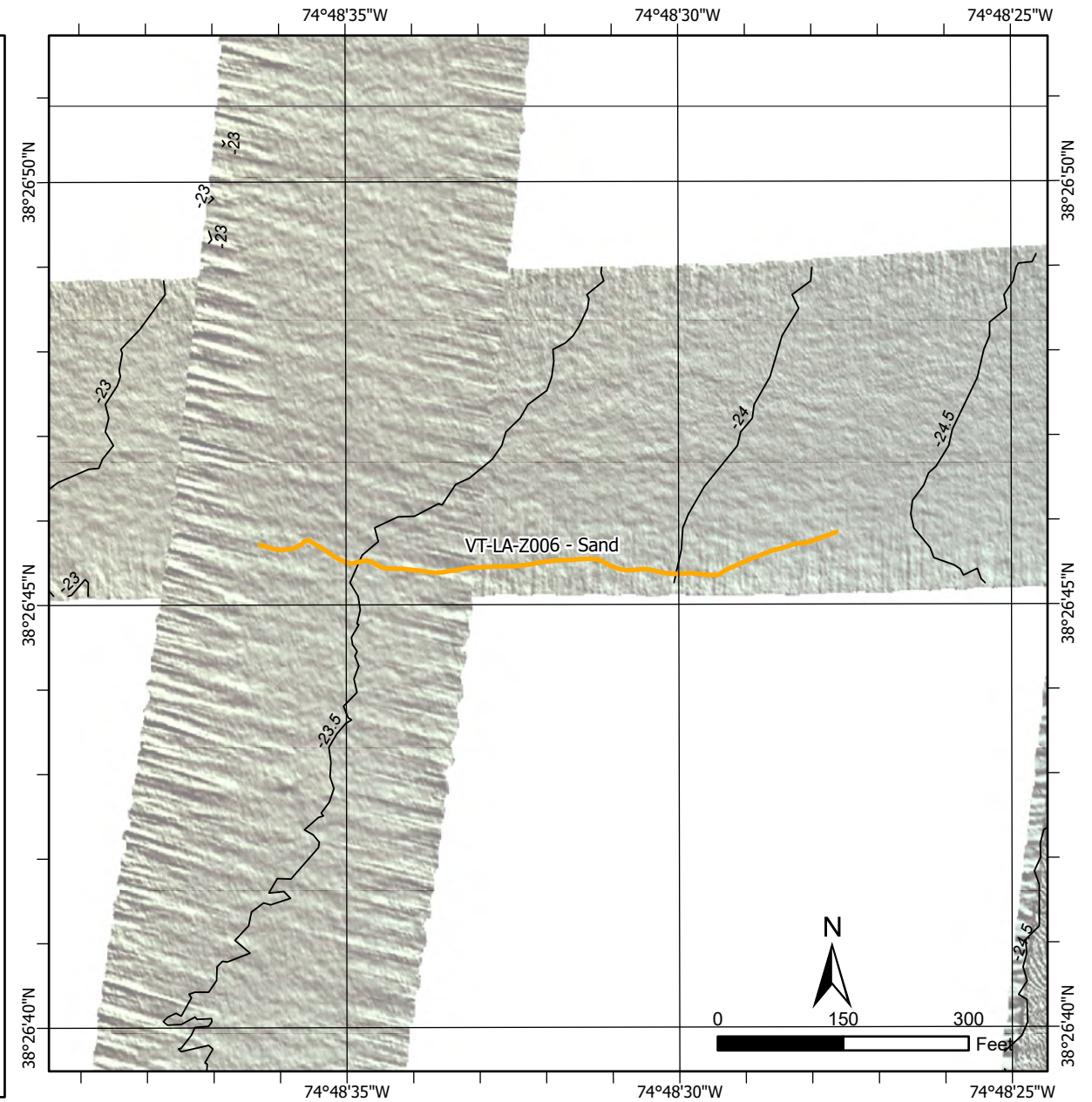
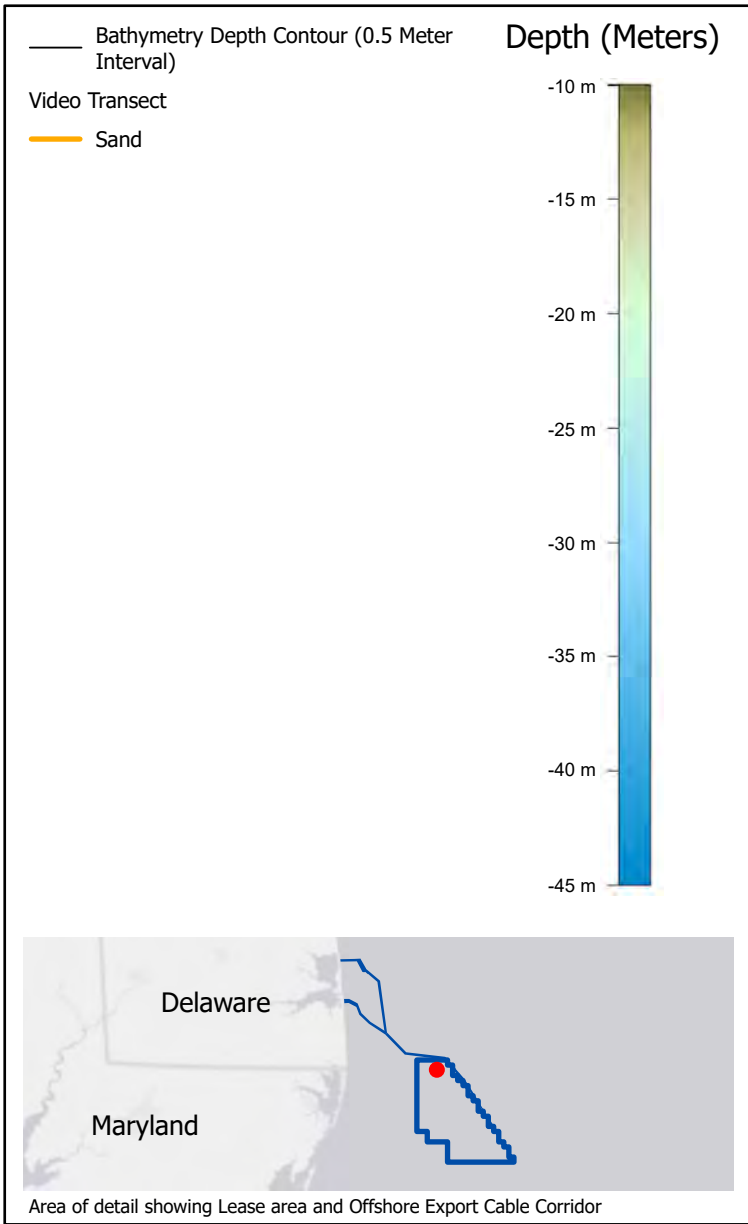
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z005



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



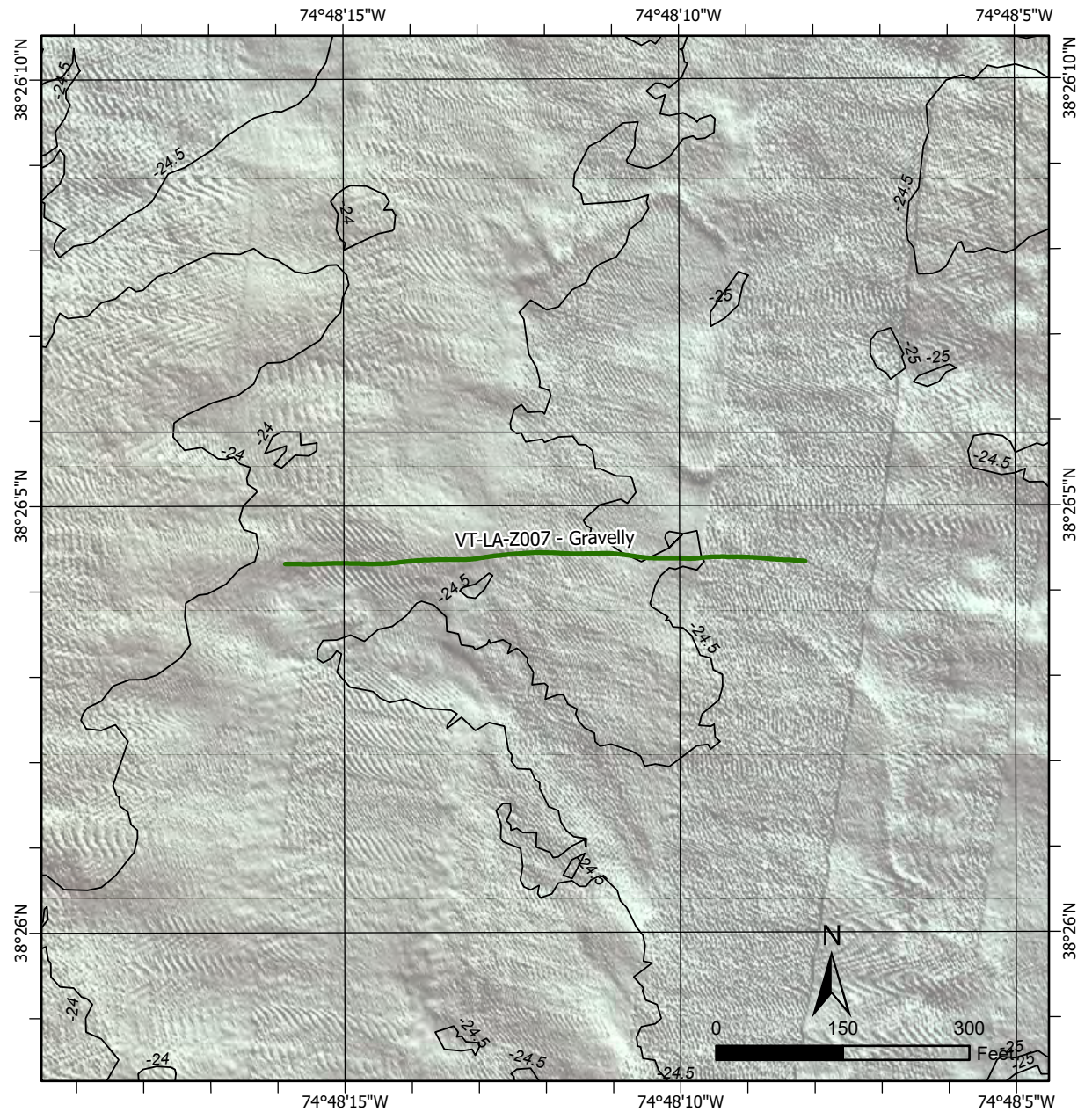
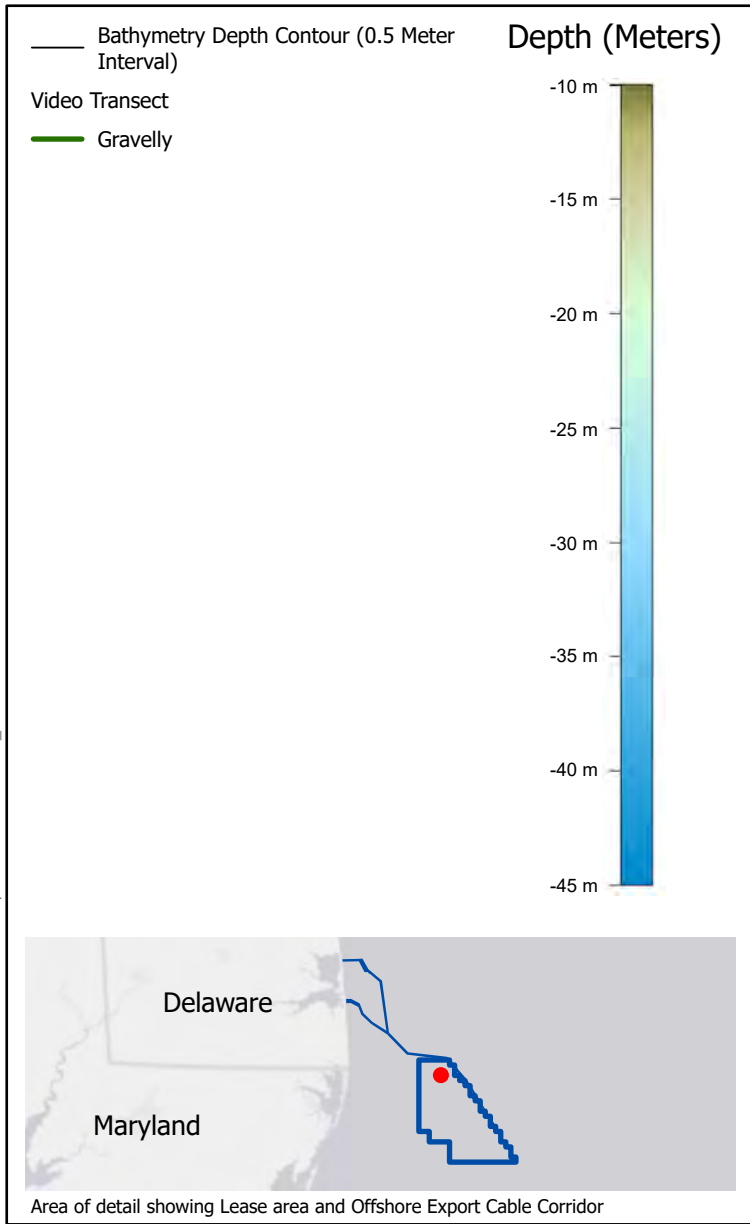
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

- Source:
- 1) GEMS, Bathymetry, 2022
  - 2) TDI, Video Transect Position Data, 2021
  - 3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z006



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

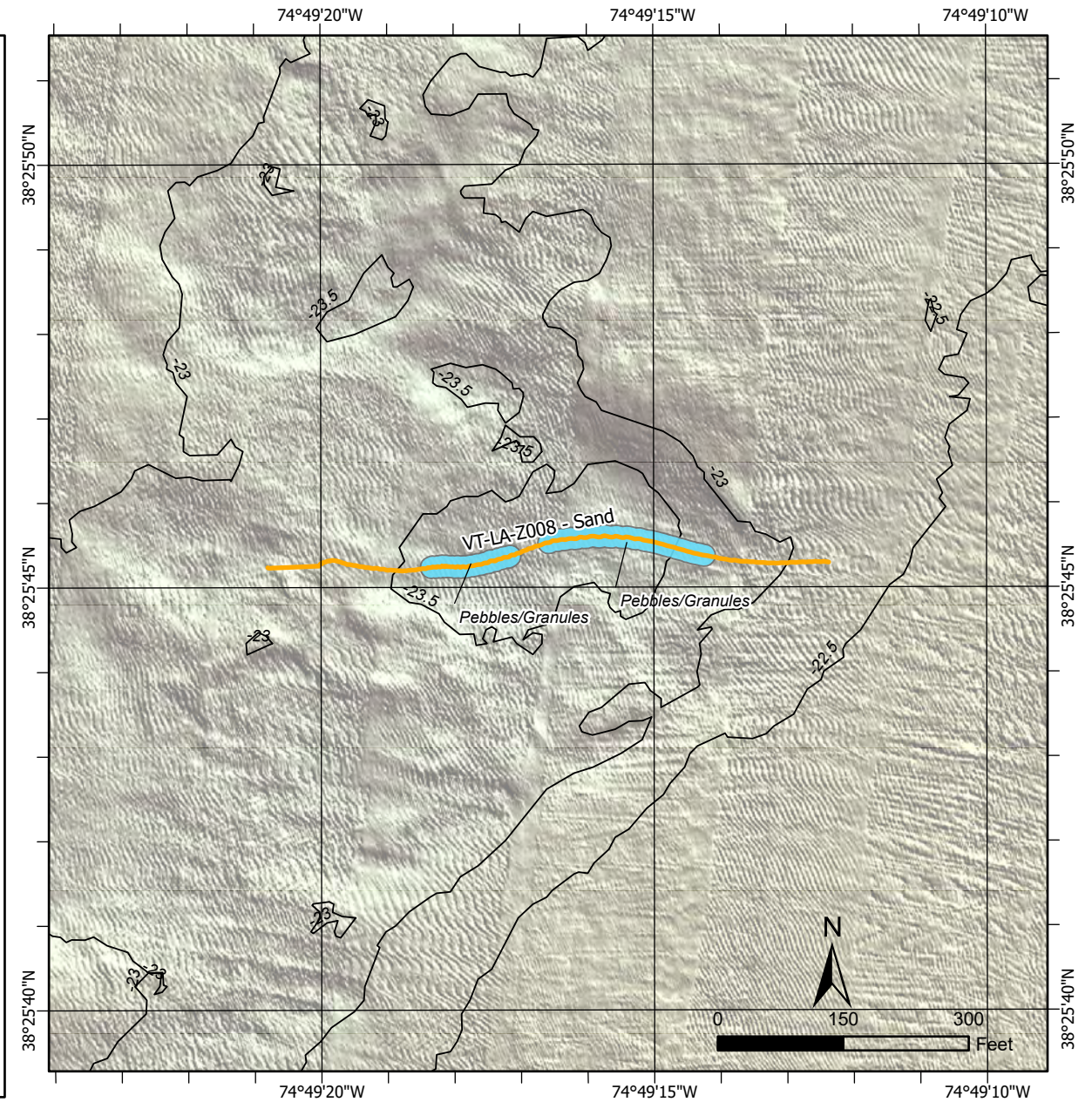
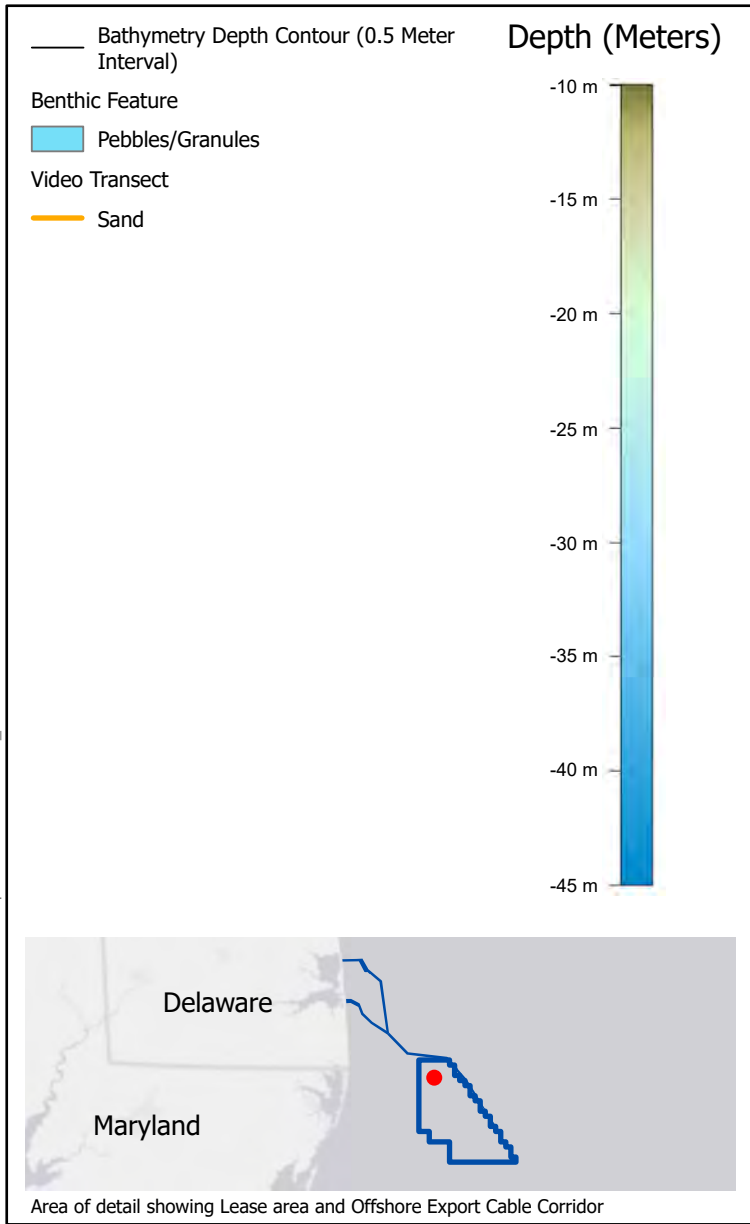
Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track

VT-LA-Z007



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



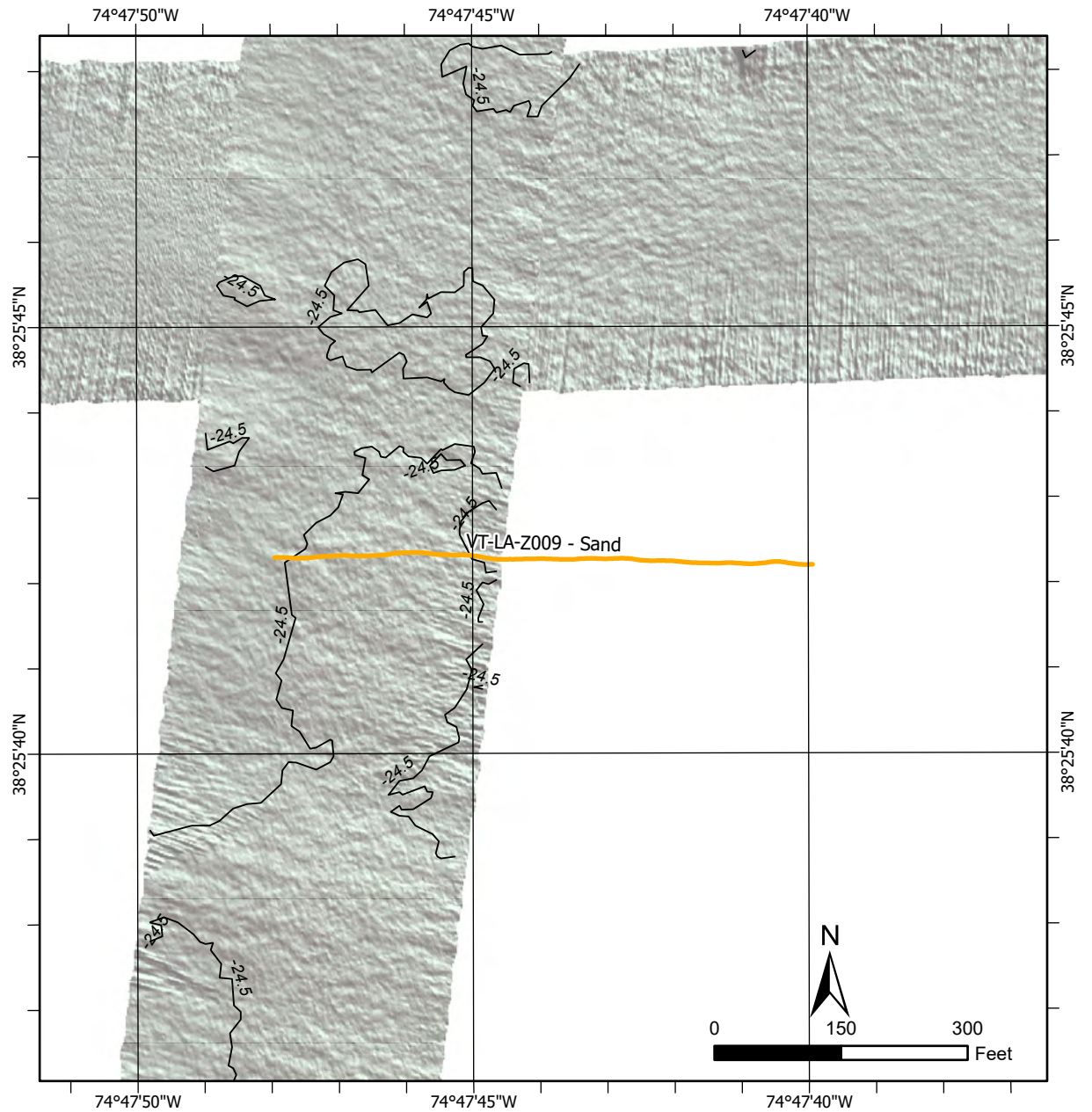
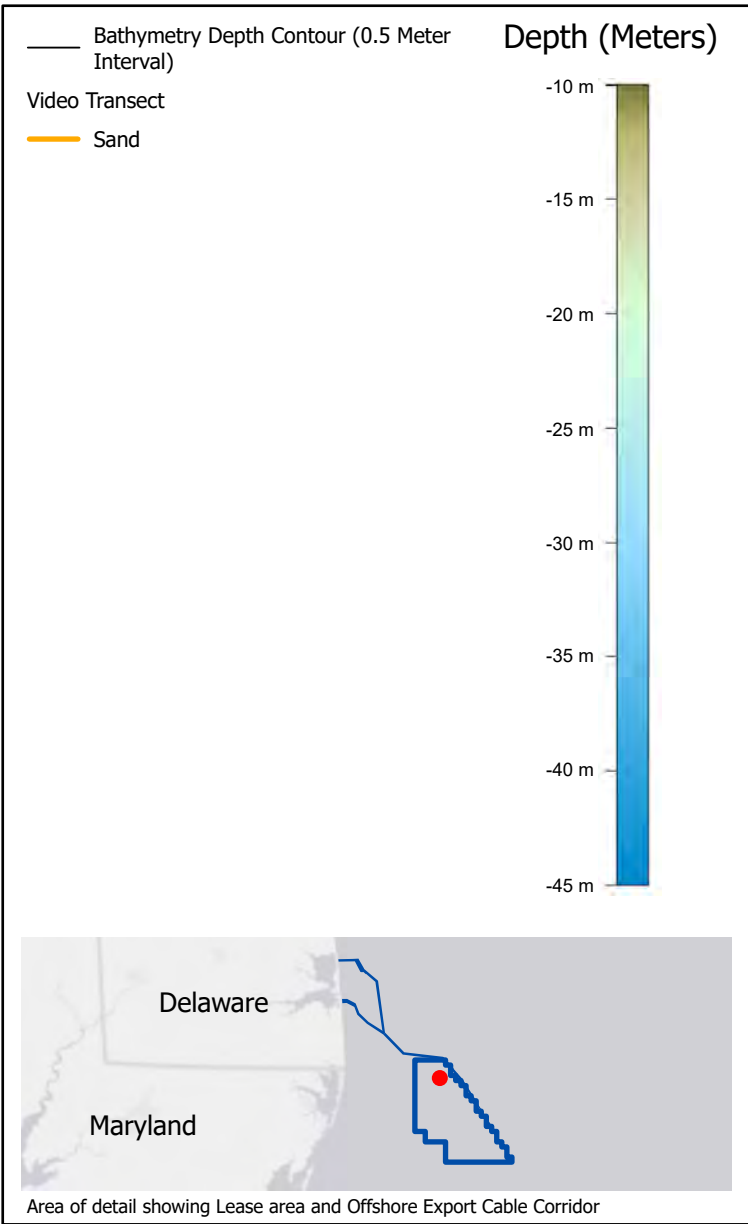
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

**Benthic Characterization for ROV Track**  
VT-LA-Z008



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



### Maryland Offshore Wind Project

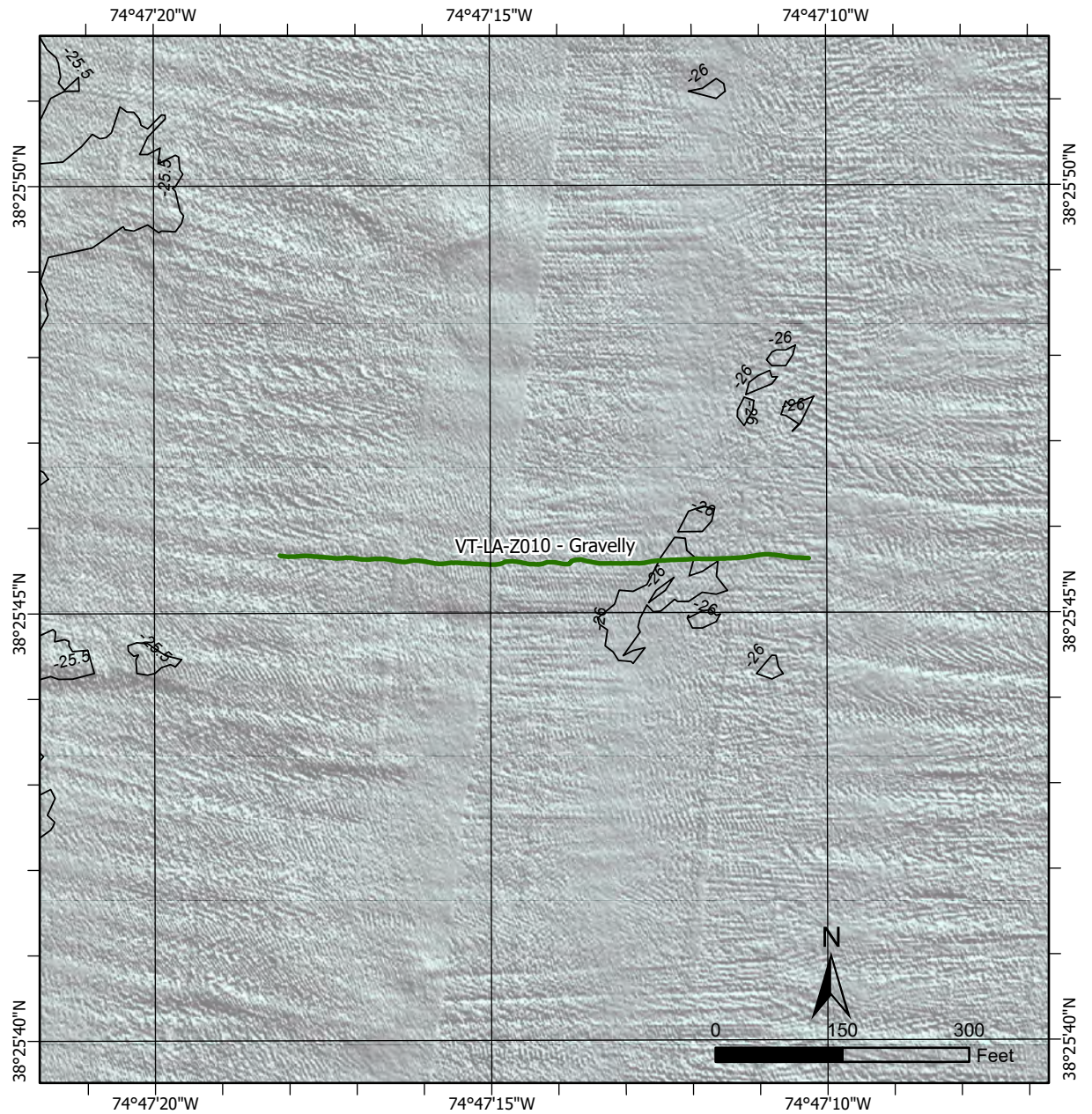
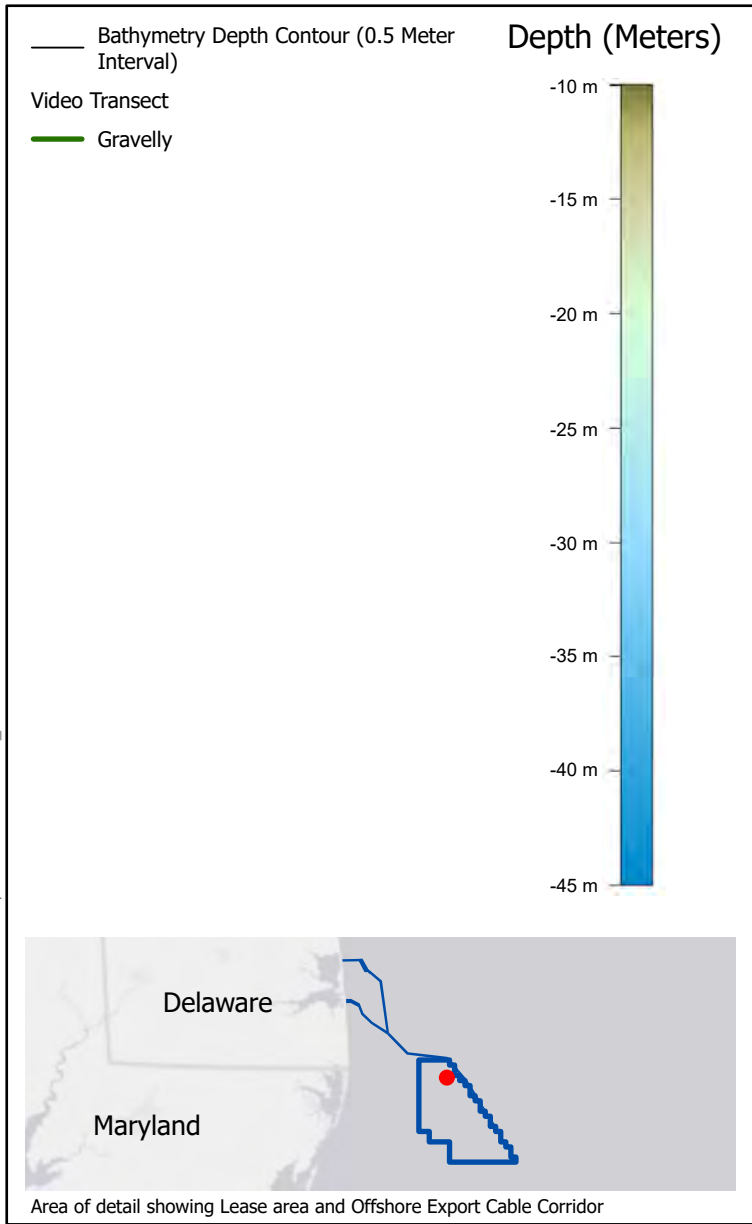
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z009



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



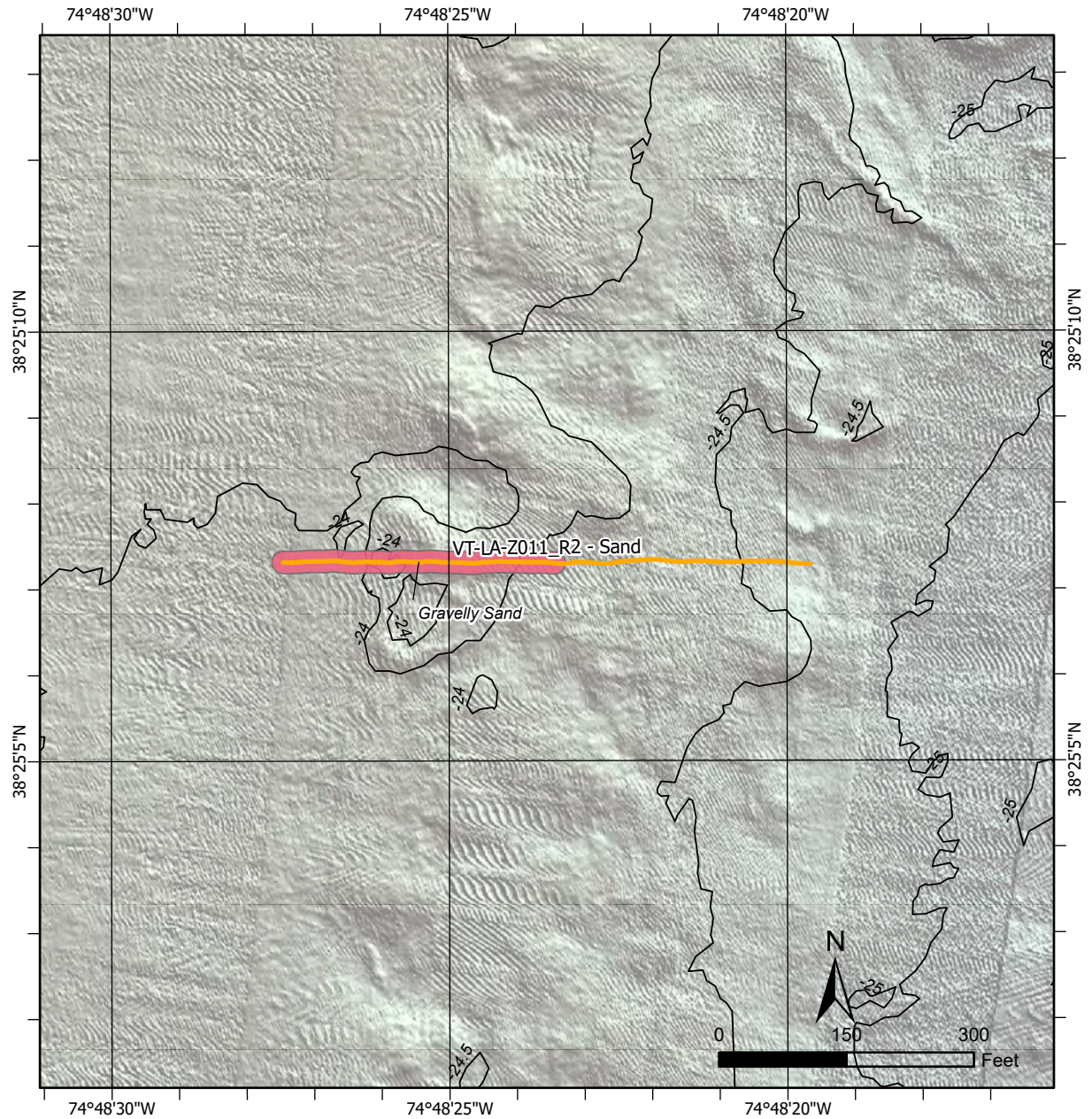
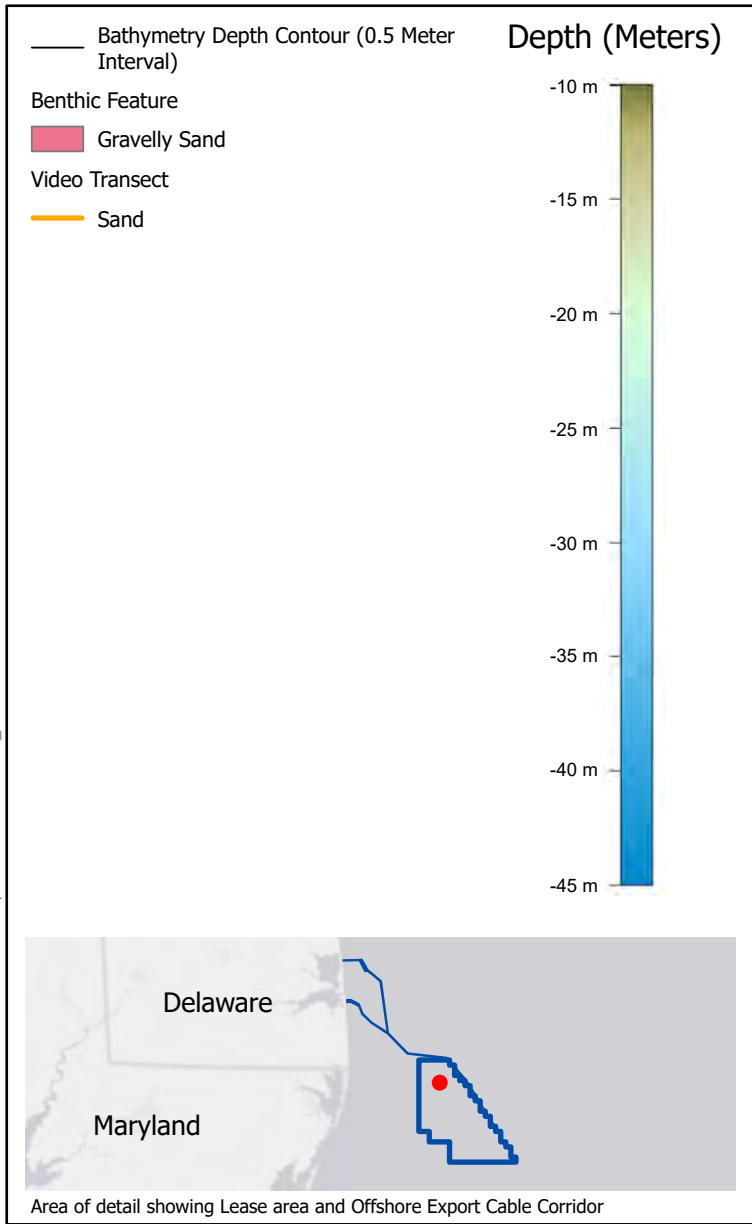
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z010



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



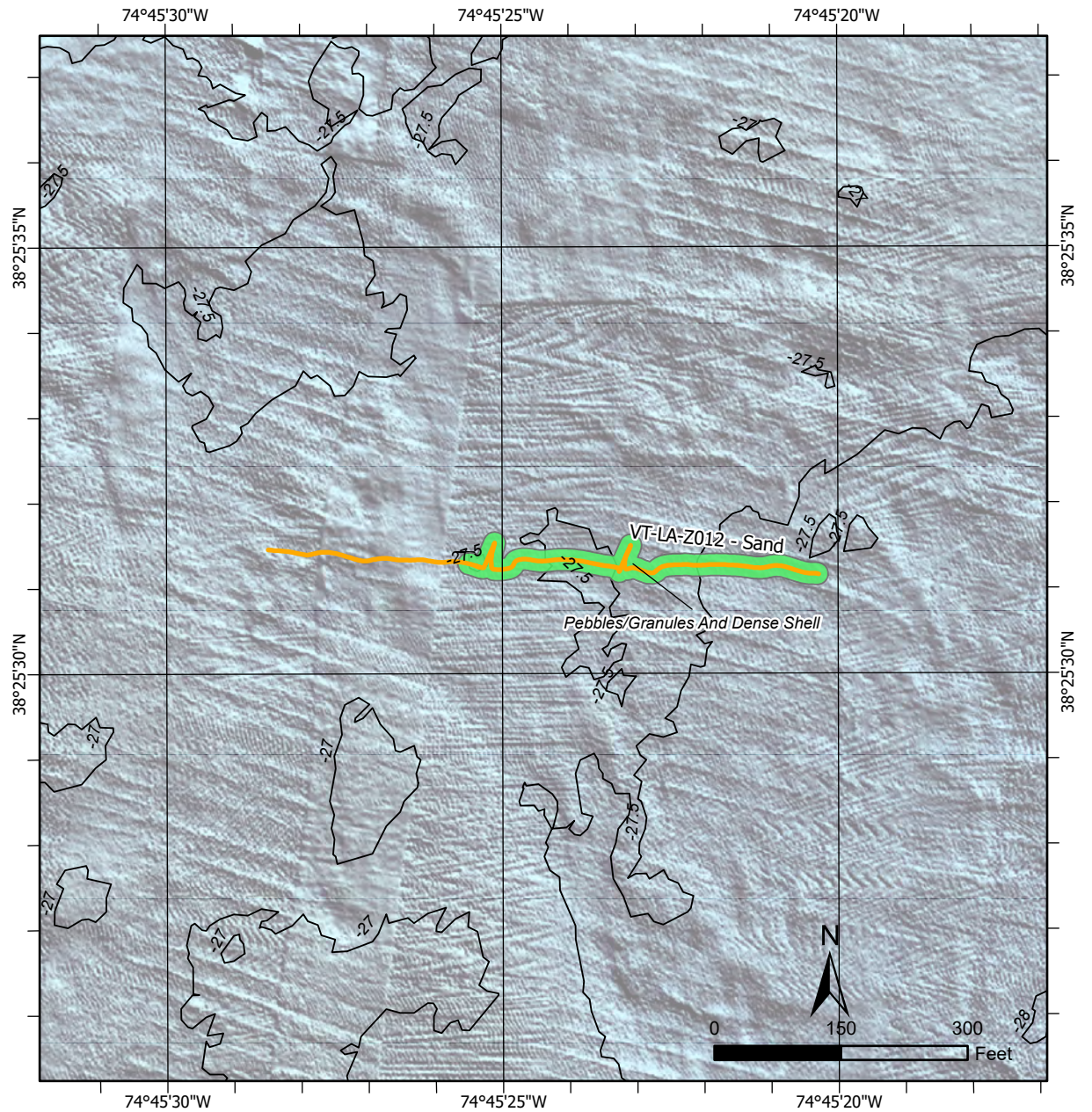
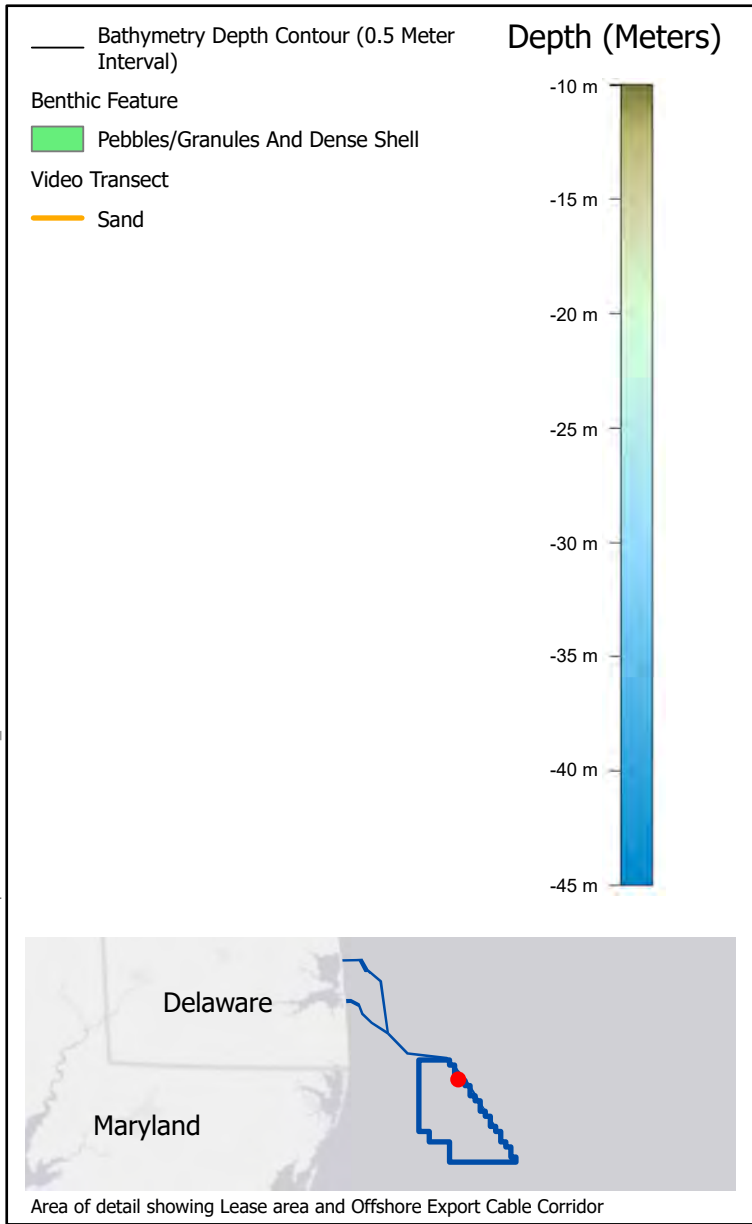
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z011\_R2



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



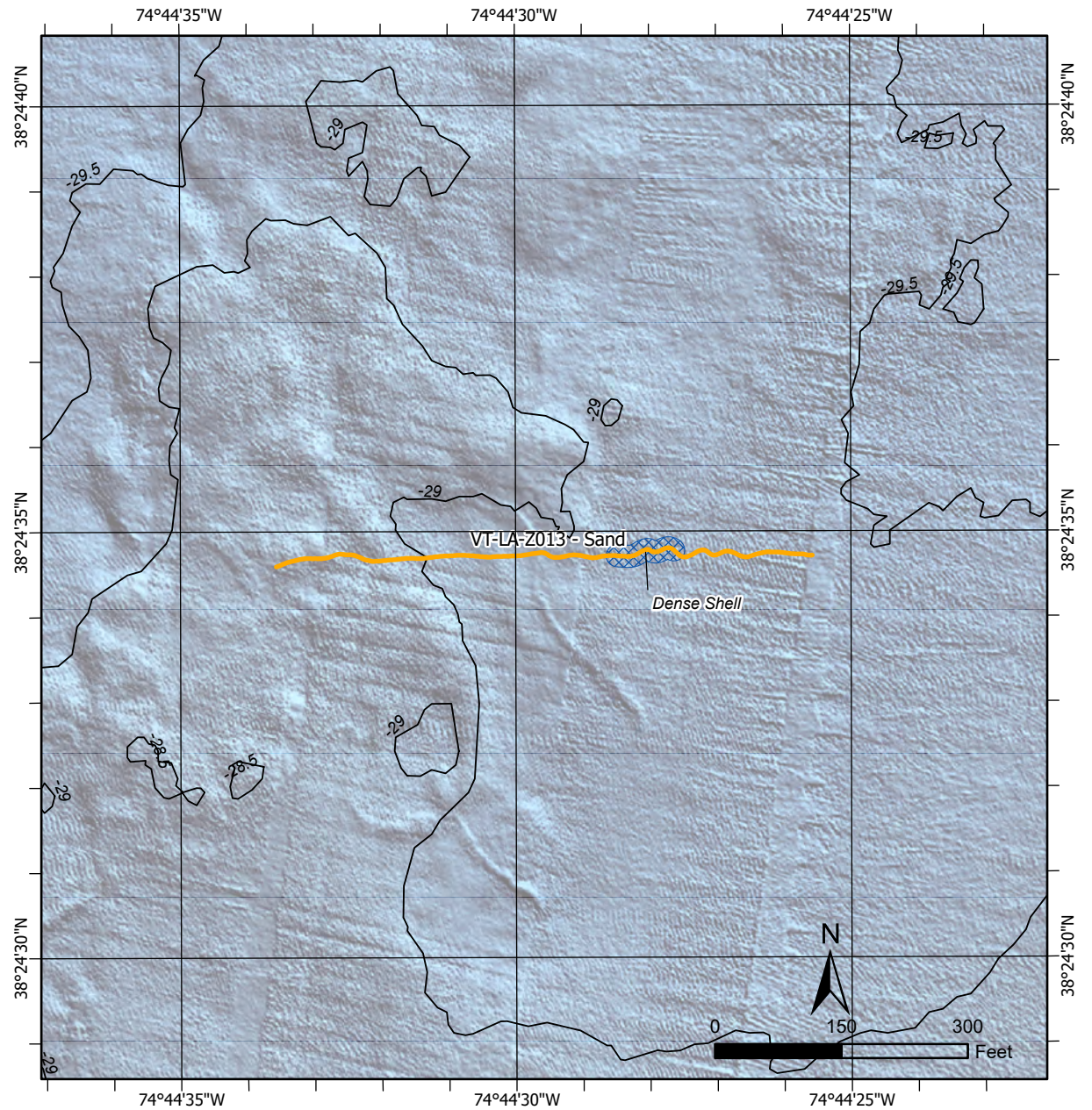
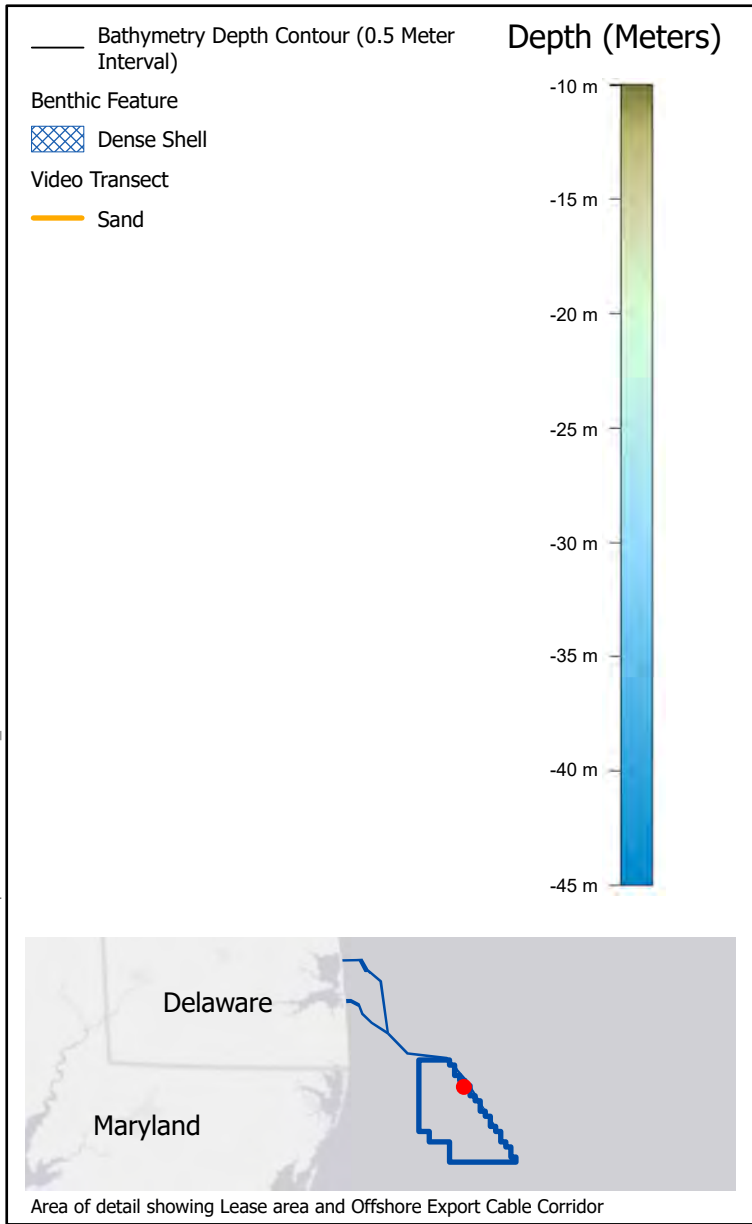
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Benthic Characterization for ROV Track  
VT-LA-Z012

- Source:
- 1) GEMS, Bathymetry, 2022
  - 2) TDI, Video Transect Position Data, 2021
  - 3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



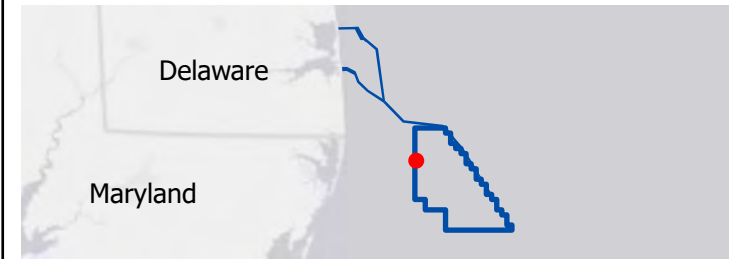
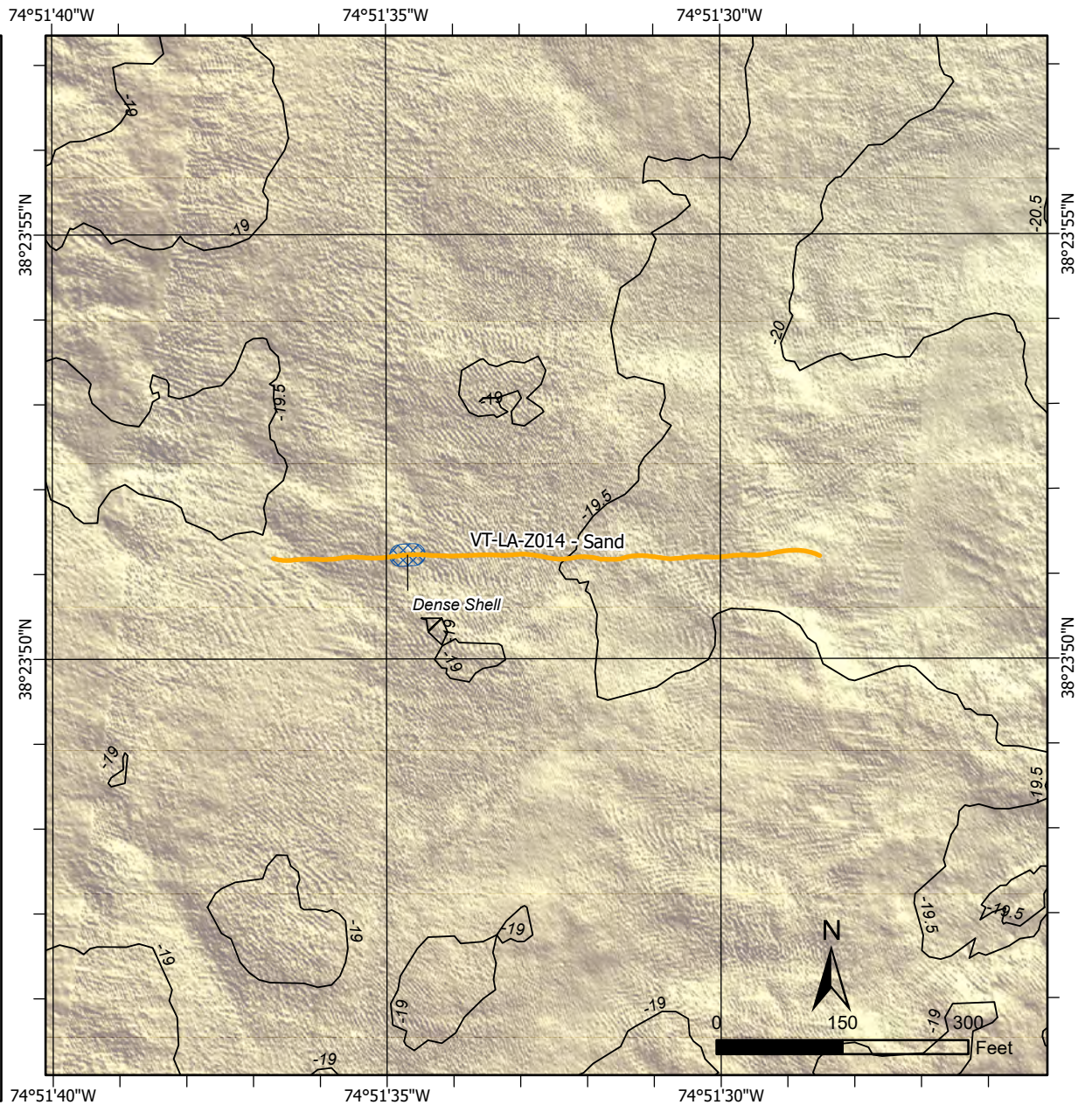
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z013



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



Area of detail showing Lease area and Offshore Export Cable Corridor



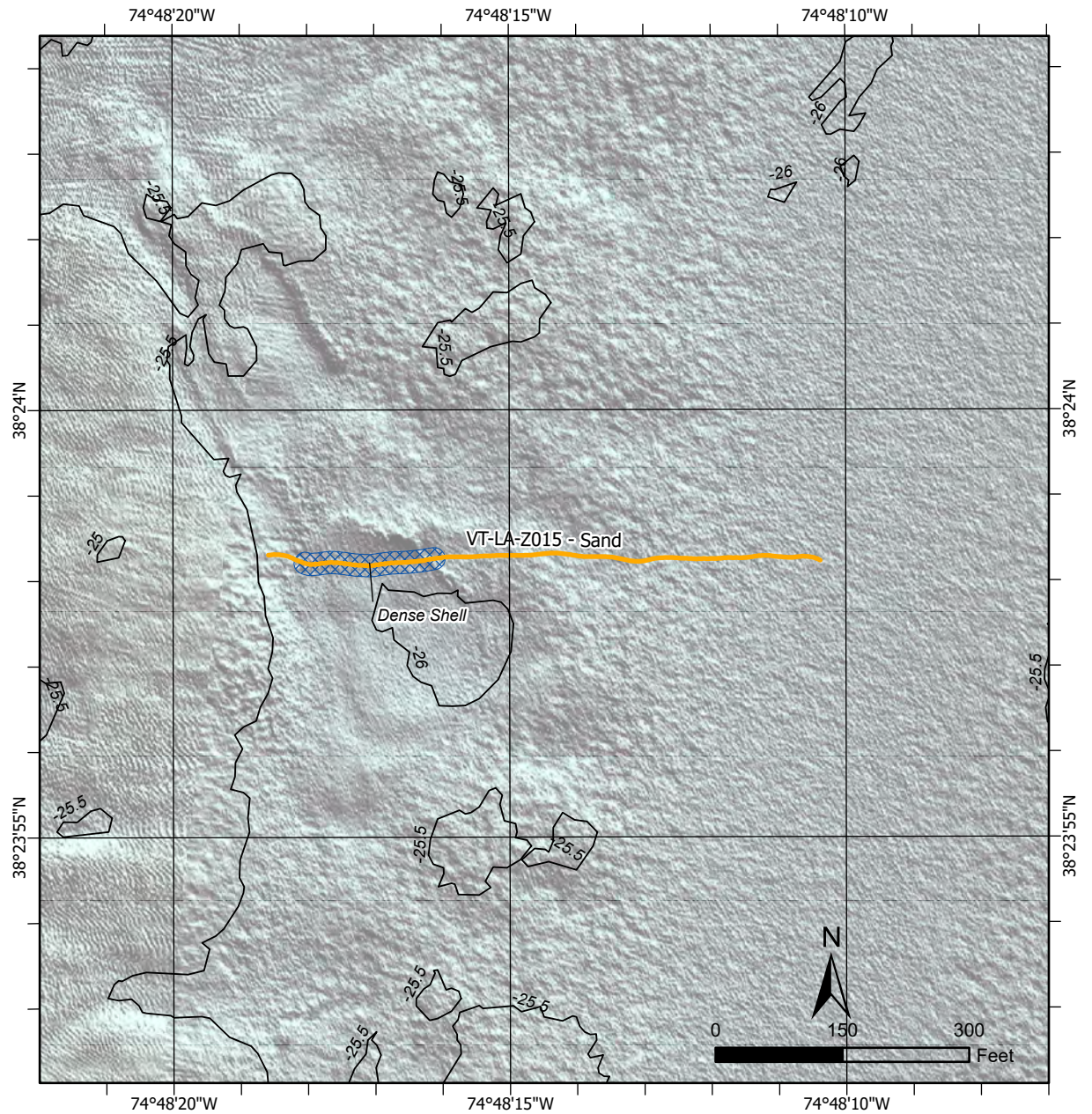
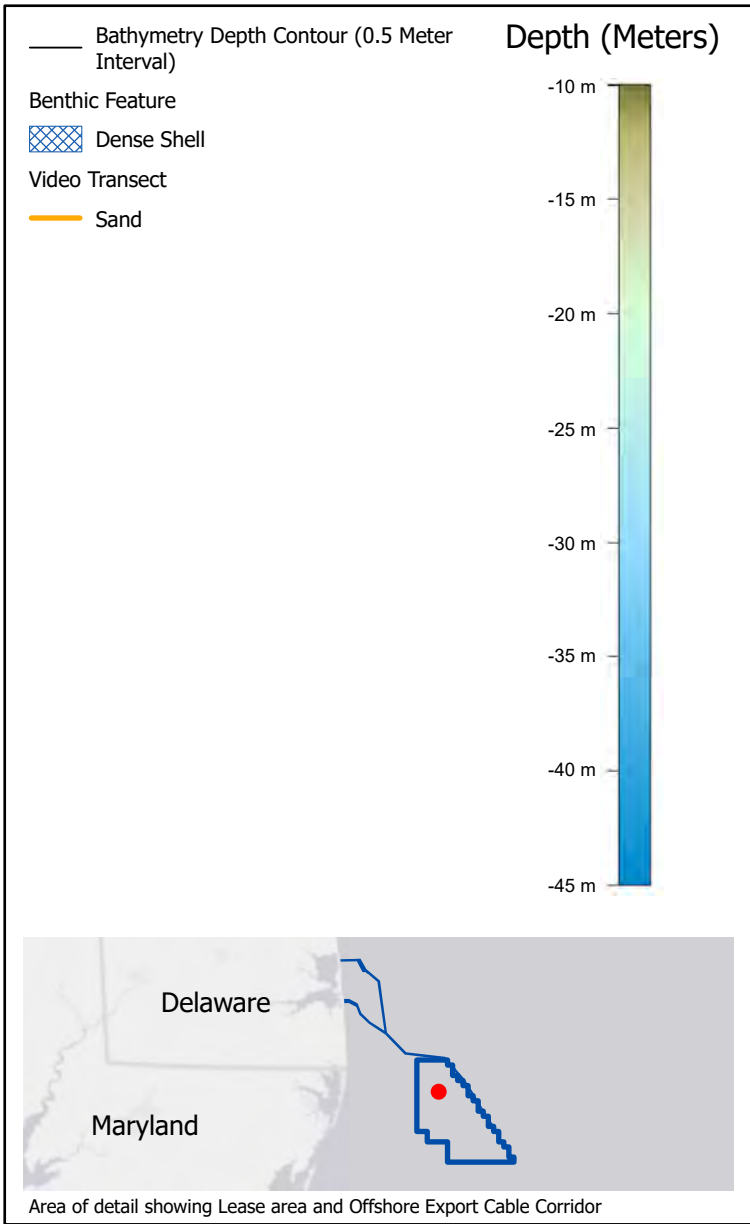
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Benthic Characterization for ROV Track  
VT-LA-Z014

- Source:
- 1) GEMS, Bathymetry, 2022
  - 2) TDI, Video Transect Position Data, 2021
  - 3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

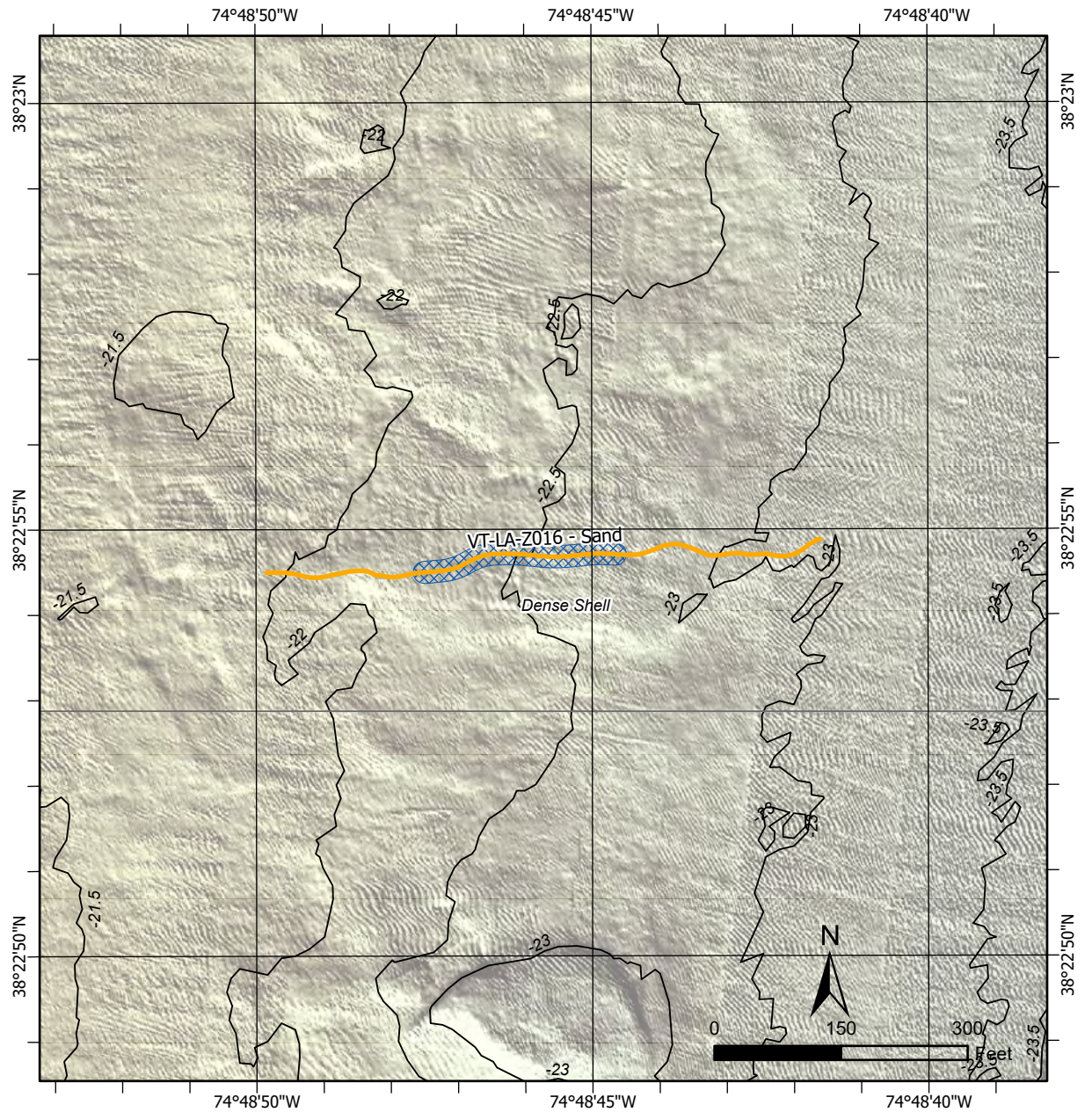
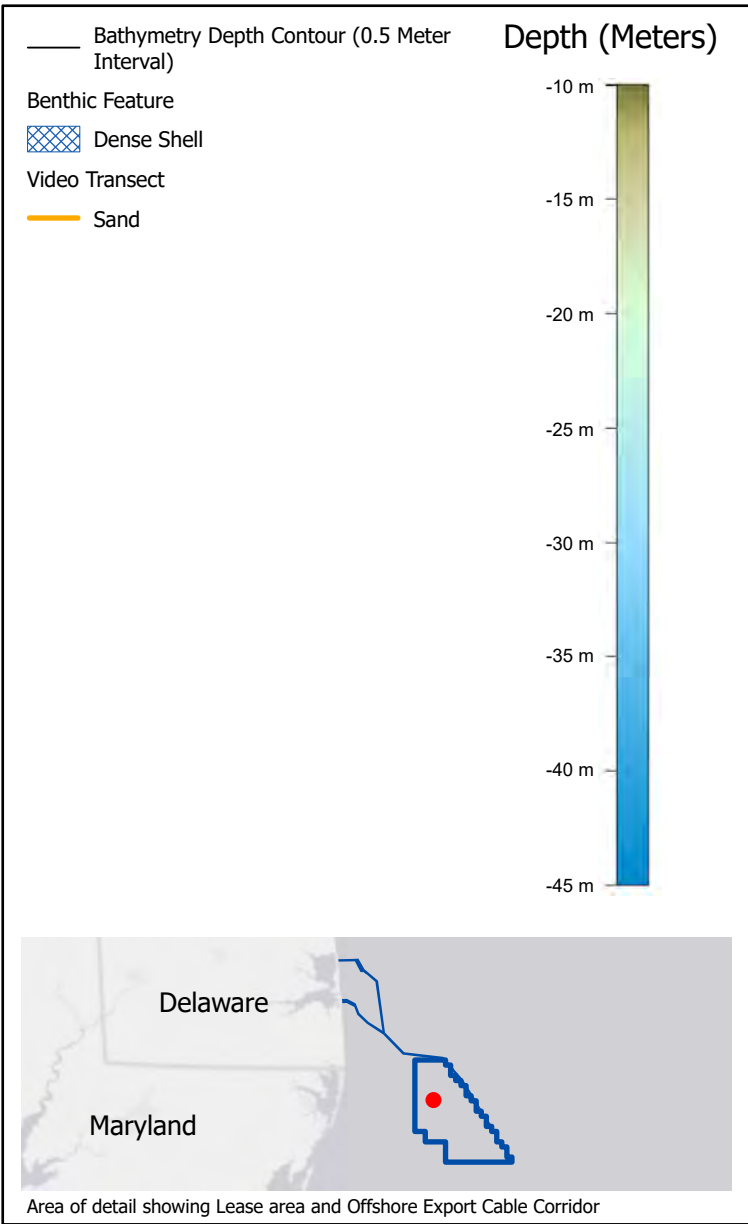
### Benthic Characterization for ROV Track

VT-LA-Z015

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



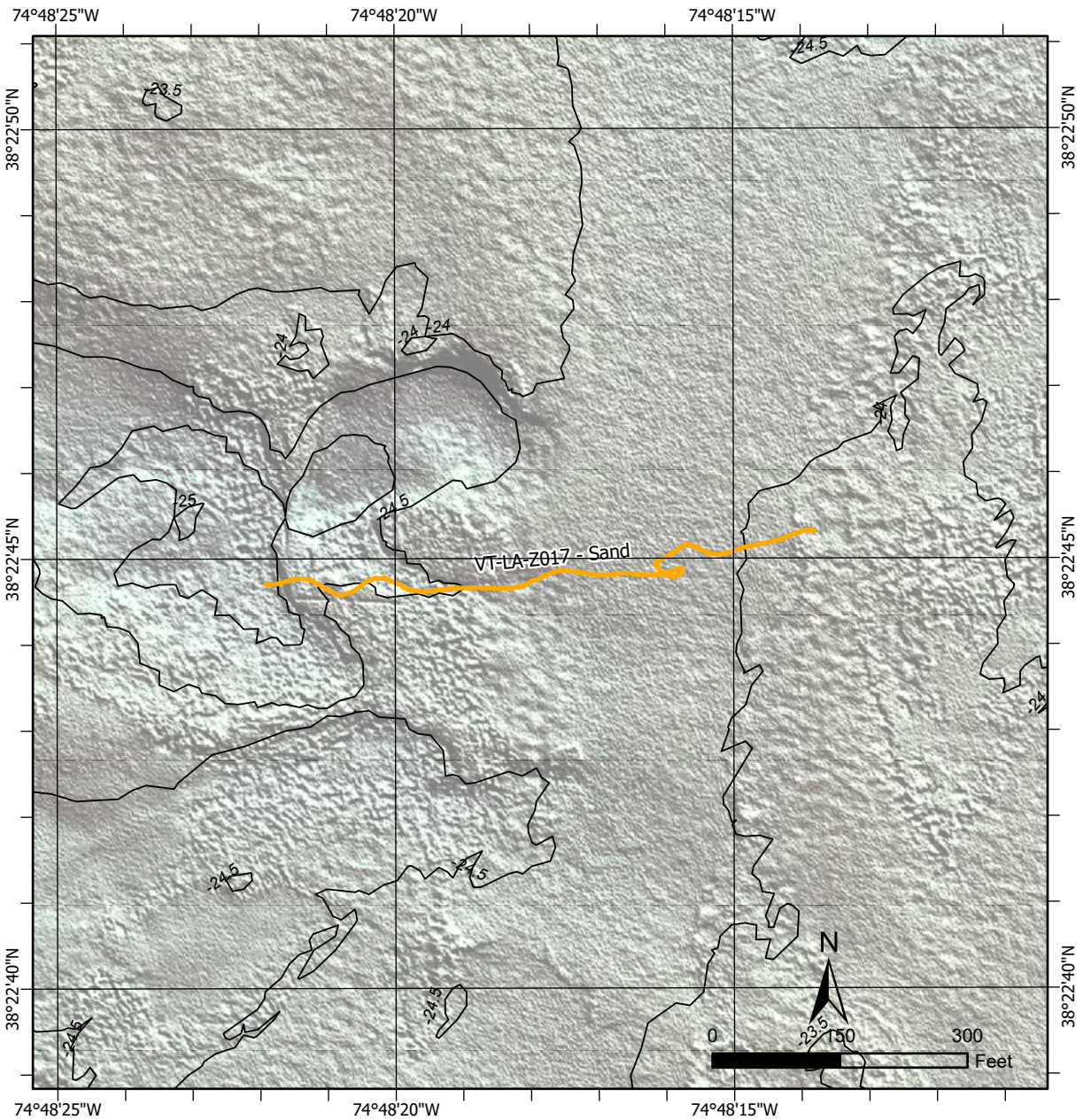
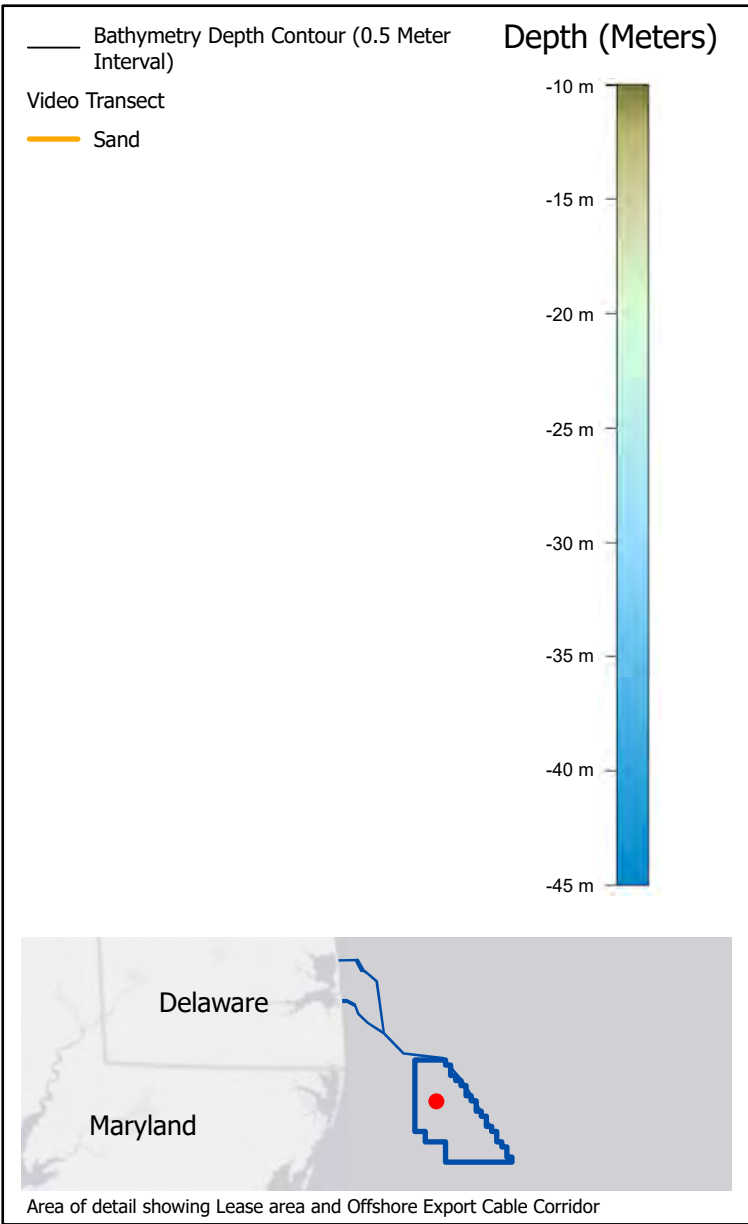
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z016



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



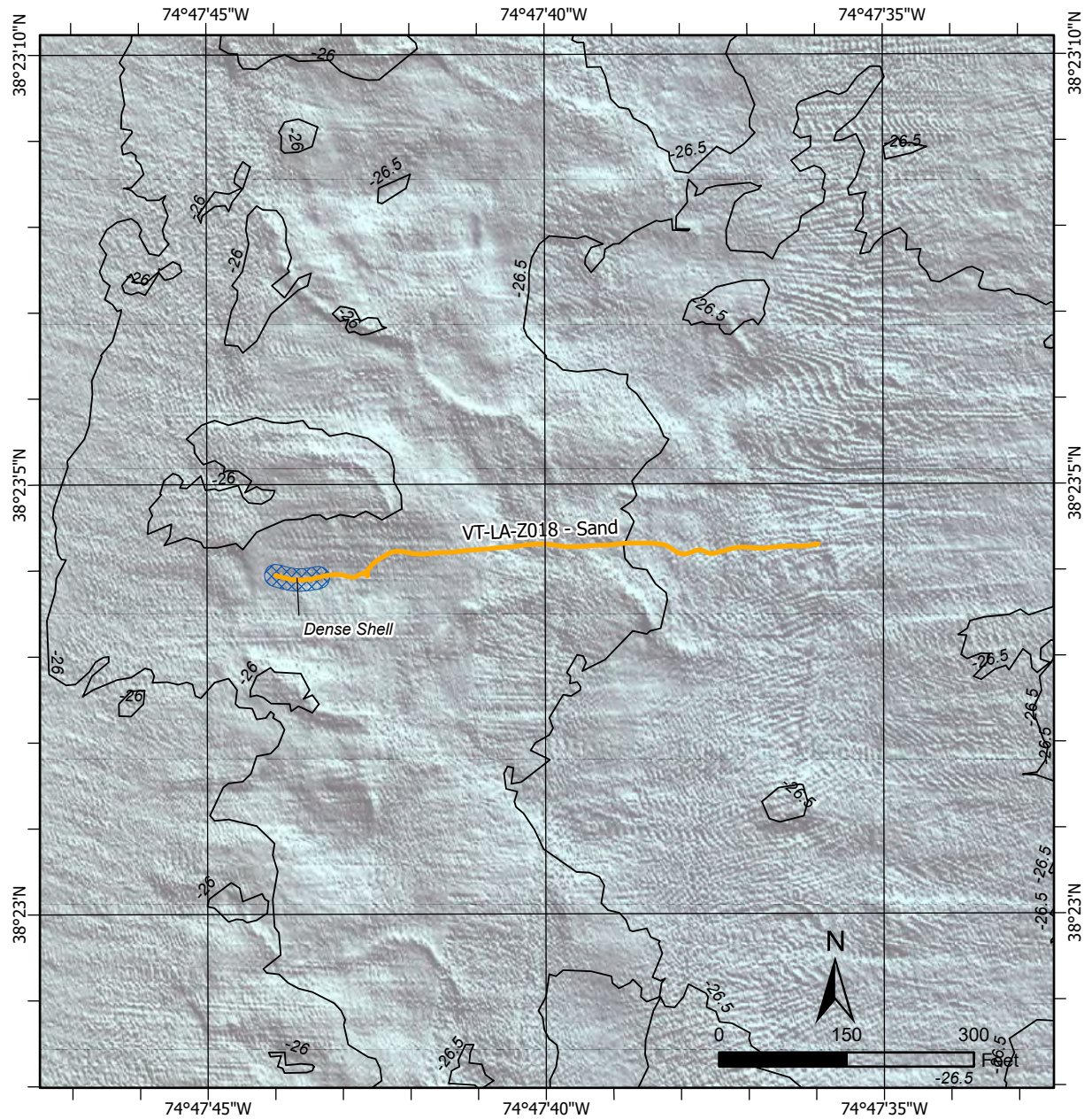
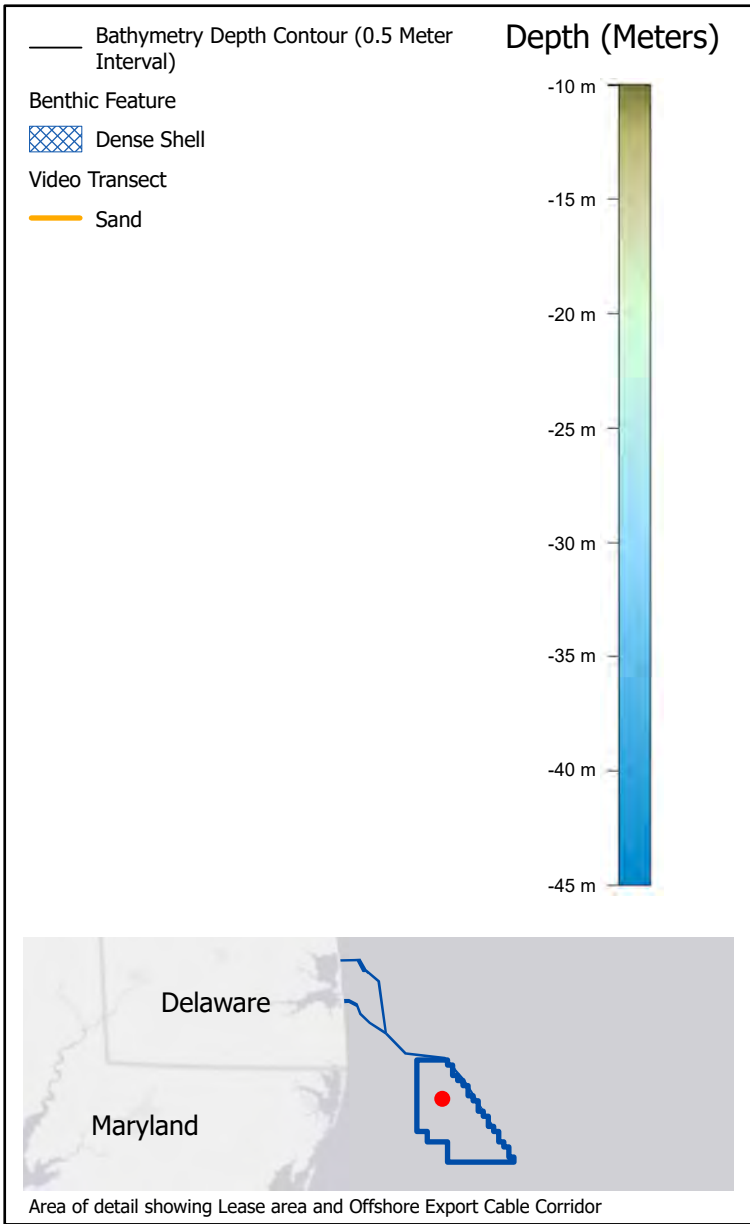
### Maryland Offshore Wind Project Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track VT-LA-Z017



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



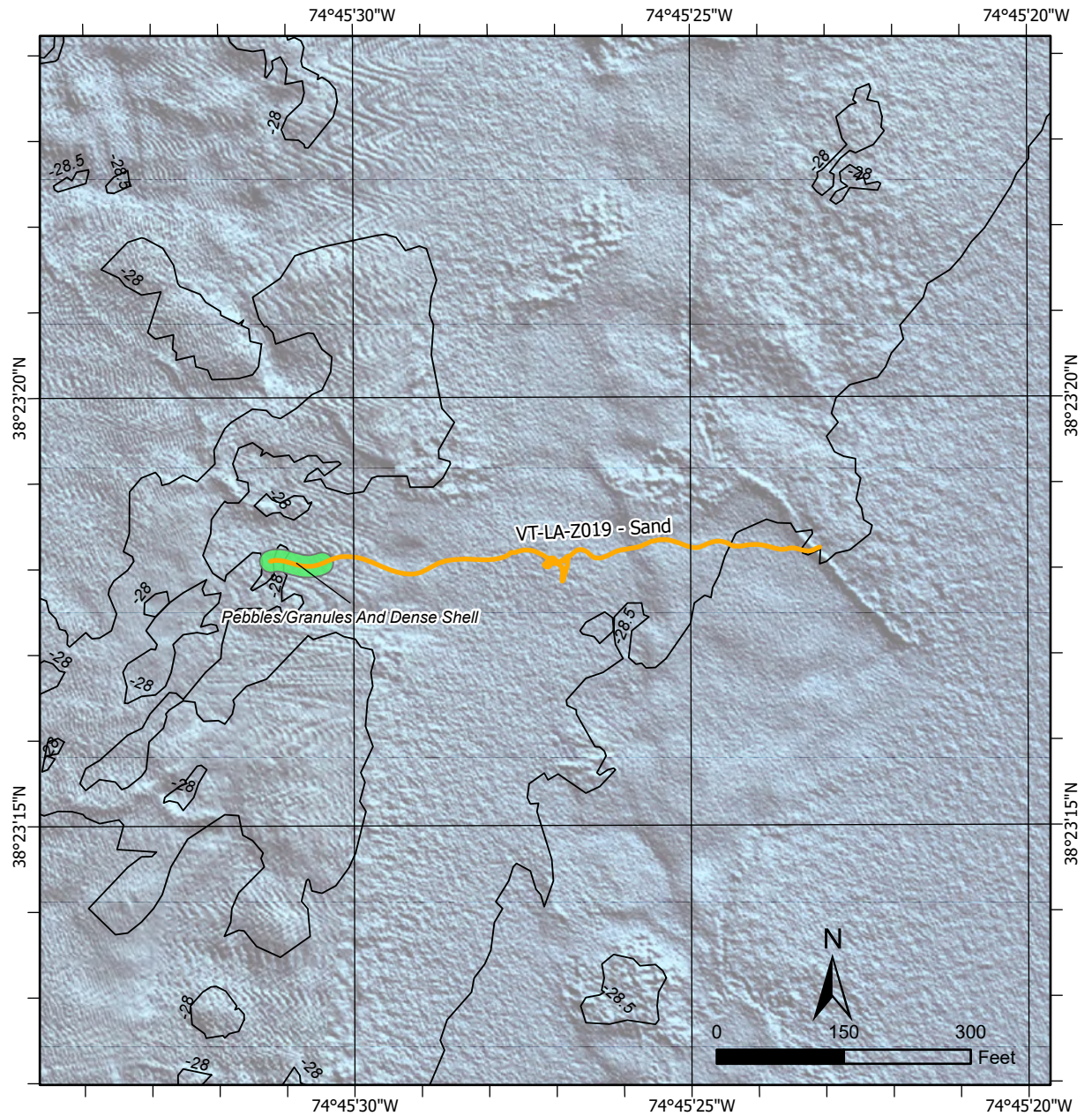
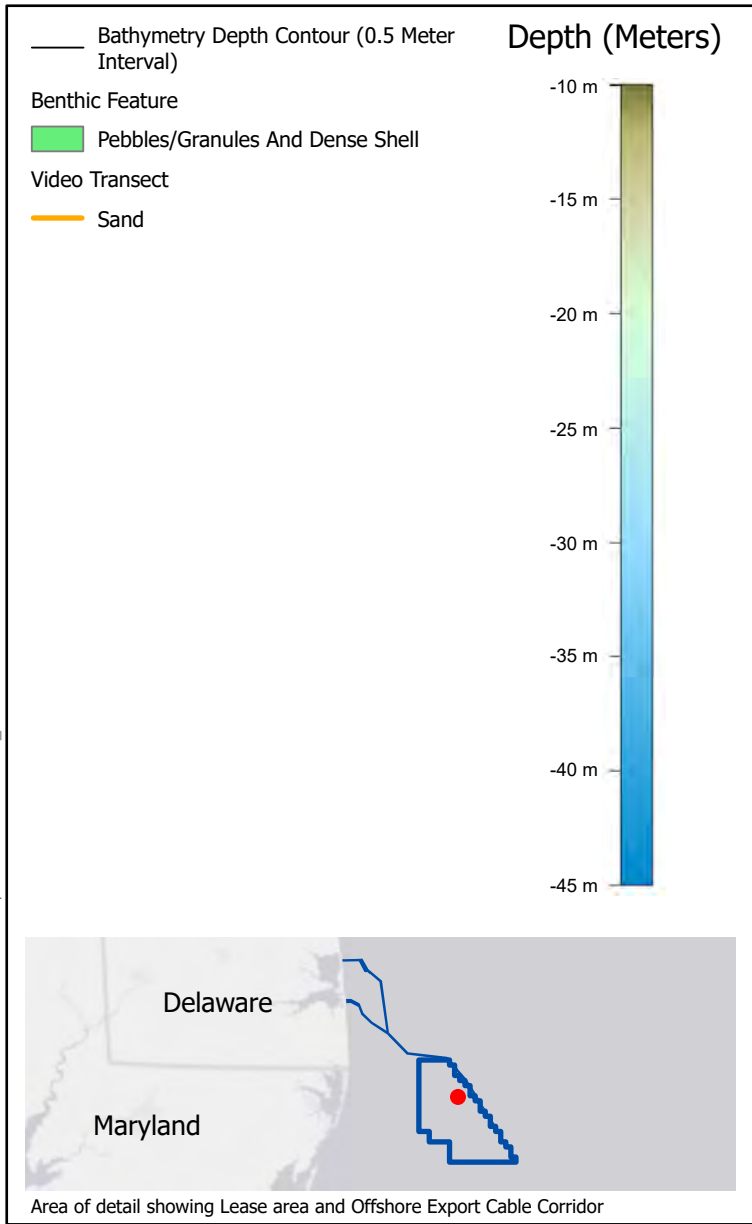
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Benthic Characterization for ROV Track  
VT-LA-Z018

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04\_Graphics\GIS\APRX\U167\_ROV\tracks01



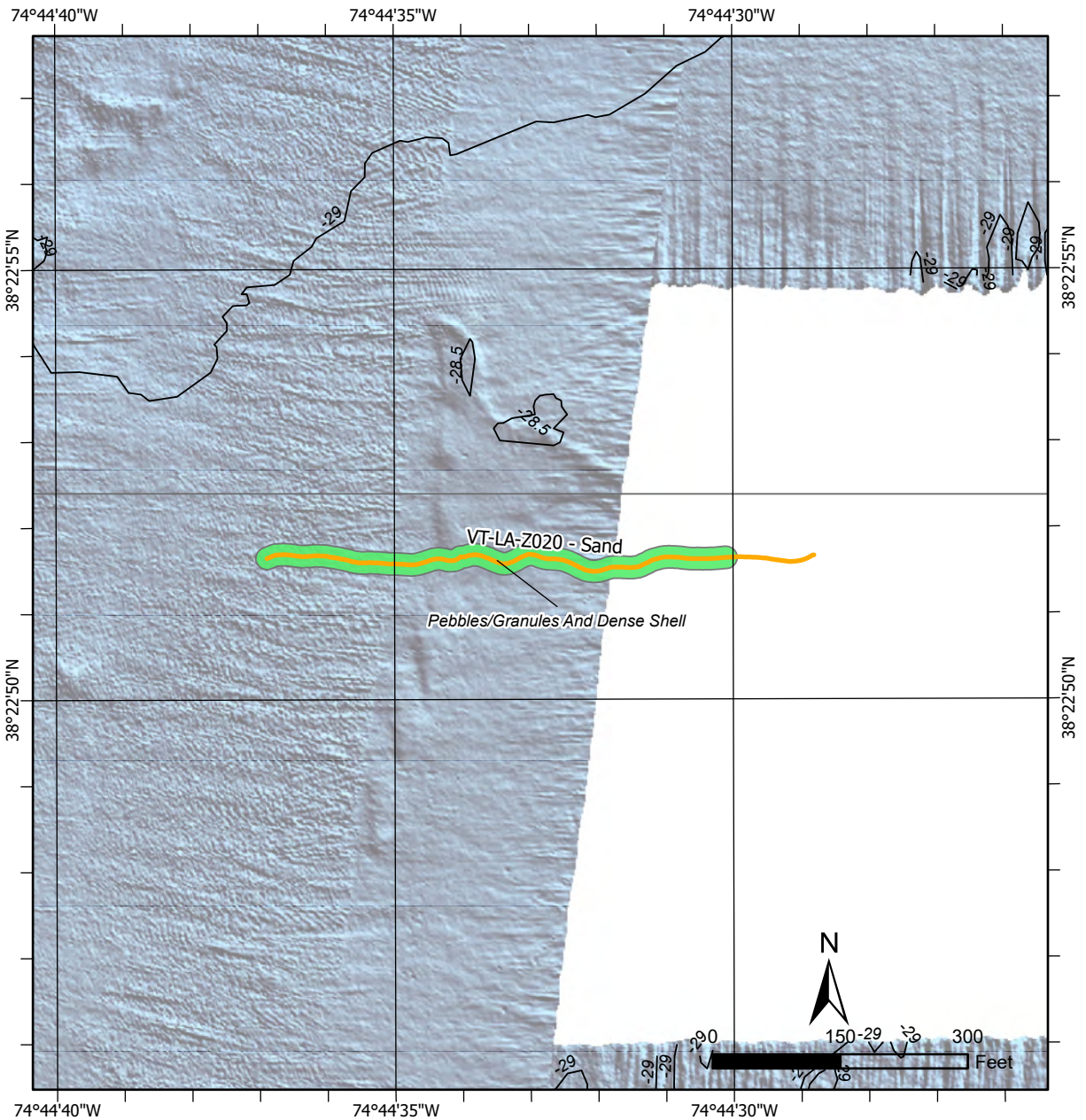
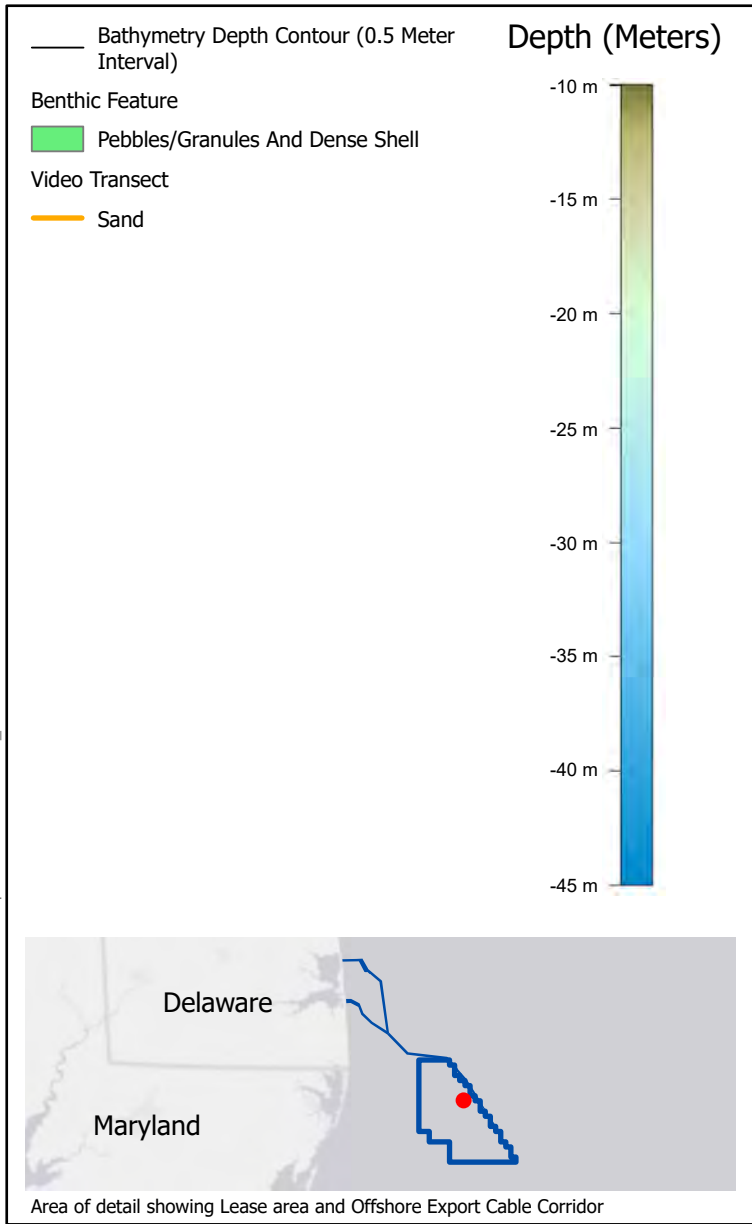
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Benthic Characterization for ROV Track  
VT-LA-Z019

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



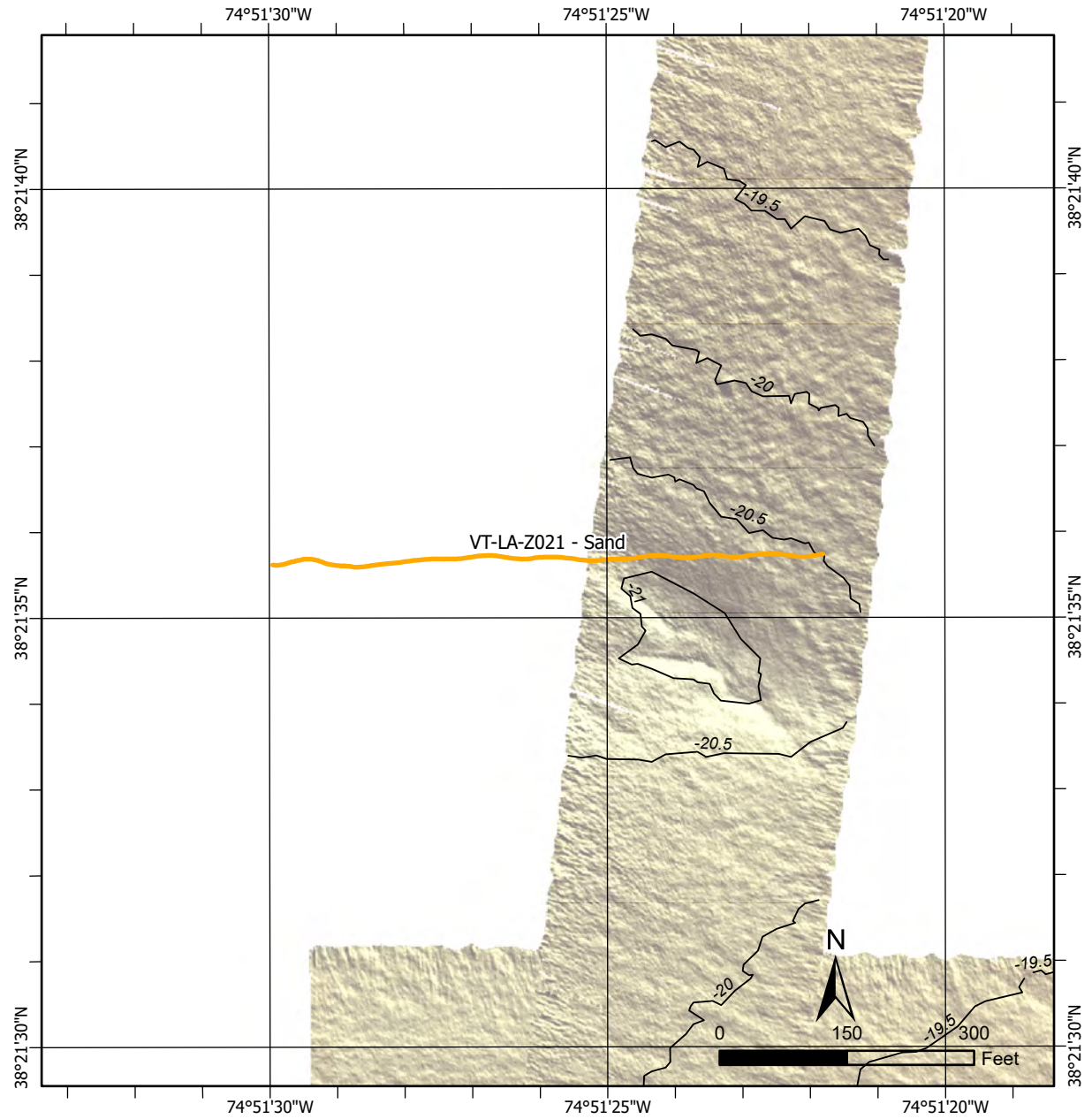
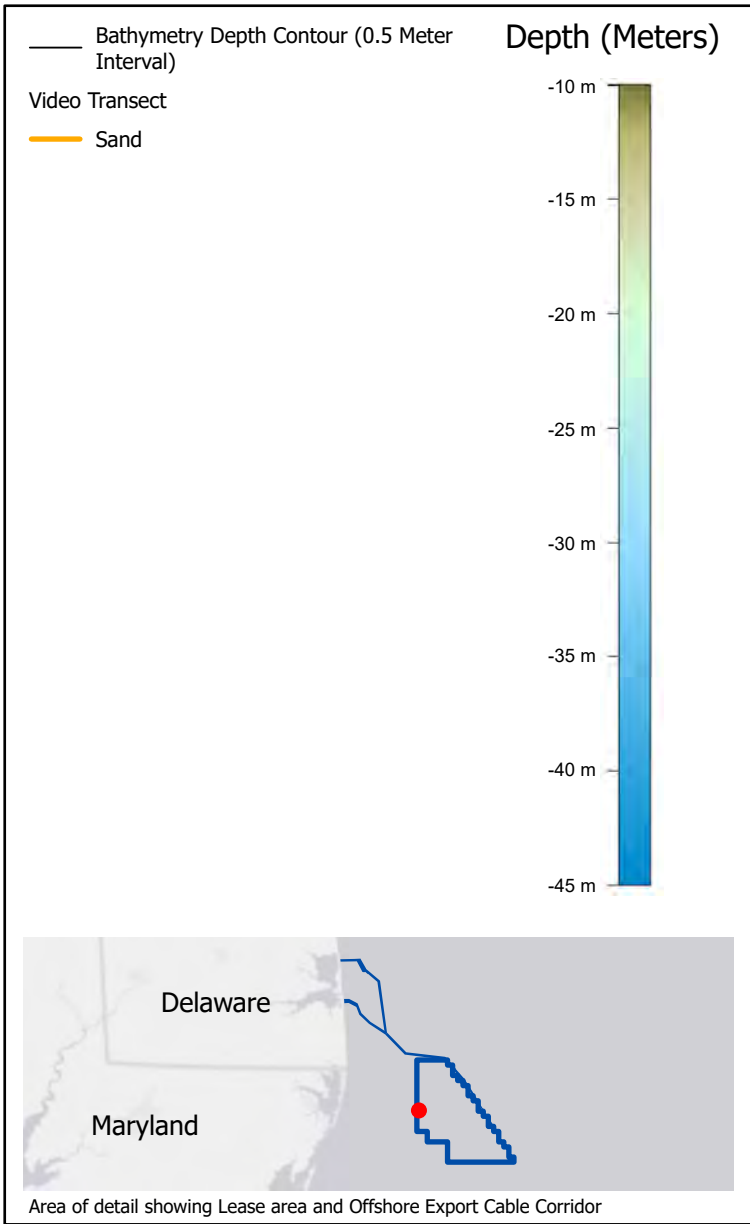
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z020



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

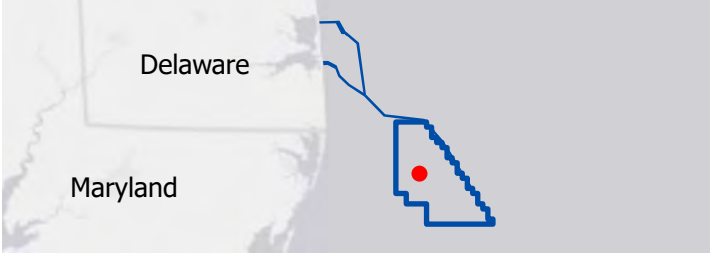
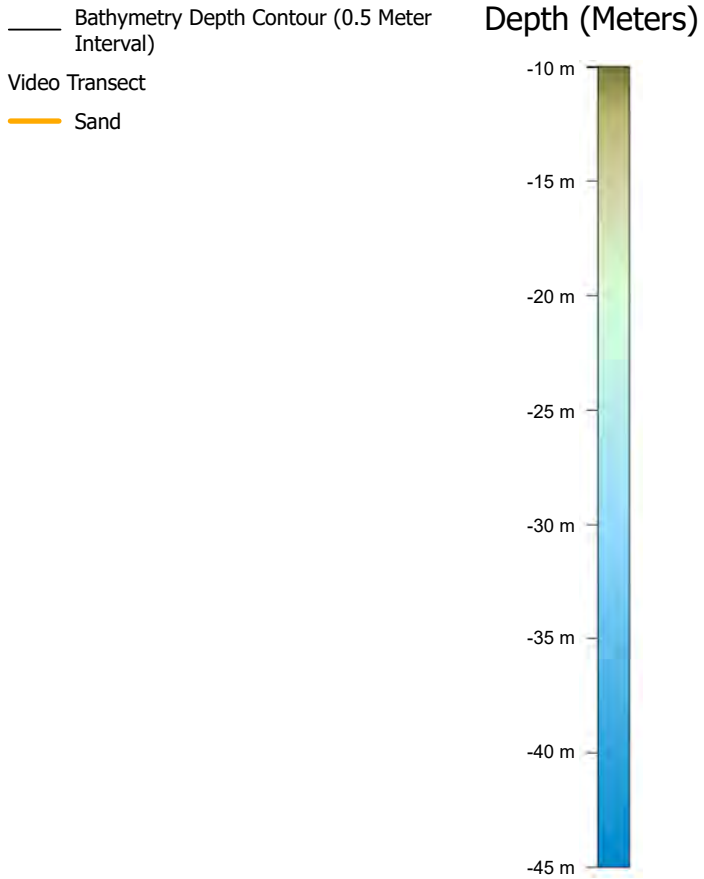
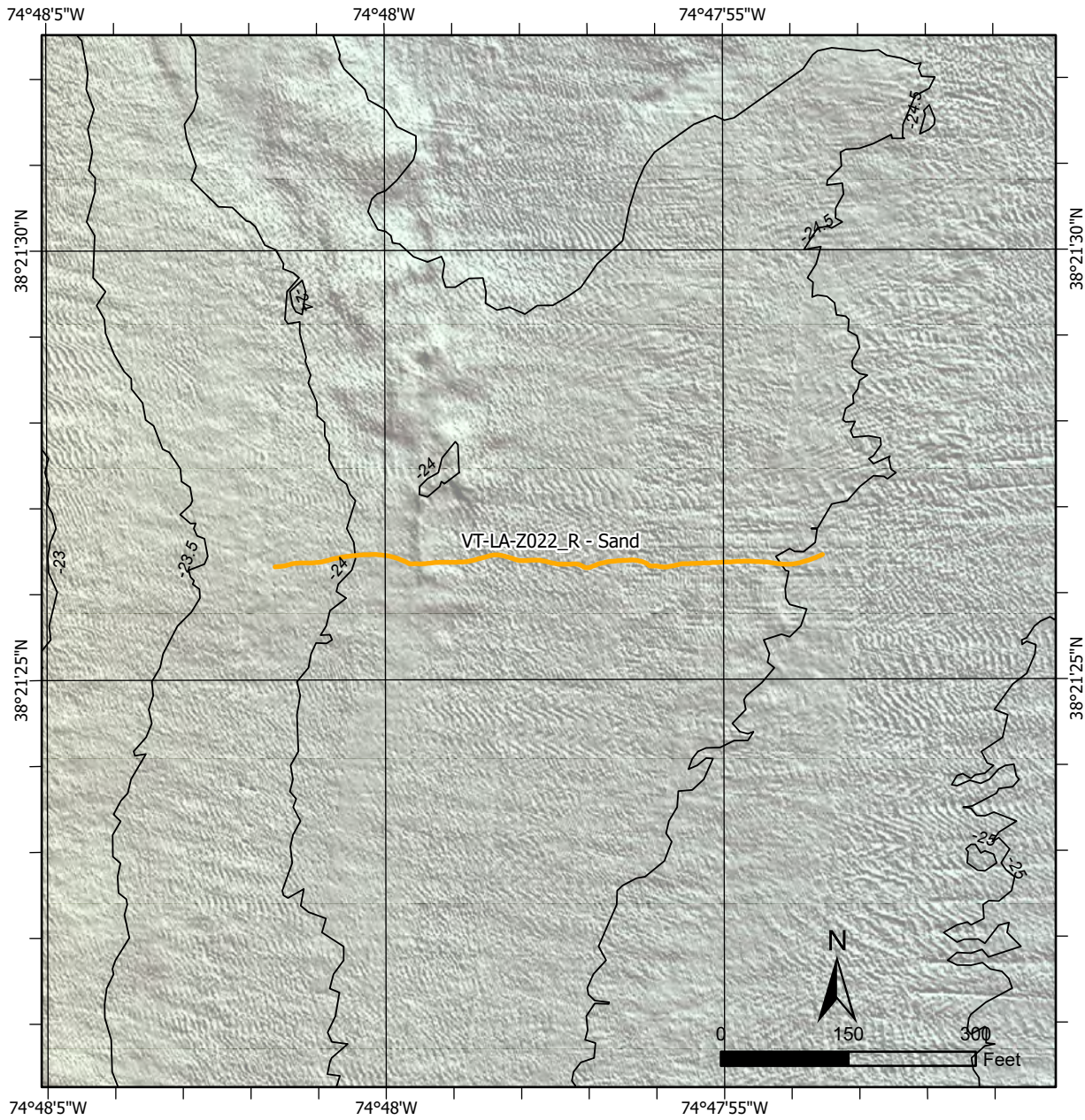
### Benthic Characterization for ROV Track

VT-LA-Z021

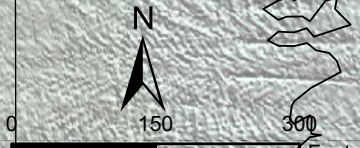
- Source:
- 1) GEMS, Bathymetry, 2022
  - 2) TDI, Video Transect Position Data, 2021
  - 3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



Area of detail showing Lease area and Offshore Export Cable Corridor



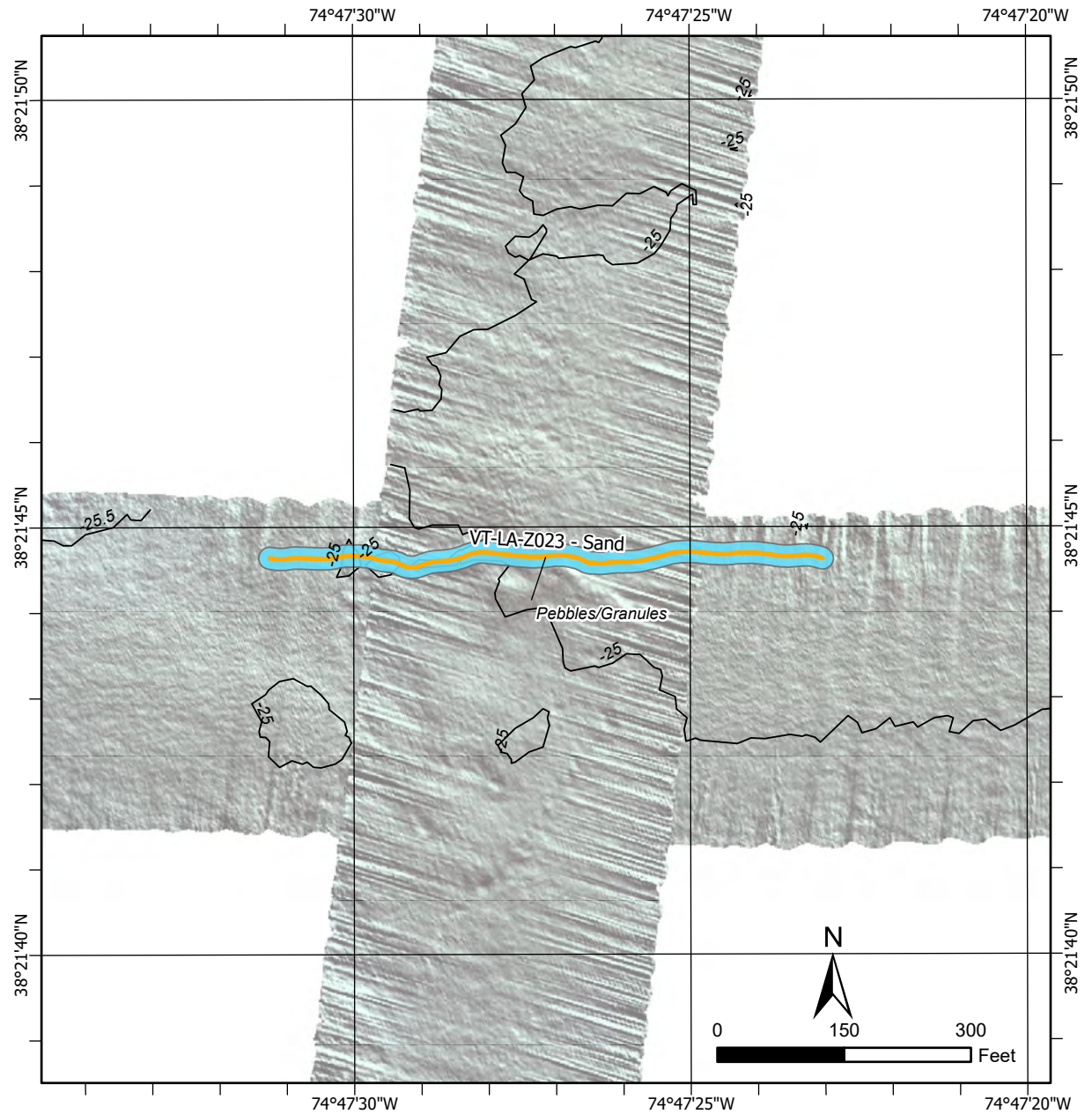
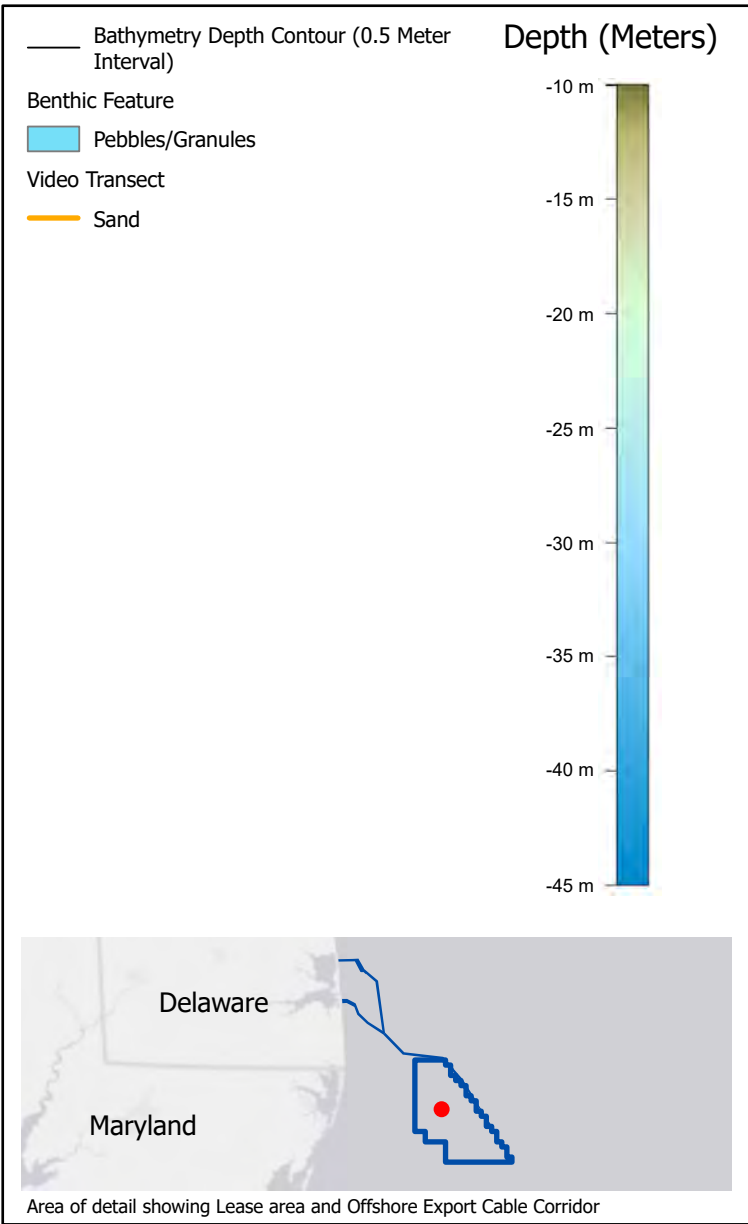
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Benthic Characterization for ROV Track  
VT-LA-Z022\_R

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



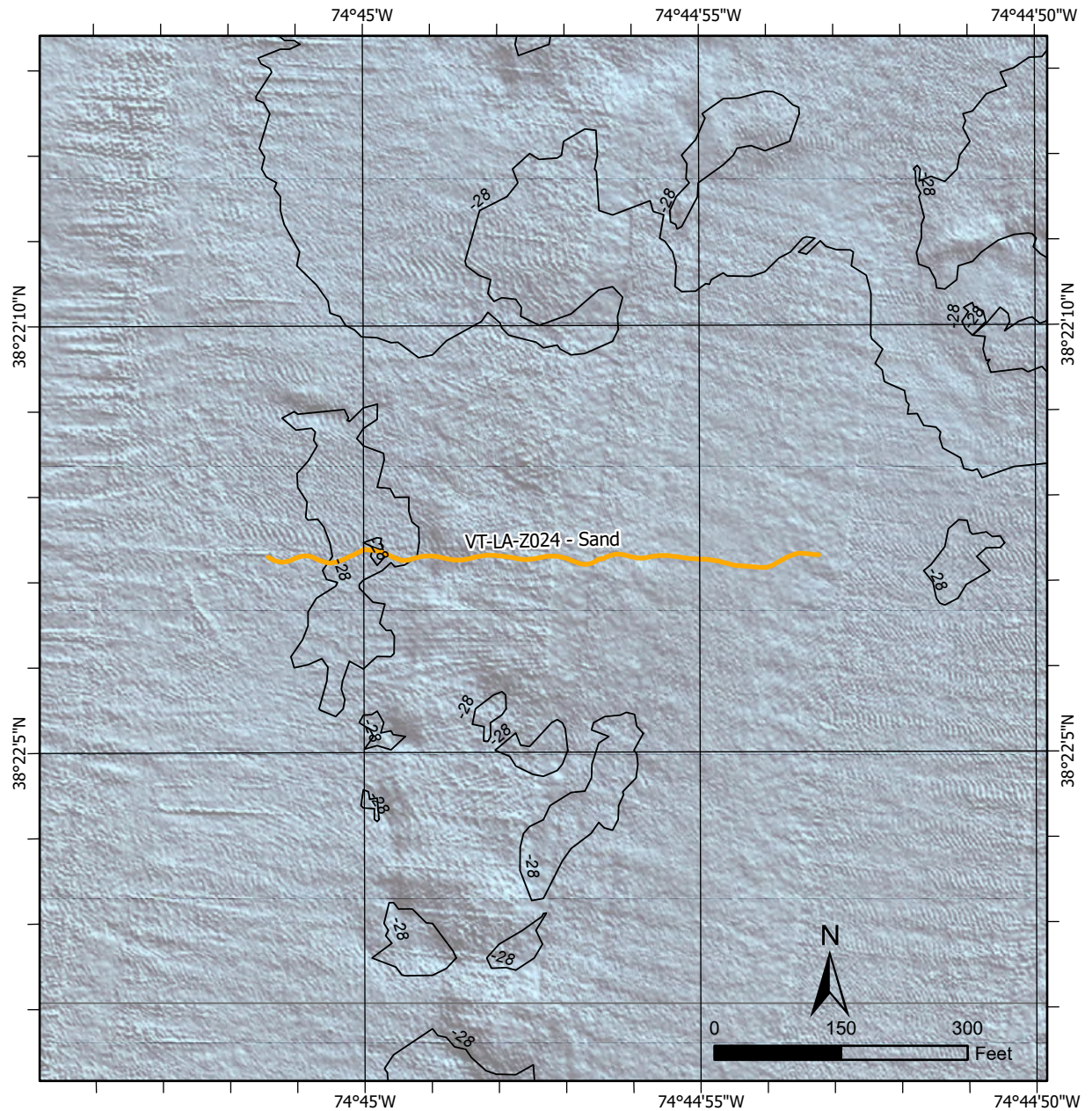
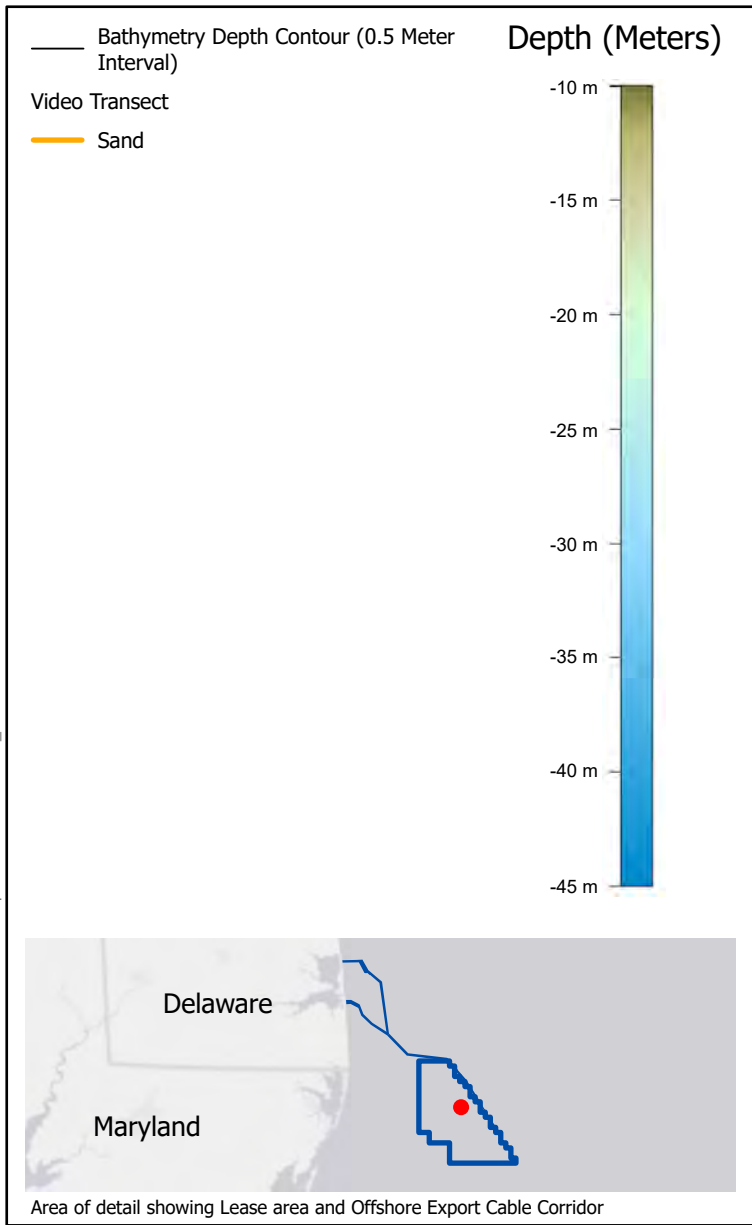
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z023



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



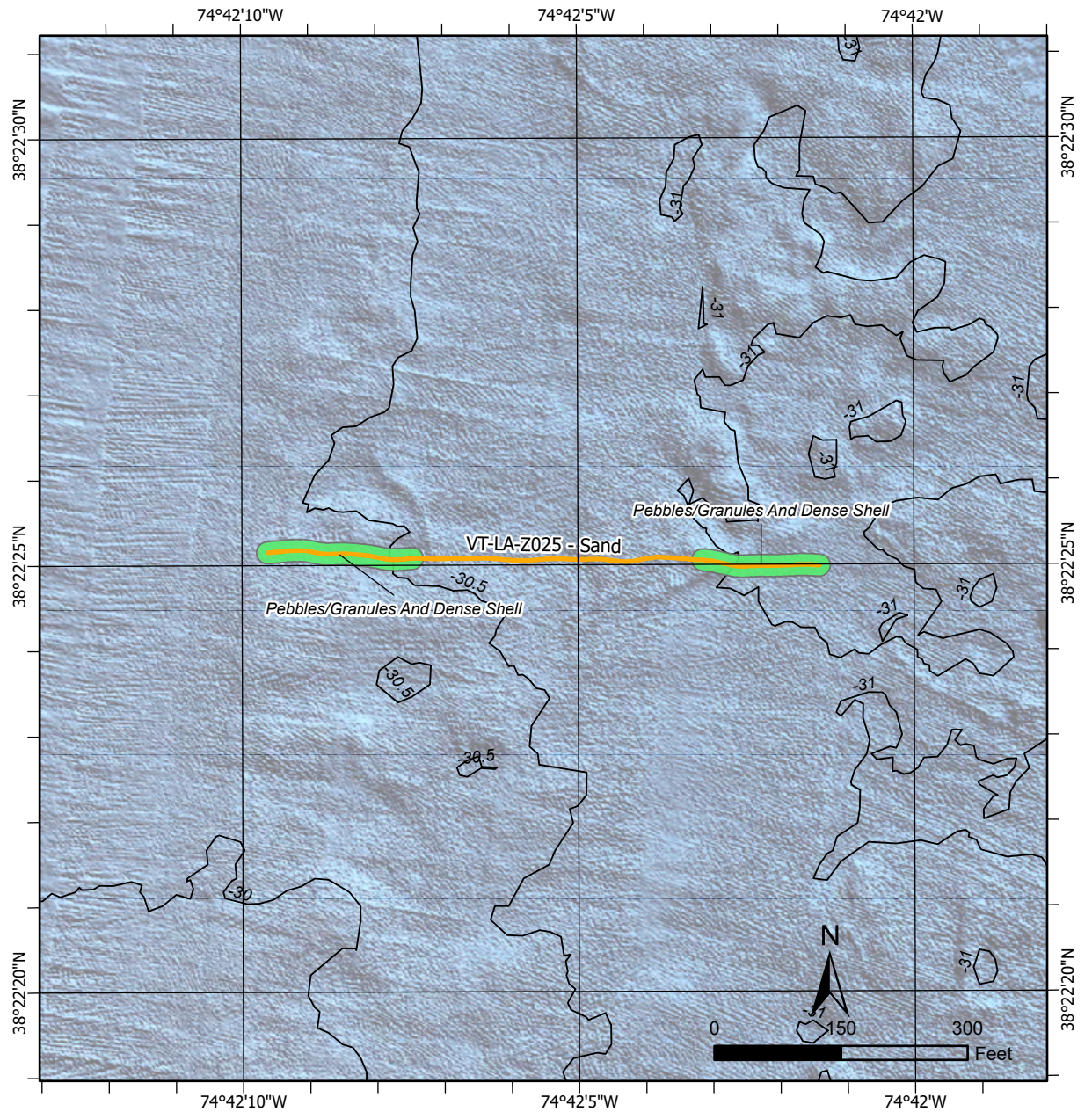
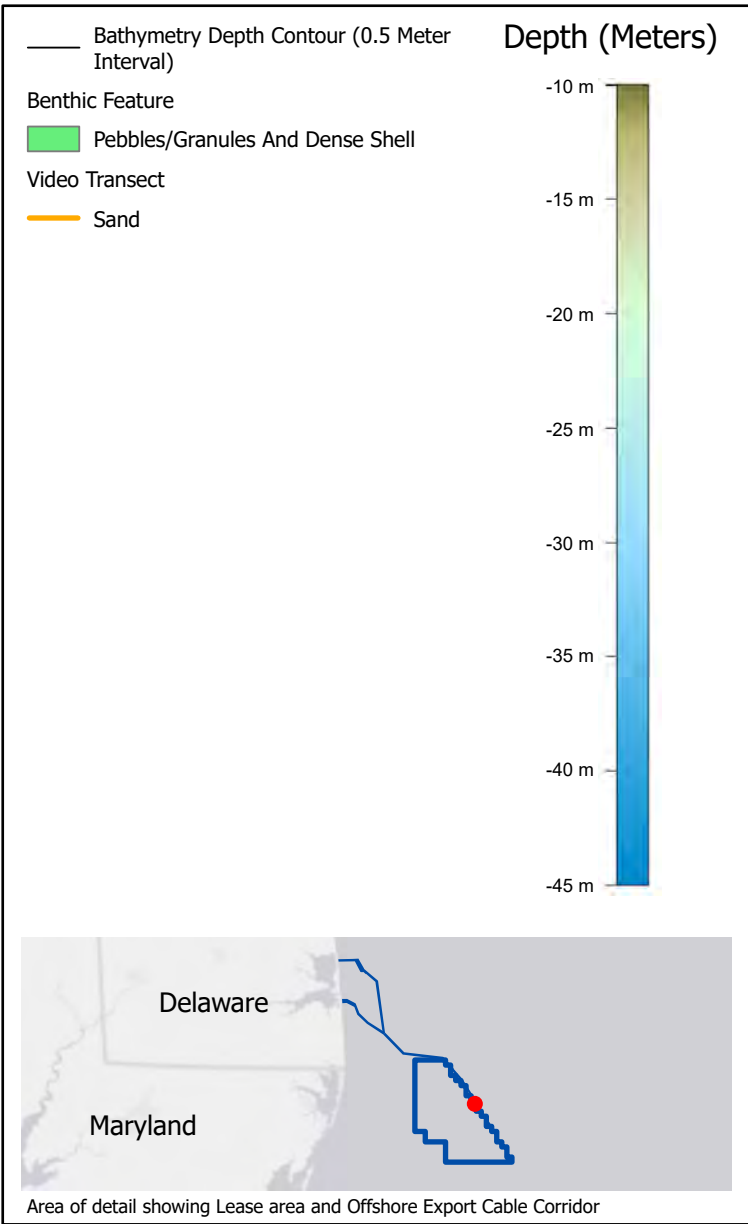
### Maryland Offshore Wind Project Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track VT-LA-Z024



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



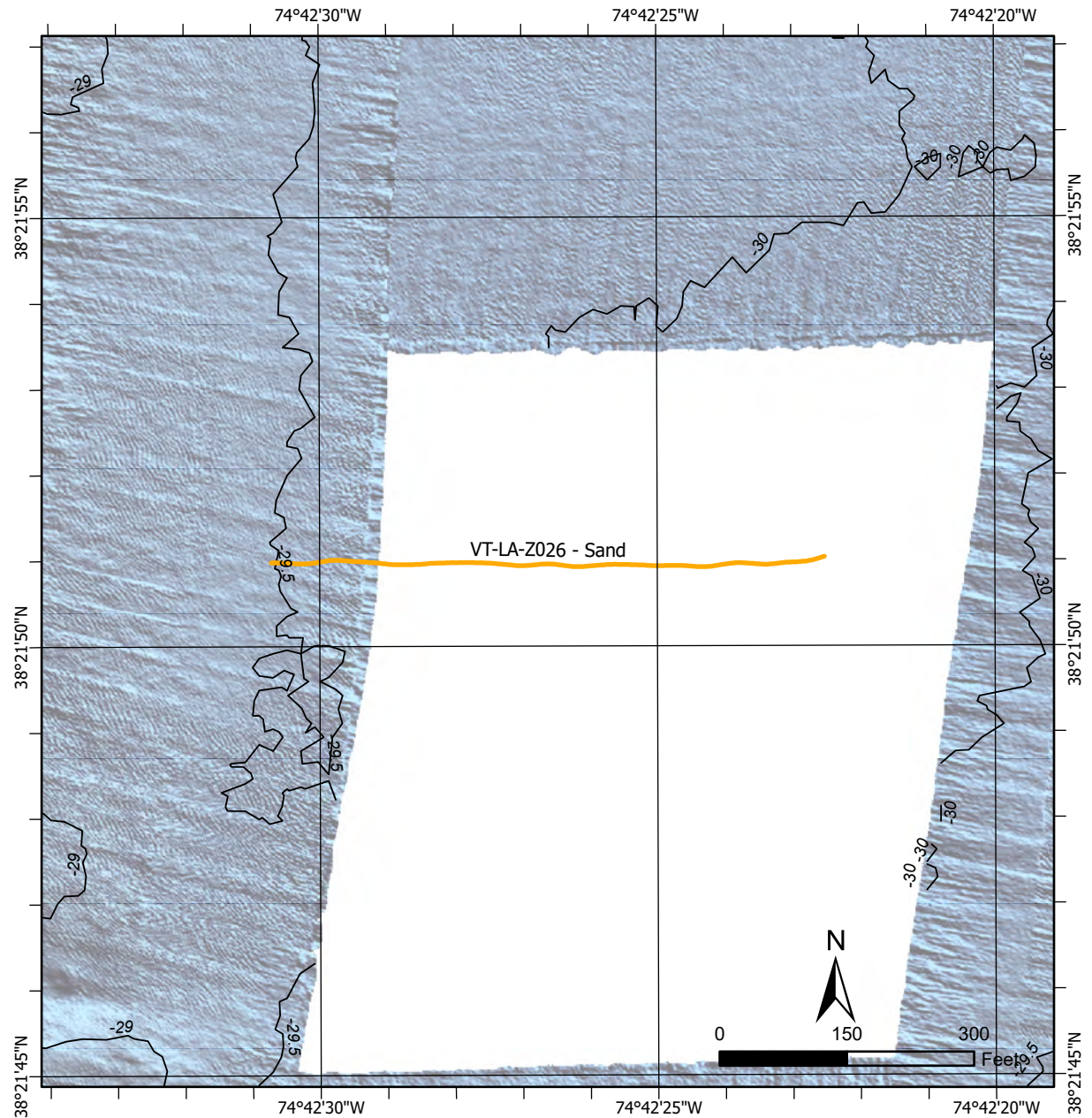
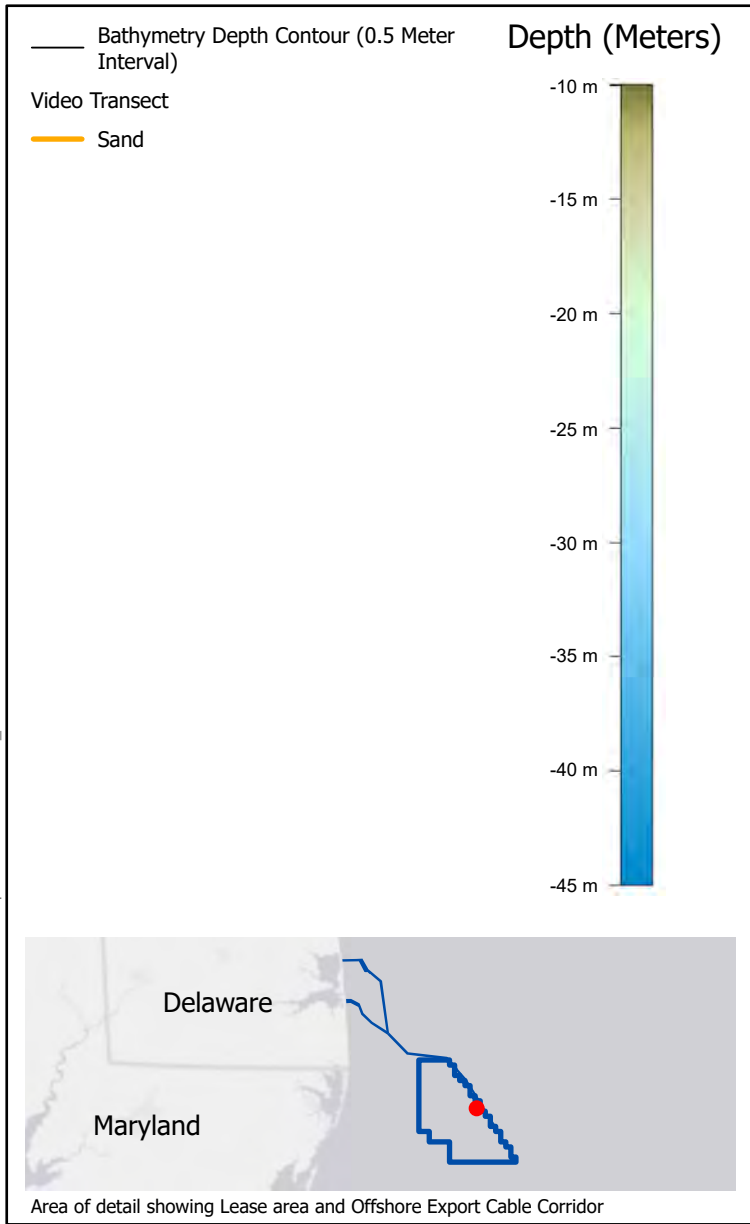
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

**Benthic Characterization for ROV Track**  
VT-LA-Z025



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

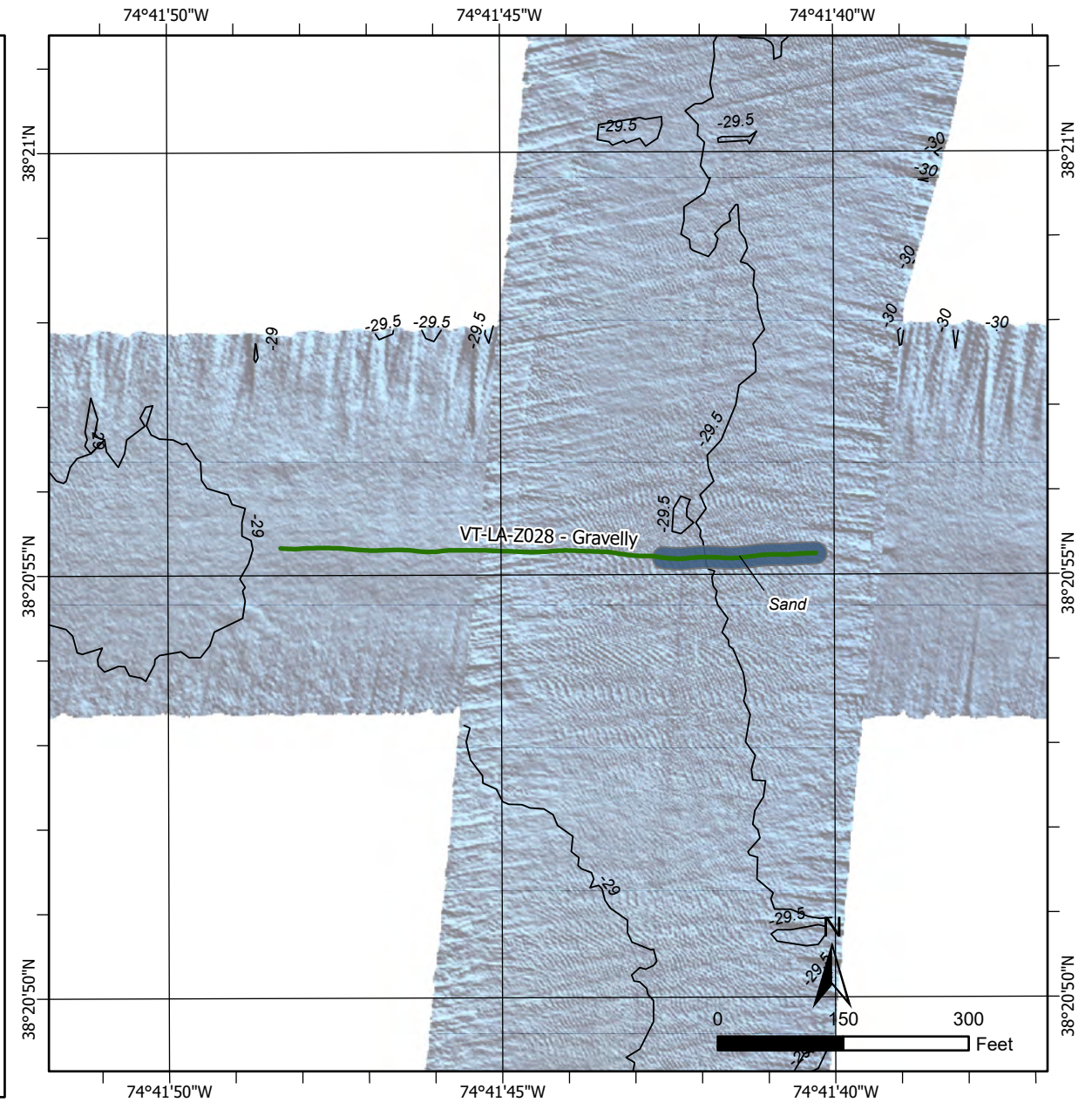
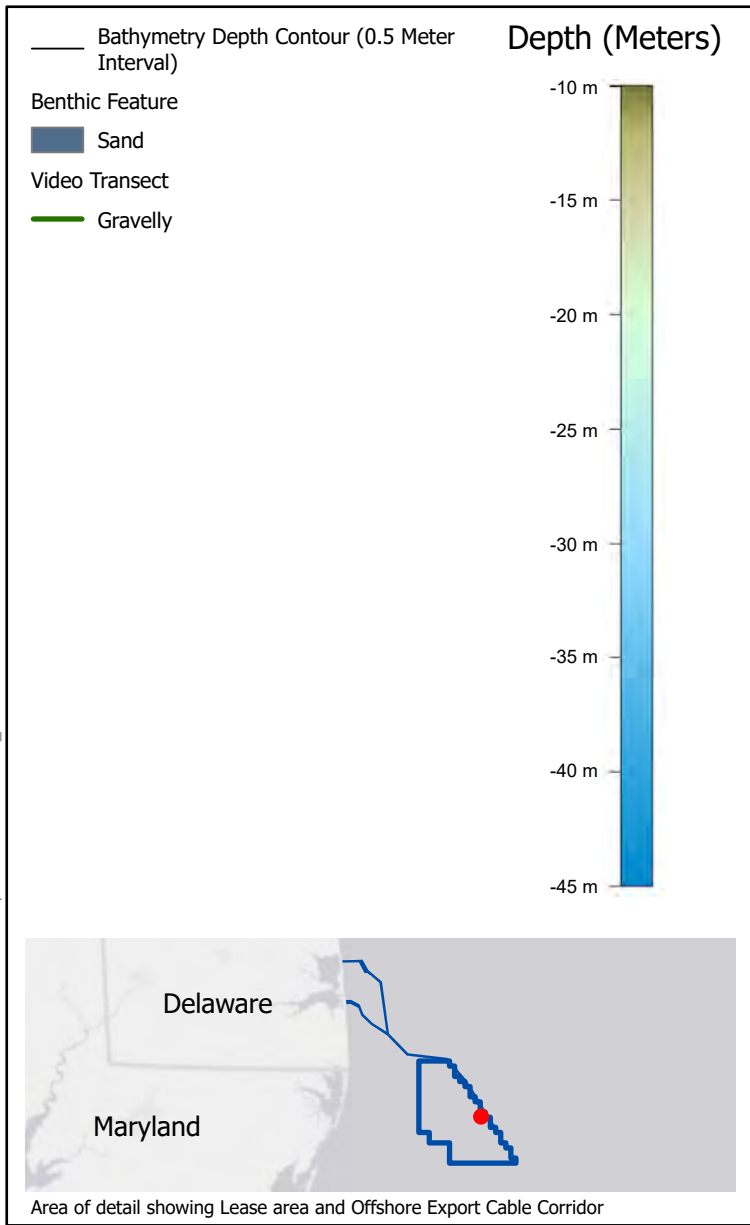
Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track

VT-LA-Z026



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

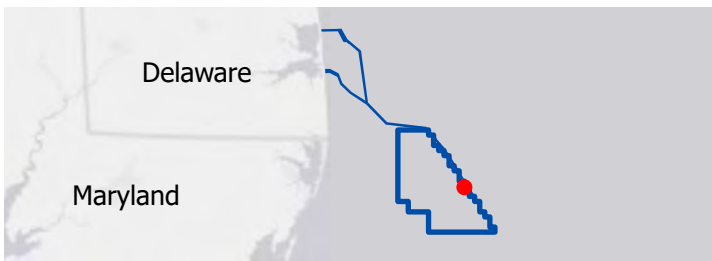
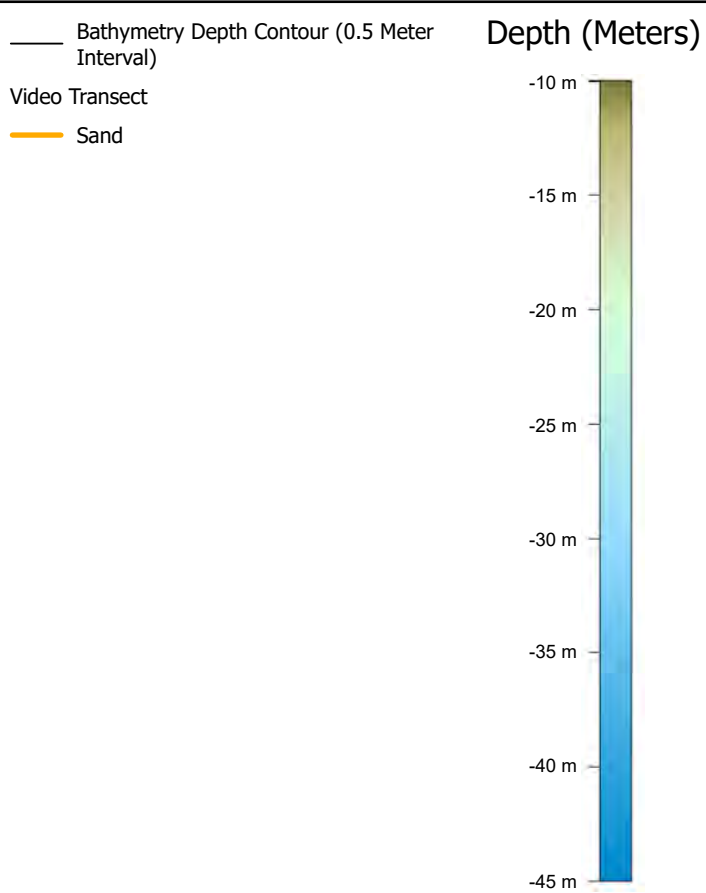
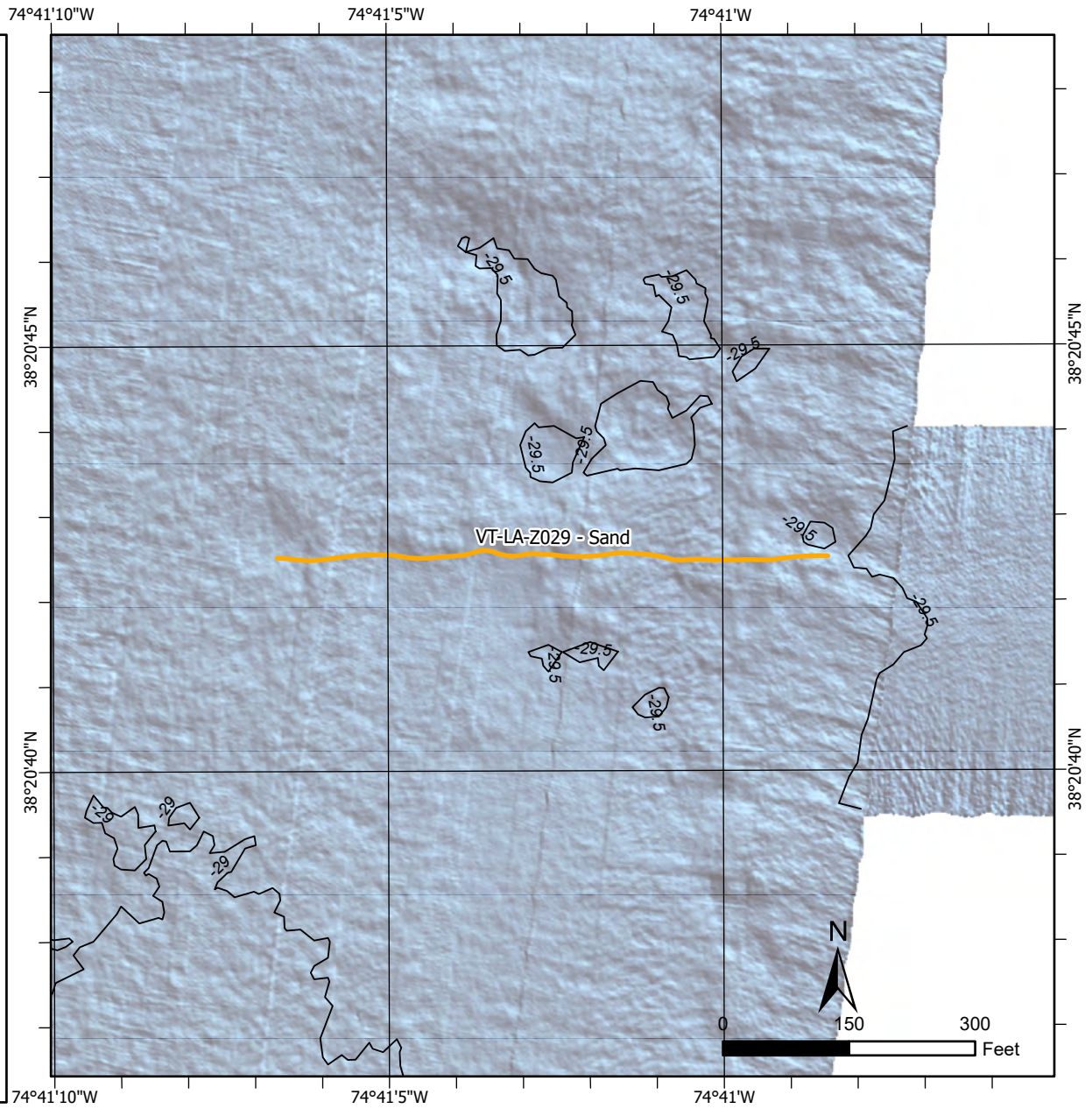
### Benthic Characterization for ROV Track

VT-LA-Z028

- Source:
- 1) GEMS, Bathymetry, 2022
  - 2) TDI, Video Transect Position Data, 2021
  - 3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD04 Graphics\GIS\APRXU167\_ROVtracks01



Area of detail showing Lease area and Offshore Export Cable Corridor



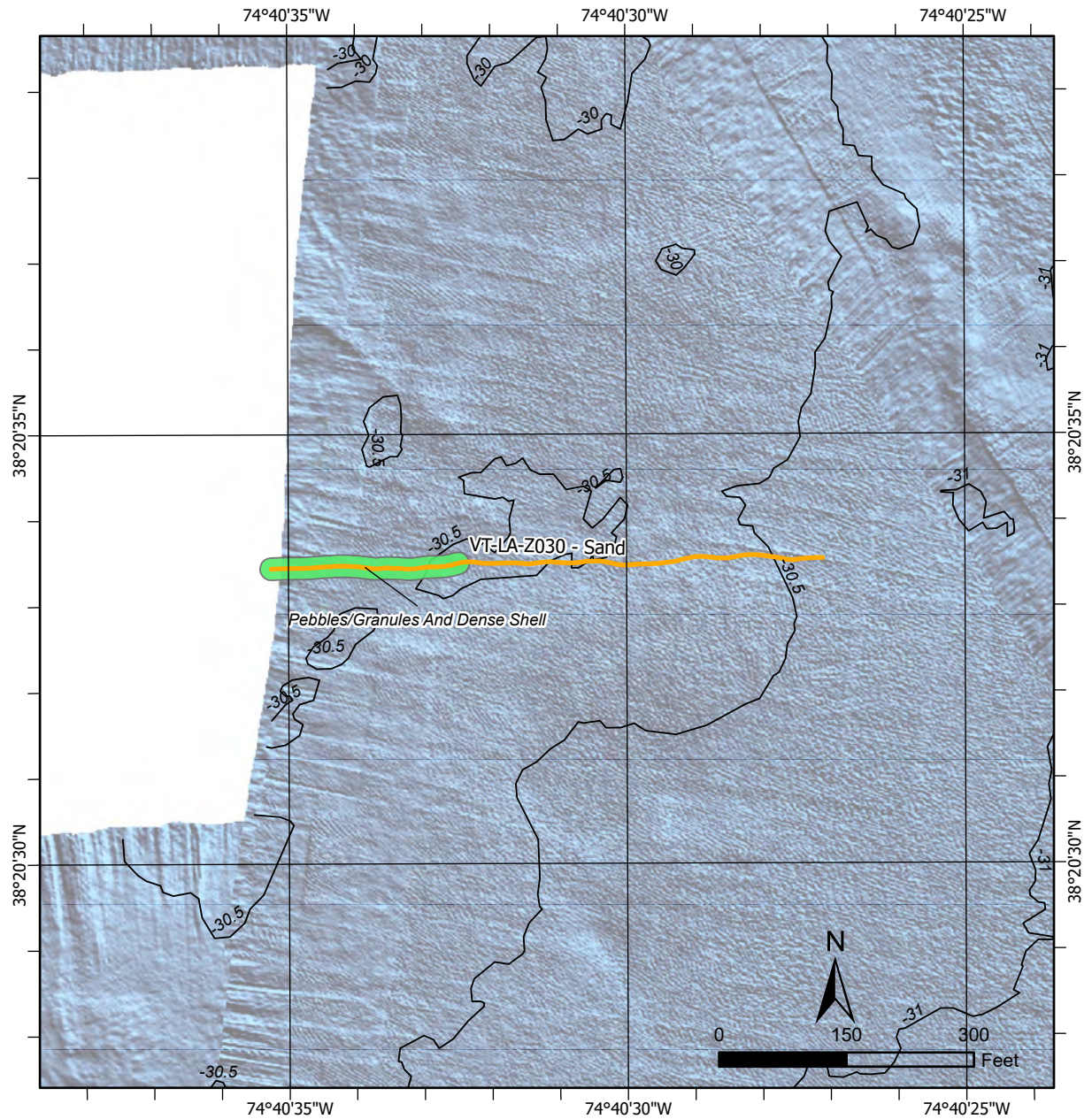
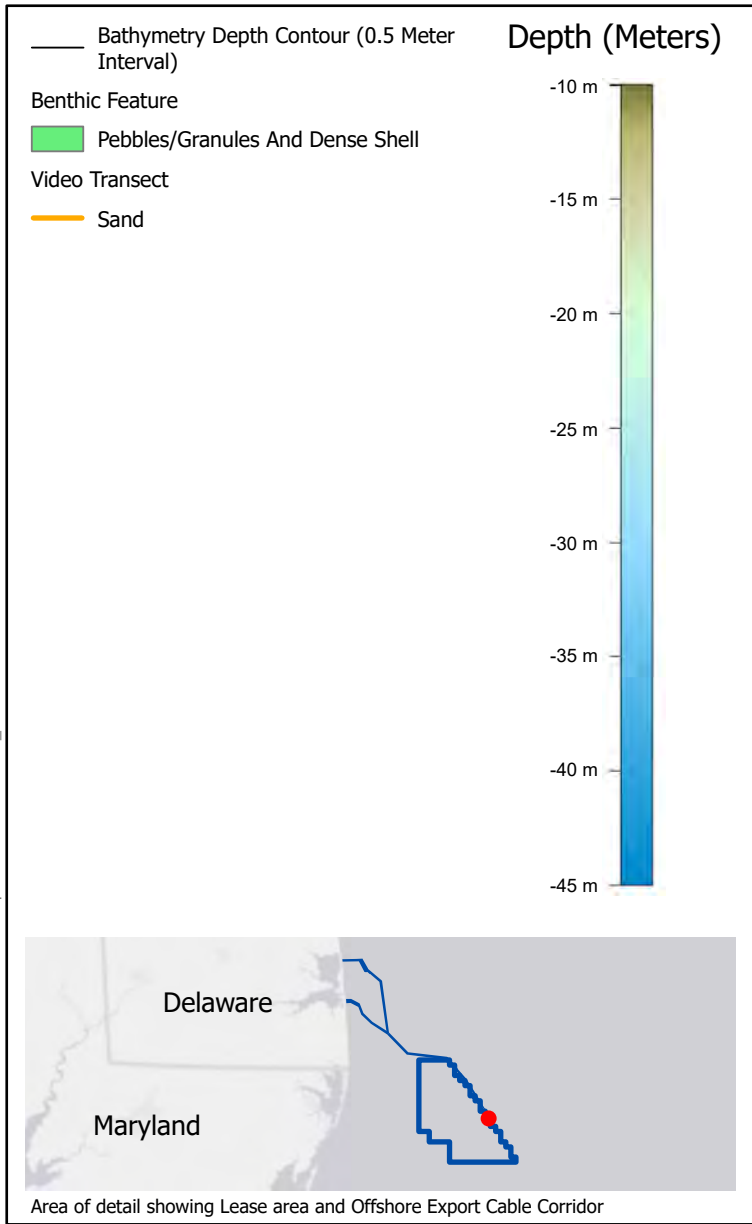
### Maryland Offshore Wind Project Offshore Maryland and Delaware

### Benthic Characterization for ROV Track VT-LA-Z029

- Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



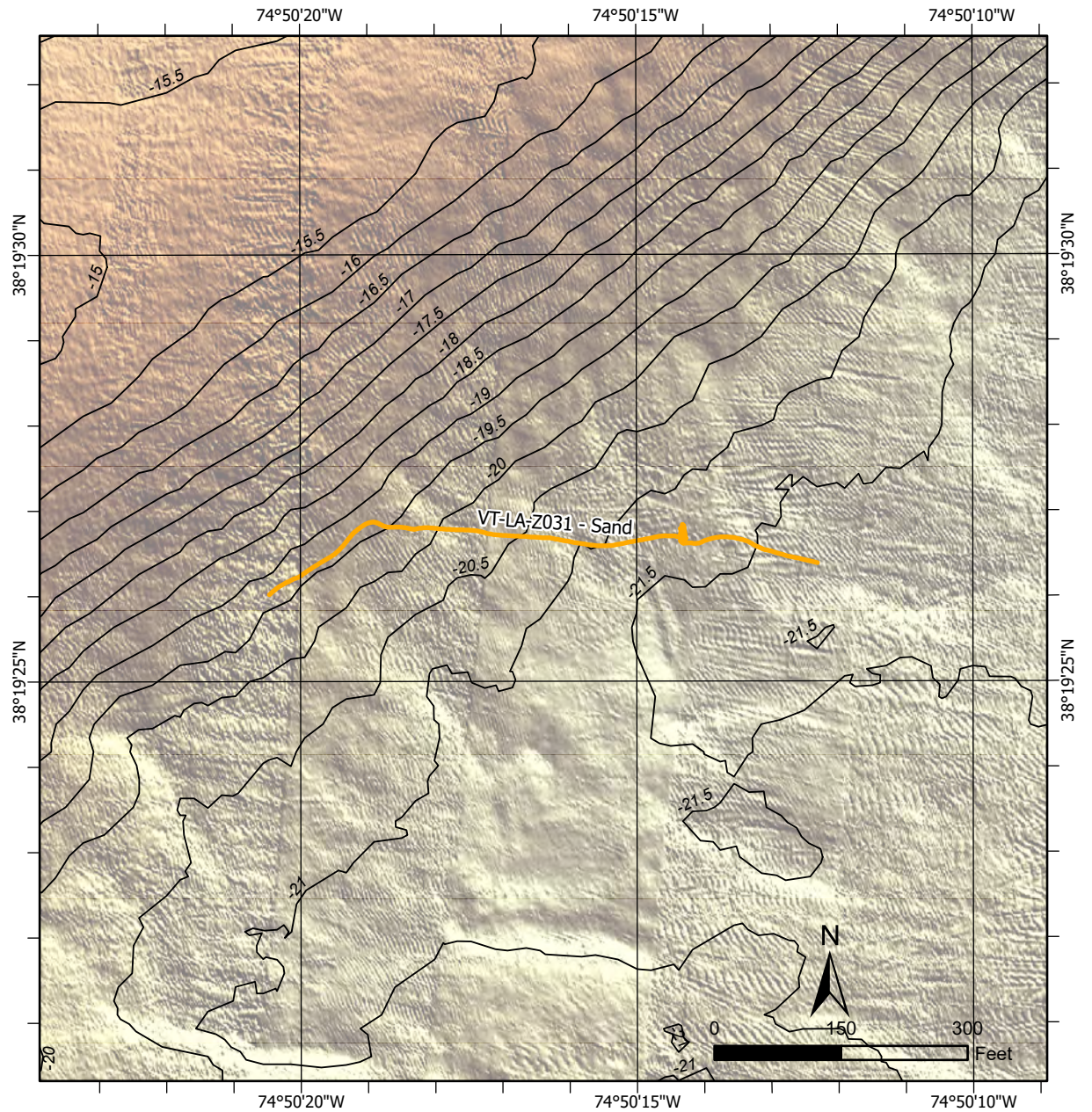
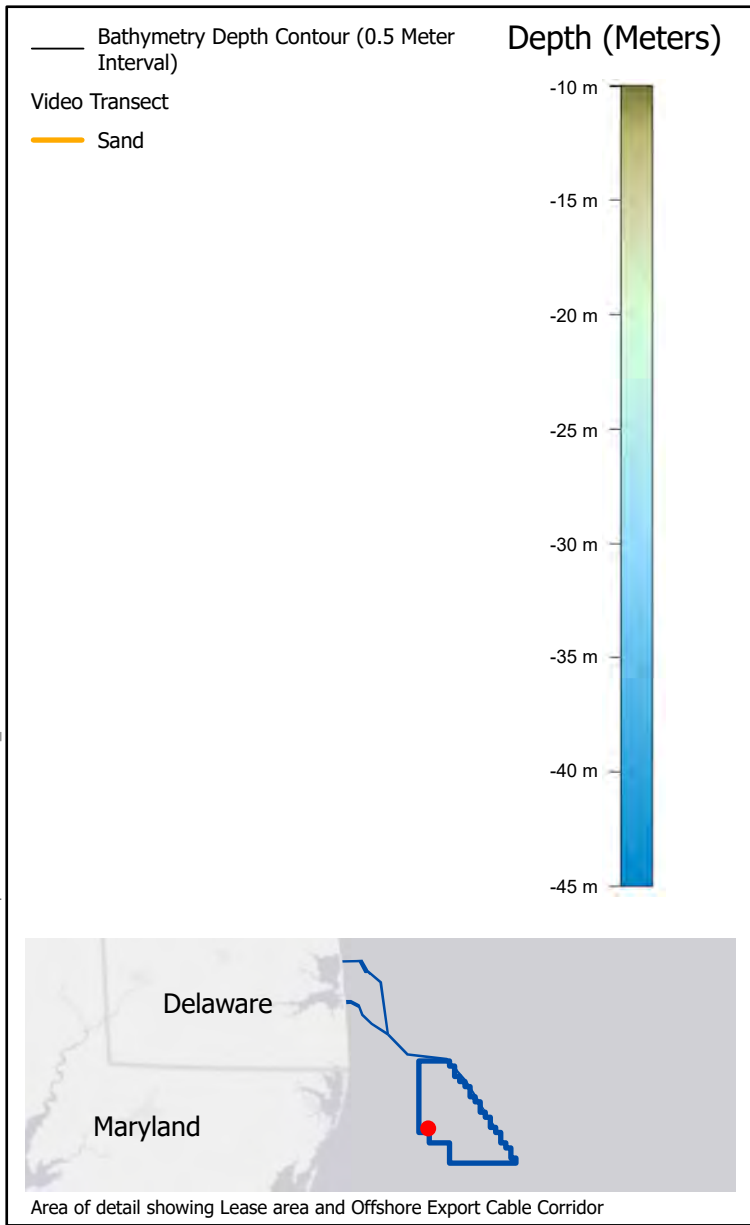
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

**Benthic Characterization for ROV Track**  
VT-LA-Z030



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

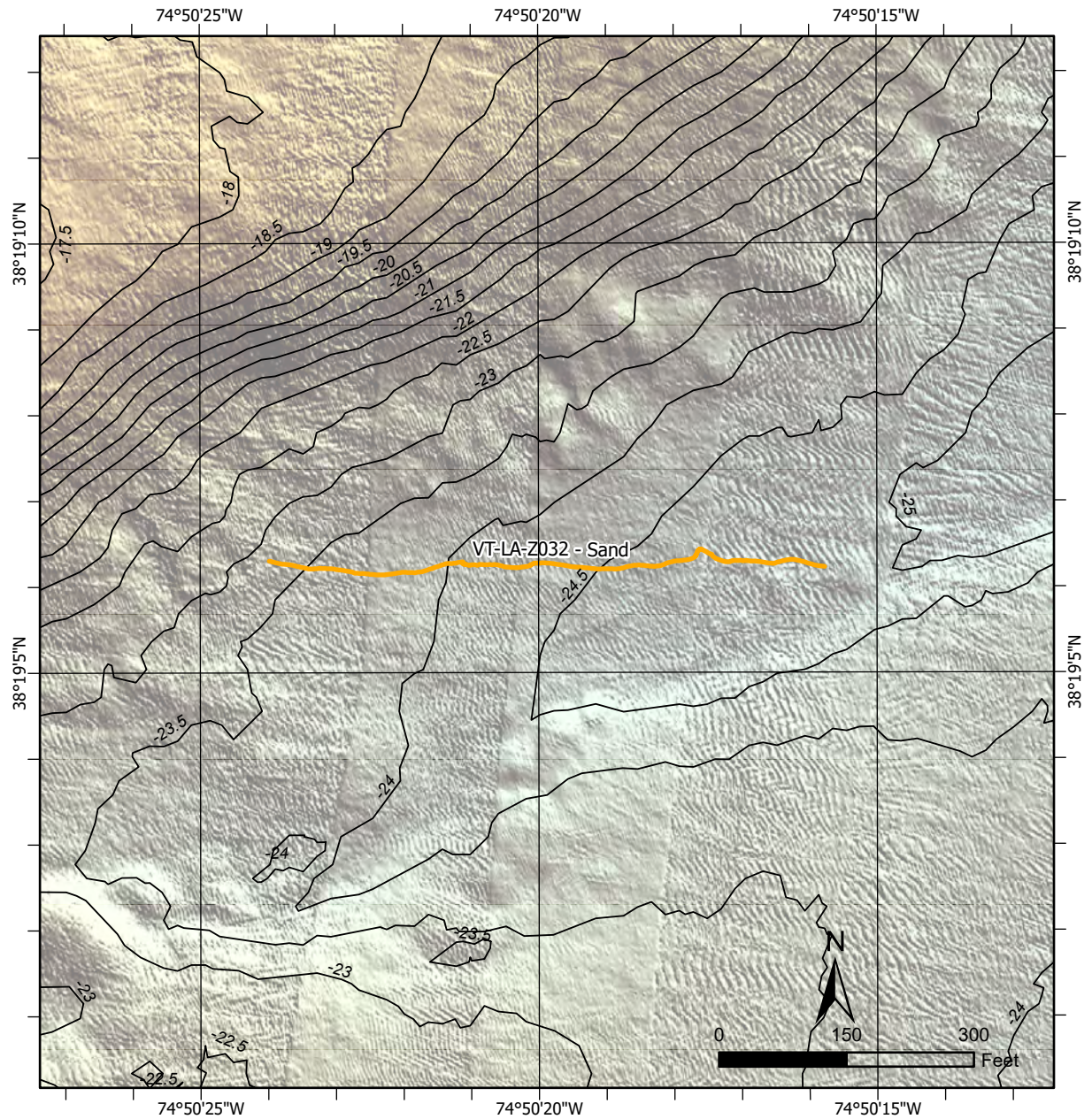
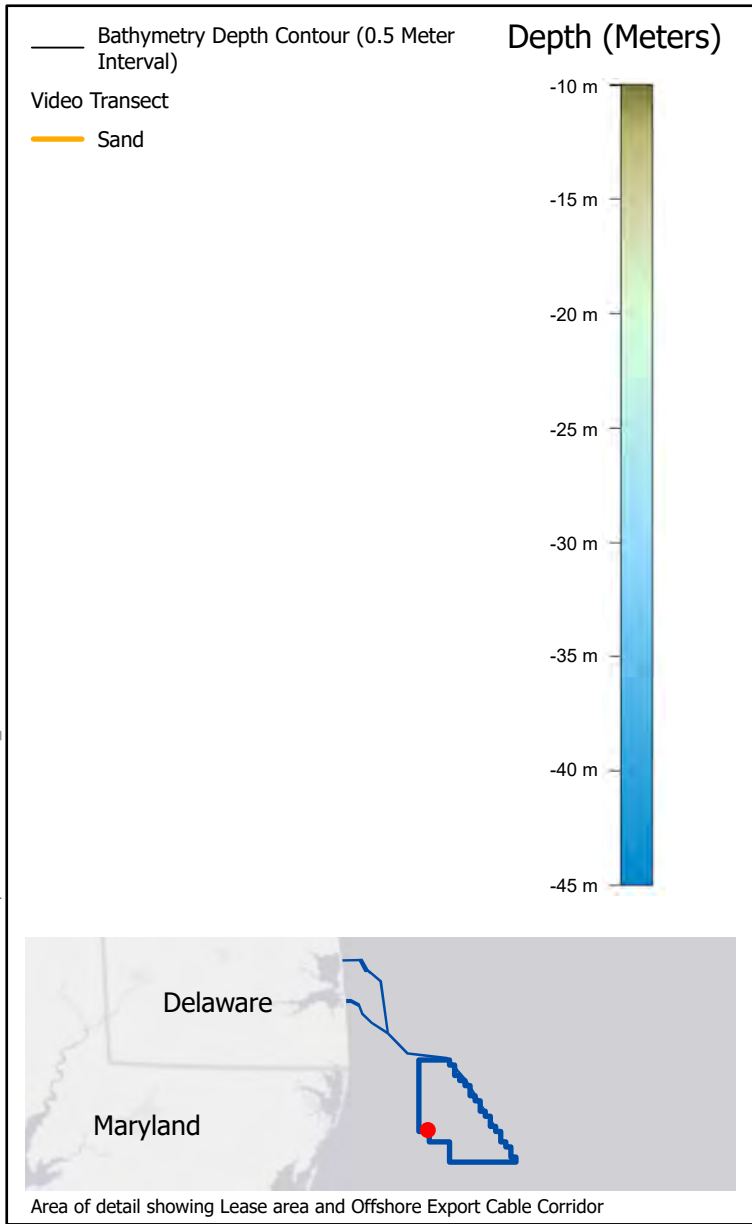
### Benthic Characterization for ROV Track

VT-LA-Z031

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

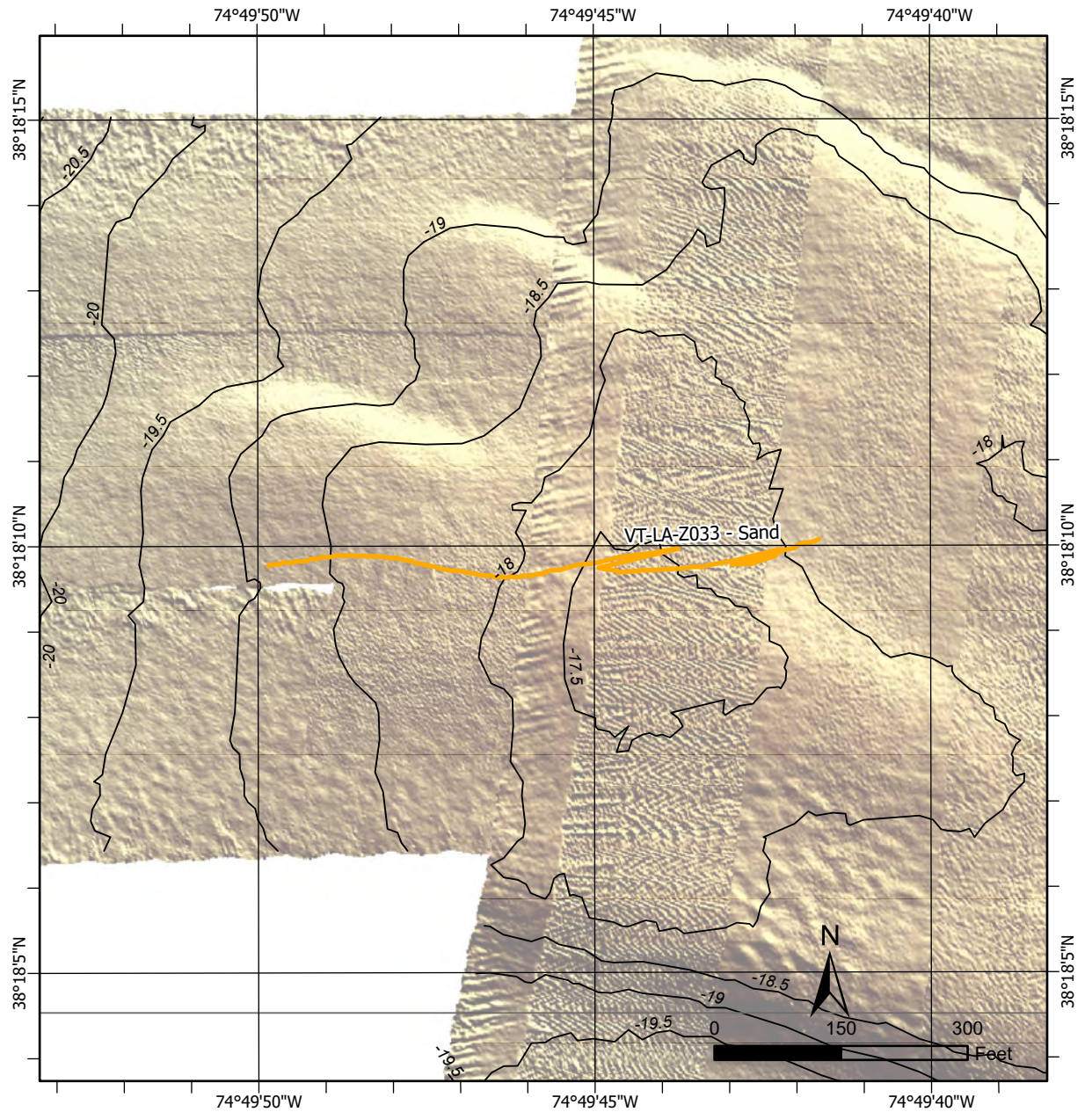
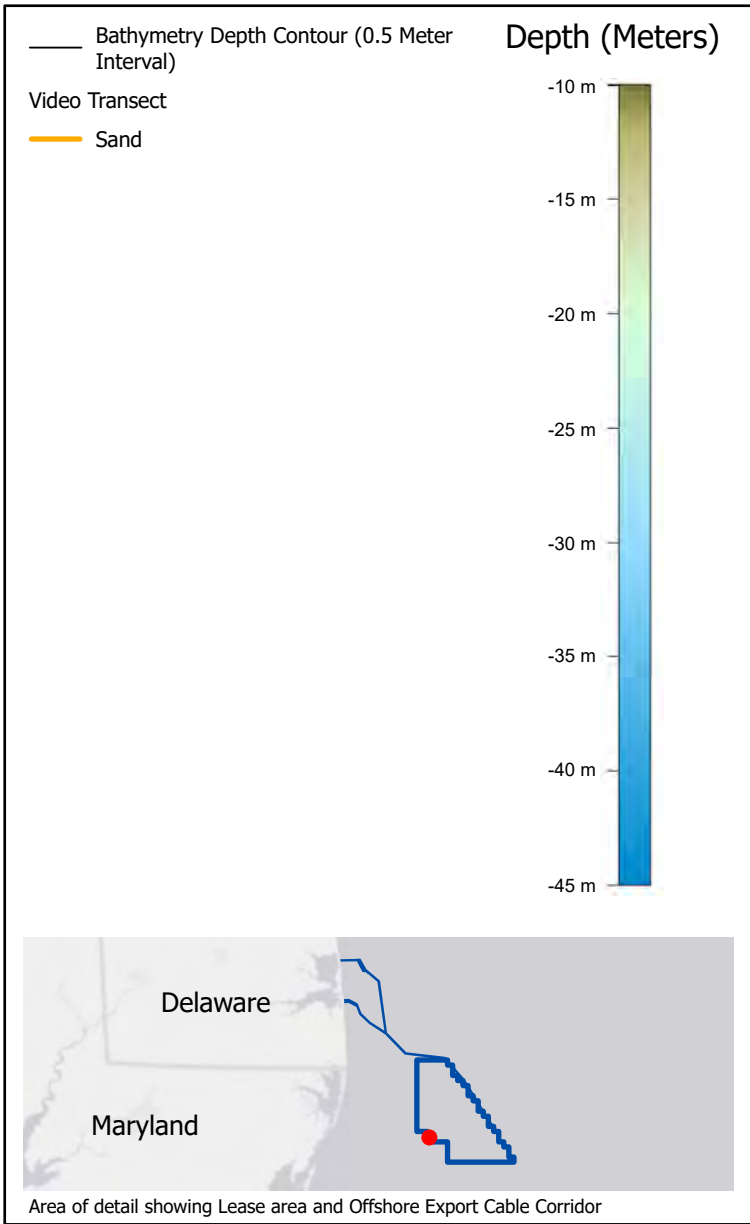
Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track

VT-LA-Z032



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



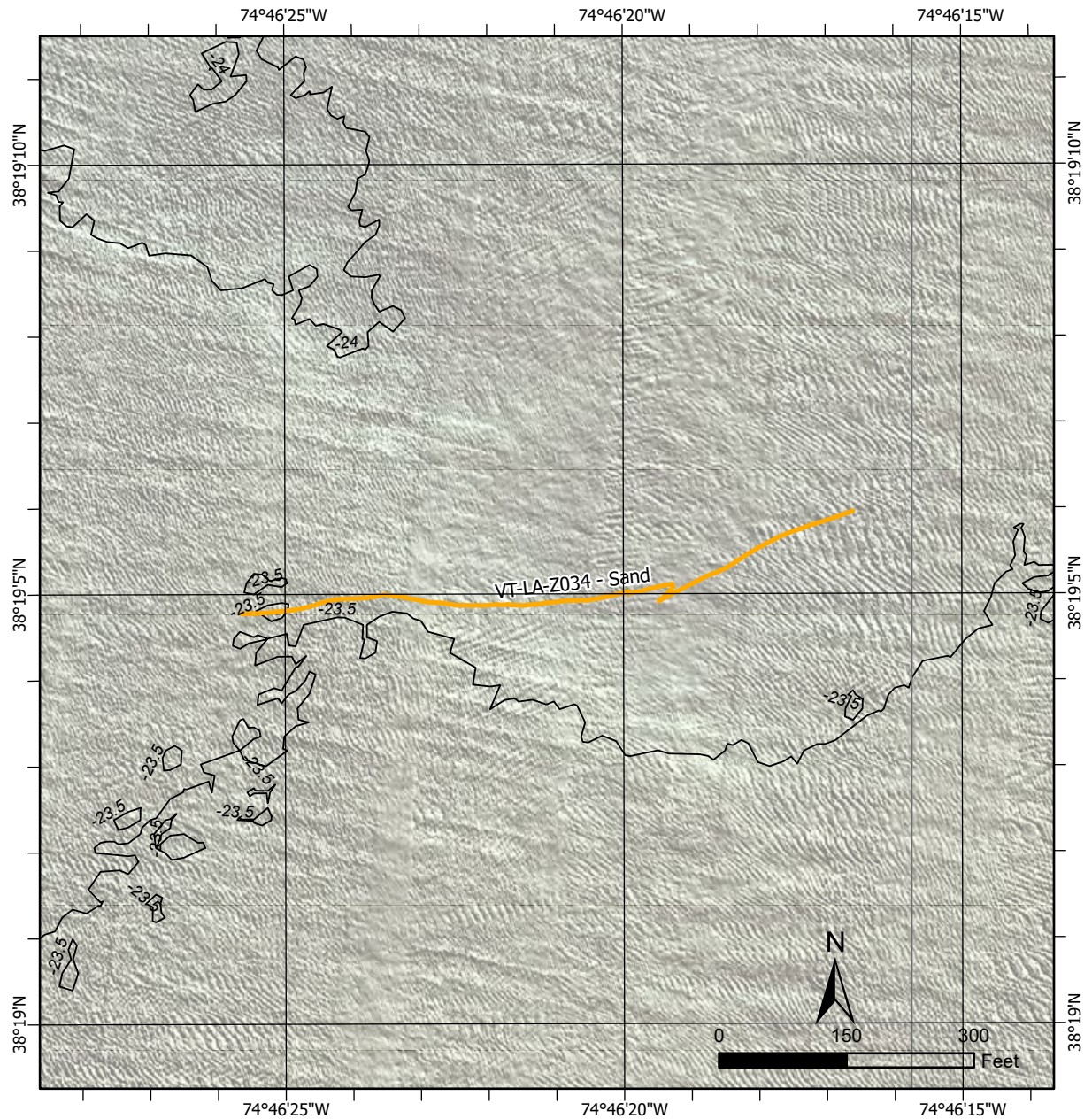
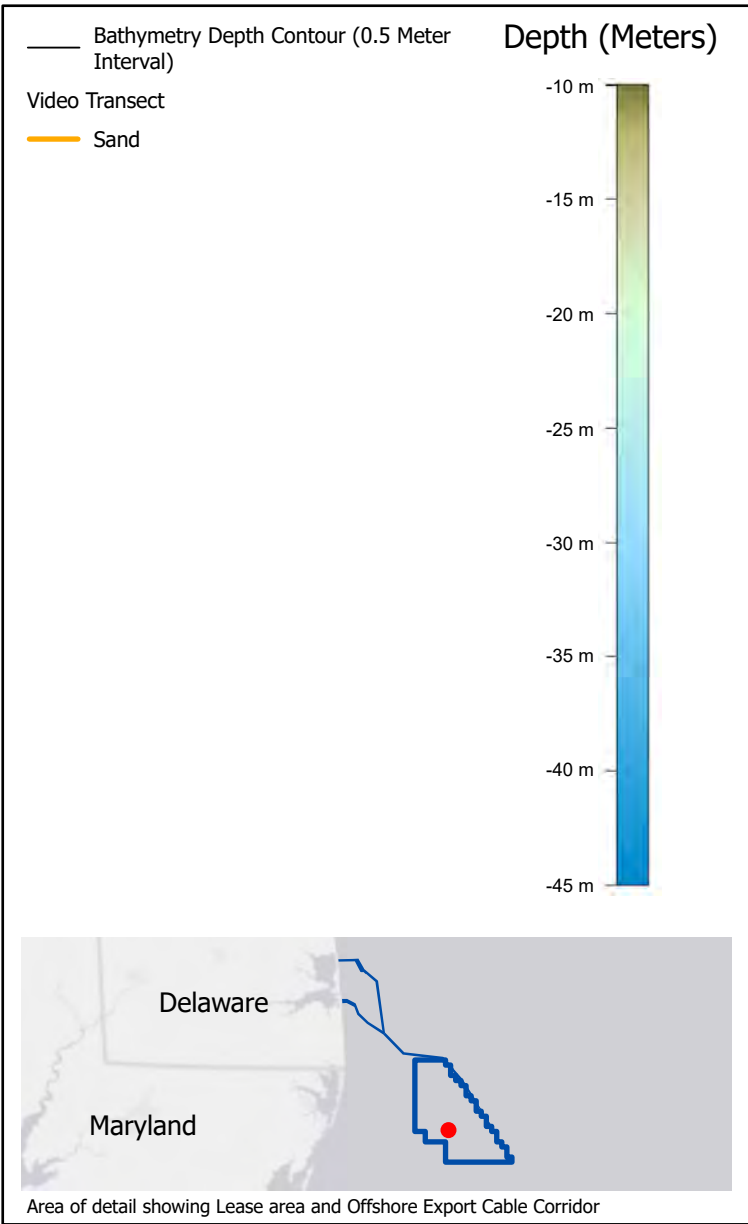
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Benthic Characterization for ROV Track  
VT-LA-Z033

- Source:
- 1) GEMS, Bathymetry, 2022
  - 2) TDI, Video Transect Position Data, 2021
  - 3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



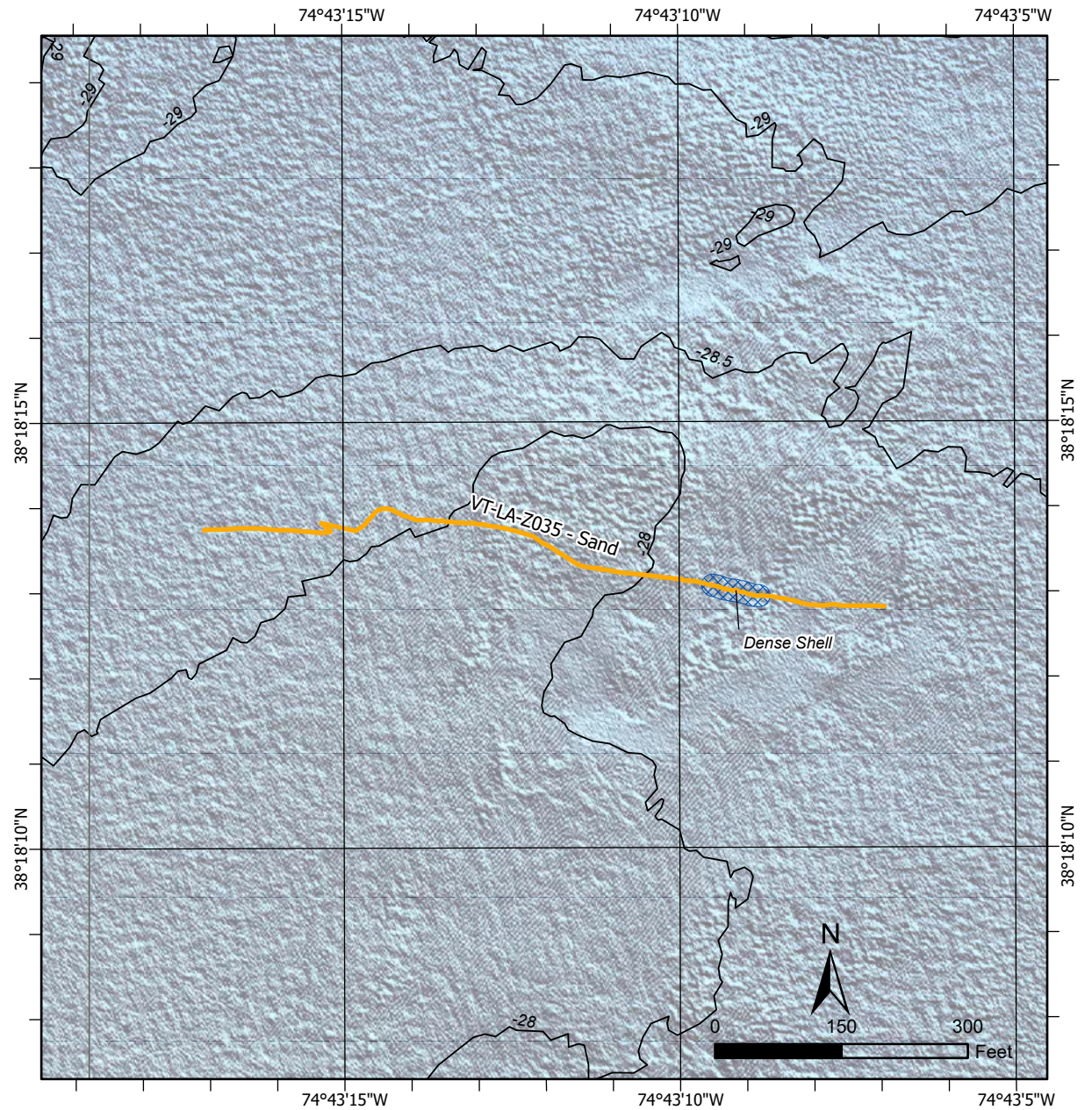
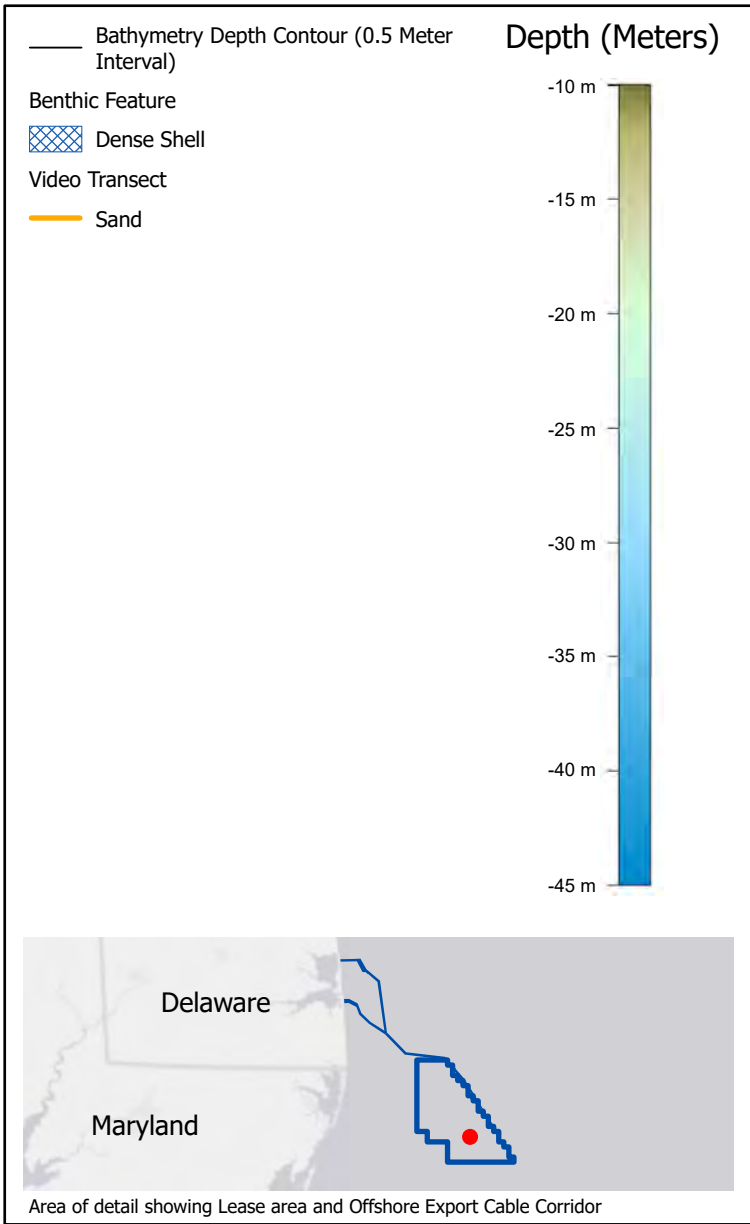
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z034



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



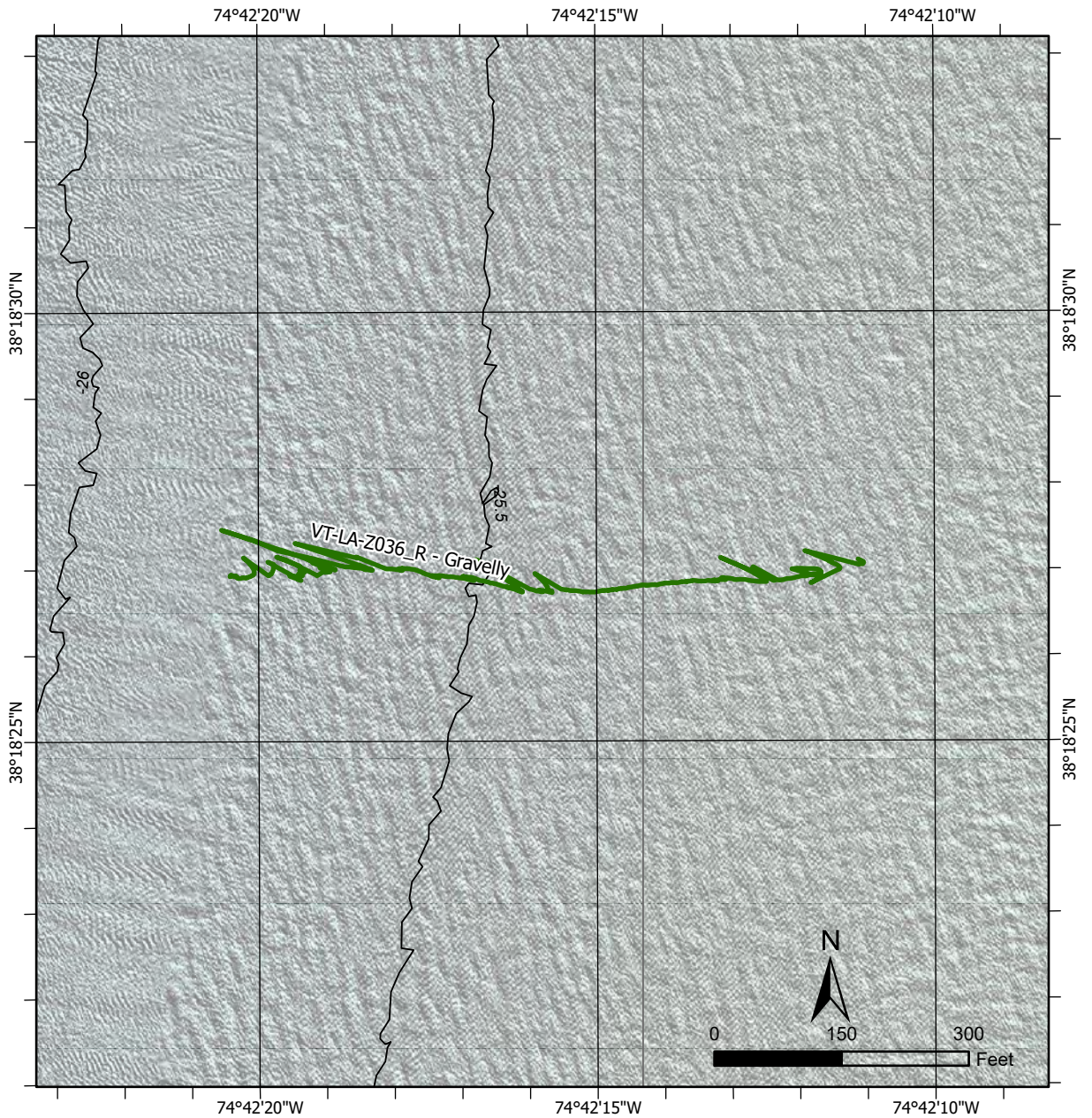
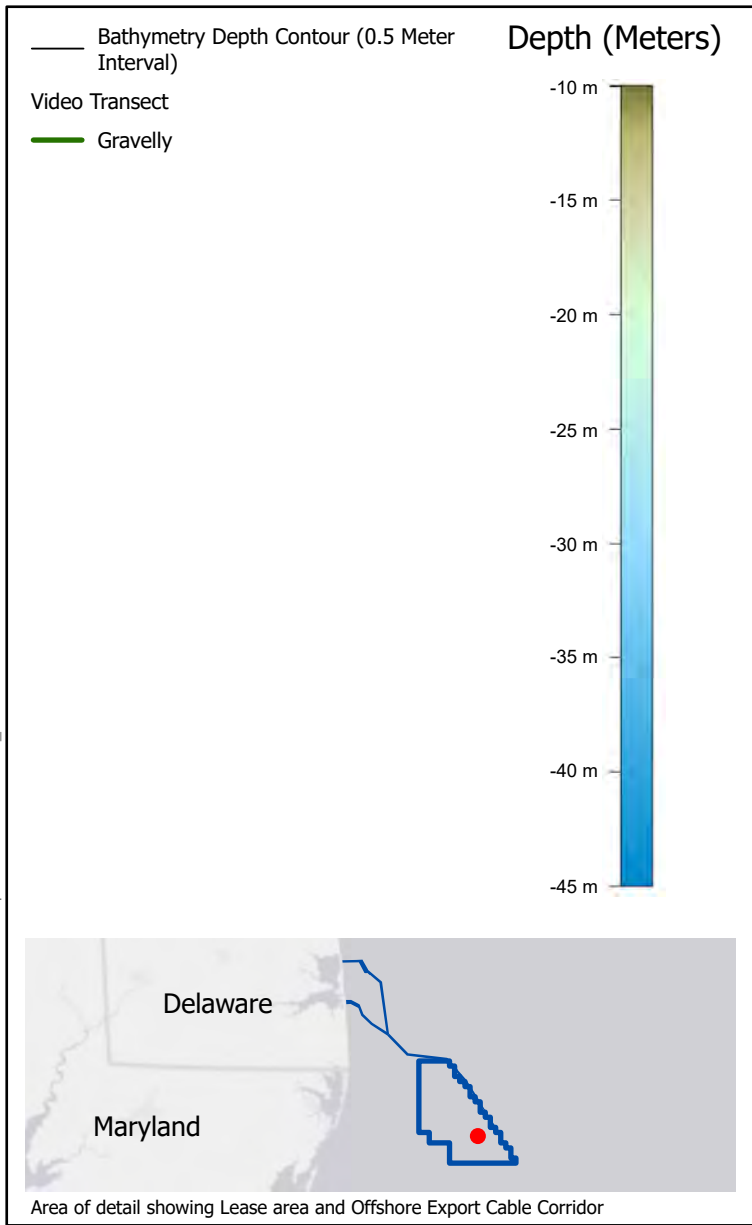
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Benthic Characterization for ROV Track  
VT-LA-Z035

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



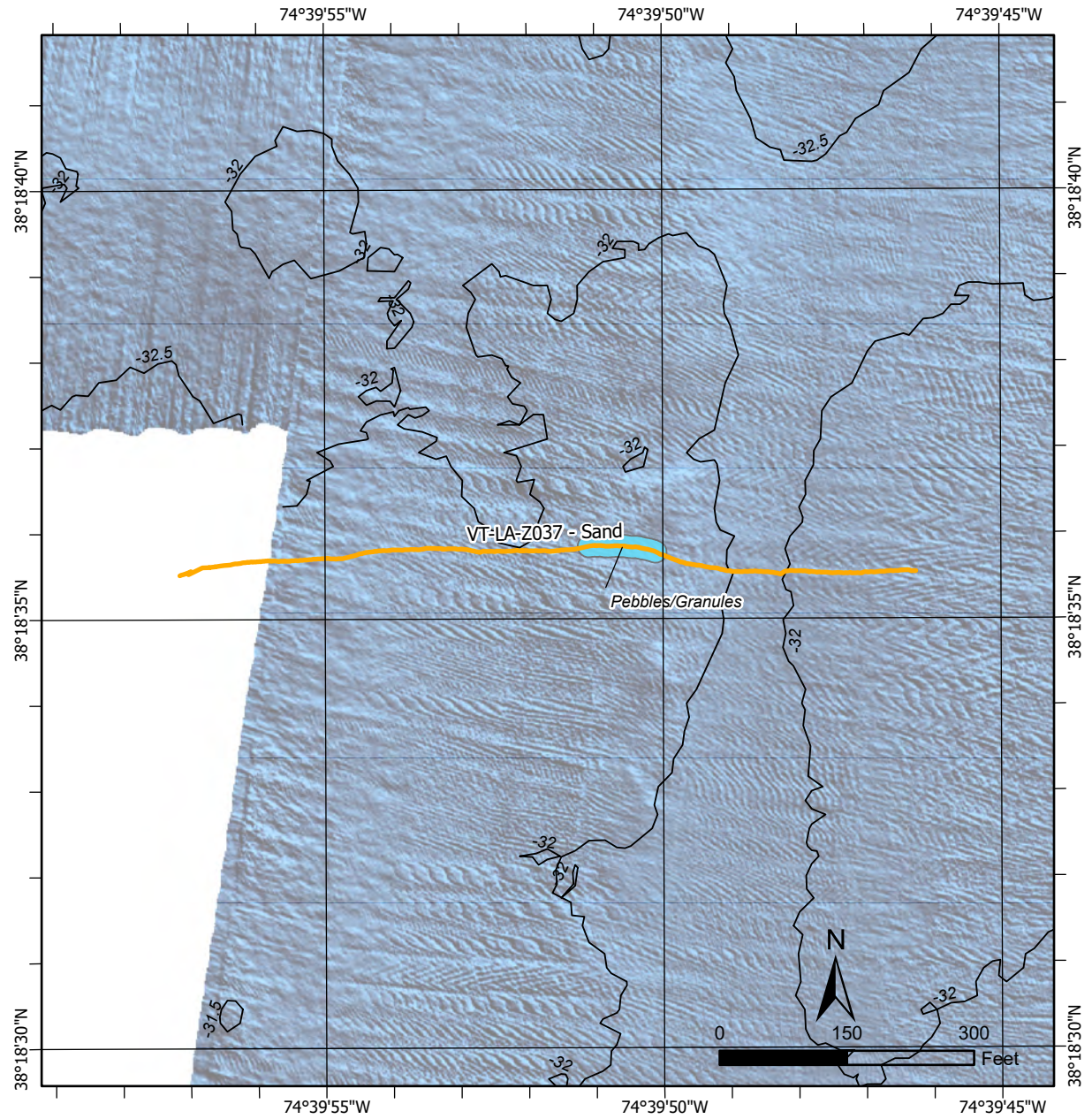
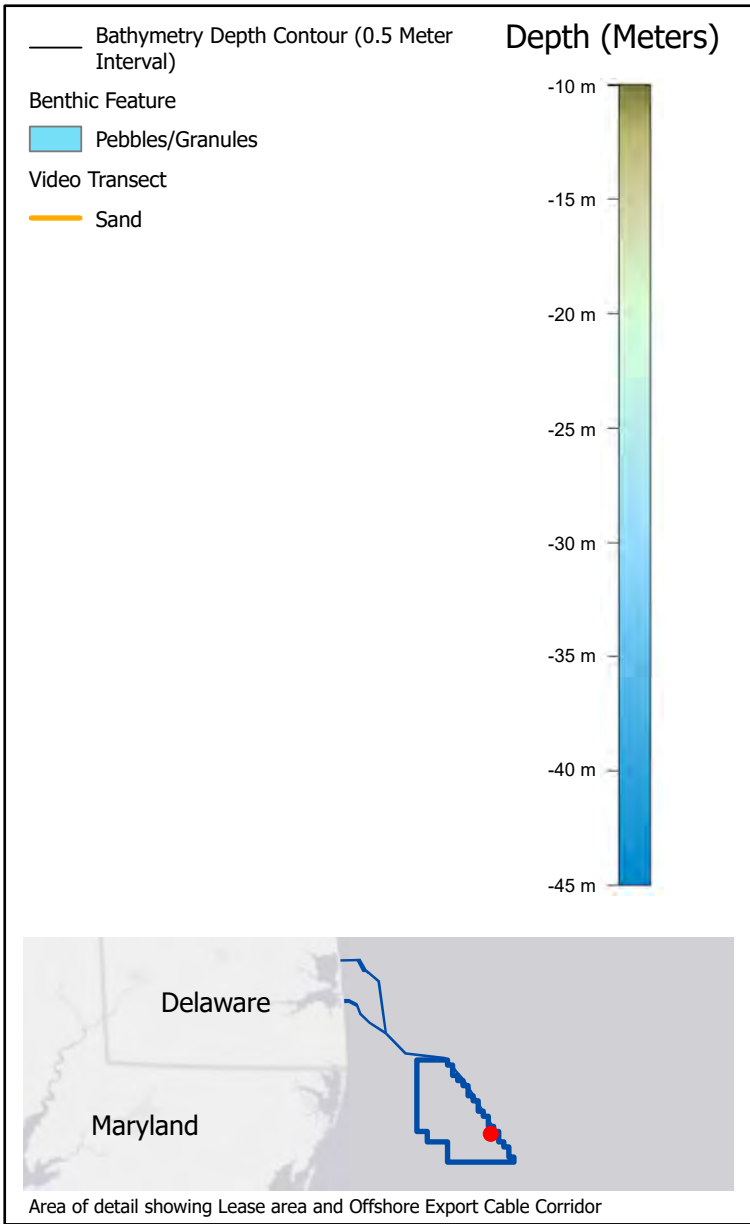
### Maryland Offshore Wind Project Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track VT-LA-Z036\_R



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



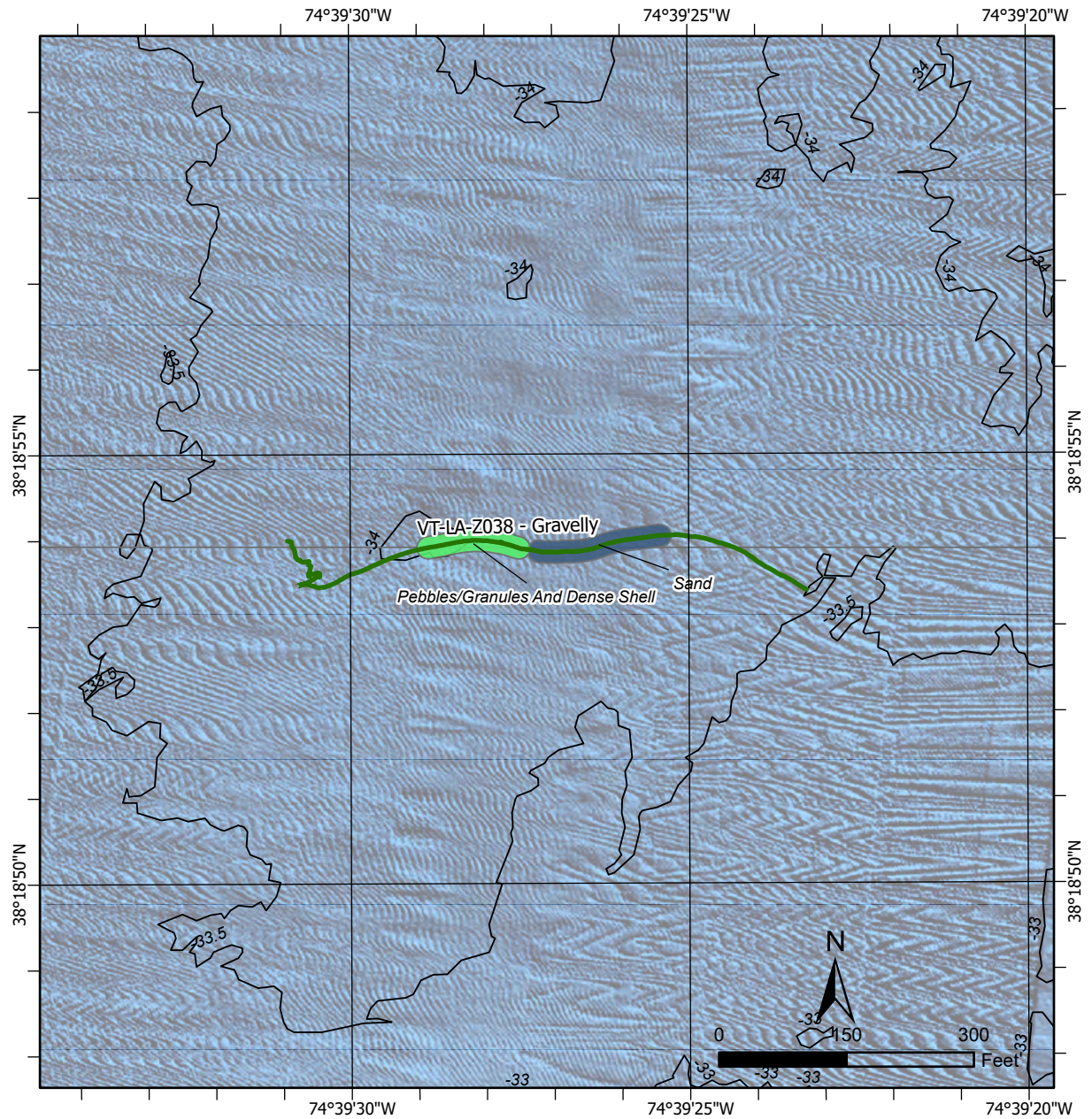
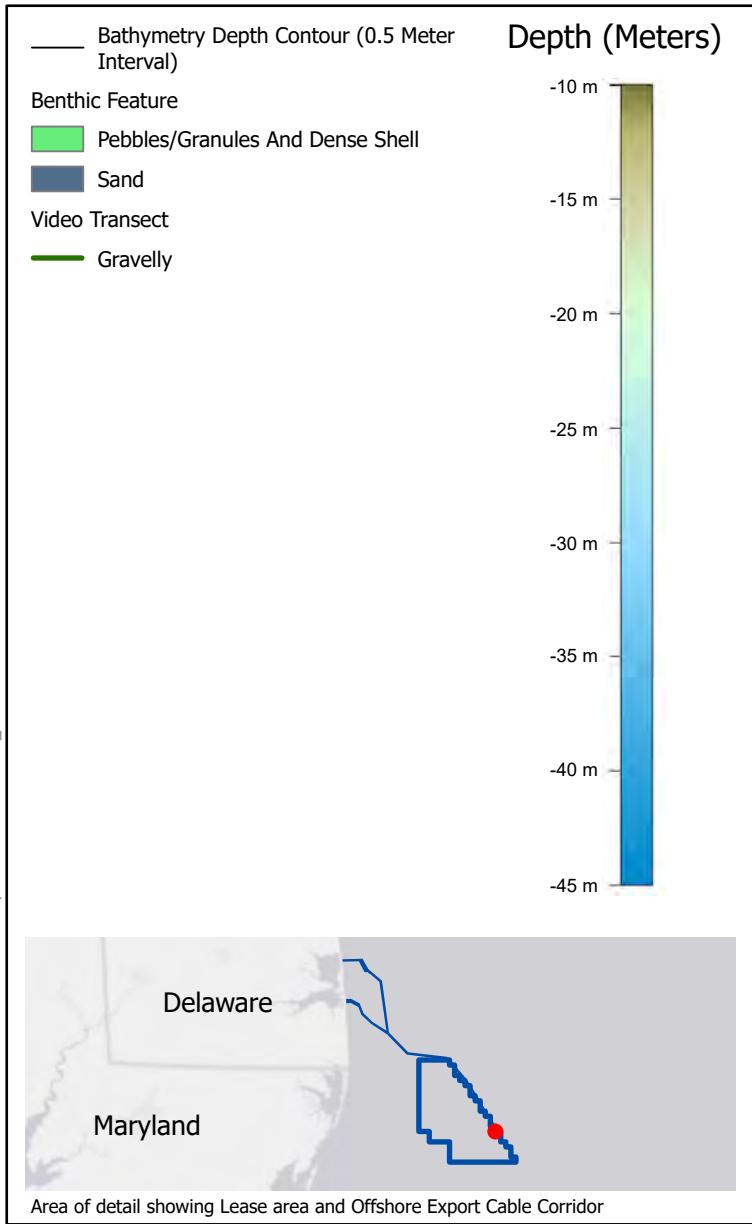
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z037



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



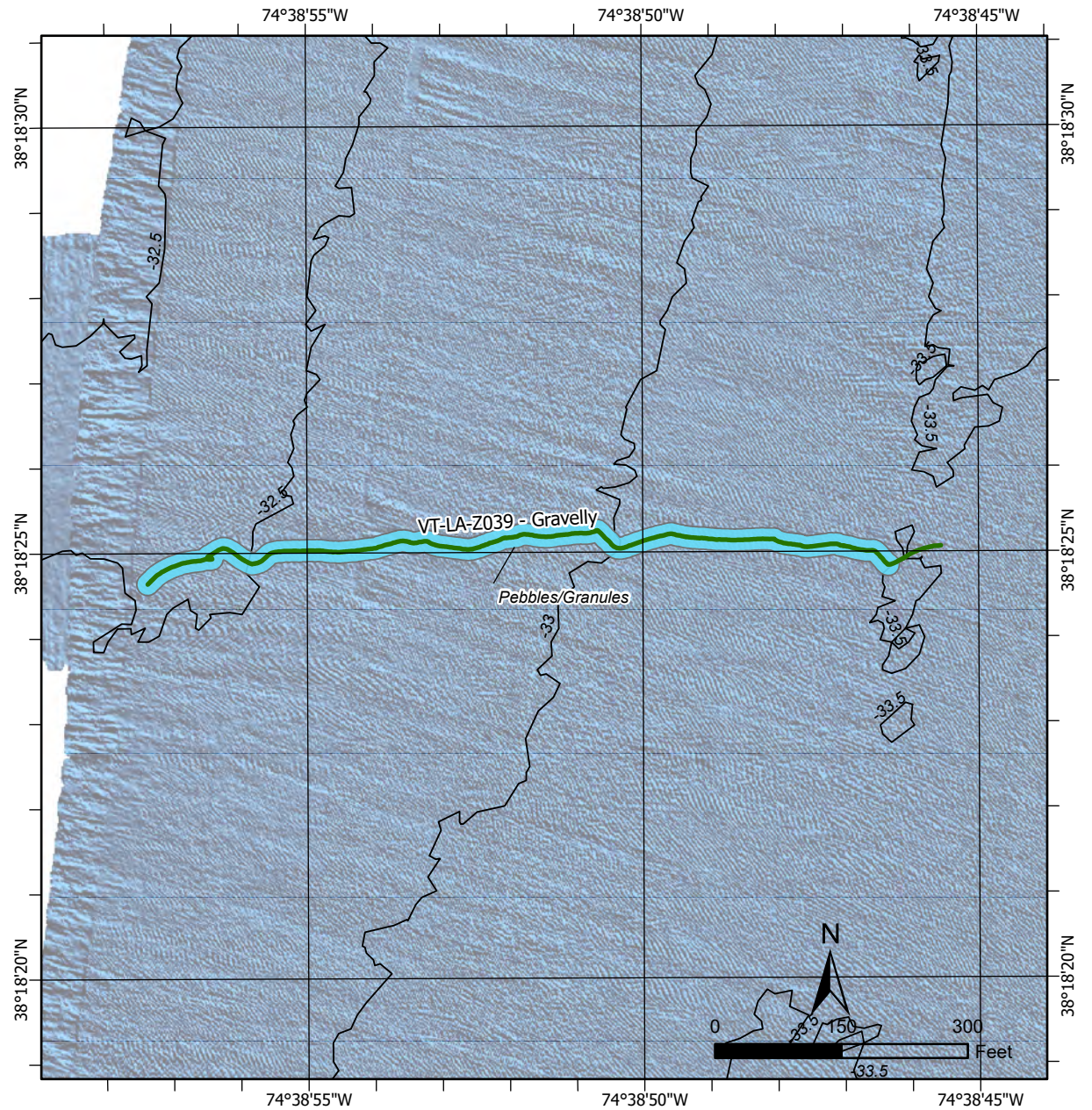
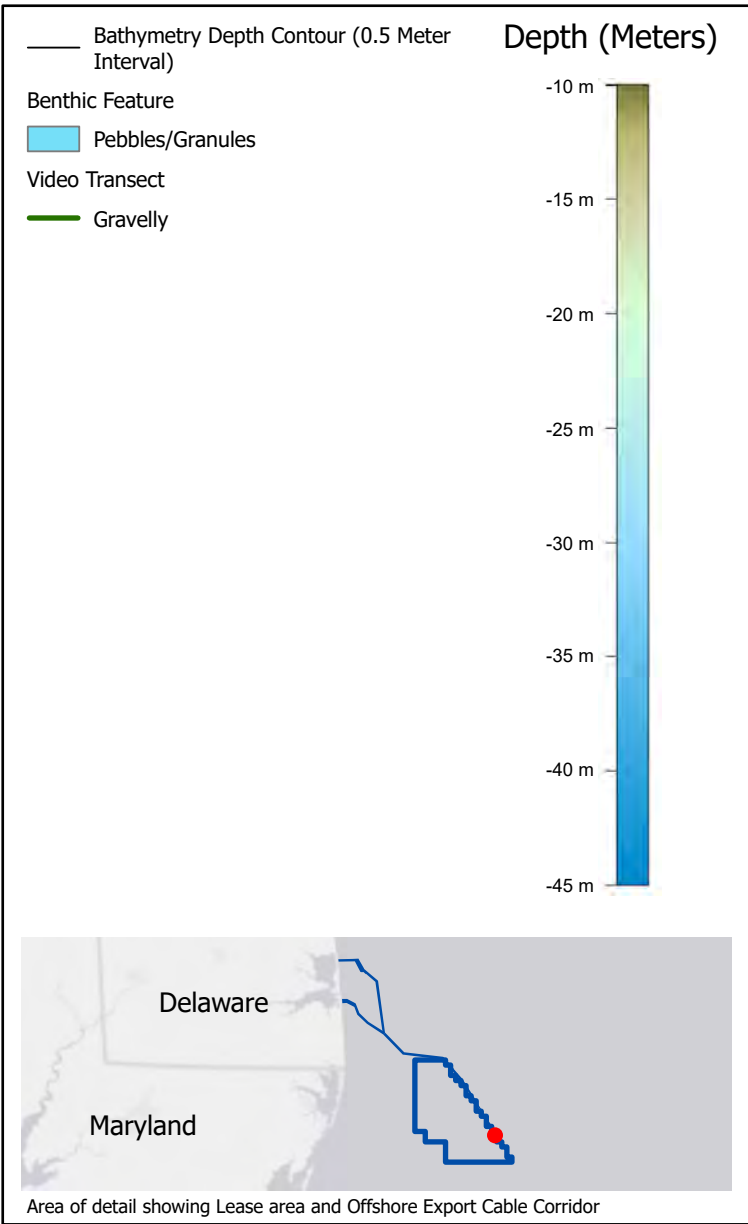
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z038



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



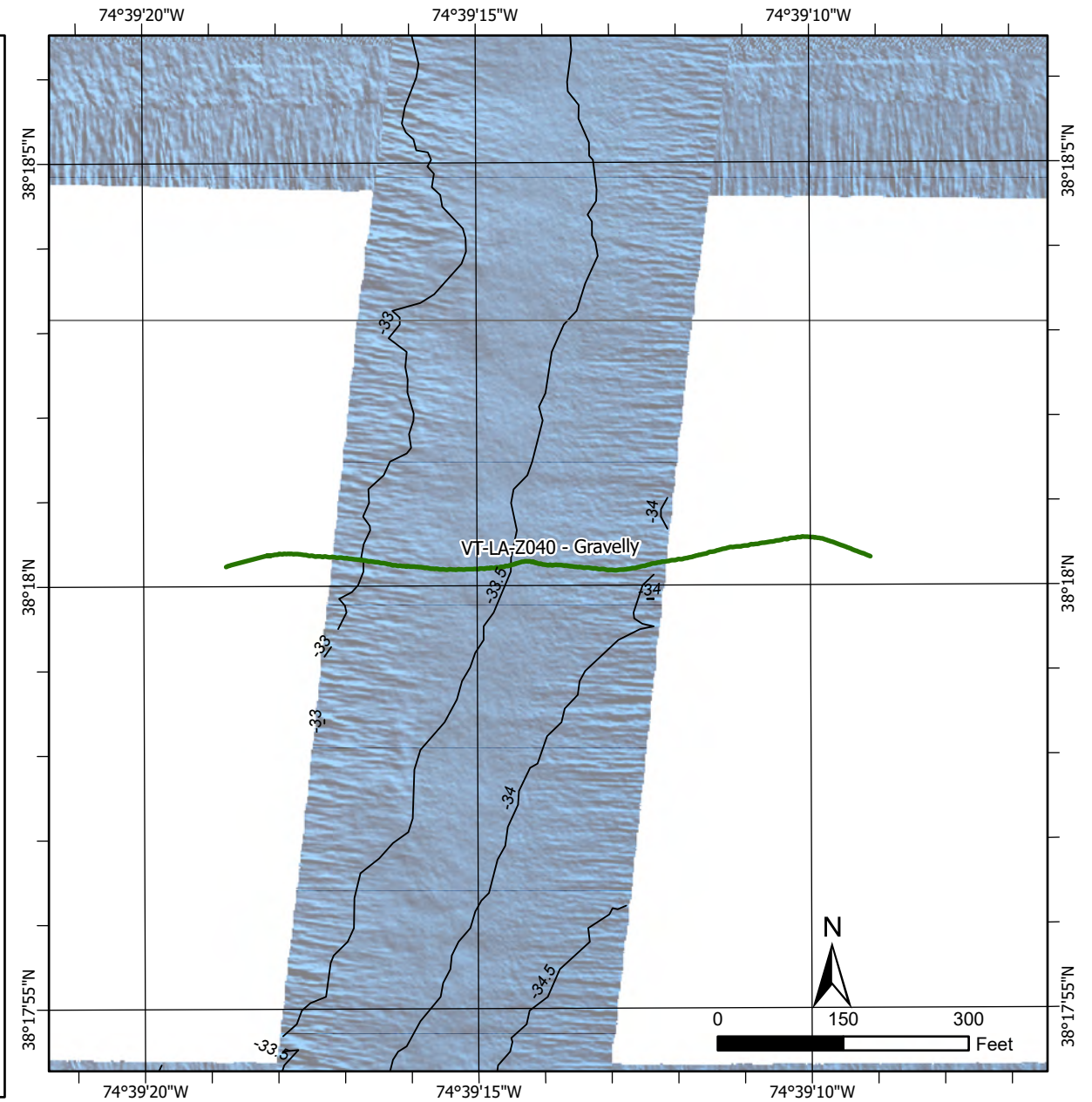
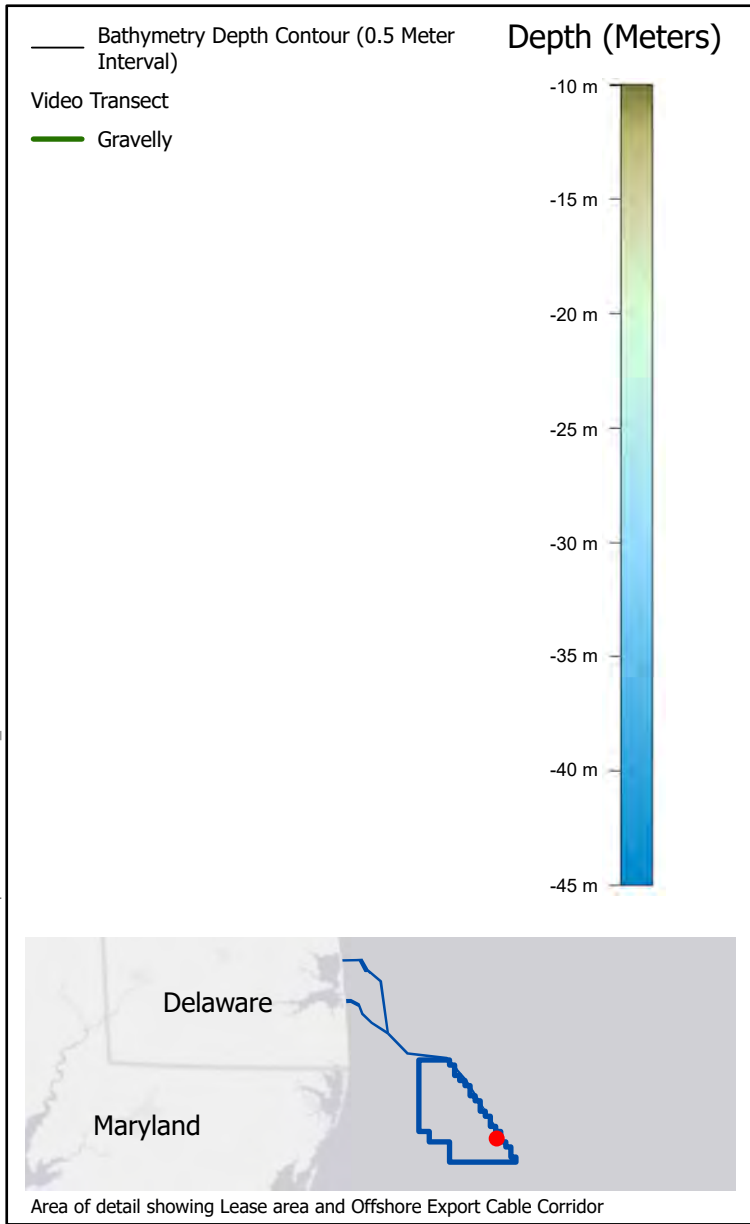
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z039



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

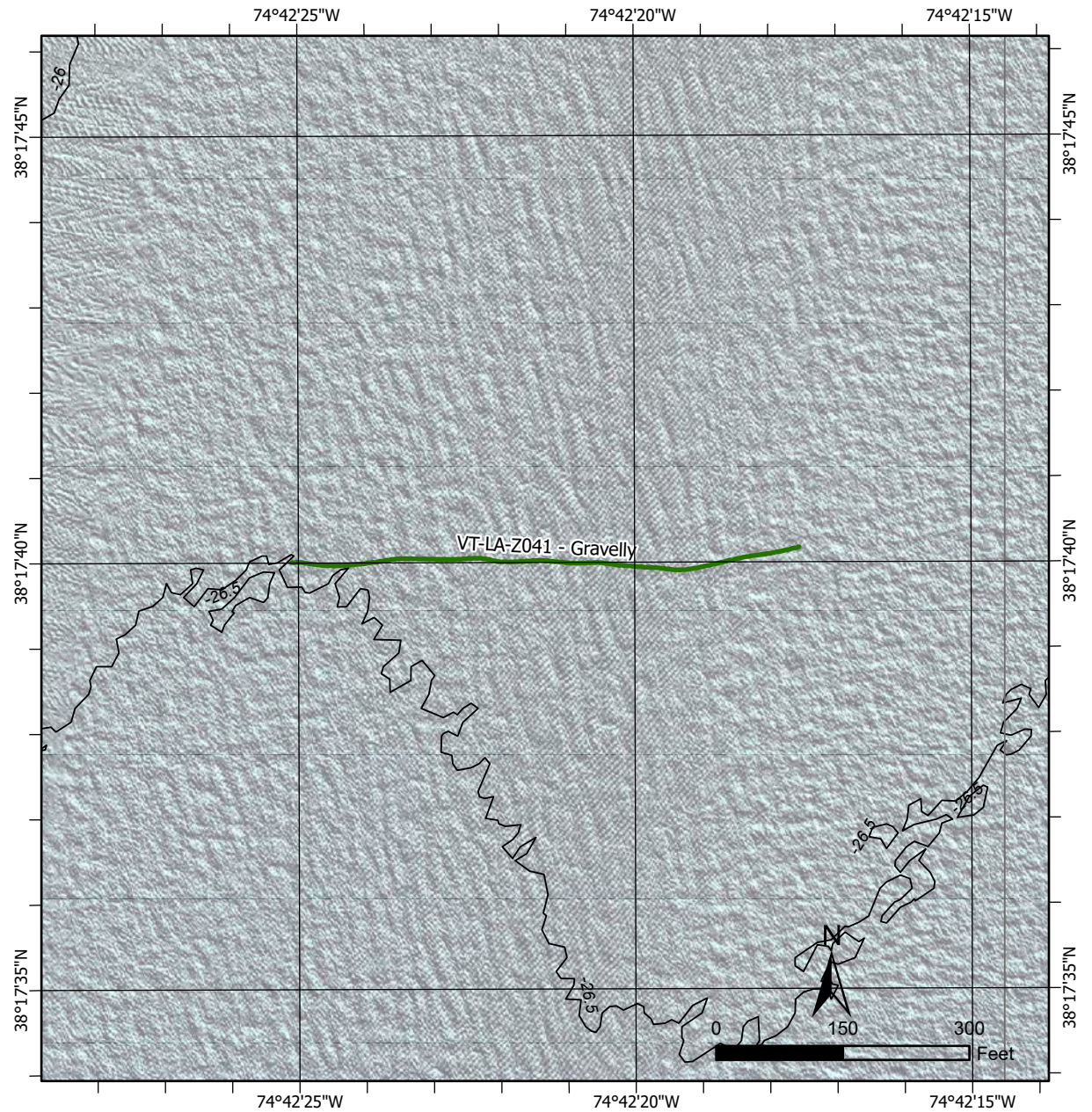
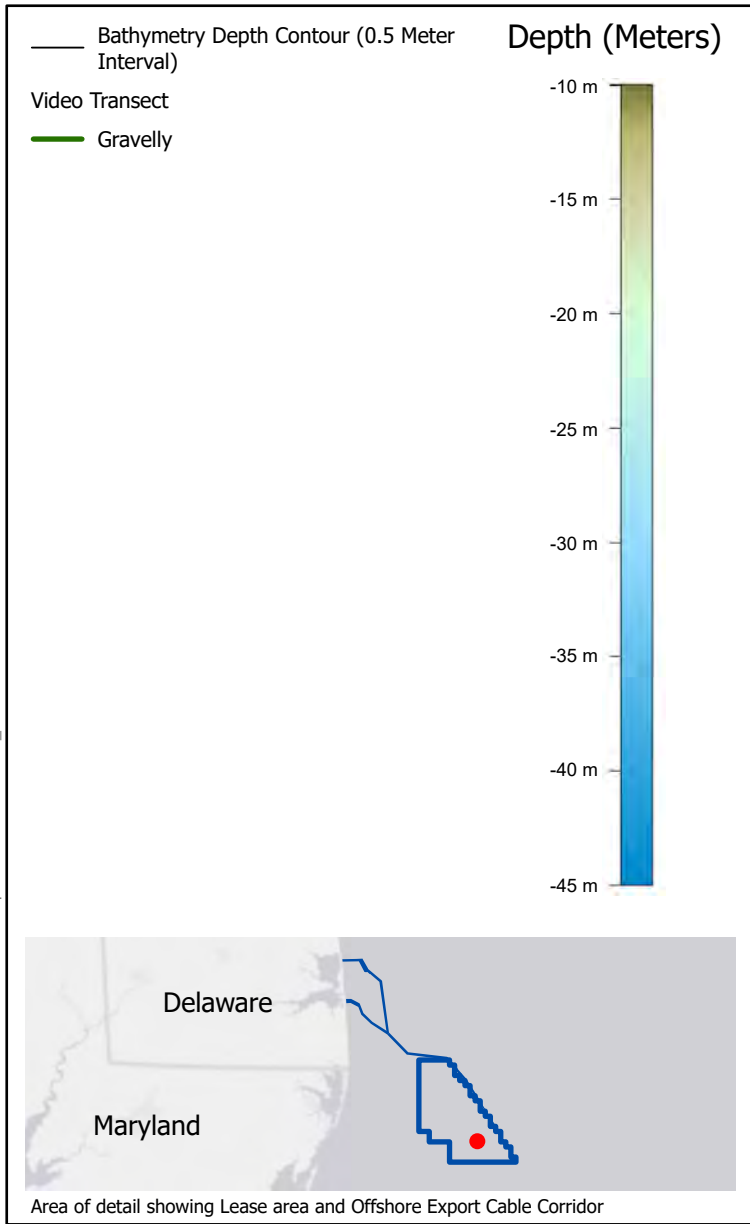
Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track

VT-LA-Z040



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

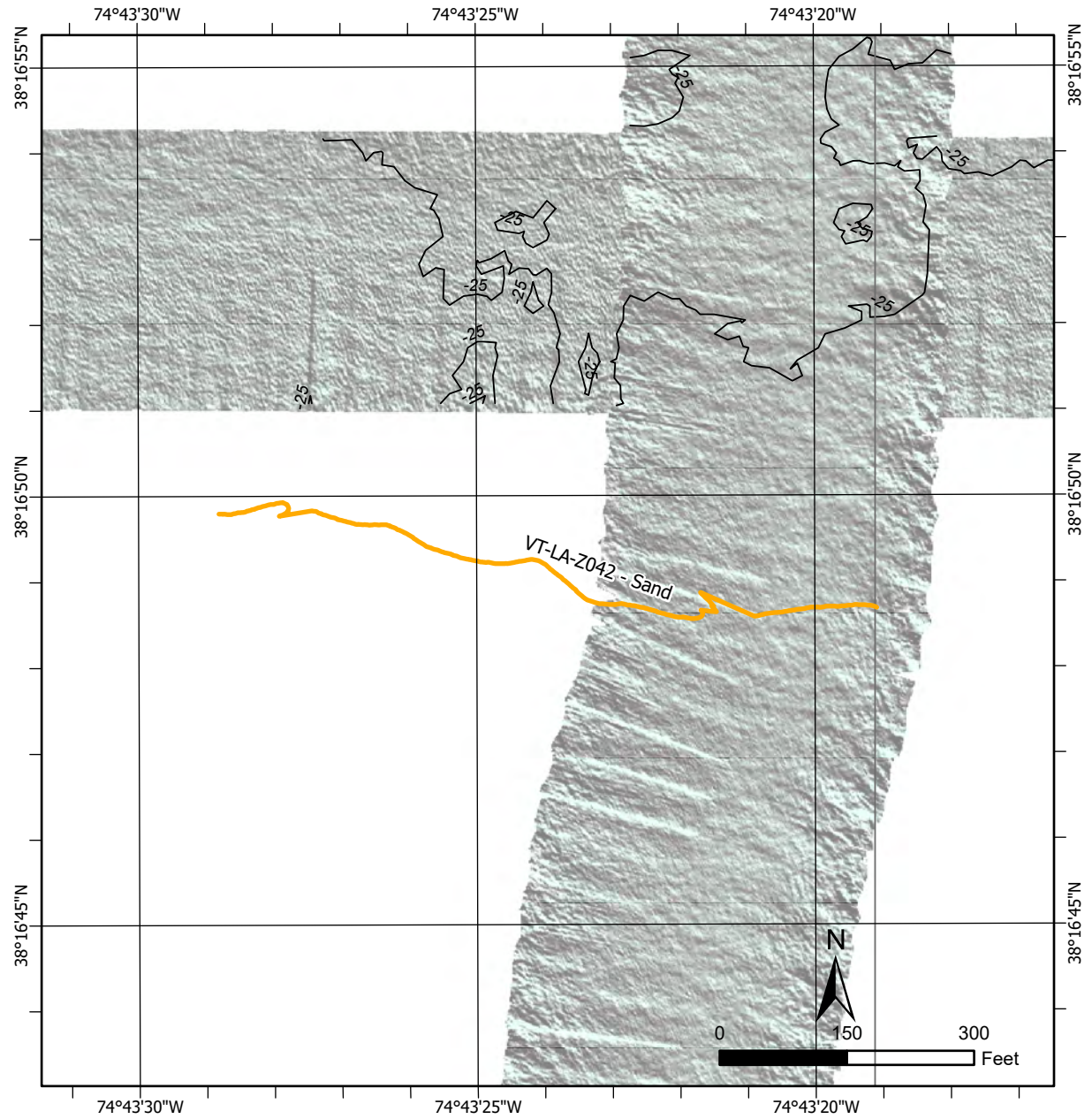
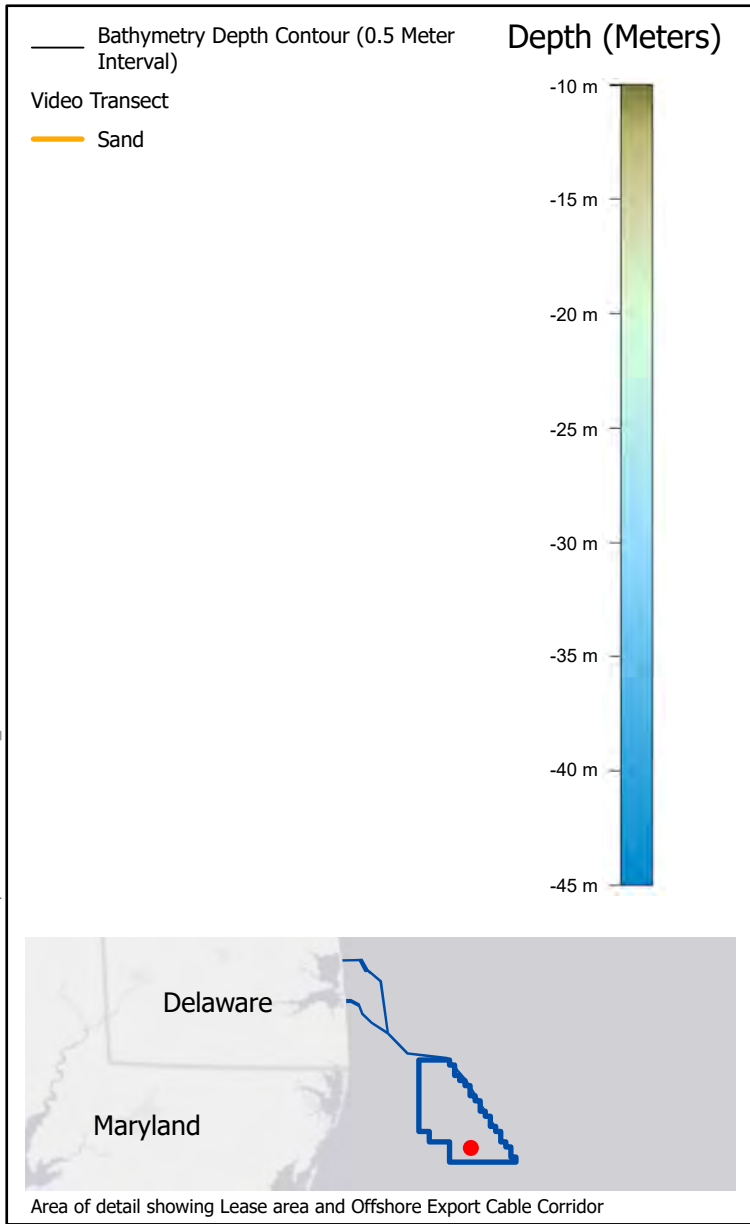
### Benthic Characterization for ROV Track

VT-LA-Z041

- Source:
- 1) GEMS, Bathymetry, 2022
  - 2) TDI, Video Transect Position Data, 2021
  - 3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



### Maryland Offshore Wind Project

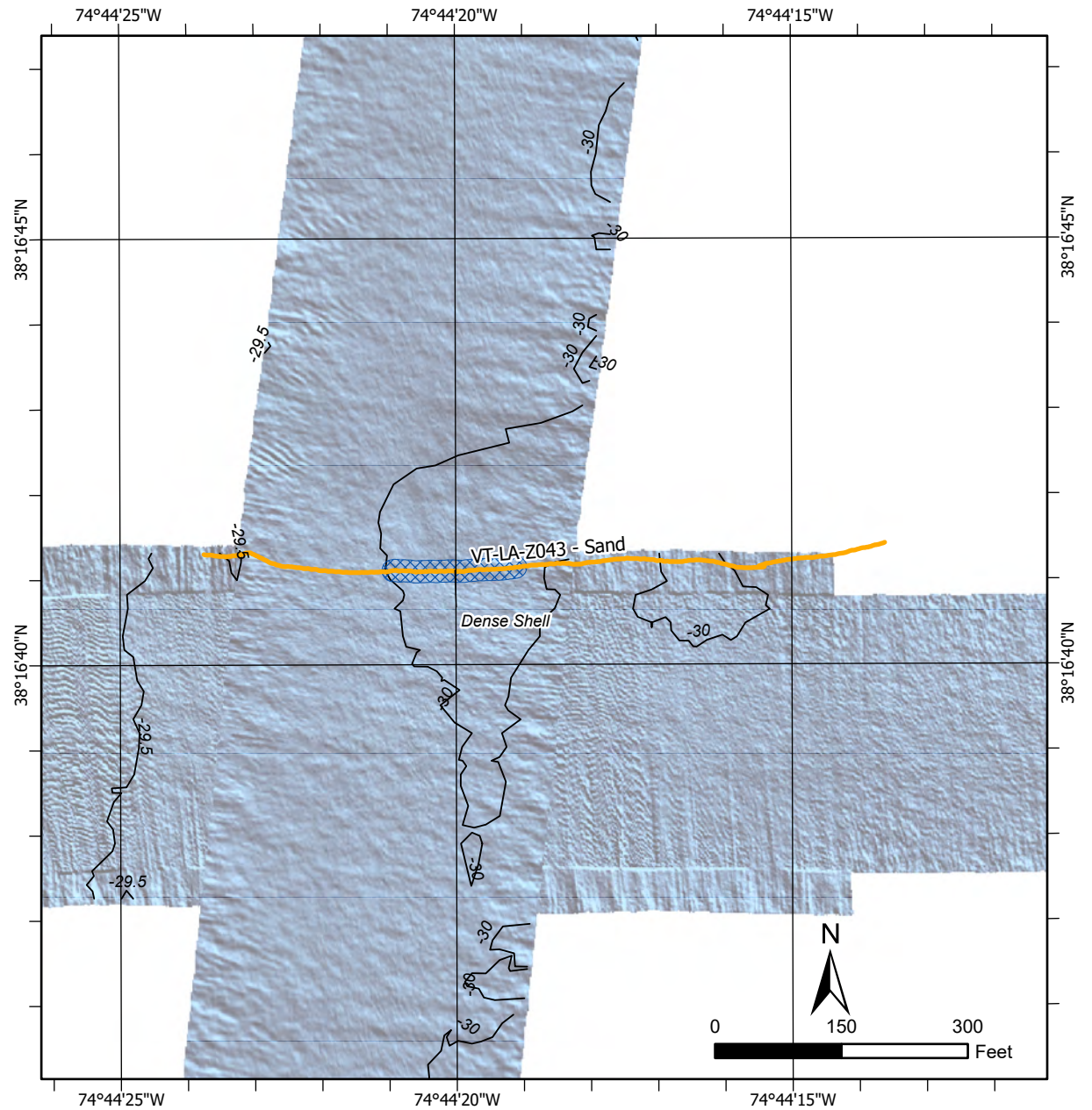
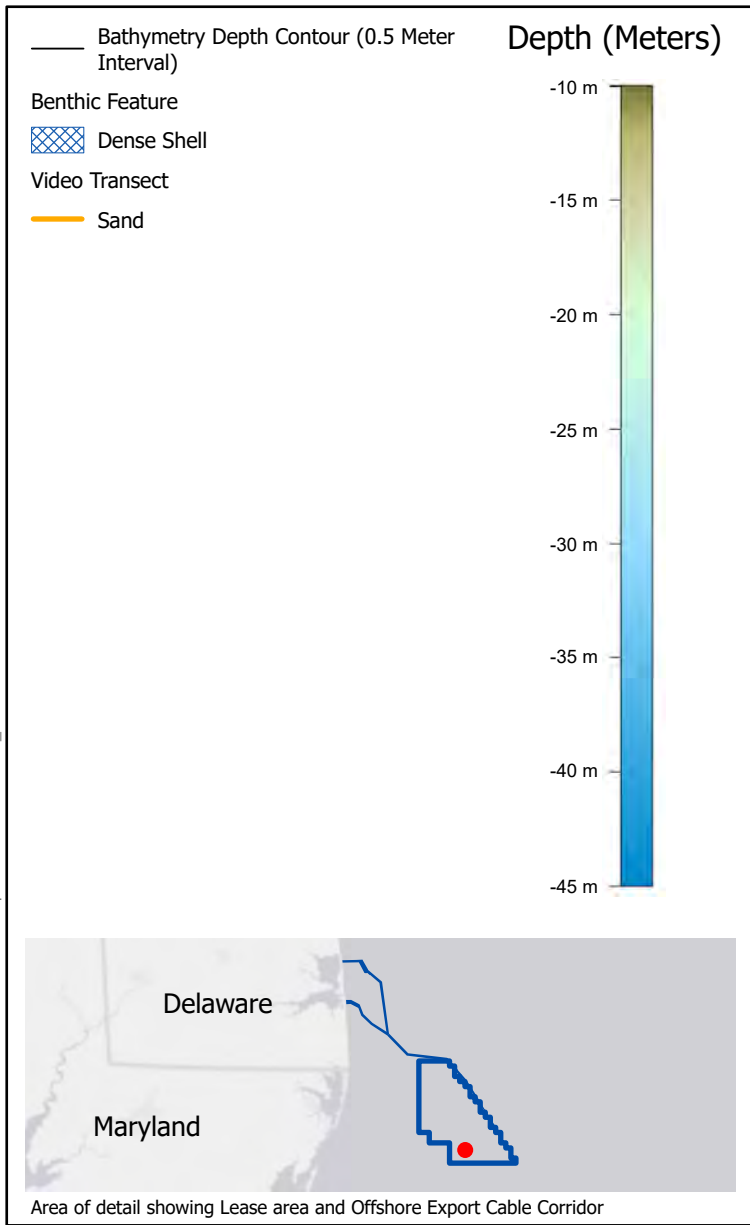
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track VT-LA-Z042



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

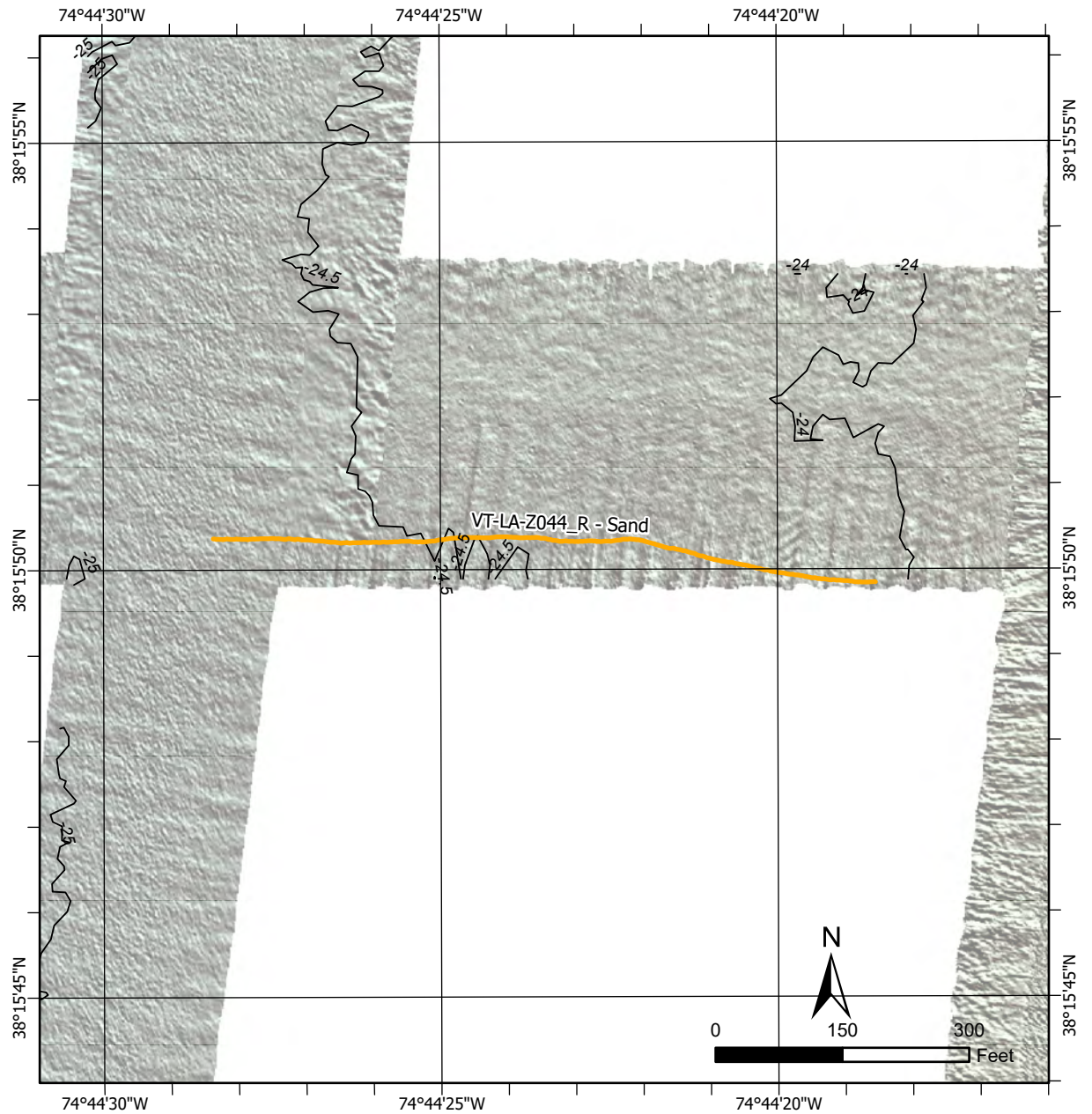
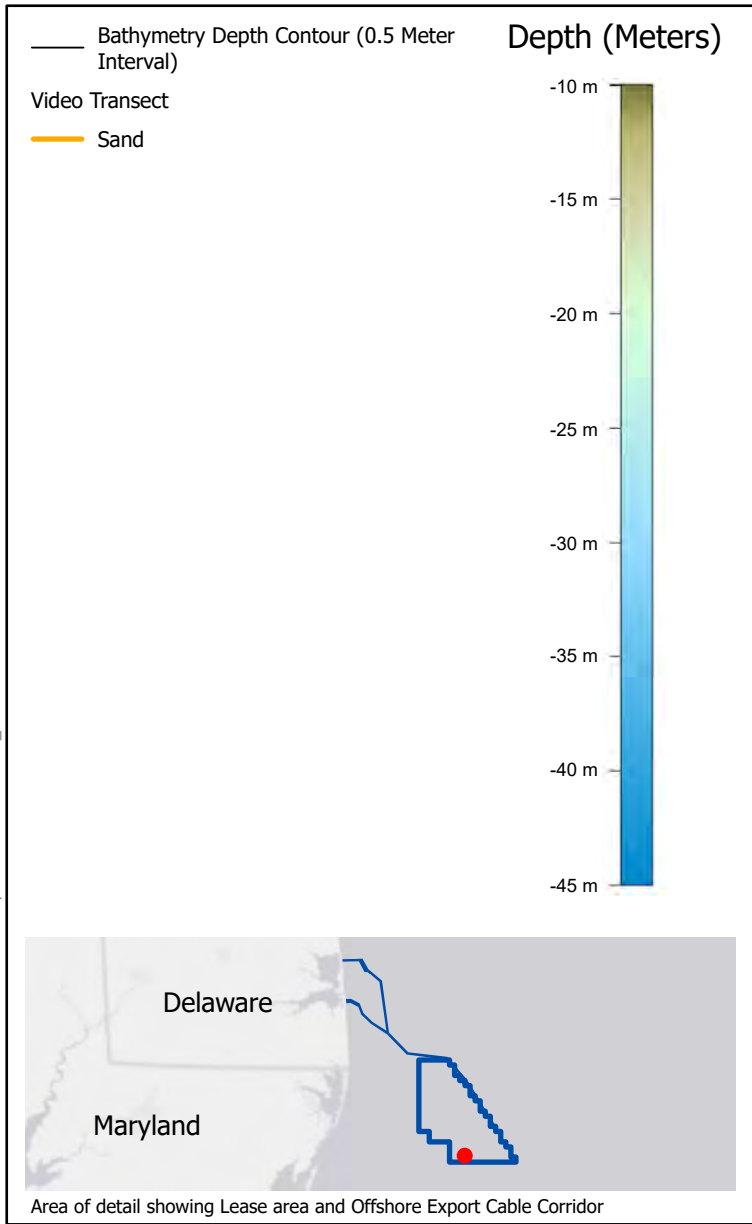
Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track

VT-LA-Z043



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROVtracks01



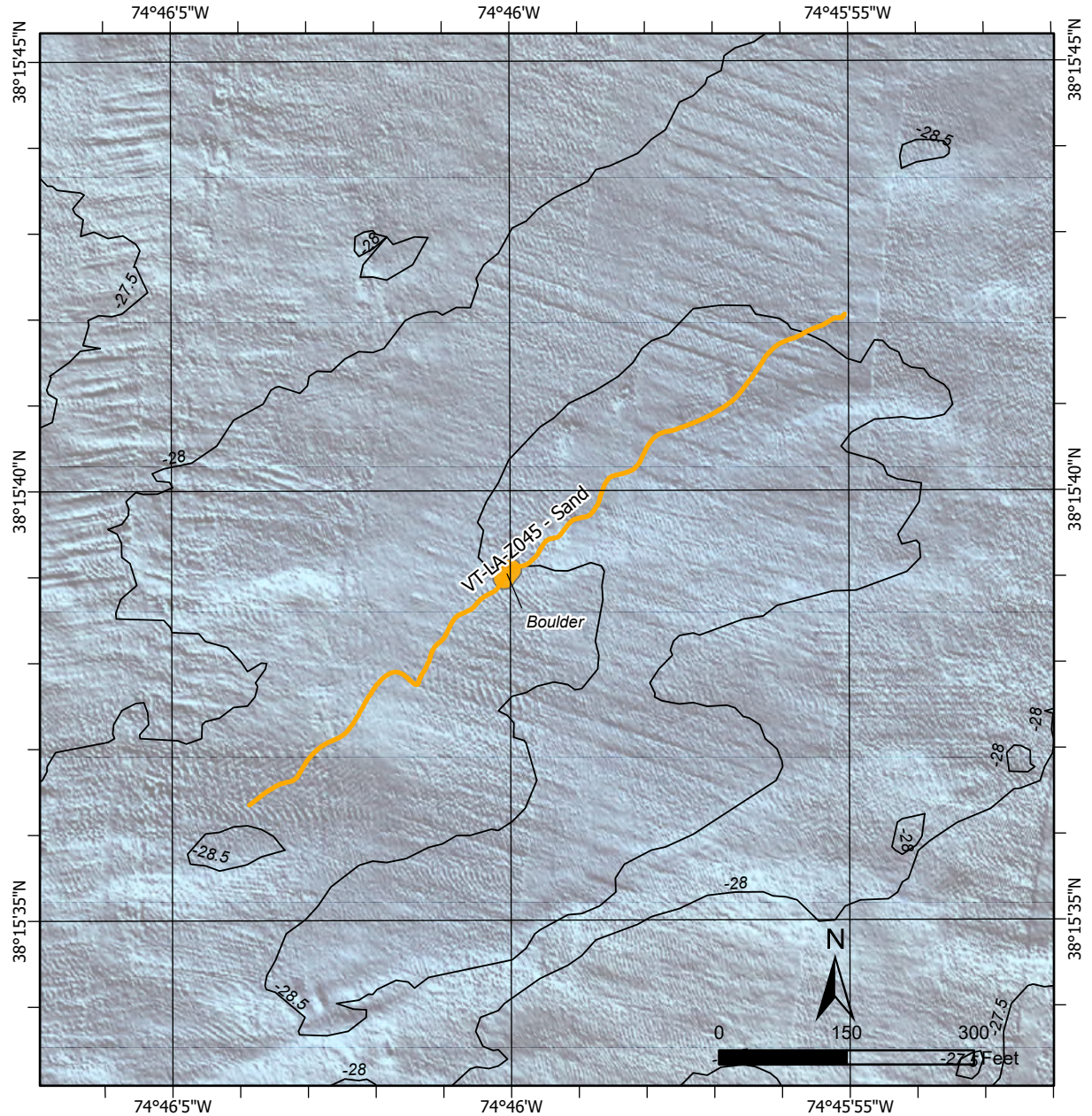
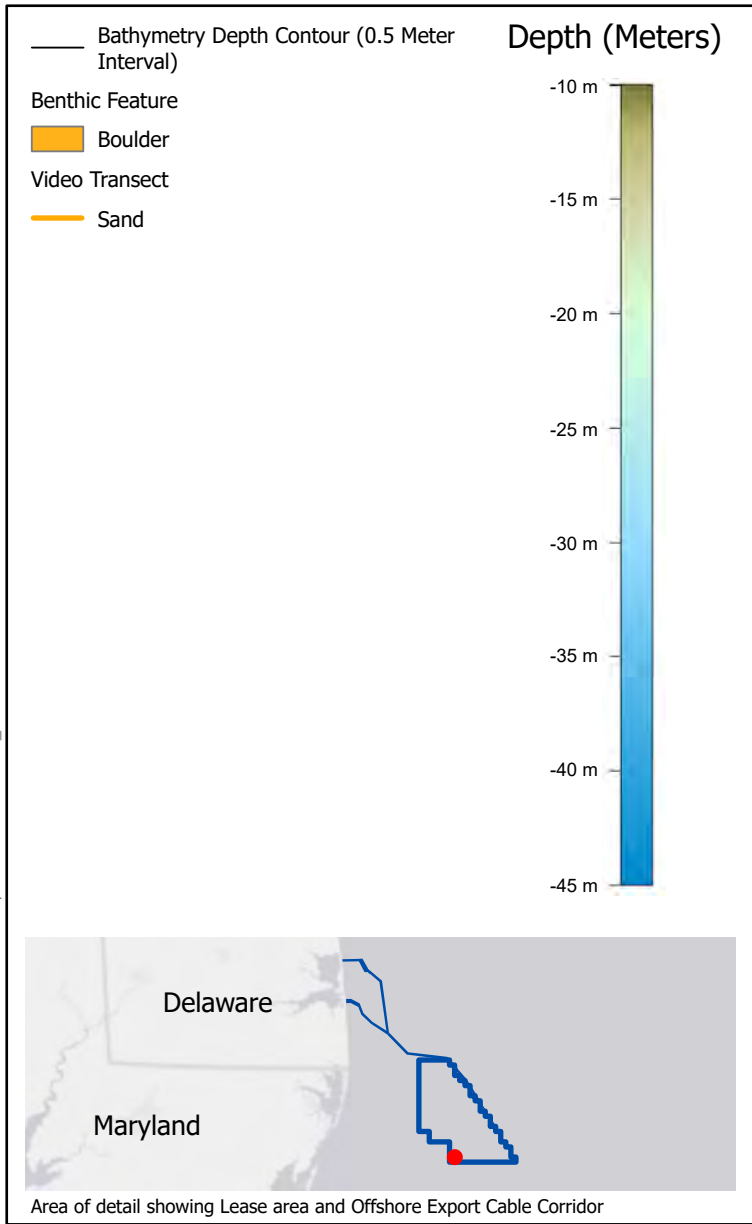
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z044\_R



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



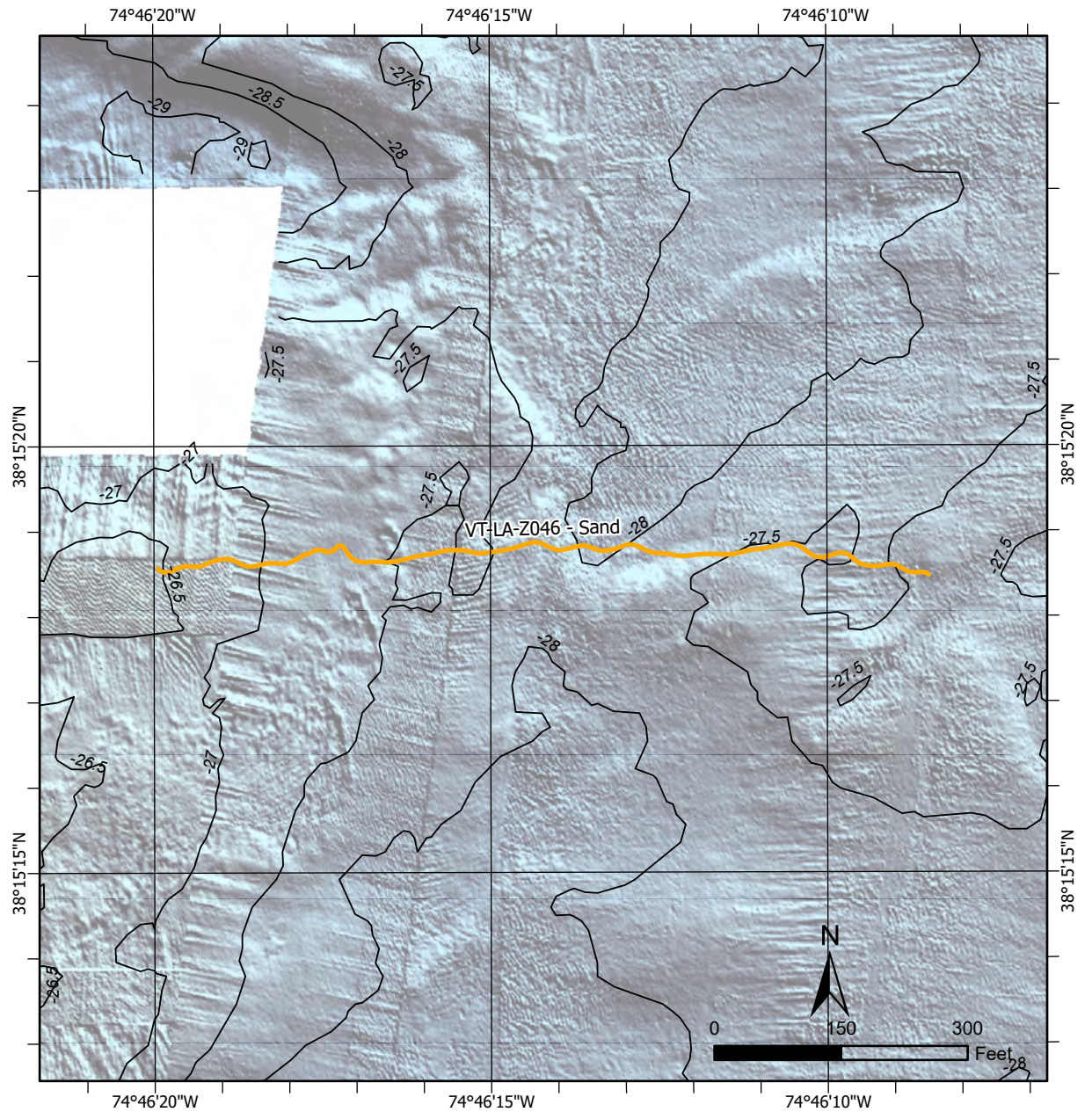
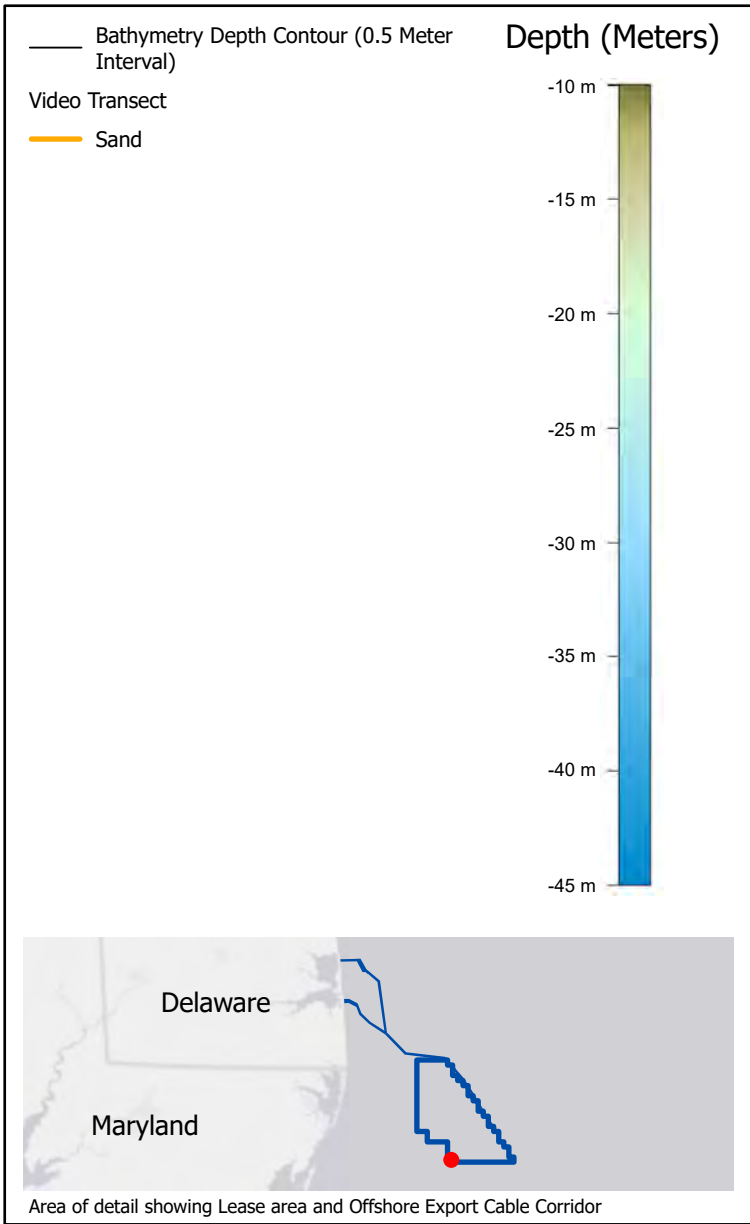
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

**Benthic Characterization for ROV Track**  
VT-LA-Z045



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



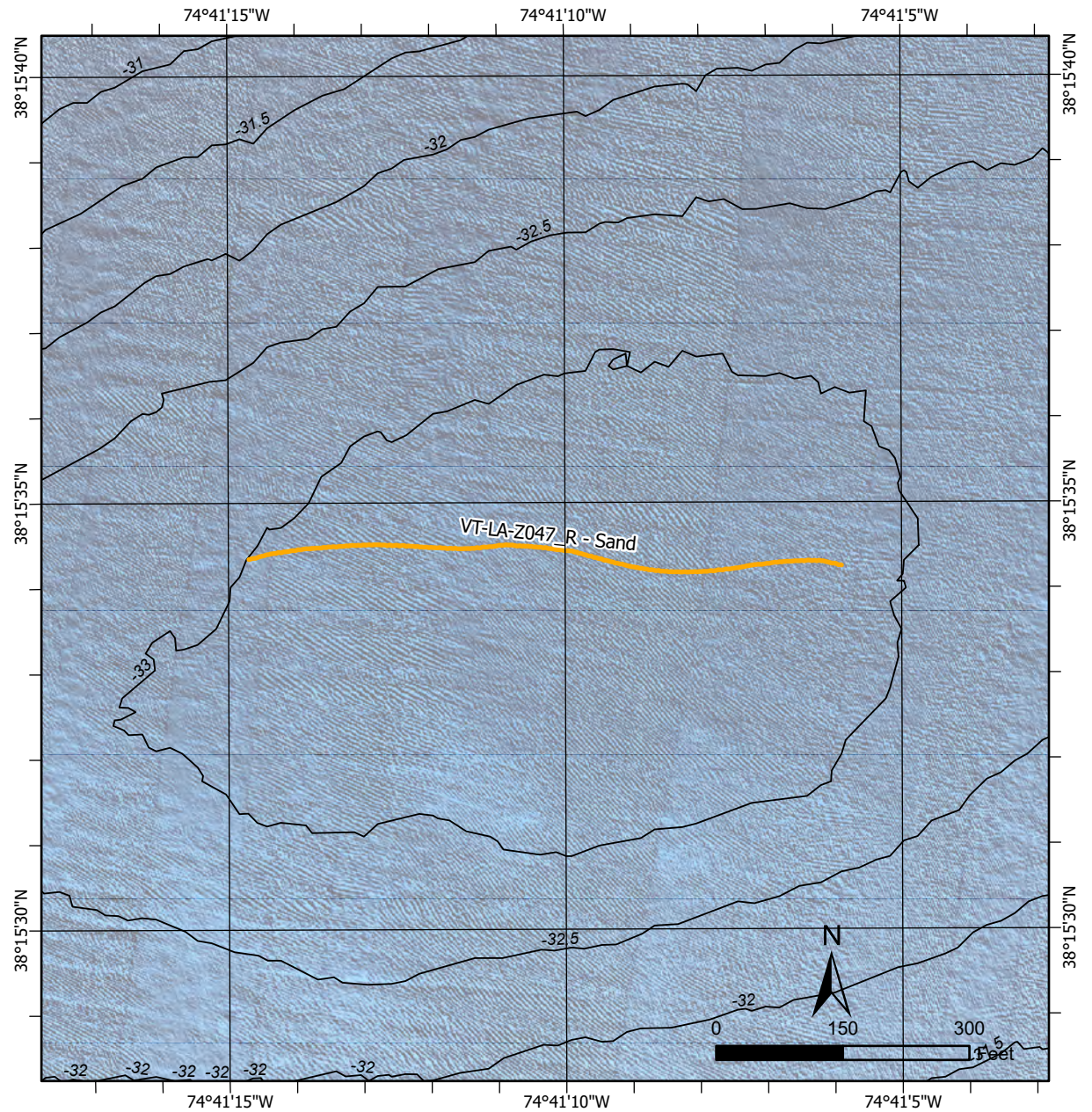
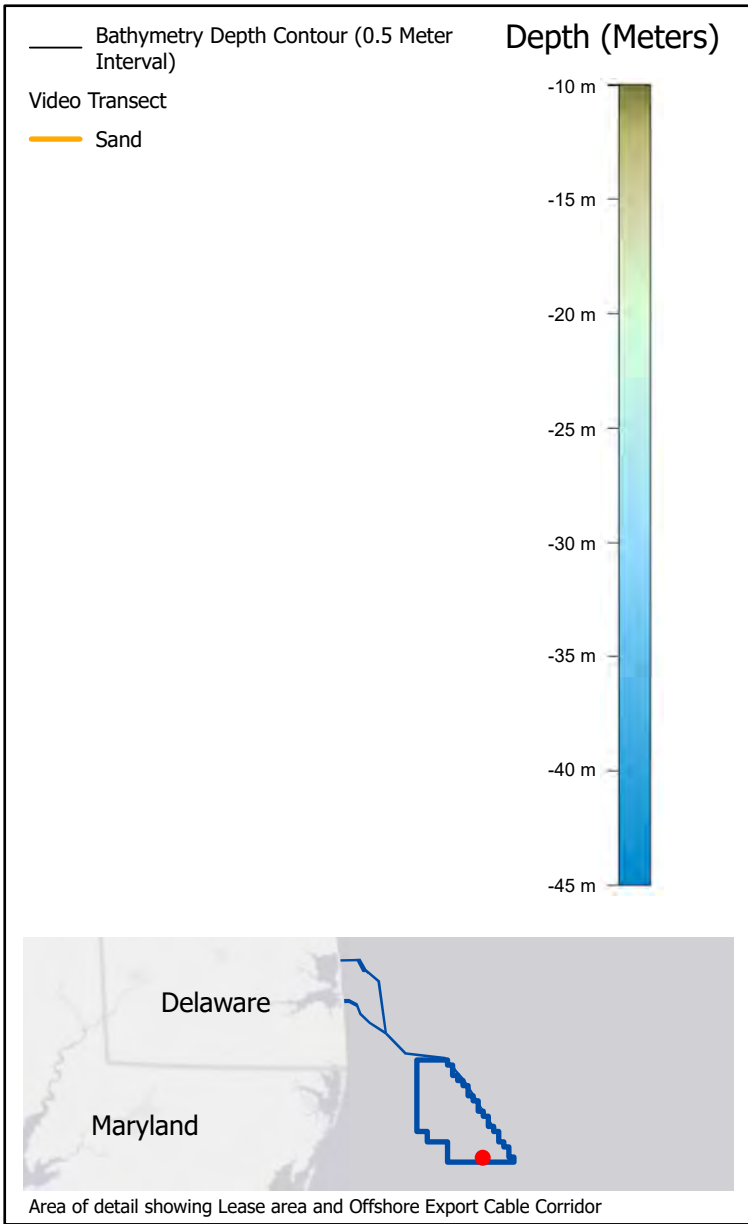
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
 1) GEMS, Bathymetry, 2022  
 2) TDI, Video Transect Position Data, 2021  
 3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z046



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

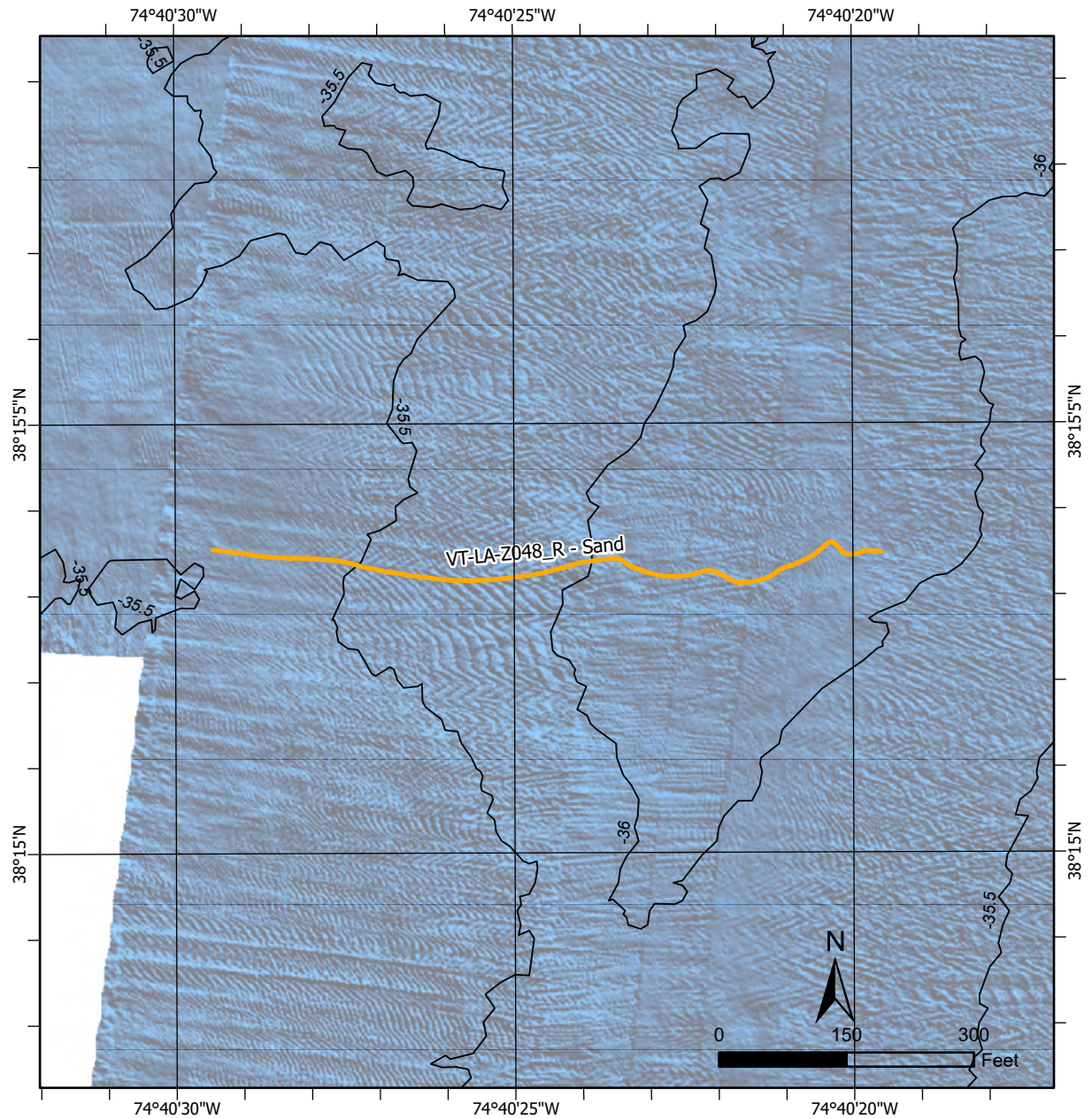
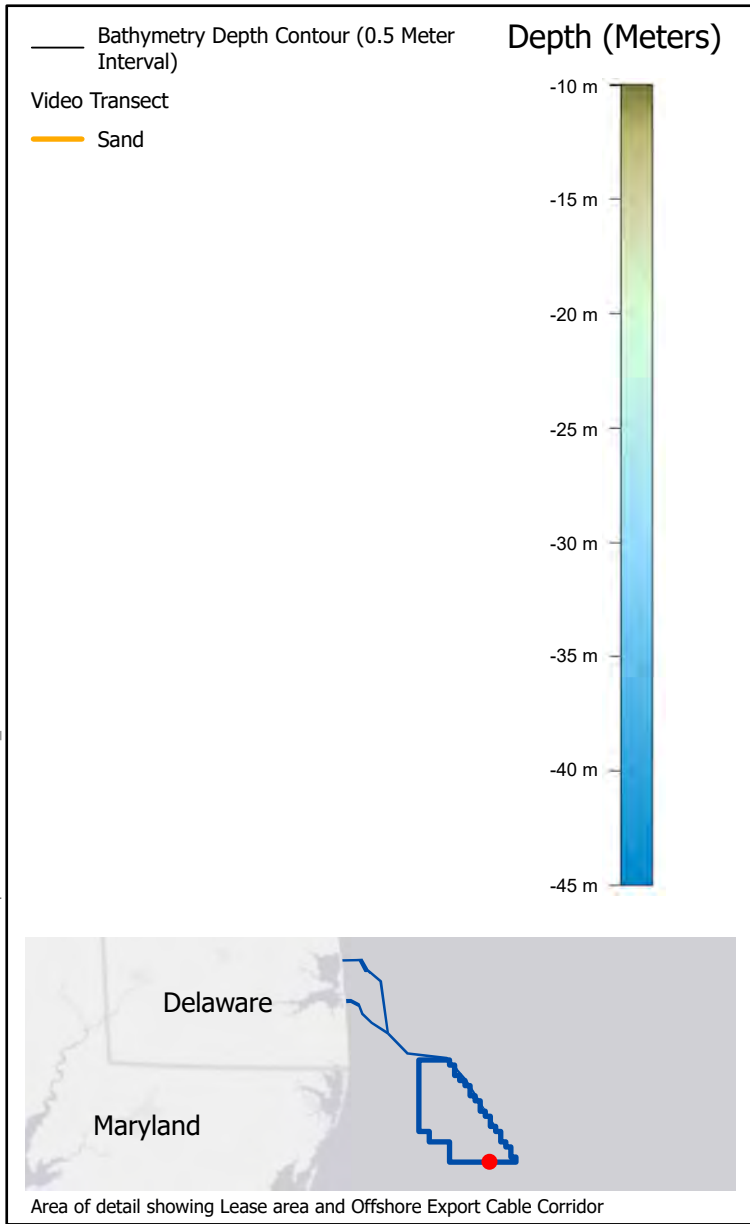
Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track

VT-LA-Z047\_R



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



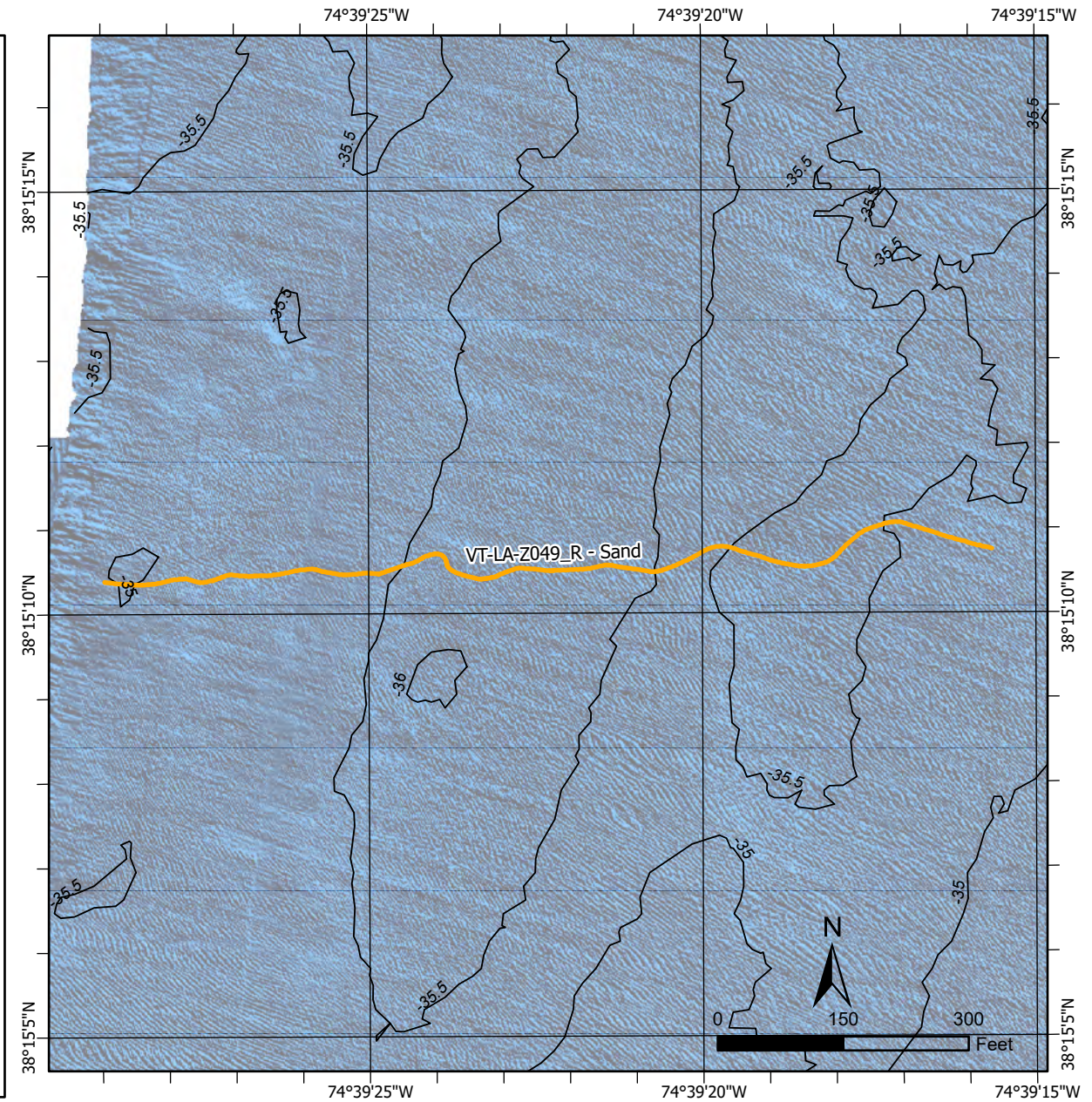
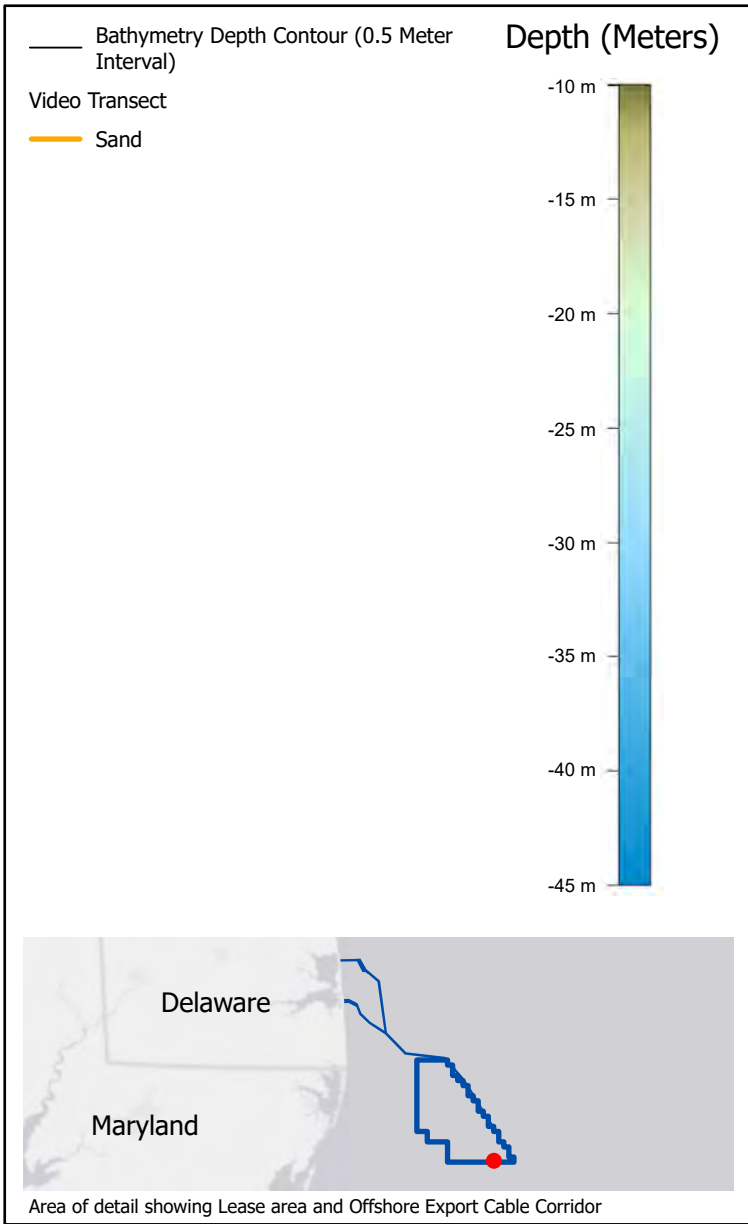
### Maryland Offshore Wind Project Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z048\_R



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



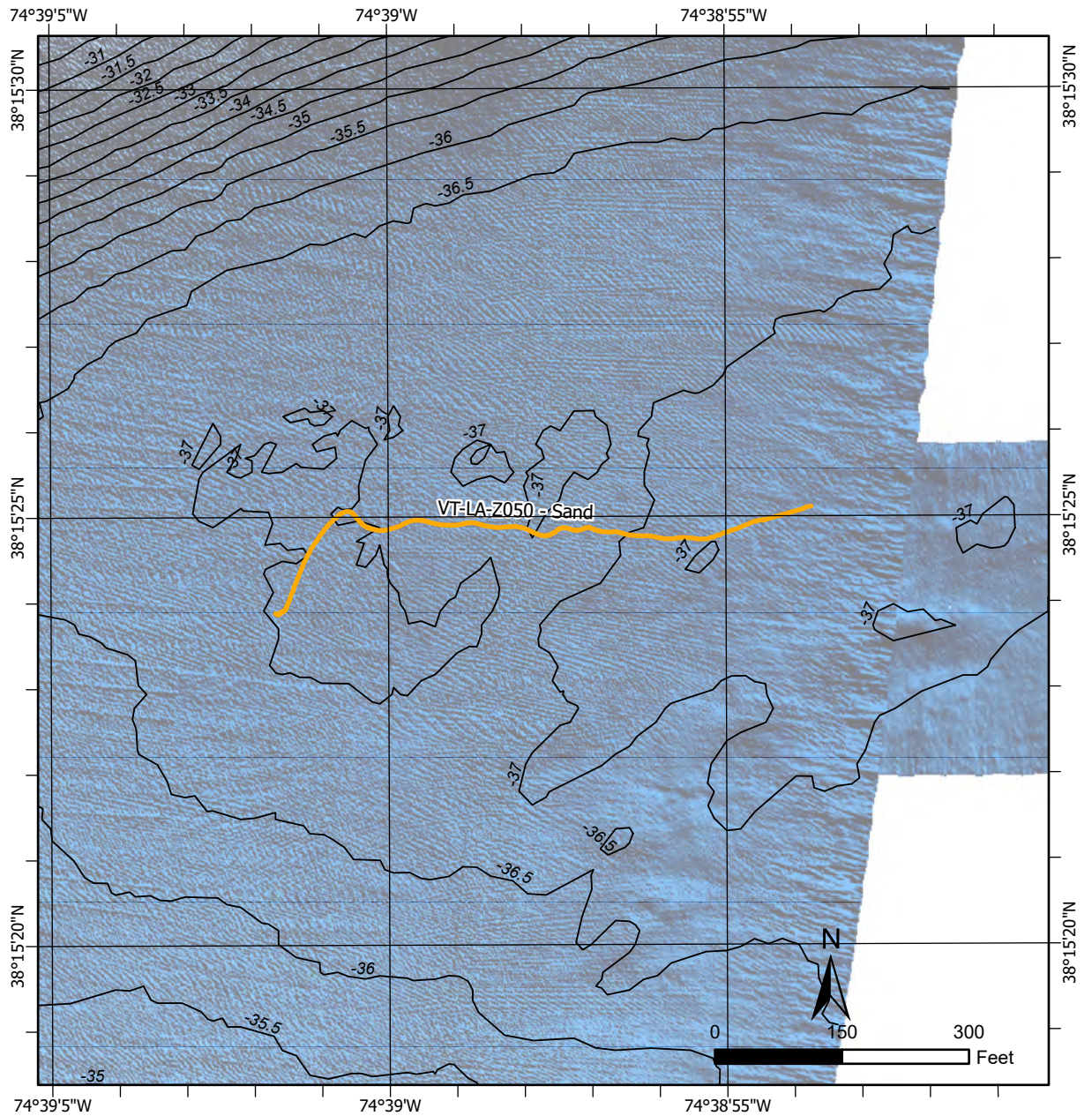
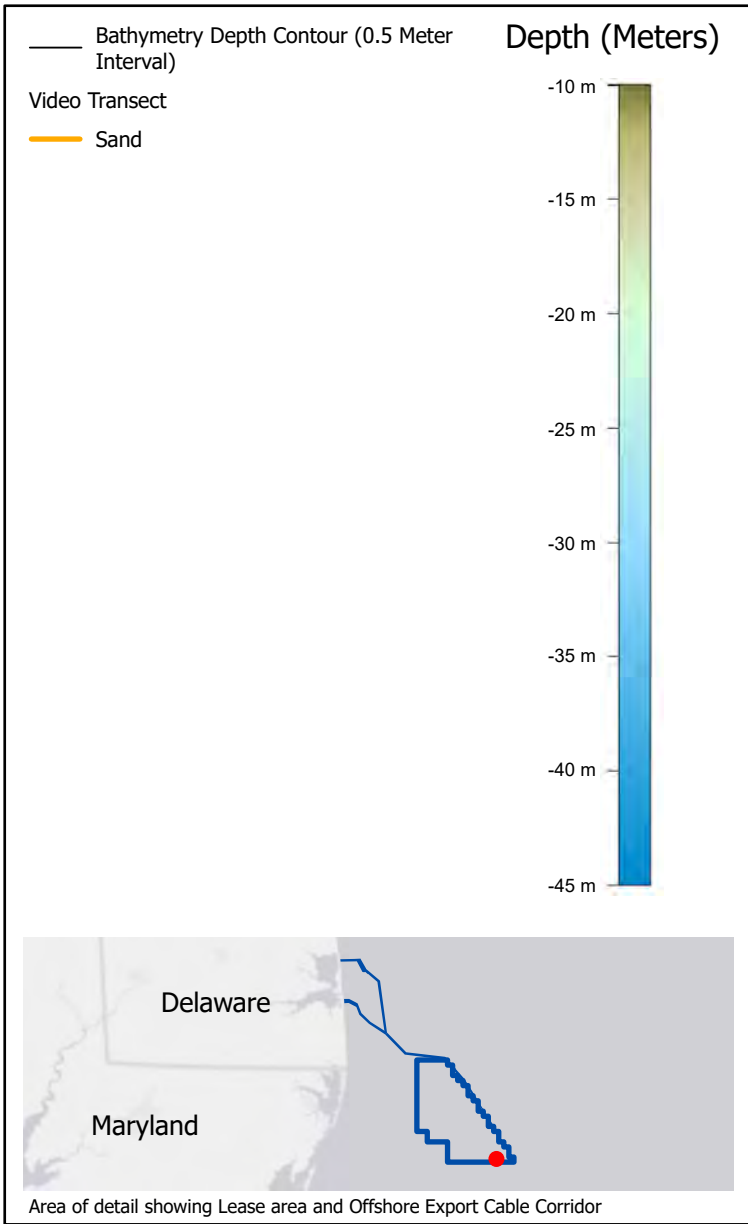
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z049\_R



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

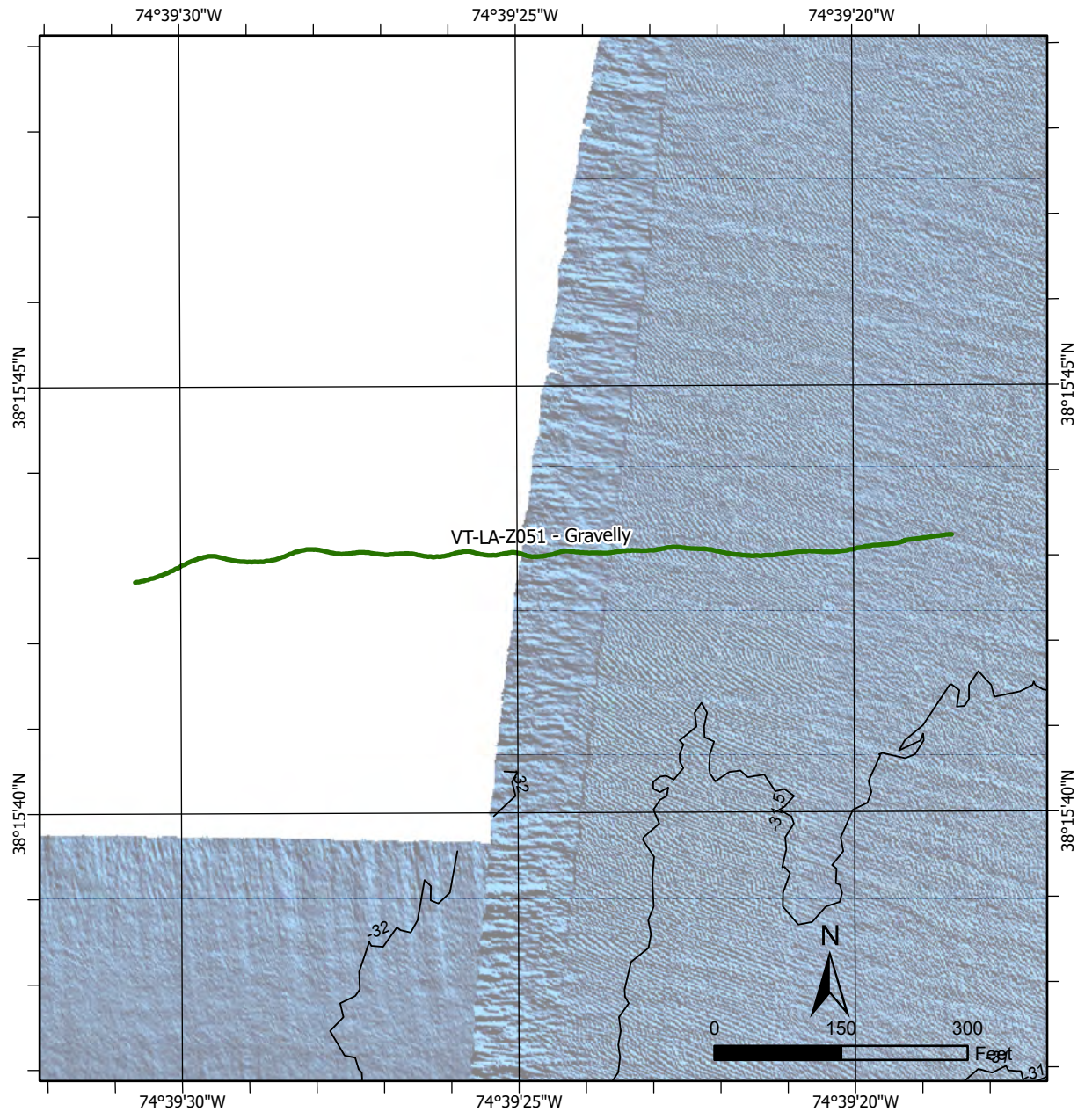
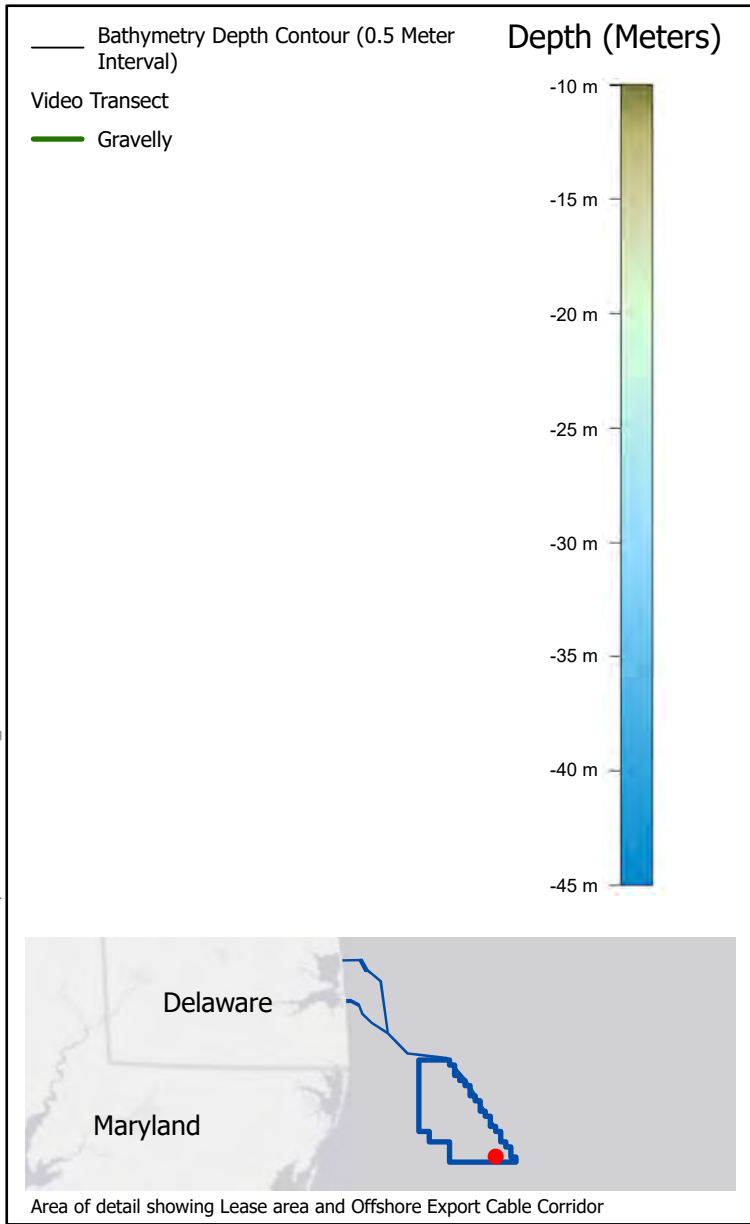
Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track

VT-LA-Z050



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

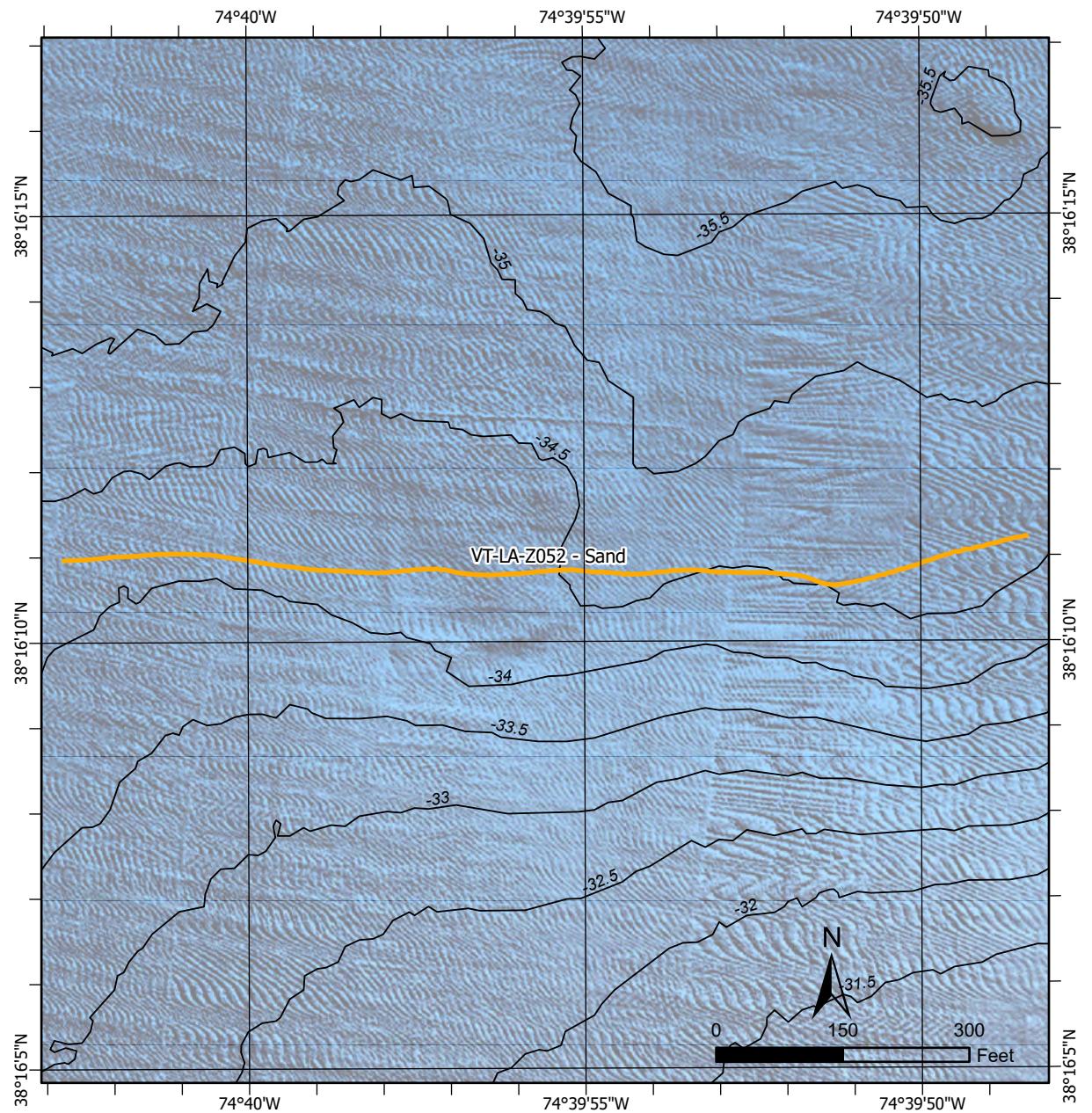
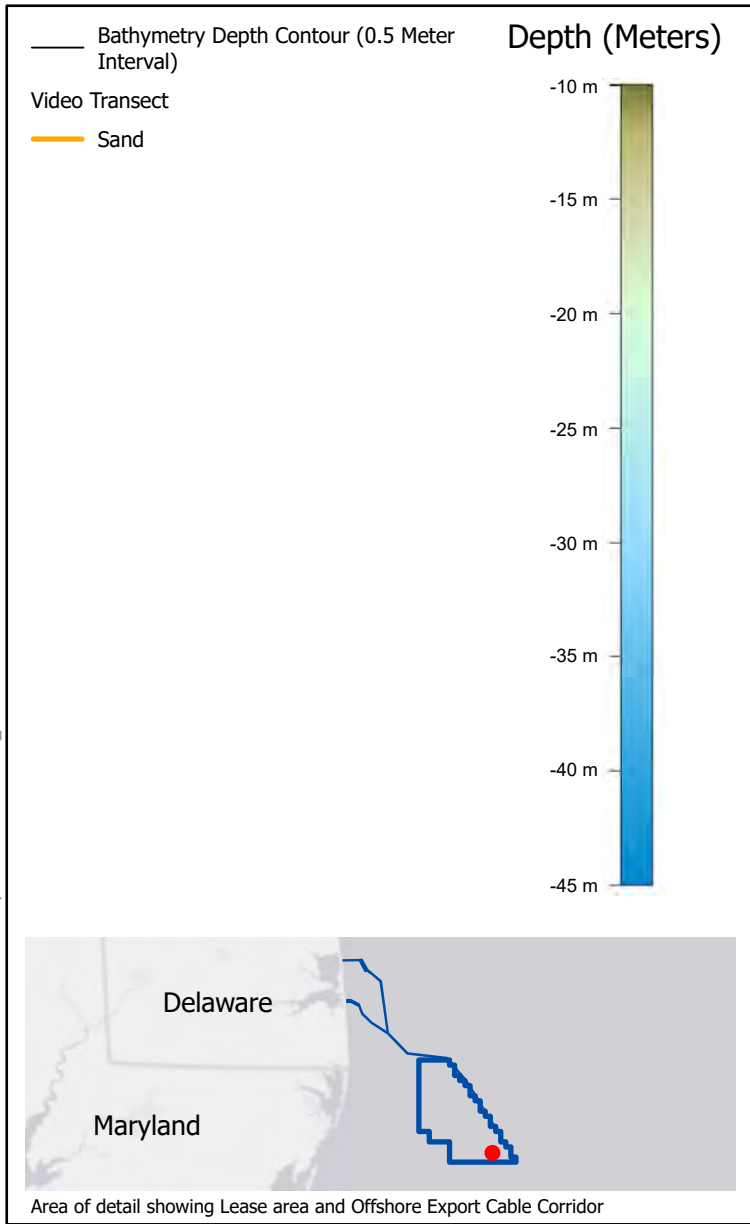
Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track

VT-LA-Z051



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

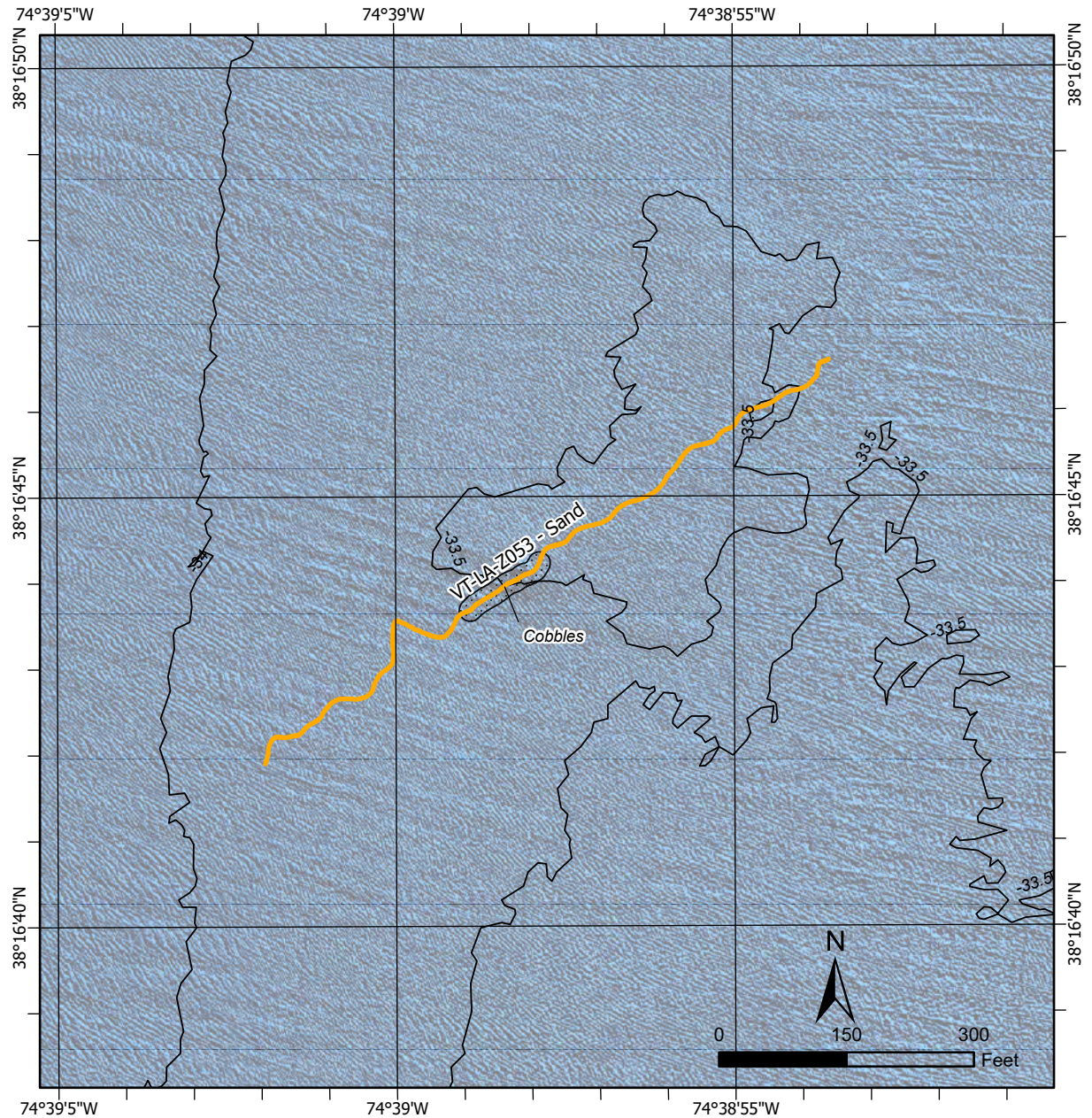
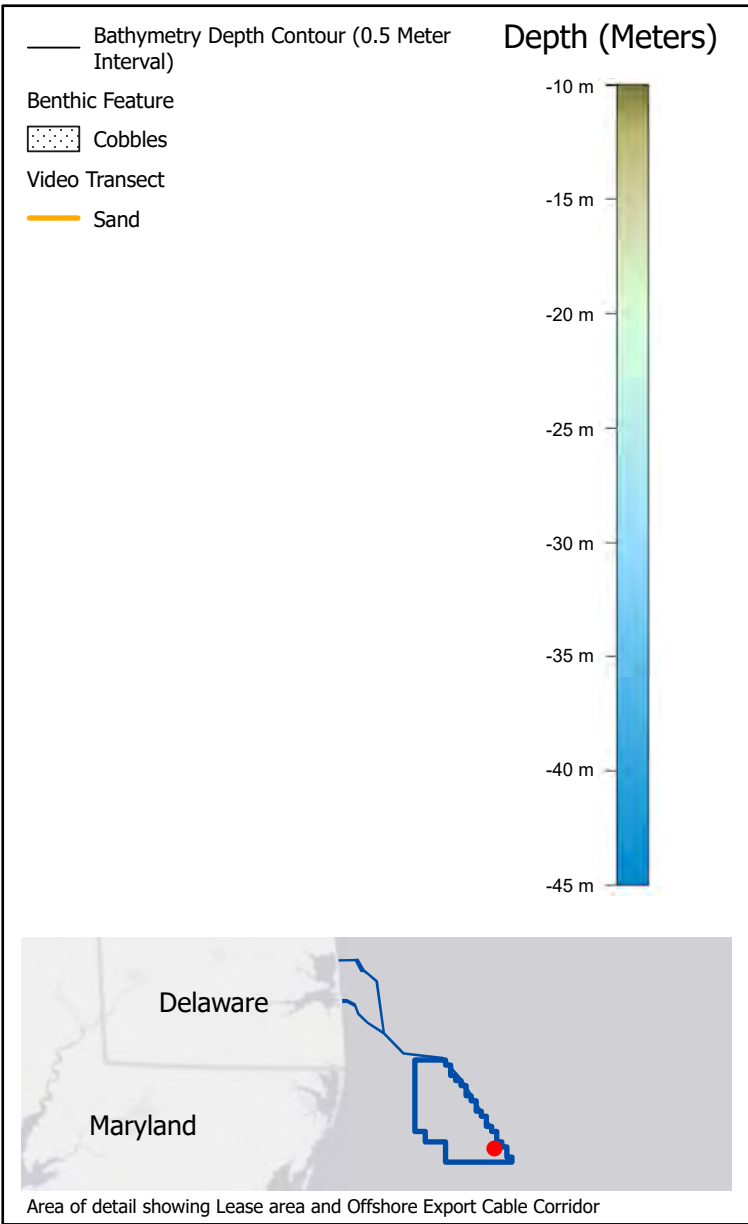
### Benthic Characterization for ROV Track

VT-LA-Z052

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



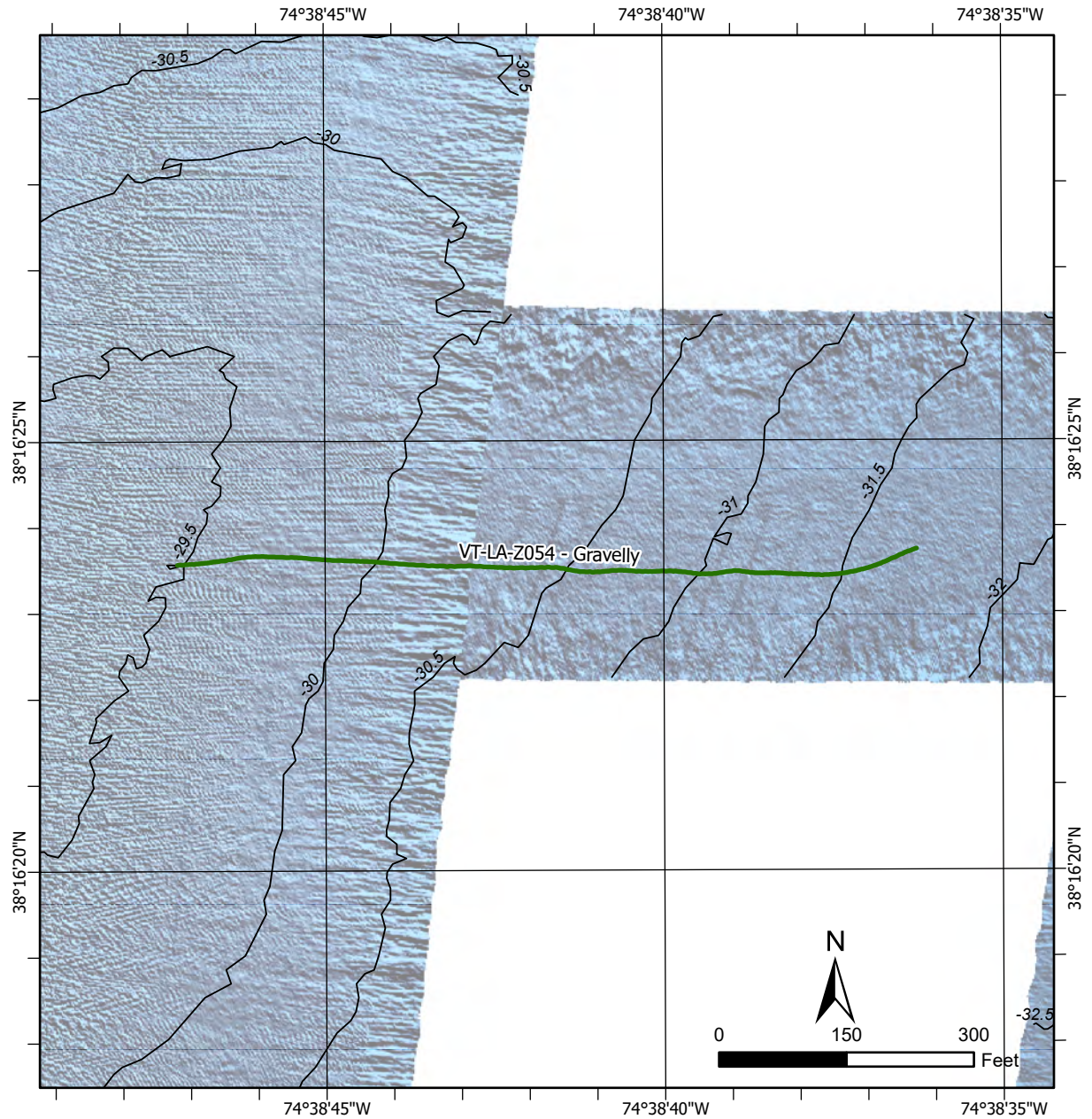
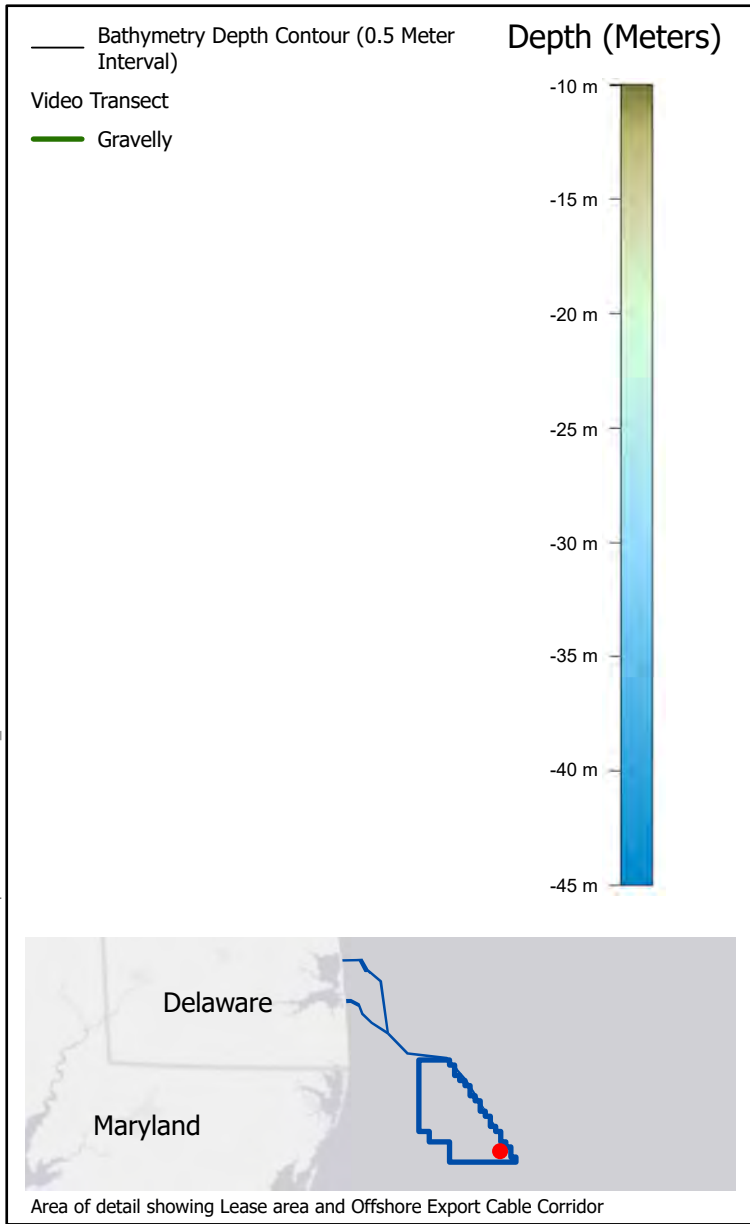
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Benthic Characterization for ROV Track  
VT-LA-Z053

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

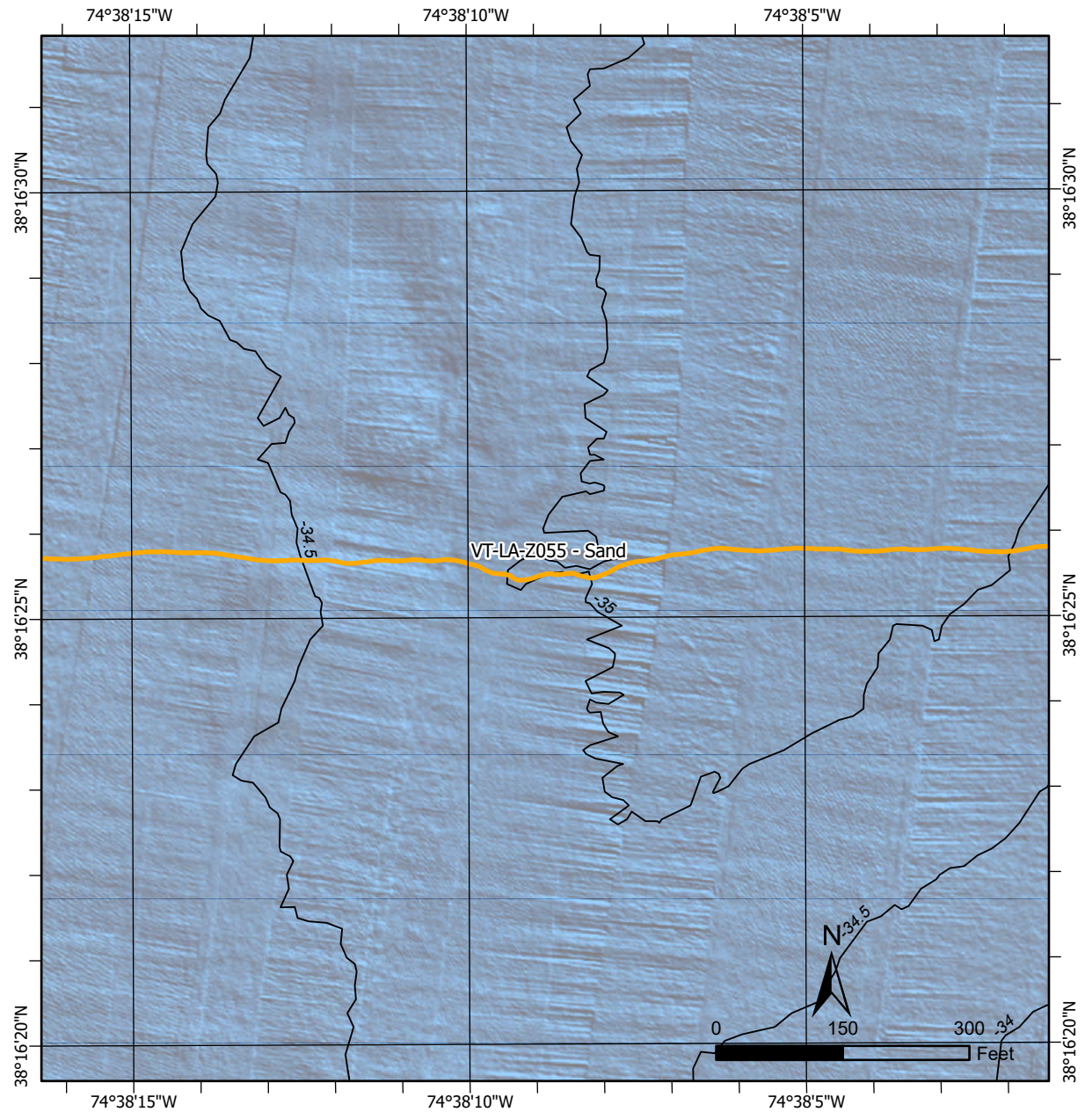
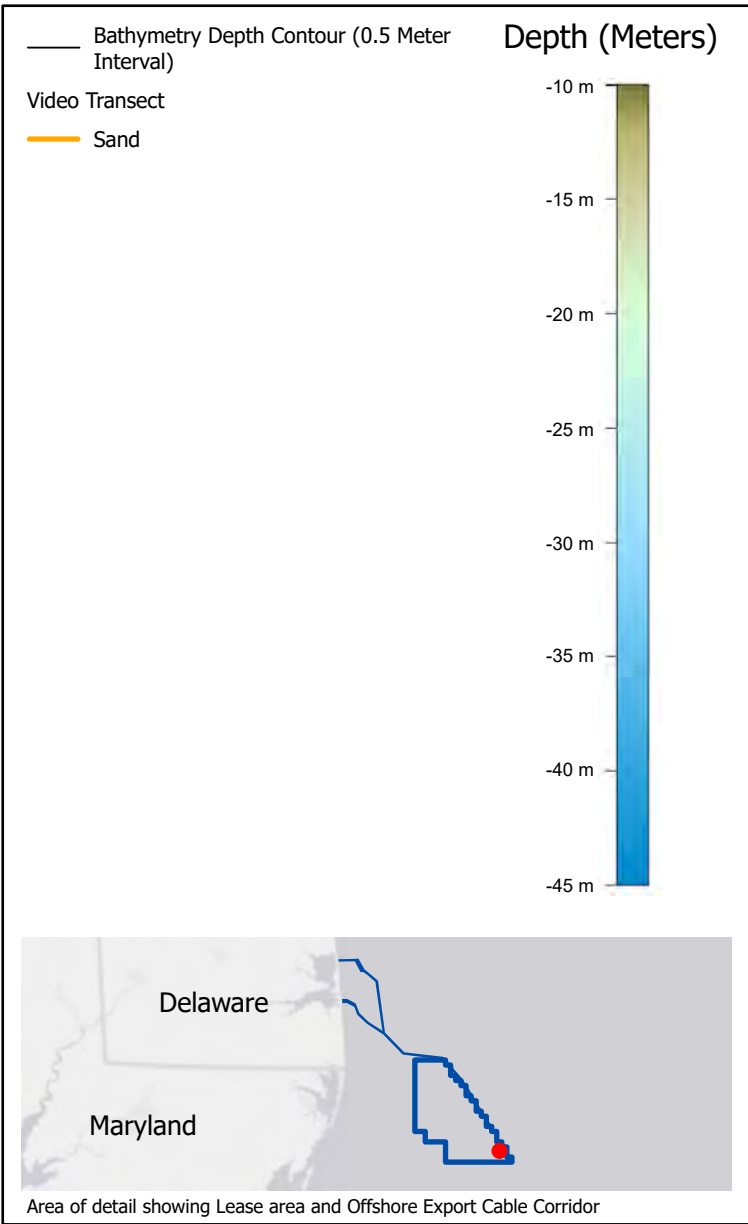
Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

### Benthic Characterization for ROV Track

VT-LA-Z054



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APR\U167\_ROV\tracks01



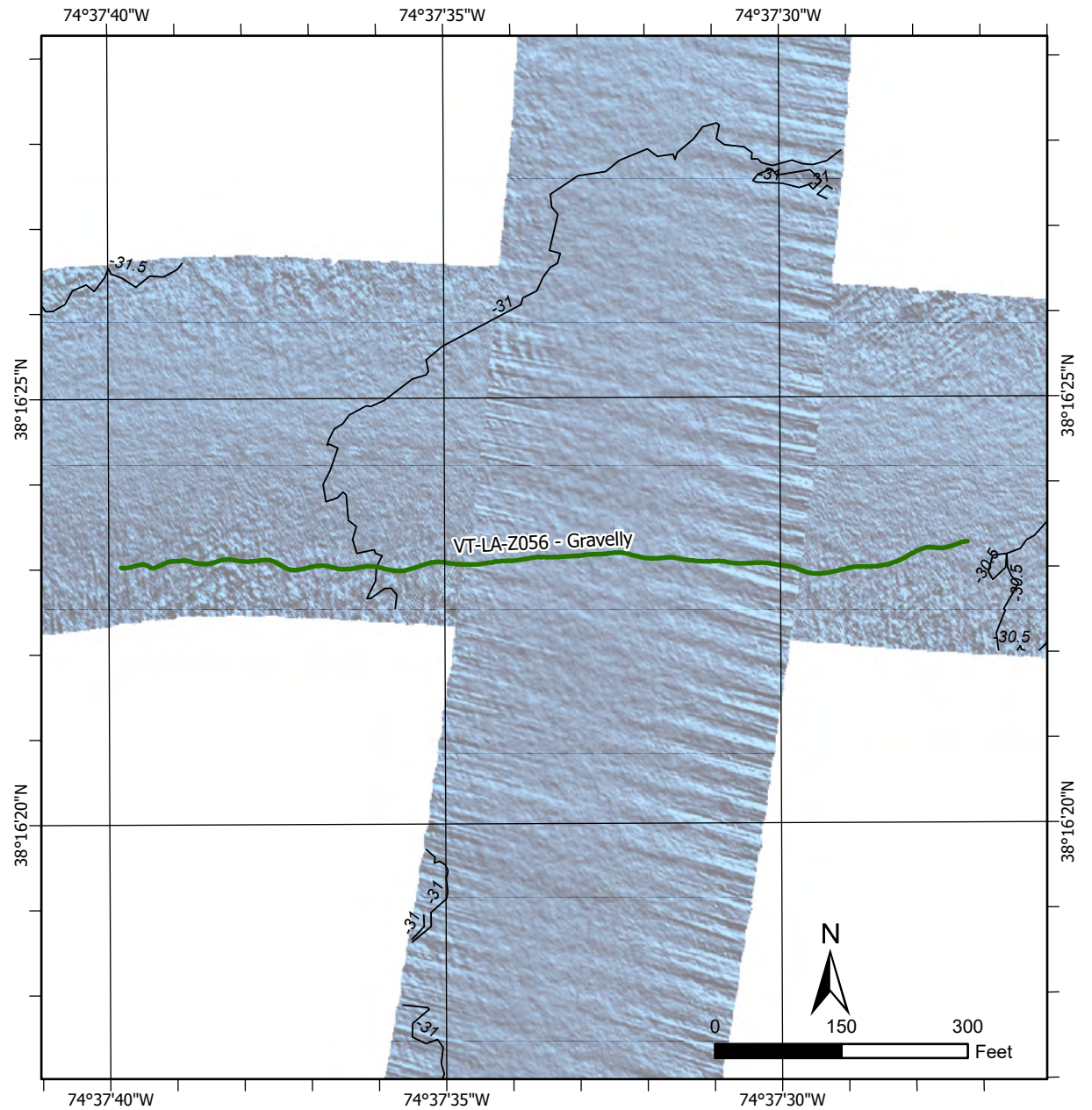
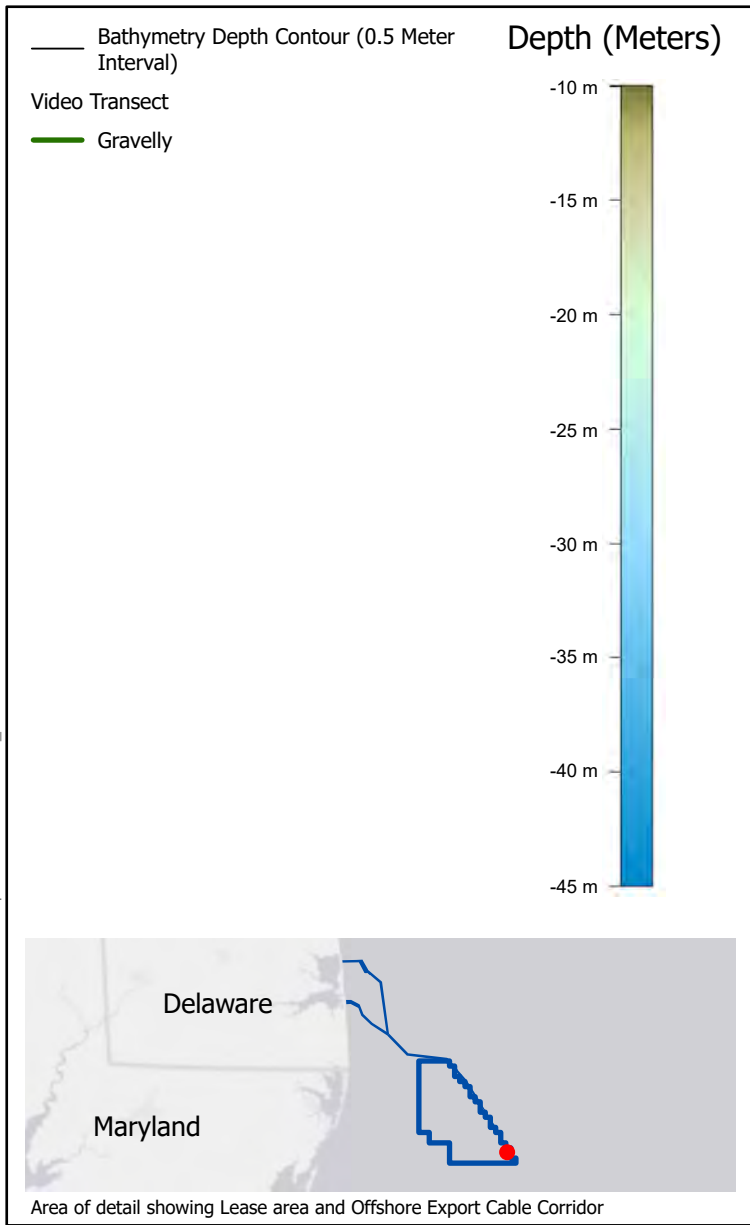
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

- Source:
- 1) GEMS, Bathymetry, 2022
  - 2) TDI, Video Transect Position Data, 2021
  - 3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z055



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRX\U167\_ROV\tracks01



### Maryland Offshore Wind Project

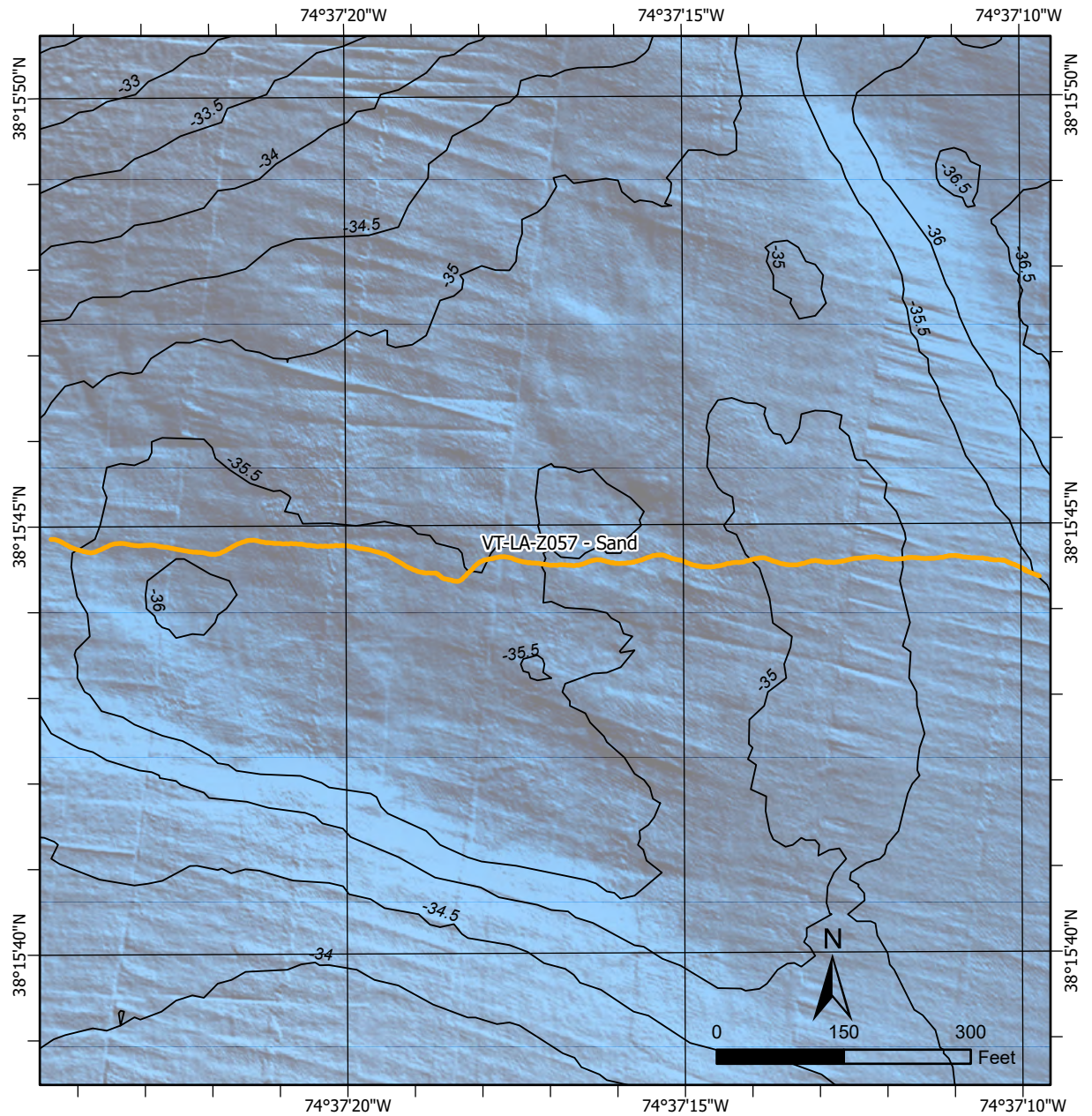
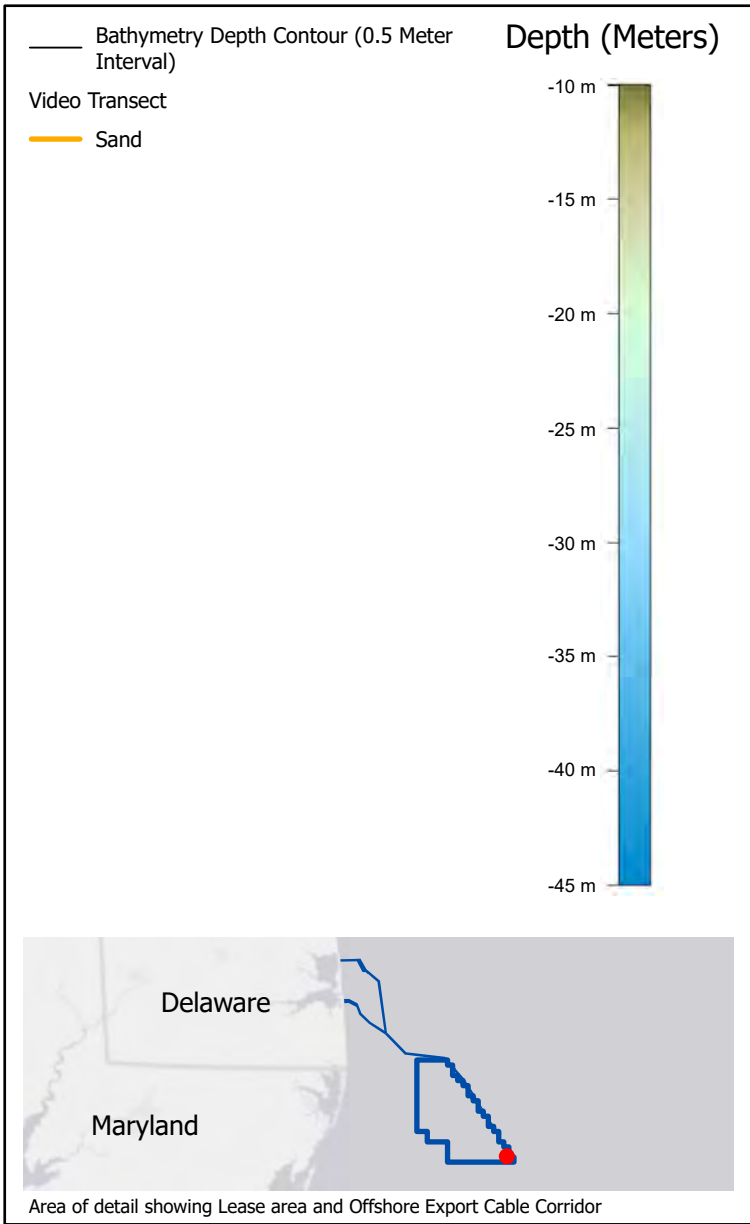
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z056



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROVtracks01



### Maryland Offshore Wind Project

Offshore Maryland and Delaware

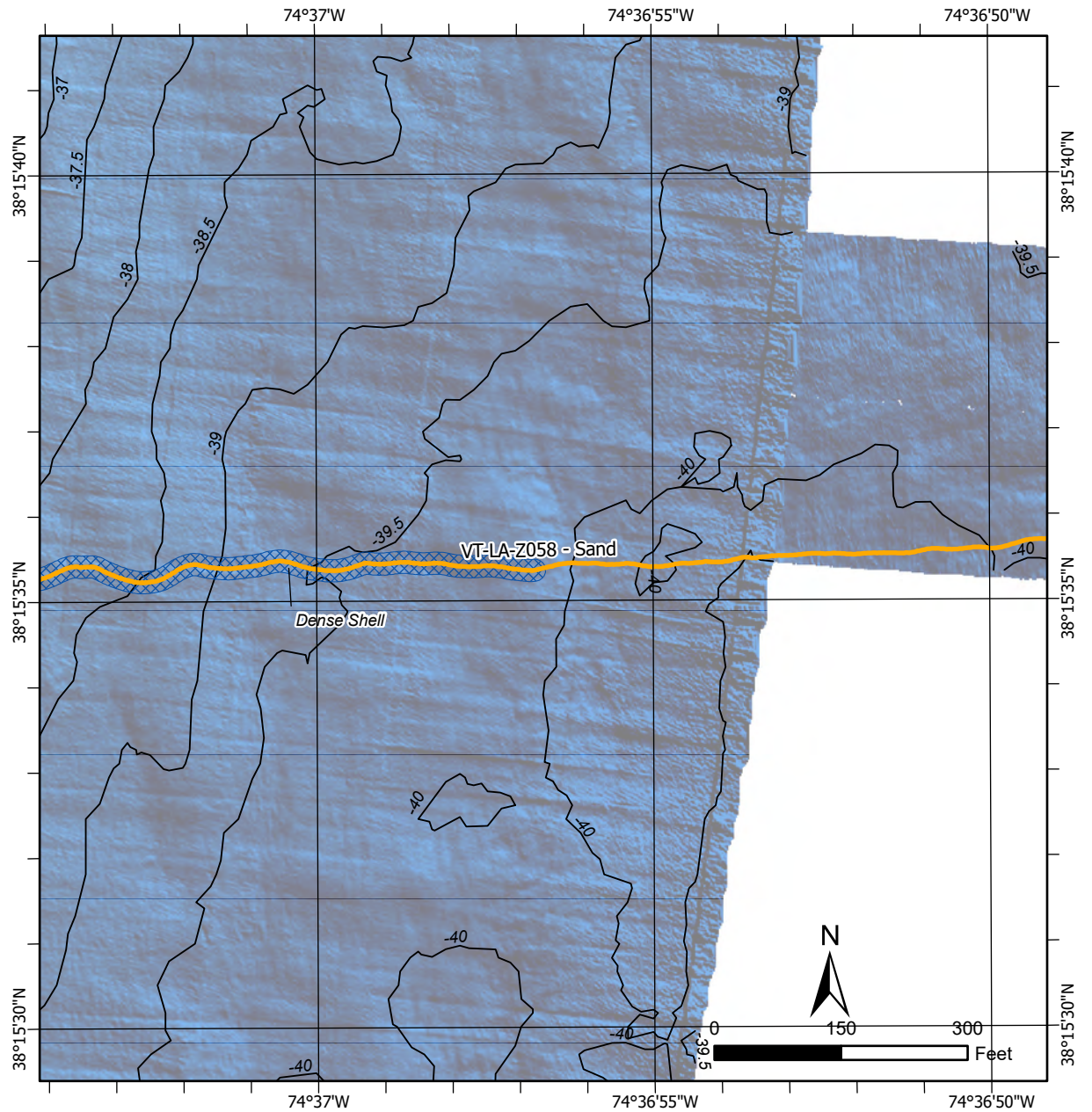
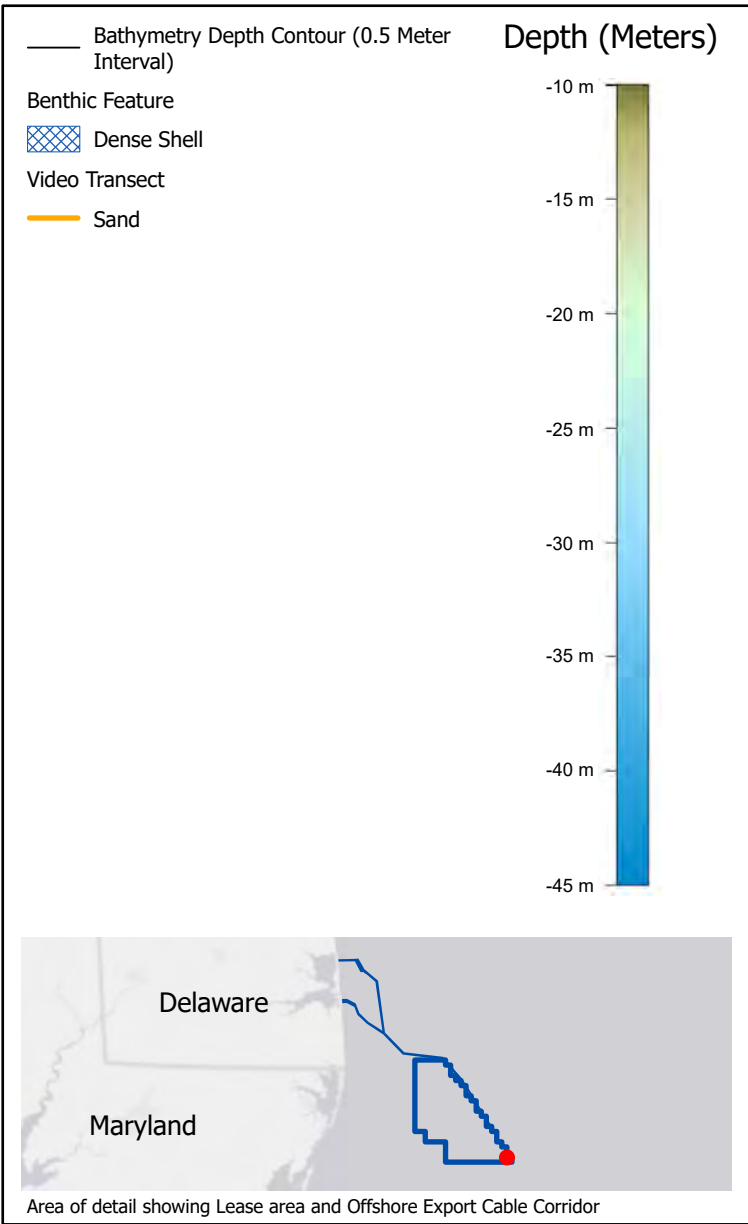
### Benthic Characterization for ROV Track

VT-LA-Z057

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



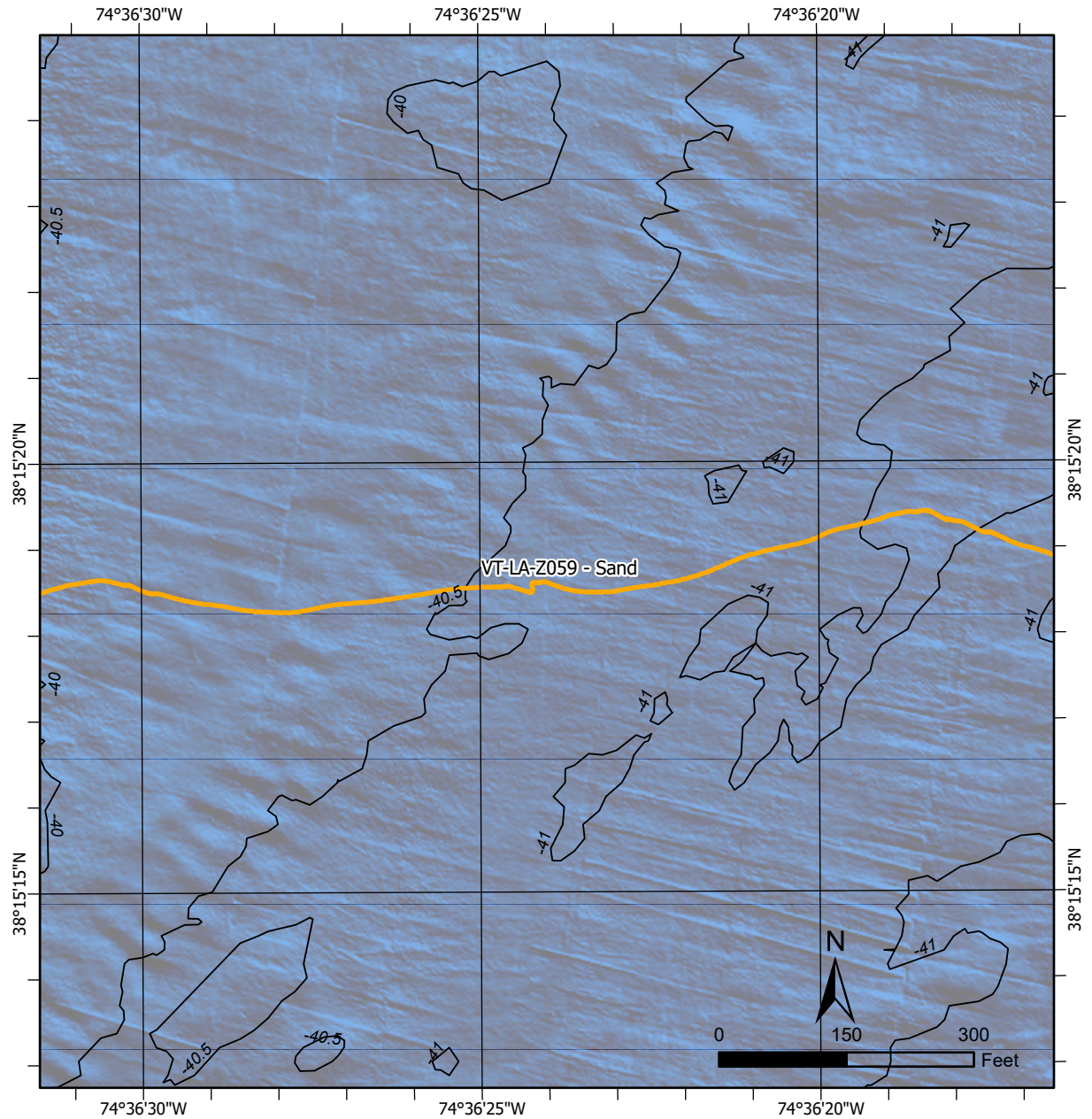
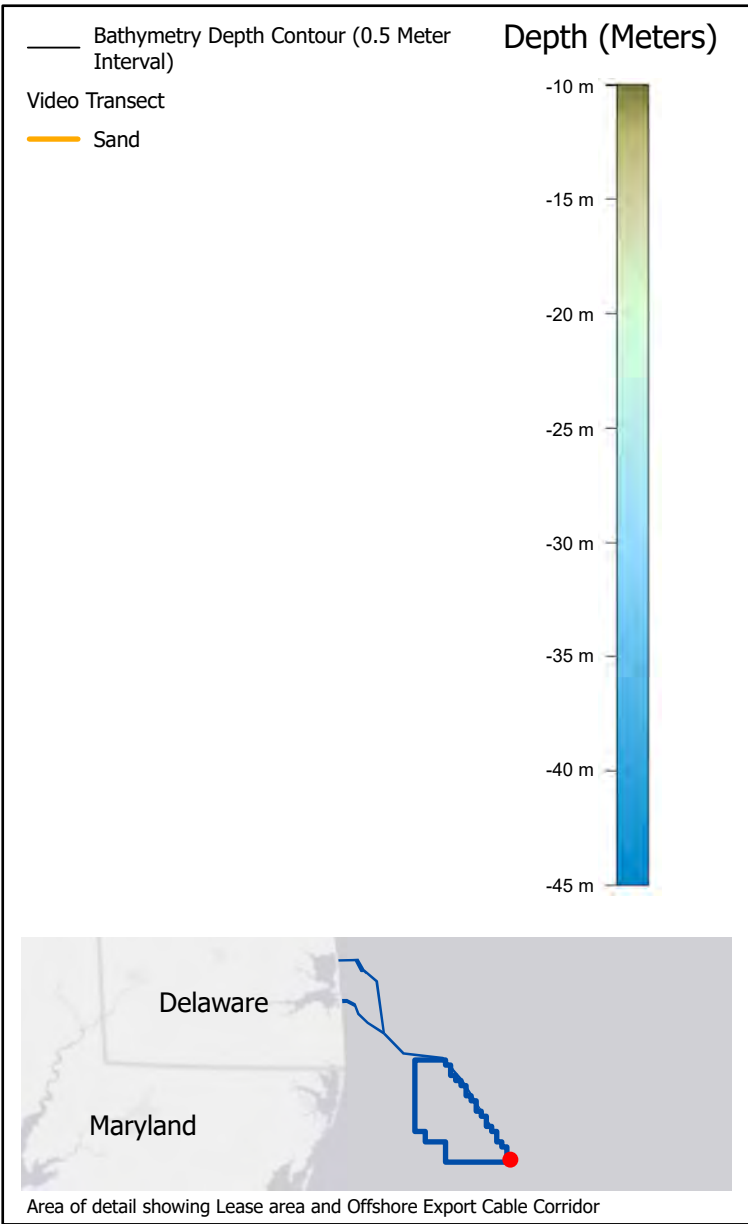
**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z058



Default Folder: J:\U167 - US Wind MD\04 Graphics\GIS\APRXU167\_ROV\tracks01



**Maryland Offshore Wind Project**  
Offshore Maryland and Delaware

Source:  
1) GEMS, Bathymetry, 2022  
2) TDI, Video Transect Position Data, 2021  
3) ESS, Track Characterization, 2021

Benthic Characterization for ROV Track  
VT-LA-Z059







## **Attachment B**

---

### **Benthic Sample Taxonomy and Enumeration Results**





























## **Attachment C**

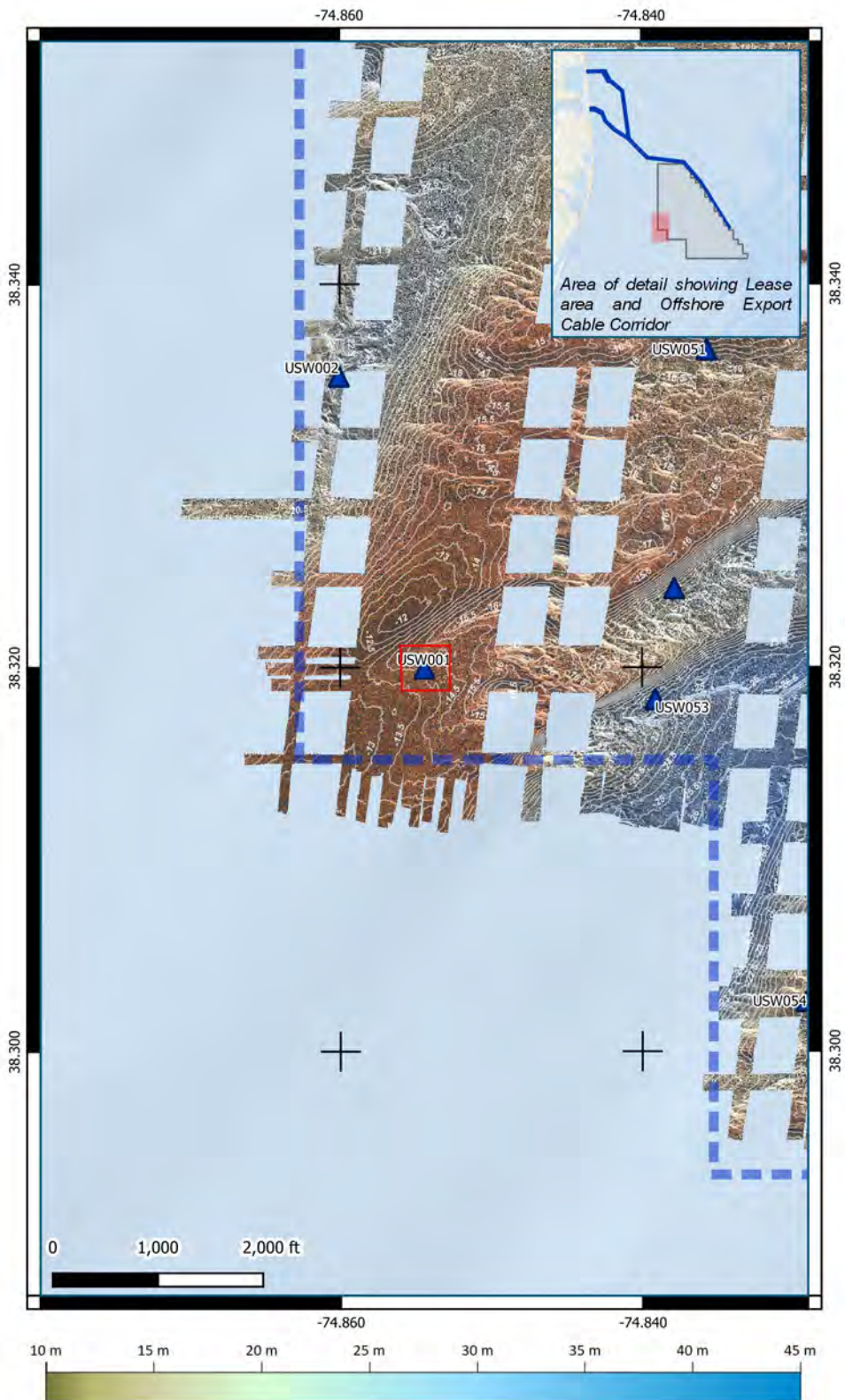
---

### **Benthic Macrofaunal Grab Logs**





### Map of Benthic Grab Location

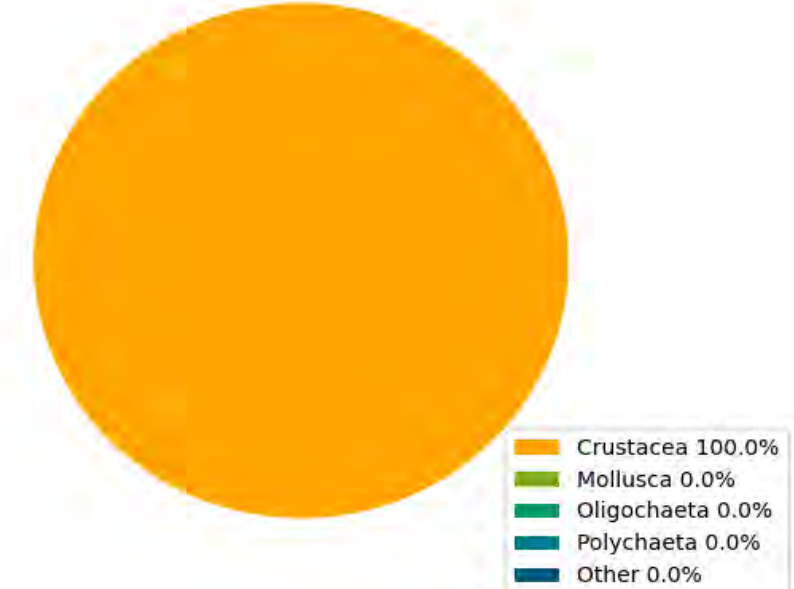


### Benthic Grab USW001

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 50                            |
| Taxa Richness <sup>1</sup> :   |                     | 2                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

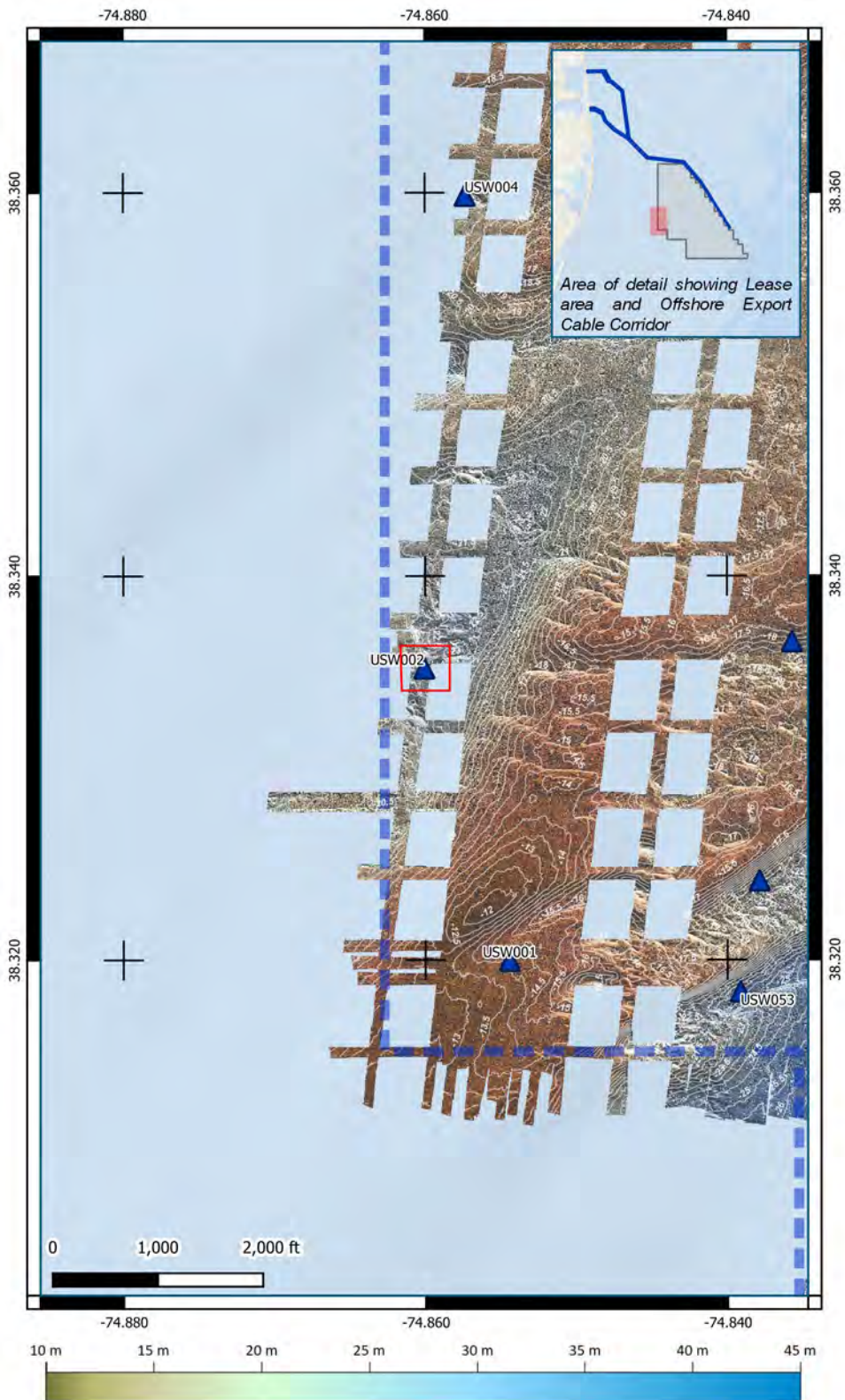


### Sample Photograph





### Map of Benthic Grab Location

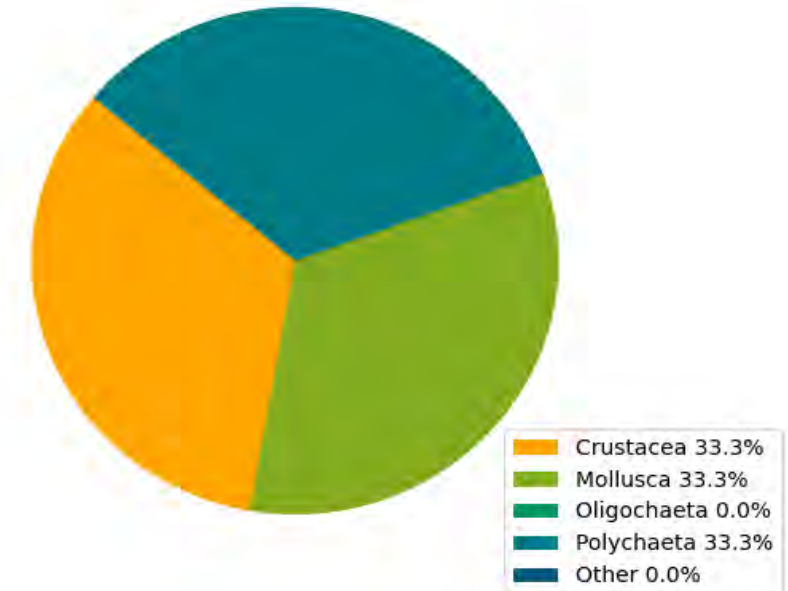


### Benthic Grab USW002

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 150                             |
| Taxa Richness <sup>1</sup> :   |                     | 5                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

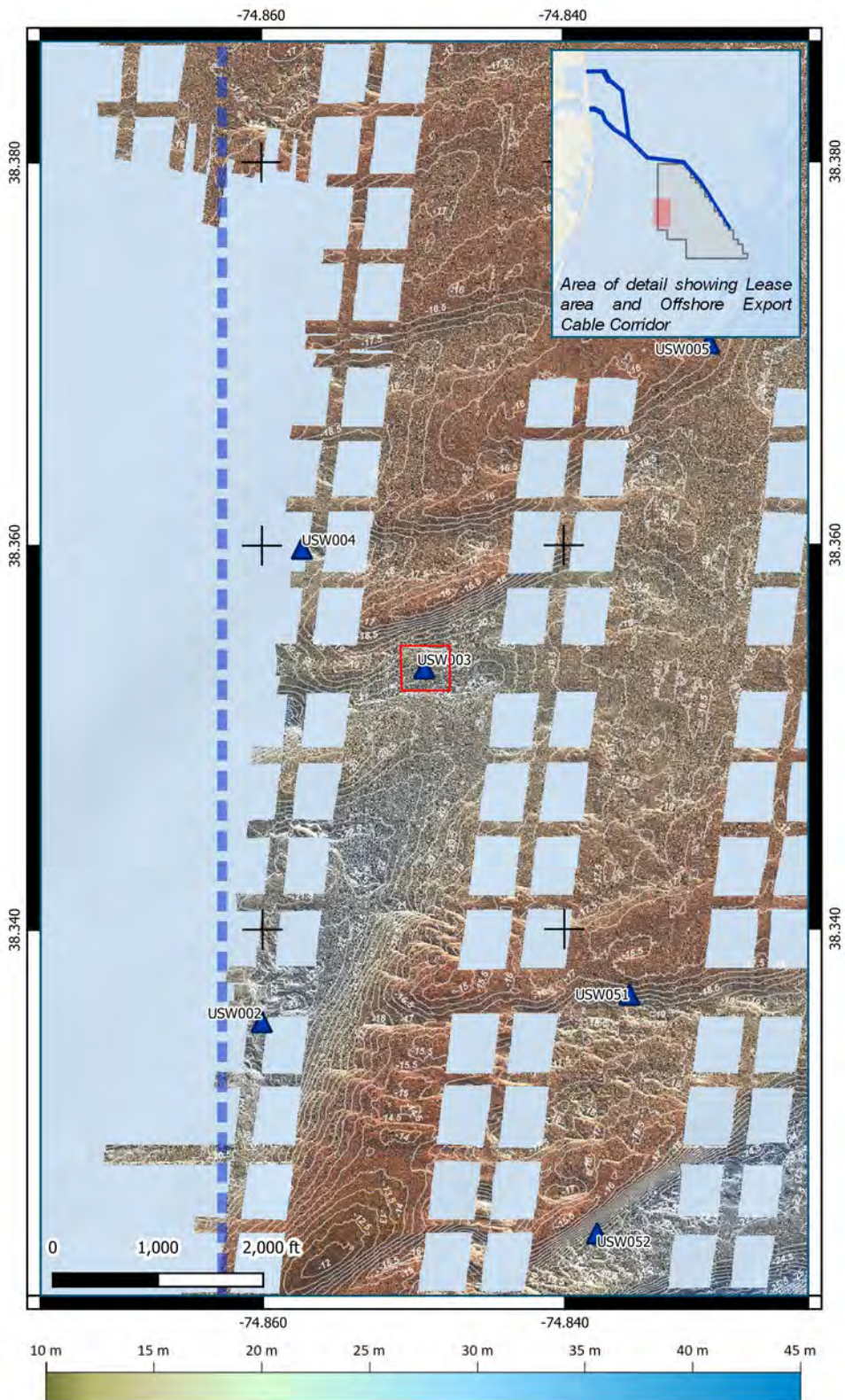


### Sample Photograph





### Map of Benthic Grab Location

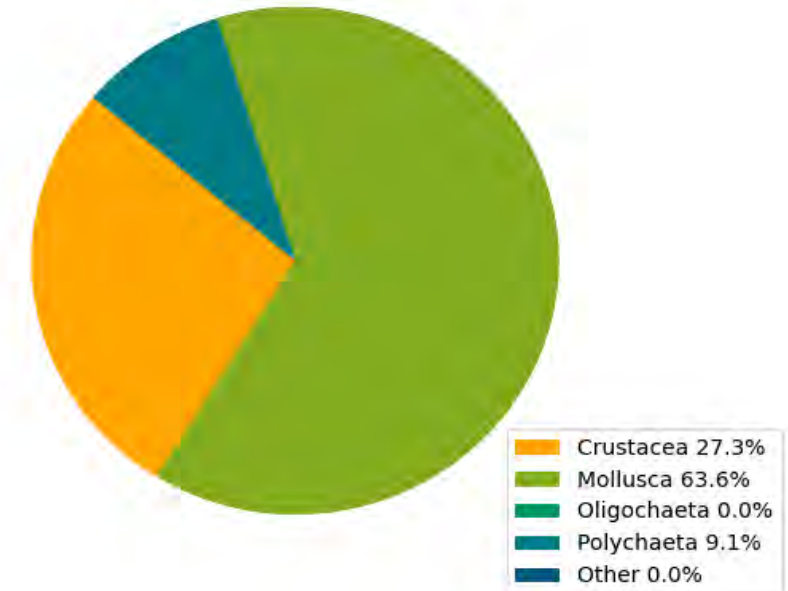


### Benthic Grab USW003

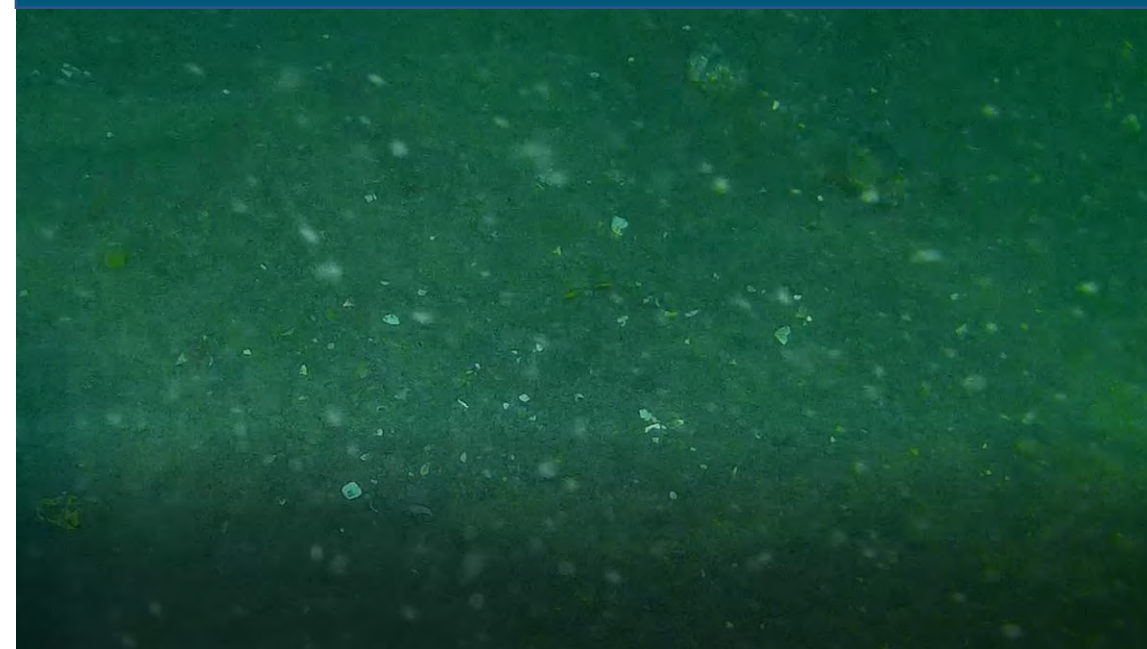
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 275                           |
| Taxa Richness <sup>1</sup> :   |                     | 6                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

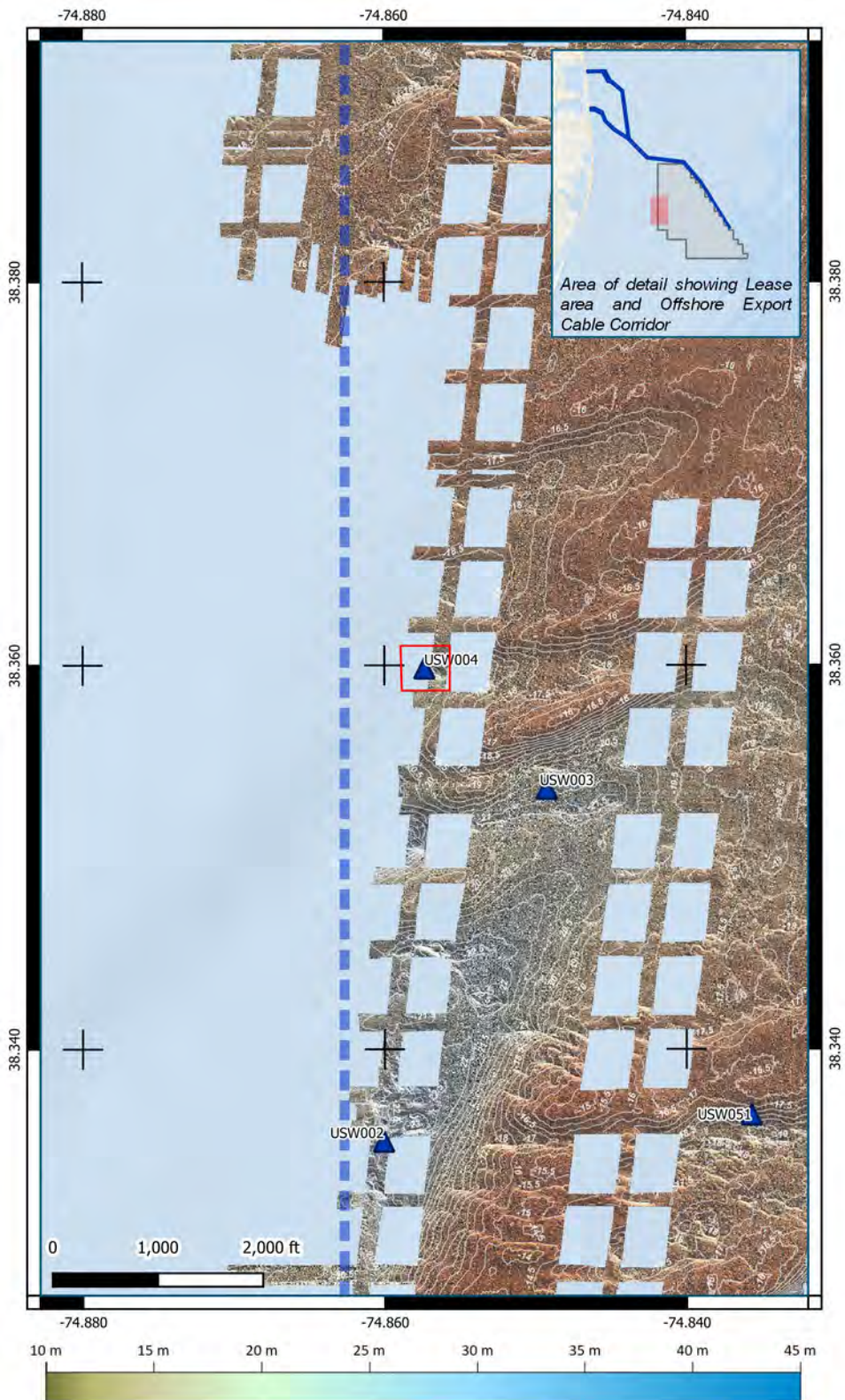


### Sample Photograph





### Map of Benthic Grab Location

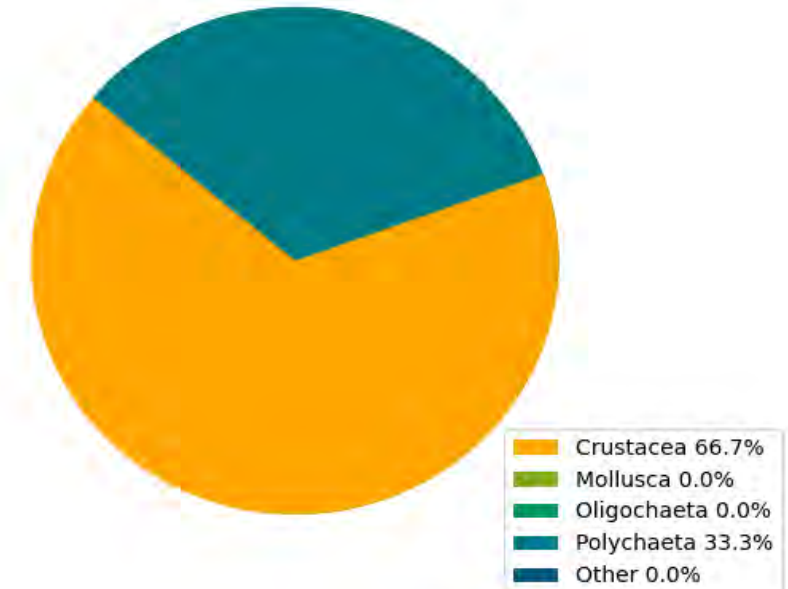


### Benthic Grab USW004

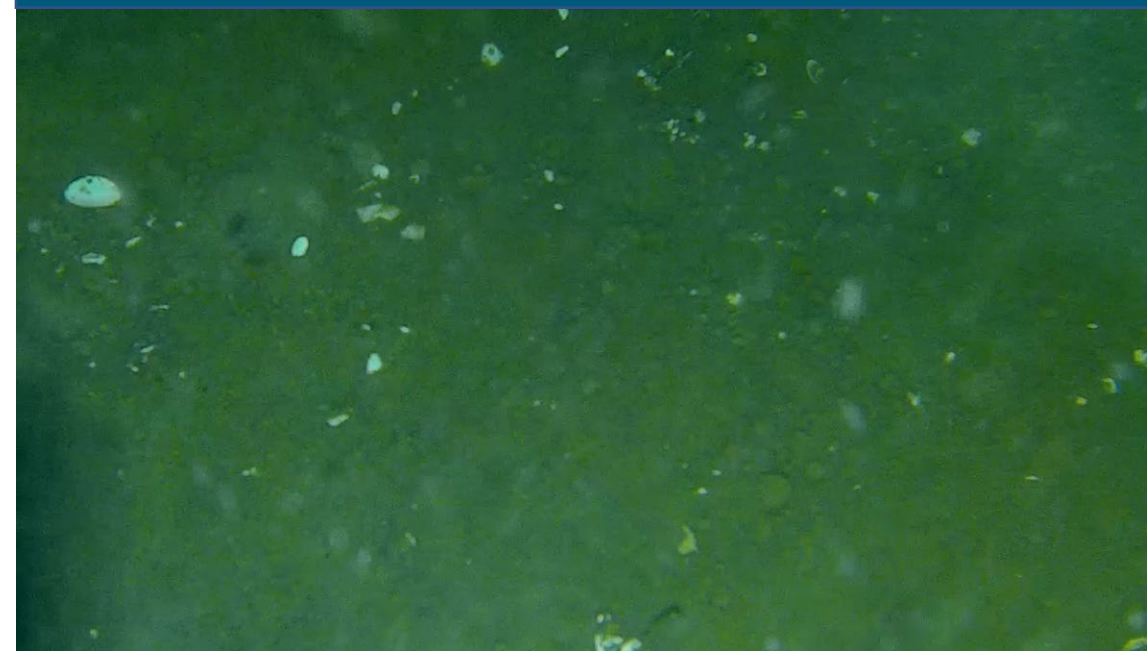
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 300                           |
| Taxa Richness <sup>1</sup> :   |                     | 3                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

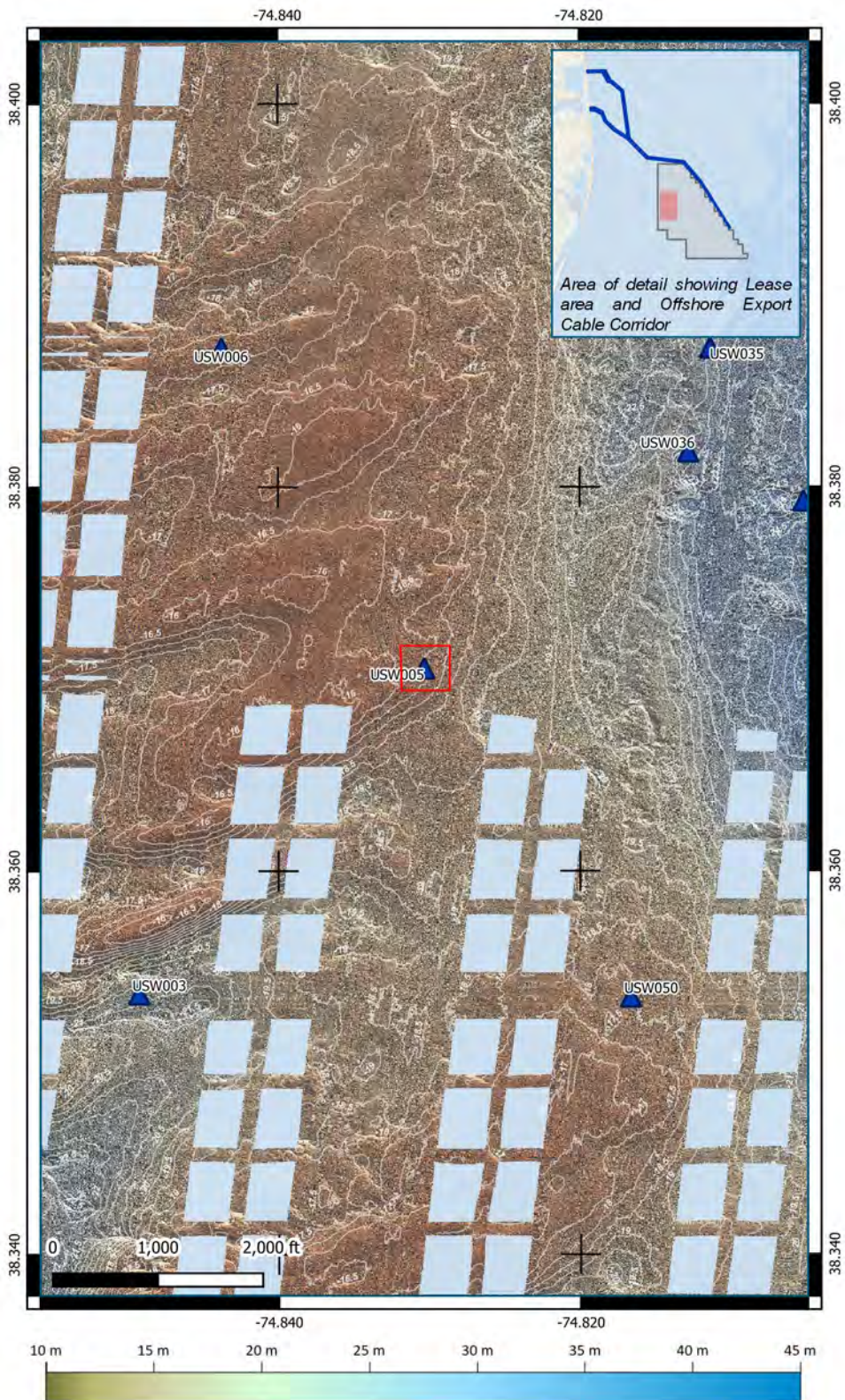


### Sample Photograph





### Map of Benthic Grab Location

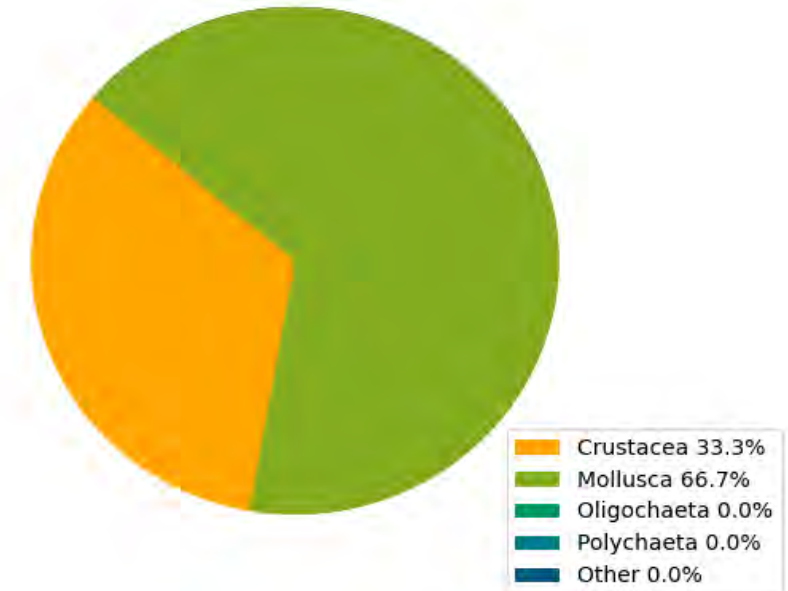


### Benthic Grab USW005

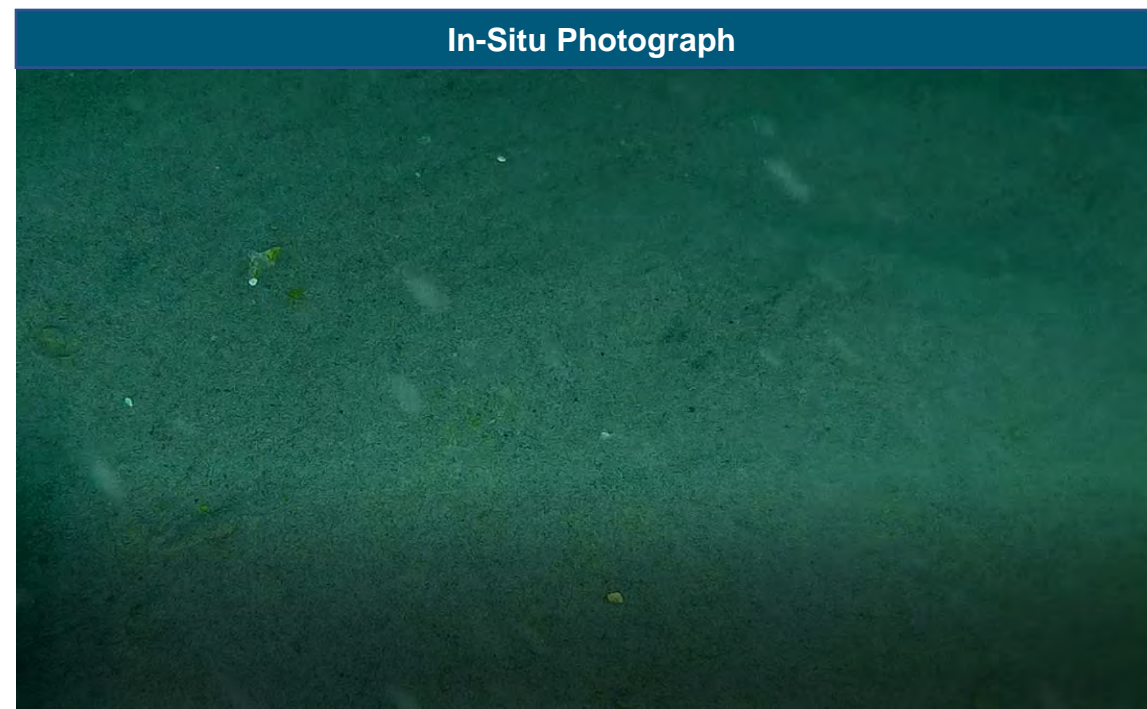
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 75                            |
| Taxa Richness <sup>1</sup> :   |                     | 2                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

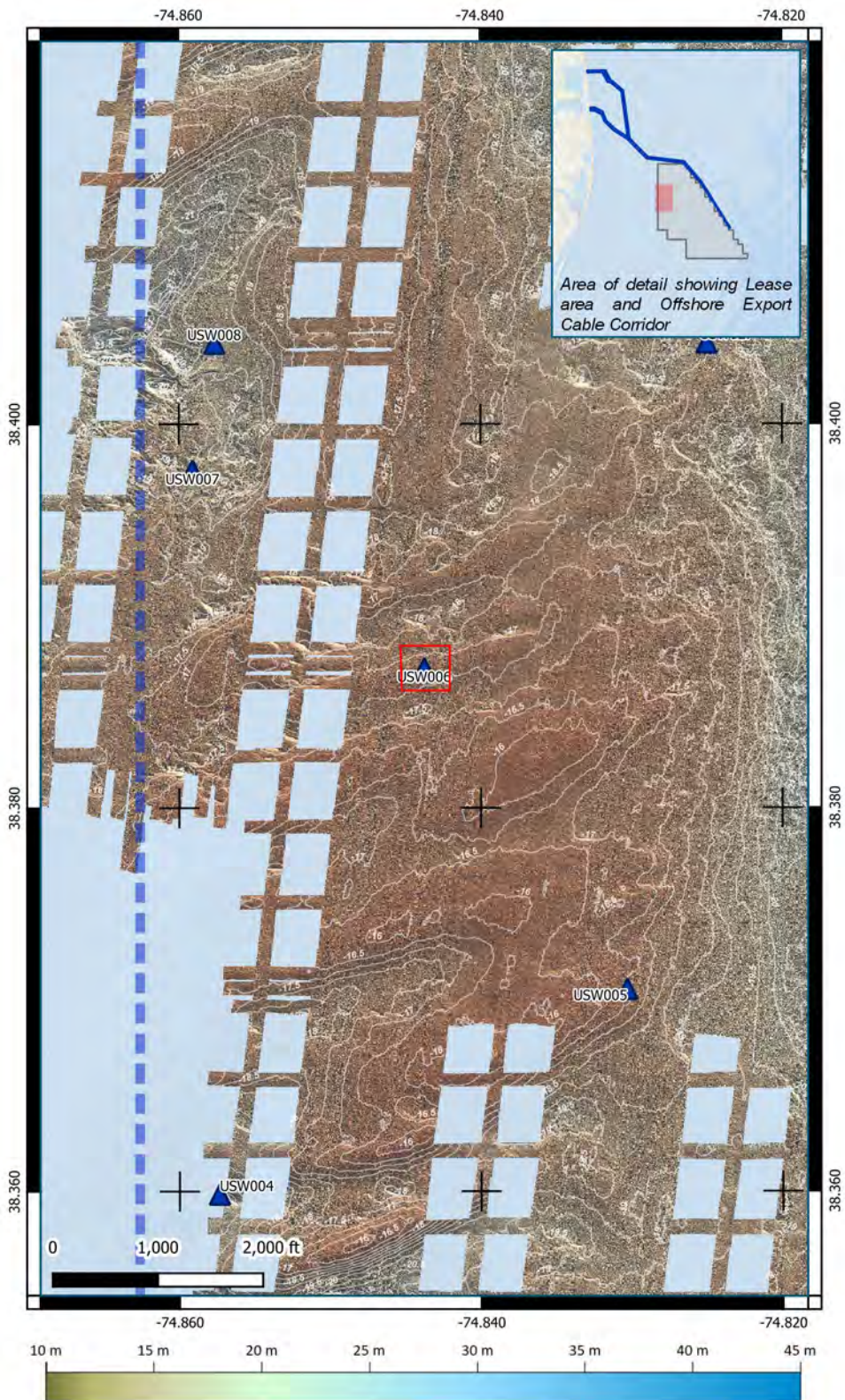


### Sample Photograph





### Map of Benthic Grab Location

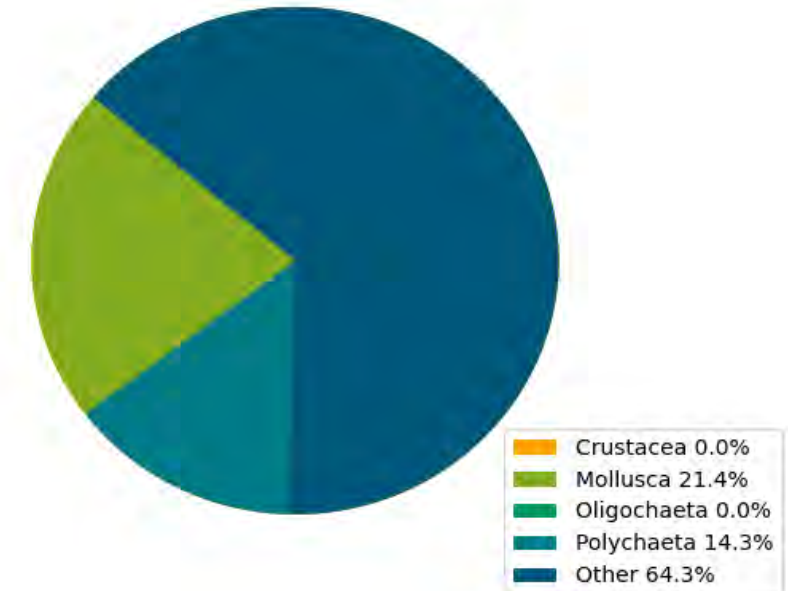


### Benthic Grab USW006

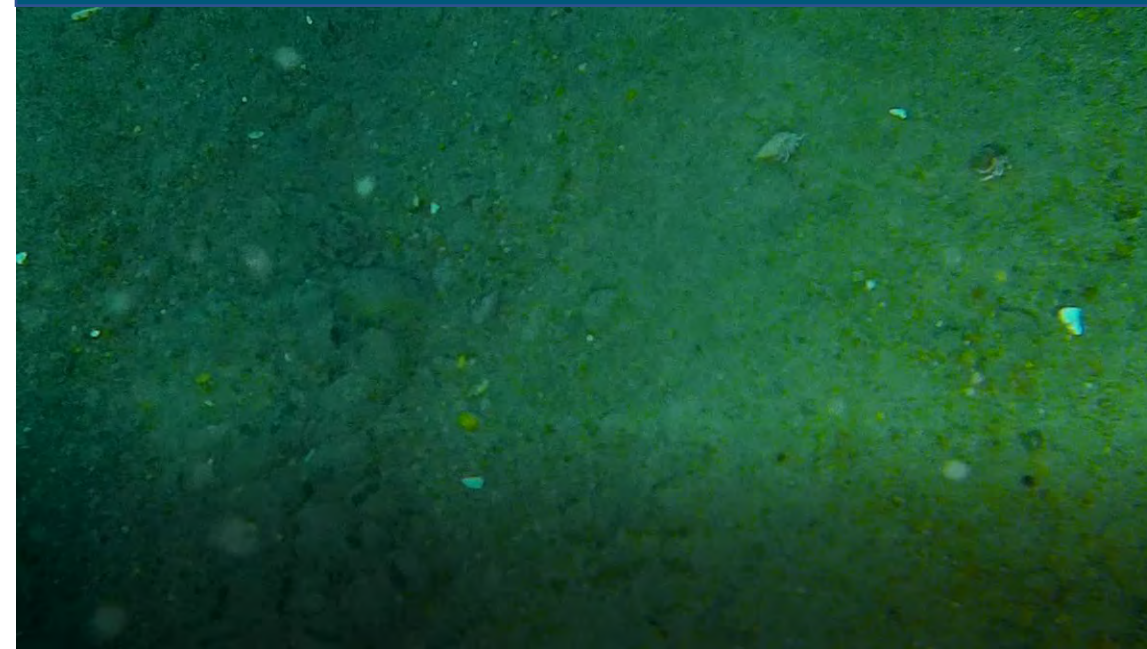
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 350                           |
| Taxa Richness <sup>1</sup> :   |                     | 6                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

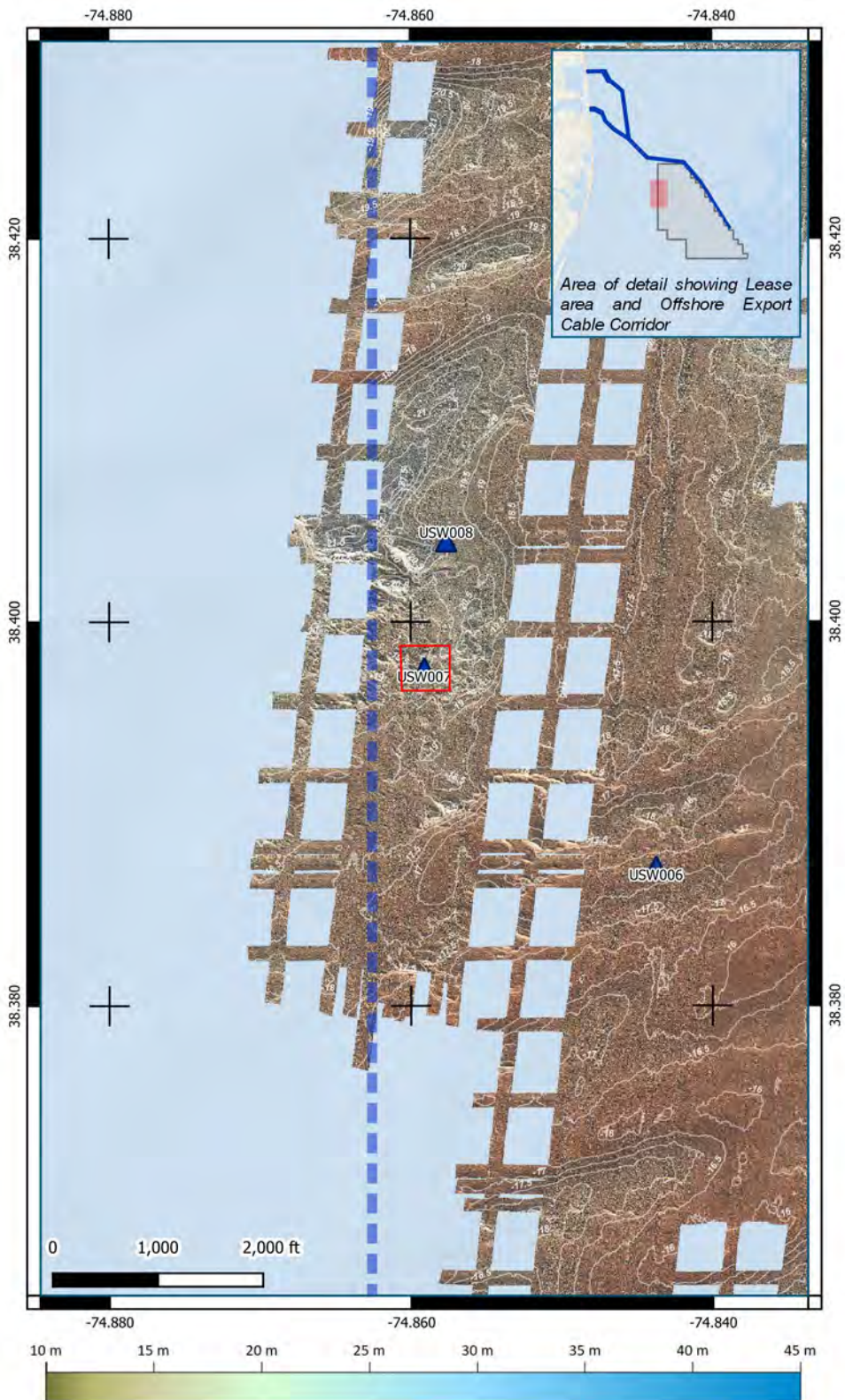


### Sample Photograph





### Map of Benthic Grab Location

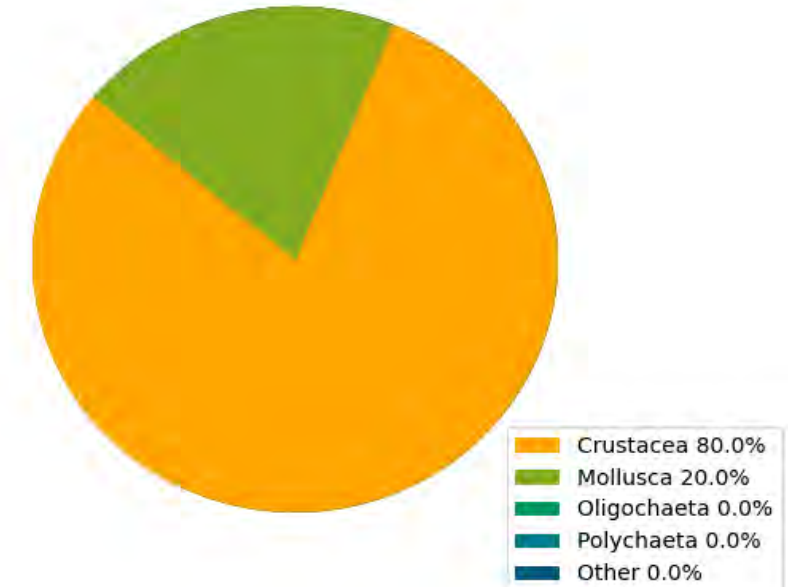


### Benthic Grab USW007

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 125                             |
| Taxa Richness <sup>1</sup> :   |                     | 3                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

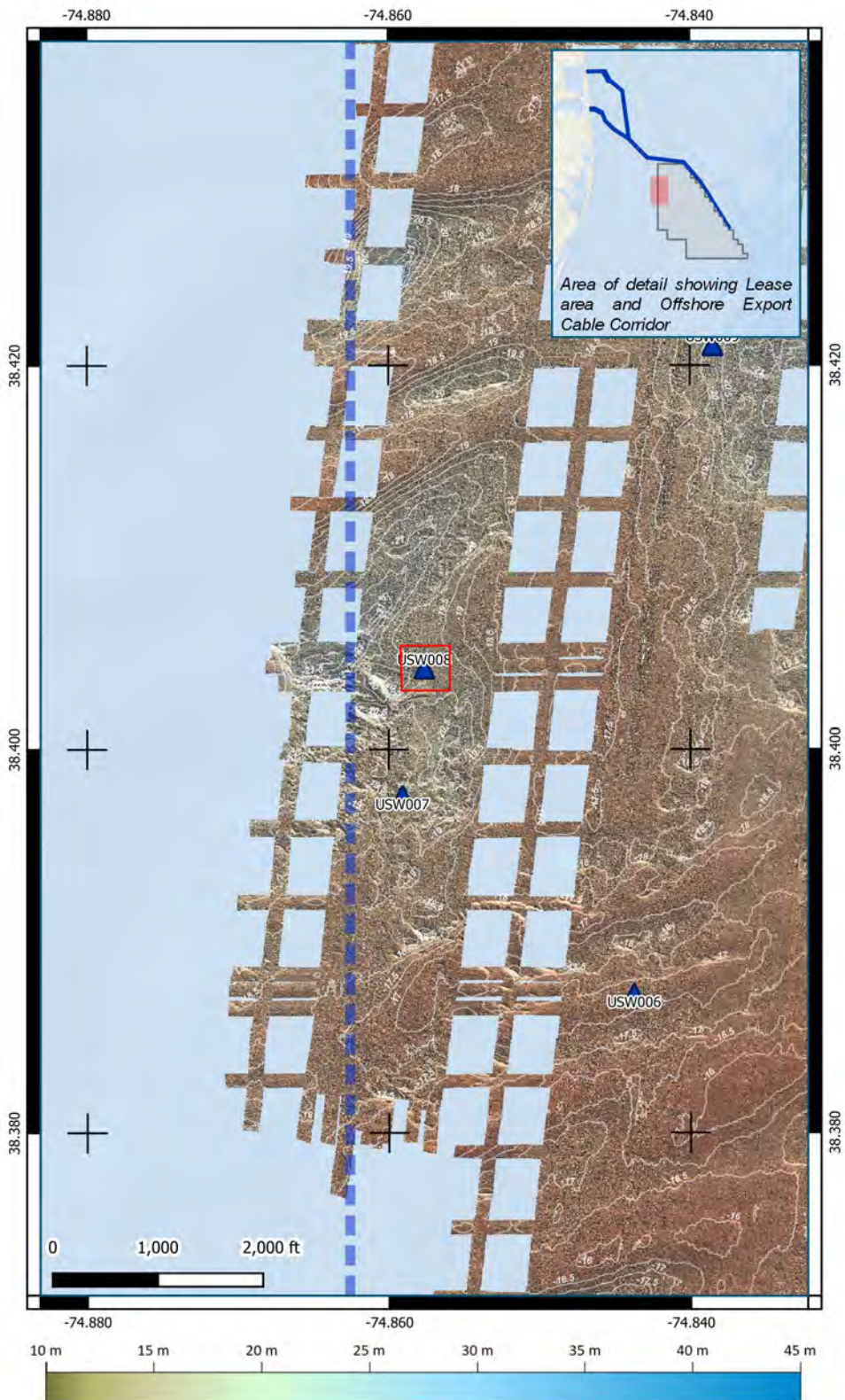


### Sample Photograph





### Map of Benthic Grab Location

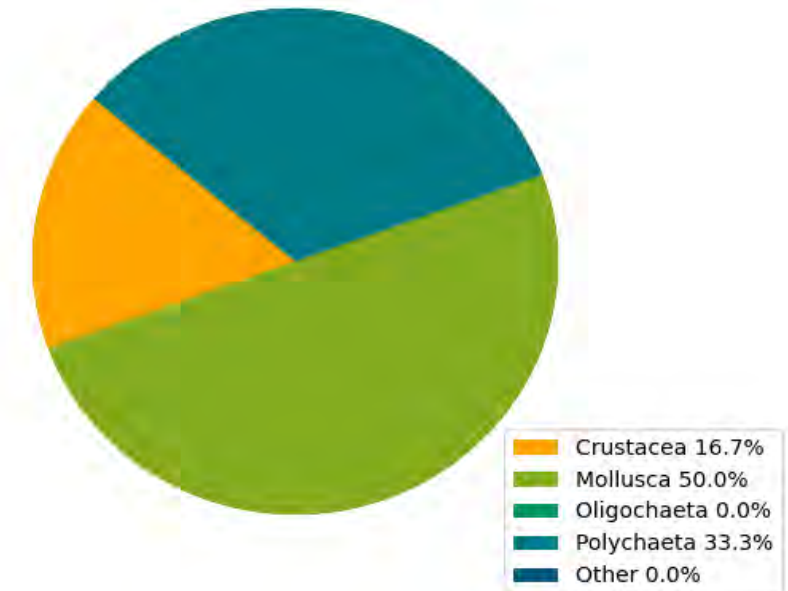


### Benthic Grab USW008

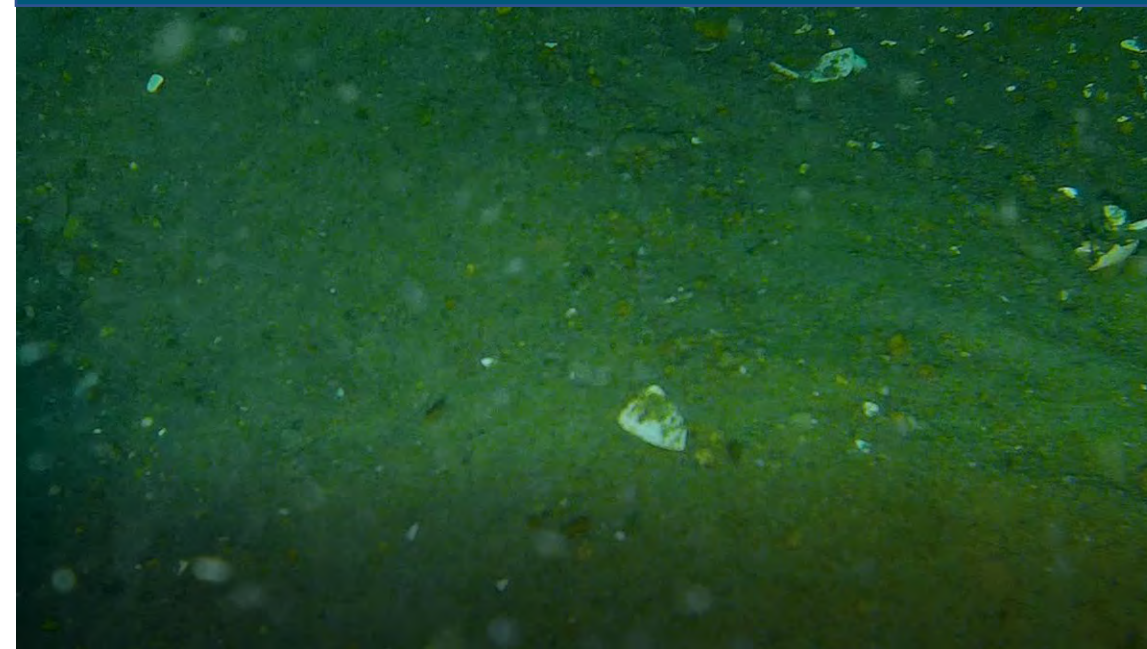
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 150                             |
| Taxa Richness <sup>1</sup> :   |                     | 6                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

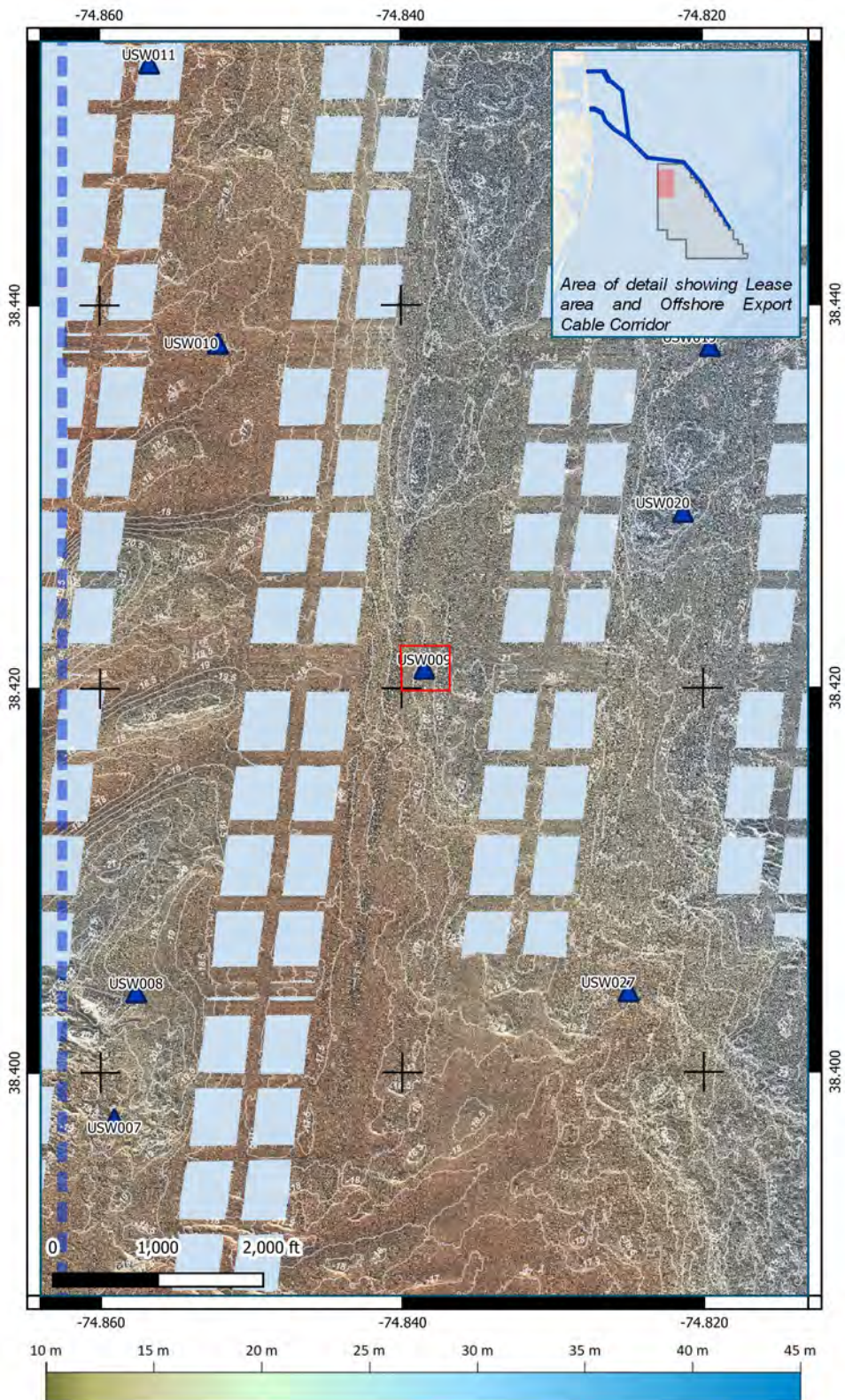


### Sample Photograph





### Map of Benthic Grab Location

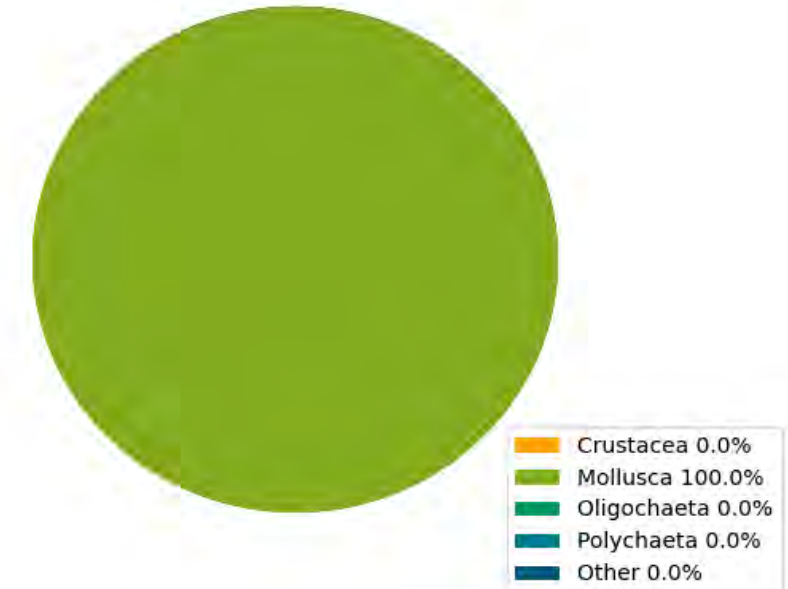


### Benthic Grab USW009

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 25                              |
| Taxa Richness <sup>1</sup> :   |                     | 1                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

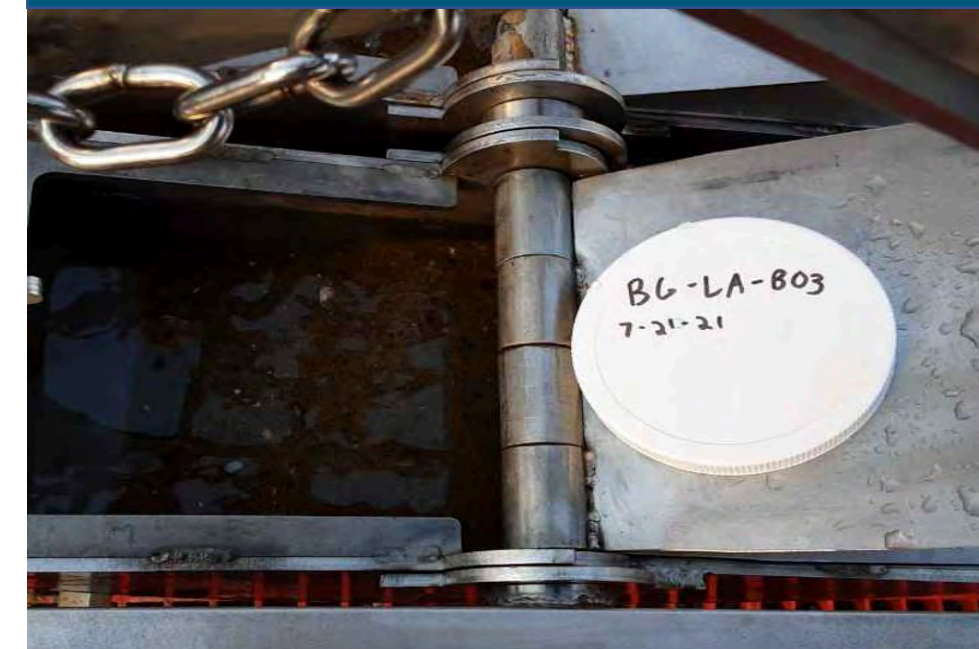
### Benthic Organism Density by Taxa Group



### In-Situ Photograph



### Sample Photograph





### Map of Benthic Grab Location

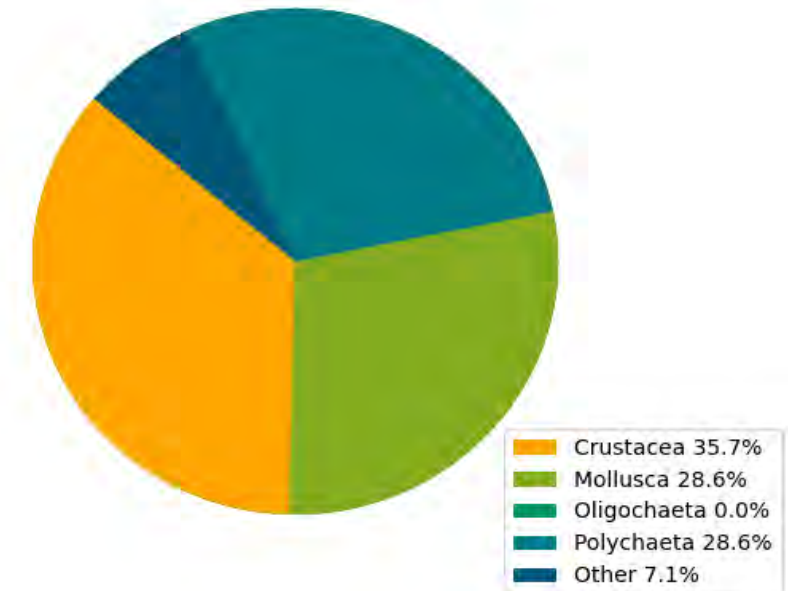


### Benthic Grab USW010

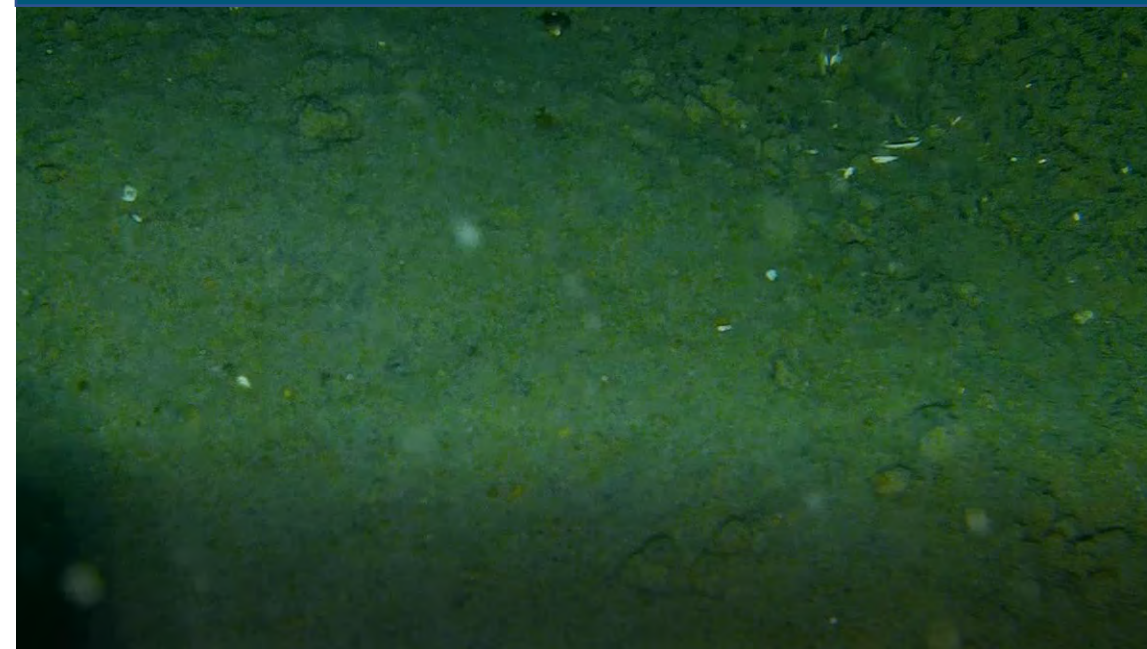
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 350                           |
| Taxa Richness <sup>1</sup> :   |                     | 9                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

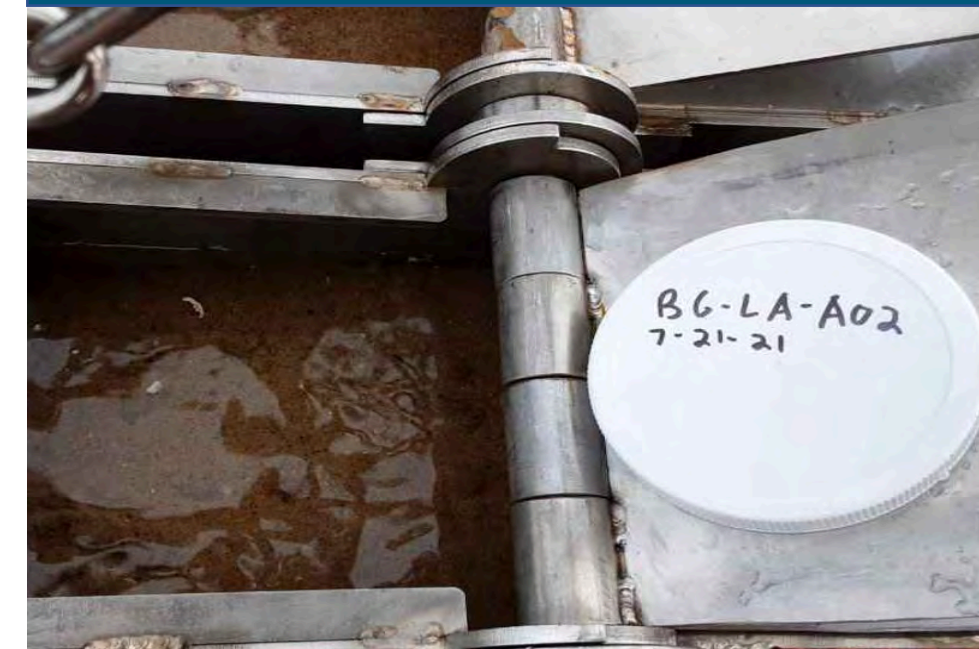
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

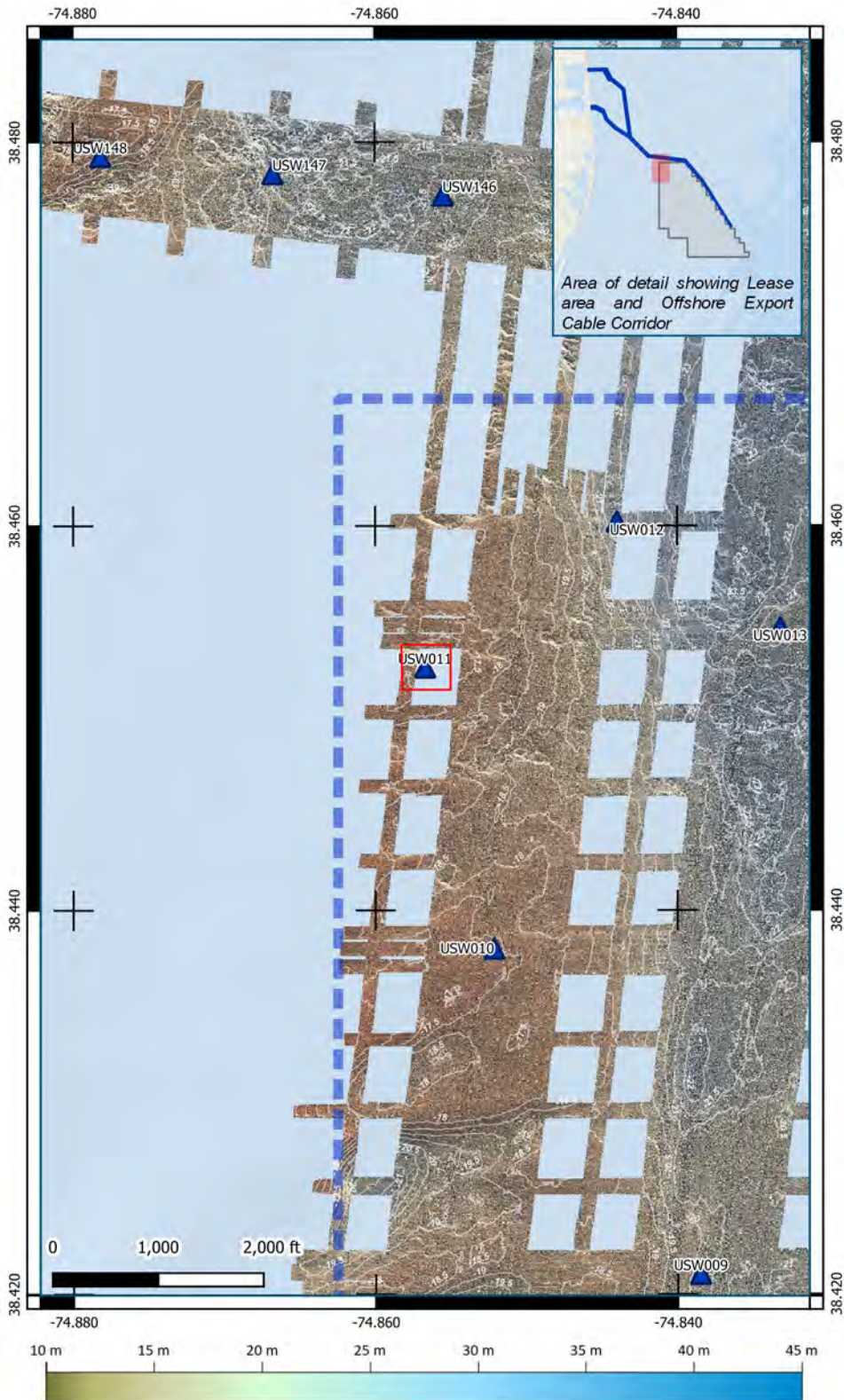


### Sample Photograph





### Map of Benthic Grab Location

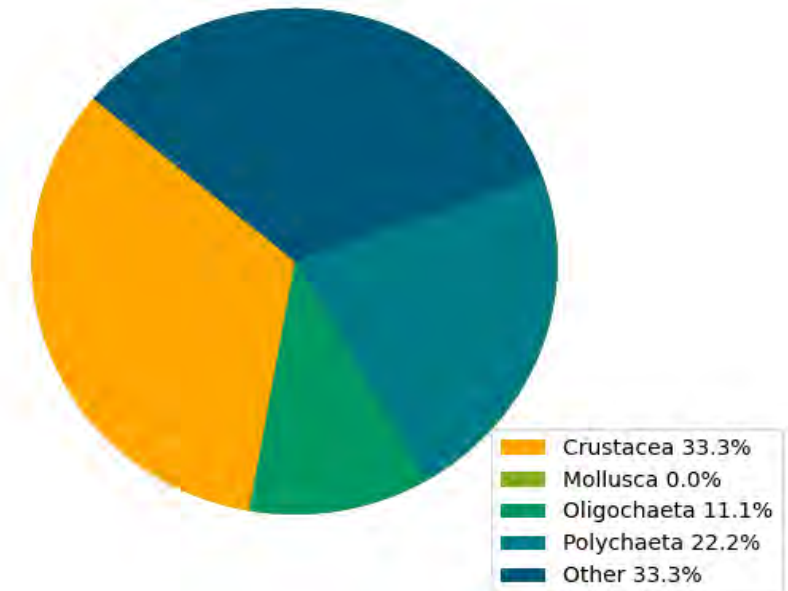


### Benthic Grab USW011

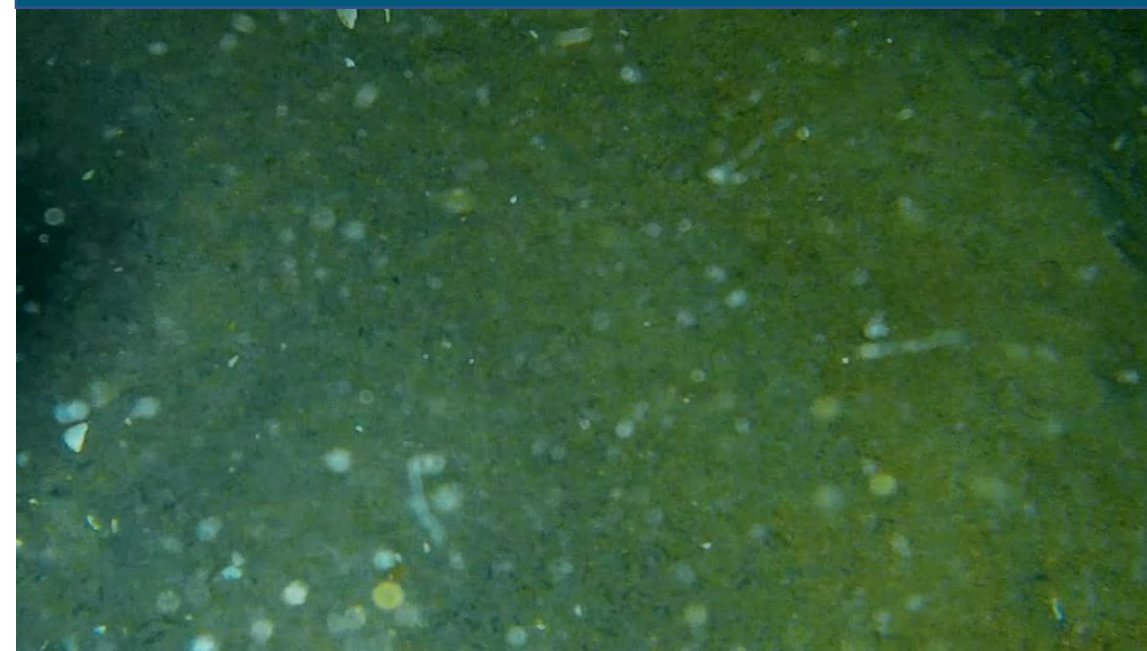
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 225                           |
| Taxa Richness <sup>1</sup> :   |                     | 7                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

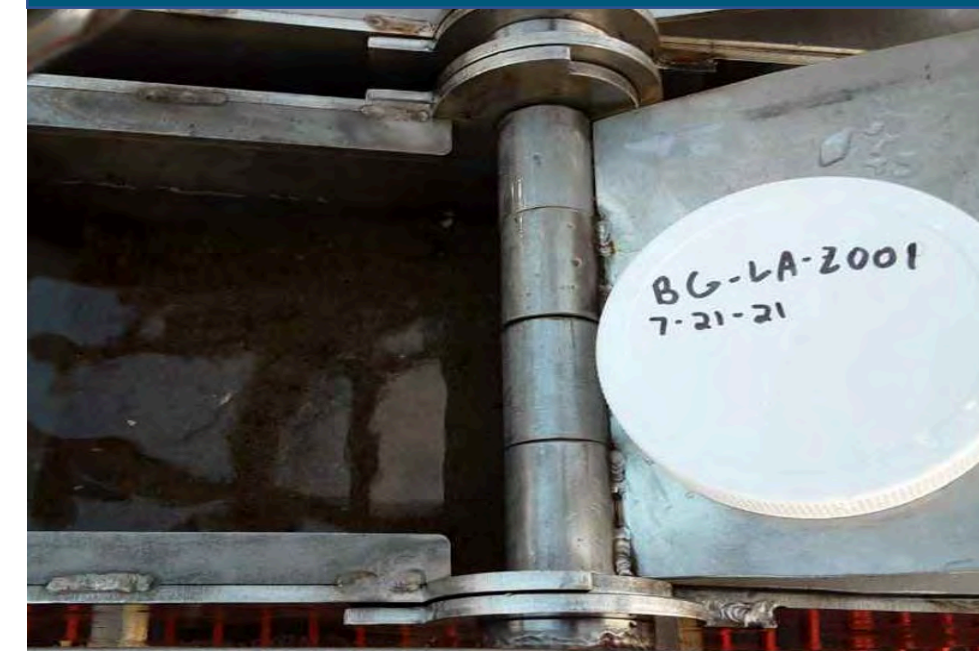
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

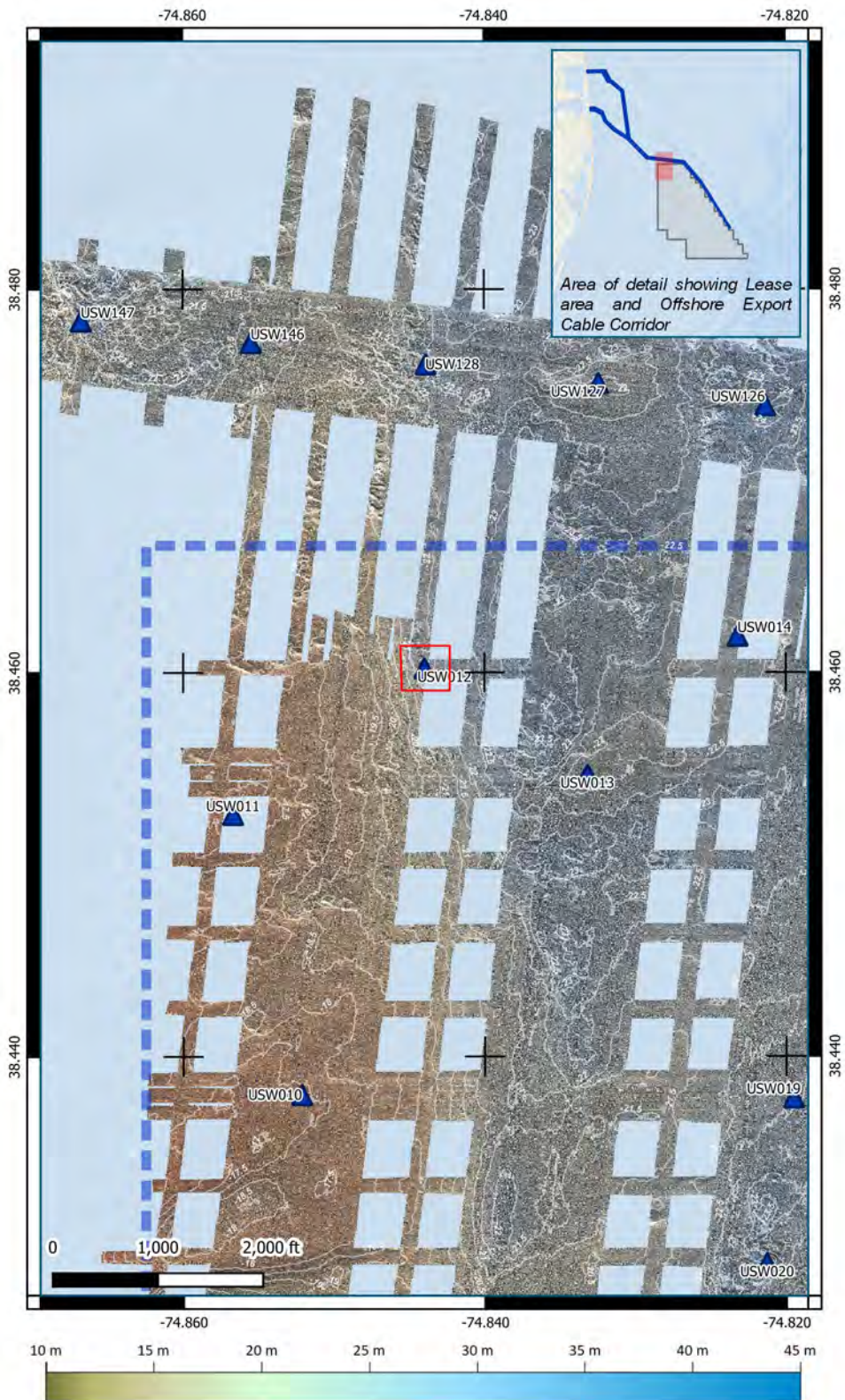


### Sample Photograph





### Map of Benthic Grab Location

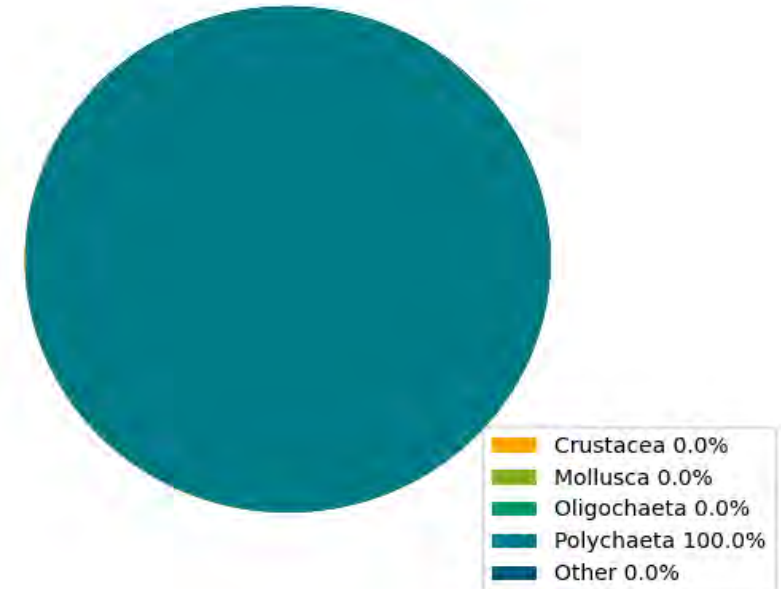


### Benthic Grab USW012

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 50                              |
| Taxa Richness <sup>1</sup> :   |                     | 1                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

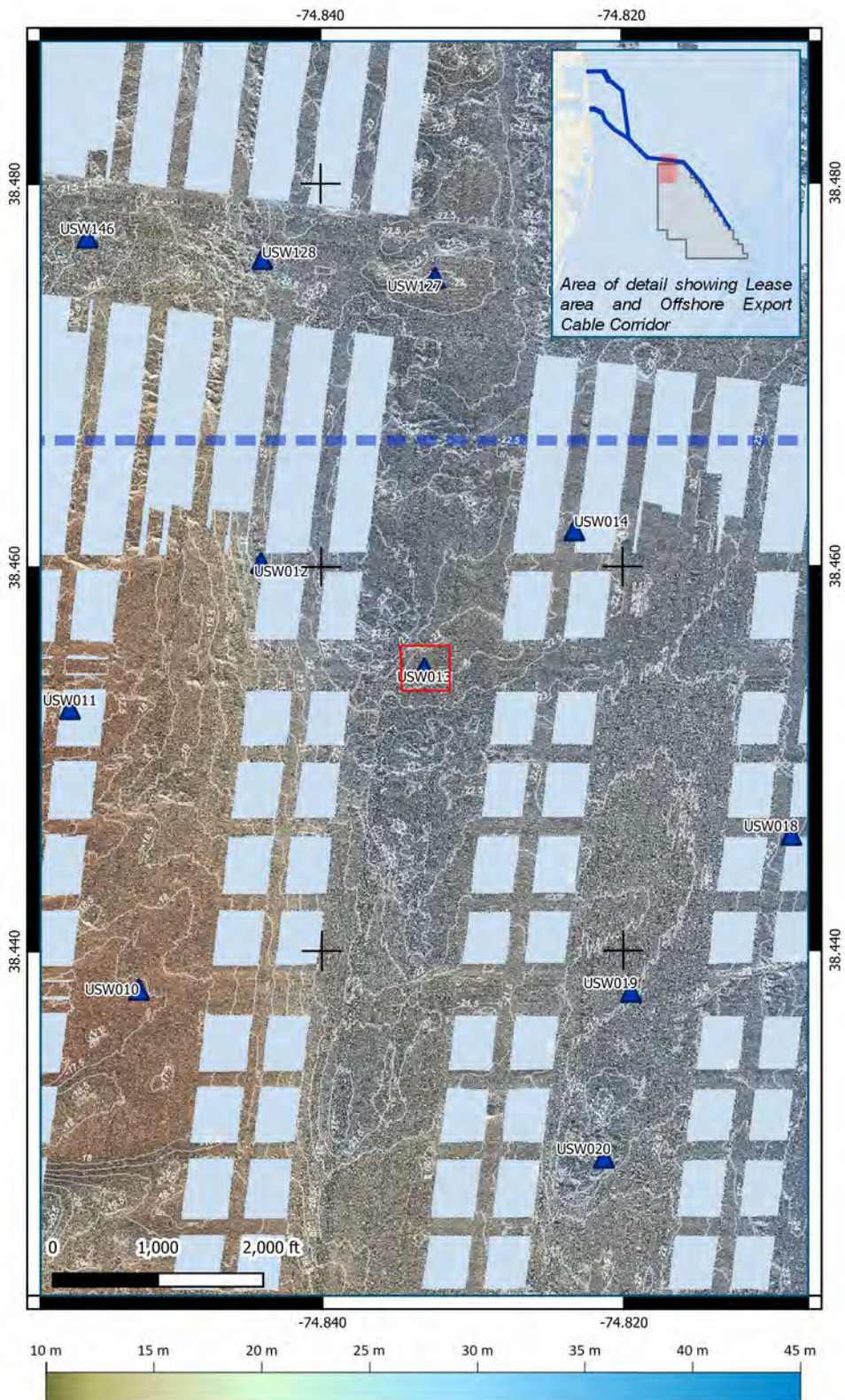


### Sample Photograph





### Map of Benthic Grab Location

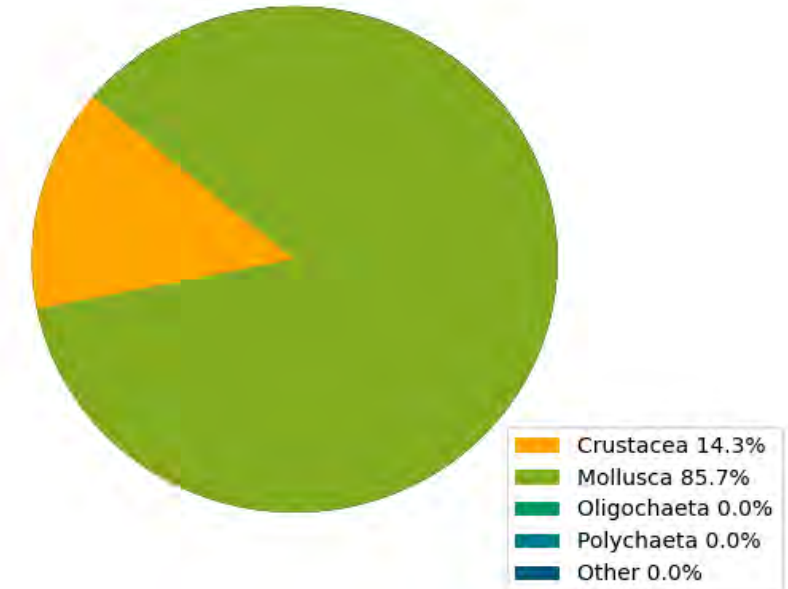


### Benthic Grab USW013

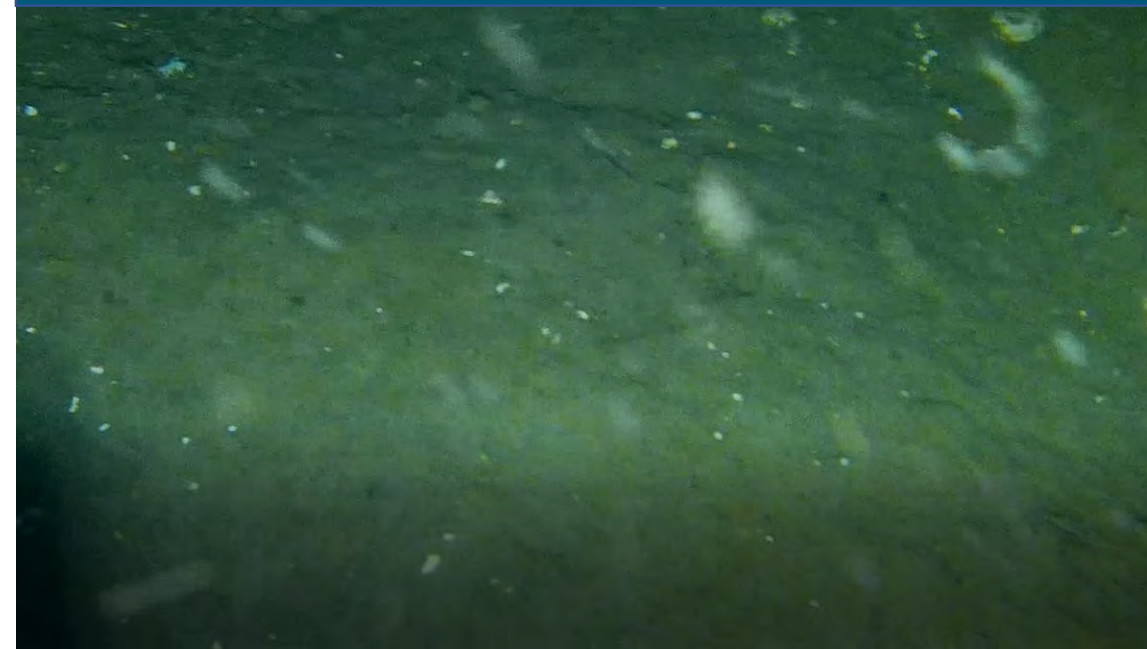
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 175                           |
| Taxa Richness <sup>1</sup> :   |                     | 4                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

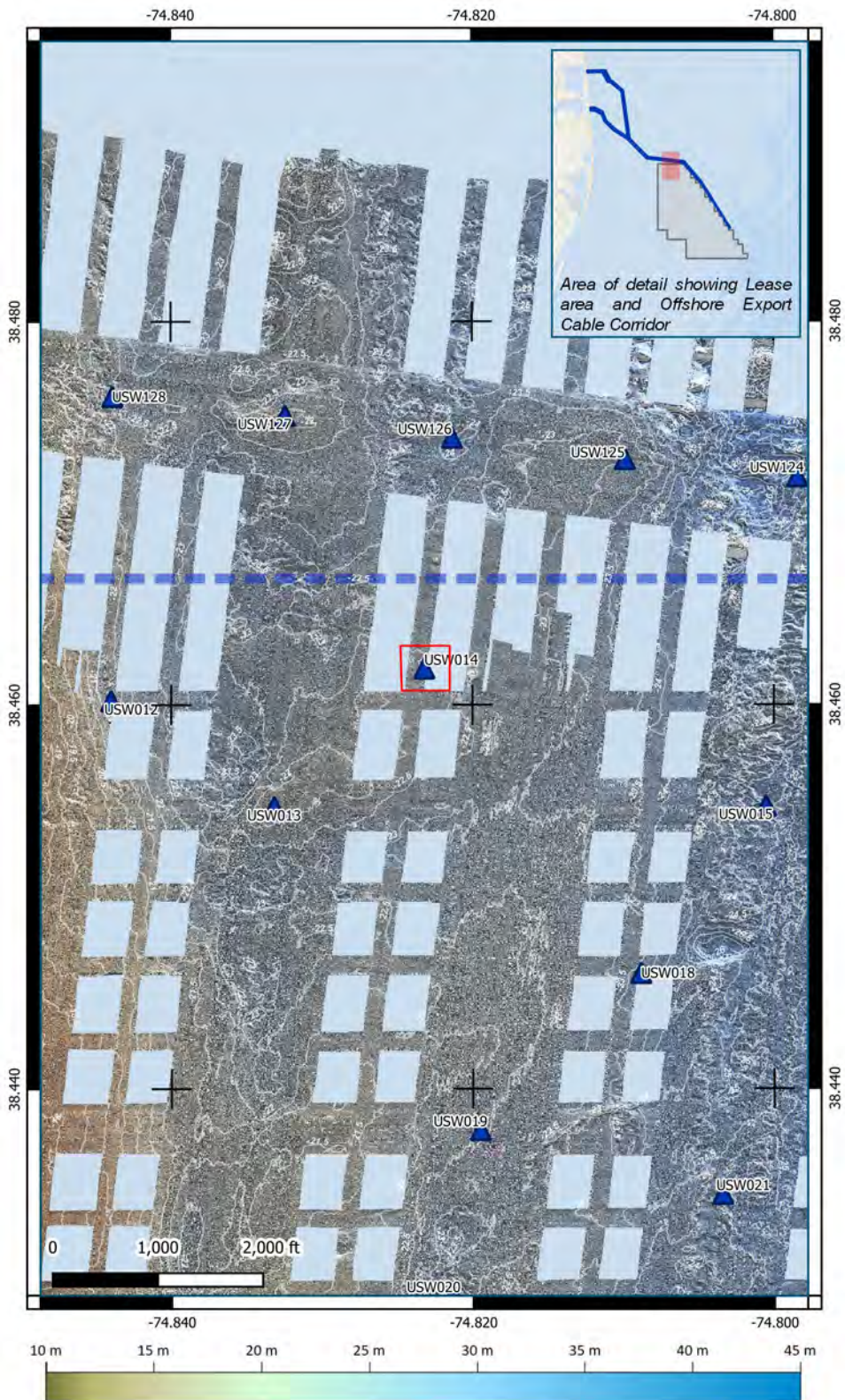


### Sample Photograph





### Map of Benthic Grab Location

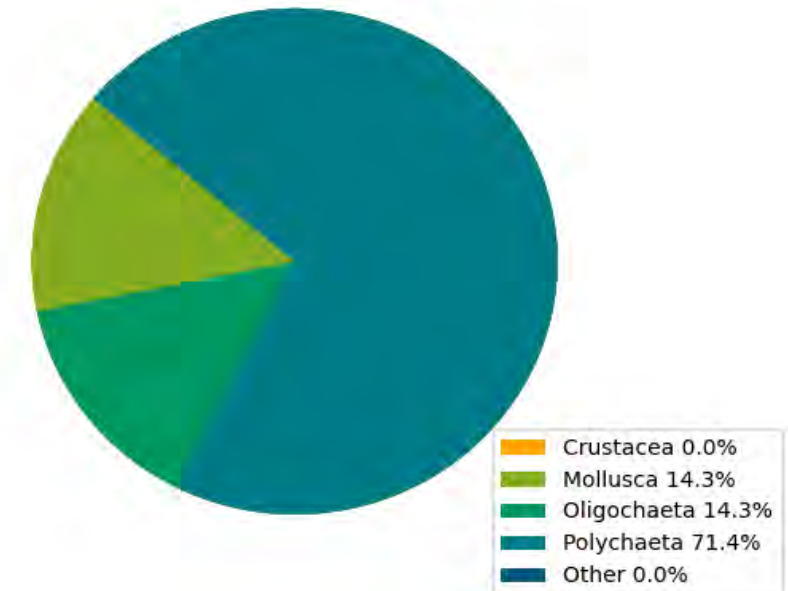


### Benthic Grab USW014

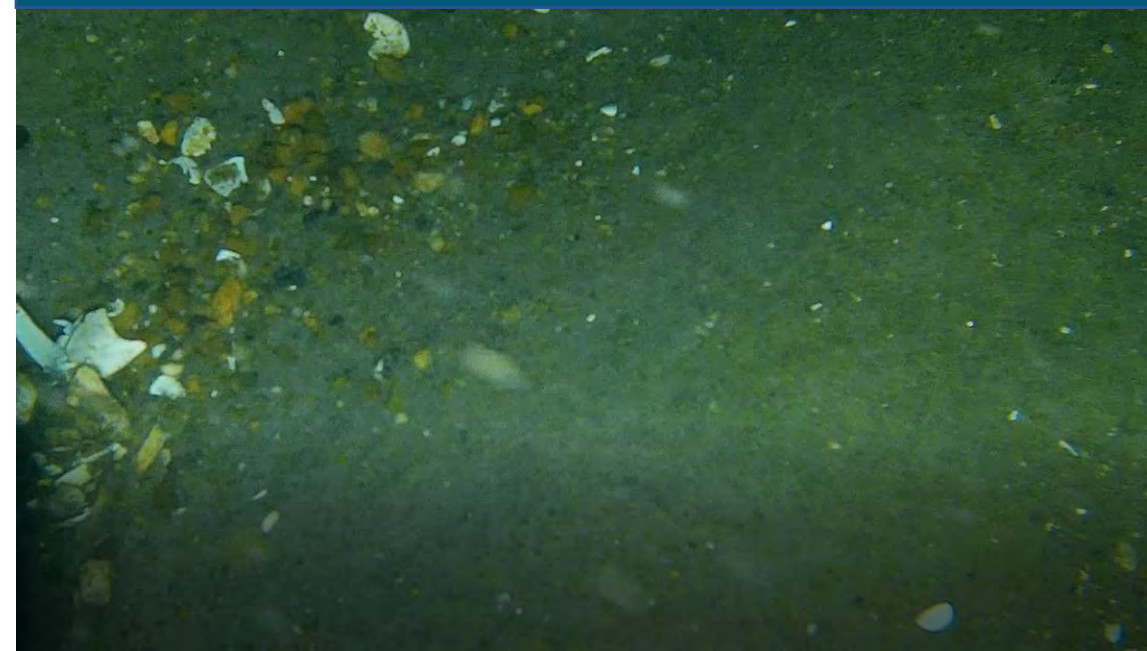
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 350                             |
| Taxa Richness <sup>1</sup> :   |                     | 8                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

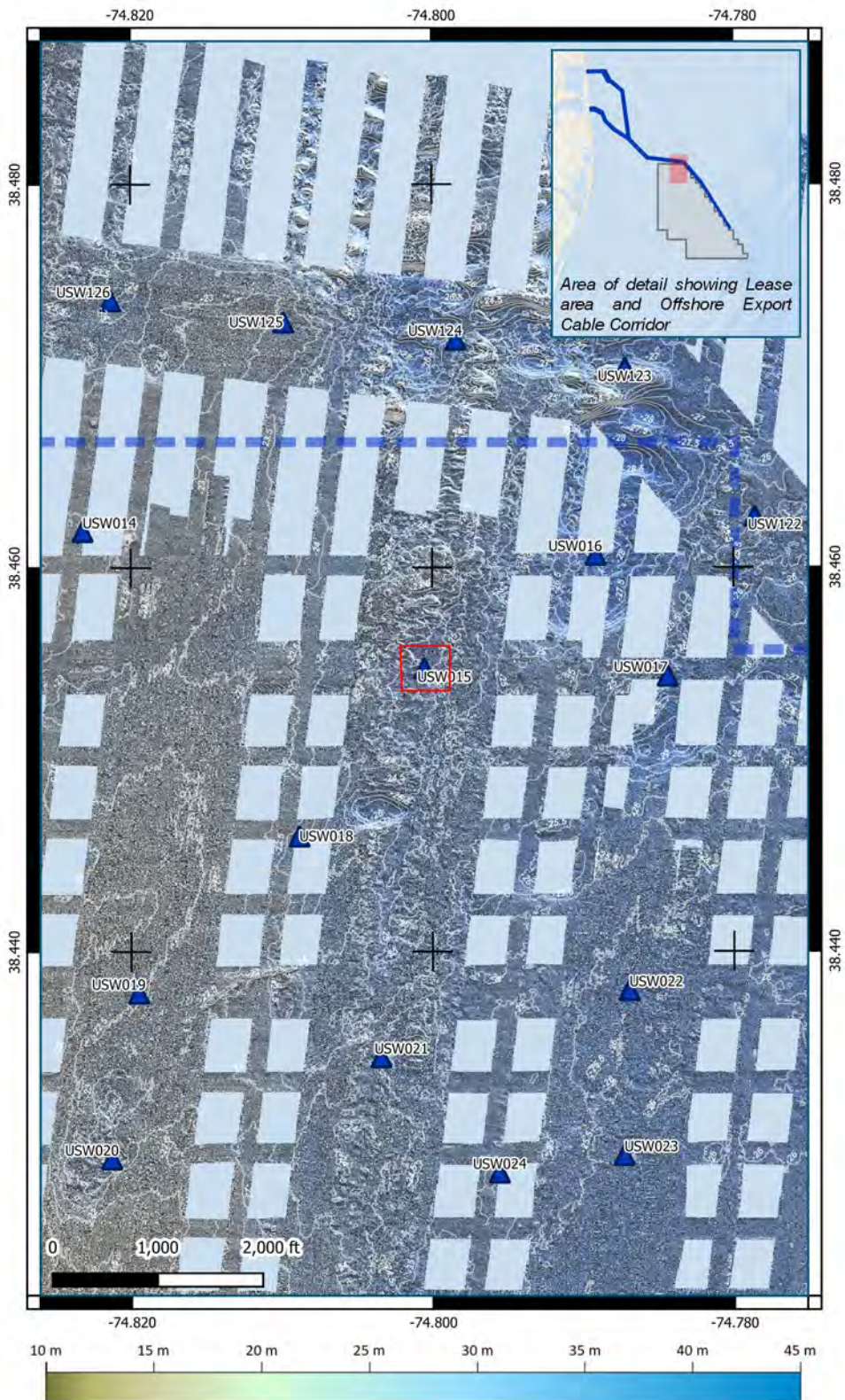


### Sample Photograph





### Map of Benthic Grab Location

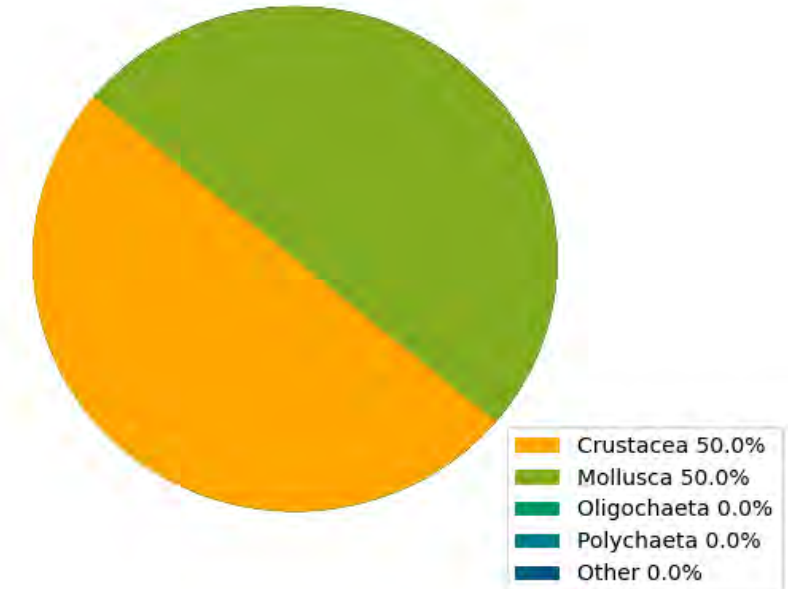


### Benthic Grab USW015

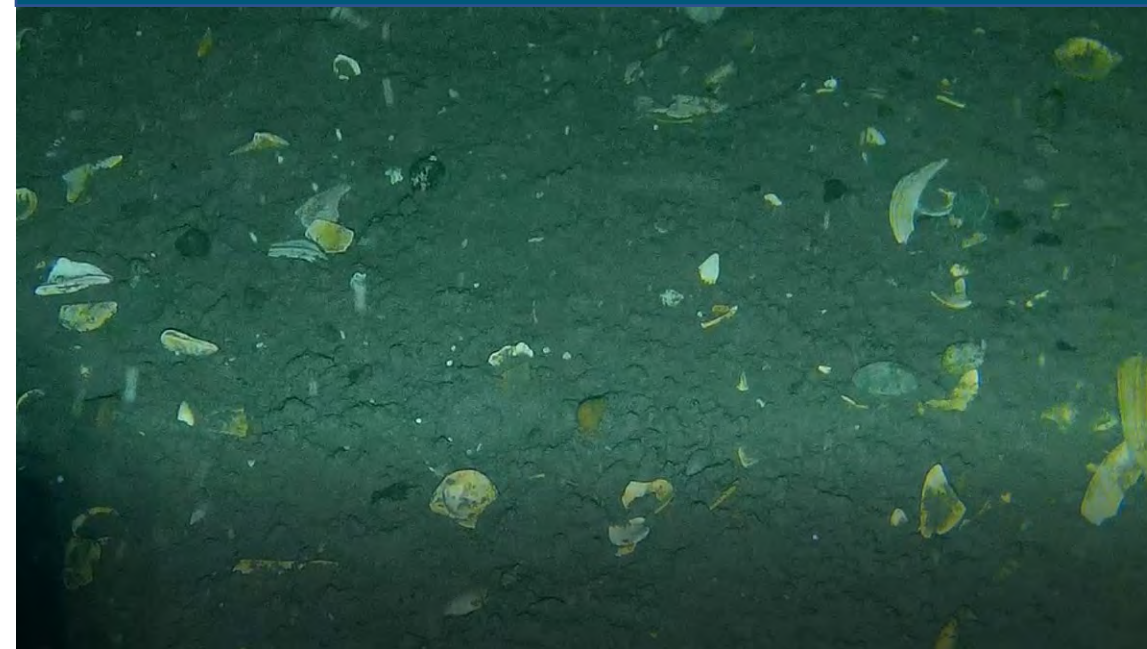
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 50                              |
| Taxa Richness <sup>1</sup> :   |                     | 2                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

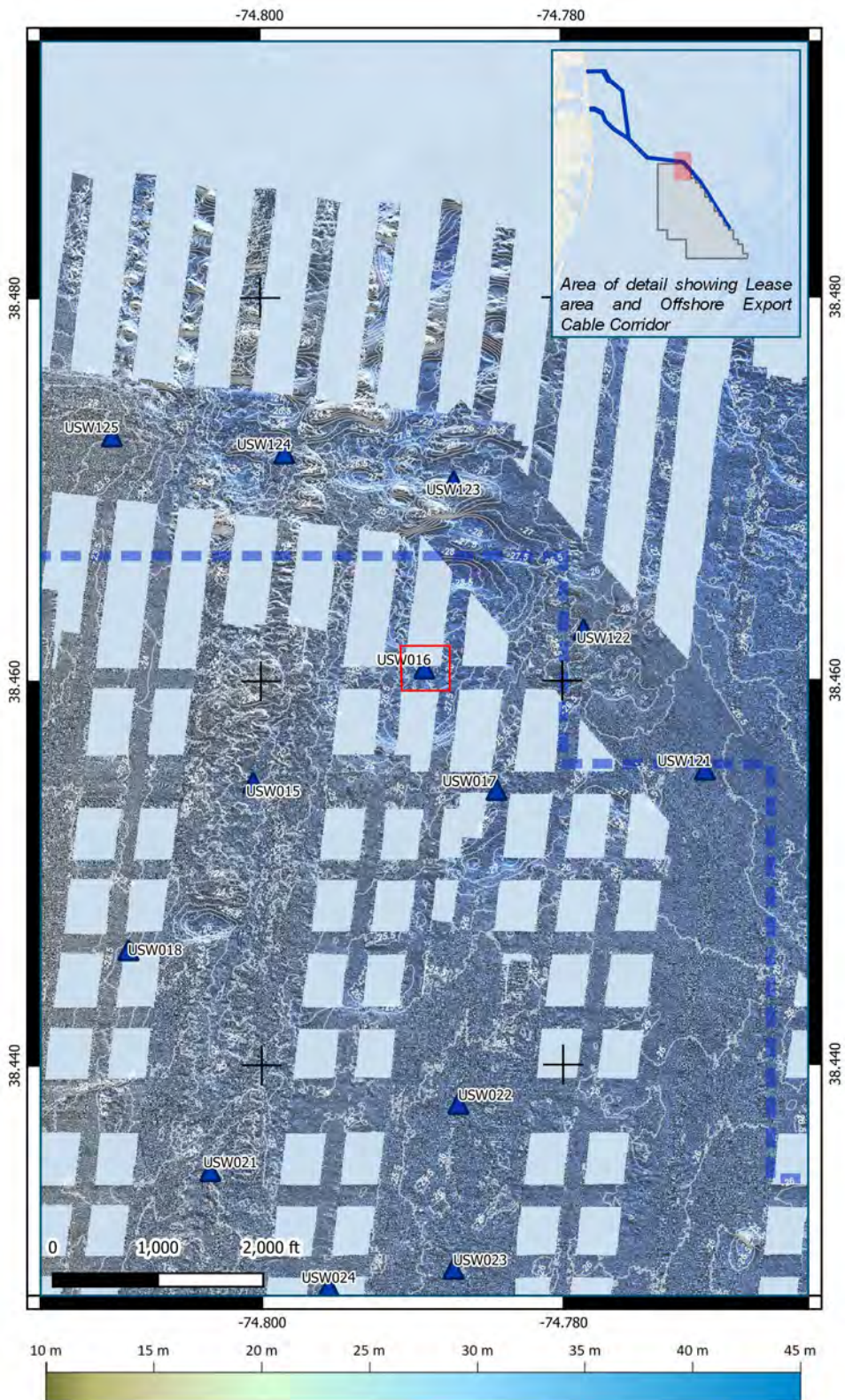


### Sample Photograph





### Map of Benthic Grab Location

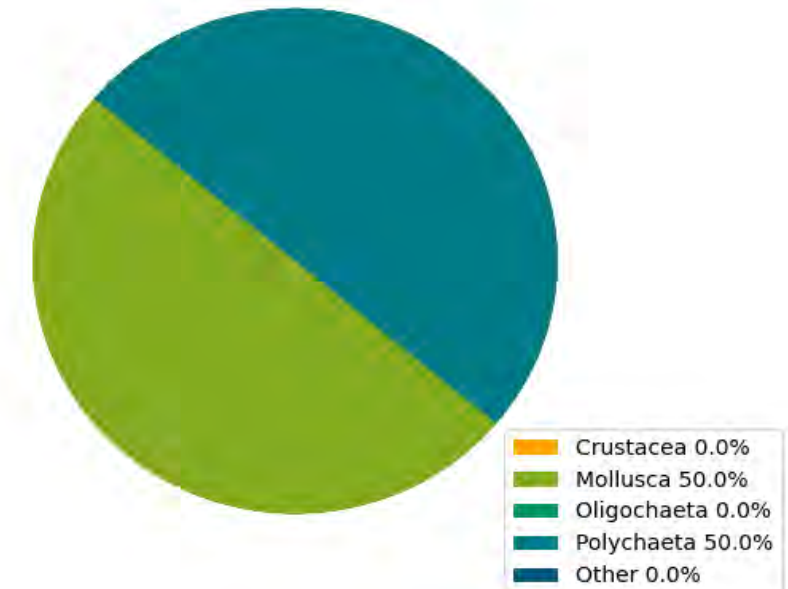


### Benthic Grab USW016

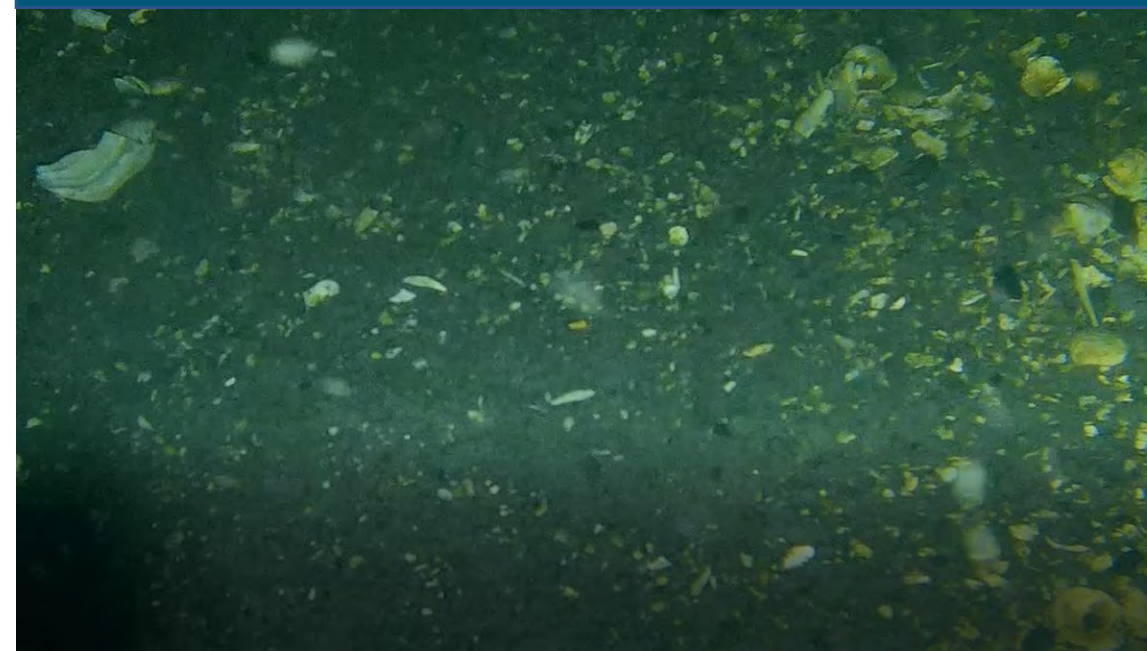
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 50                              |
| Taxa Richness <sup>1</sup> :   |                     | 2                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

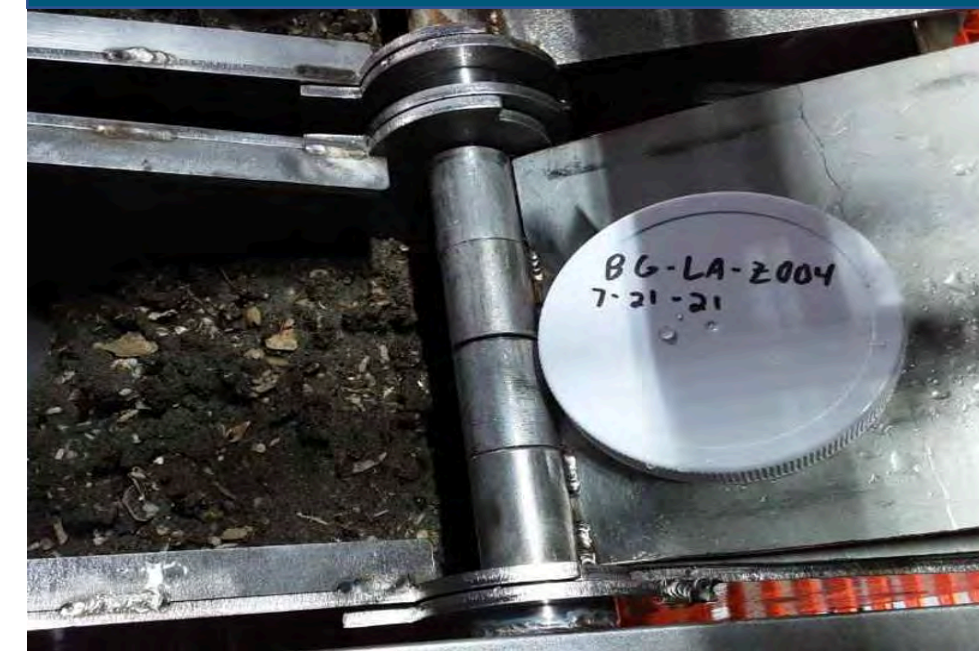
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

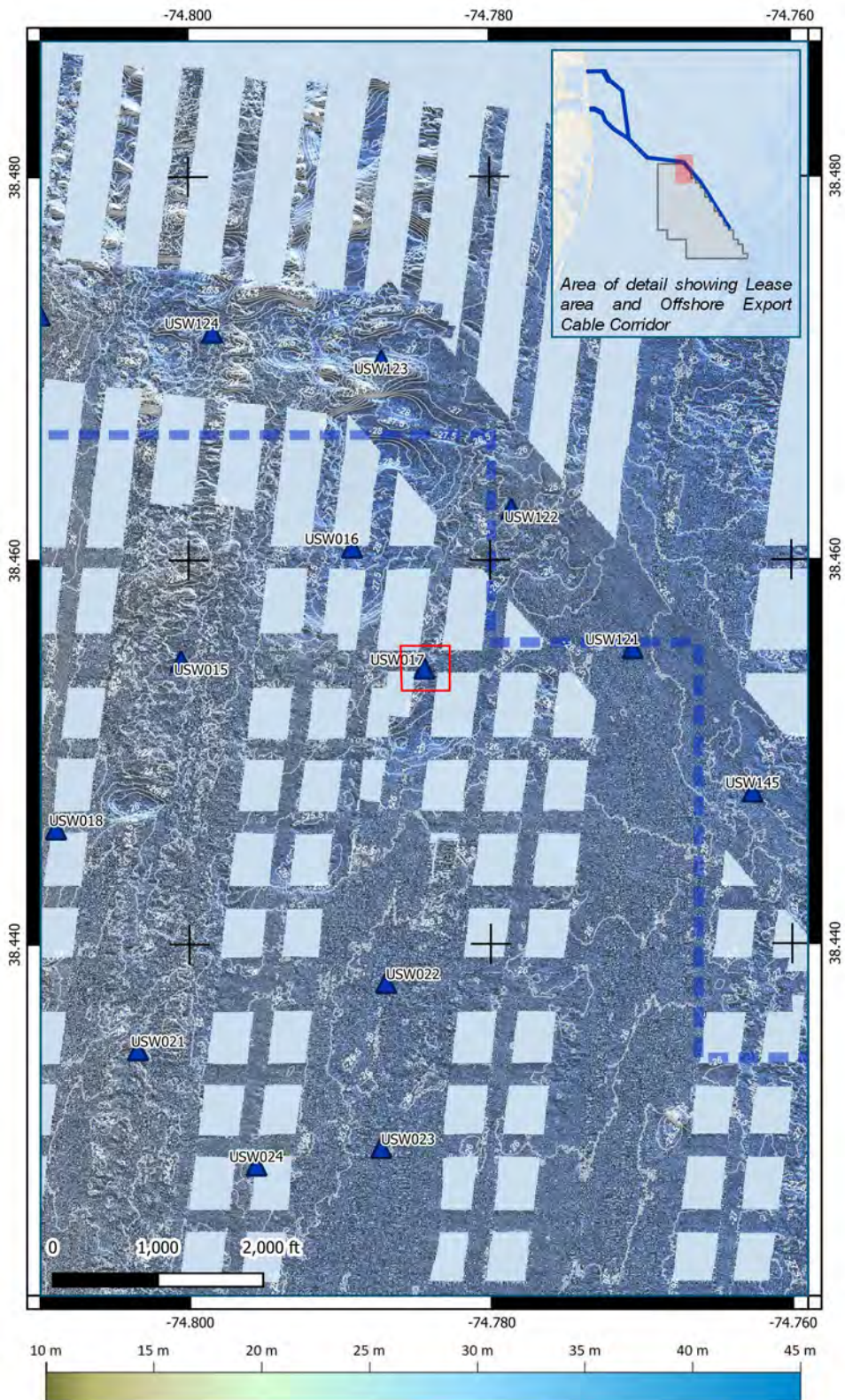


### Sample Photograph





### Map of Benthic Grab Location

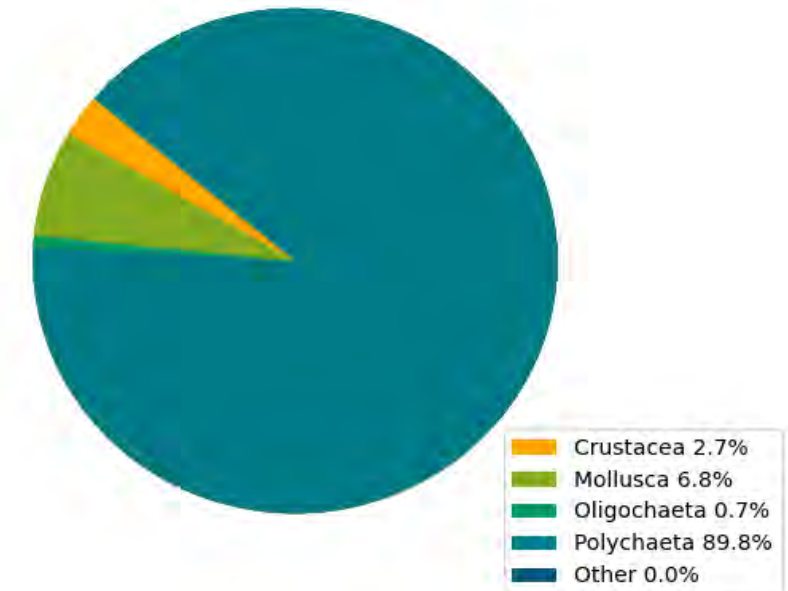


### Benthic Grab USW017

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 3675                            |
| Taxa Richness <sup>1</sup> :   |                     | 22                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

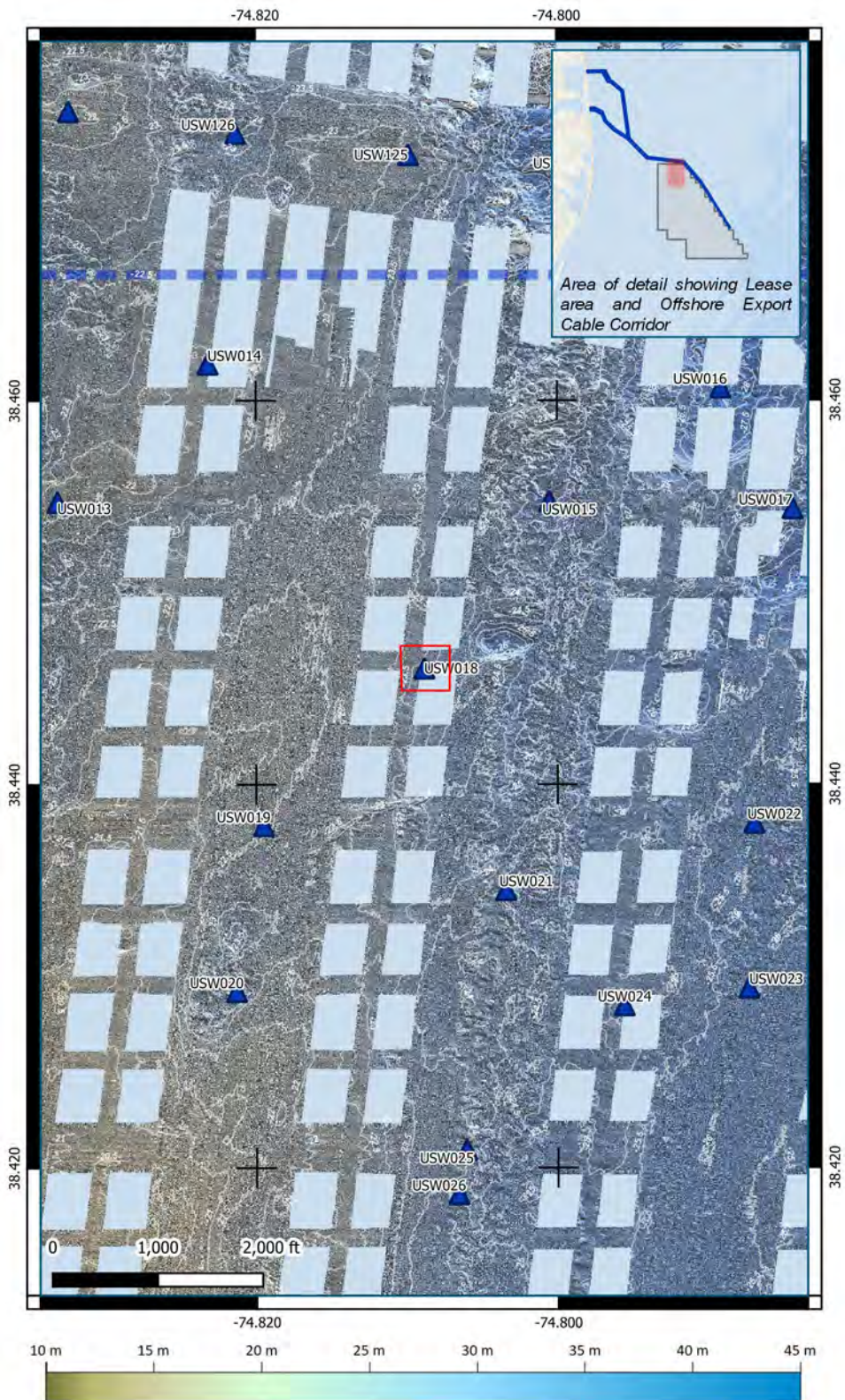


### Sample Photograph





### Map of Benthic Grab Location

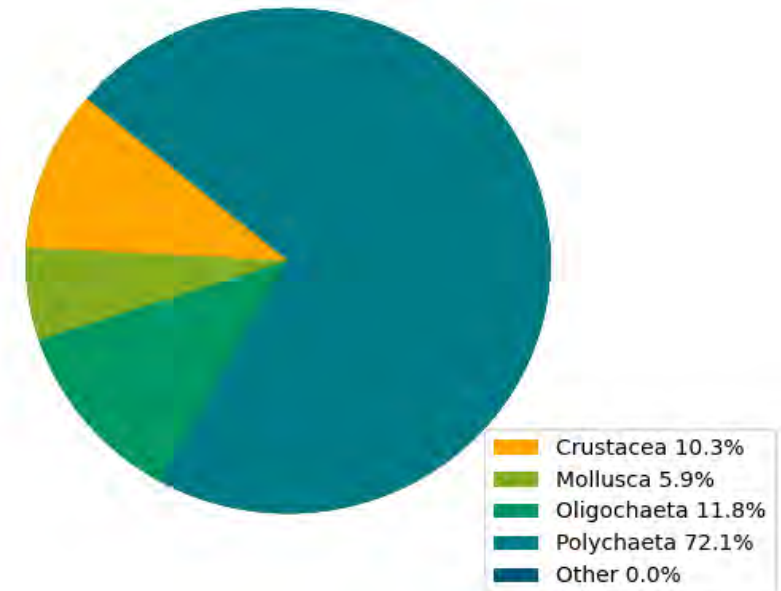


### Benthic Grab USW018

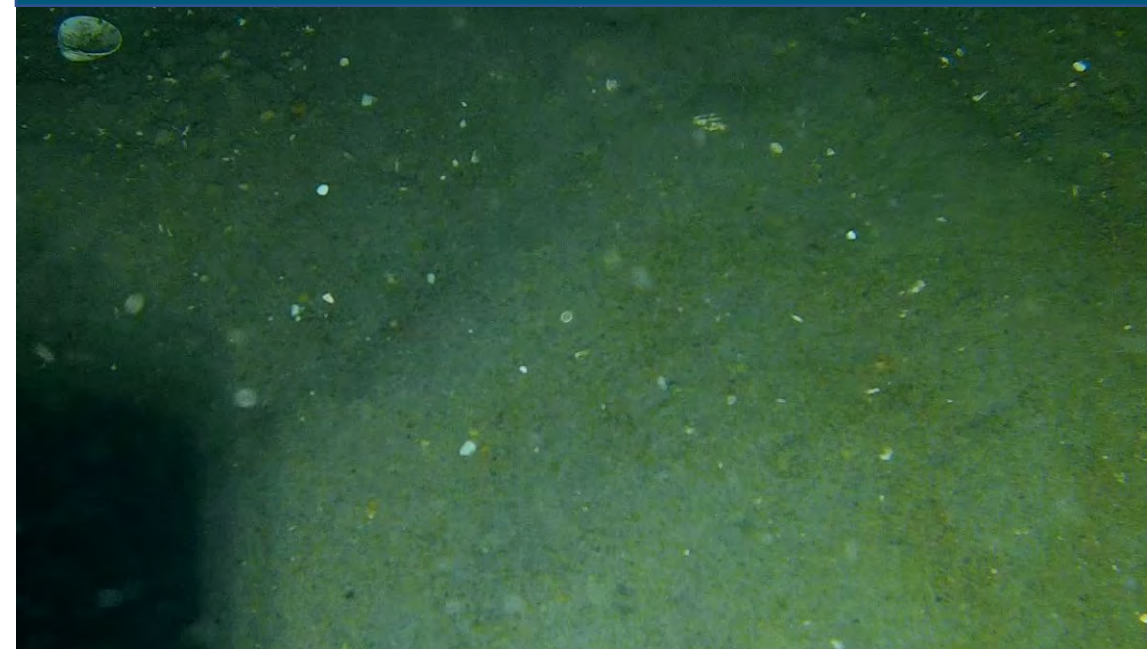
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Very Coarse/Coarse Sand       |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1700                          |
| Taxa Richness <sup>1</sup> :   |                     | 21                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

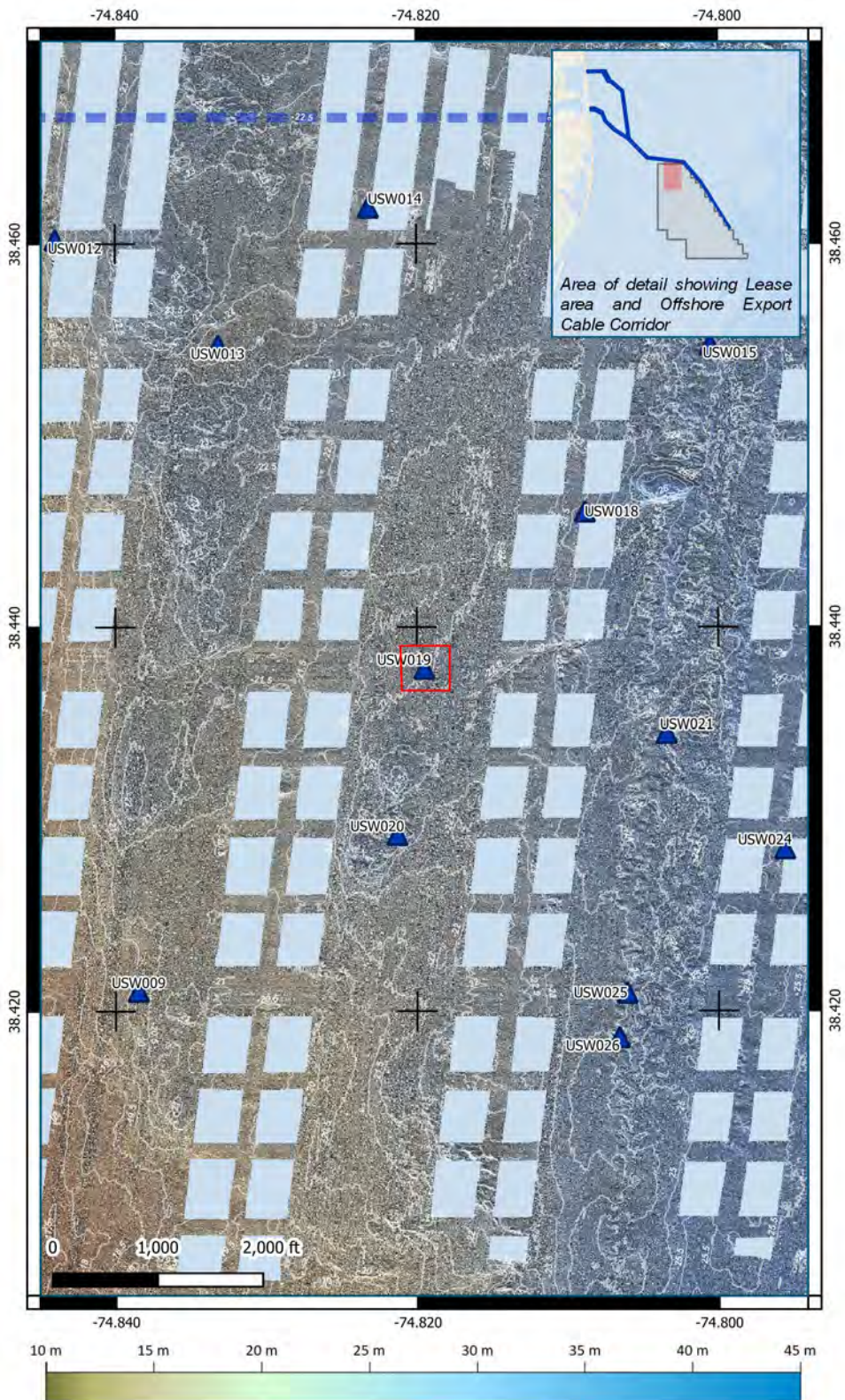


### Sample Photograph





### Map of Benthic Grab Location

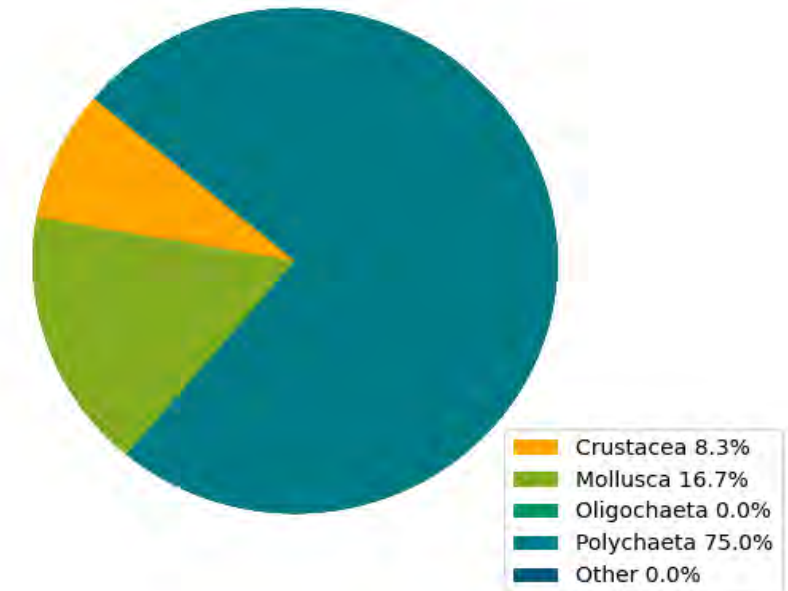


### Benthic Grab USW019

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Very Coarse/Coarse Sand       |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 300                           |
| Taxa Richness <sup>1</sup> :   |                     | 5                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

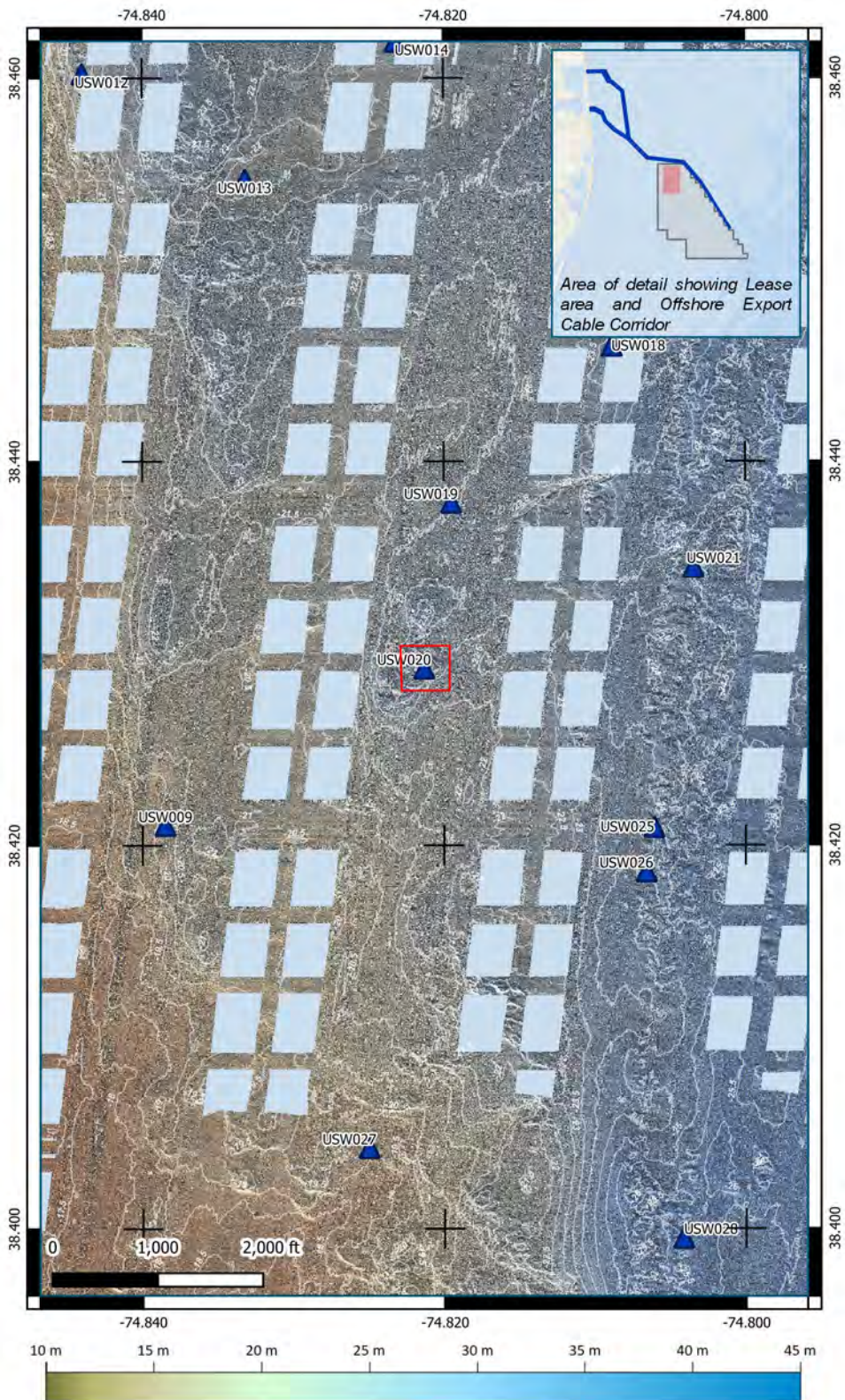


### Sample Photograph





### Map of Benthic Grab Location

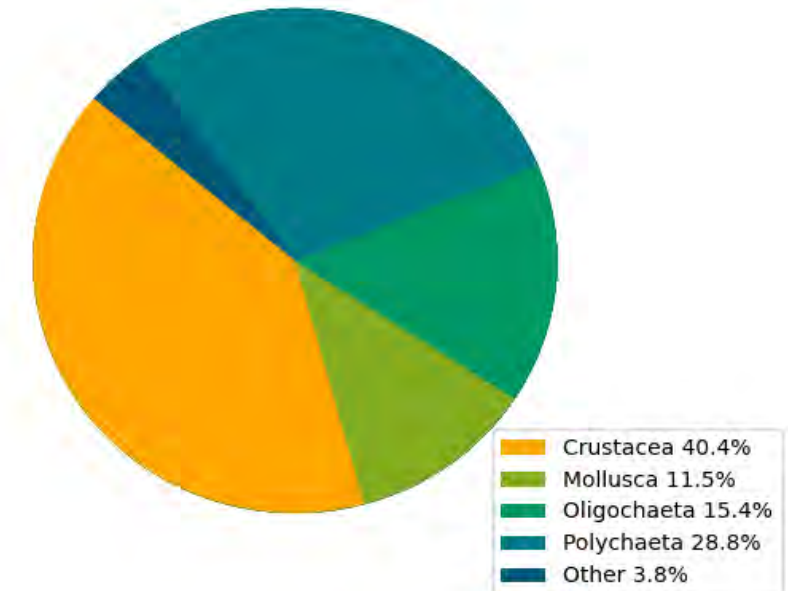


### Benthic Grab USW020

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Fine/Very Fine Sand           |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1300                          |
| Taxa Richness <sup>1</sup> :   |                     | 21                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

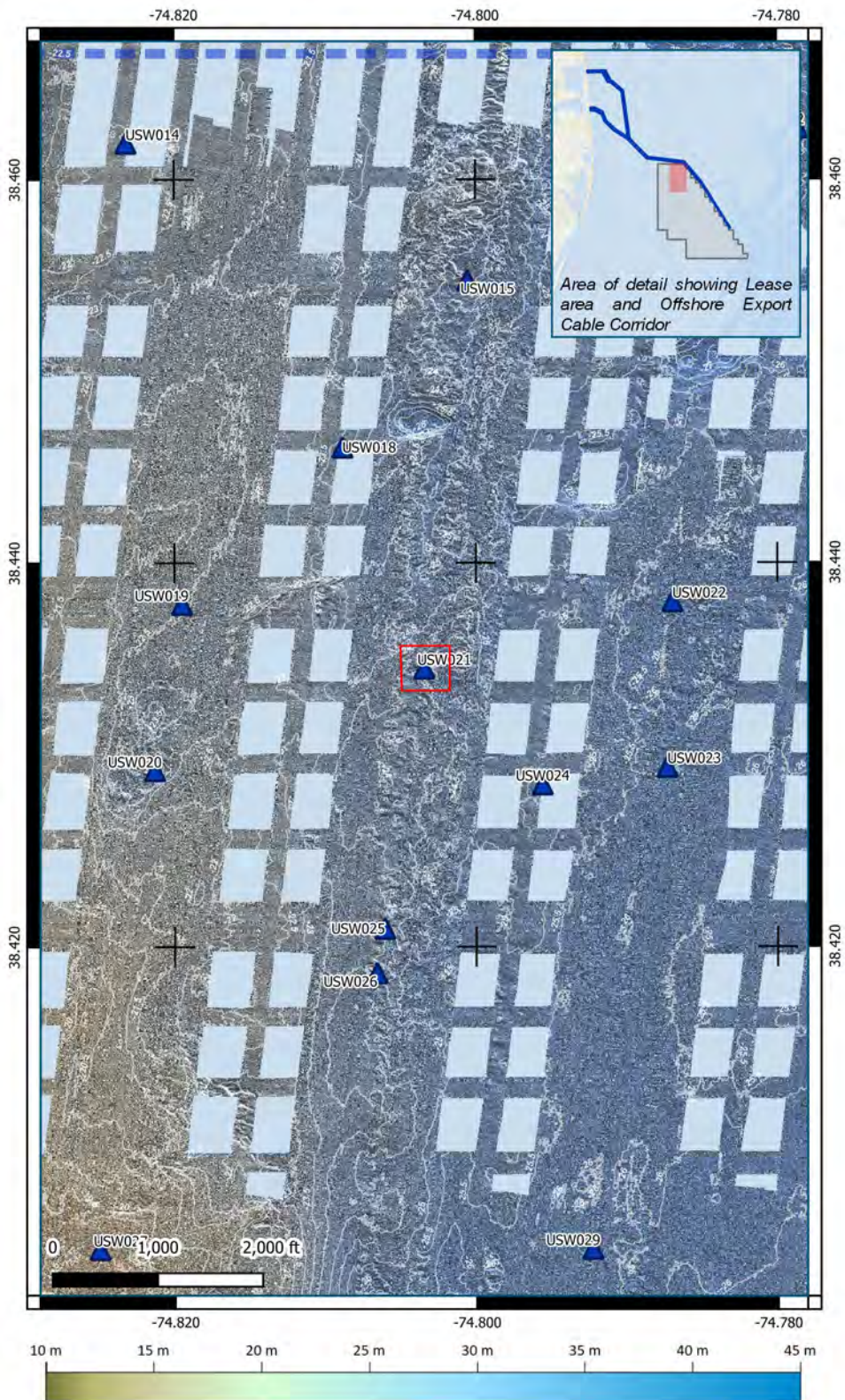


### Sample Photograph





### Map of Benthic Grab Location

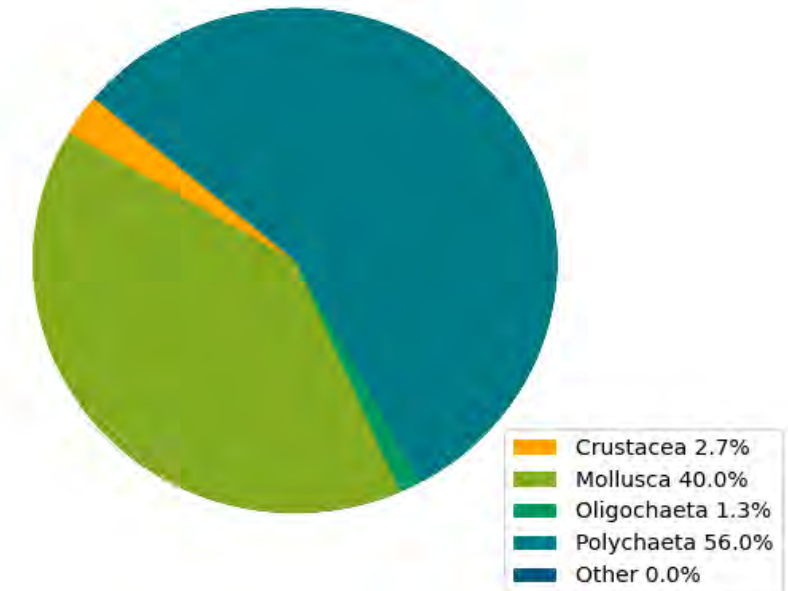


### Benthic Grab USW021

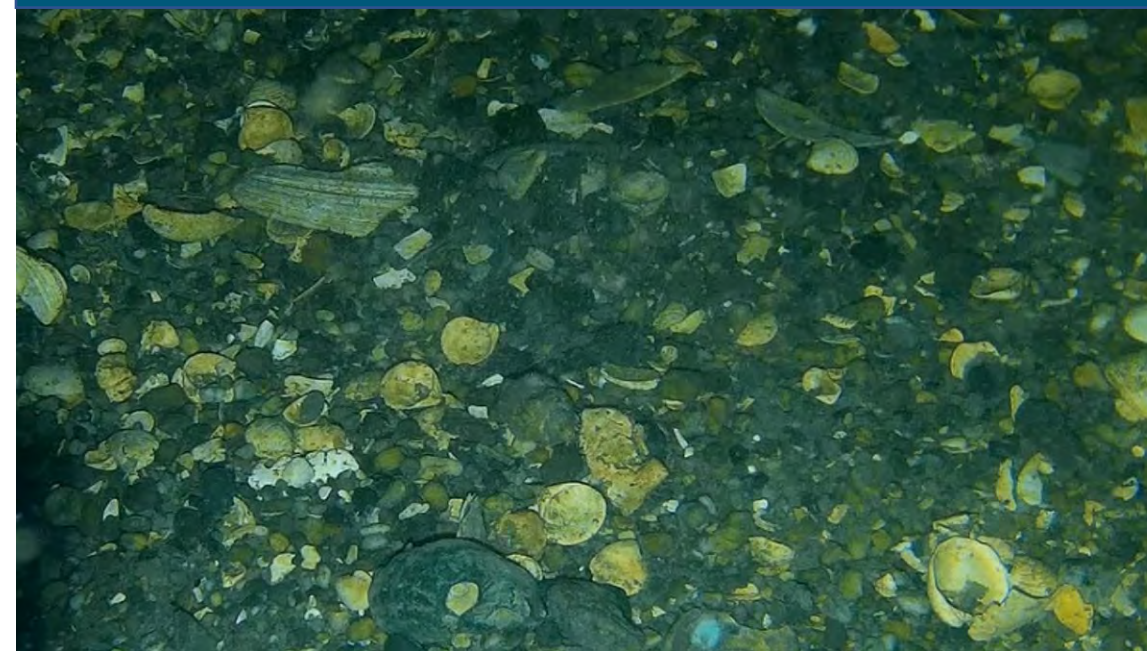
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1875                            |
| Taxa Richness <sup>1</sup> :   |                     | 15                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

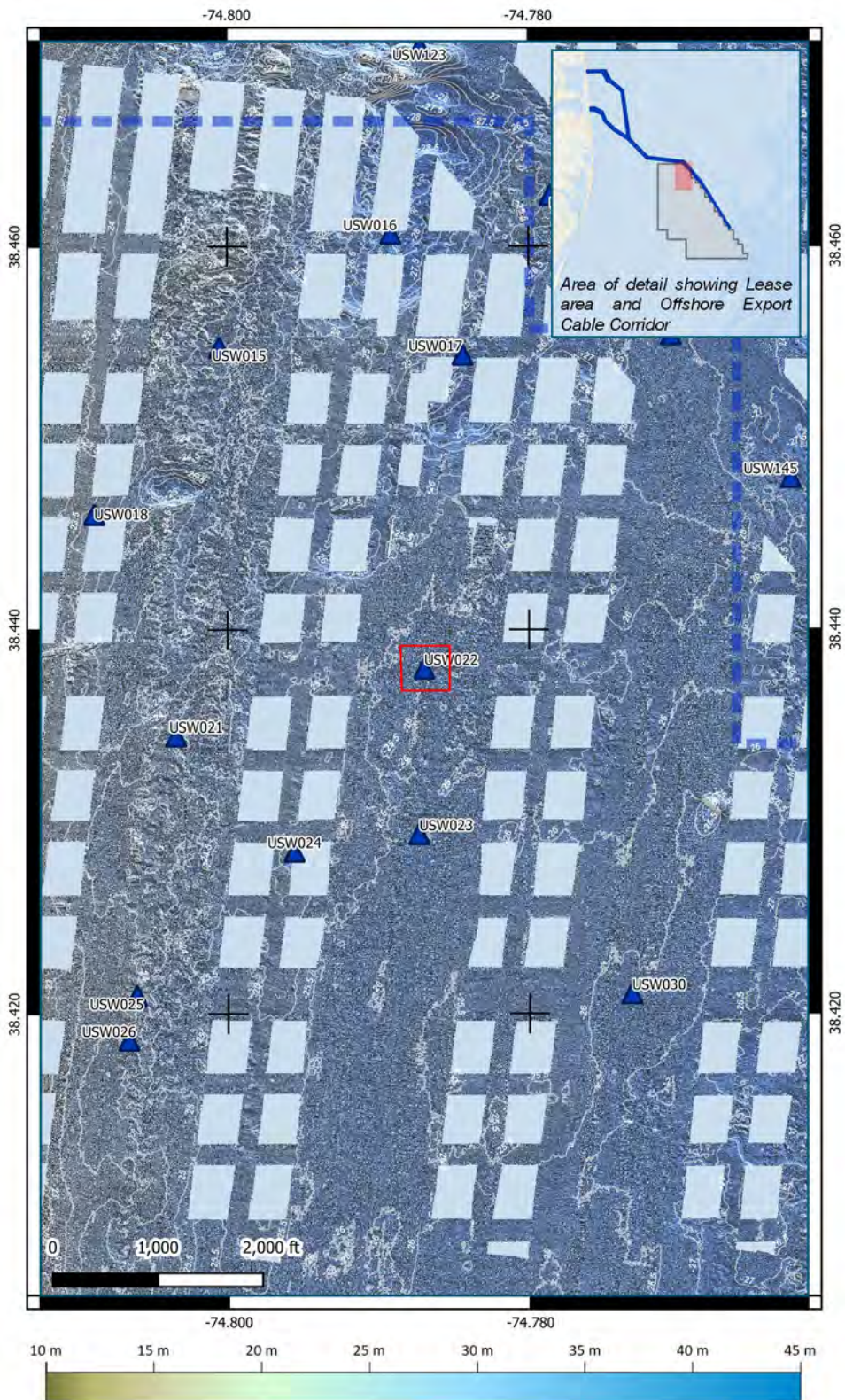


### Sample Photograph





### Map of Benthic Grab Location

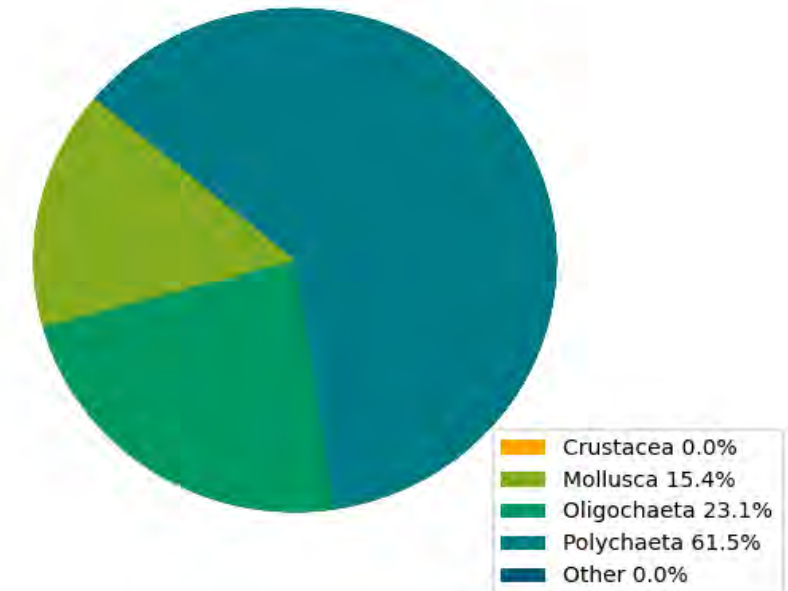


### Benthic Grab USW022

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 325                             |
| Taxa Richness <sup>1</sup> :   |                     | 9                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

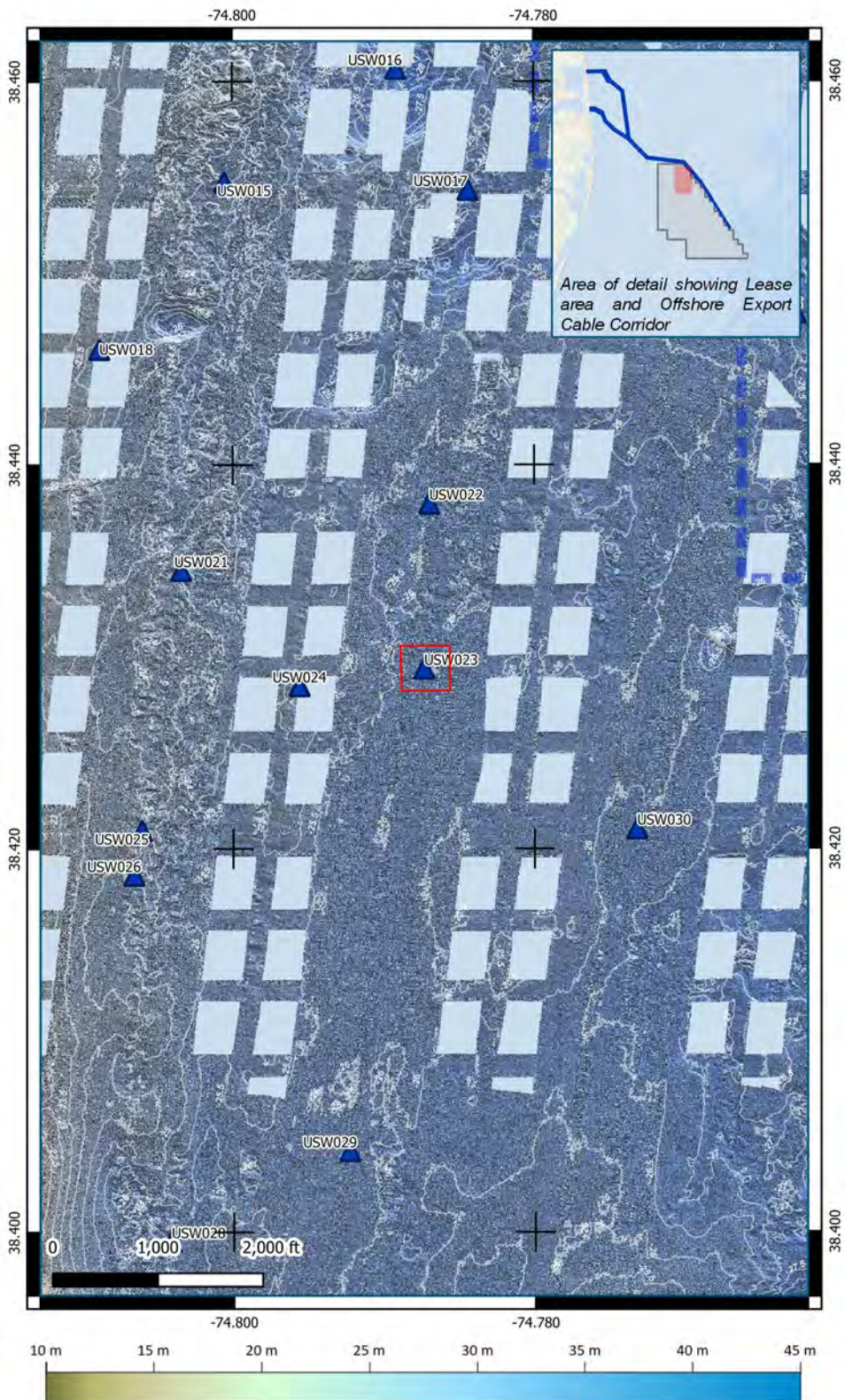


### Sample Photograph





### Map of Benthic Grab Location

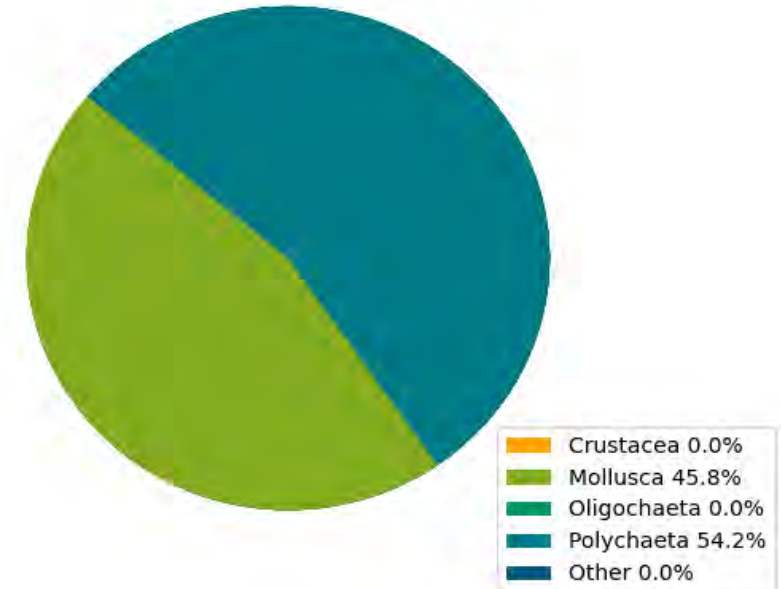


### Benthic Grab USW023

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 2675                            |
| Taxa Richness <sup>1</sup> :   |                     | 11                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

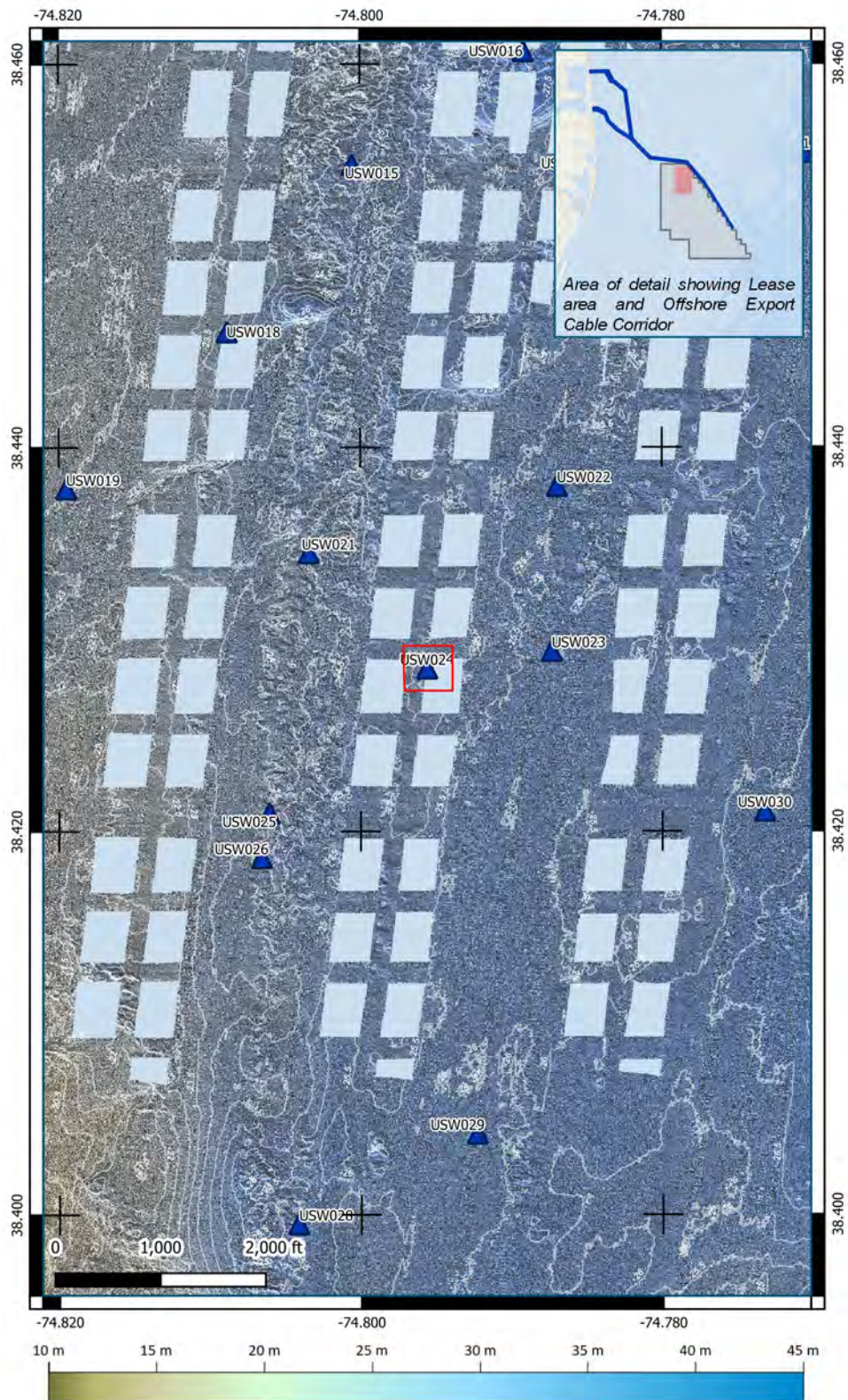


### Sample Photograph





### Map of Benthic Grab Location

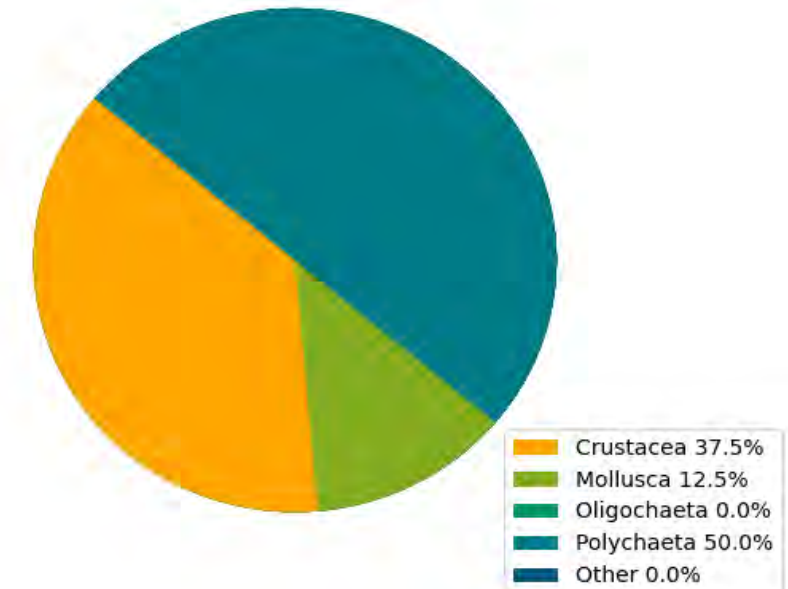


### Benthic Grab USW024

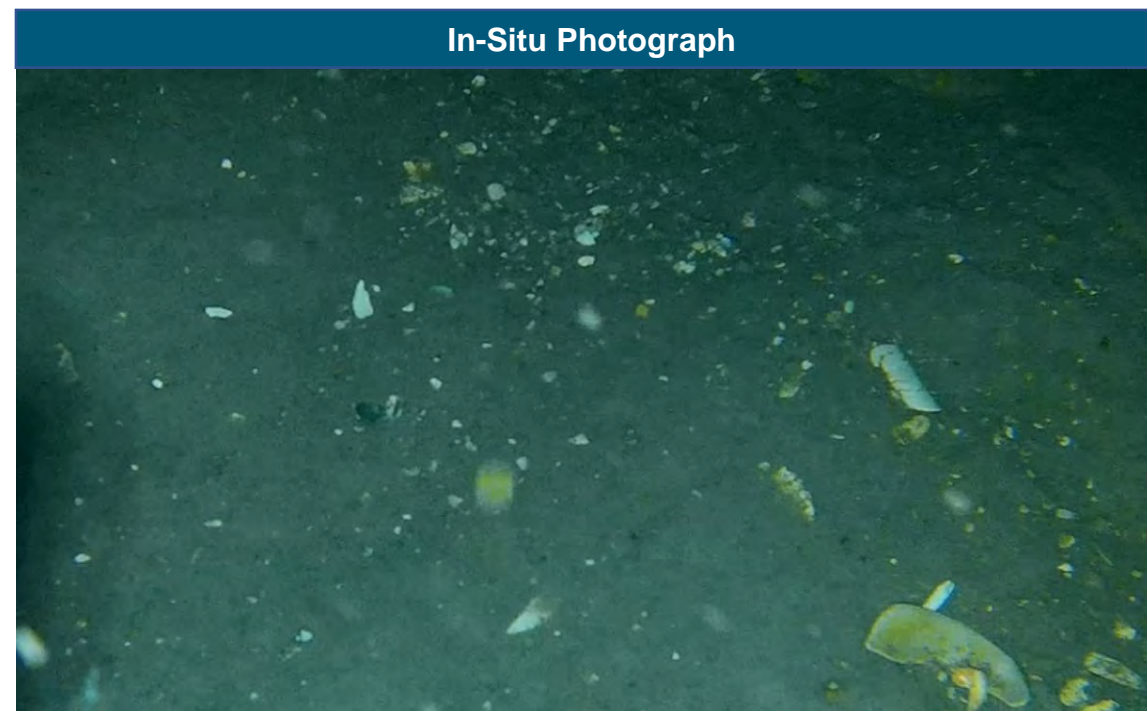
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 200                           |
| Taxa Richness <sup>1</sup> :   |                     | 8                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

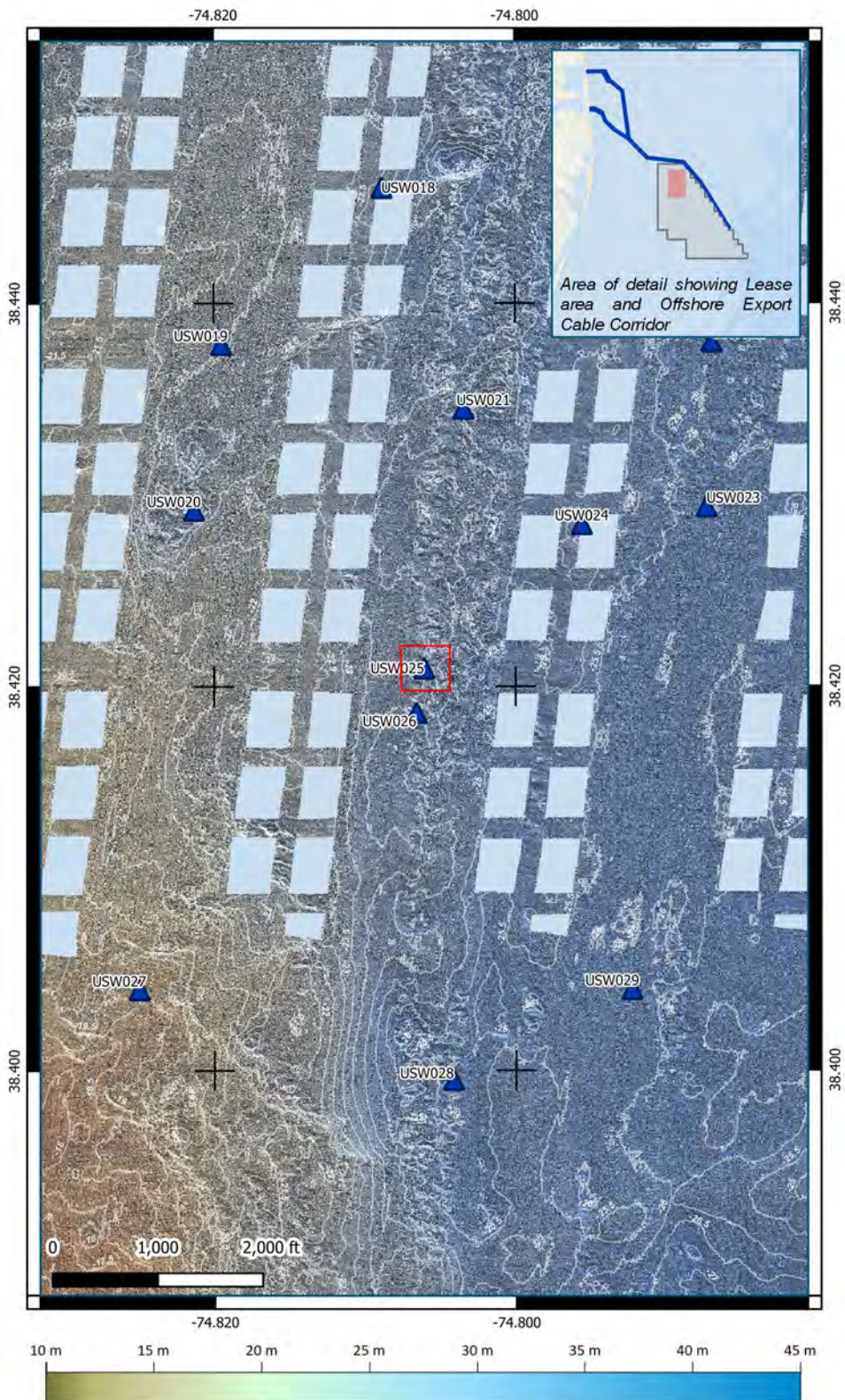


### Sample Photograph





### Map of Benthic Grab Location

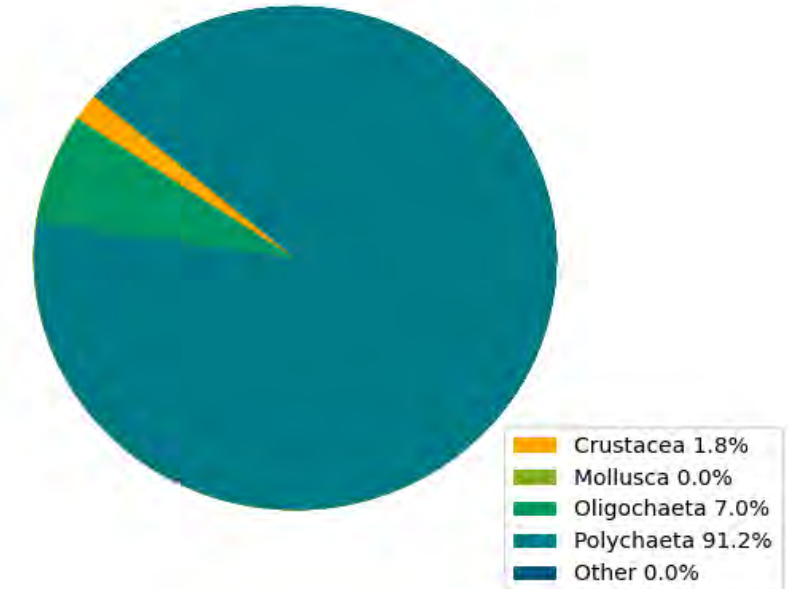


### Benthic Grab USW025

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1425                            |
| Taxa Richness <sup>1</sup> :   |                     | 5                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

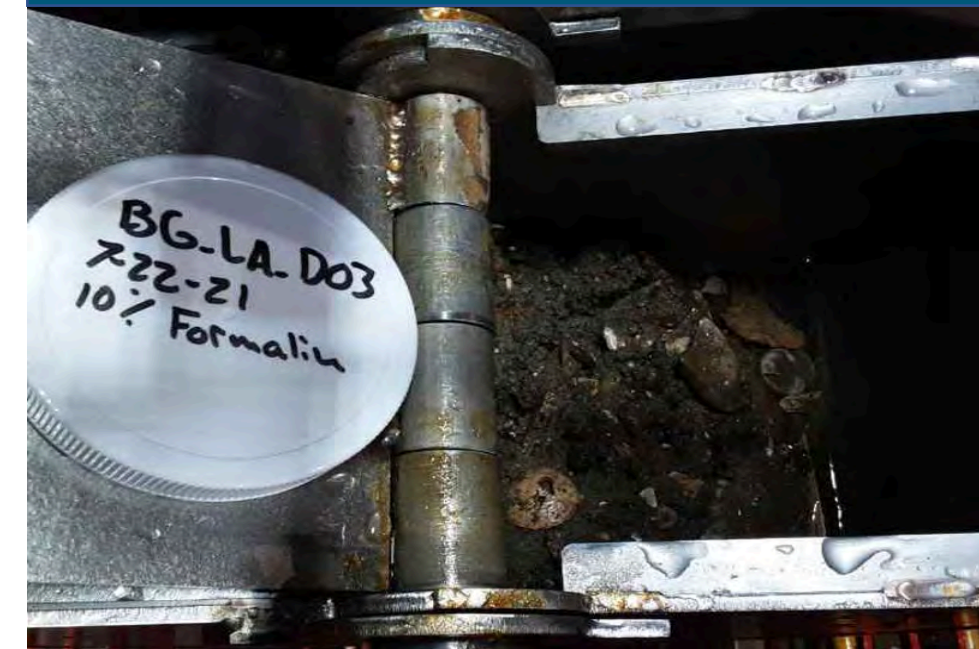
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

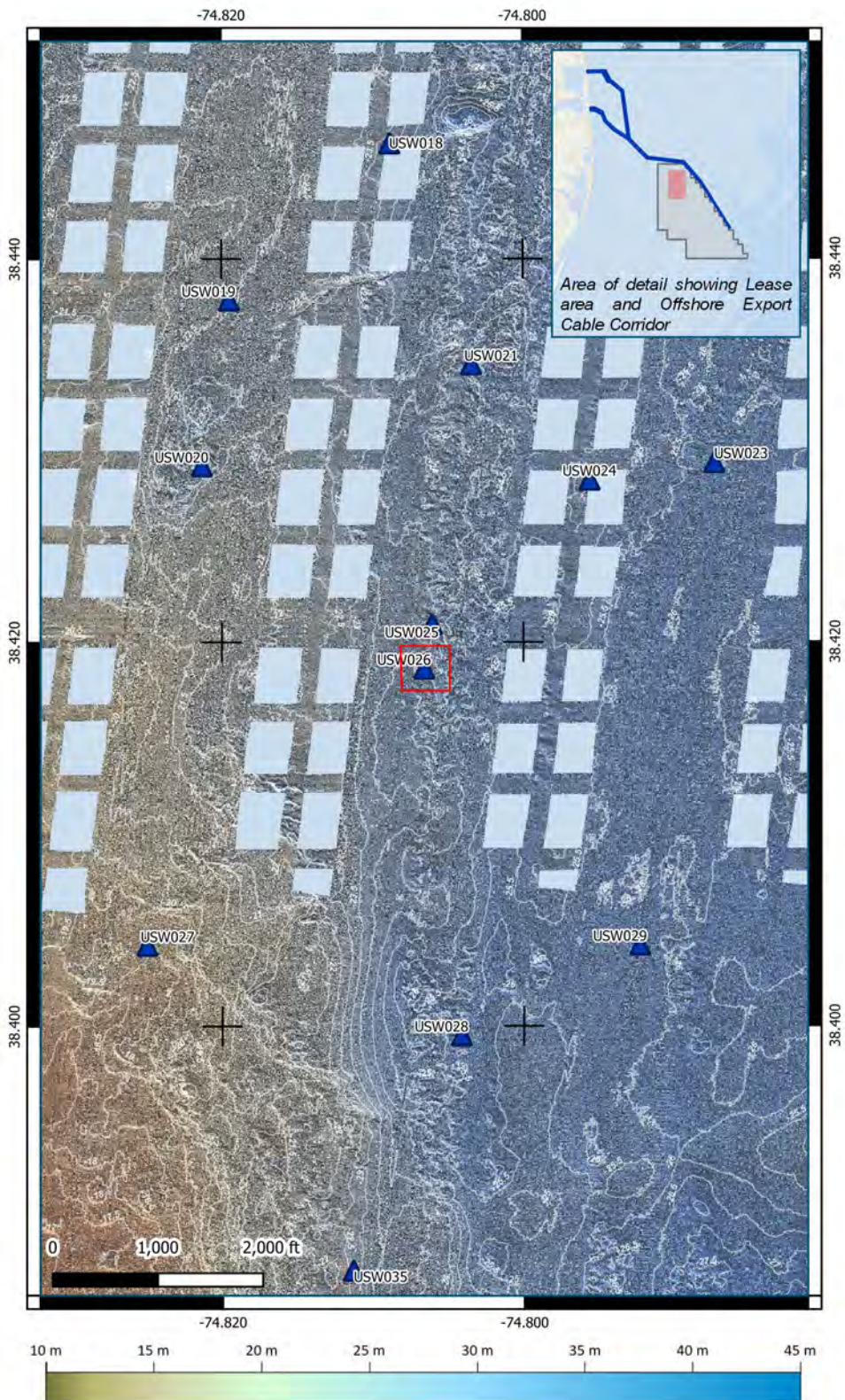


### Sample Photograph





### Map of Benthic Grab Location

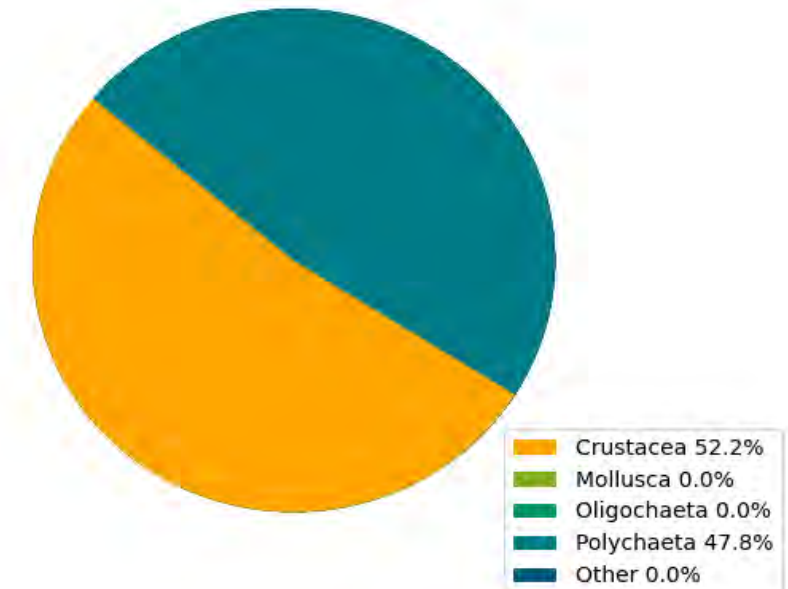


### Benthic Grab USW026

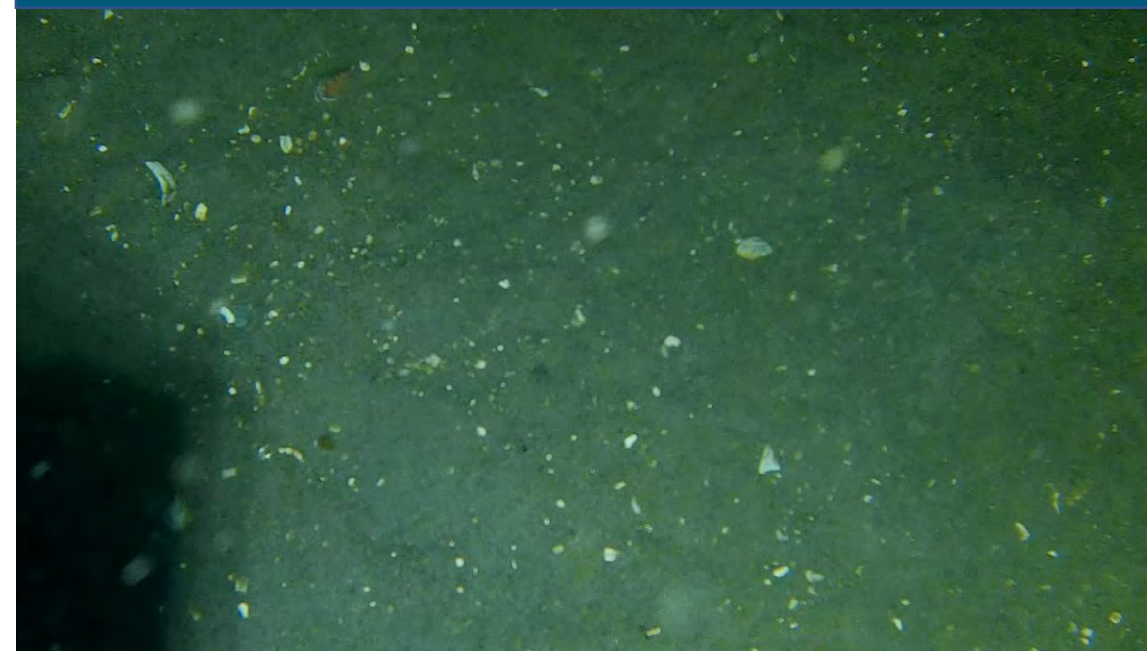
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 575                           |
| Taxa Richness <sup>1</sup> :   |                     | 8                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

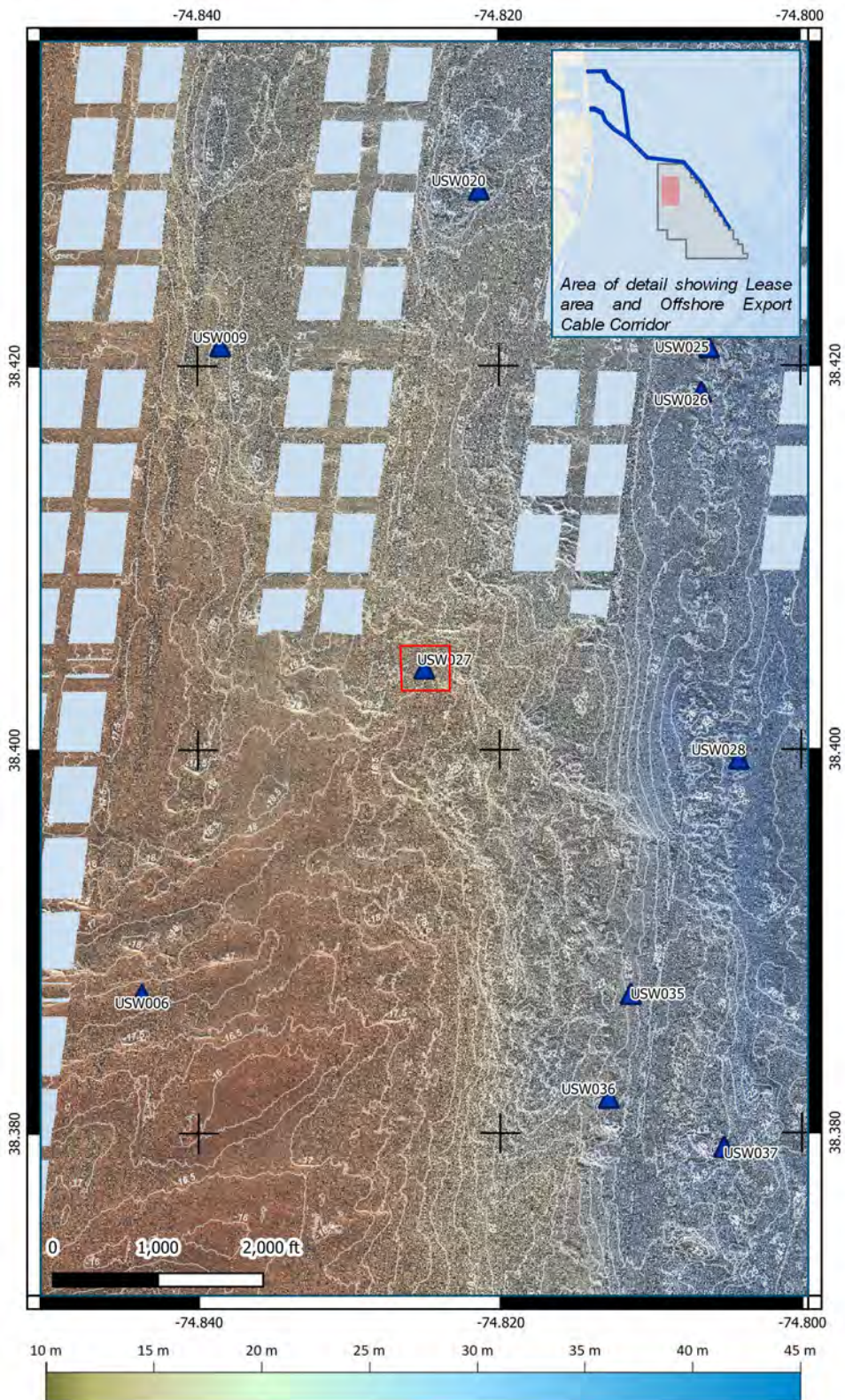


### Sample Photograph





### Map of Benthic Grab Location

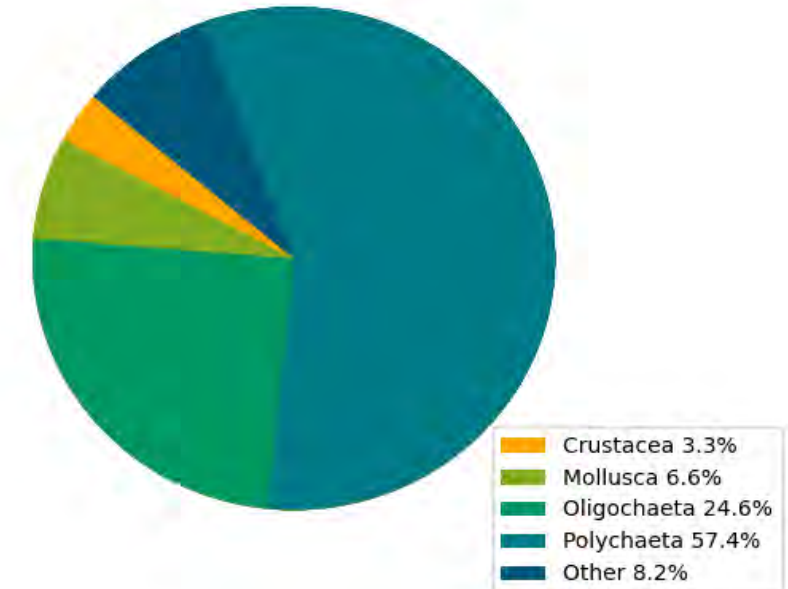


### Benthic Grab USW027

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1525                            |
| Taxa Richness <sup>1</sup> :   |                     | 14                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

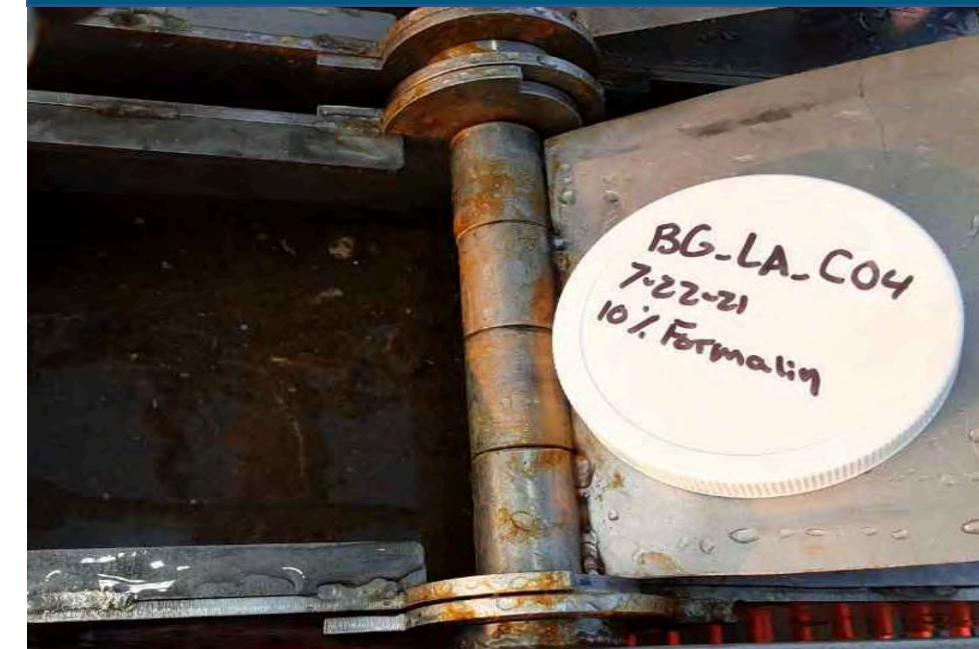
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

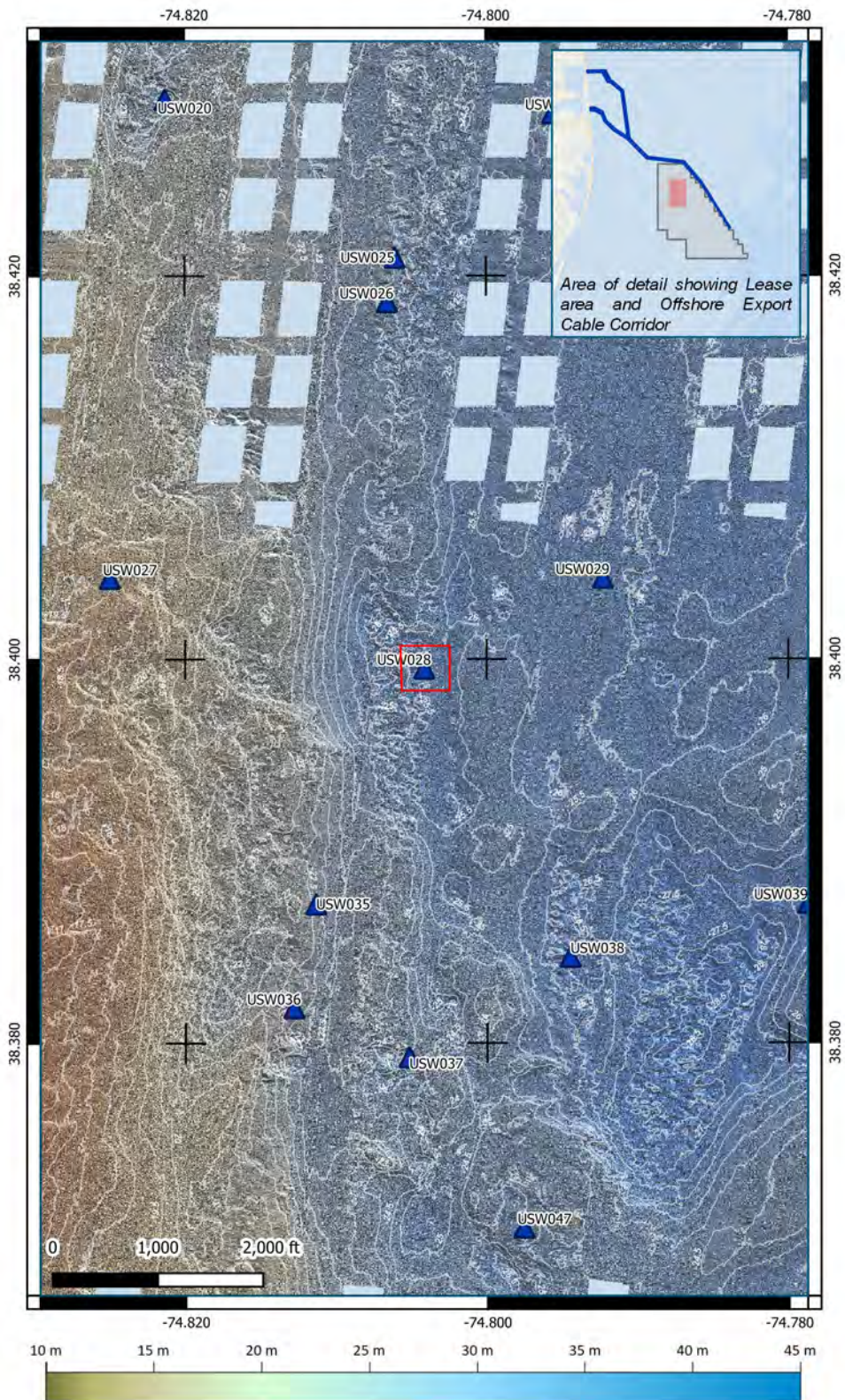


### Sample Photograph





### Map of Benthic Grab Location

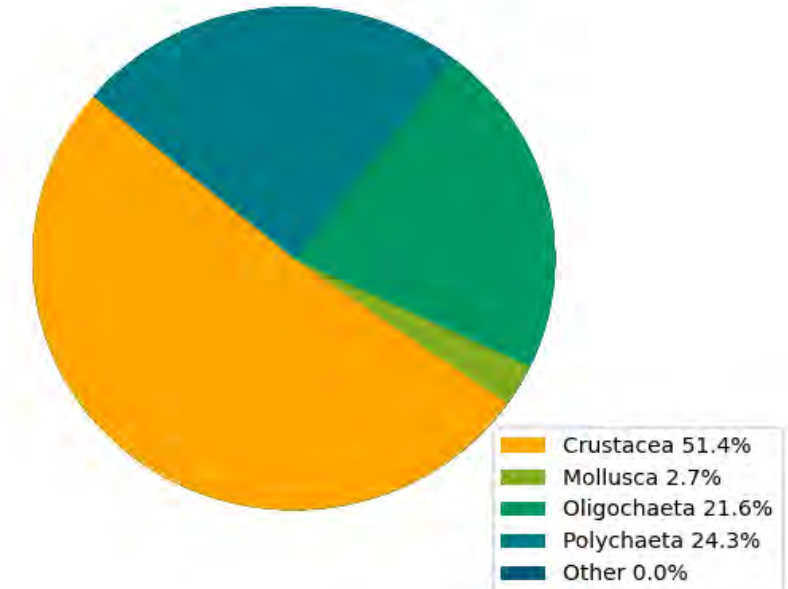


### Benthic Grab USW028

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 925                           |
| Taxa Richness <sup>1</sup> :   |                     | 17                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

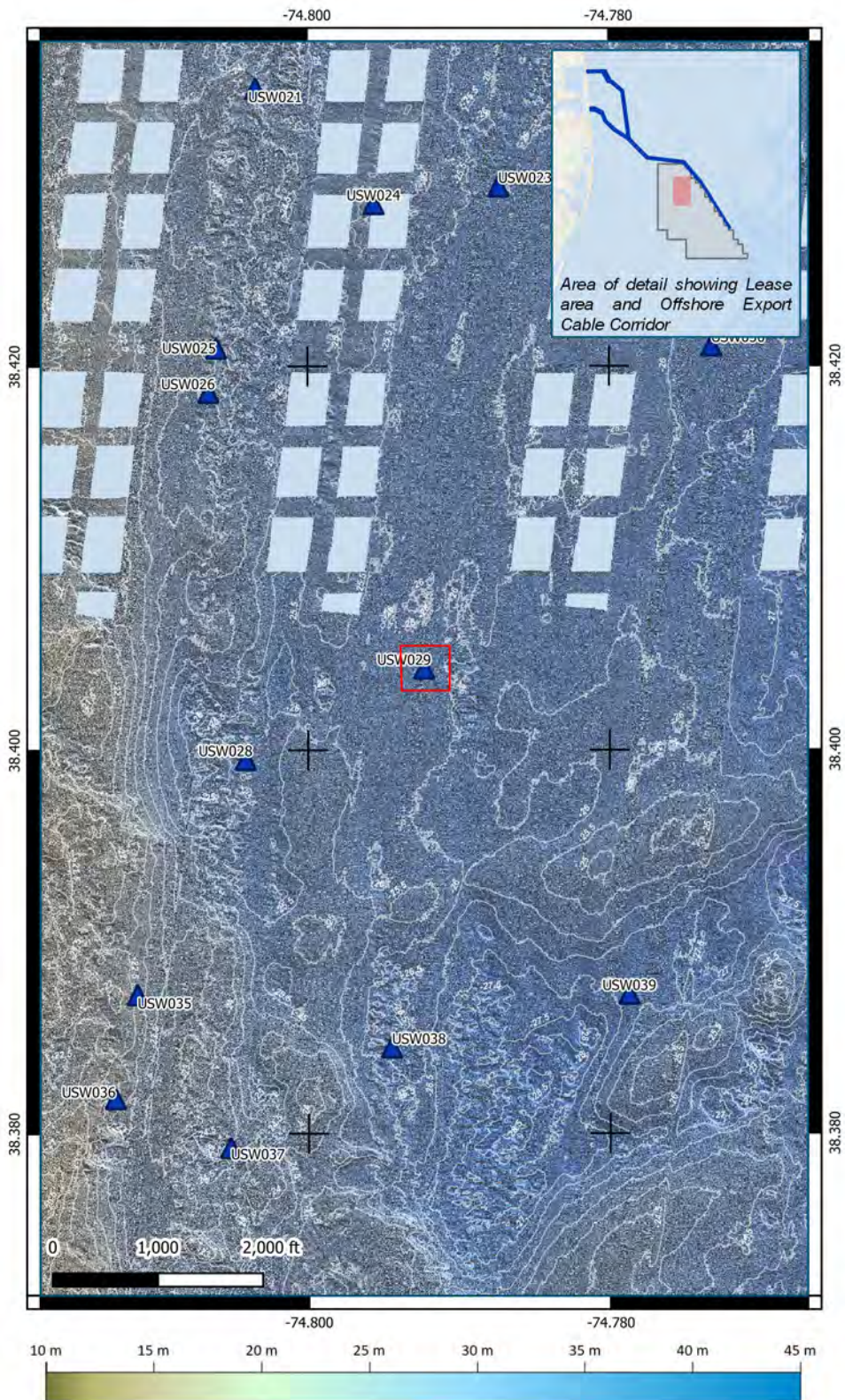


### Sample Photograph





### Map of Benthic Grab Location

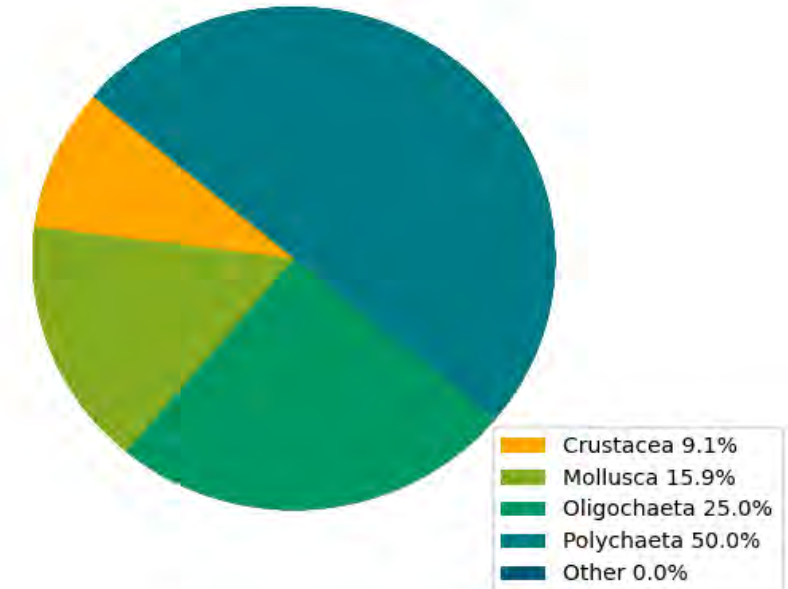


### Benthic Grab USW029

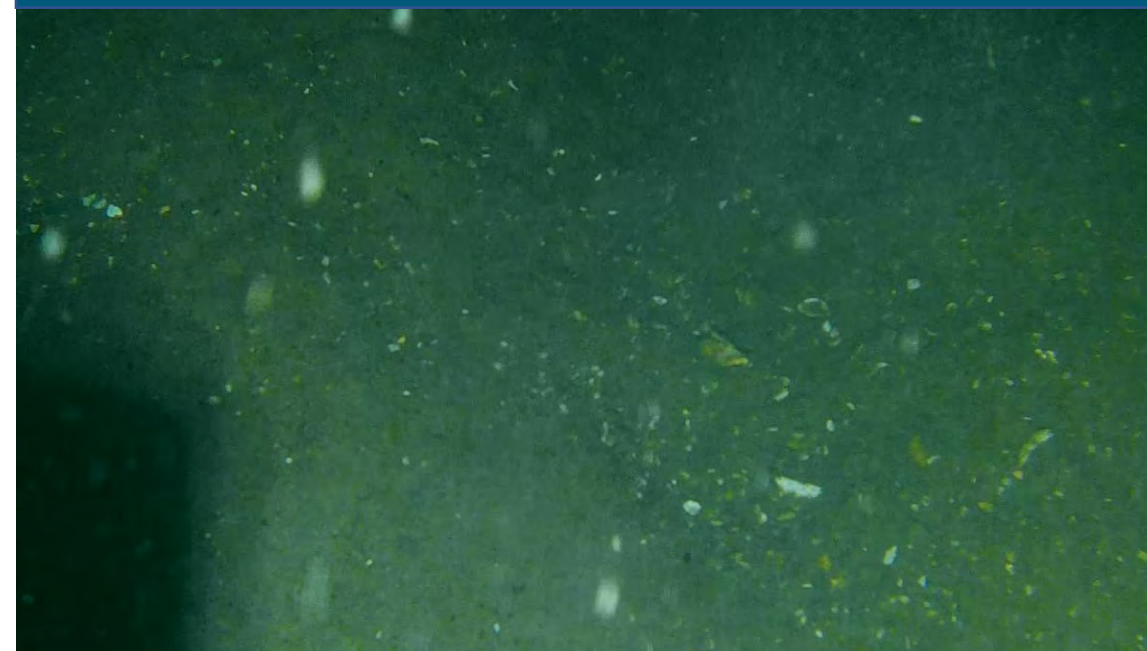
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1100                            |
| Taxa Richness <sup>1</sup> :   |                     | 13                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

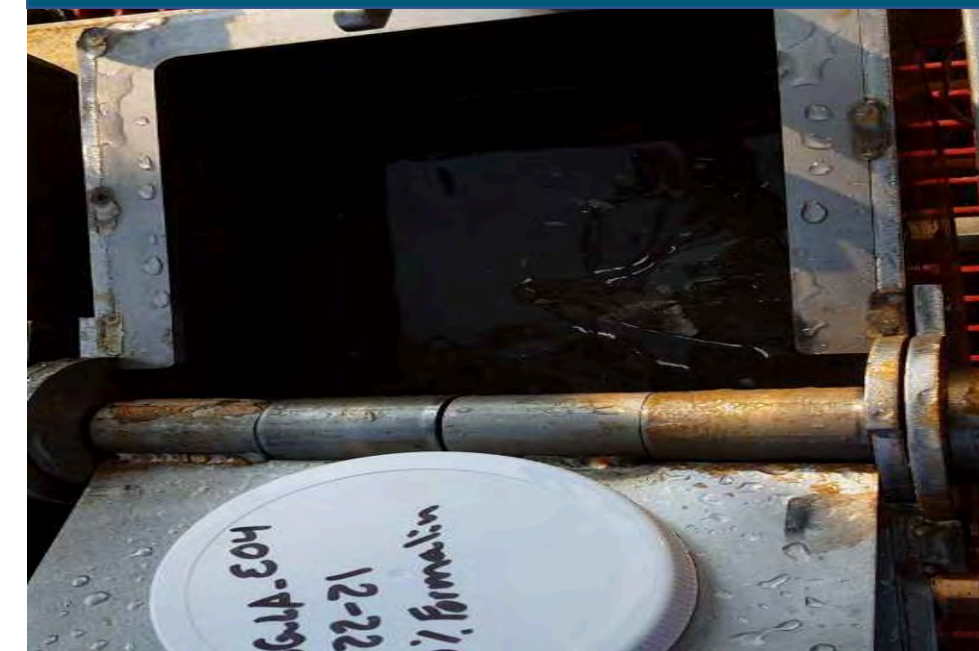
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

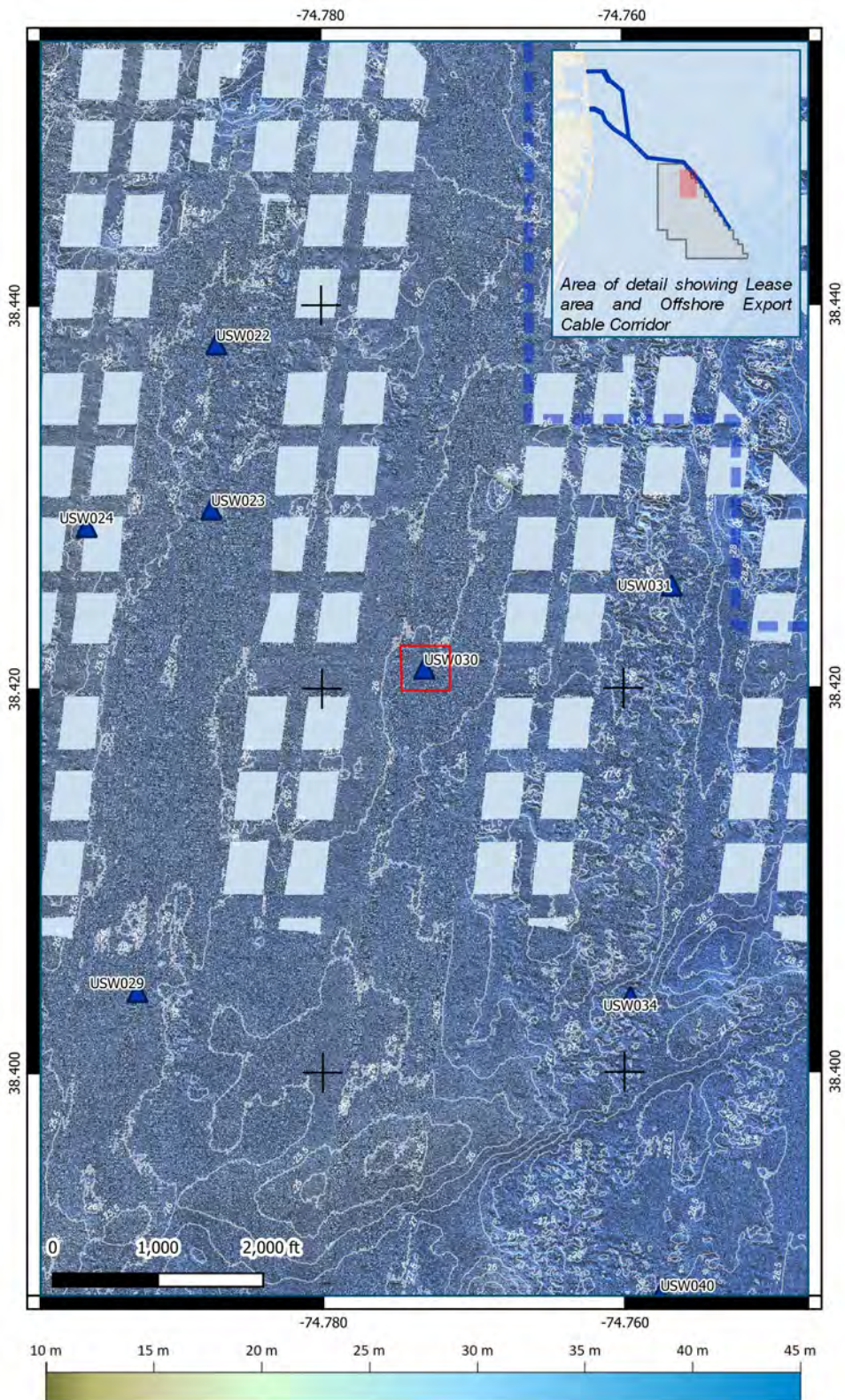


### Sample Photograph





### Map of Benthic Grab Location

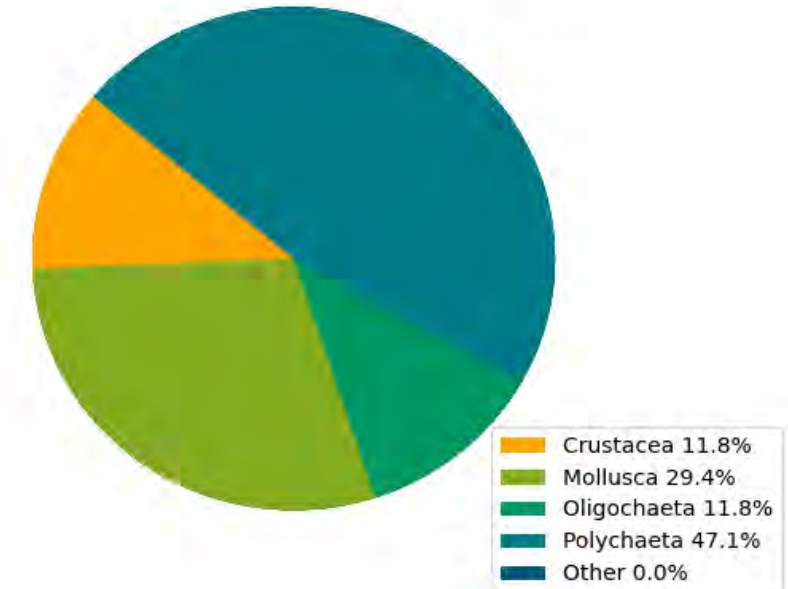


### Benthic Grab USW030

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 425                           |
| Taxa Richness <sup>1</sup> :   |                     | 11                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

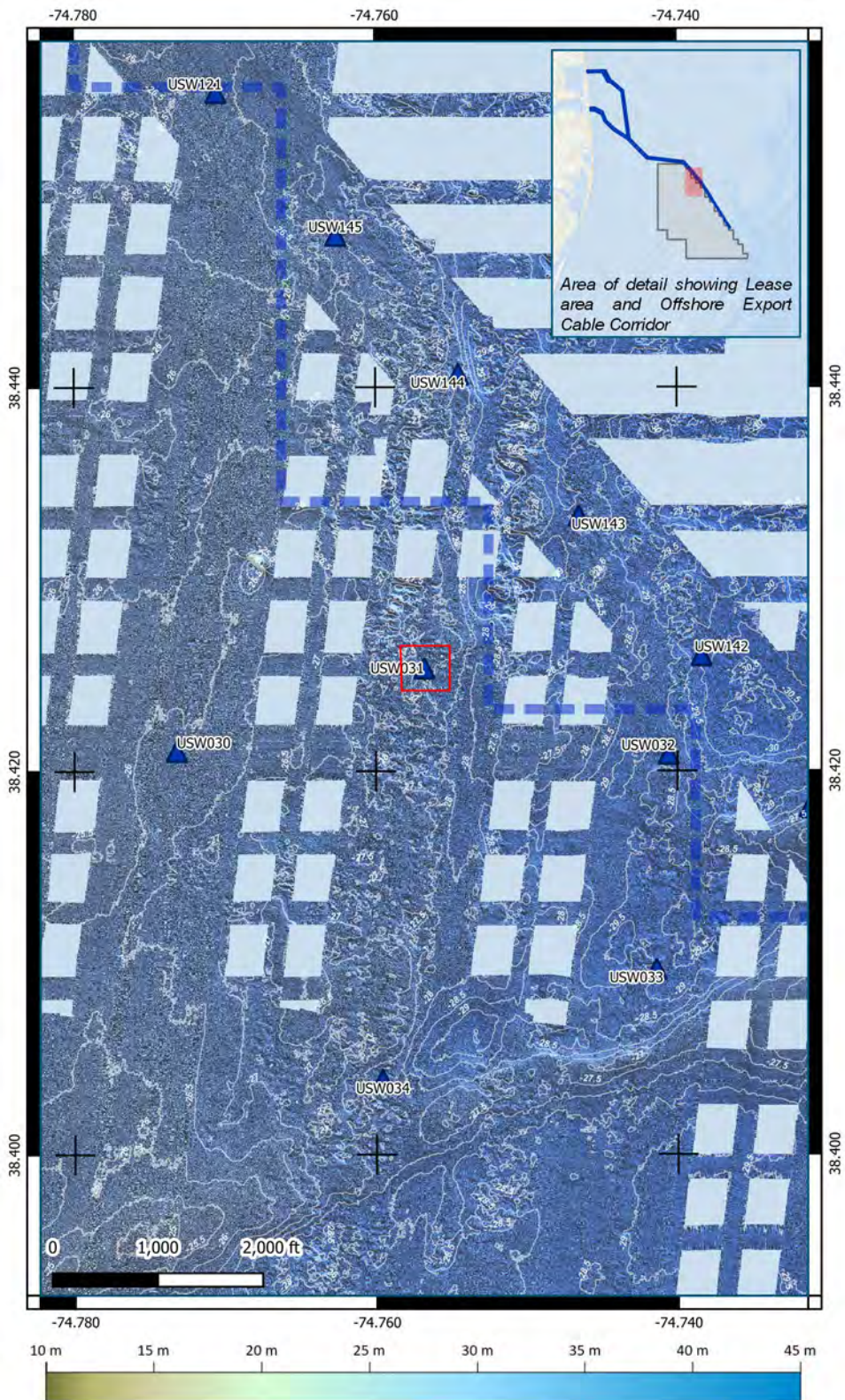


### Sample Photograph





### Map of Benthic Grab Location

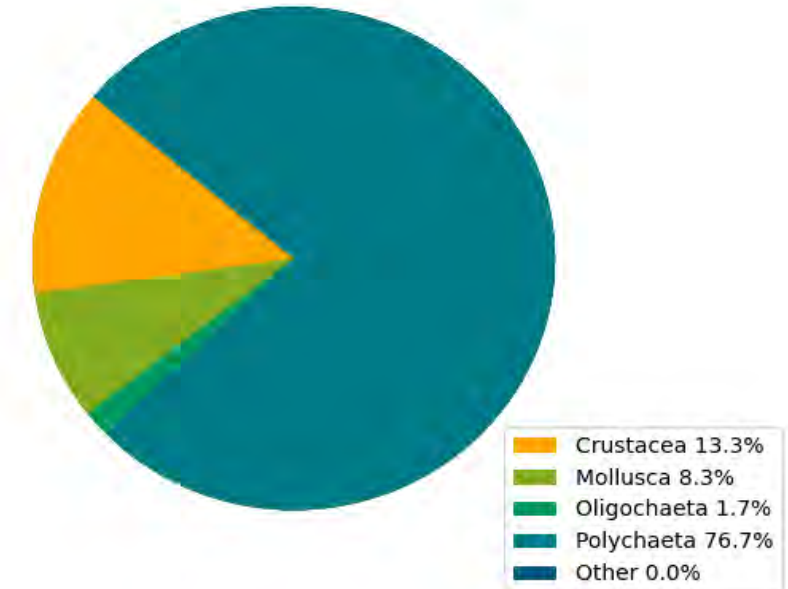


### Benthic Grab USW031

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1500                            |
| Taxa Richness <sup>1</sup> :   |                     | 17                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

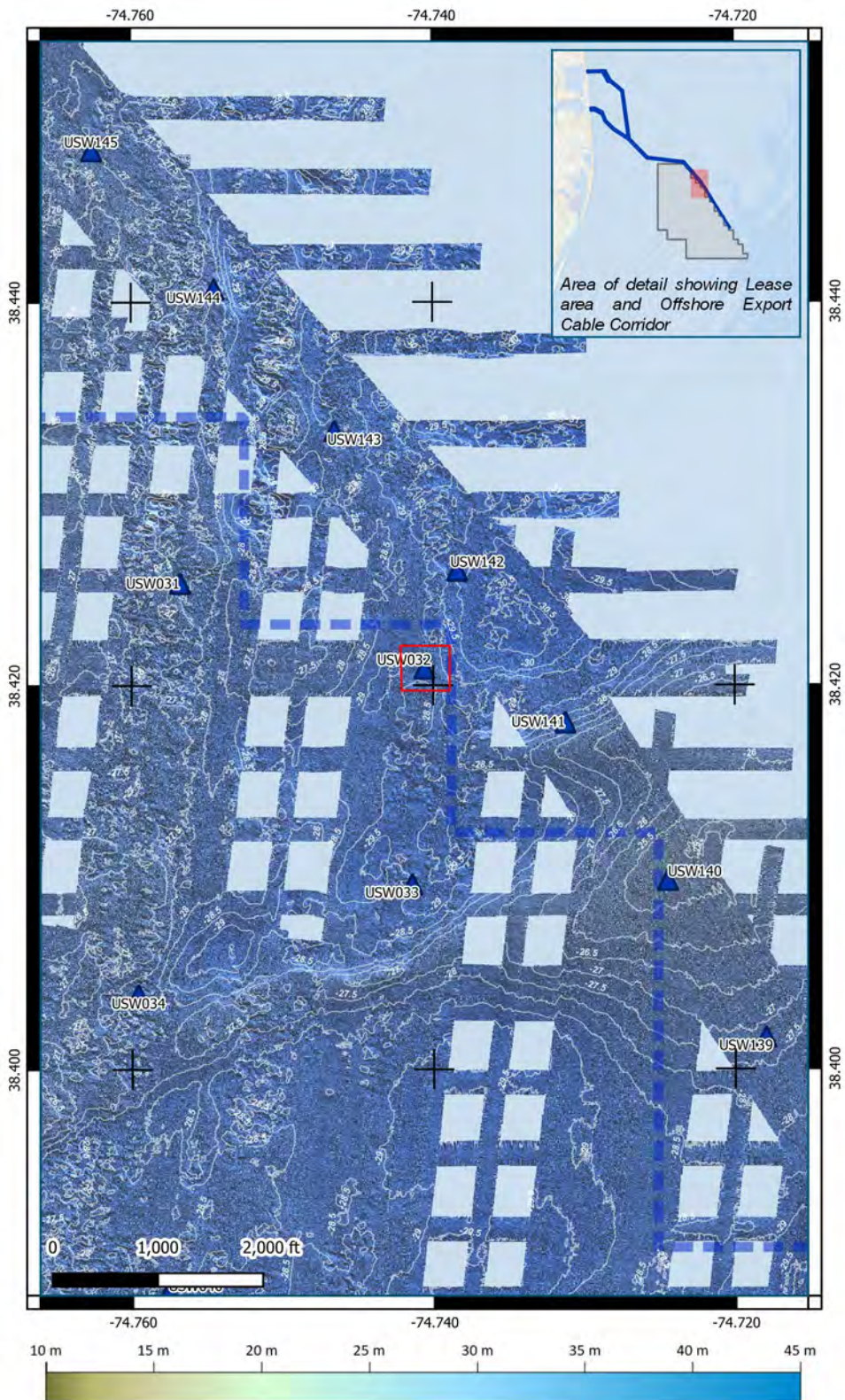


### Sample Photograph





### Map of Benthic Grab Location

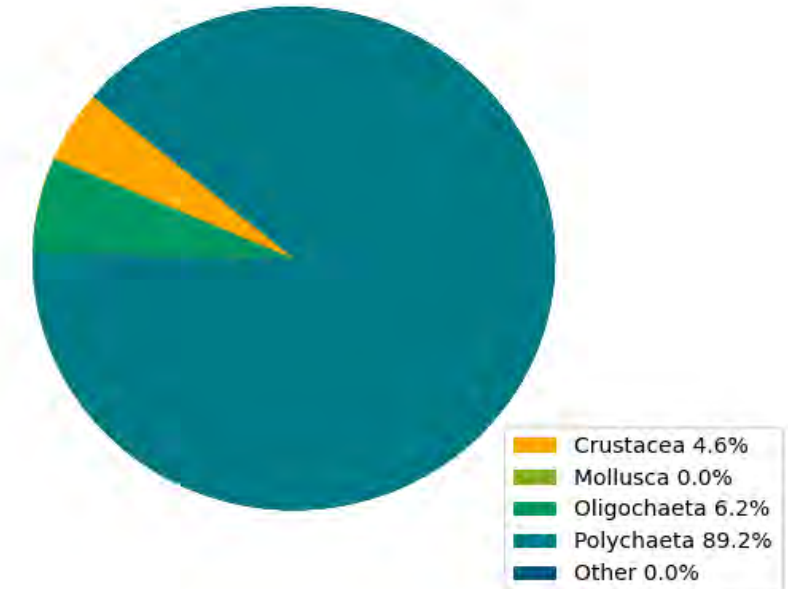


### Benthic Grab USW032

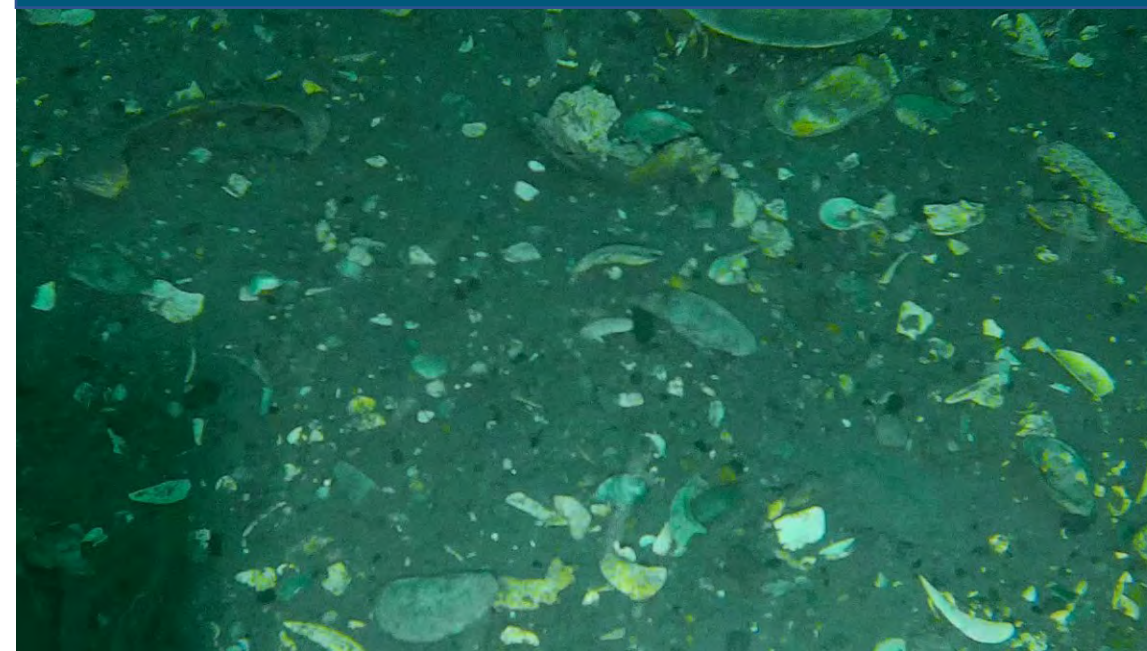
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1625                            |
| Taxa Richness <sup>1</sup> :   |                     | 15                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

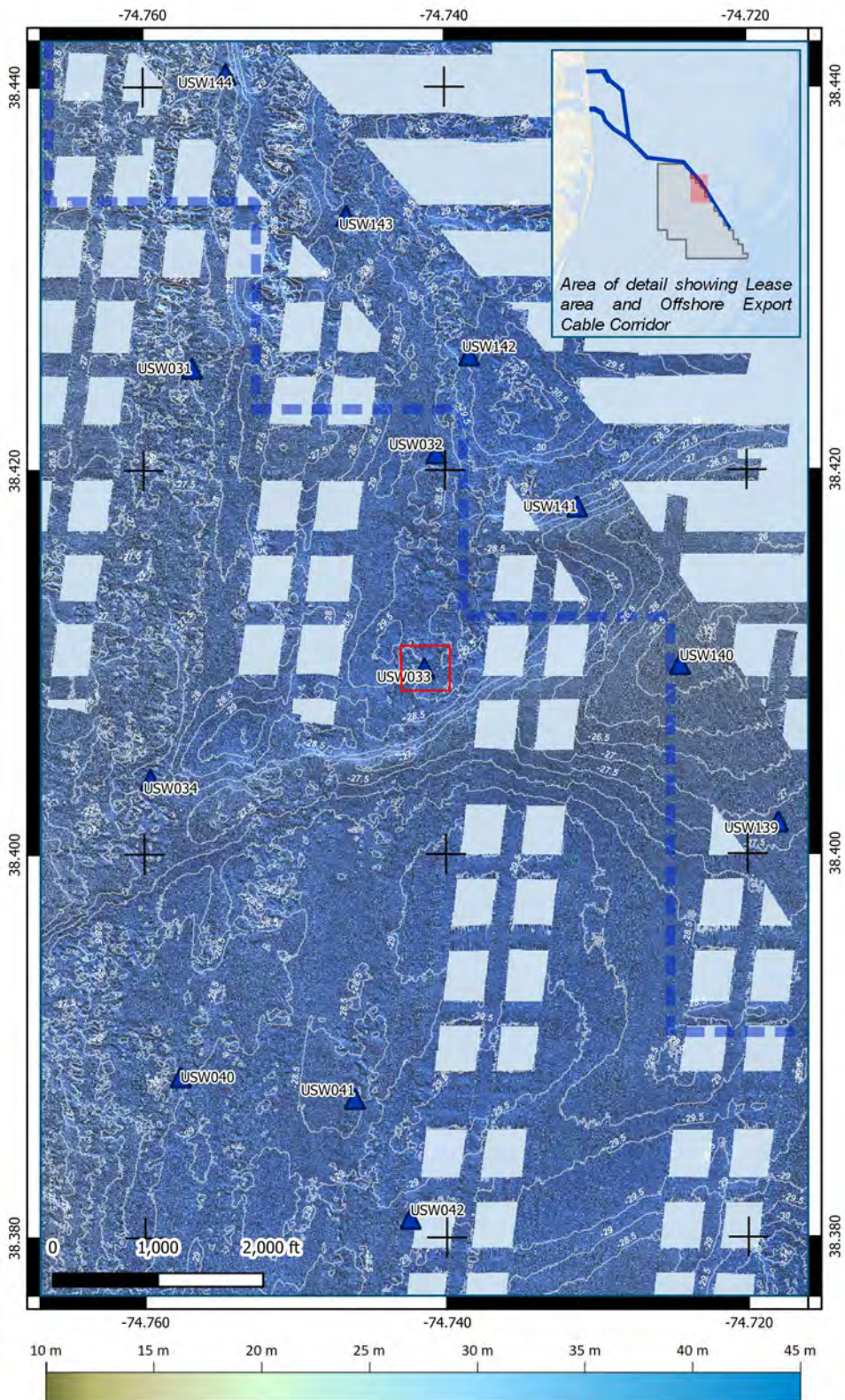


### Sample Photograph





### Map of Benthic Grab Location

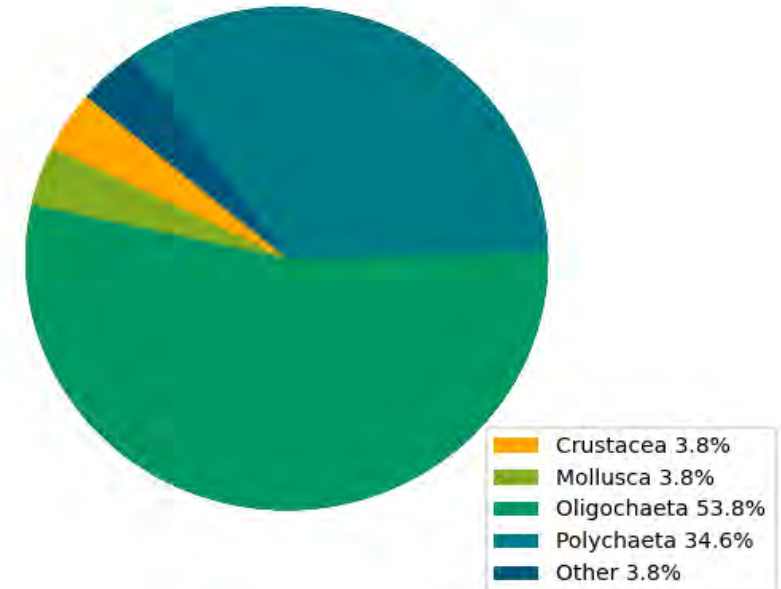


### Benthic Grab USW033

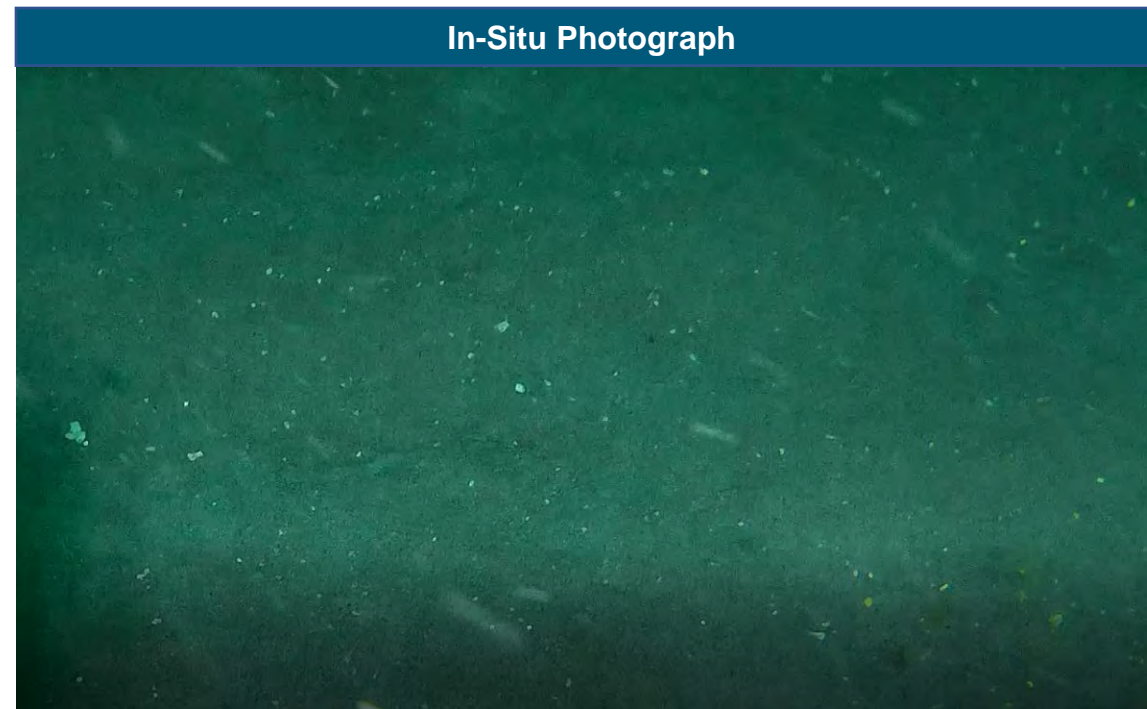
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Fine/Very Fine Sand           |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 650                           |
| Taxa Richness <sup>1</sup> :   |                     | 13                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

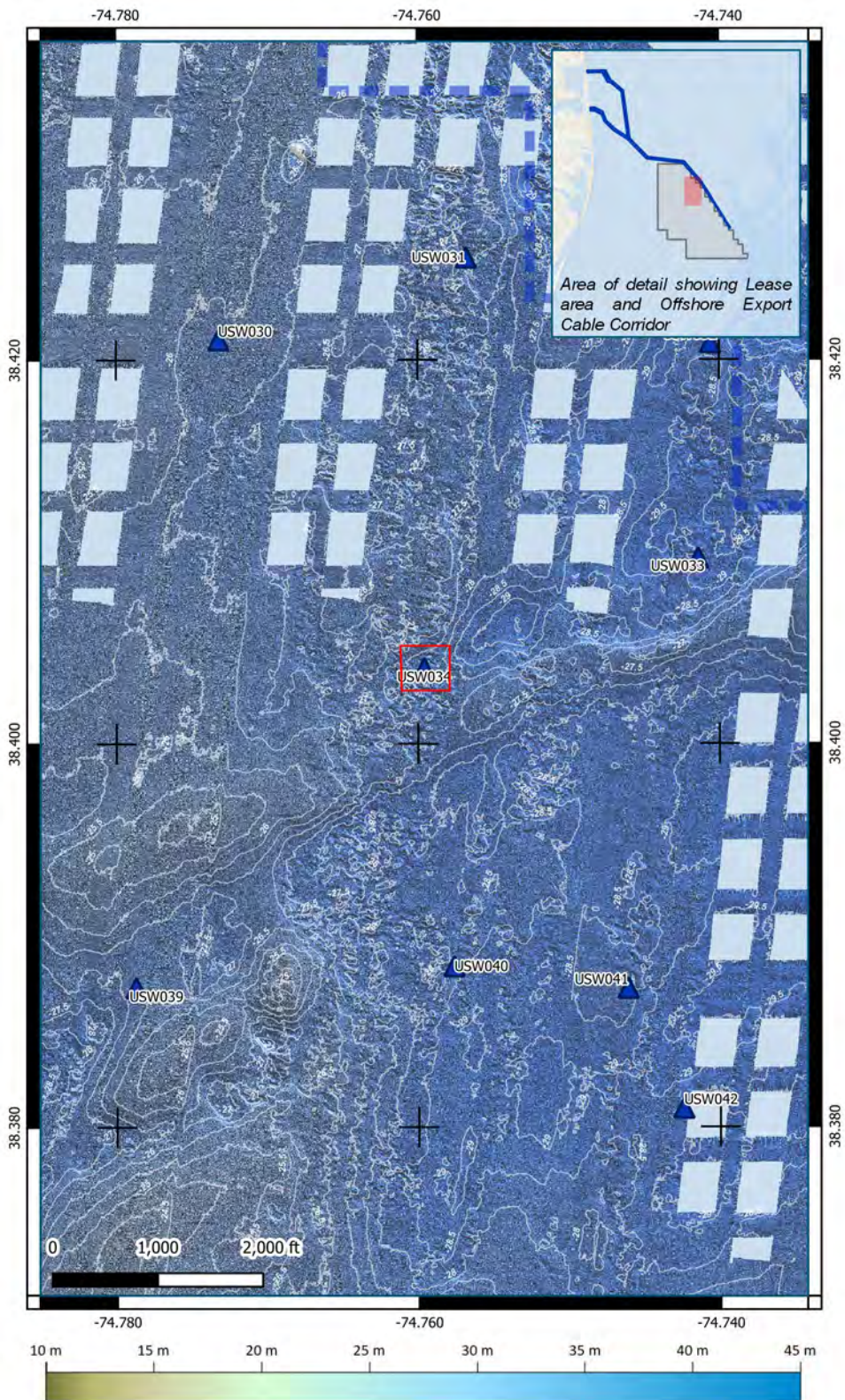


### Sample Photograph





### Map of Benthic Grab Location

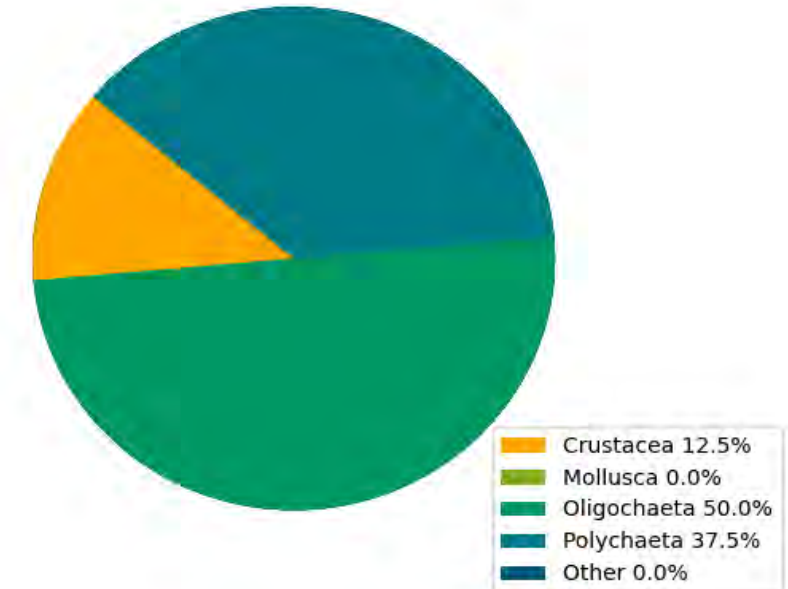


### Benthic Grab USW034

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 200                           |
| Taxa Richness <sup>1</sup> :   |                     | 5                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

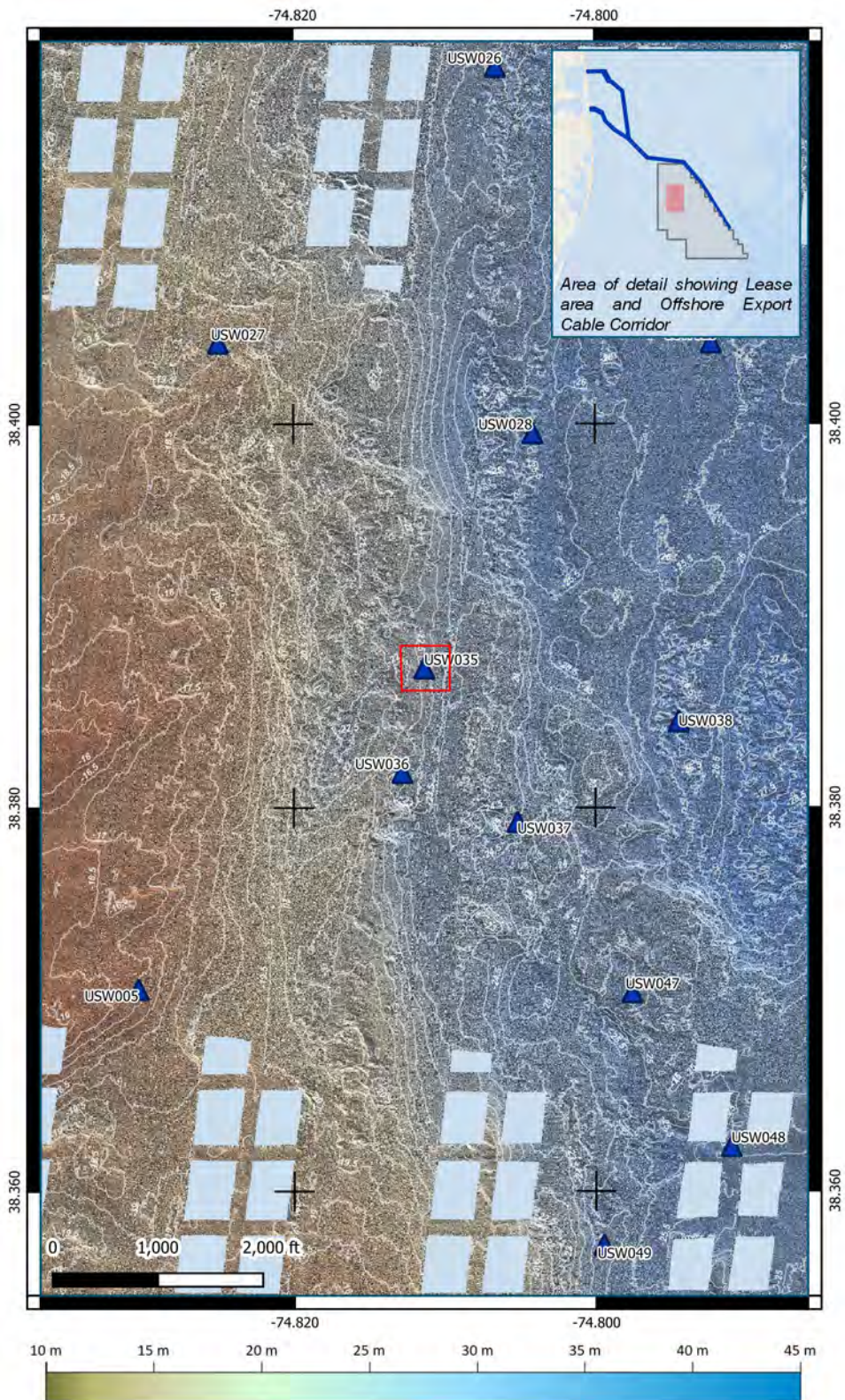


### Sample Photograph





### Map of Benthic Grab Location

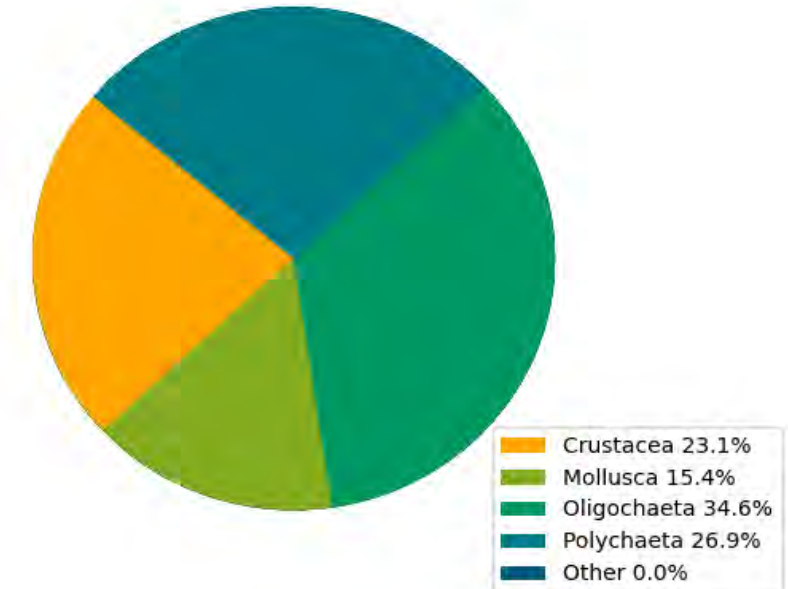


### Benthic Grab USW035

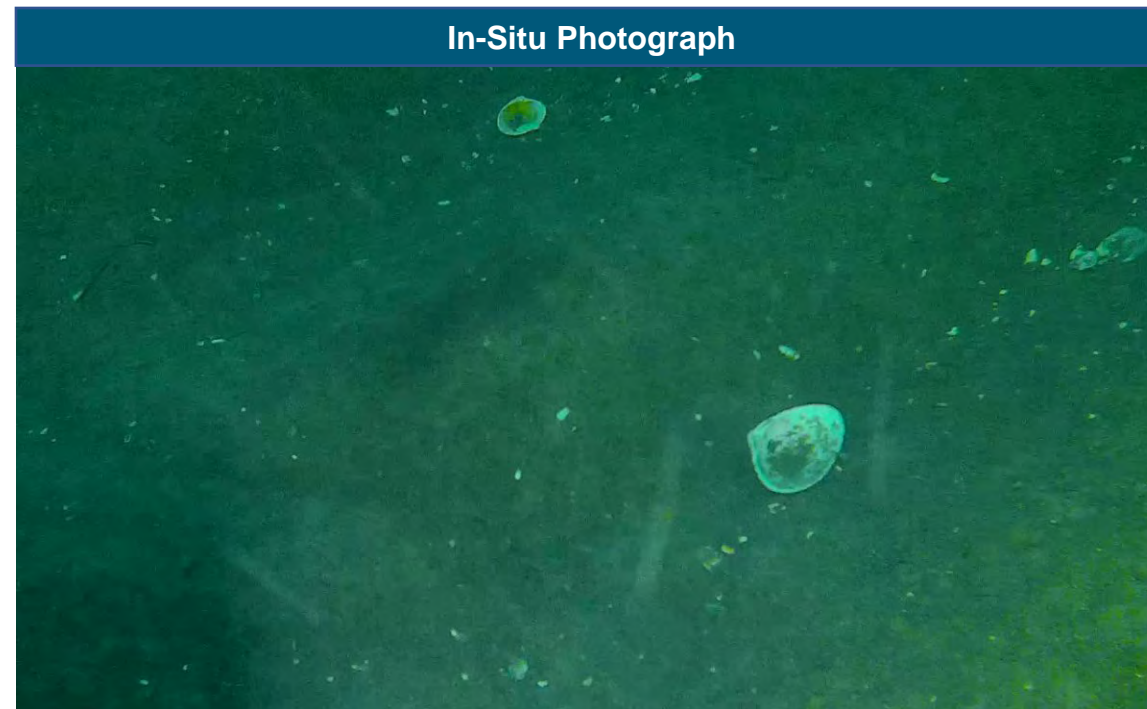
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Very Coarse/Coarse Sand       |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 650                           |
| Taxa Richness <sup>1</sup> :   |                     | 13                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

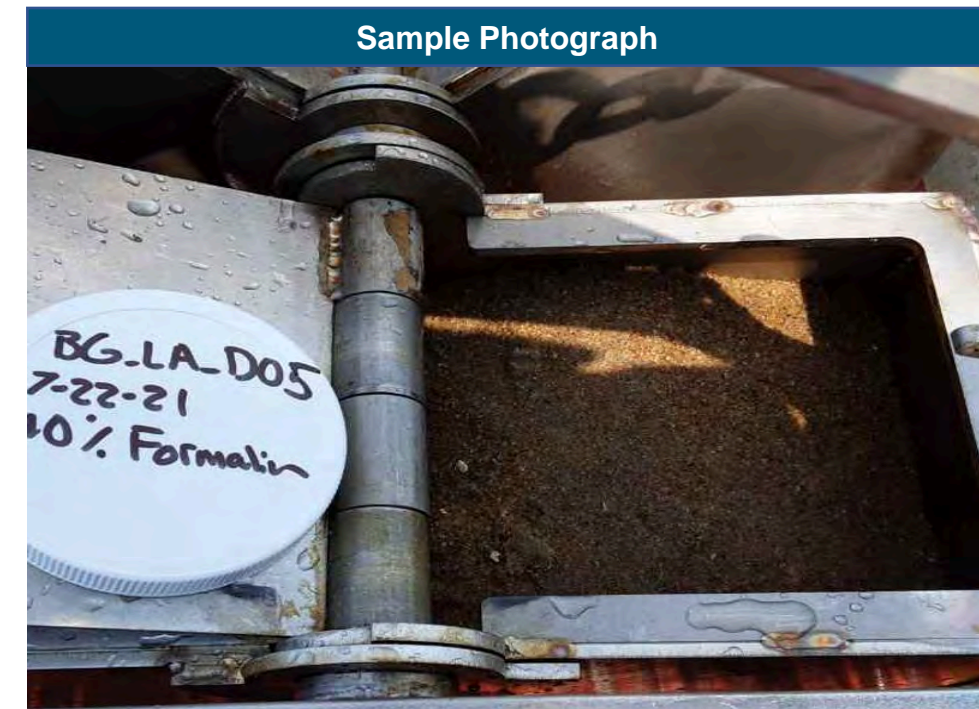
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

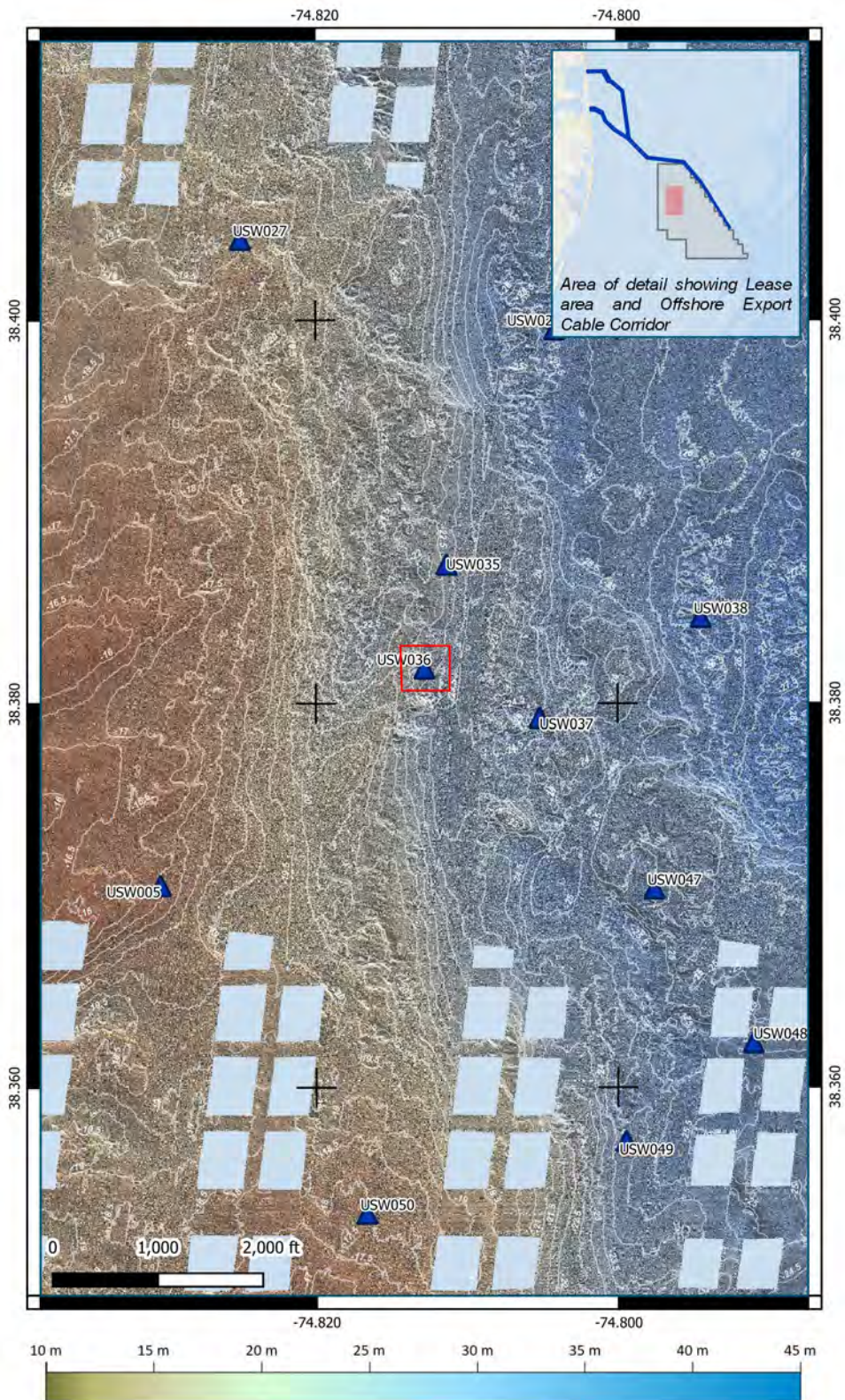


### Sample Photograph





### Map of Benthic Grab Location

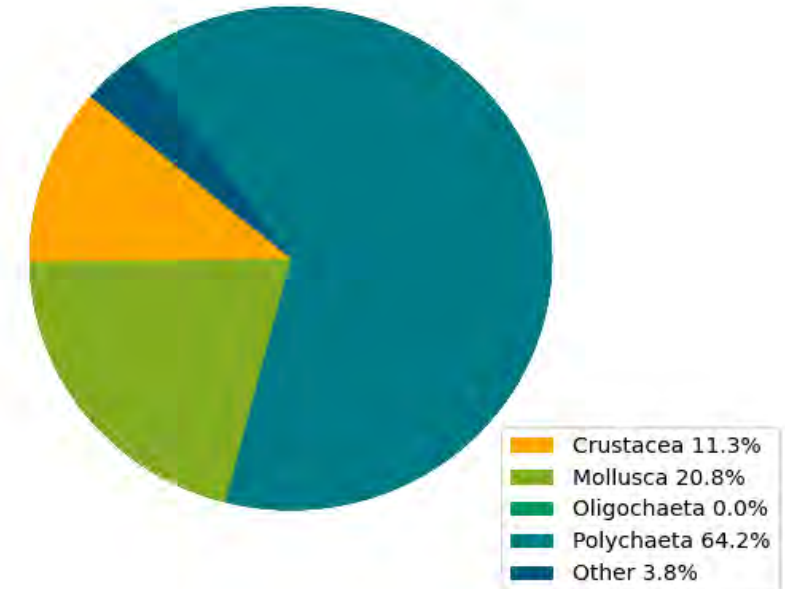


### Benthic Grab USW036

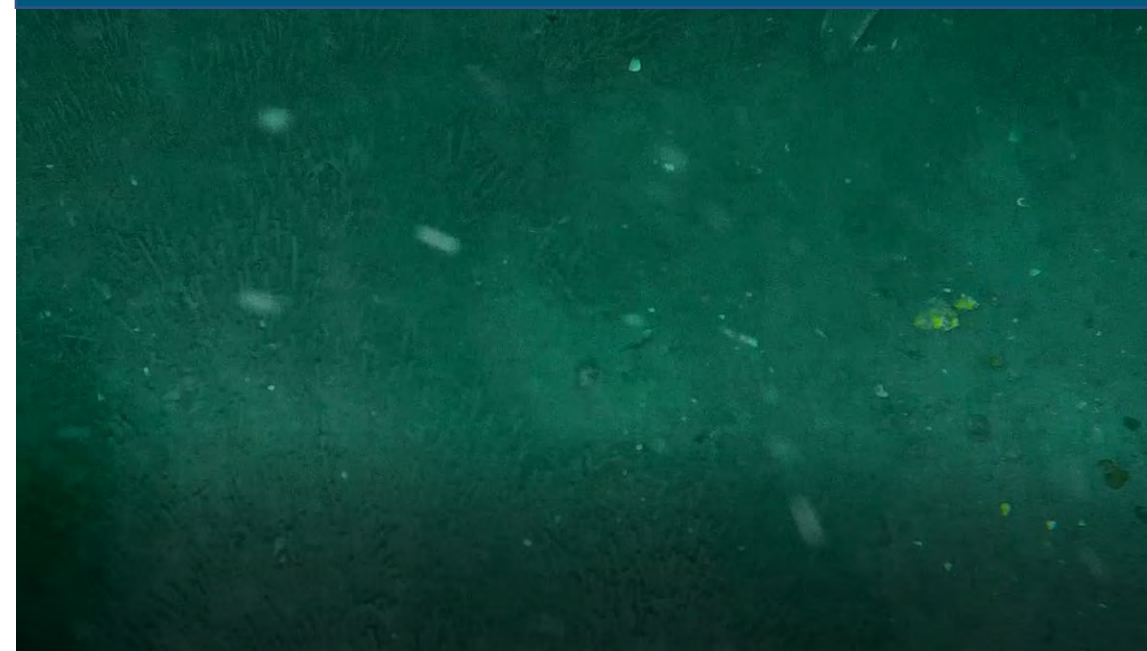
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1325                          |
| Taxa Richness <sup>1</sup> :   |                     | 16                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

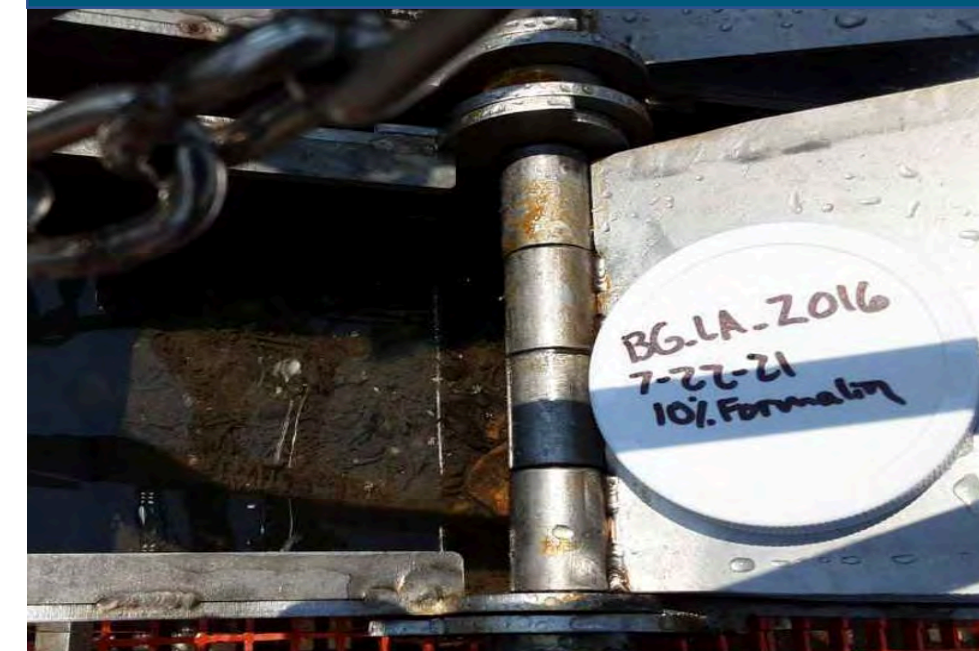
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

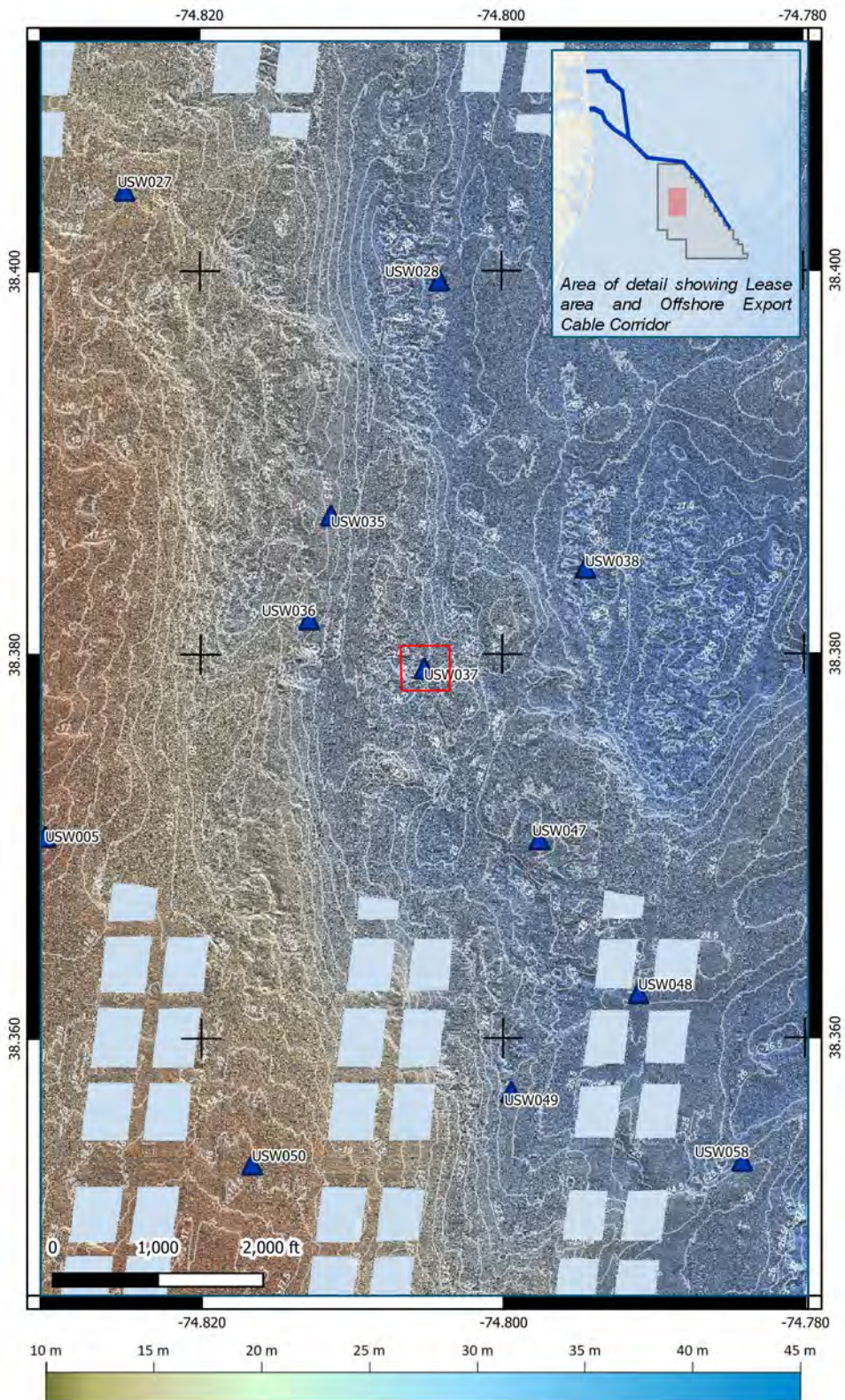


### Sample Photograph





### Map of Benthic Grab Location

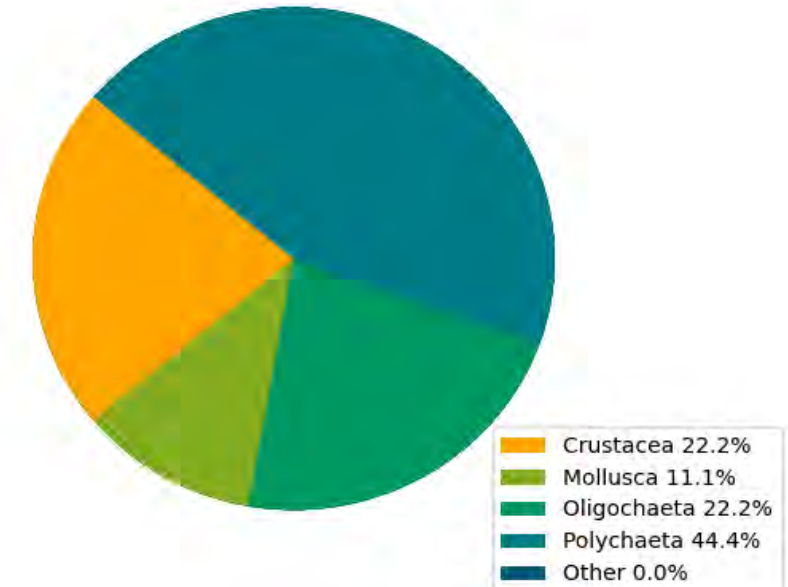


### Benthic Grab USW037

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 225                           |
| Taxa Richness <sup>1</sup> :   |                     | 7                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

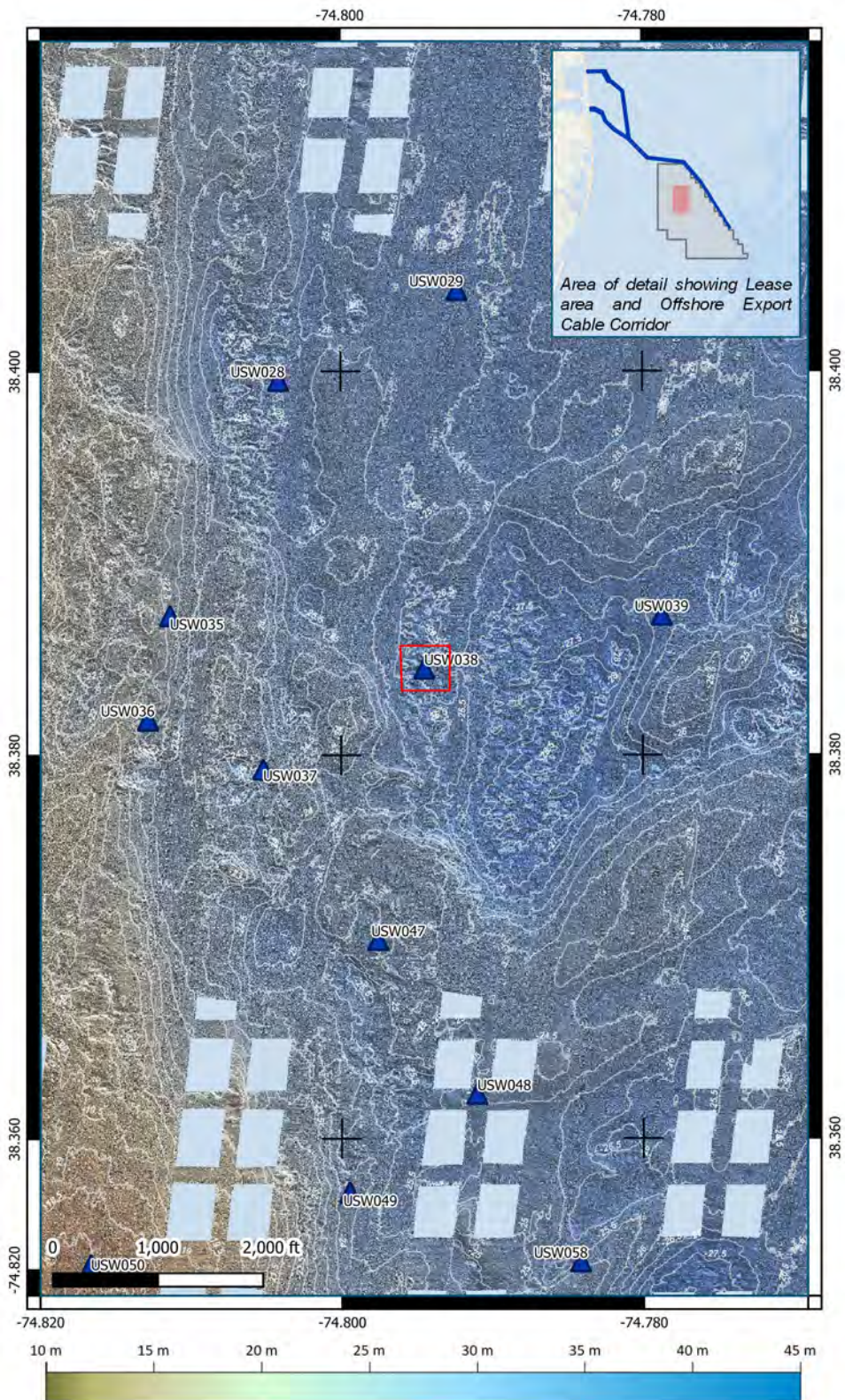


### Sample Photograph





### Map of Benthic Grab Location

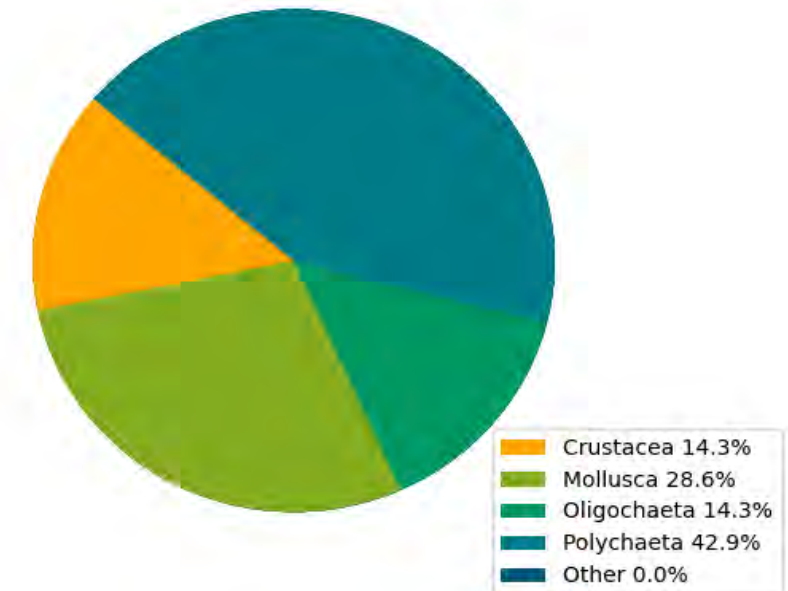


### Benthic Grab USW038

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 175                             |
| Taxa Richness <sup>1</sup> :   |                     | 5                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

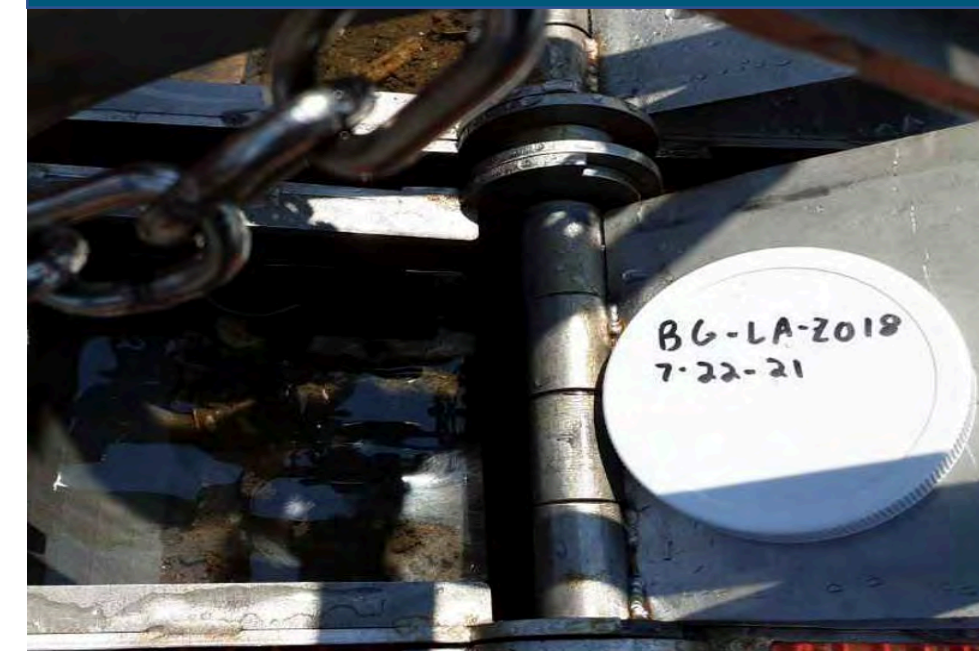
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

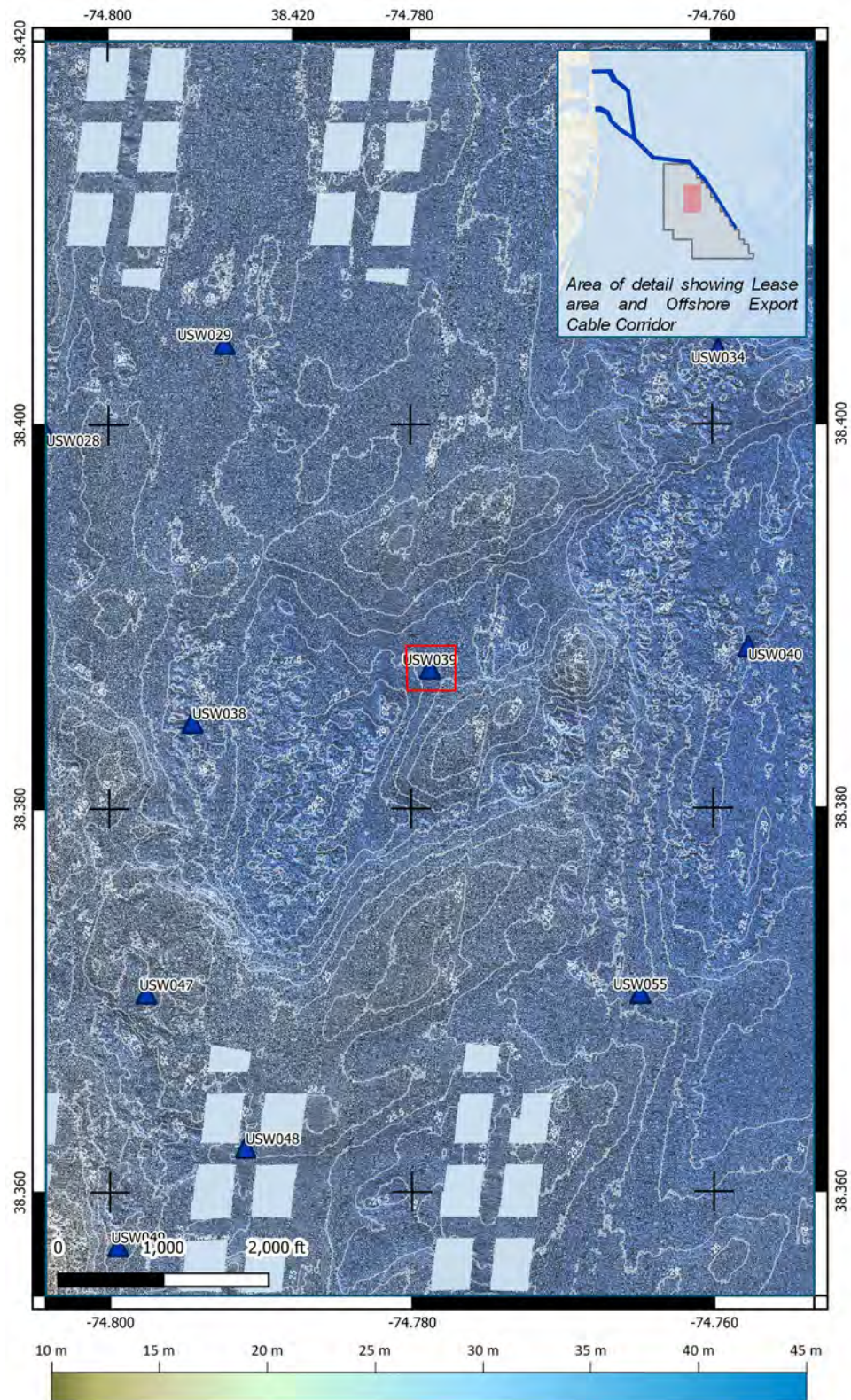


### Sample Photograph





### Map of Benthic Grab Location

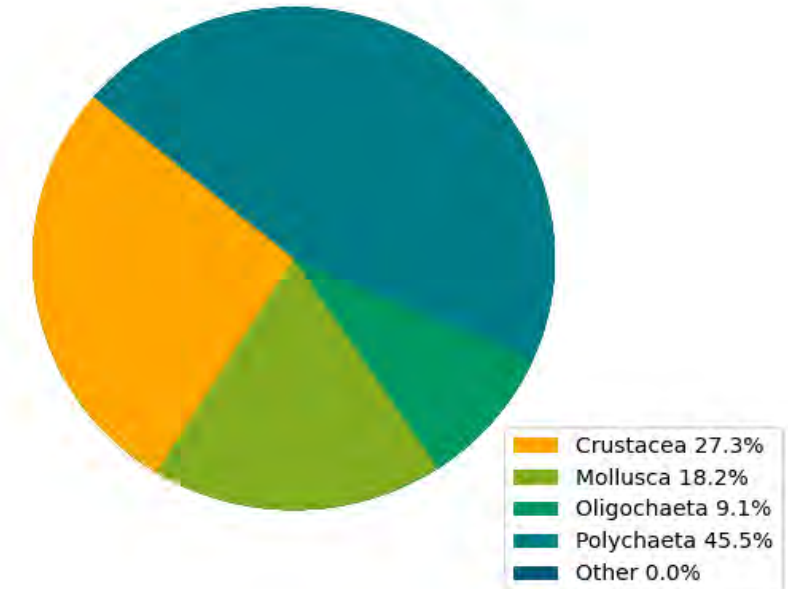


### Benthic Grab USW039

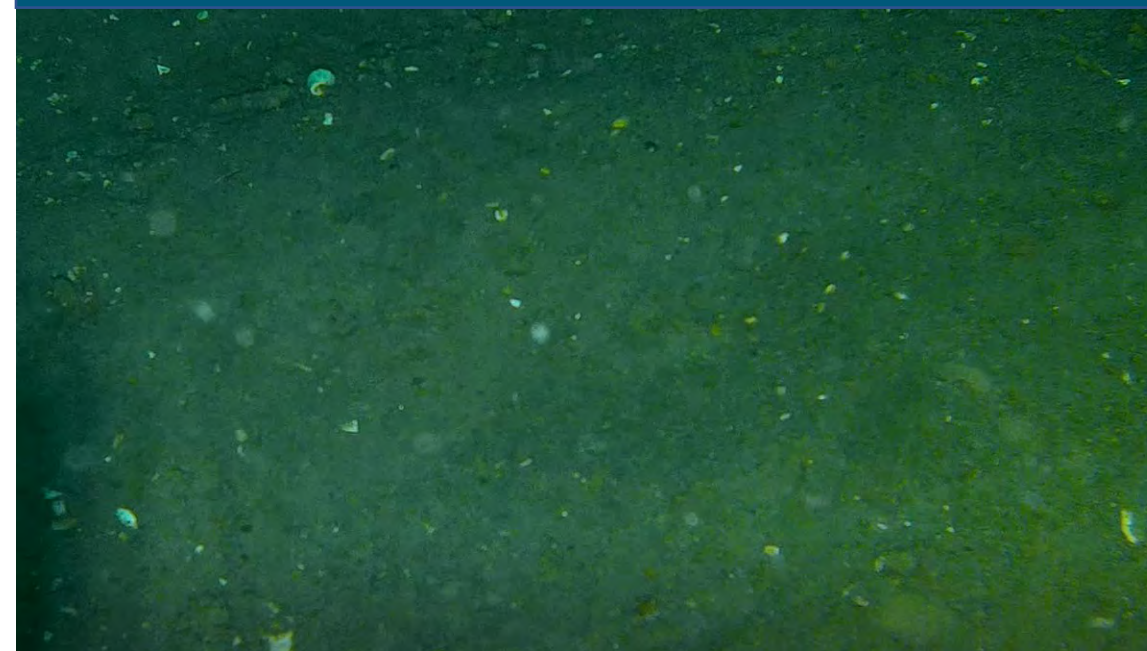
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 275                           |
| Taxa Richness <sup>1</sup> :   |                     | 8                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

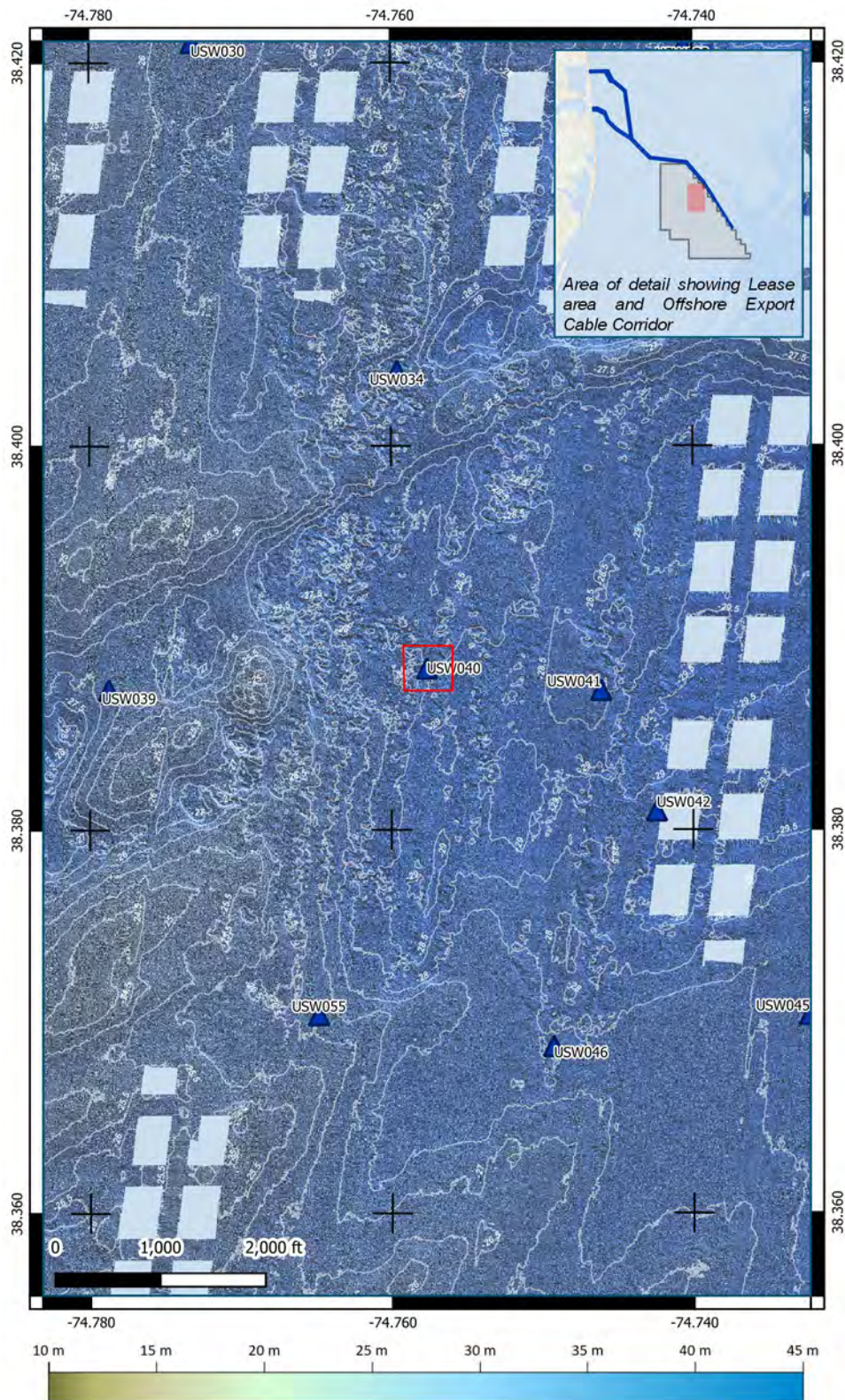


### Sample Photograph





### Map of Benthic Grab Location

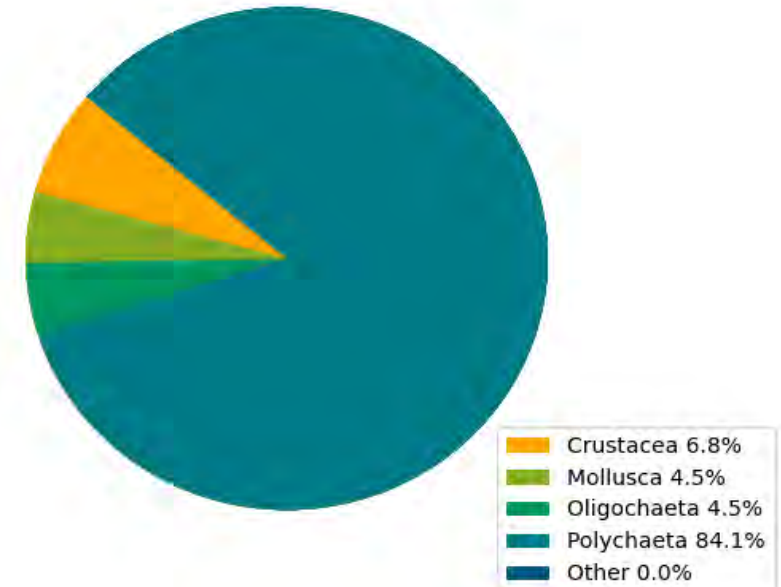


### Benthic Grab USW040

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1100                            |
| Taxa Richness <sup>1</sup> :   |                     | 13                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

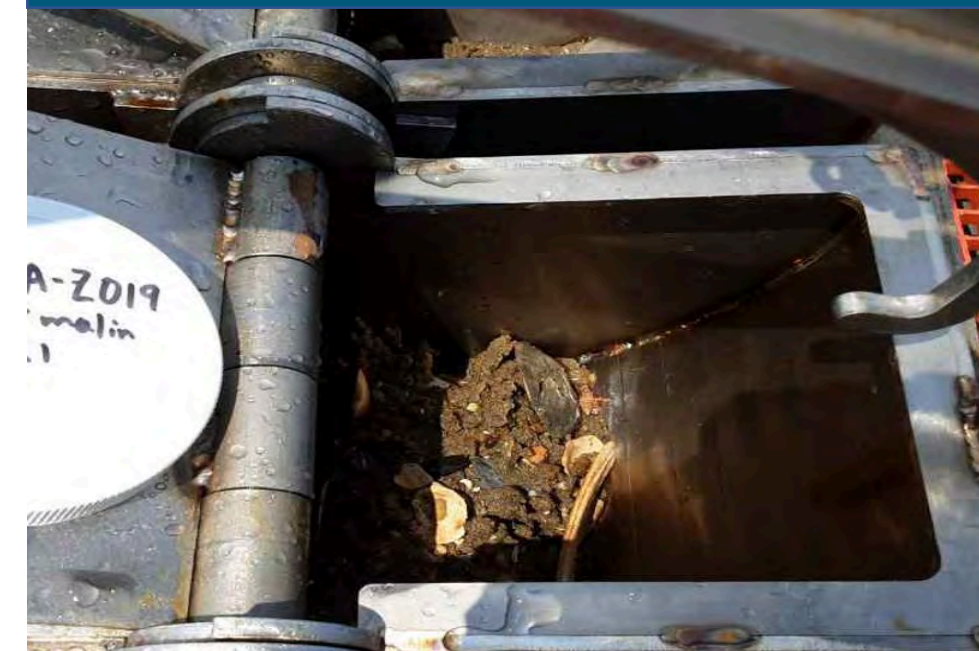
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

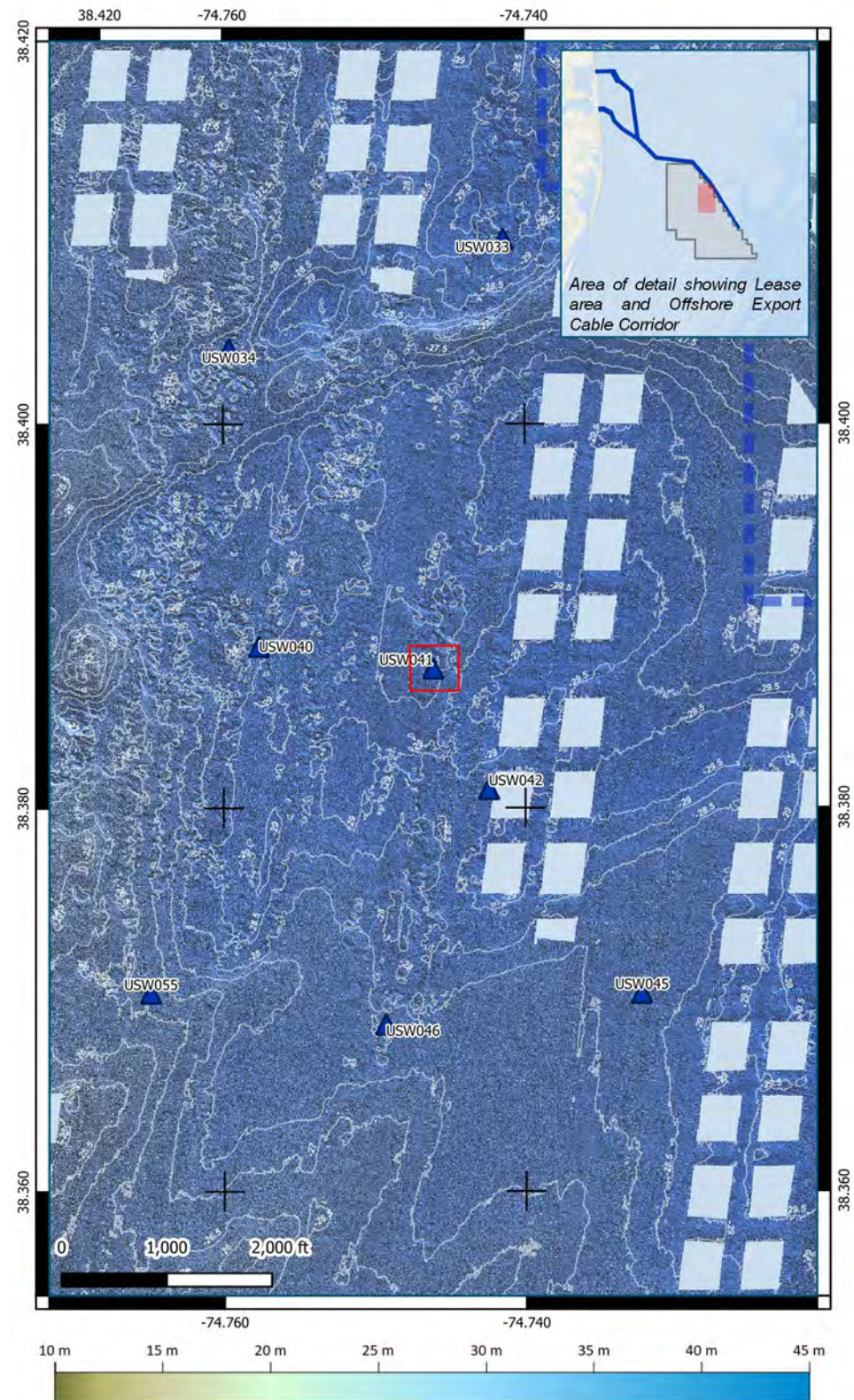


### Sample Photograph





### Map of Benthic Grab Location

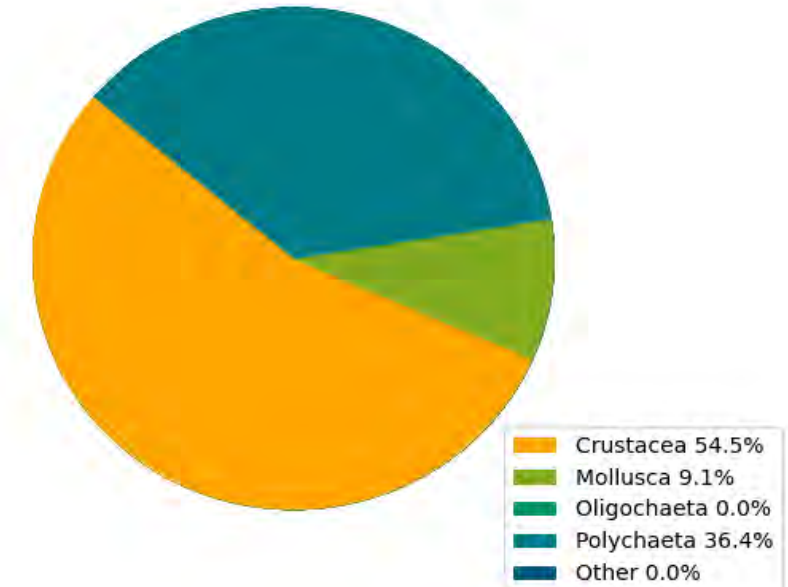


### Benthic Grab USW041

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 275                             |
| Taxa Richness <sup>1</sup> :   |                     | 8                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

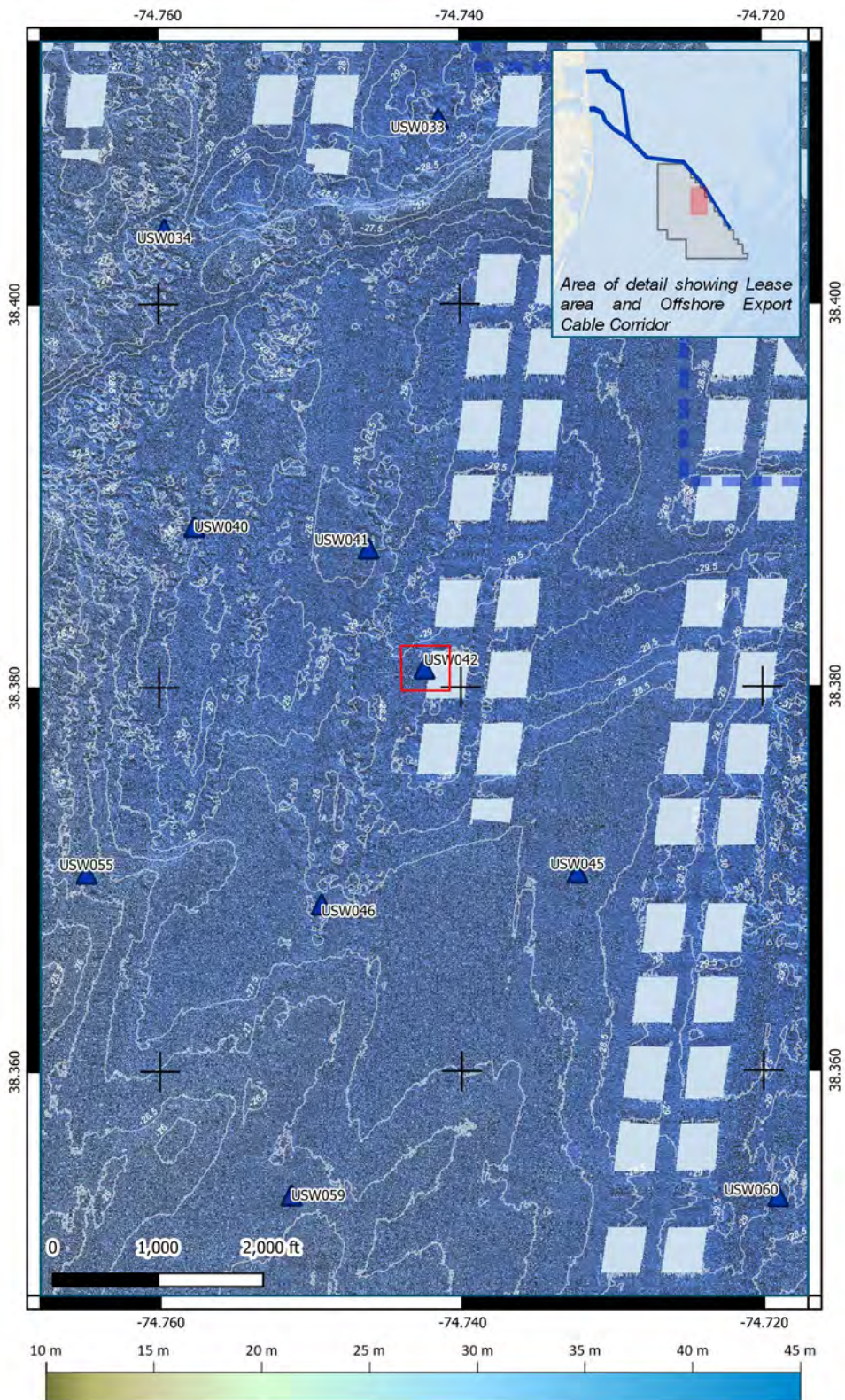


### Sample Photograph





### Map of Benthic Grab Location

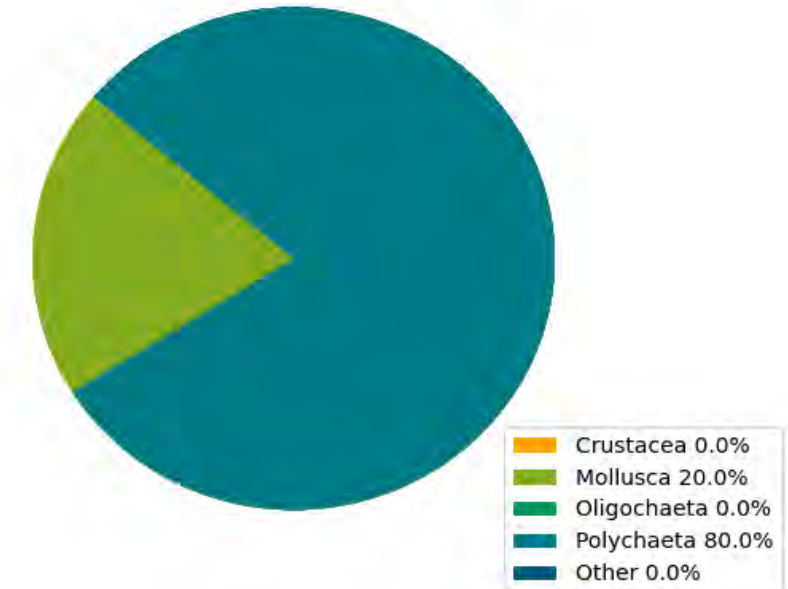


### Benthic Grab USW042

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 250                             |
| Taxa Richness <sup>1</sup> :   |                     | 7                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

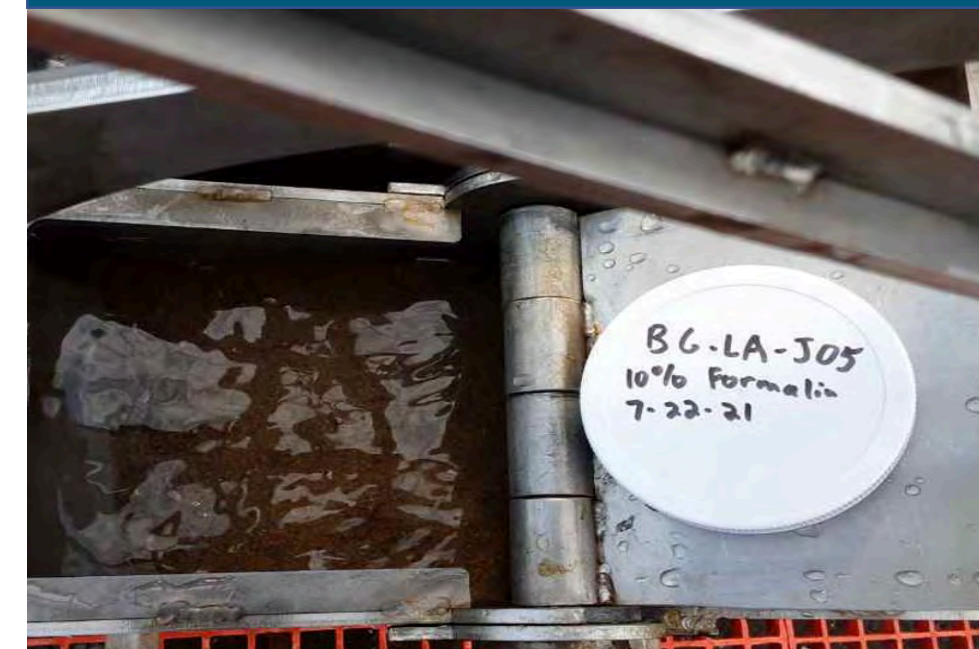
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

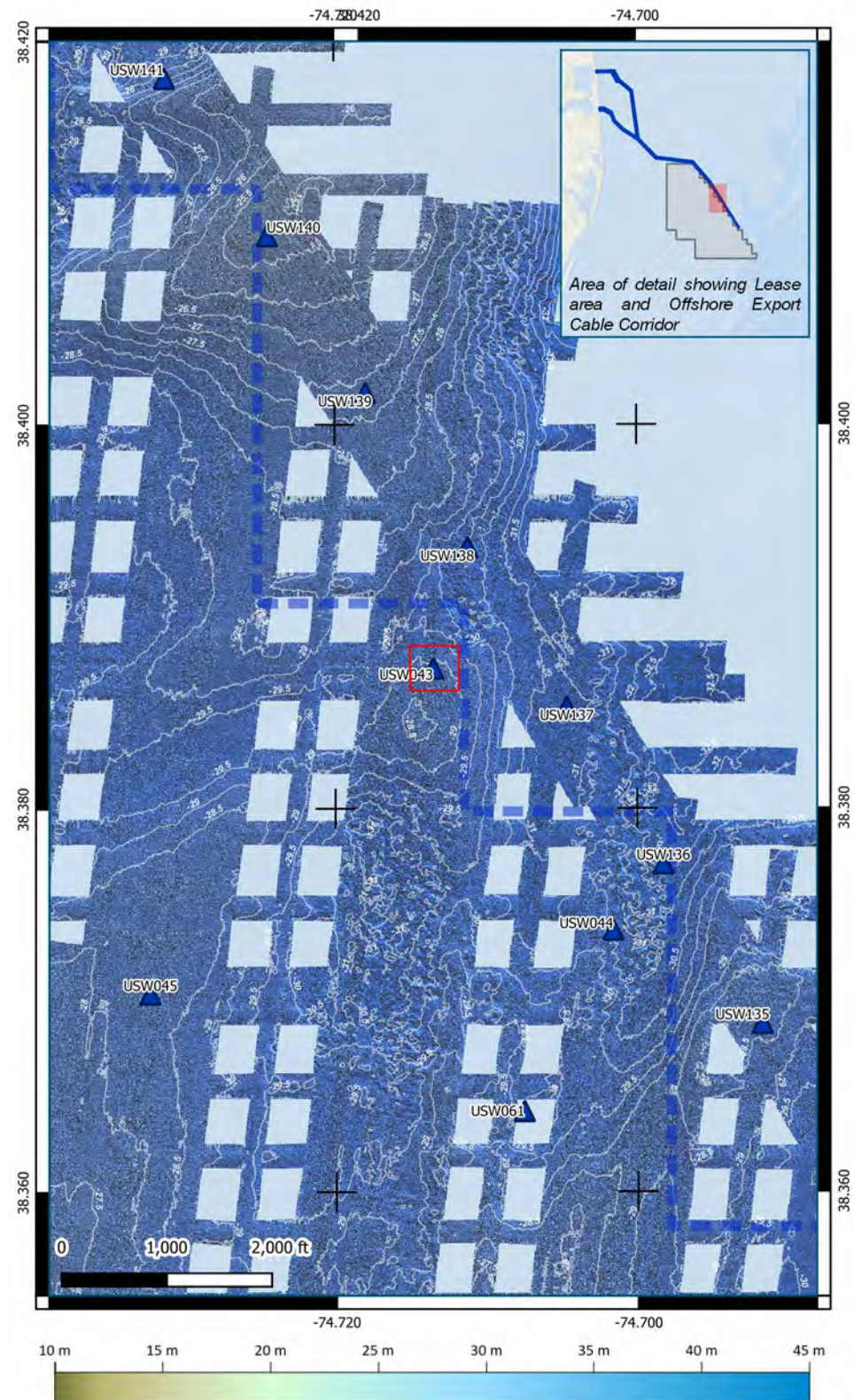


### Sample Photograph





### Map of Benthic Grab Location

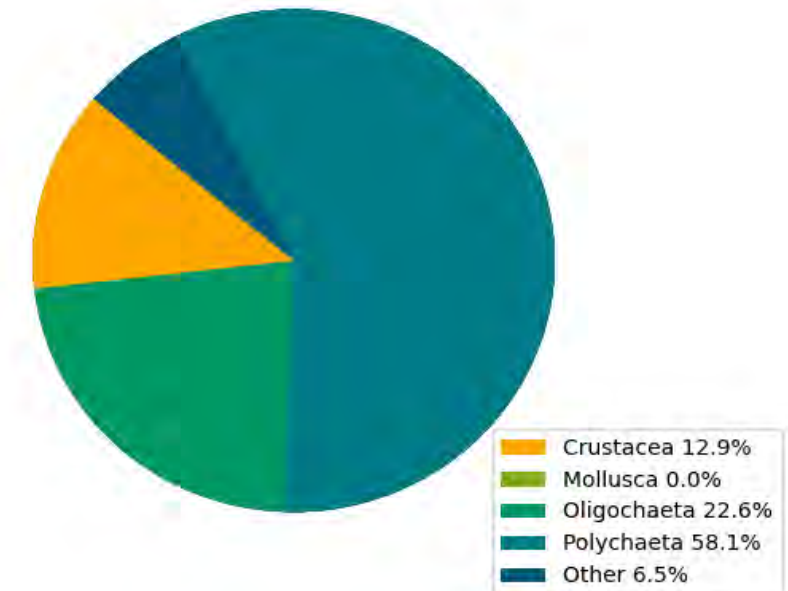


### Benthic Grab USW043

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Very Coarse/Coarse Sand       |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 775                           |
| Taxa Richness <sup>1</sup> :   |                     | 11                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

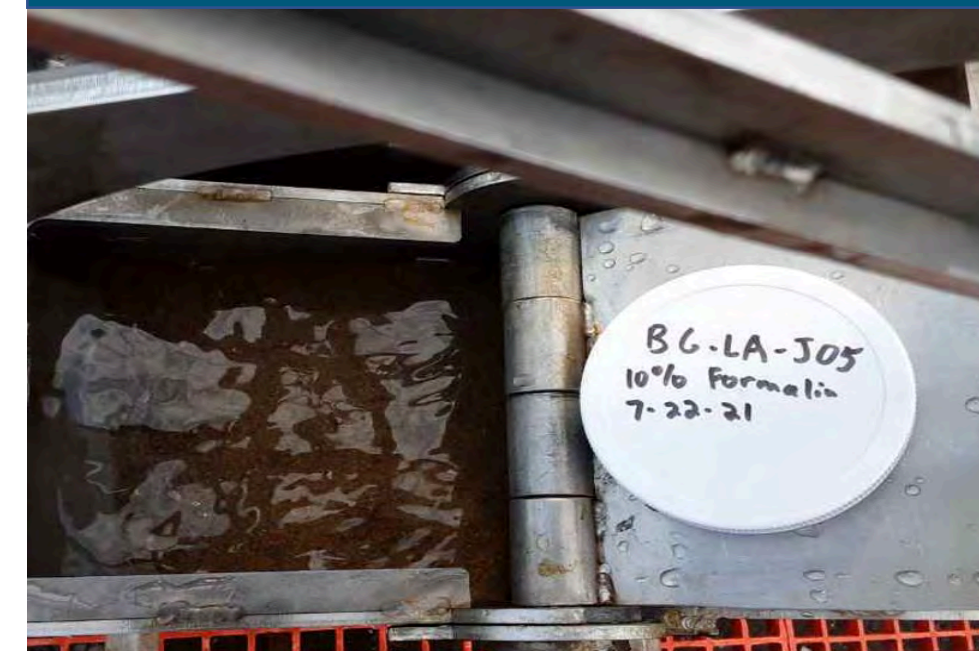
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

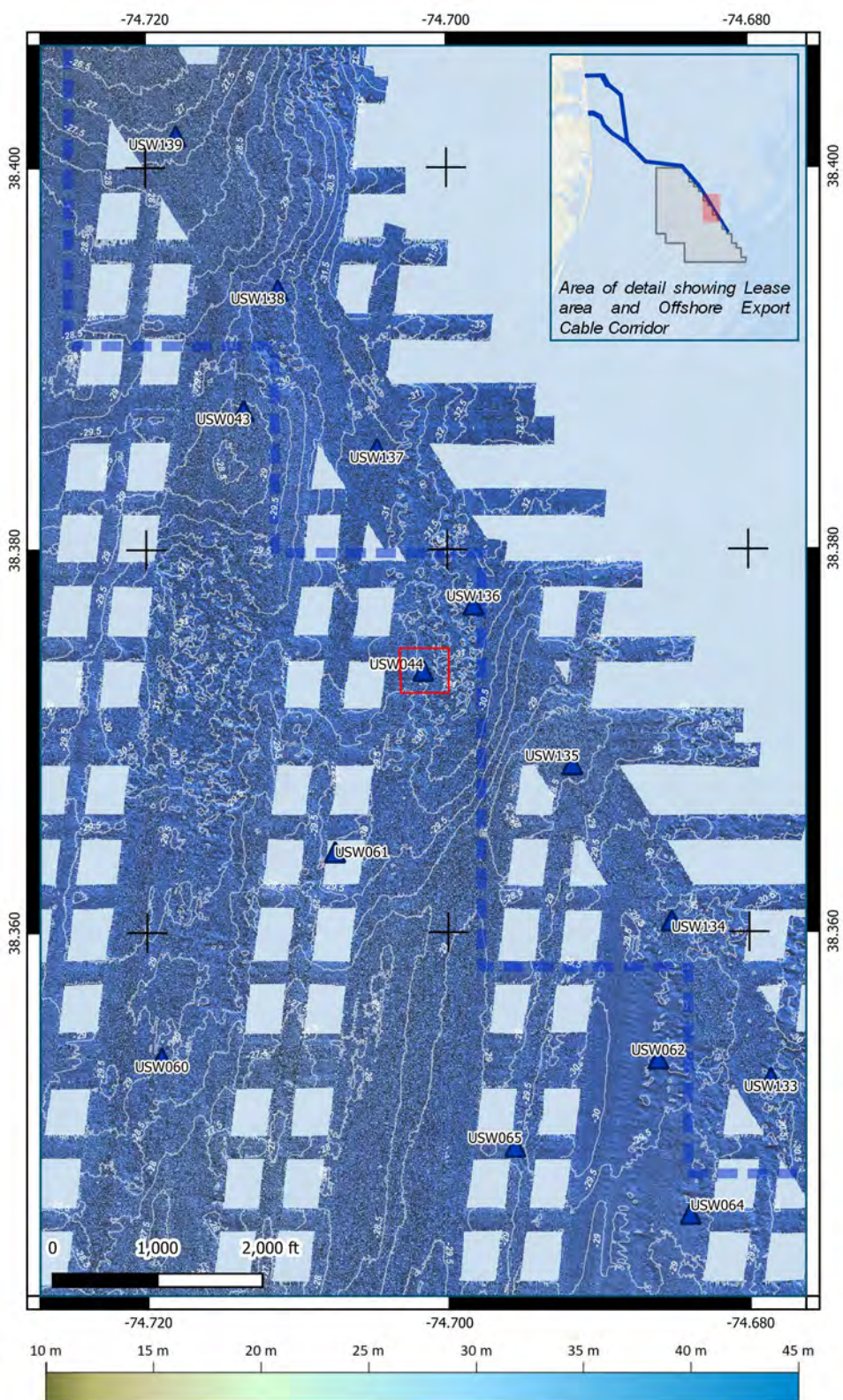


### Sample Photograph





### Map of Benthic Grab Location

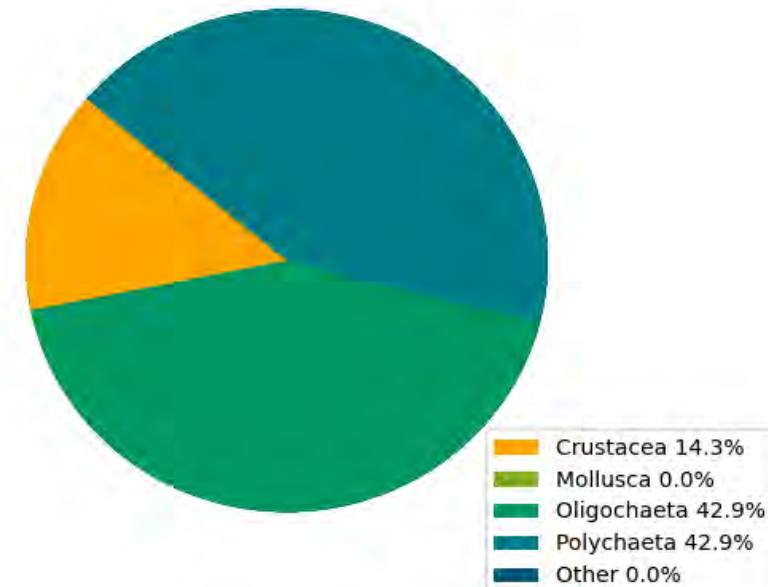


### Benthic Grab USW044

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 175                             |
| Taxa Richness <sup>1</sup> :   |                     | 3                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

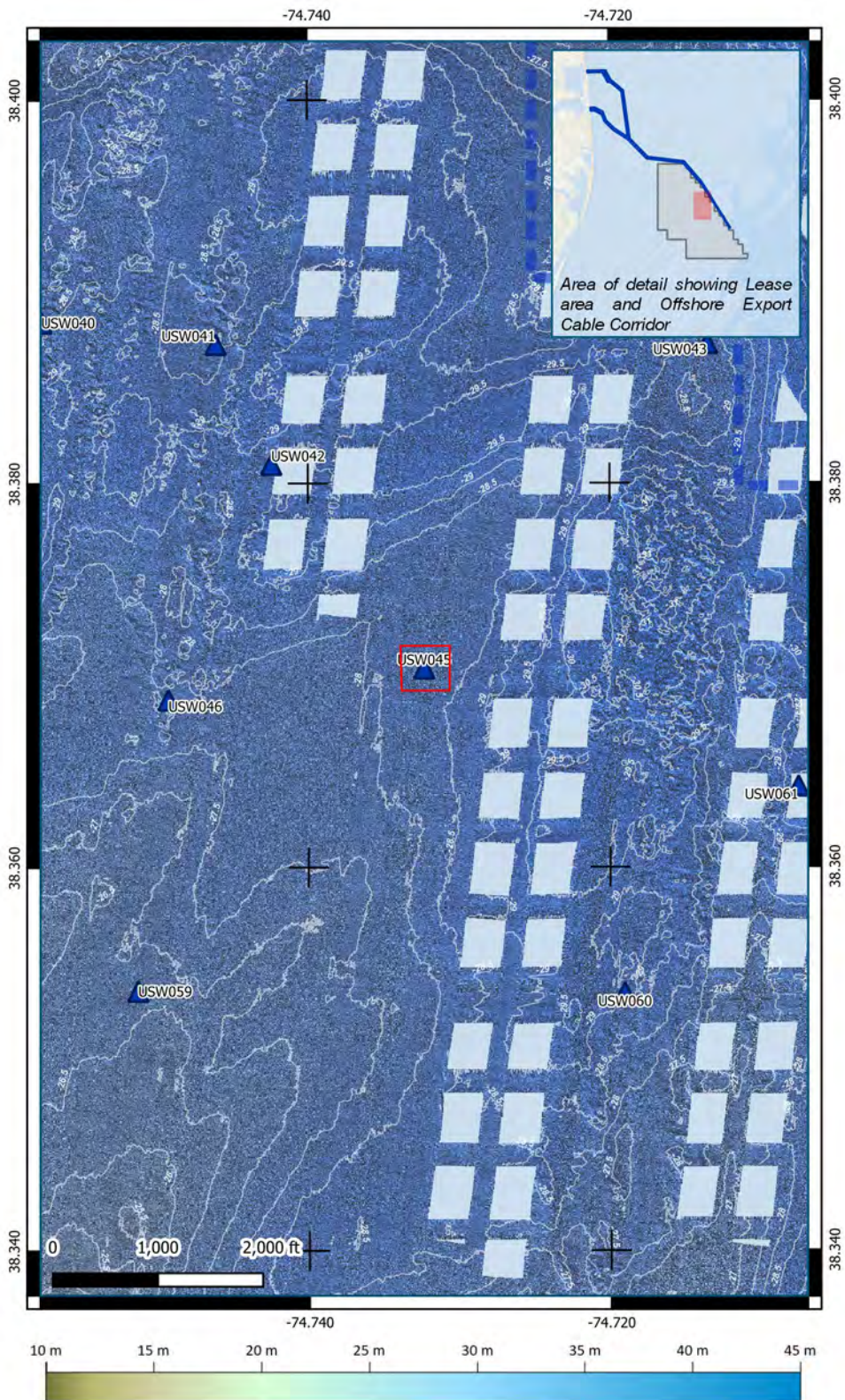


### Sample Photograph





### Map of Benthic Grab Location

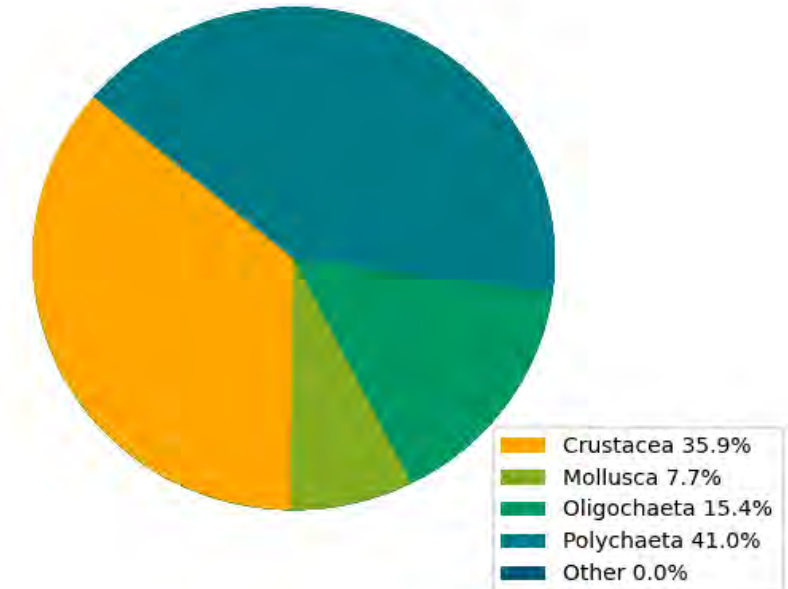


### Benthic Grab USW045

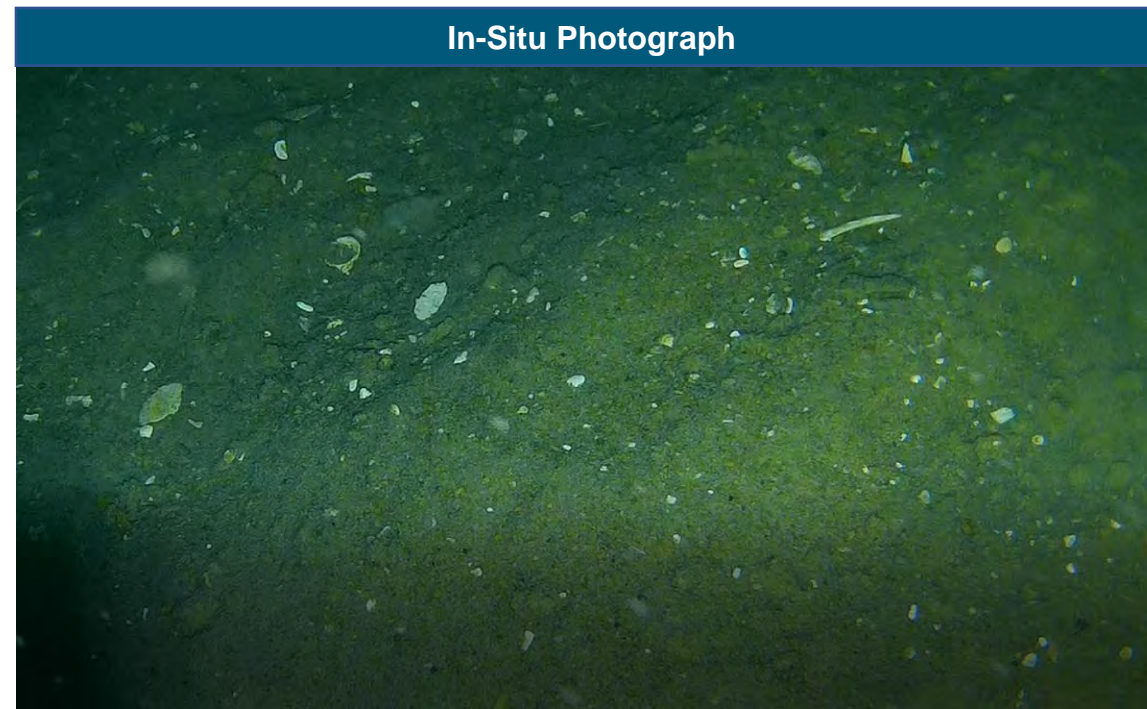
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 975                             |
| Taxa Richness <sup>1</sup> :   |                     | 18                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

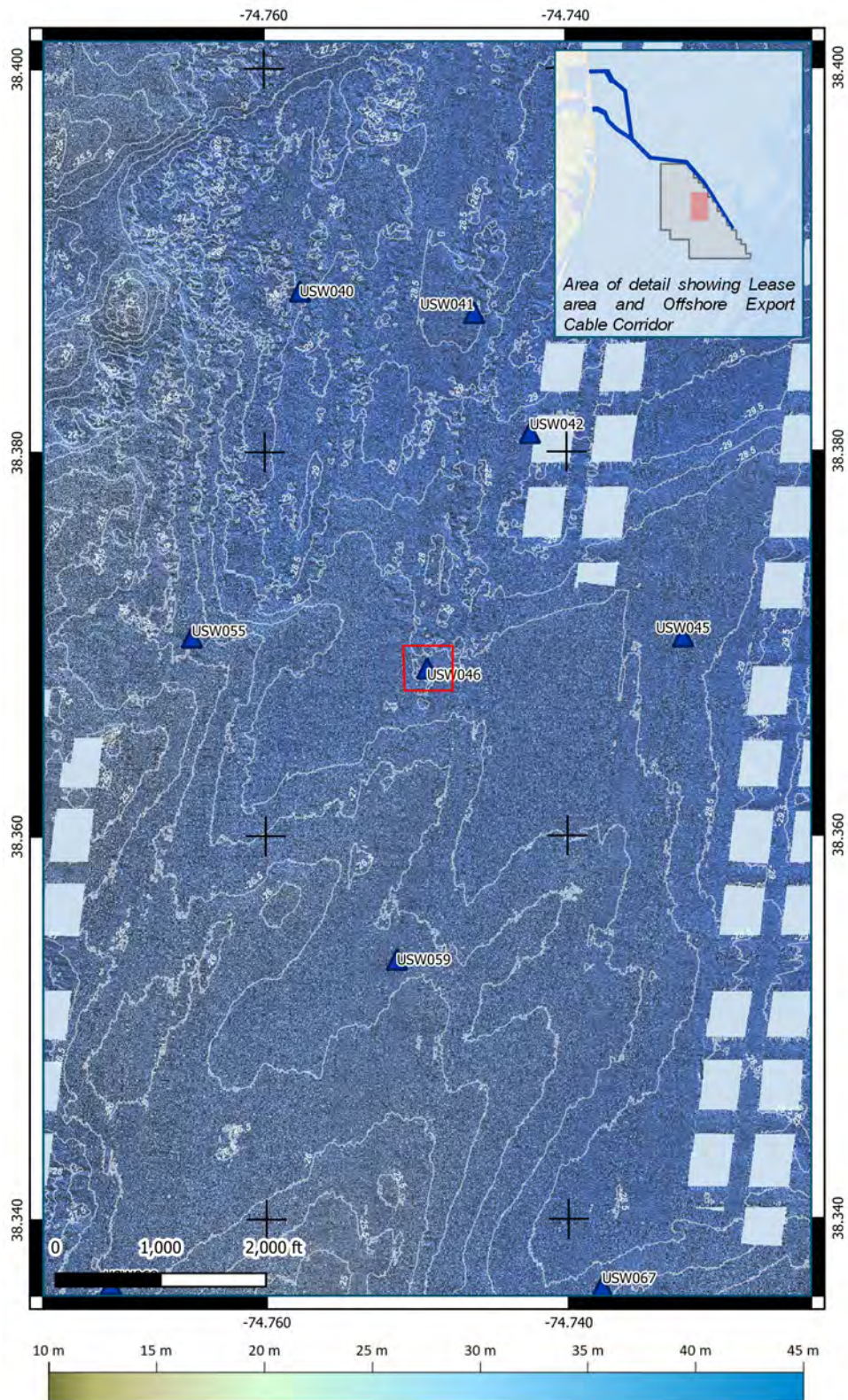


### Sample Photograph





### Map of Benthic Grab Location

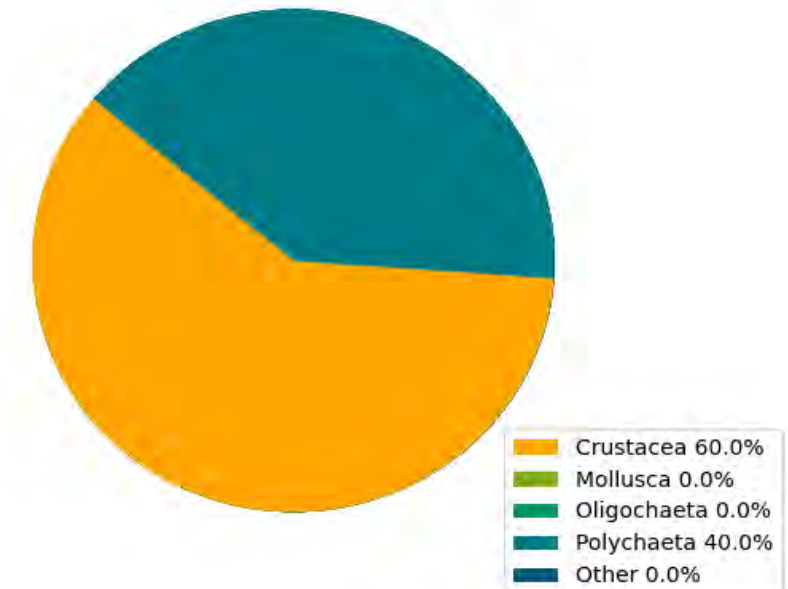


### Benthic Grab USW046

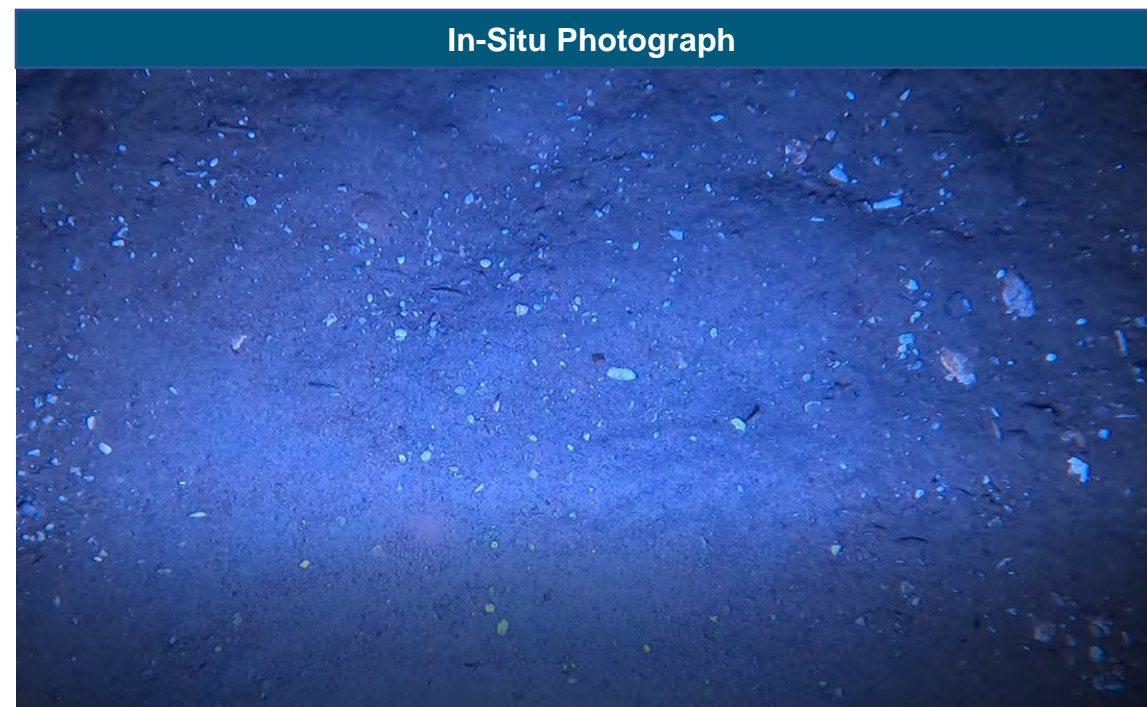
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 125                             |
| Taxa Richness <sup>1</sup> :   |                     | 4                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

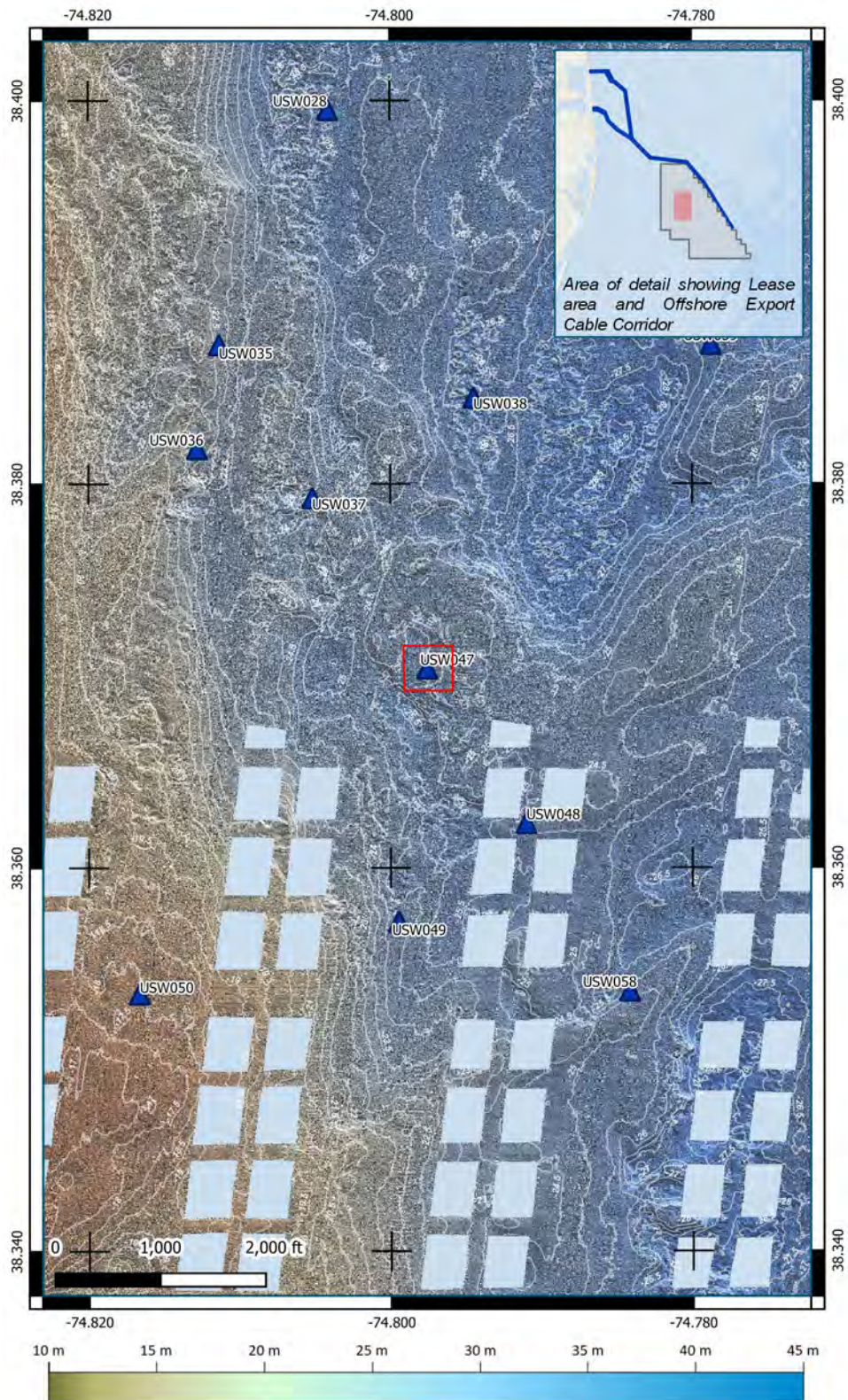


### Sample Photograph





### Map of Benthic Grab Location

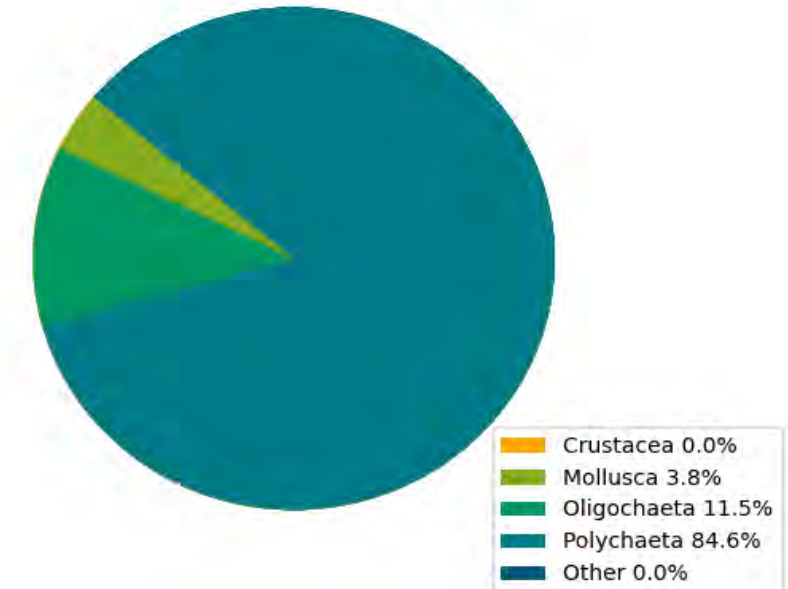


### Benthic Grab USW047

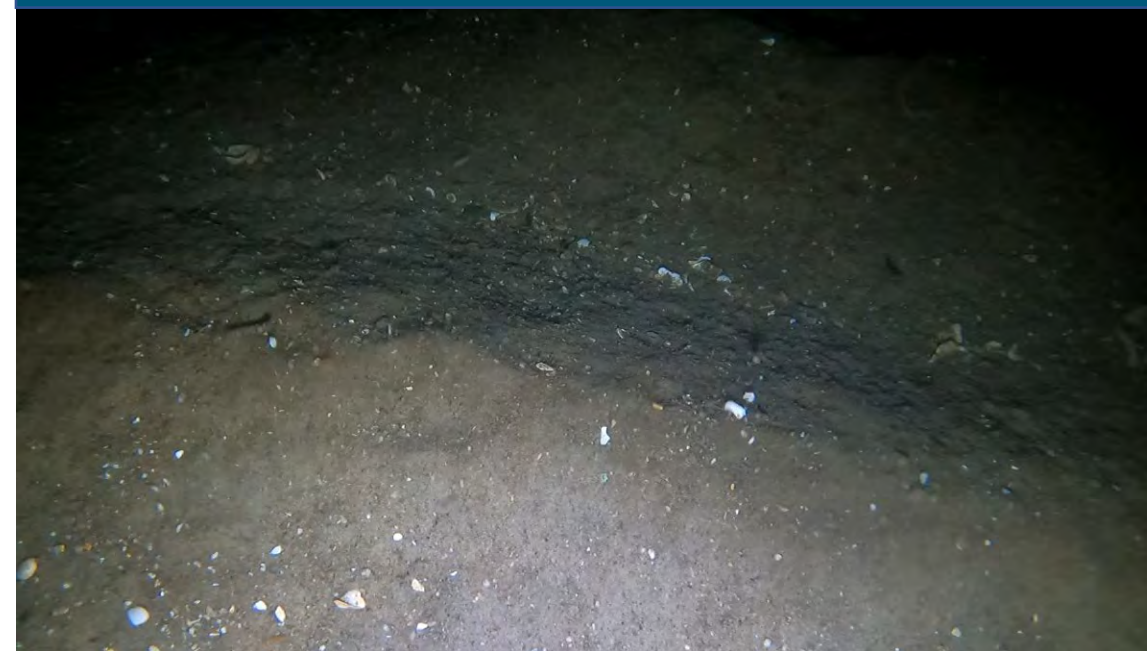
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 650                             |
| Taxa Richness <sup>1</sup> :   |                     | 10                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

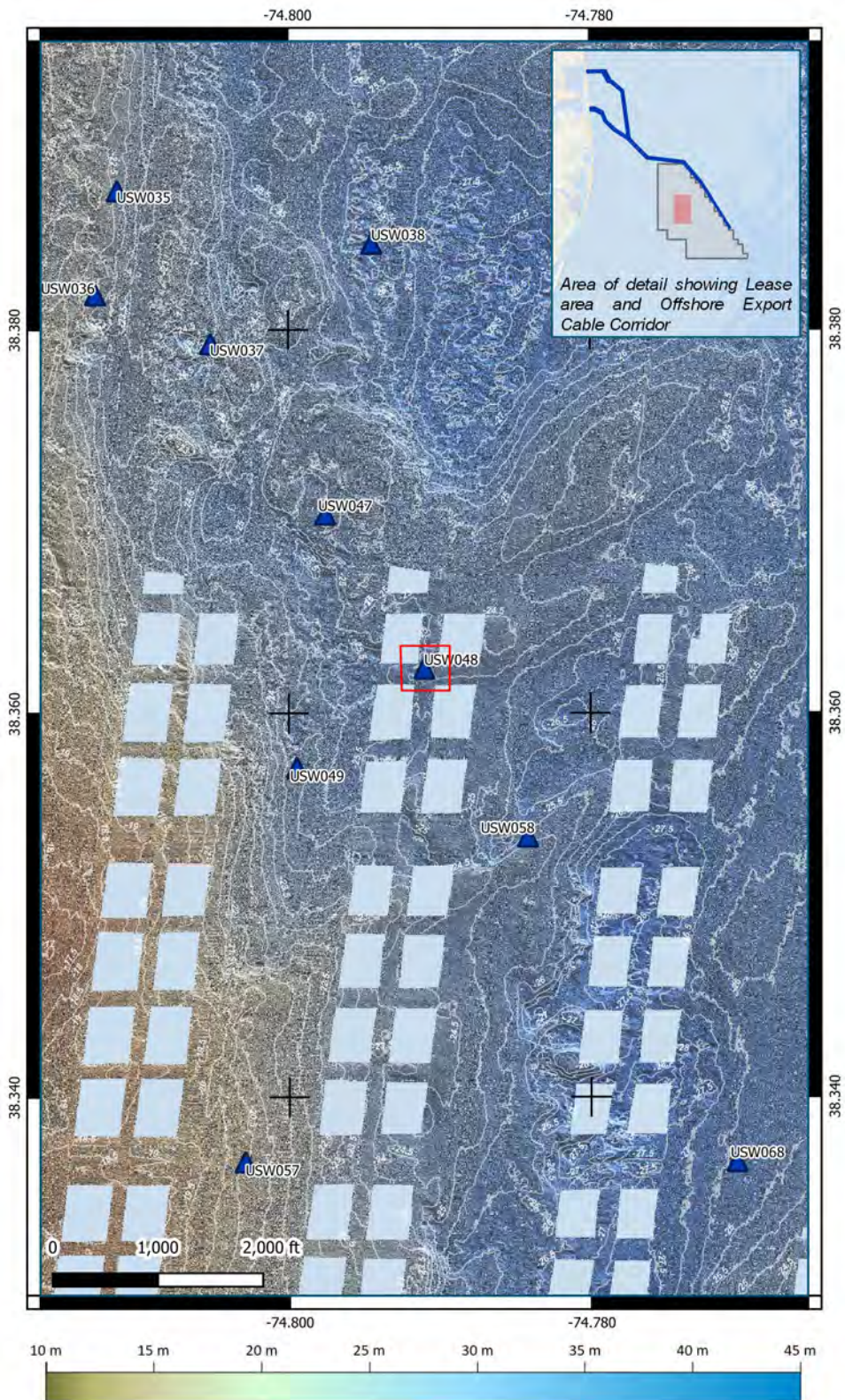


### Sample Photograph





### Map of Benthic Grab Location

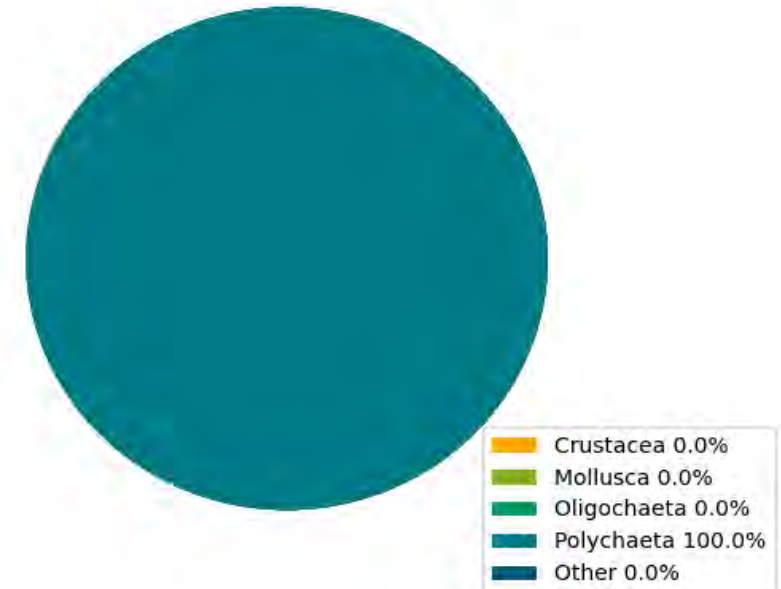


### Benthic Grab USW048

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 200                           |
| Taxa Richness <sup>1</sup> :   |                     | 4                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

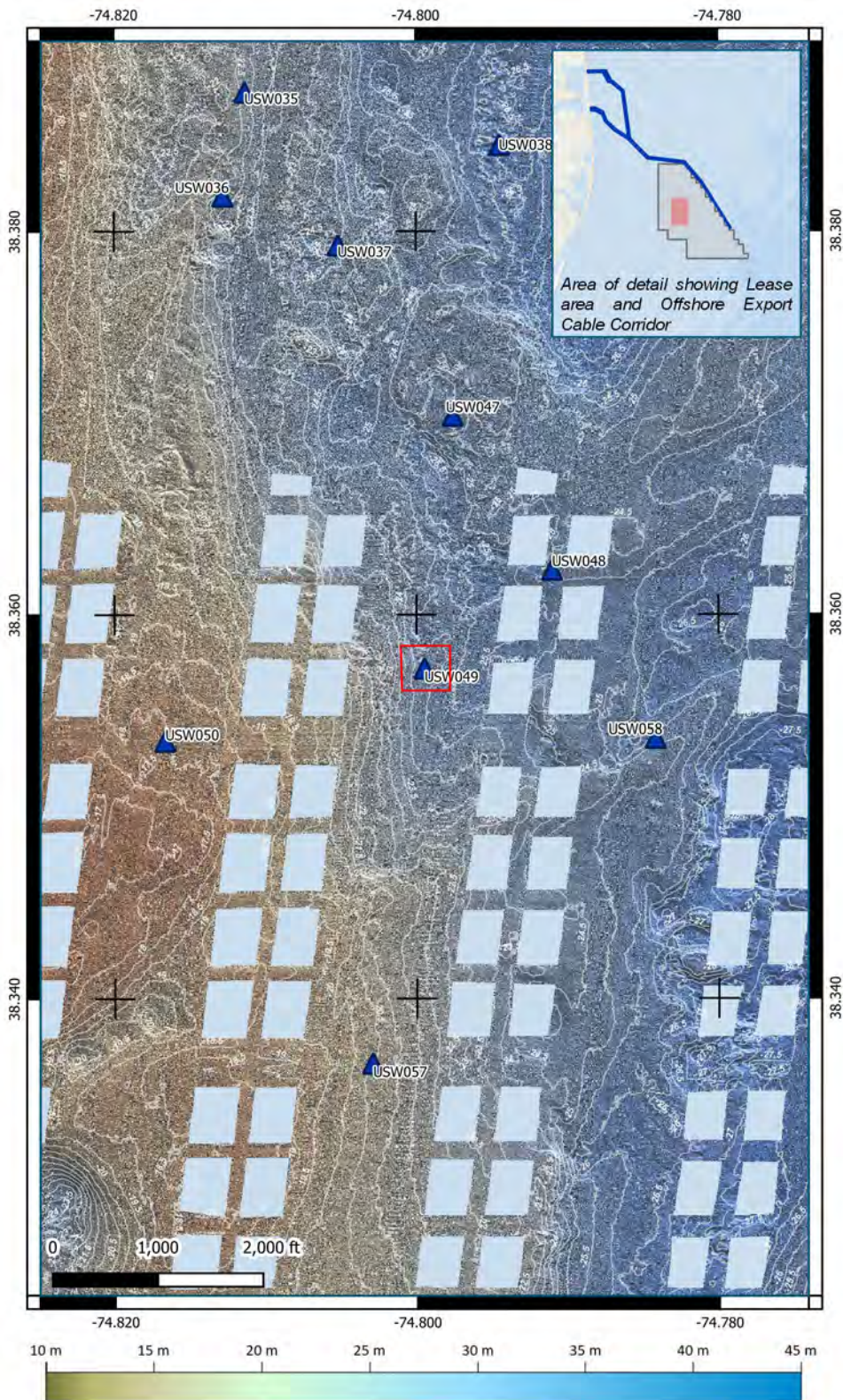


### Sample Photograph





### Map of Benthic Grab Location

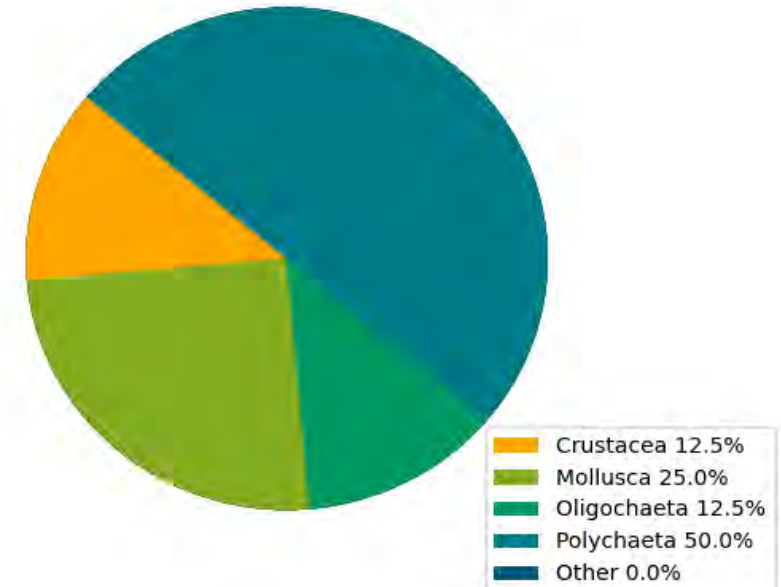


### Benthic Grab USW049

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 200                             |
| Taxa Richness <sup>1</sup> :   |                     | 5                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

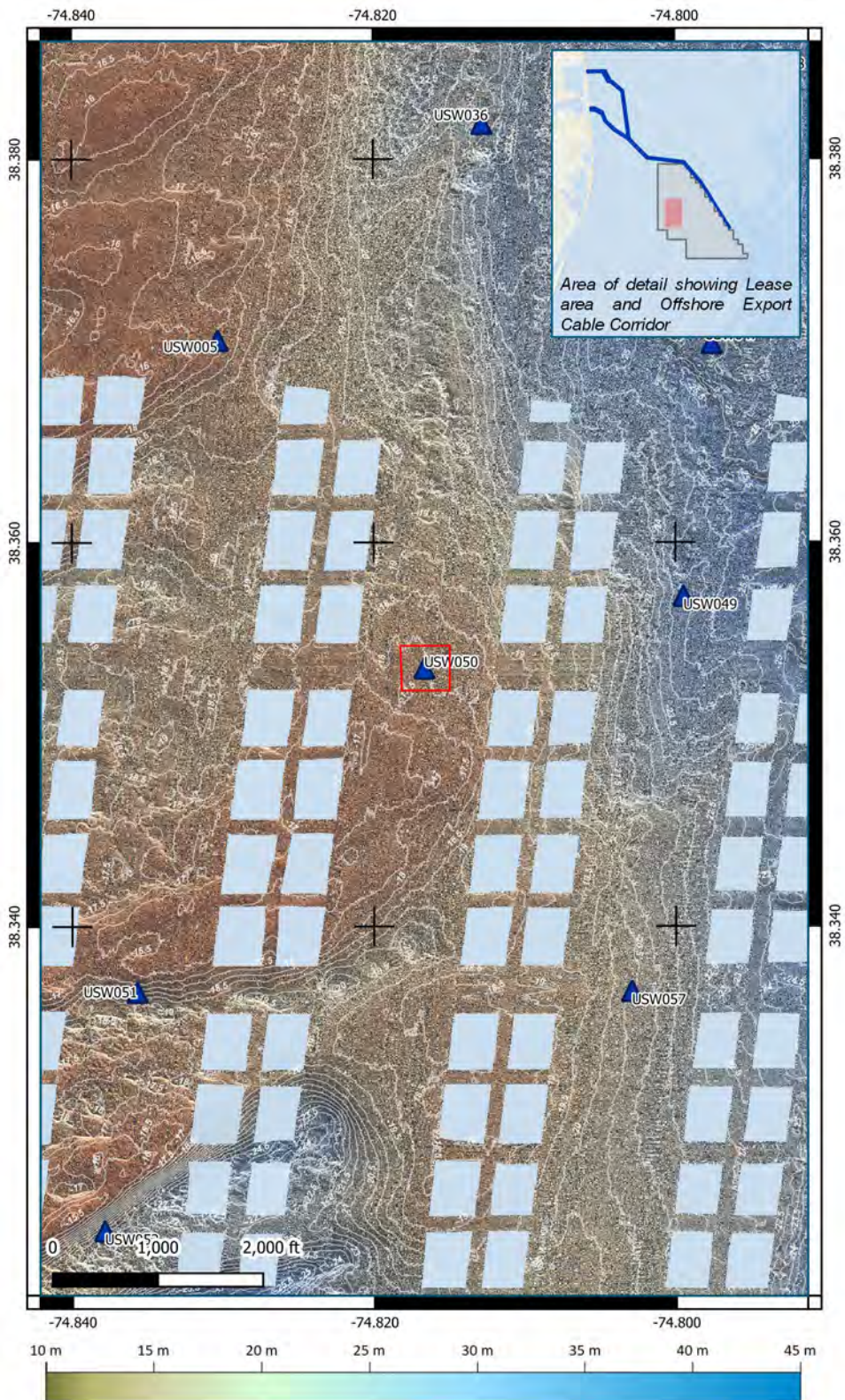


### Sample Photograph





### Map of Benthic Grab Location

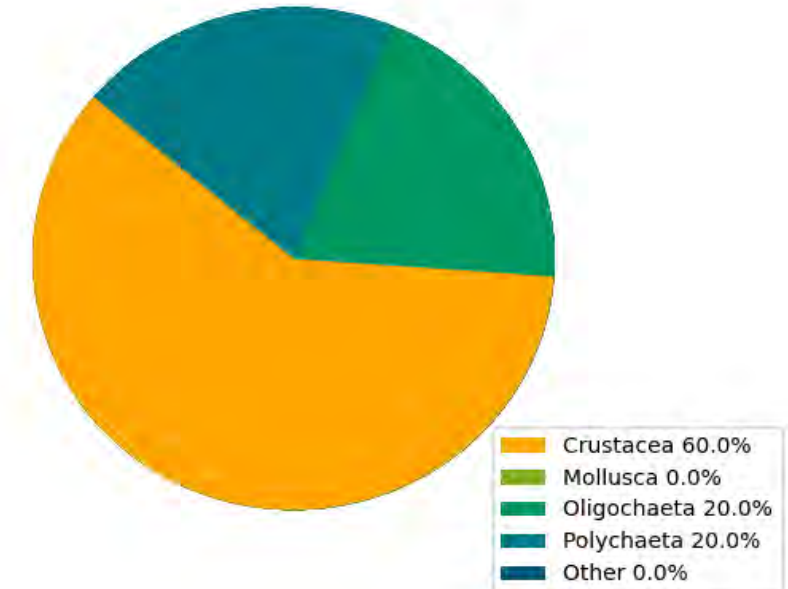


### Benthic Grab USW050

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 125                           |
| Taxa Richness <sup>1</sup> :   |                     | 4                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

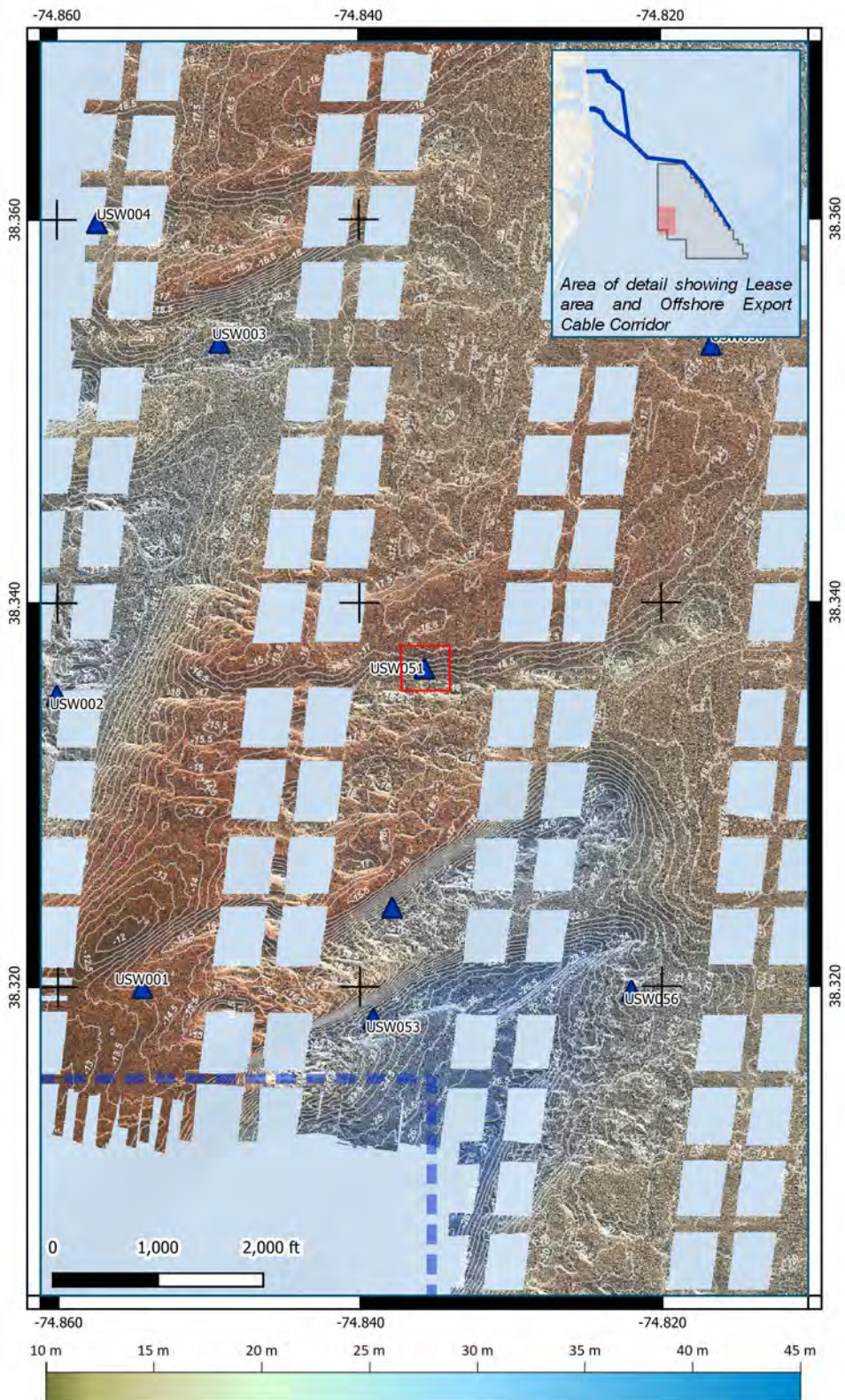


### Sample Photograph





### Map of Benthic Grab Location

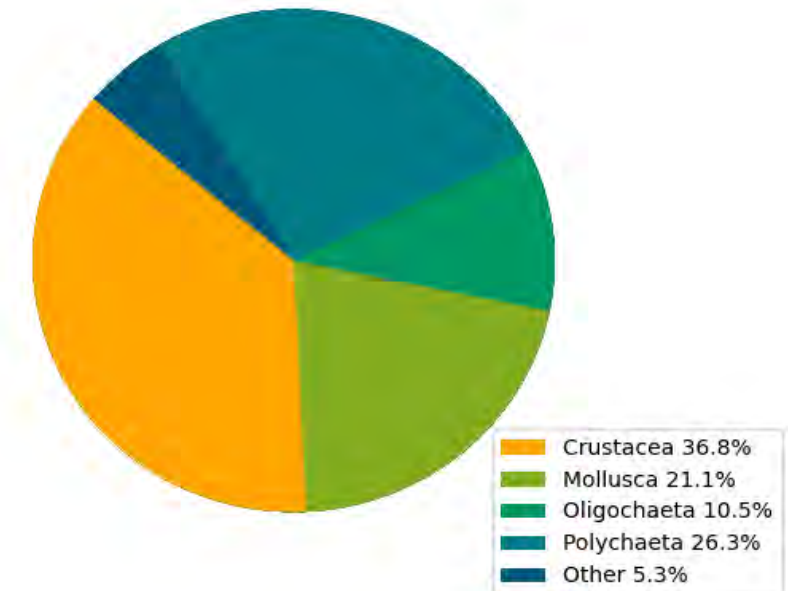


### Benthic Grab USW051

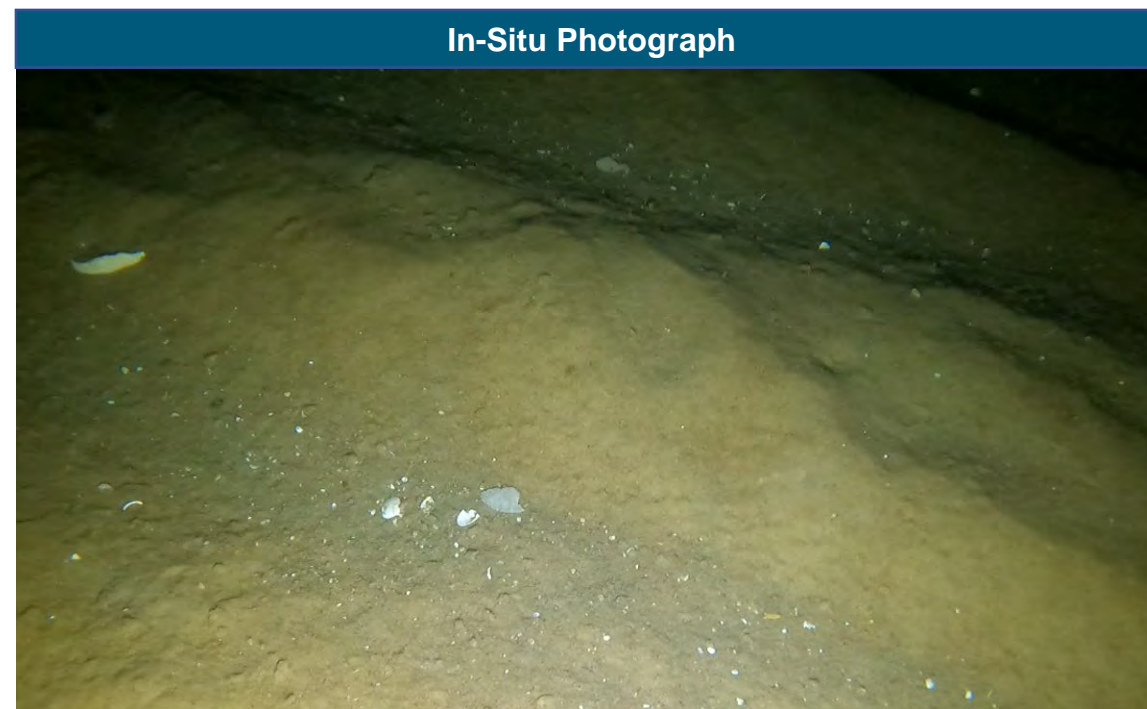
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 475                           |
| Taxa Richness <sup>1</sup> :   |                     | 11                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

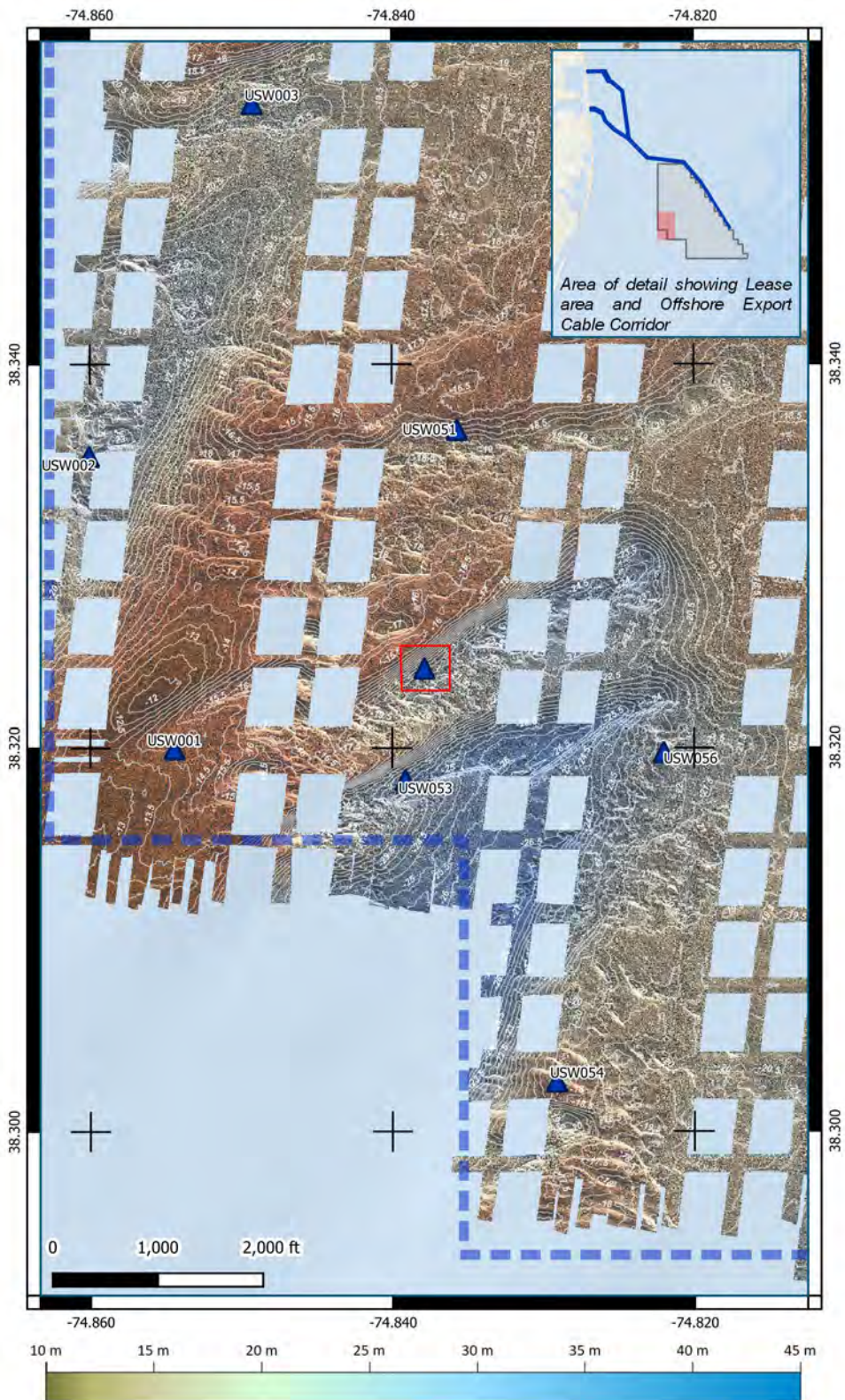


### Sample Photograph





### Map of Benthic Grab Location

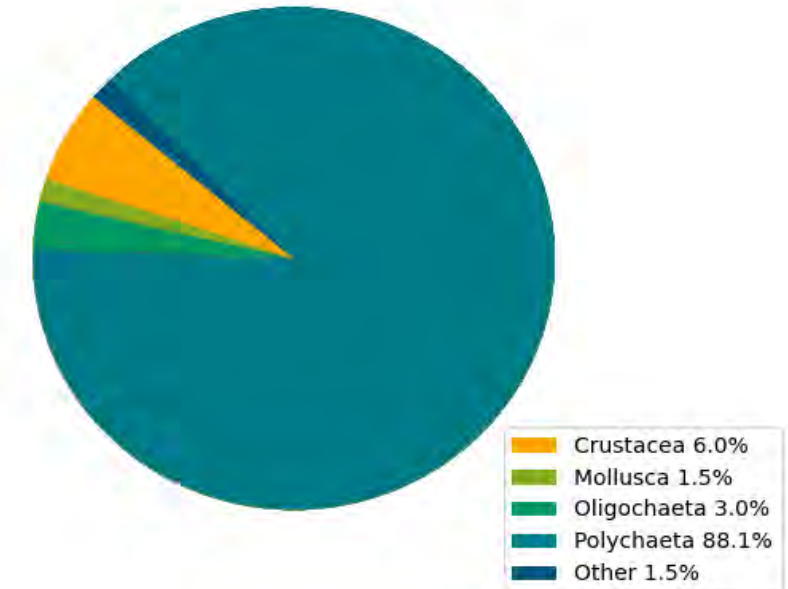


### Benthic Grab USW052

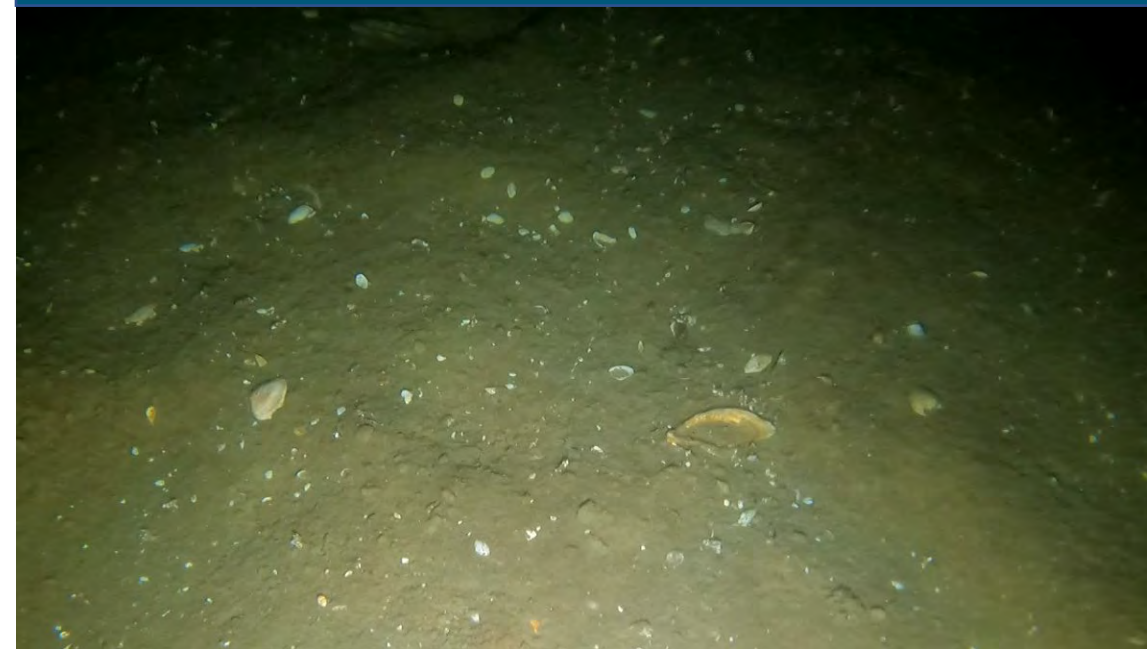
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1675                          |
| Taxa Richness <sup>1</sup> :   |                     | 16                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

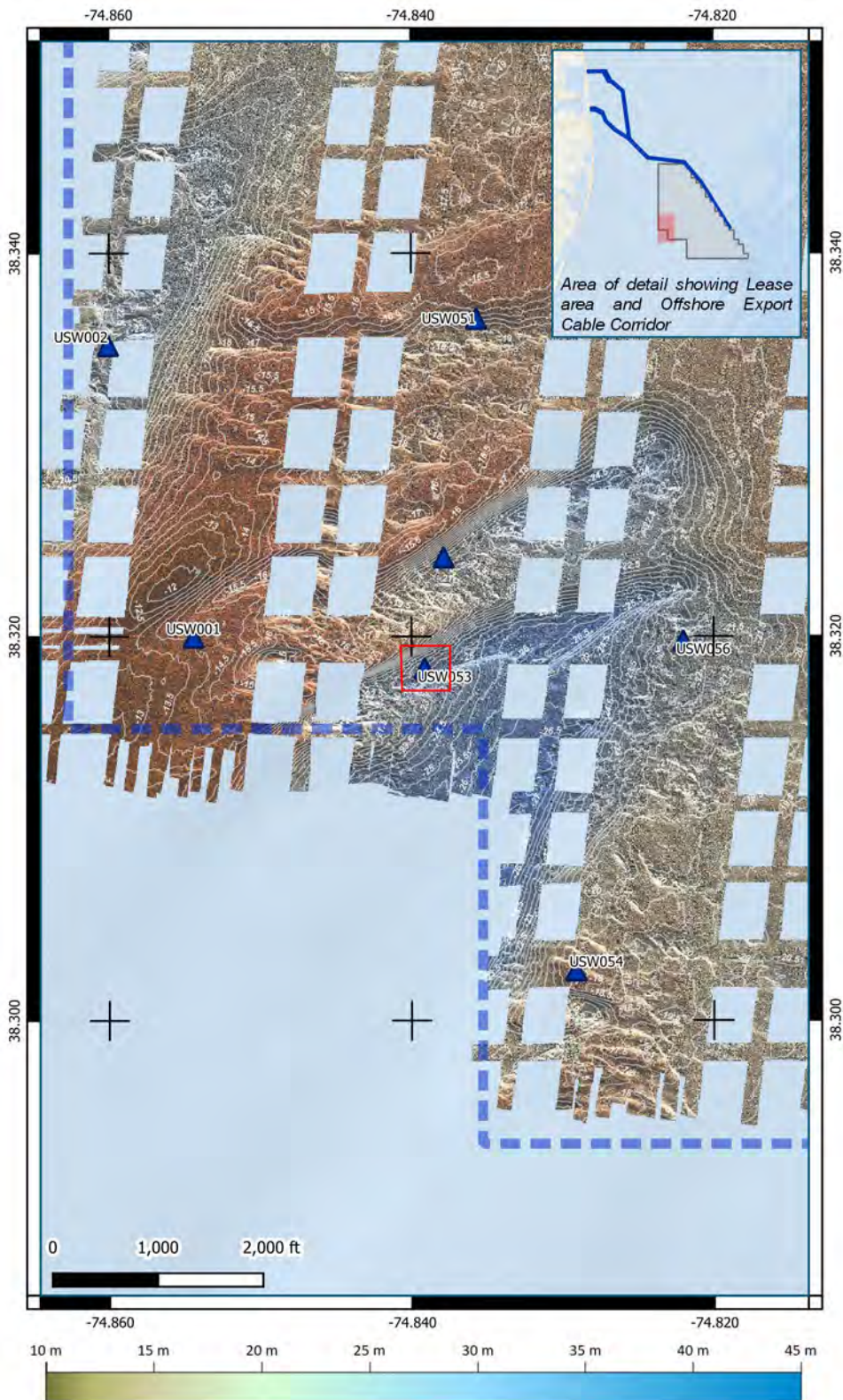


### Sample Photograph





### Map of Benthic Grab Location

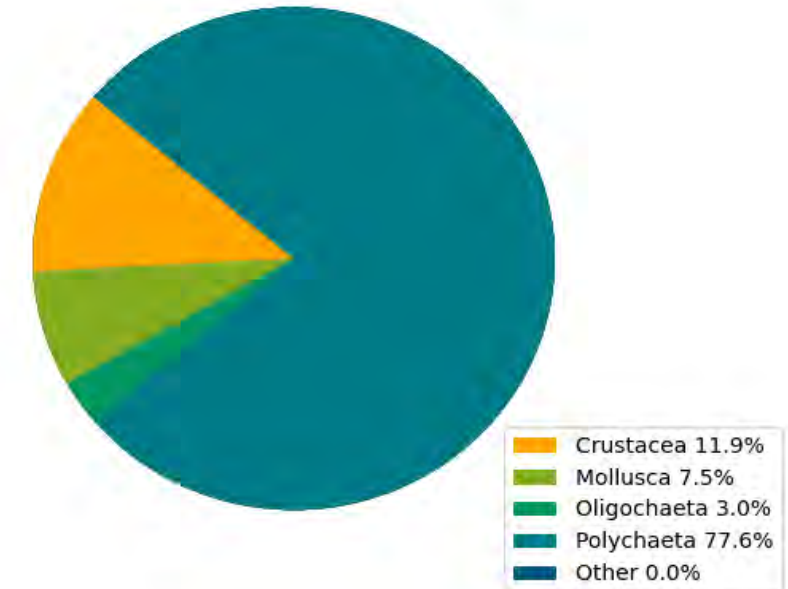


### Benthic Grab USW053

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Fine/Very Fine Sand           |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1675                          |
| Taxa Richness <sup>1</sup> :   |                     | 17                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

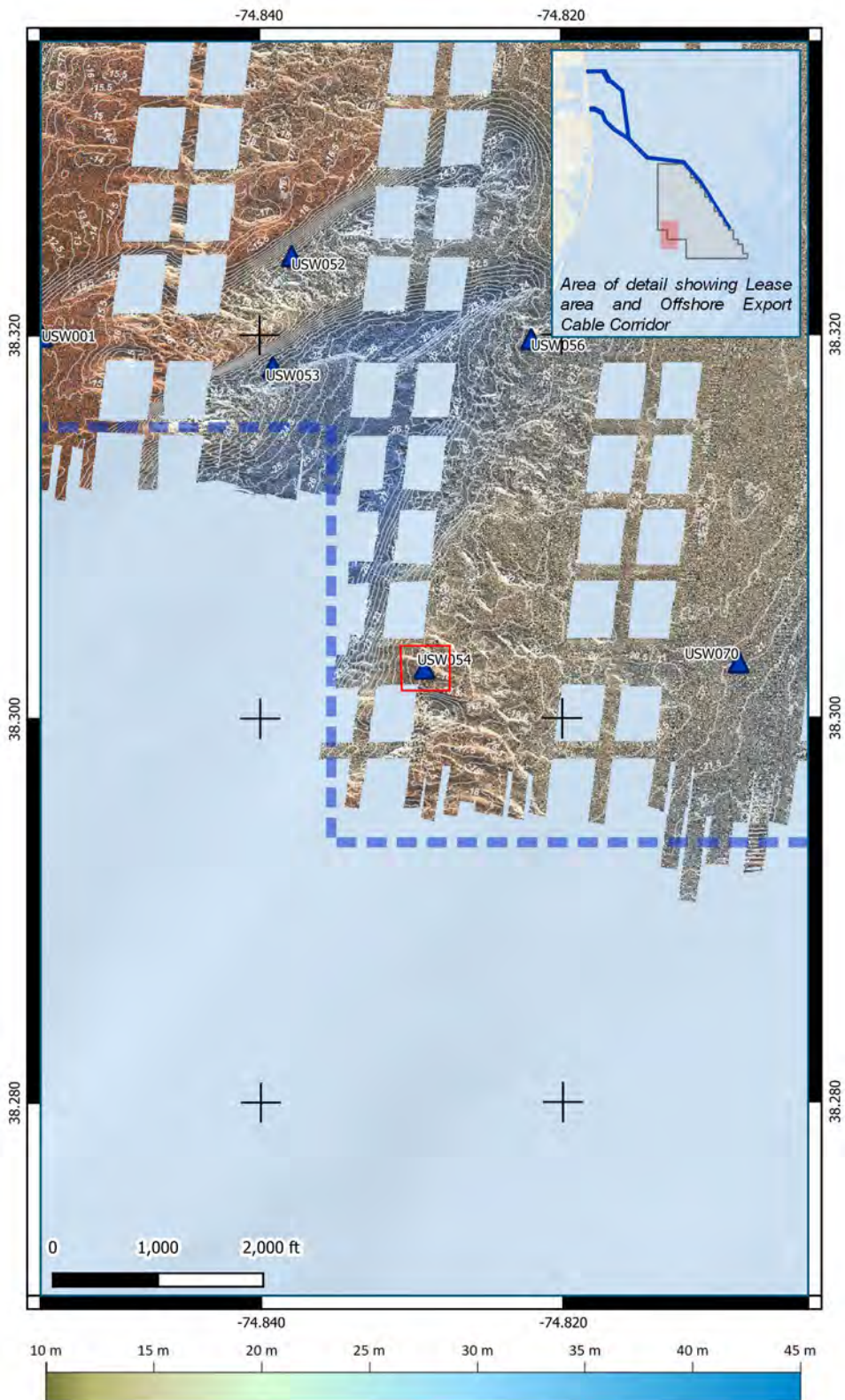


### Sample Photograph





### Map of Benthic Grab Location

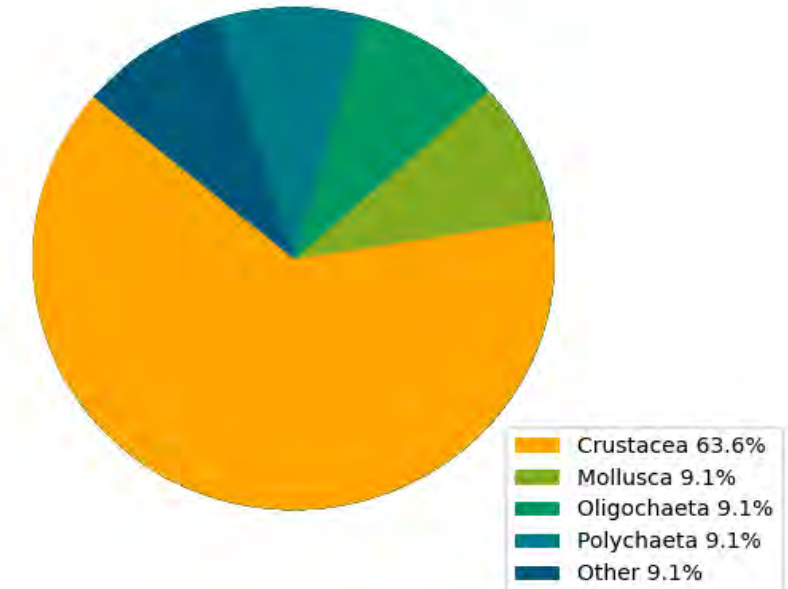


### Benthic Grab USW054

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 275                           |
| Taxa Richness <sup>1</sup> :   |                     | 7                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

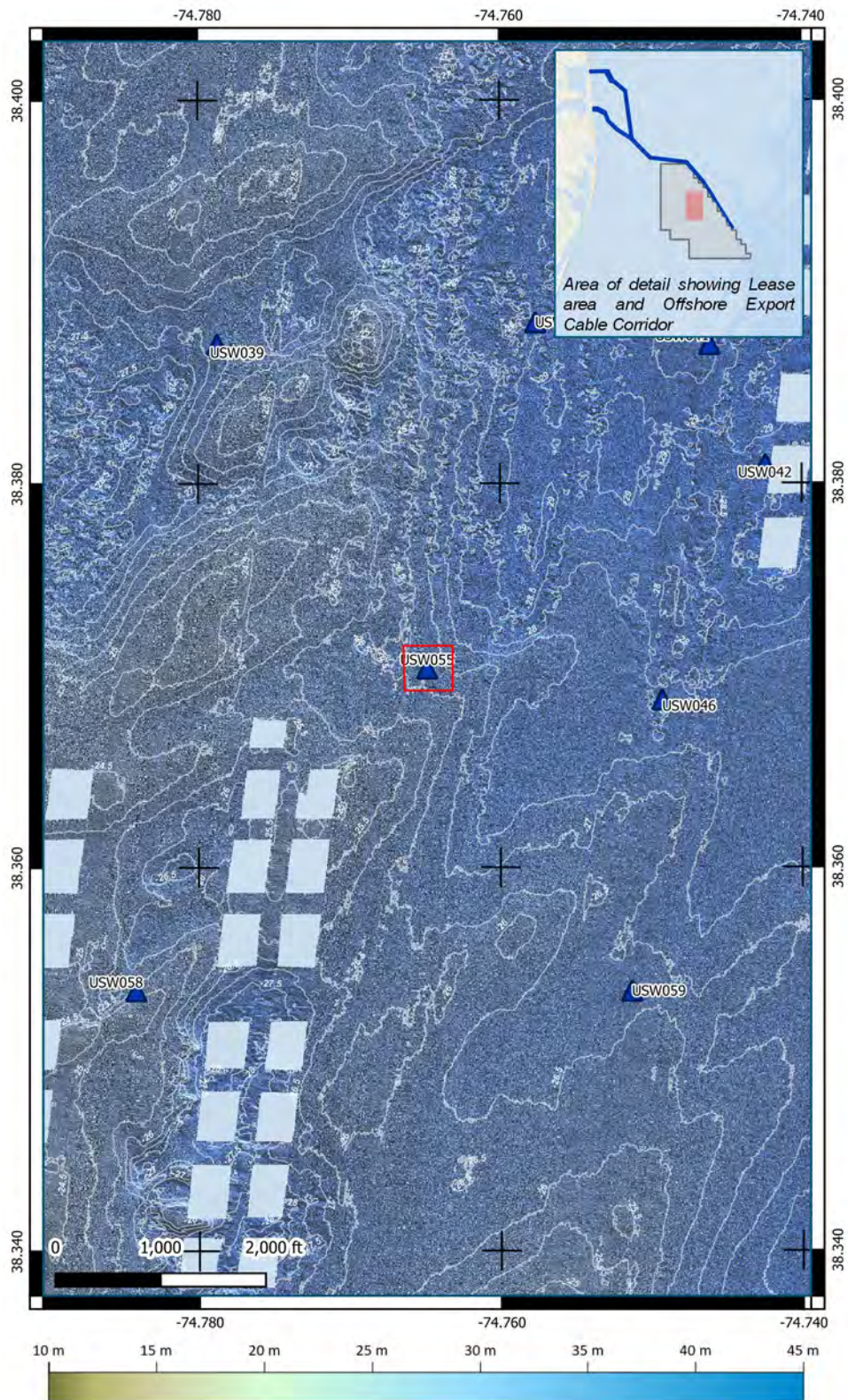


### Sample Photograph





### Map of Benthic Grab Location

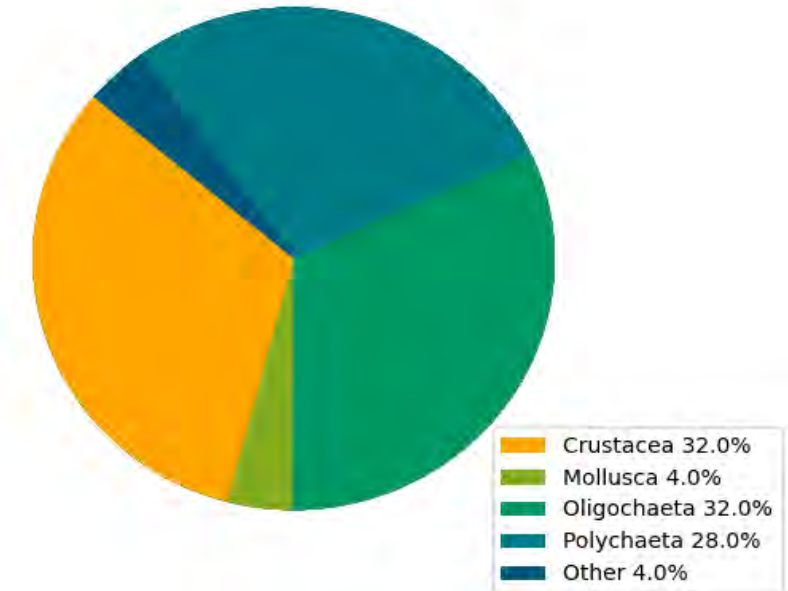


### Benthic Grab USW055

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Very Coarse/Coarse Sand       |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 625                           |
| Taxa Richness <sup>1</sup> :   |                     | 10                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

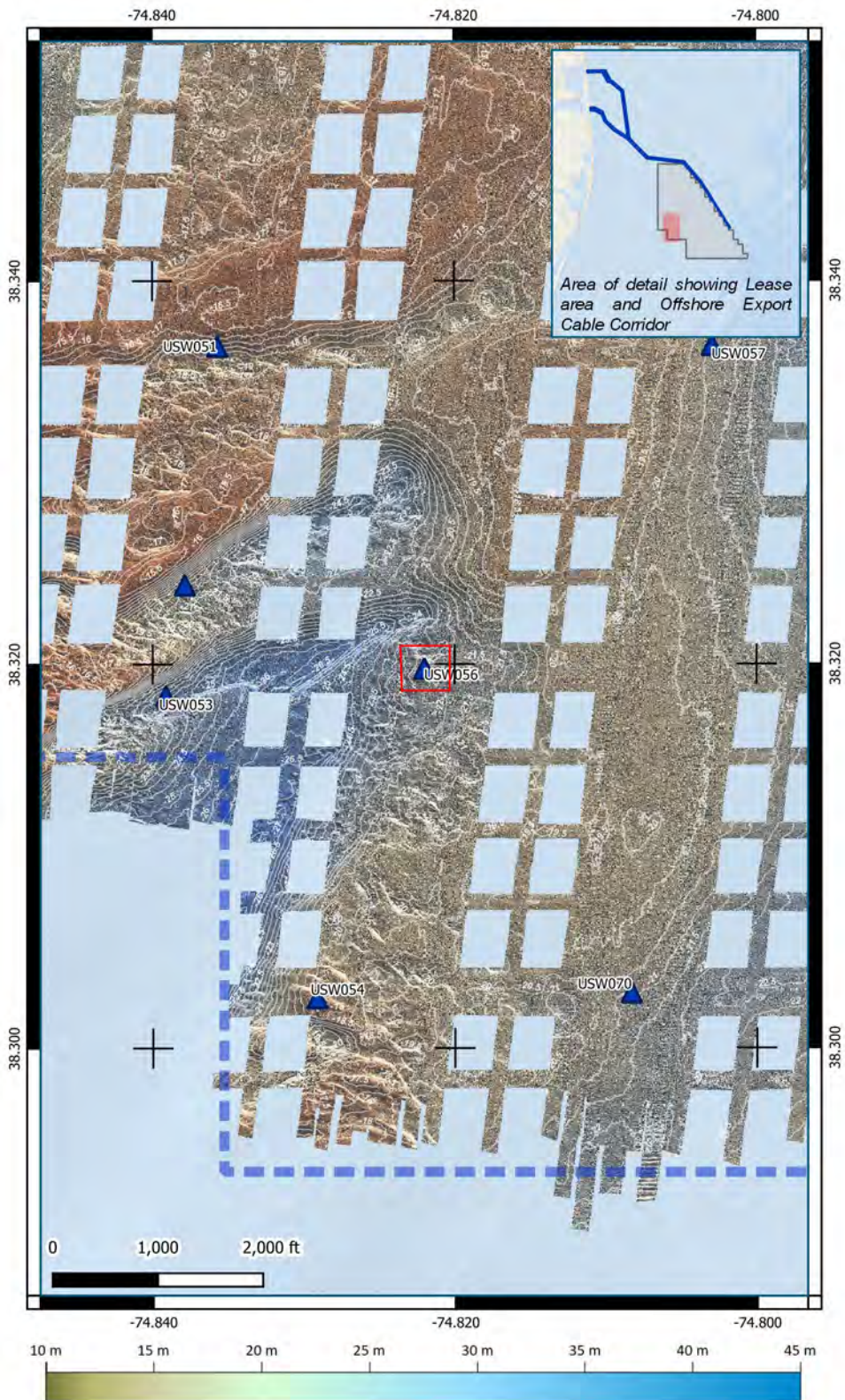


### Sample Photograph





### Map of Benthic Grab Location

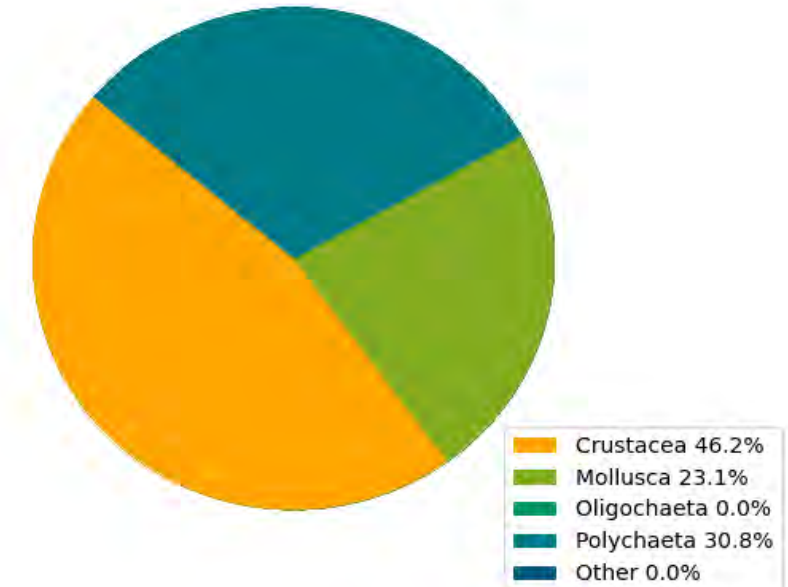


### Benthic Grab USW056

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 325                           |
| Taxa Richness <sup>1</sup> :   |                     | 8                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

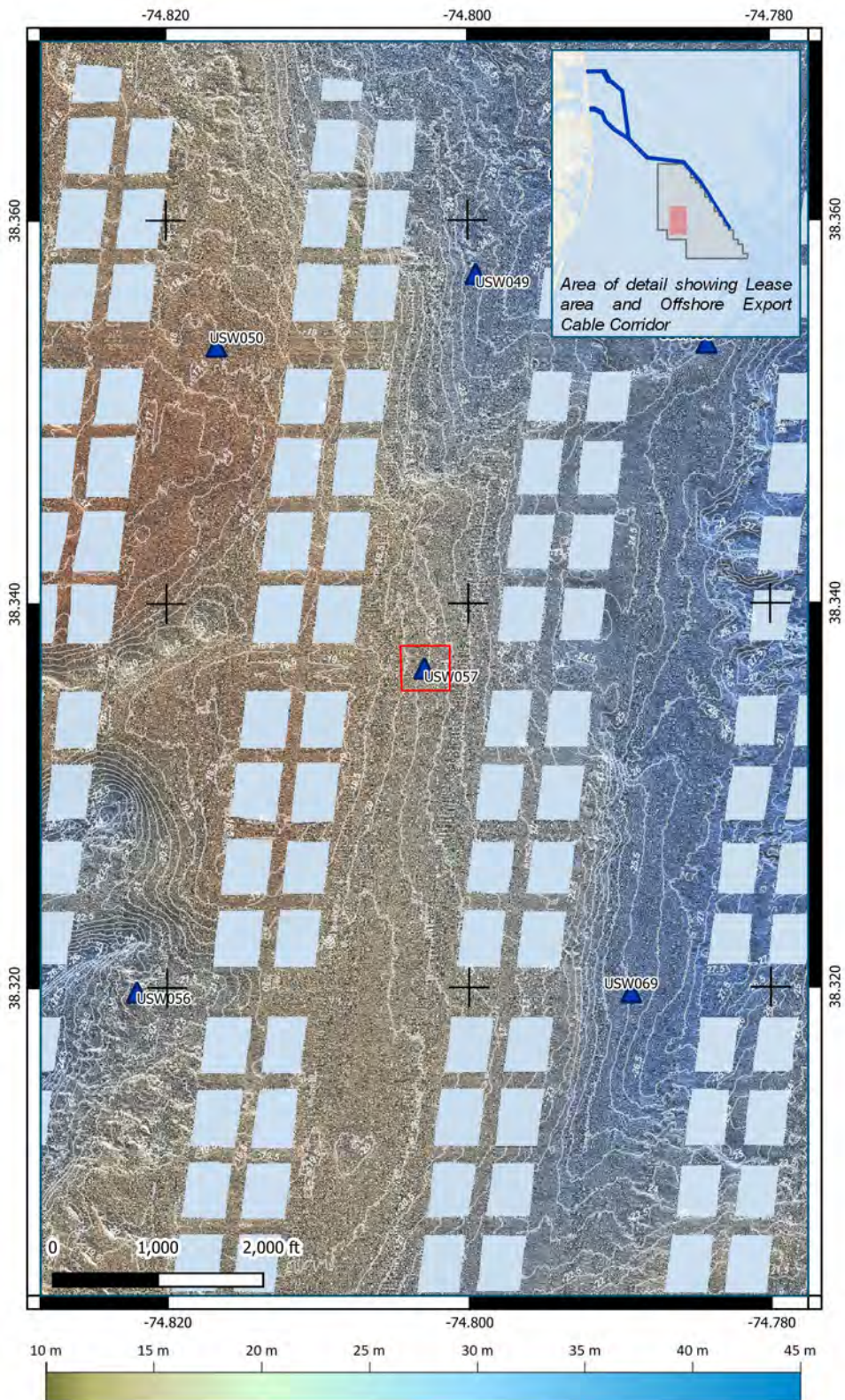


### Sample Photograph





### Map of Benthic Grab Location

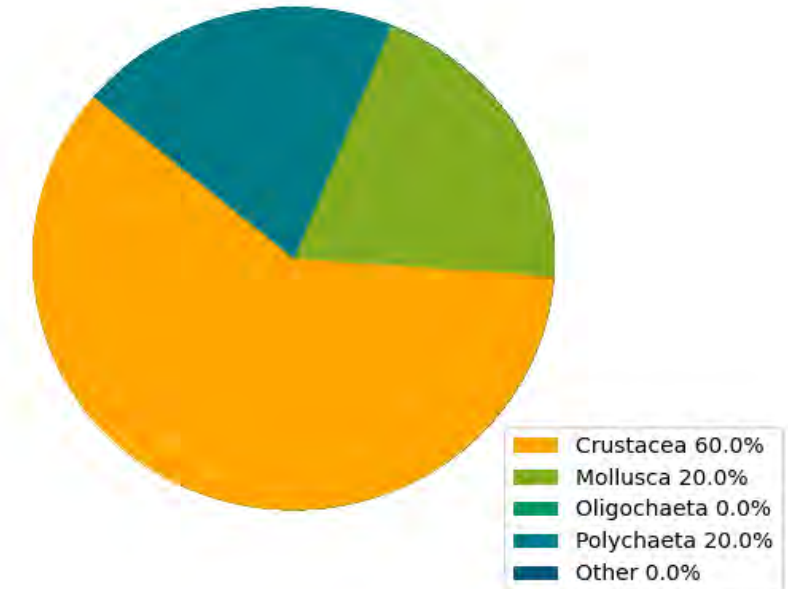


### Benthic Grab USW057

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 125                           |
| Taxa Richness <sup>1</sup> :   |                     | 4                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

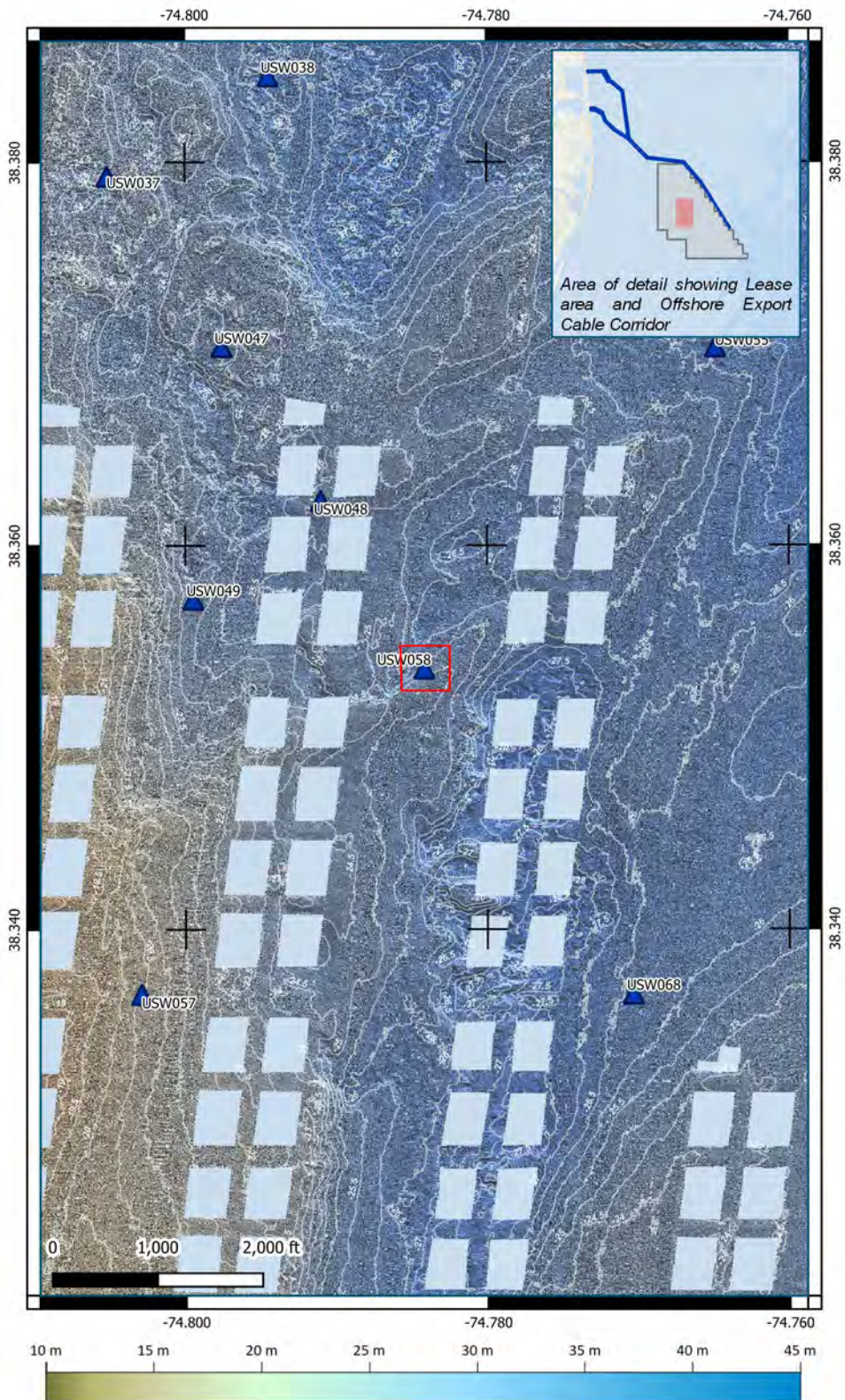


### Sample Photograph





### Map of Benthic Grab Location

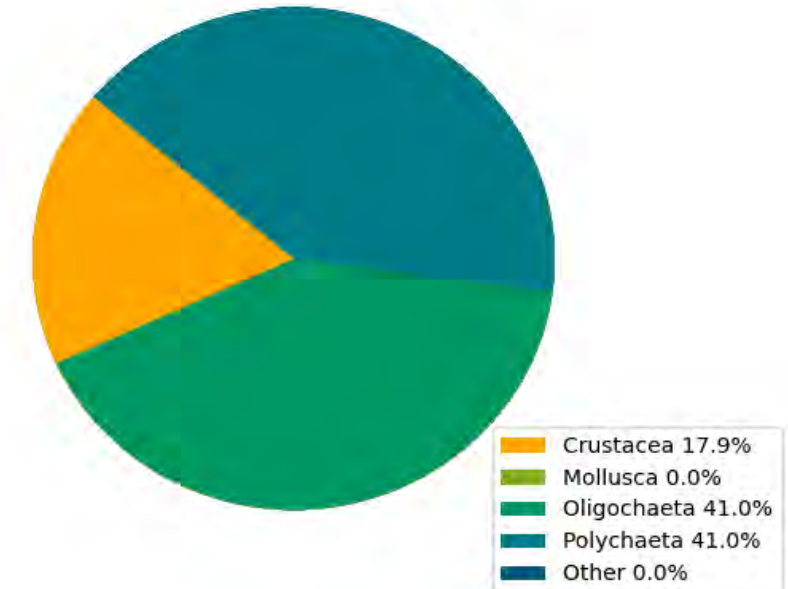


### Benthic Grab USW058

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 975                           |
| Taxa Richness <sup>1</sup> :   |                     | 13                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

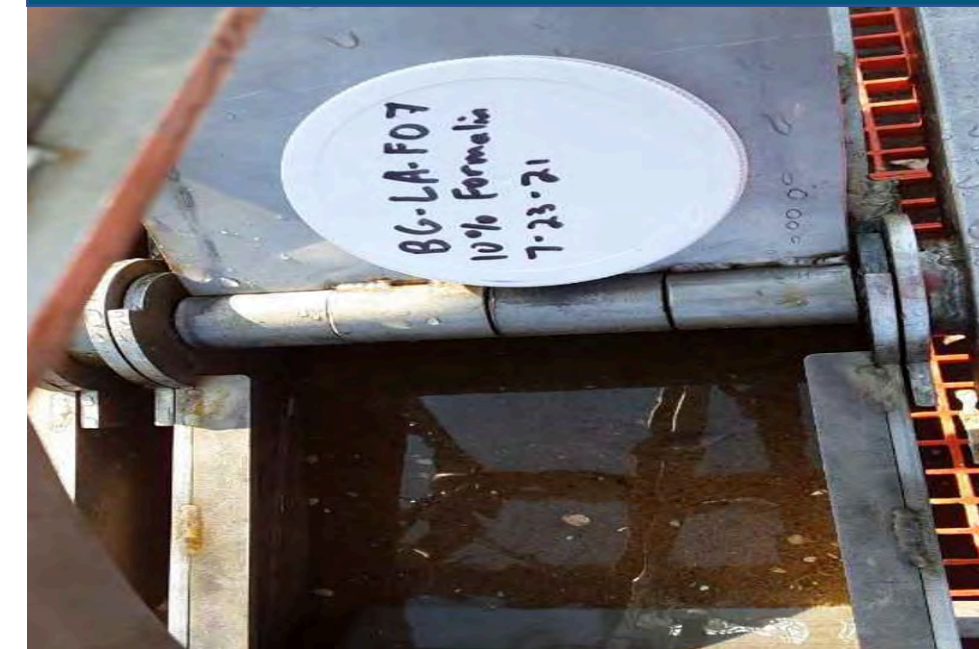
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

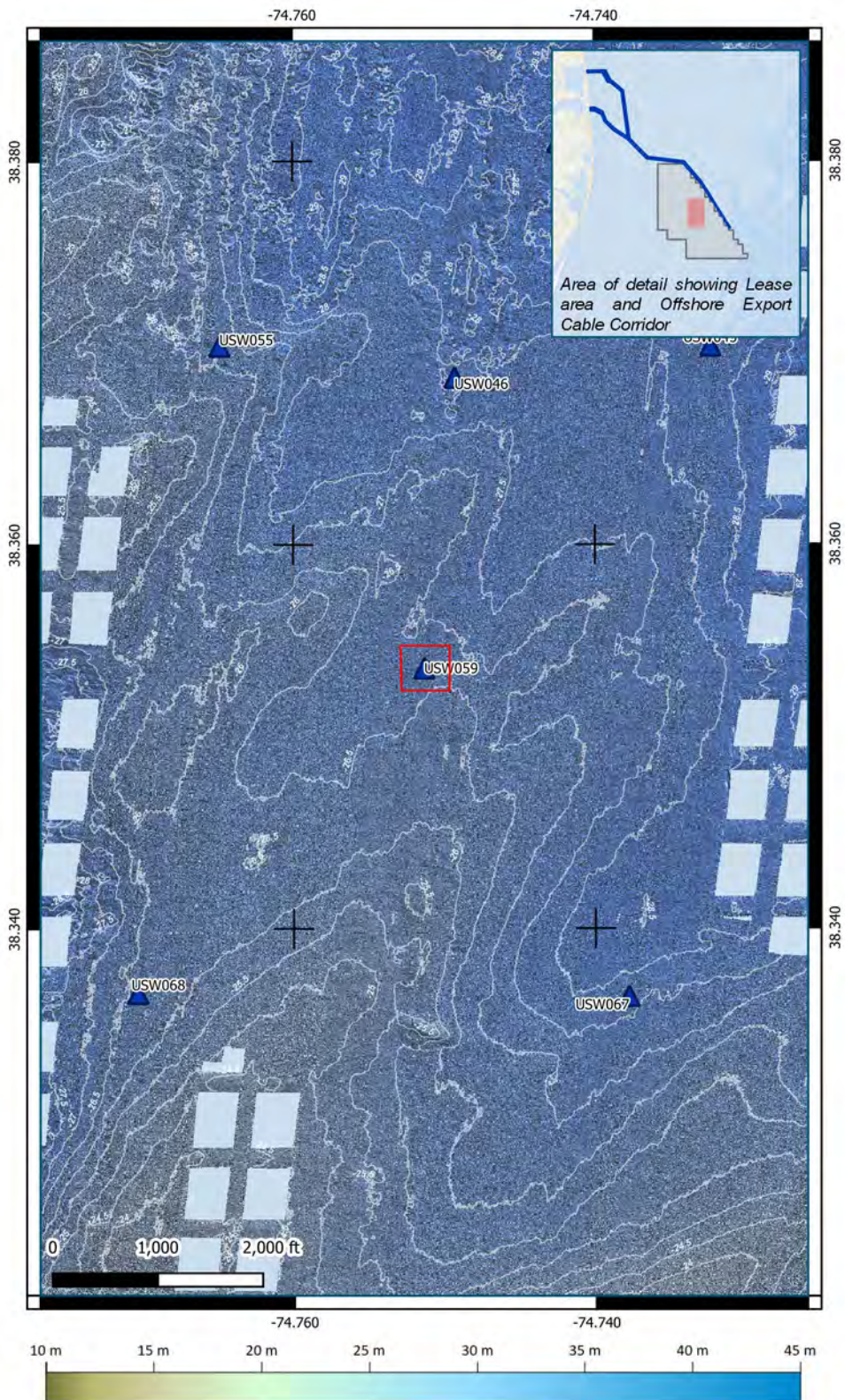


### Sample Photograph





### Map of Benthic Grab Location

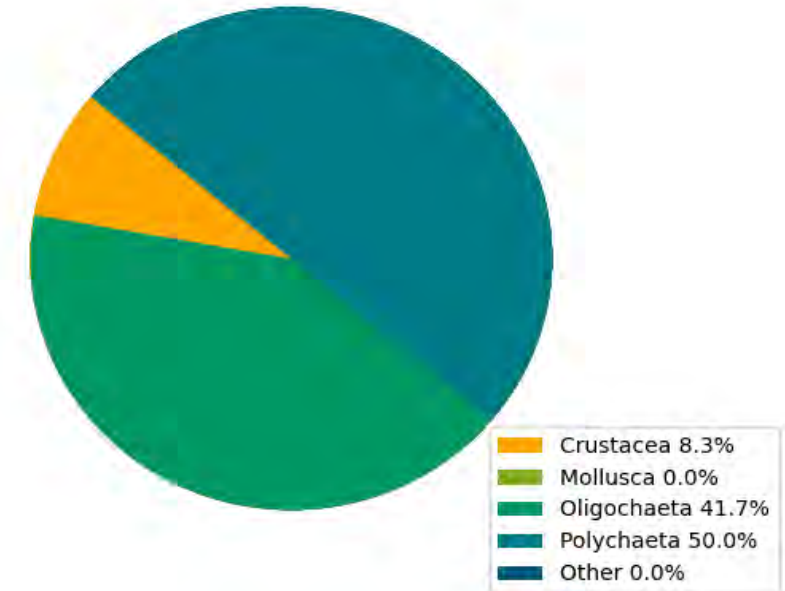


### Benthic Grab USW059

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 300                             |
| Taxa Richness <sup>1</sup> :   |                     | 7                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

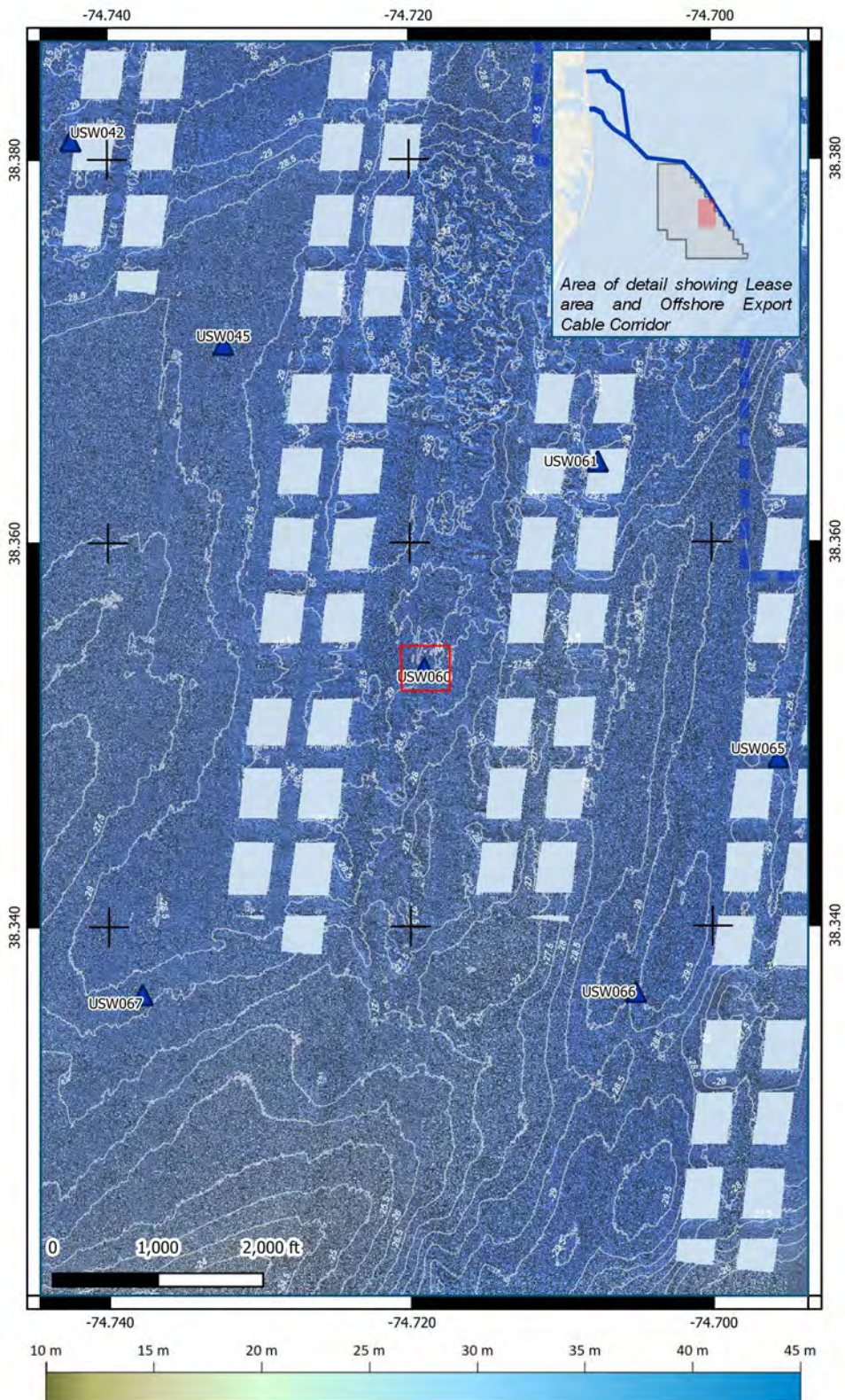


### Sample Photograph





### Map of Benthic Grab Location

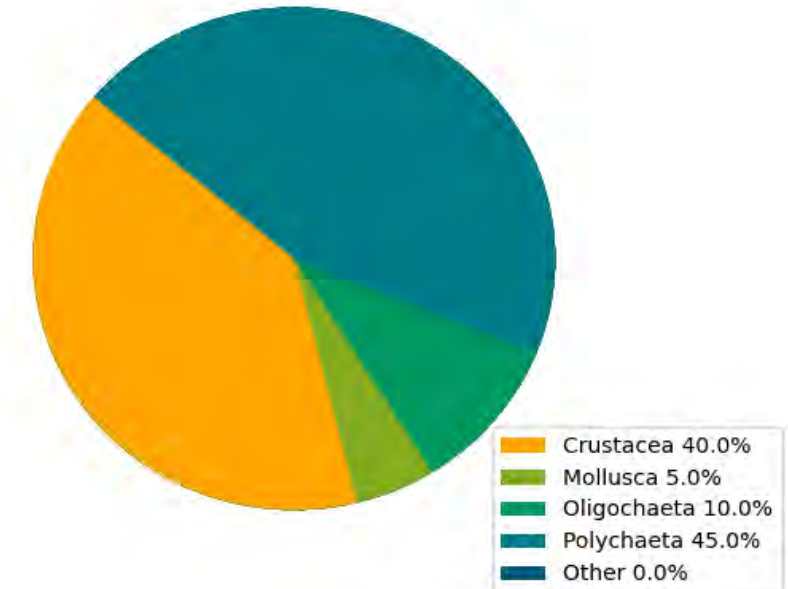


### Benthic Grab USW060

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 500                           |
| Taxa Richness <sup>1</sup> :   |                     | 11                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

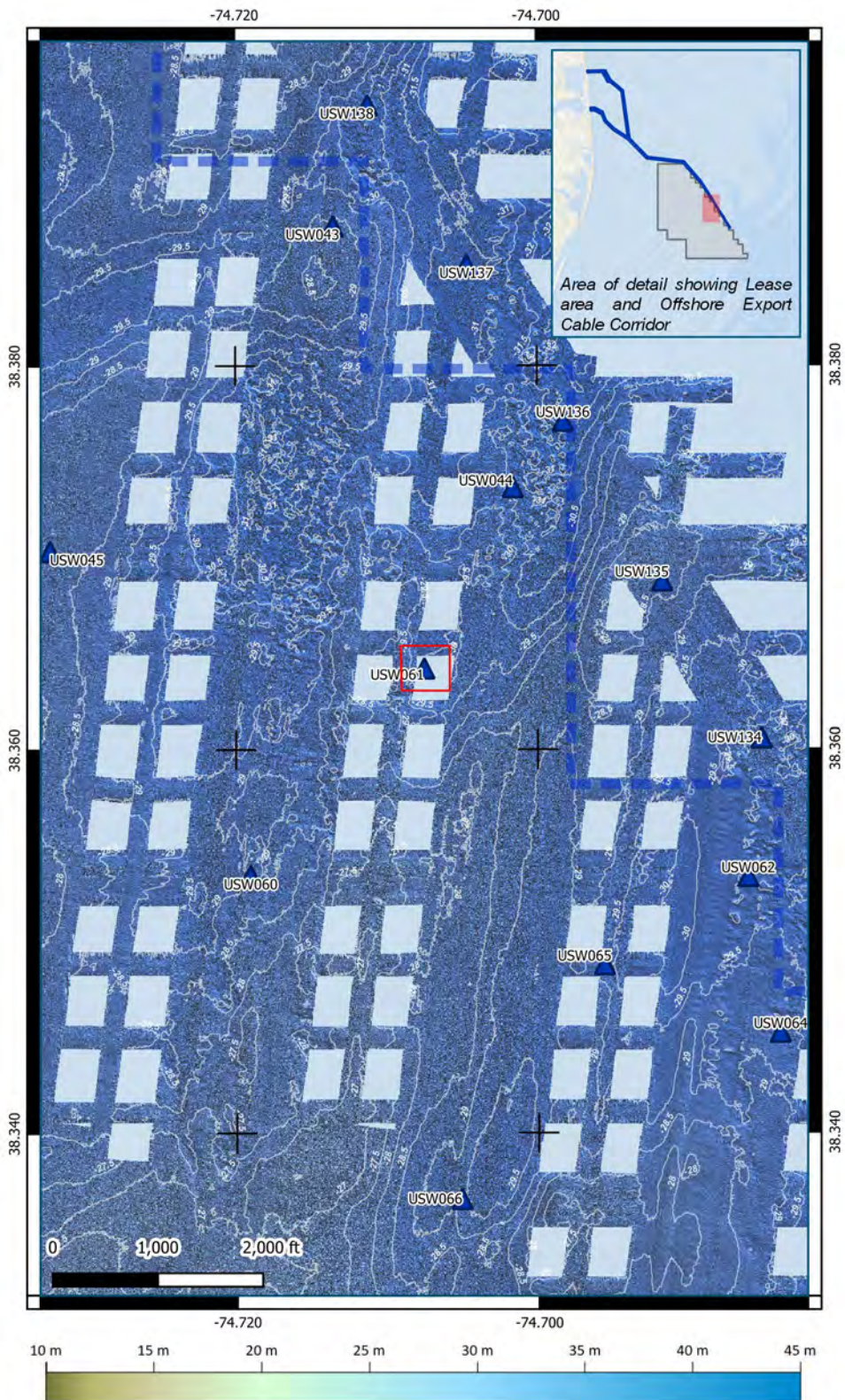


### Sample Photograph





### Map of Benthic Grab Location

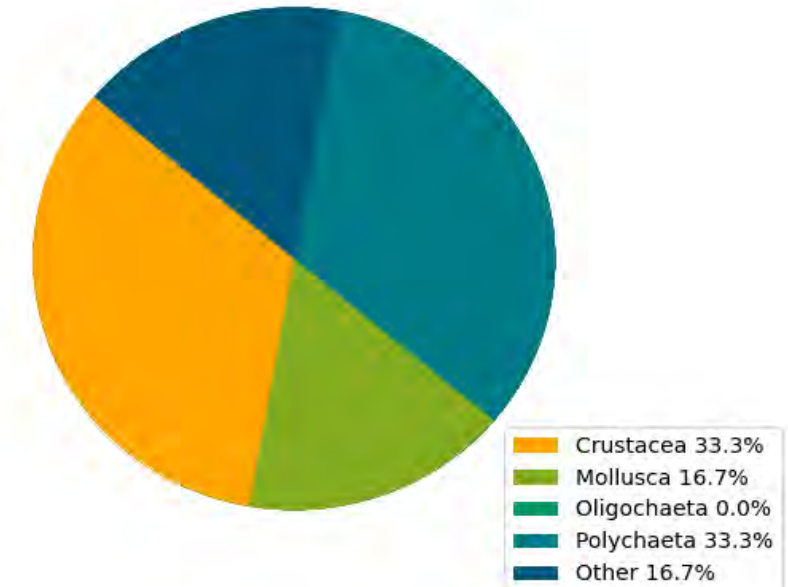


### Benthic Grab USW061

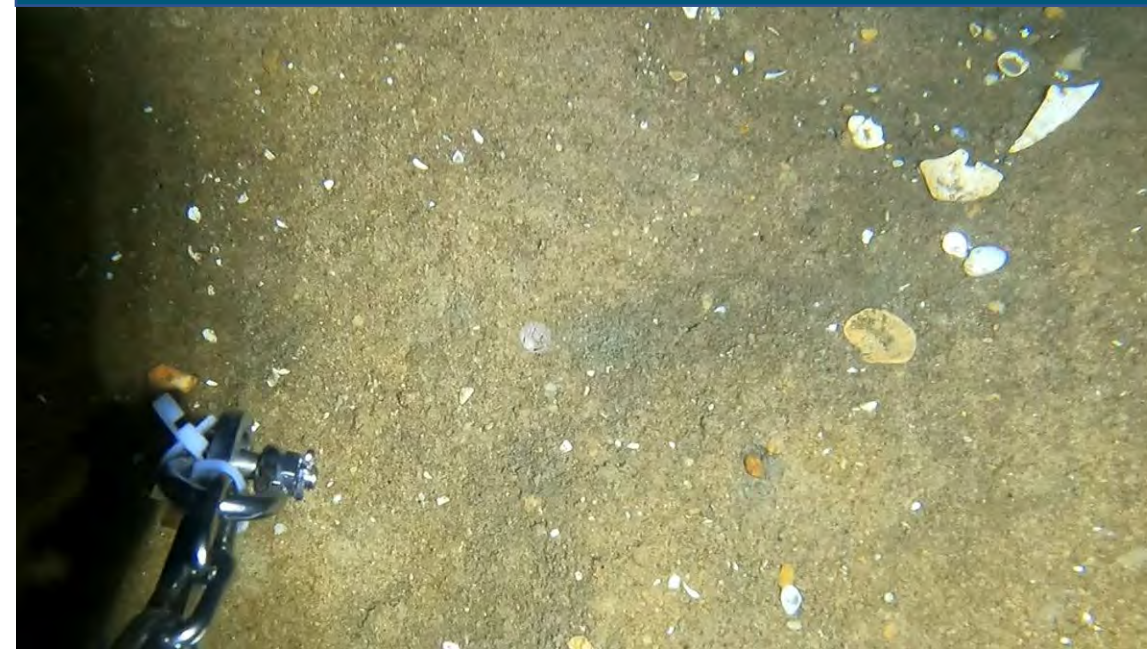
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 150                             |
| Taxa Richness <sup>1</sup> :   |                     | 6                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

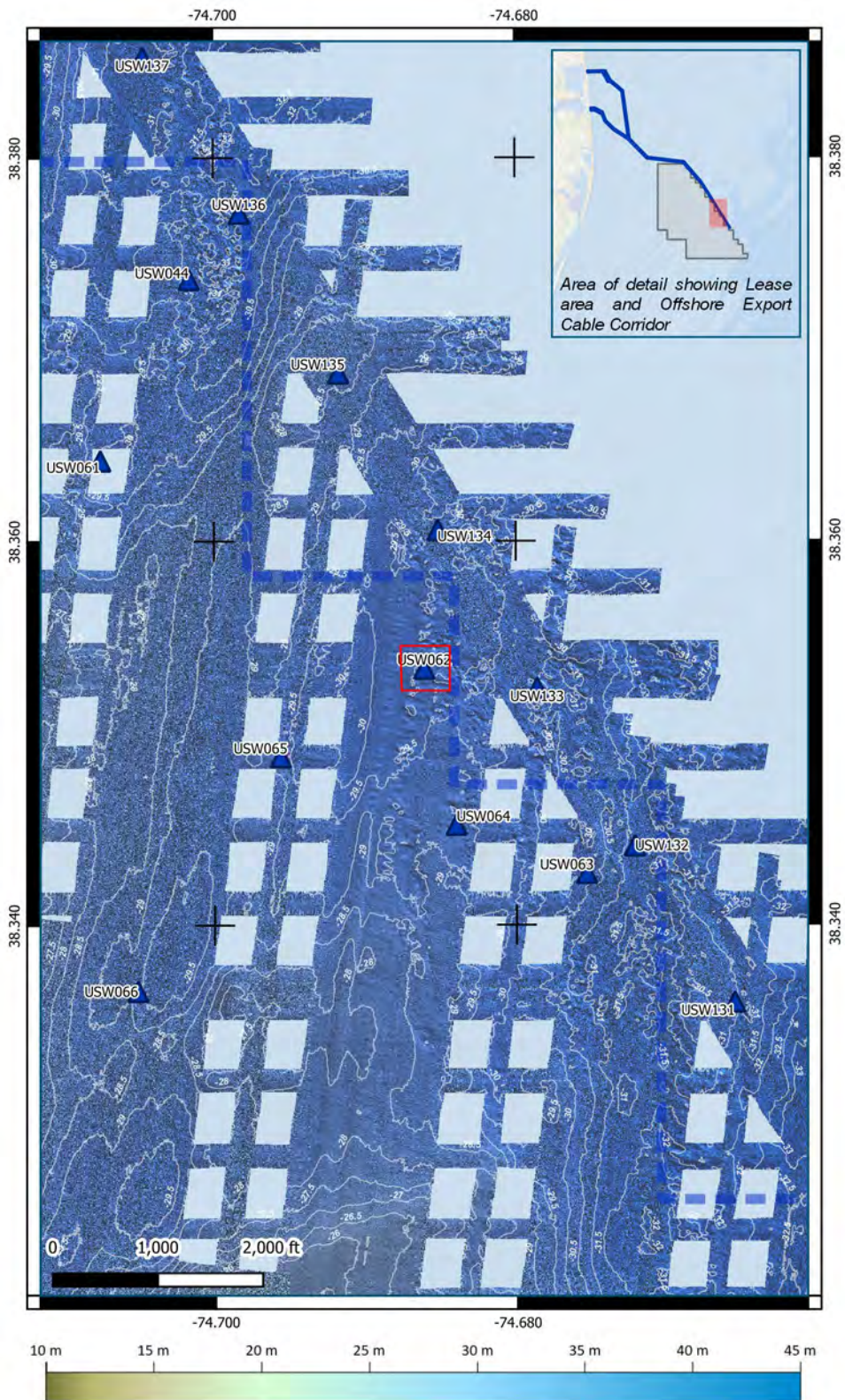


### Sample Photograph





### Map of Benthic Grab Location

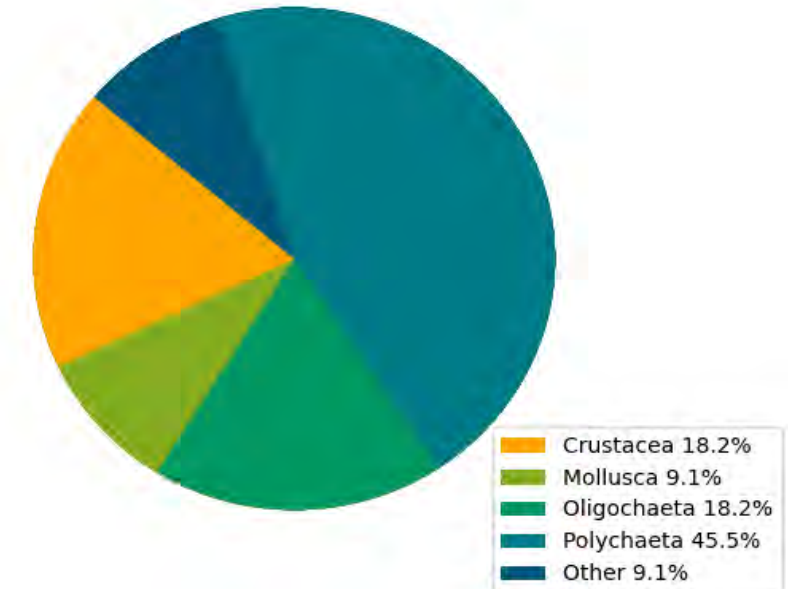


### Benthic Grab USW062

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 275                             |
| Taxa Richness <sup>1</sup> :   |                     | 10                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

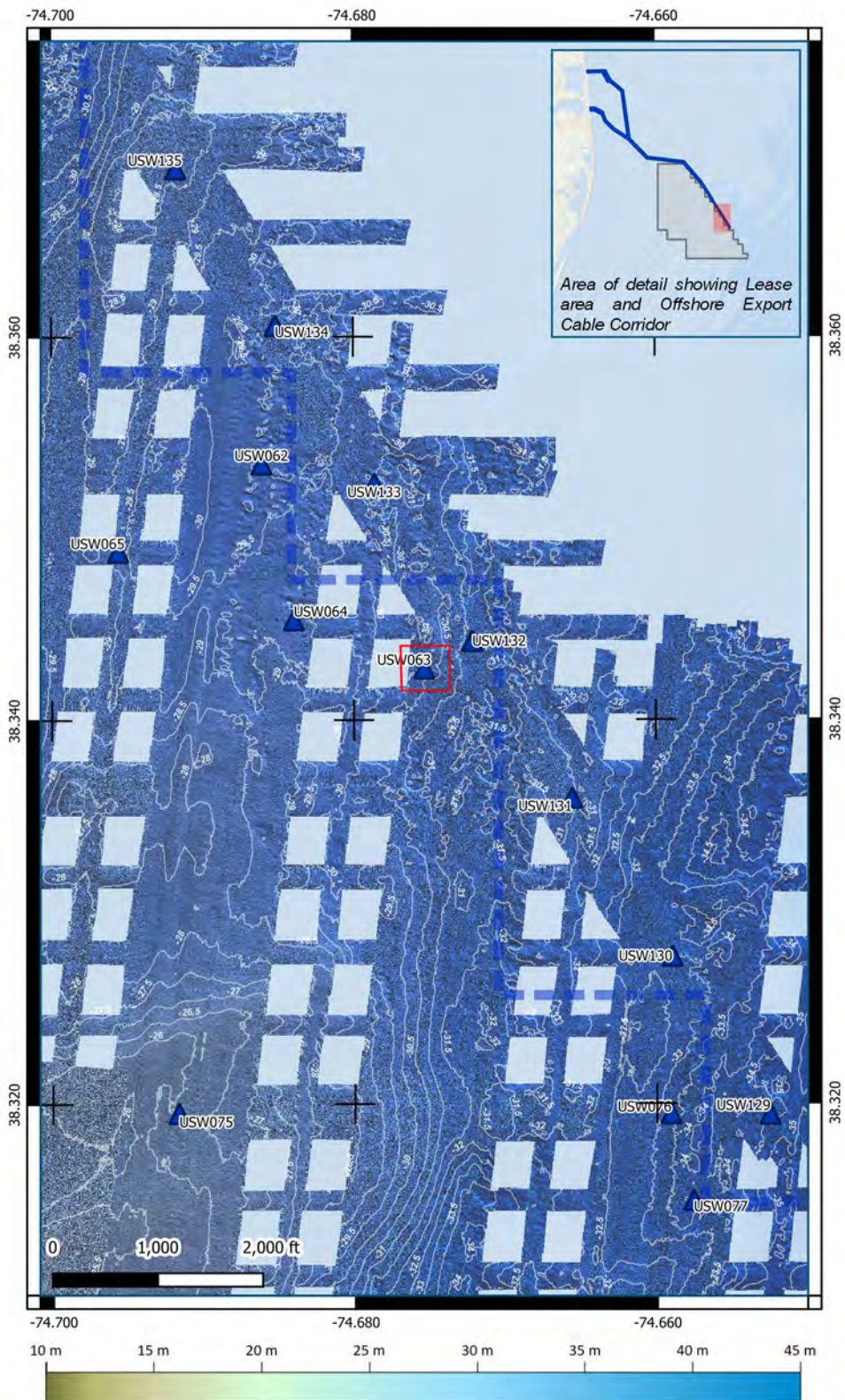


### Sample Photograph





### Map of Benthic Grab Location

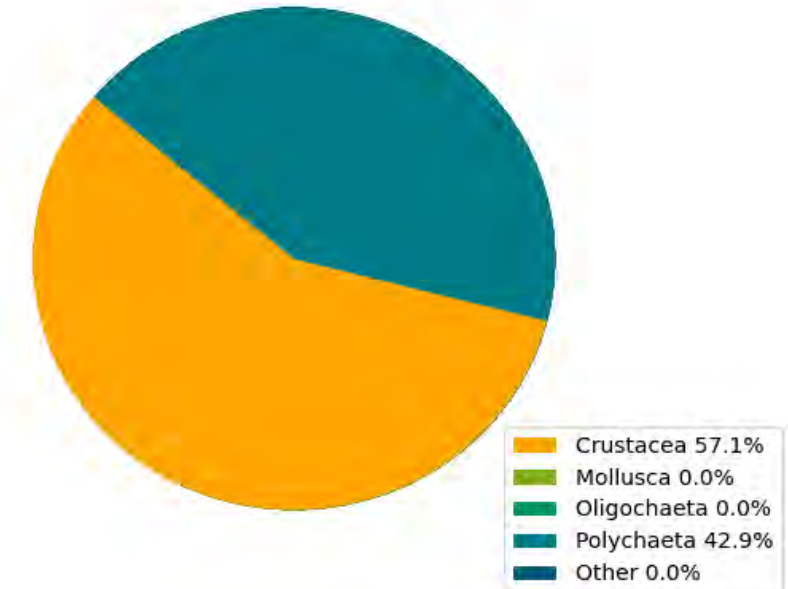


### Benthic Grab USW063

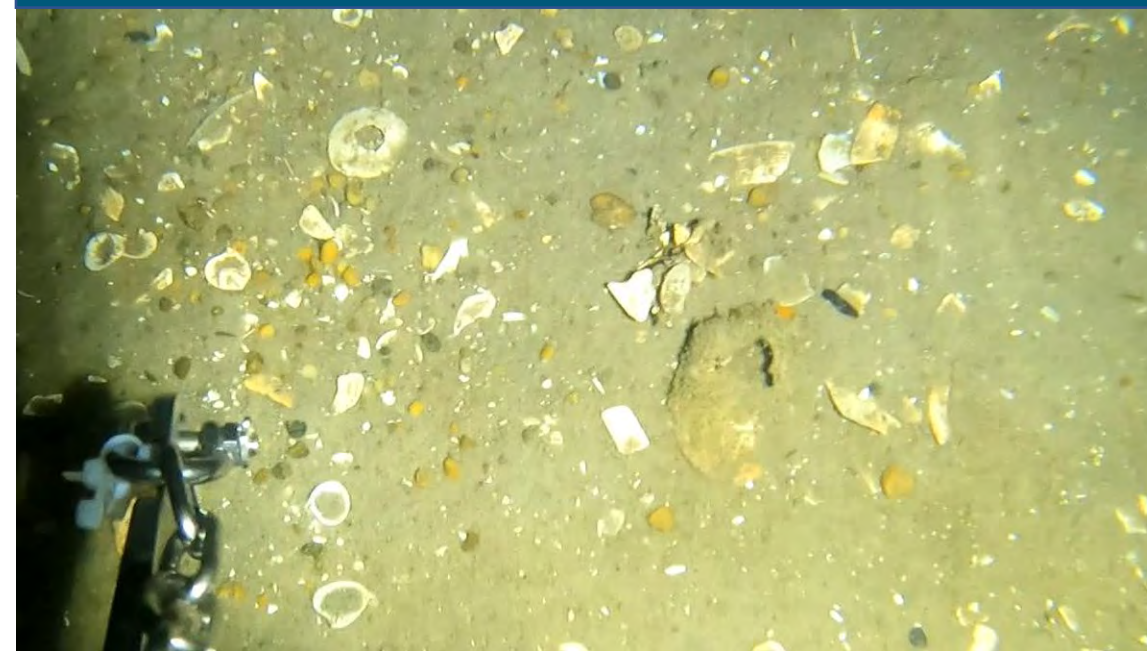
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 175                             |
| Taxa Richness <sup>1</sup> :   |                     | 6                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

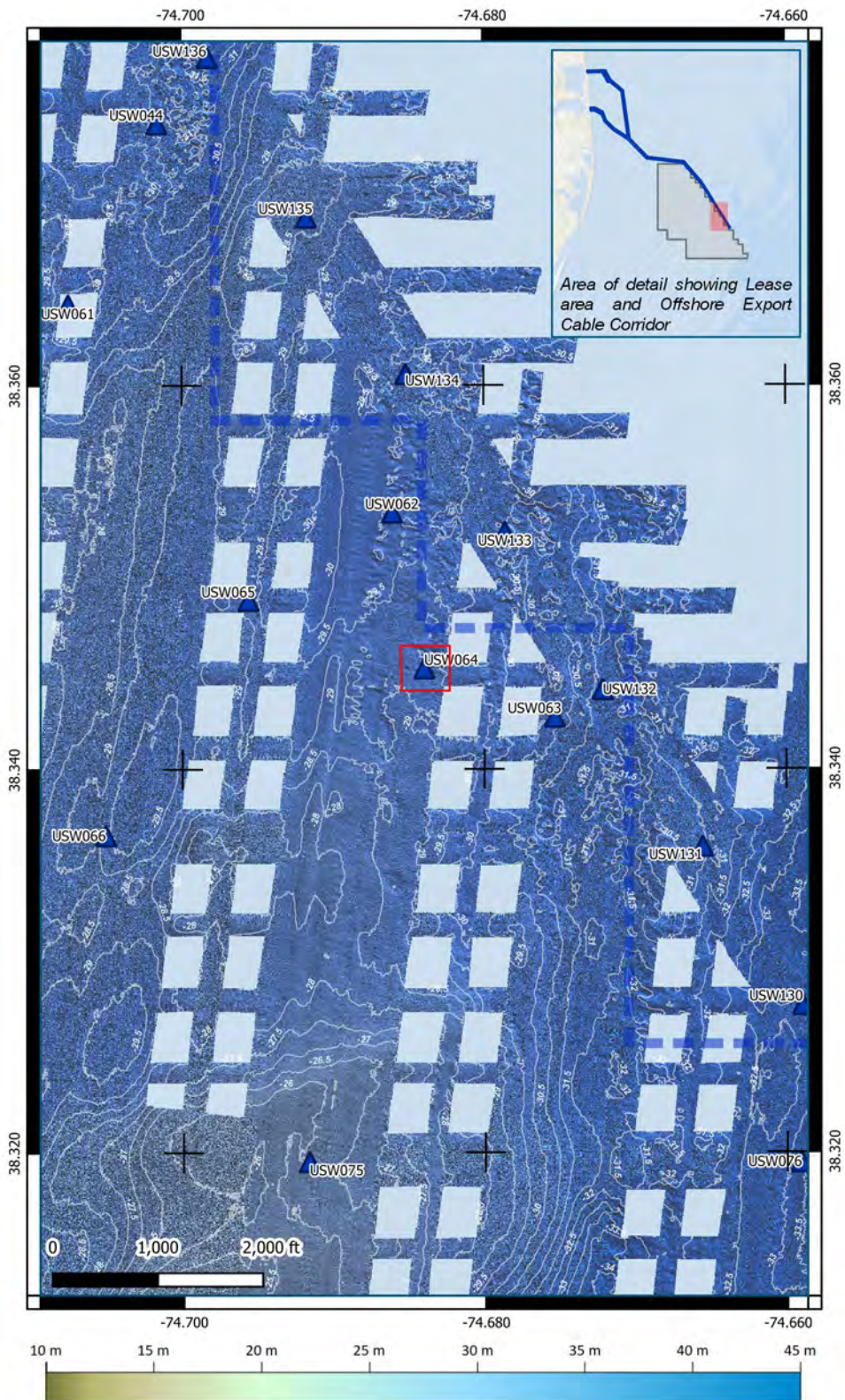


### Sample Photograph





### Map of Benthic Grab Location

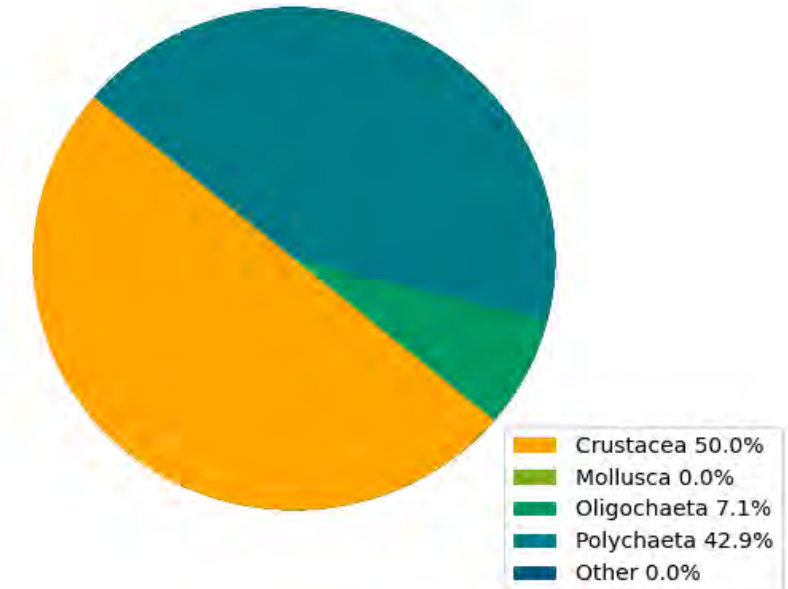


### Benthic Grab USW064

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 350                           |
| Taxa Richness <sup>1</sup> :   |                     | 6                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

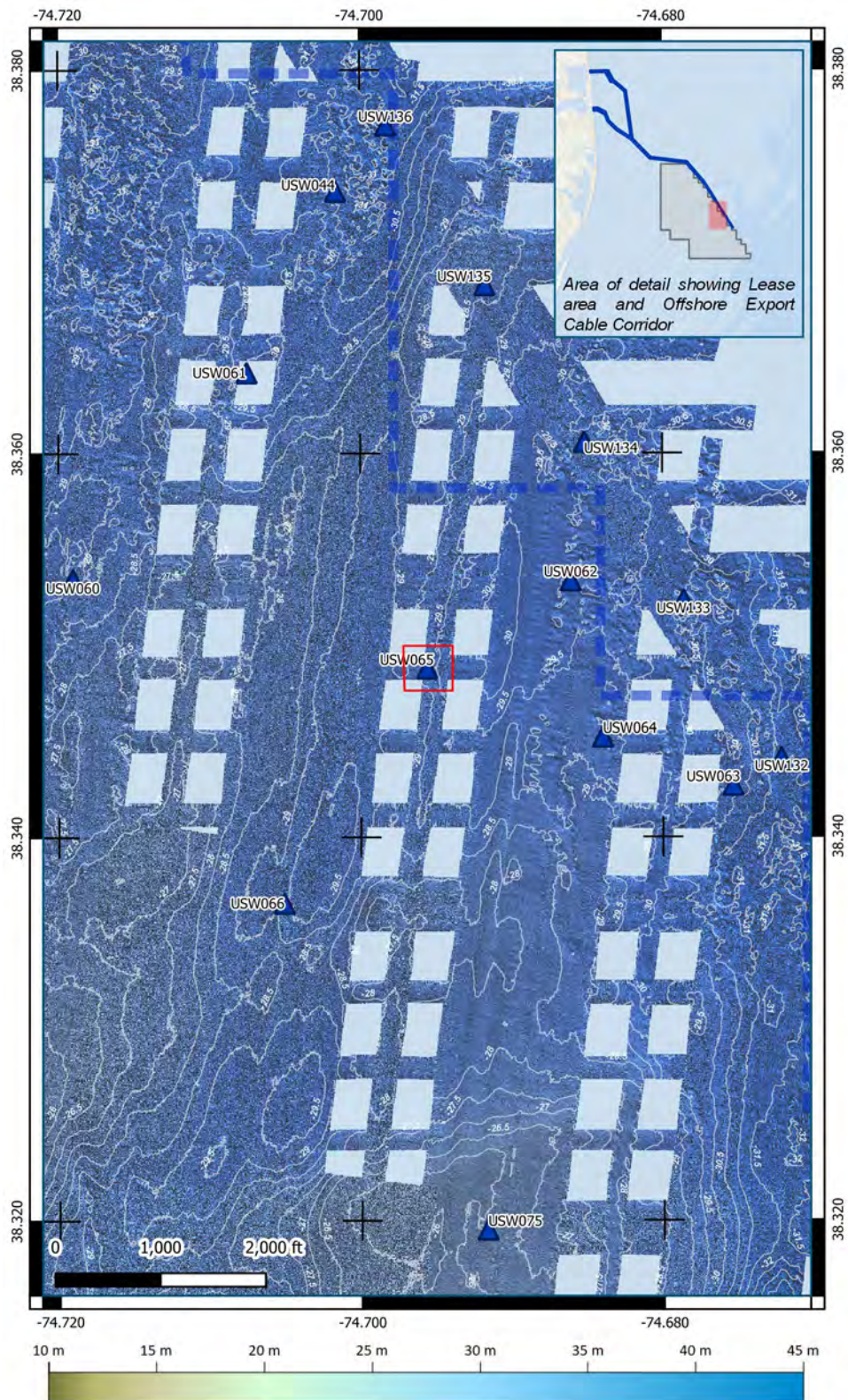


### Sample Photograph





### Map of Benthic Grab Location

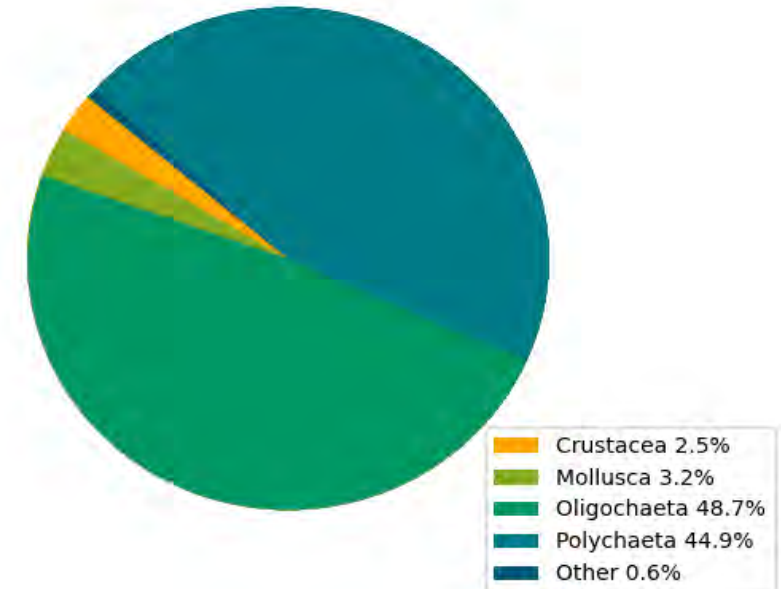


### Benthic Grab USW065

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 3950                            |
| Taxa Richness <sup>1</sup> :   |                     | 23                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

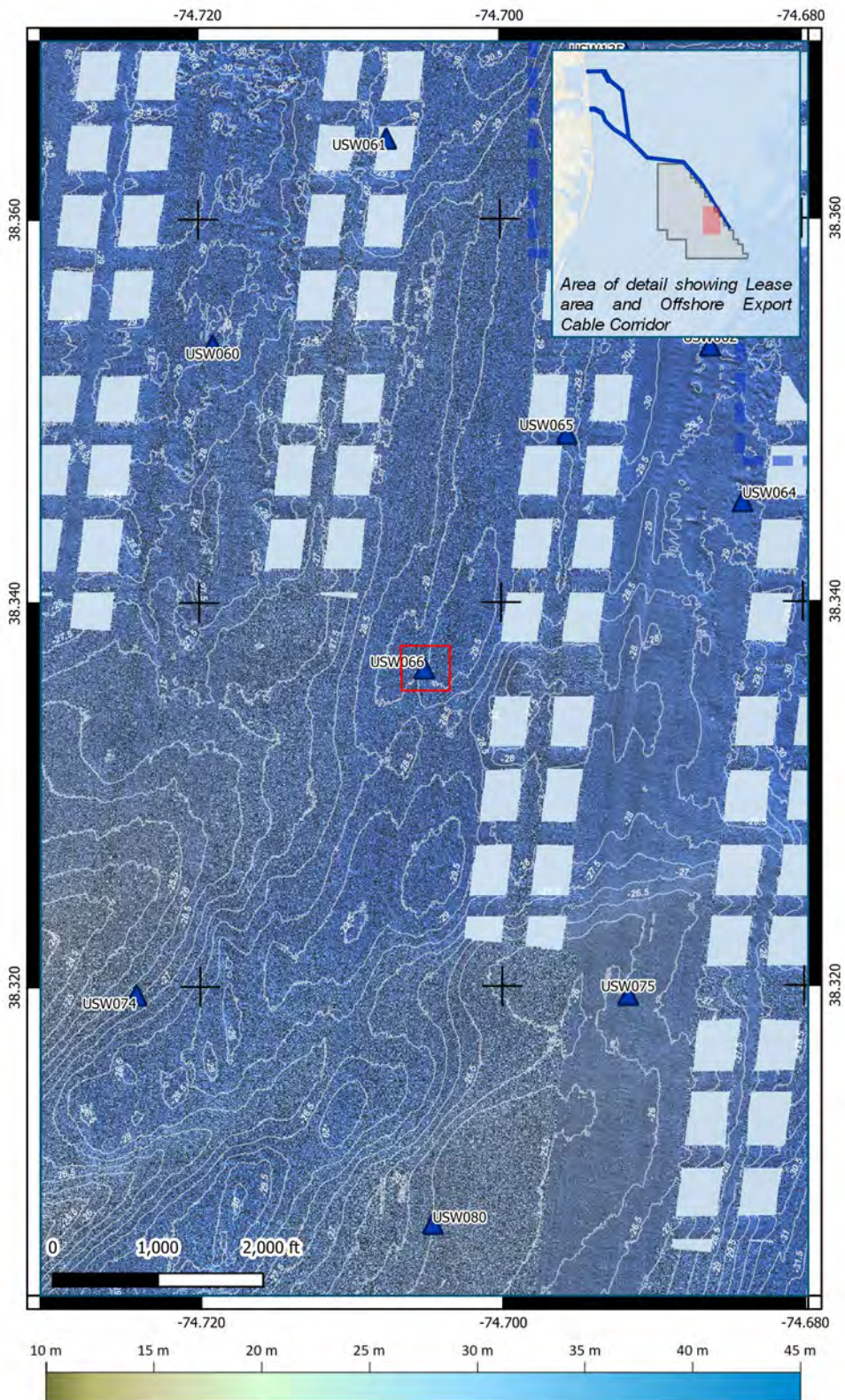


### Sample Photograph





### Map of Benthic Grab Location

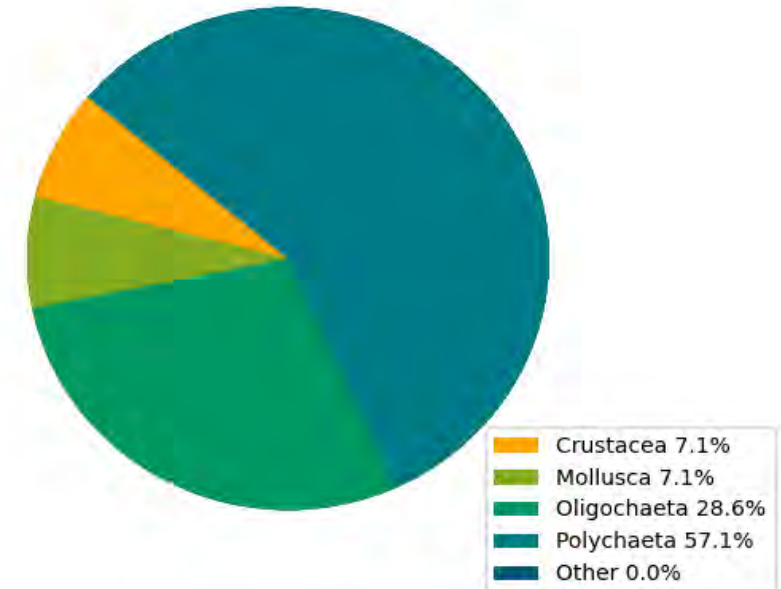


### Benthic Grab USW066

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 350                             |
| Taxa Richness <sup>1</sup> :   |                     | 9                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

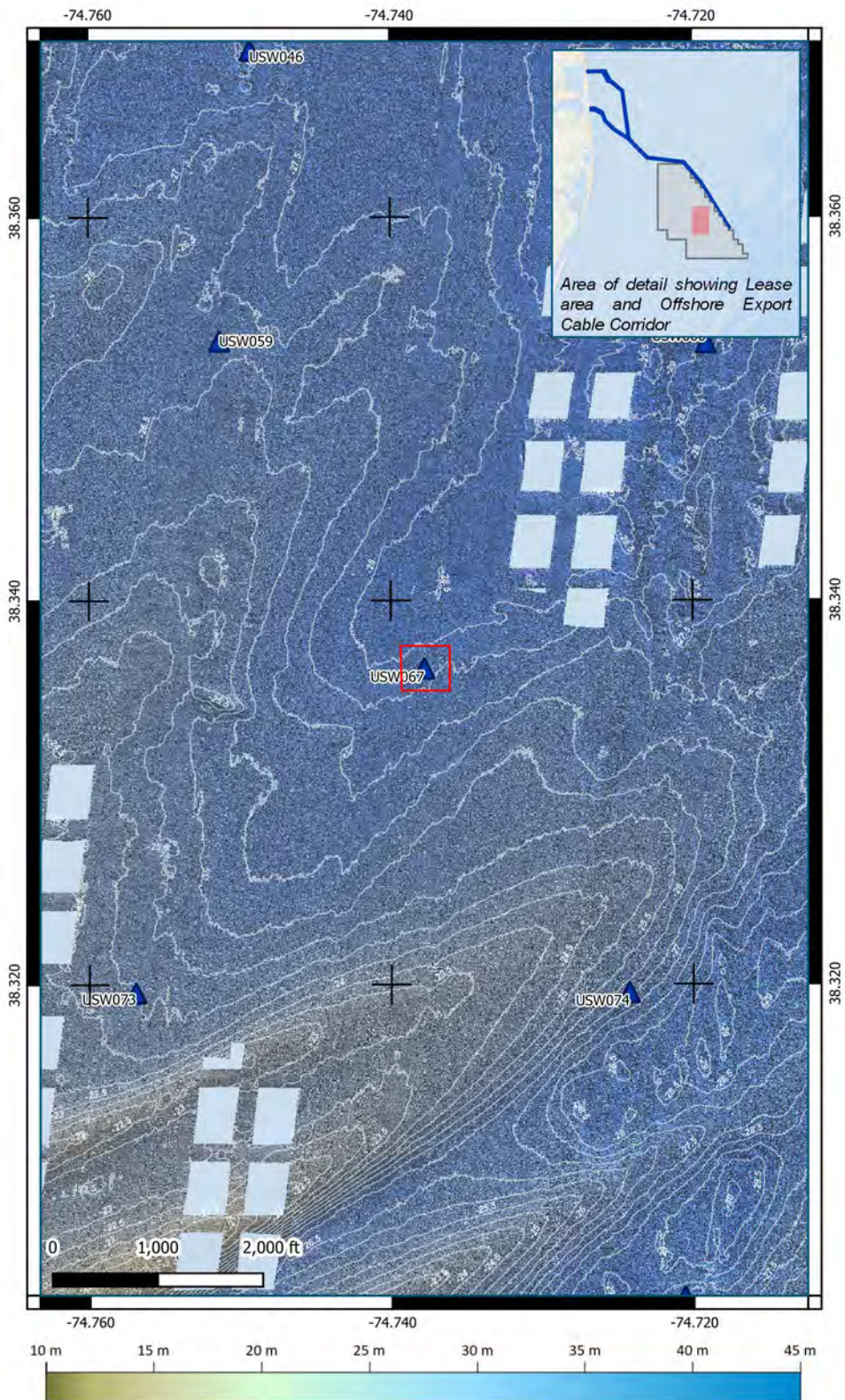


### Sample Photograph





### Map of Benthic Grab Location

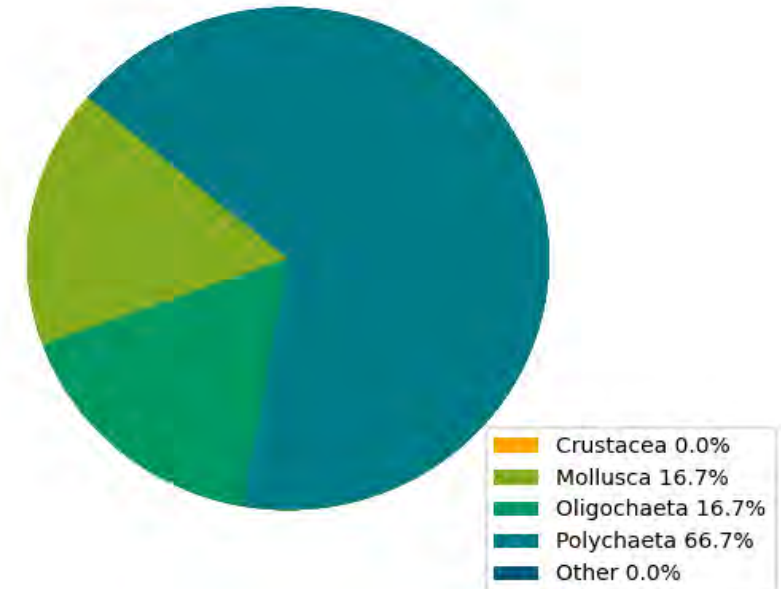


### Benthic Grab USW067

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 300                             |
| Taxa Richness <sup>1</sup> :   |                     | 9                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

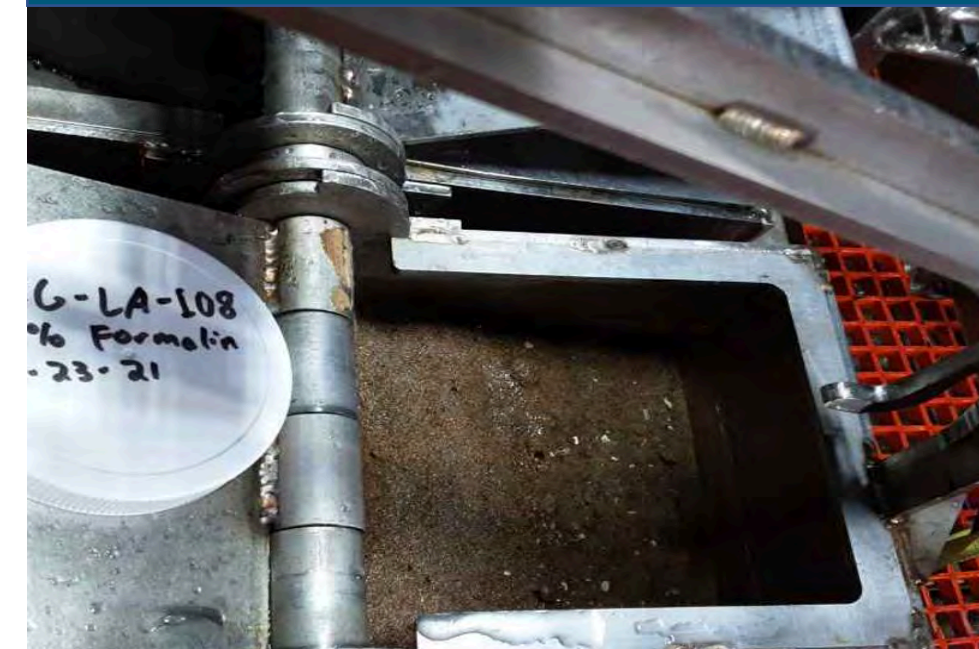
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

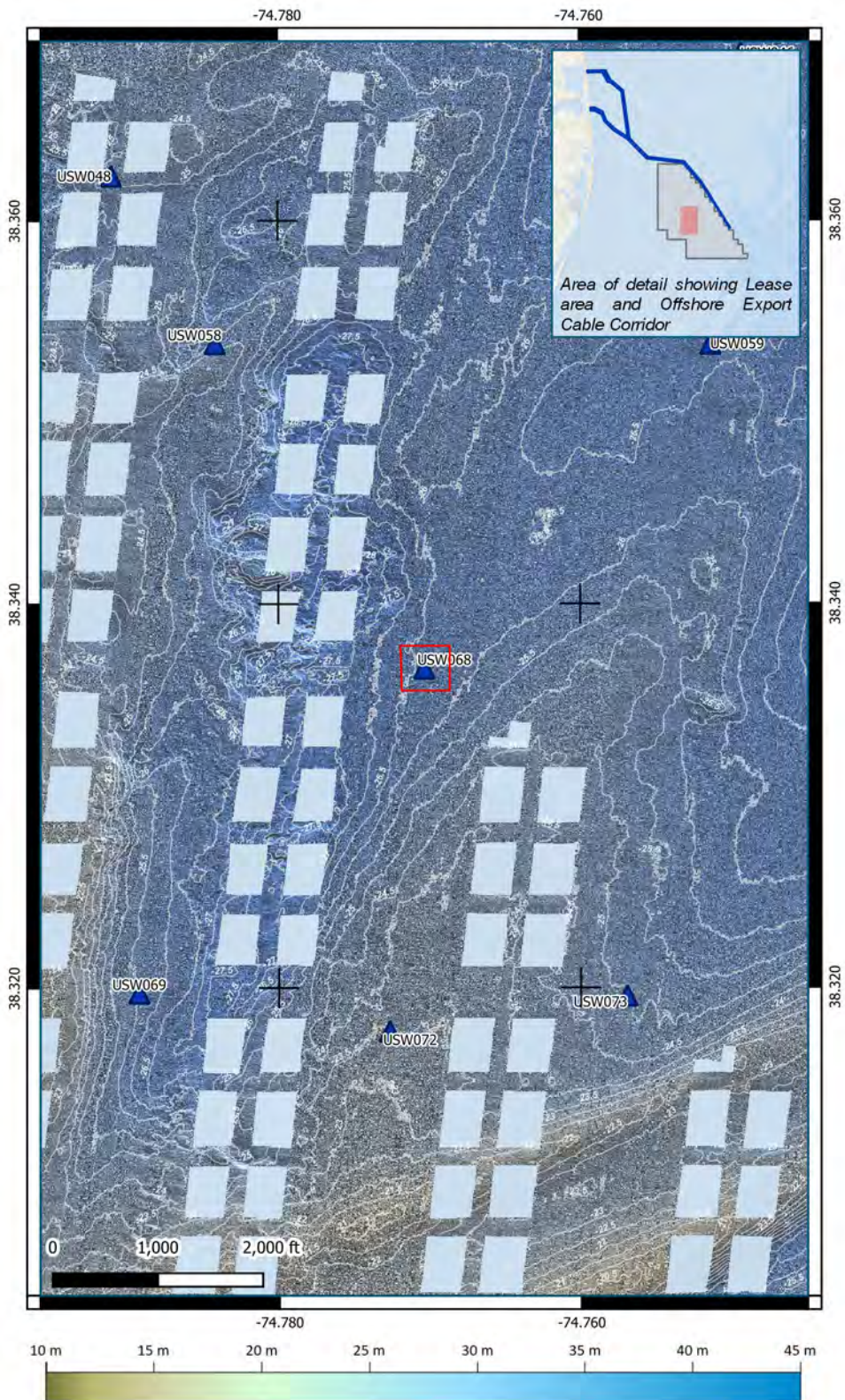


### Sample Photograph





### Map of Benthic Grab Location

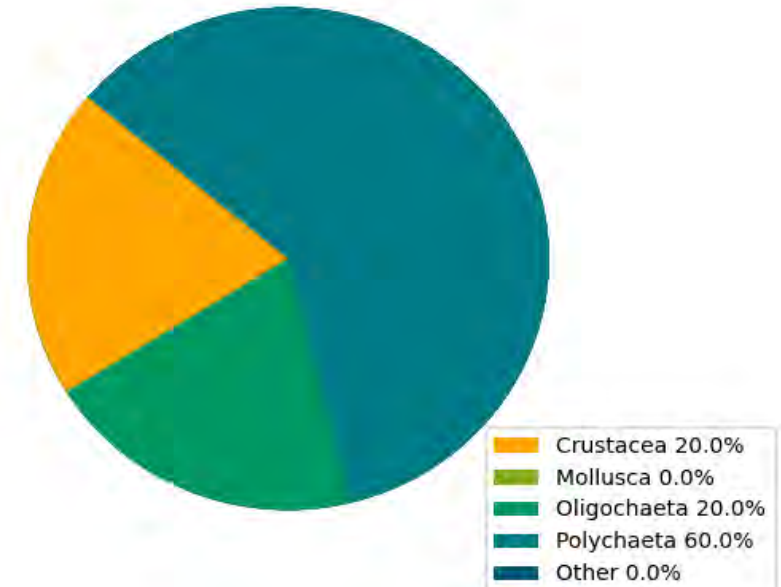


### Benthic Grab USW068

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Very Coarse/Coarse Sand       |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 125                           |
| Taxa Richness <sup>1</sup> :   |                     | 5                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

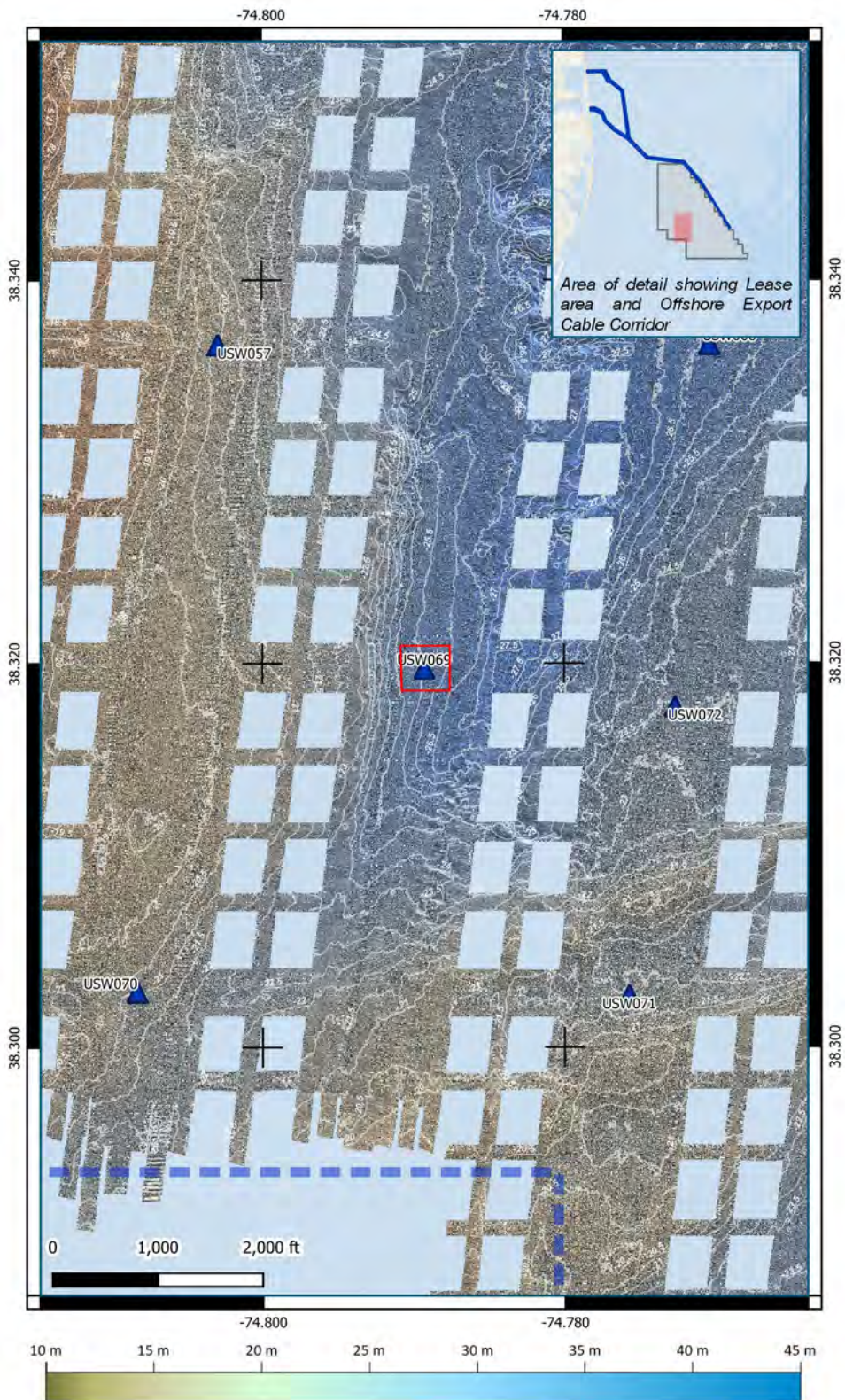


### Sample Photograph





### Map of Benthic Grab Location

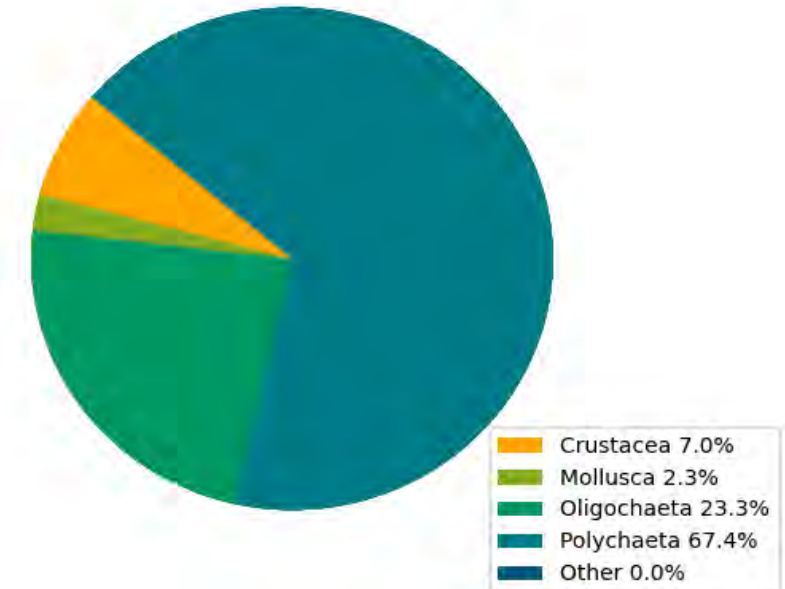


### Benthic Grab USW069

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1075                            |
| Taxa Richness <sup>1</sup> :   |                     | 14                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

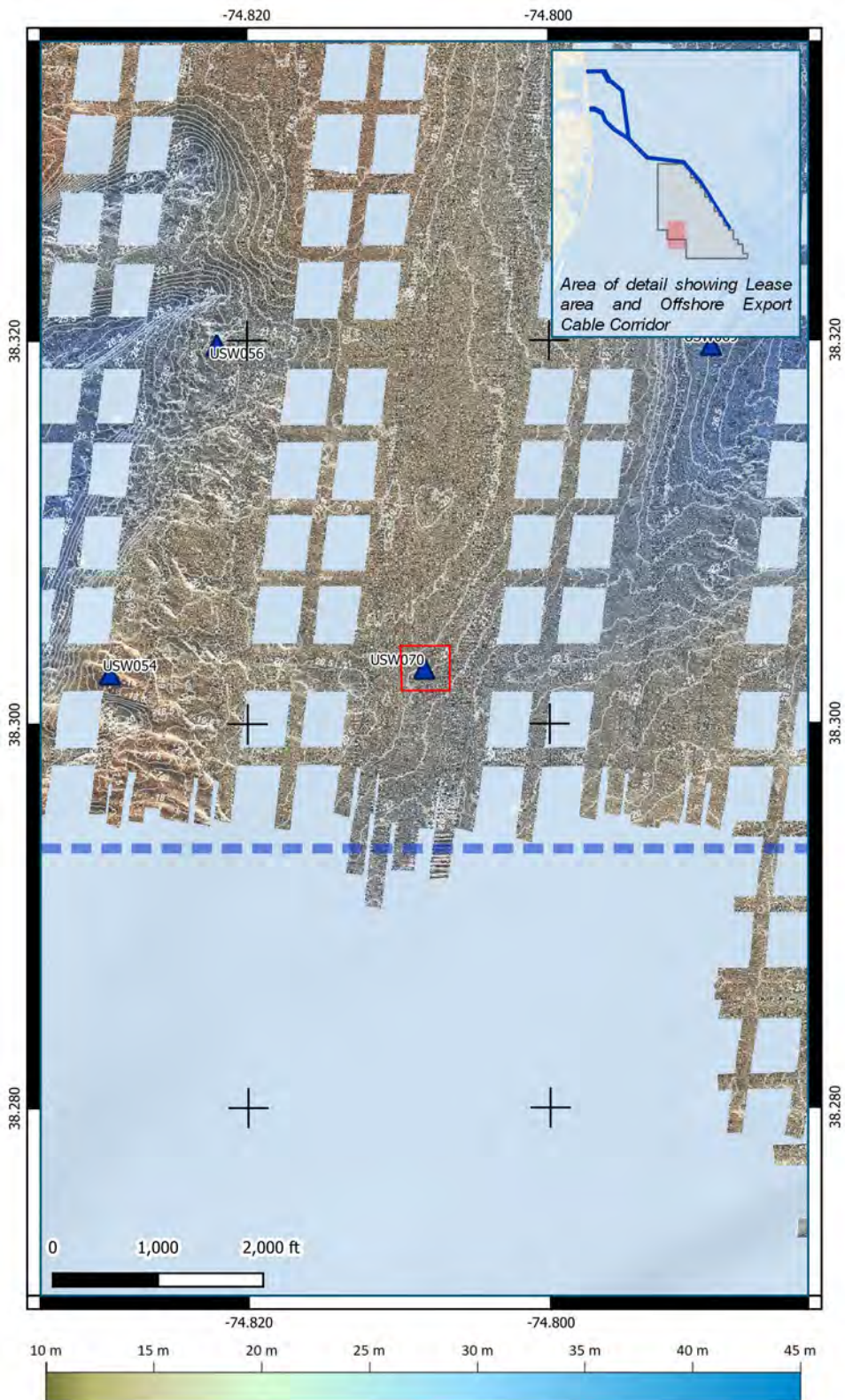


### Sample Photograph





### Map of Benthic Grab Location

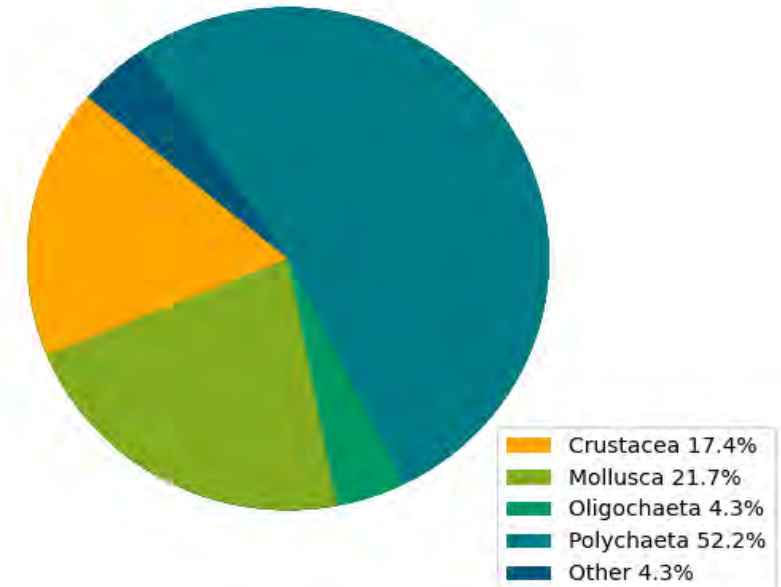


### Benthic Grab USW070

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 575                           |
| Taxa Richness <sup>1</sup> :   |                     | 15                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

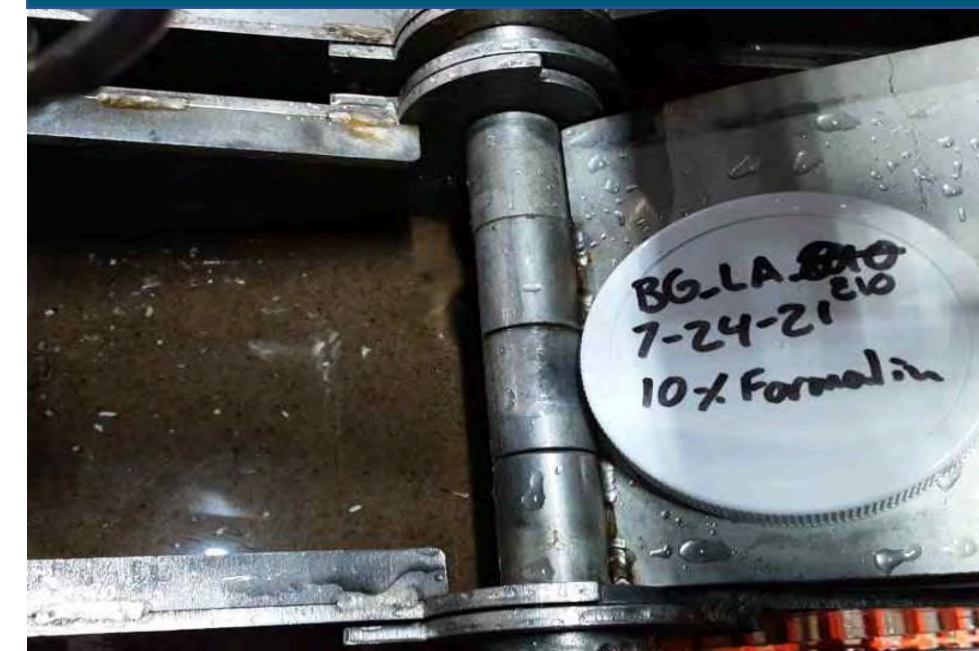
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

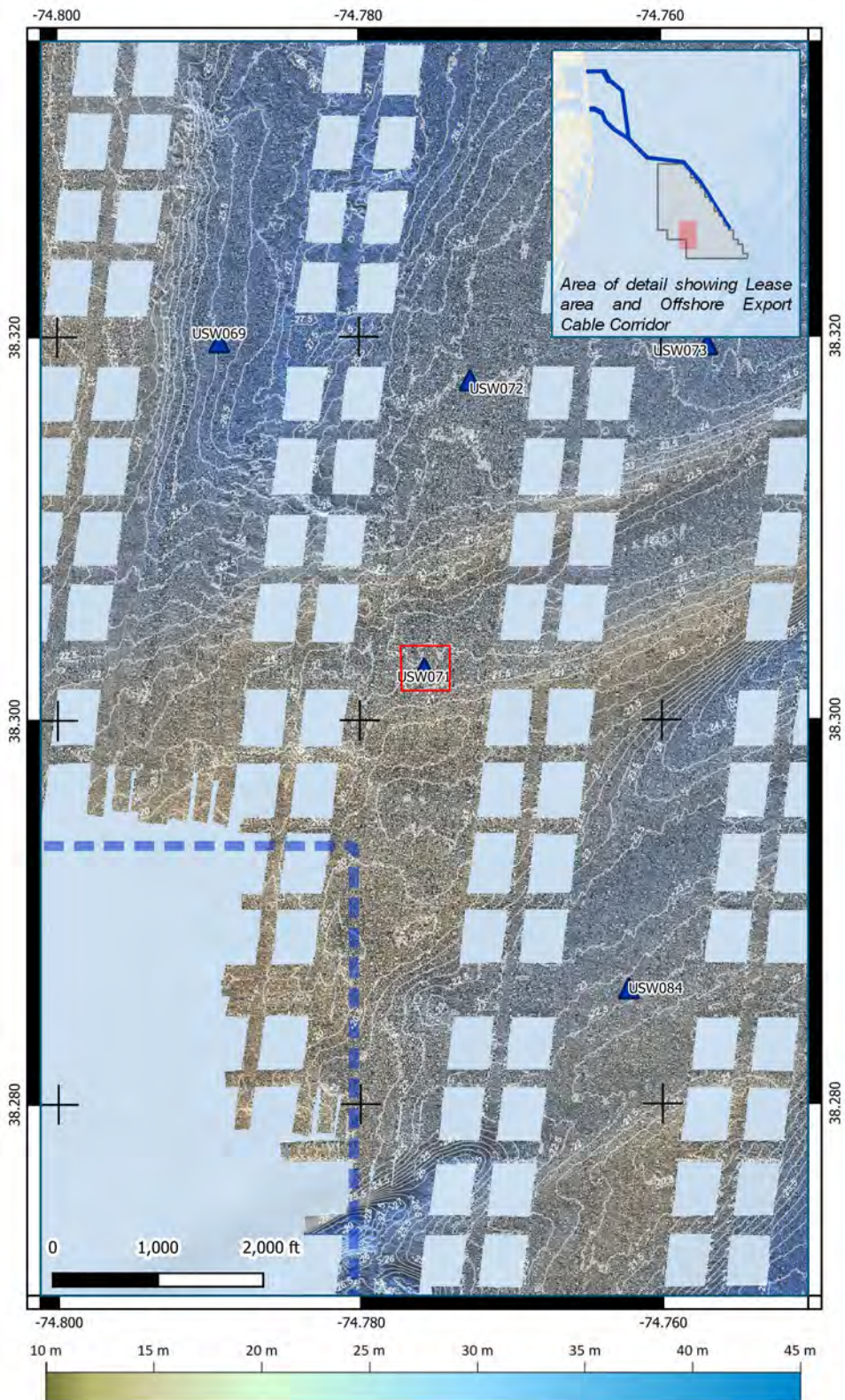


### Sample Photograph





### Map of Benthic Grab Location

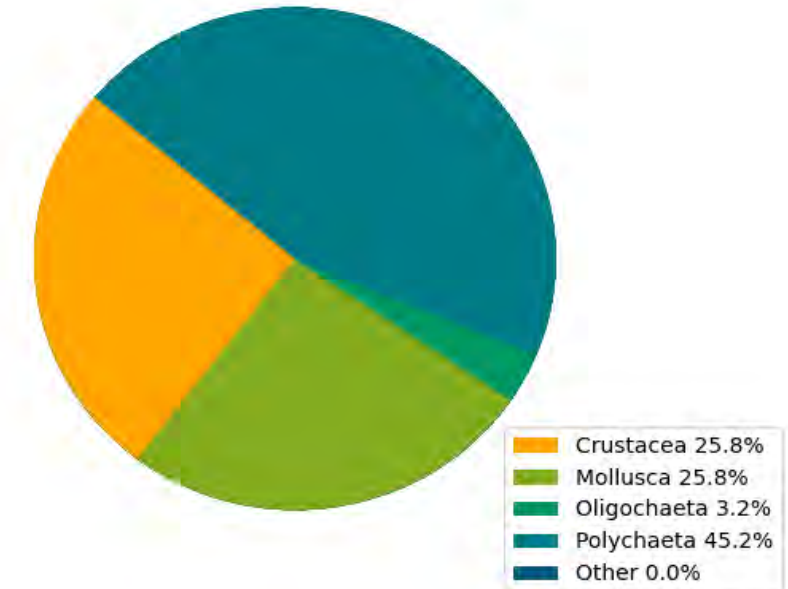


### Benthic Grab USW071

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 775                           |
| Taxa Richness <sup>1</sup> :   |                     | 16                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

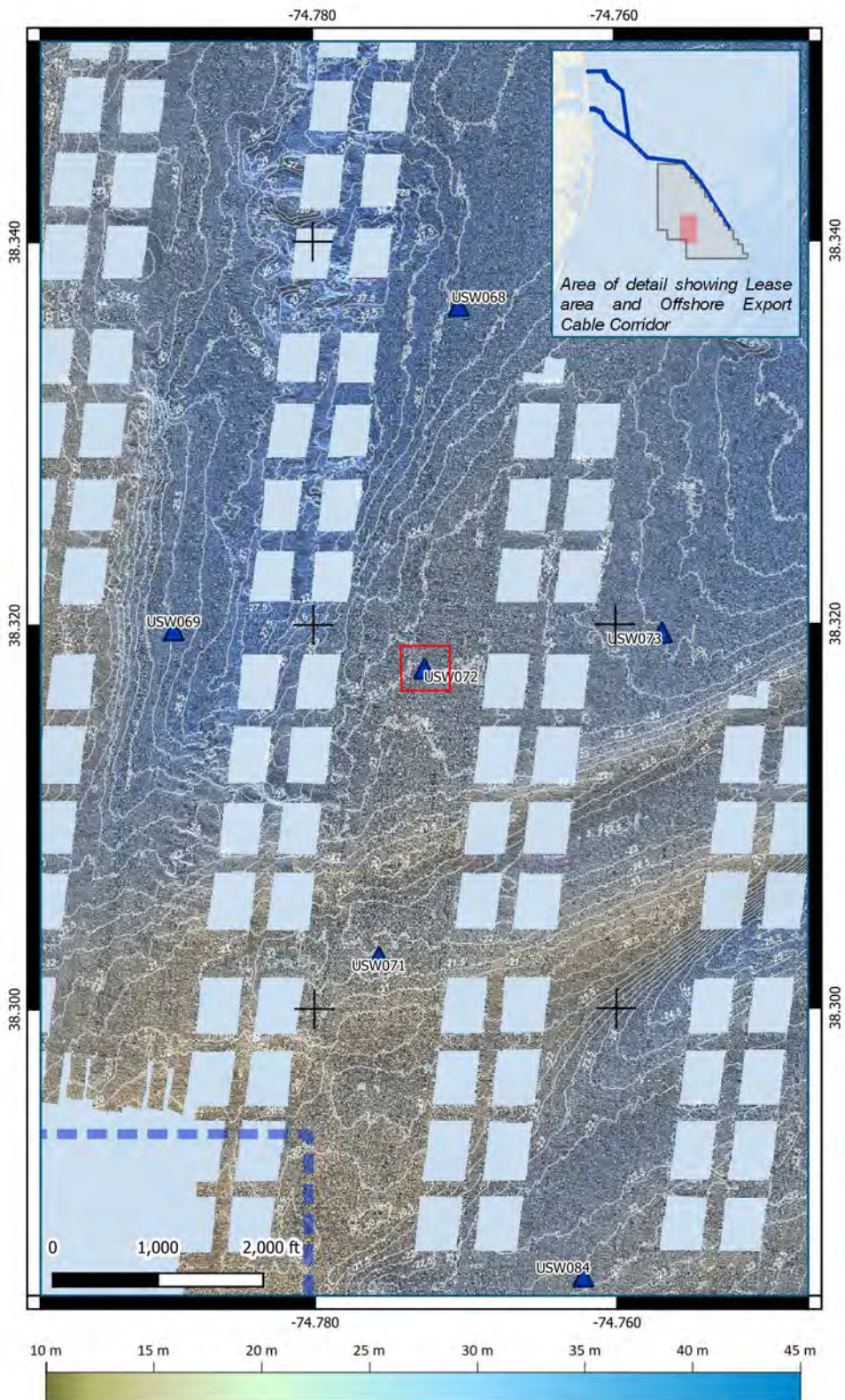


### Sample Photograph





### Map of Benthic Grab Location

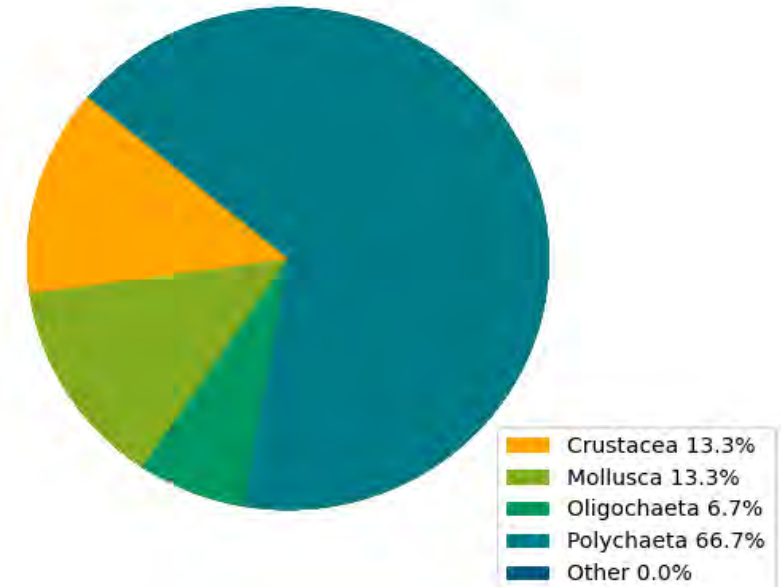


### Benthic Grab USW072

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 375                             |
| Taxa Richness <sup>1</sup> :   |                     | 9                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

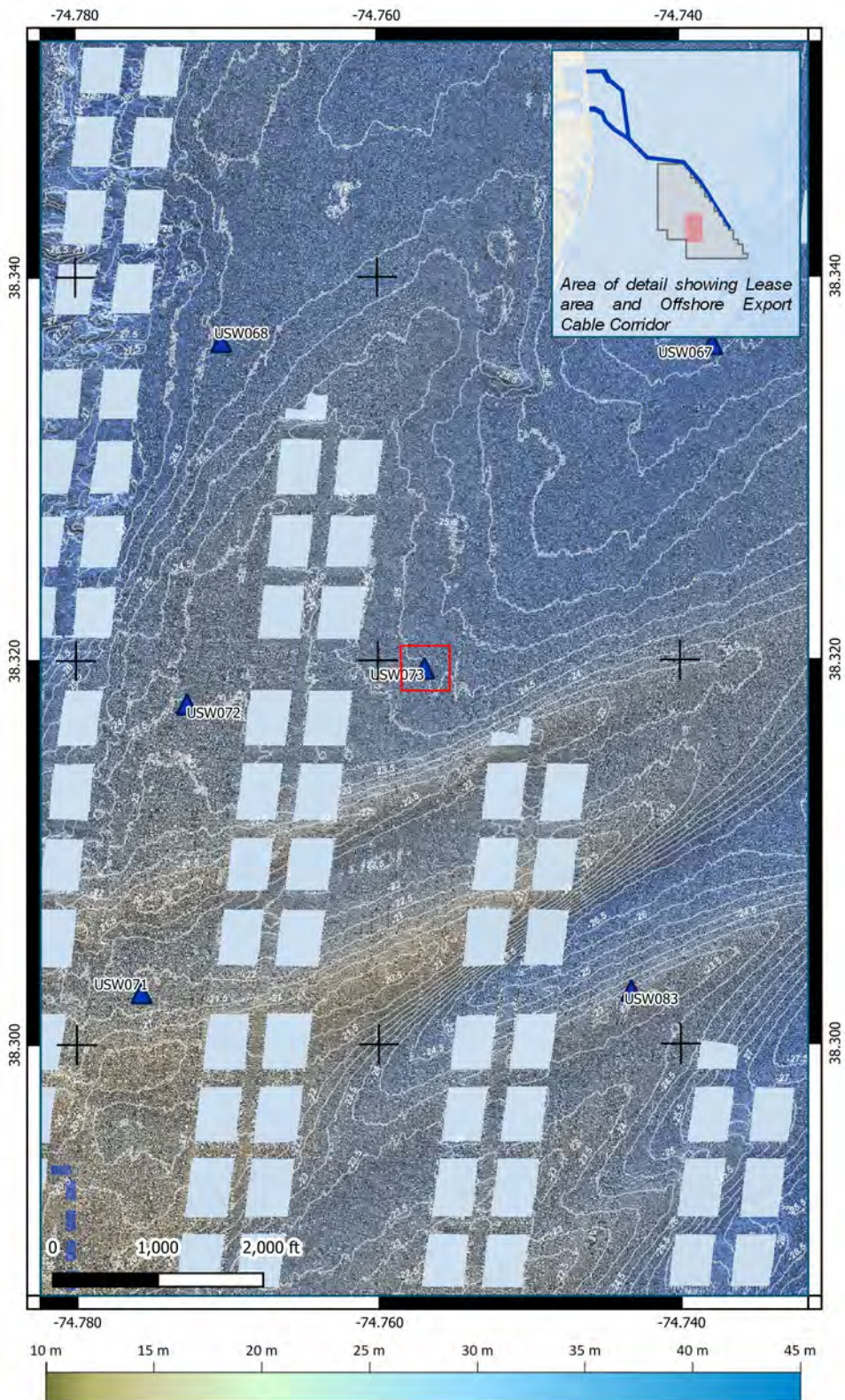


### Sample Photograph





### Map of Benthic Grab Location

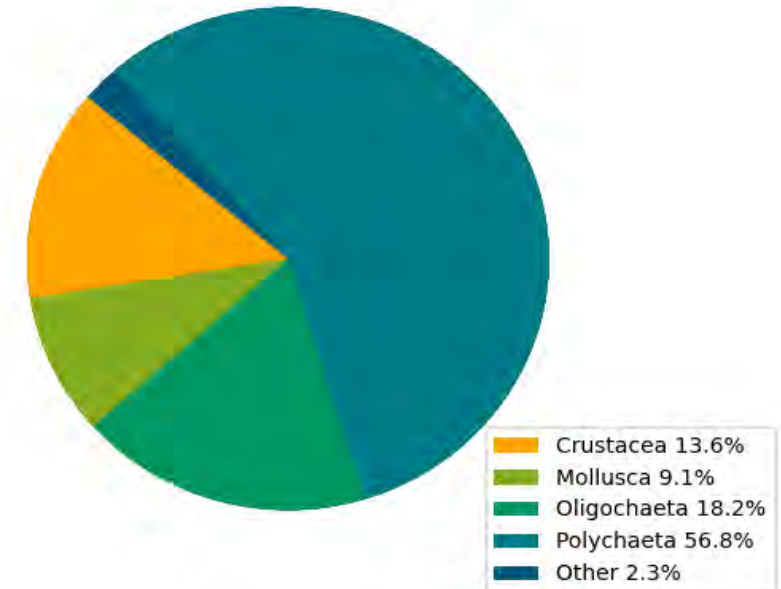


### Benthic Grab USW073

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1100                            |
| Taxa Richness <sup>1</sup> :   |                     | 20                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

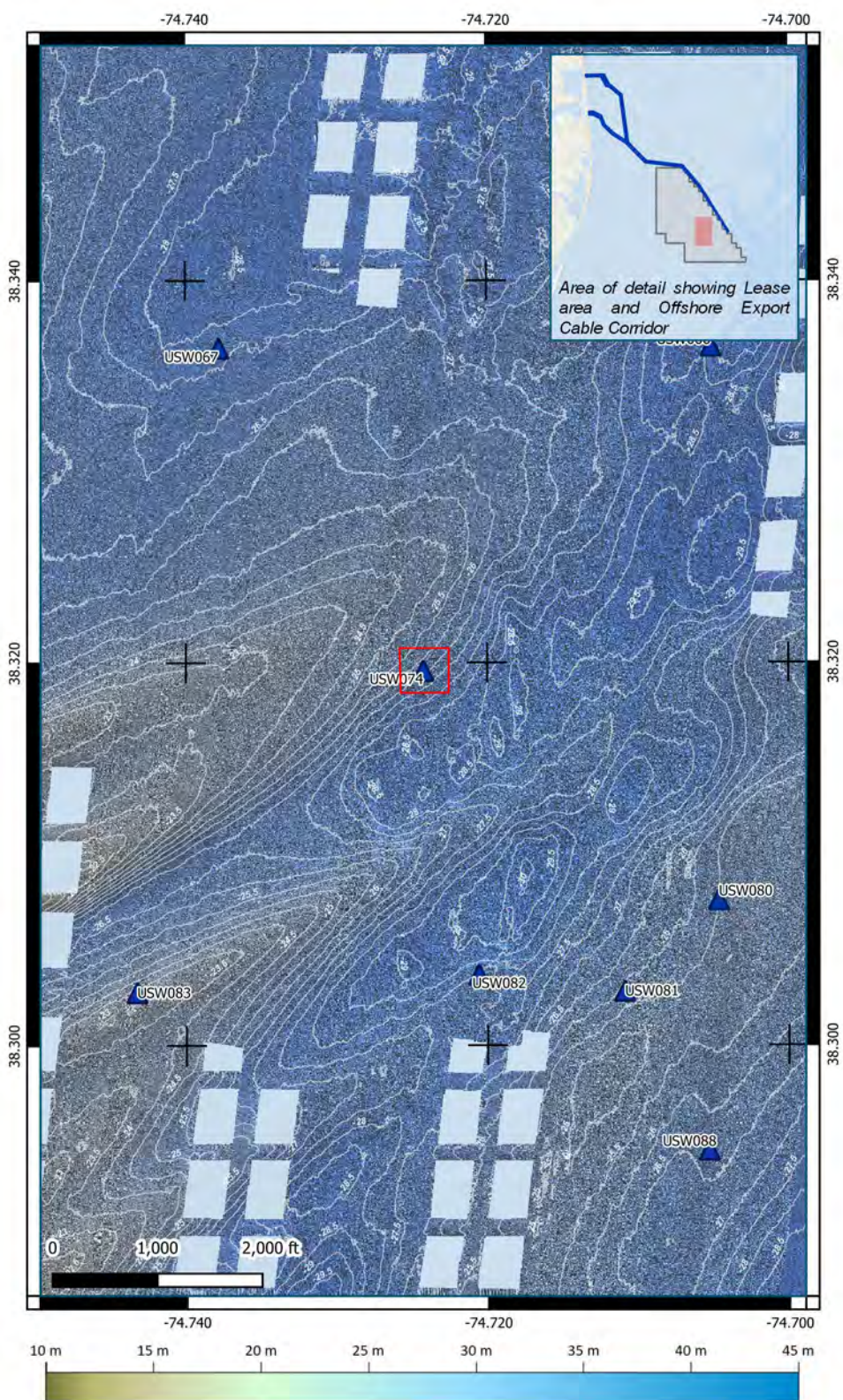


### Sample Photograph





### Map of Benthic Grab Location

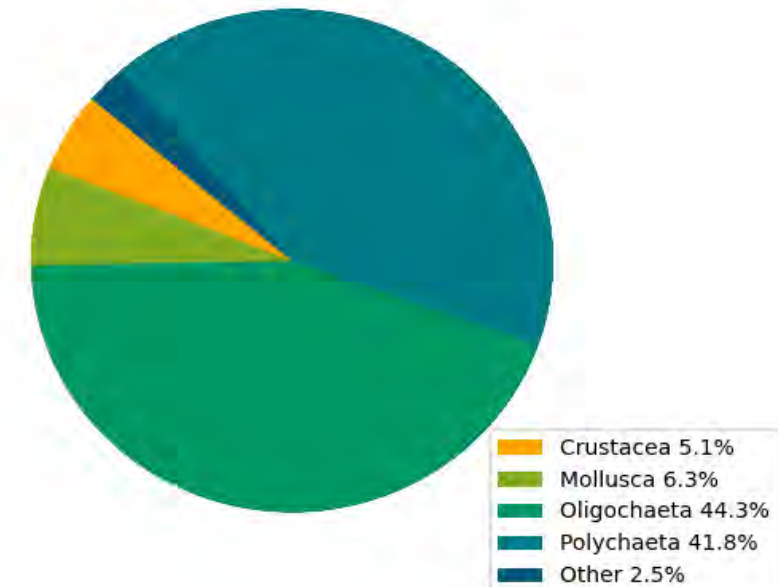


### Benthic Grab USW074

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1975                            |
| Taxa Richness <sup>1</sup> :   |                     | 18                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

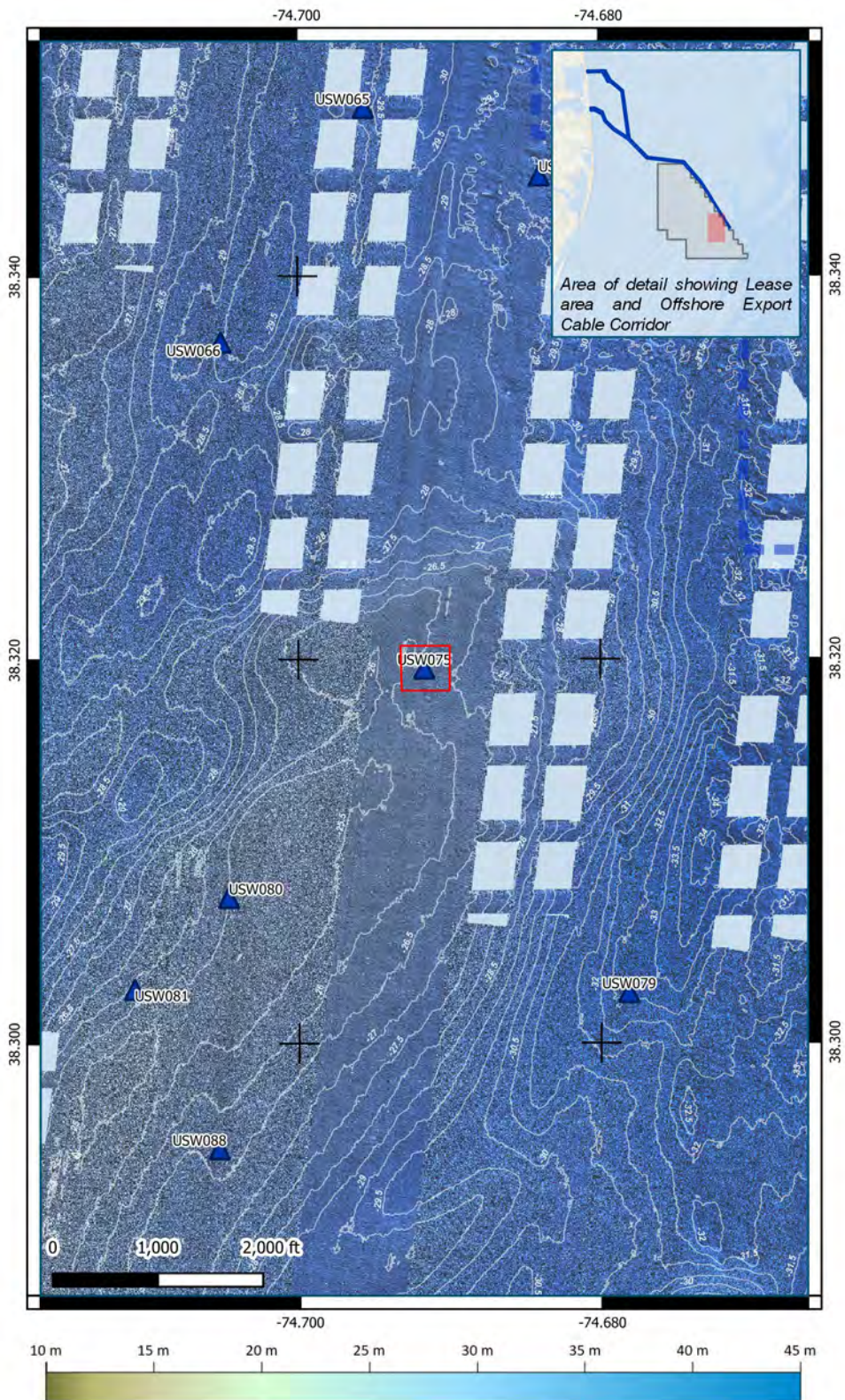


### Sample Photograph





### Map of Benthic Grab Location

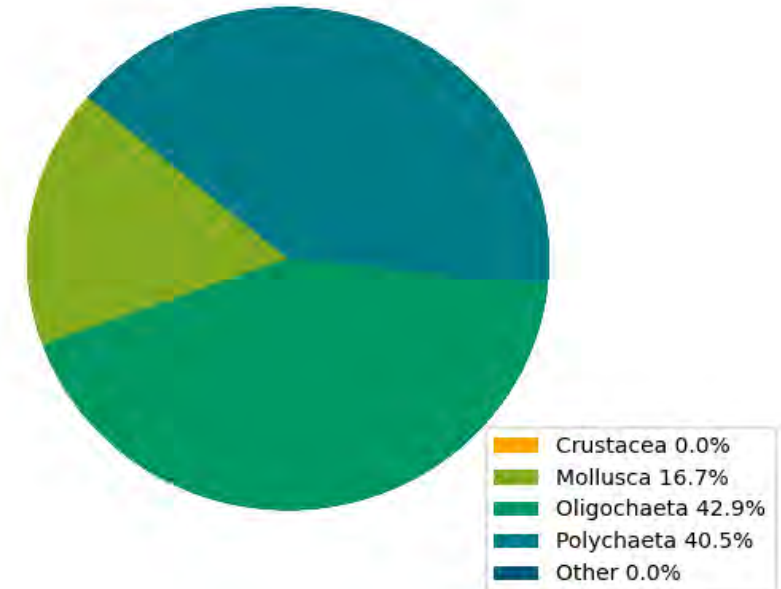


### Benthic Grab USW075

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1050                            |
| Taxa Richness <sup>1</sup> :   |                     | 13                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

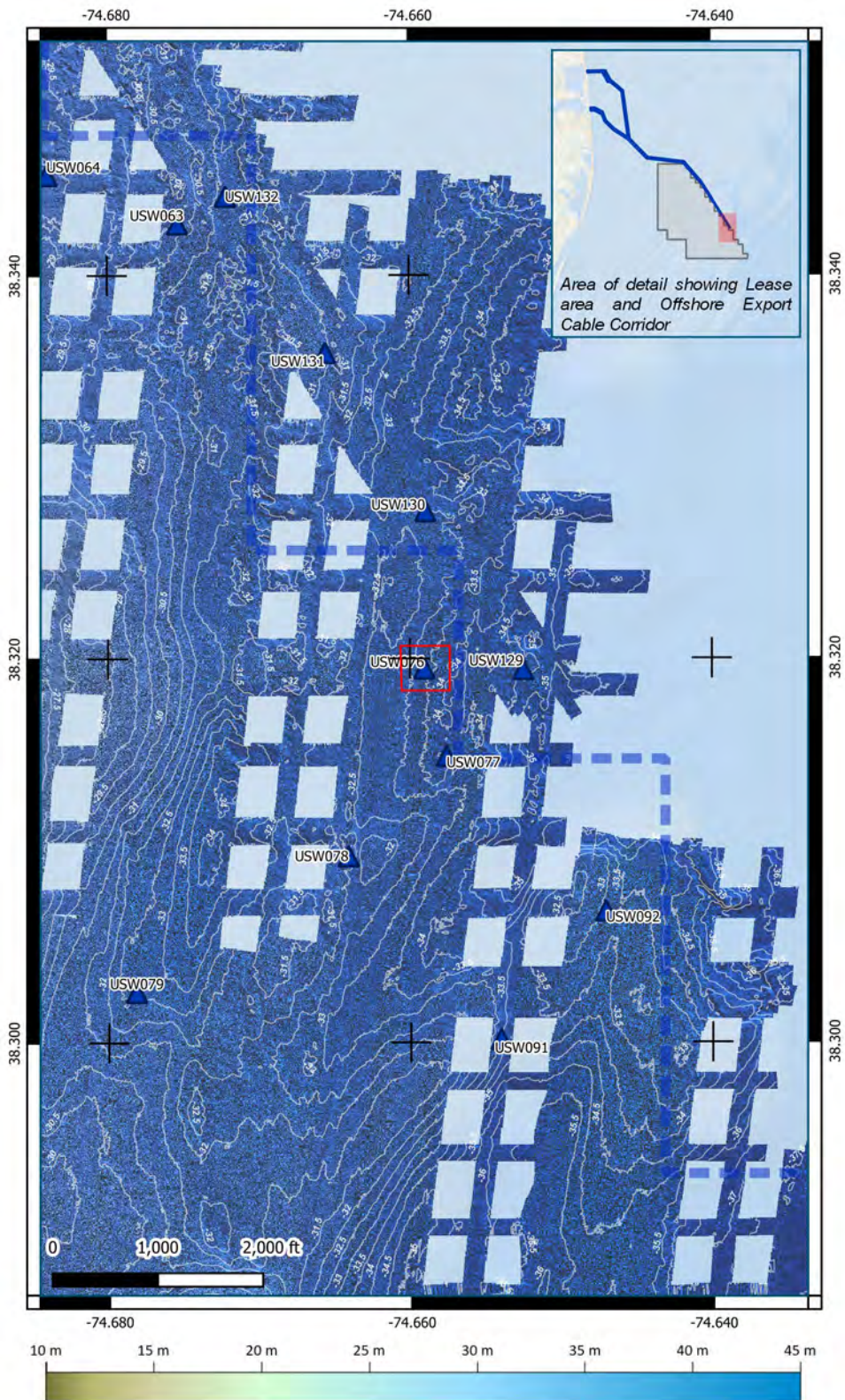


### Sample Photograph





### Map of Benthic Grab Location

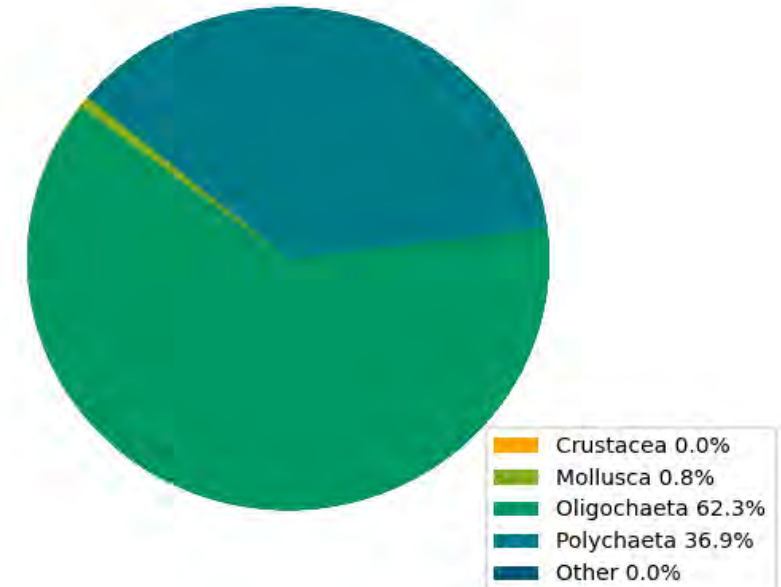


### Benthic Grab USW076

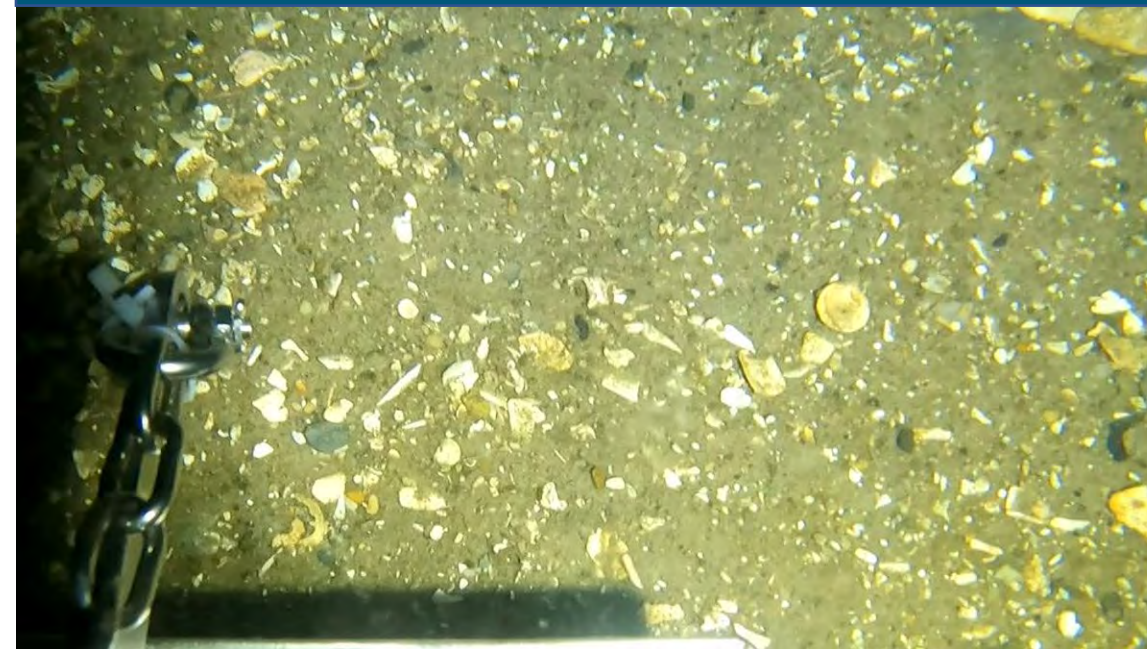
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 3250                            |
| Taxa Richness <sup>1</sup> :   |                     | 16                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

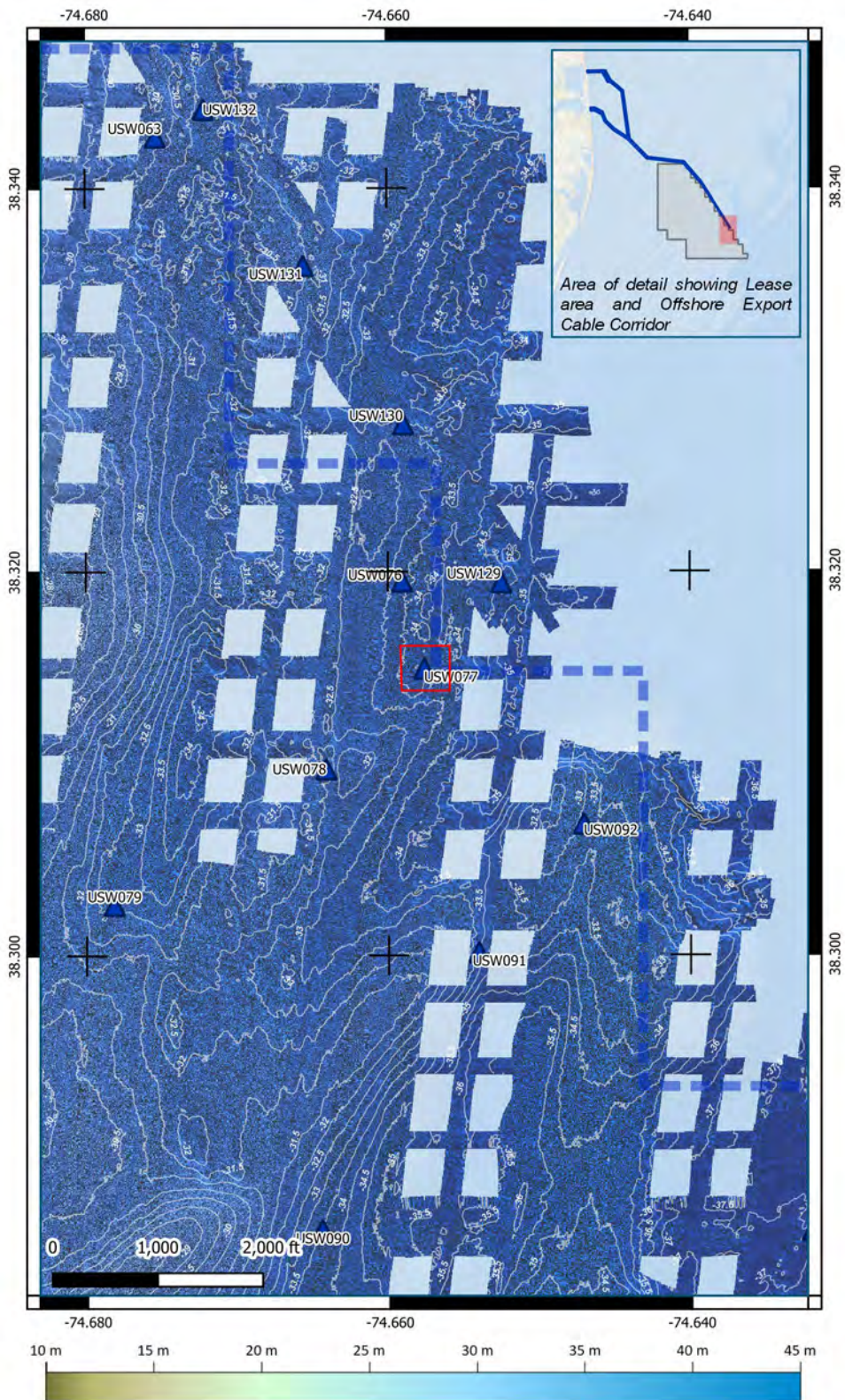


### Sample Photograph





### Map of Benthic Grab Location

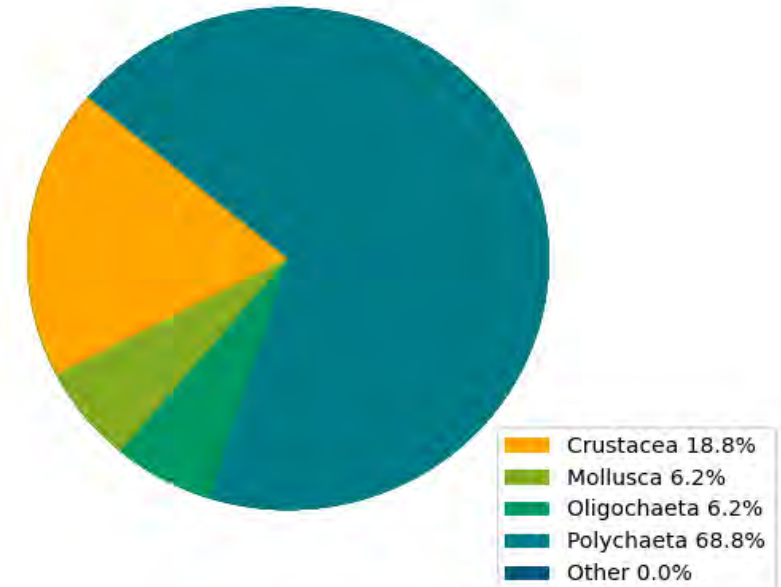


### Benthic Grab USW077

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 800                             |
| Taxa Richness <sup>1</sup> :   |                     | 18                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

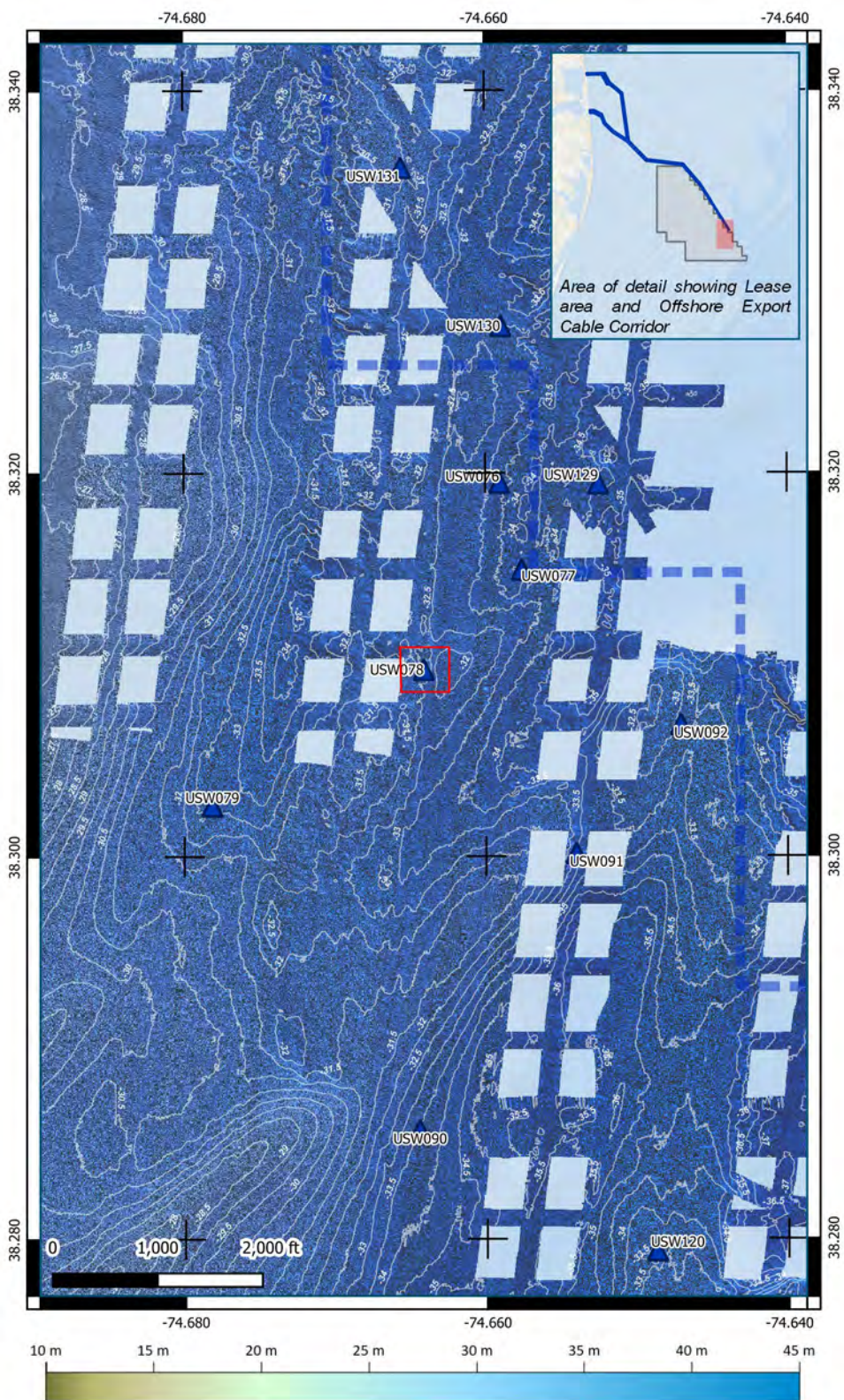


### Sample Photograph





### Map of Benthic Grab Location

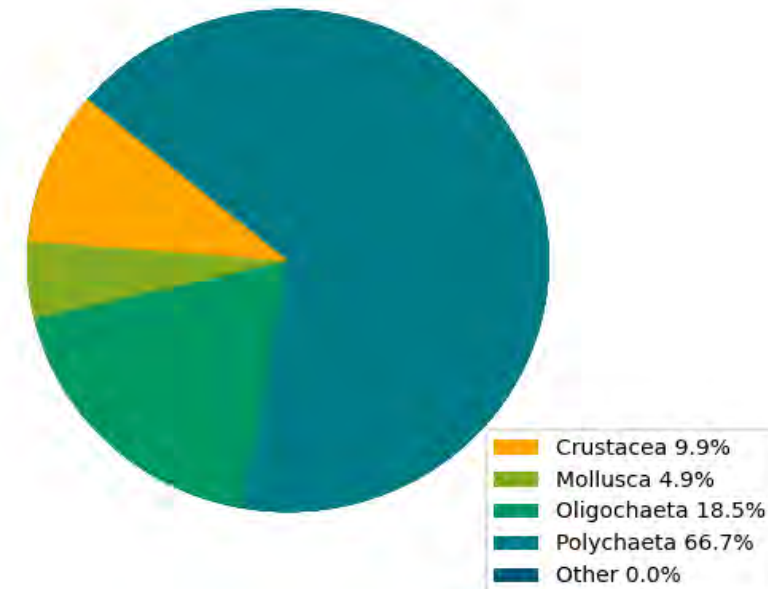


### Benthic Grab USW078

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 2025                            |
| Taxa Richness <sup>1</sup> :   |                     | 21                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

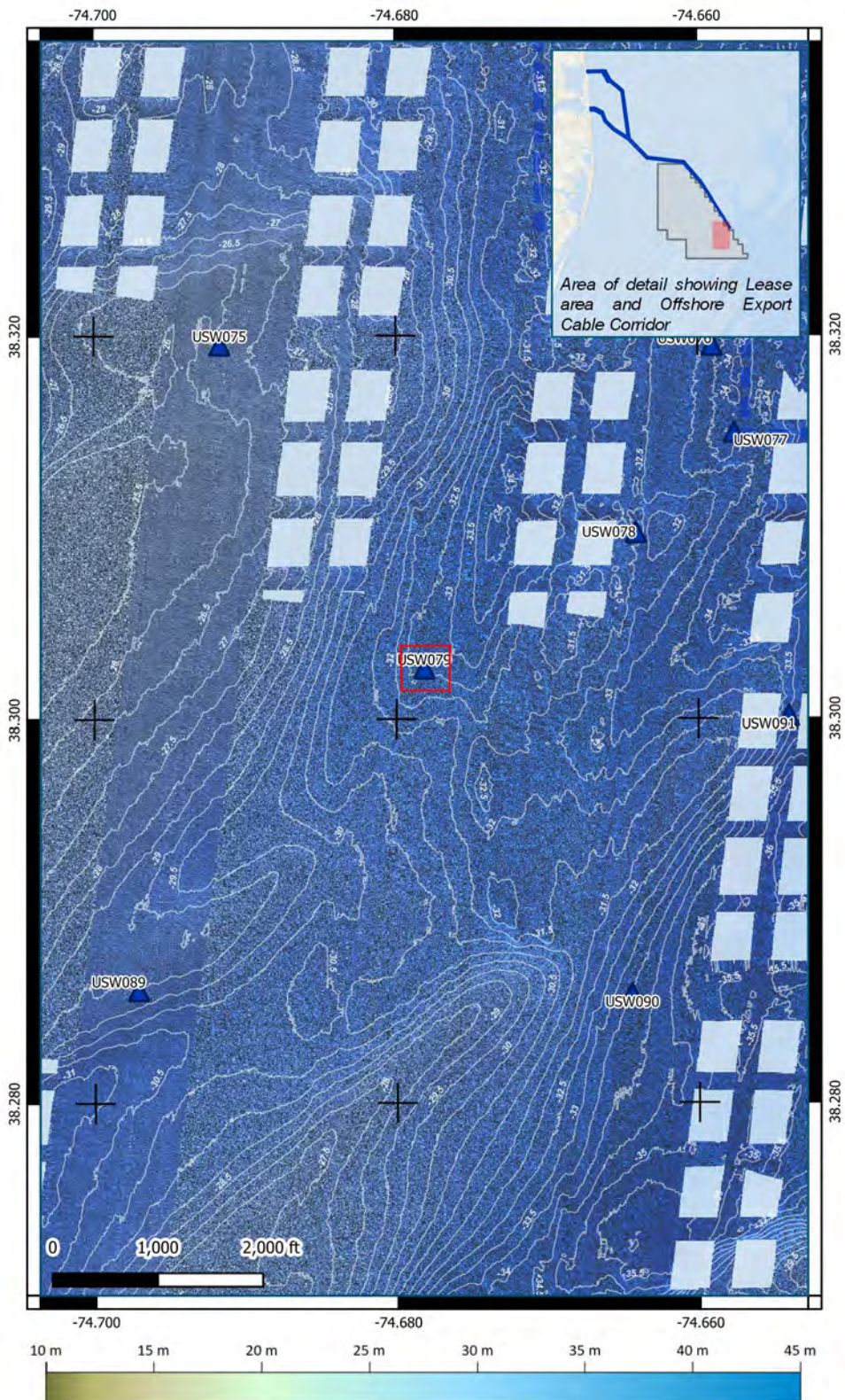


### Sample Photograph





### Map of Benthic Grab Location

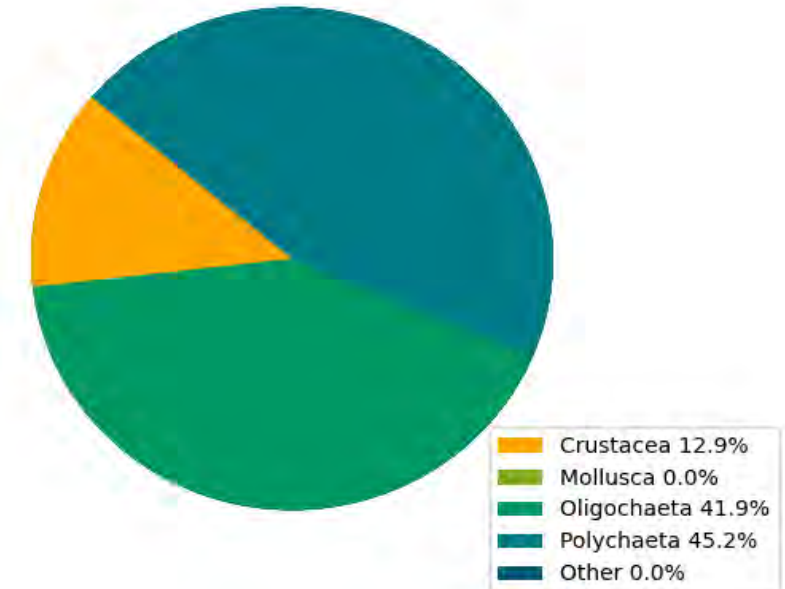


### Benthic Grab USW079

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 775                           |
| Taxa Richness <sup>1</sup> :   |                     | 10                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

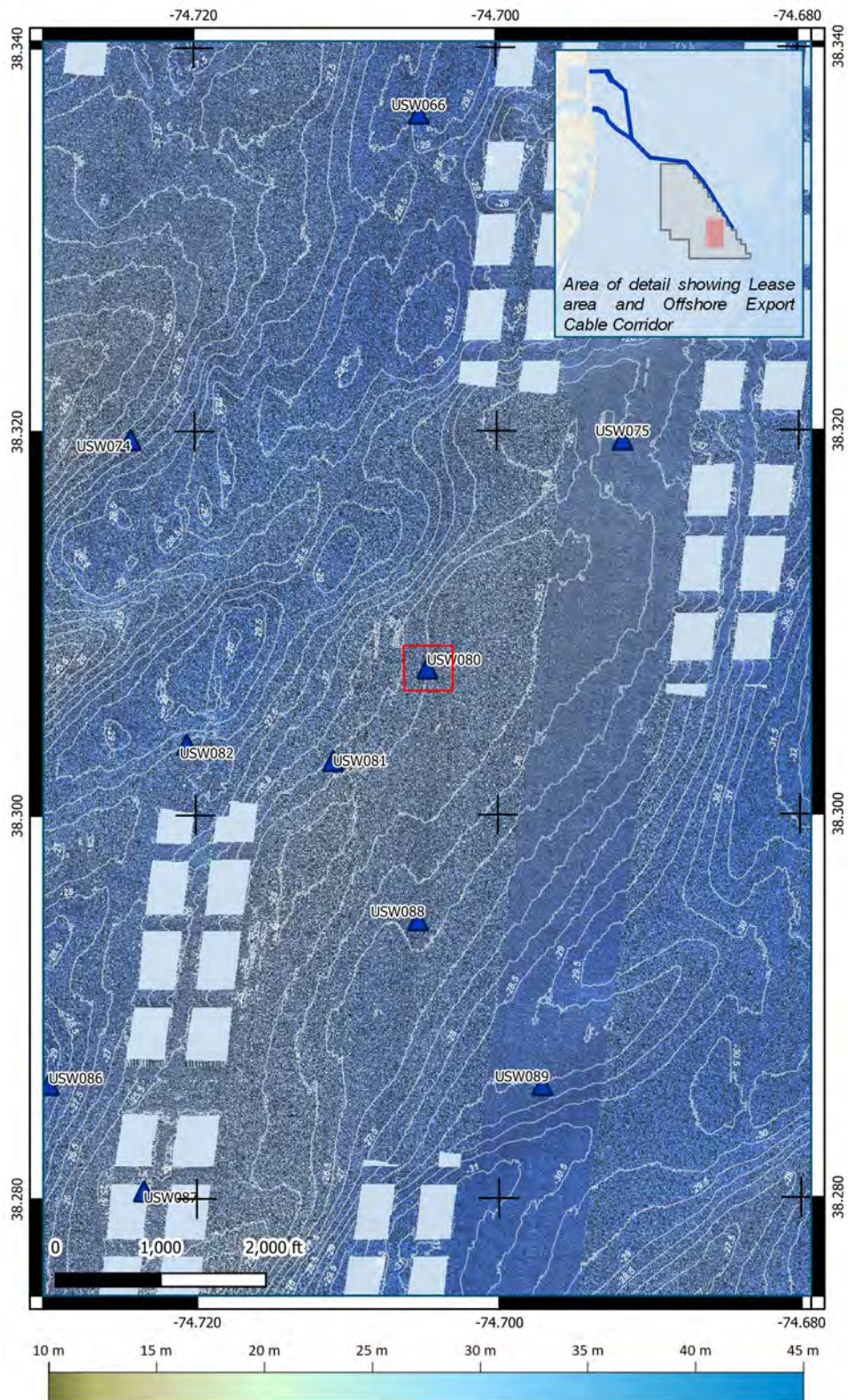


### Sample Photograph





### Map of Benthic Grab Location

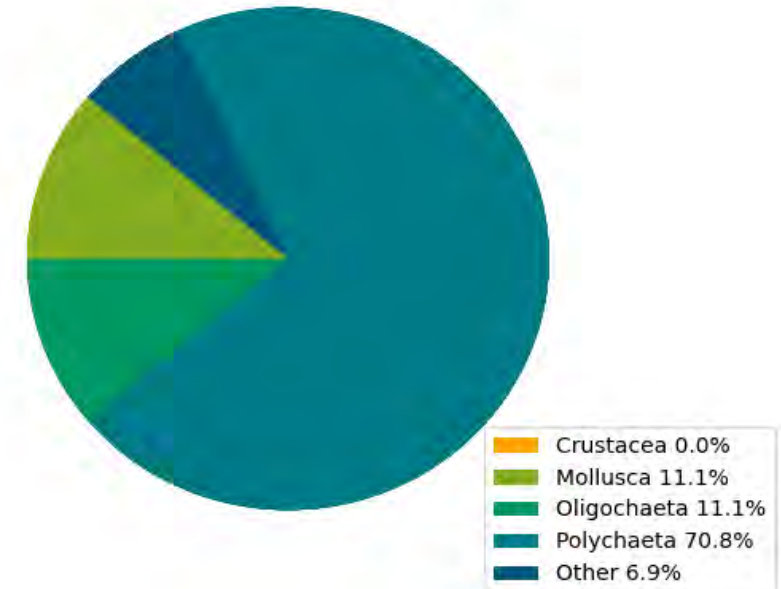


### Benthic Grab USW080

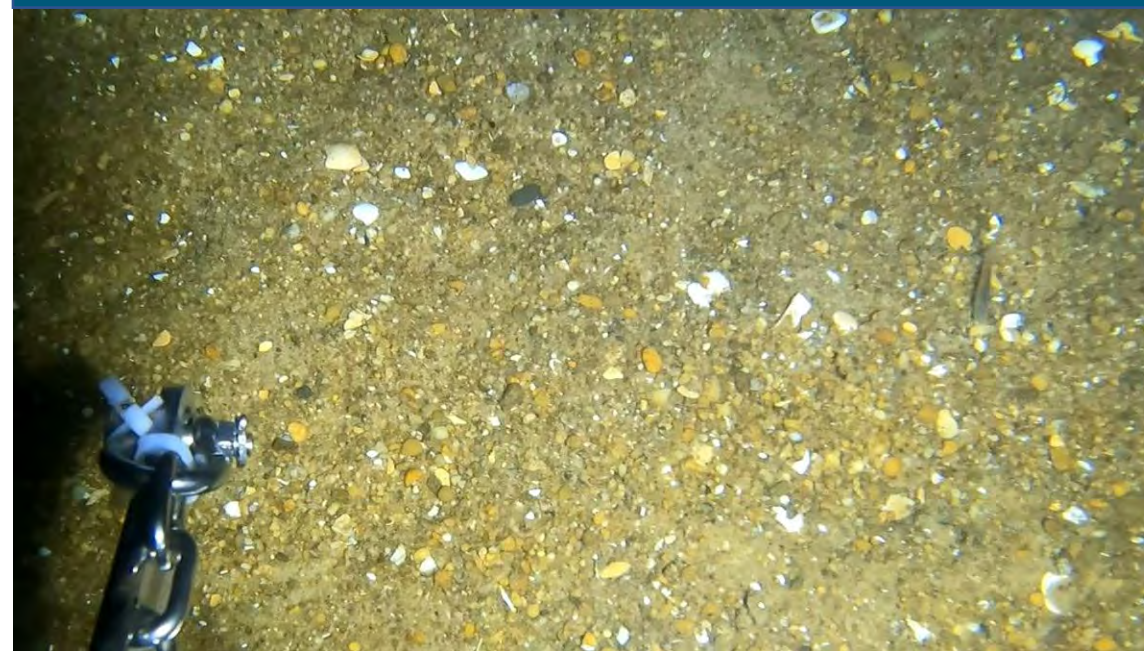
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1800                            |
| Taxa Richness <sup>1</sup> :   |                     | 14                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

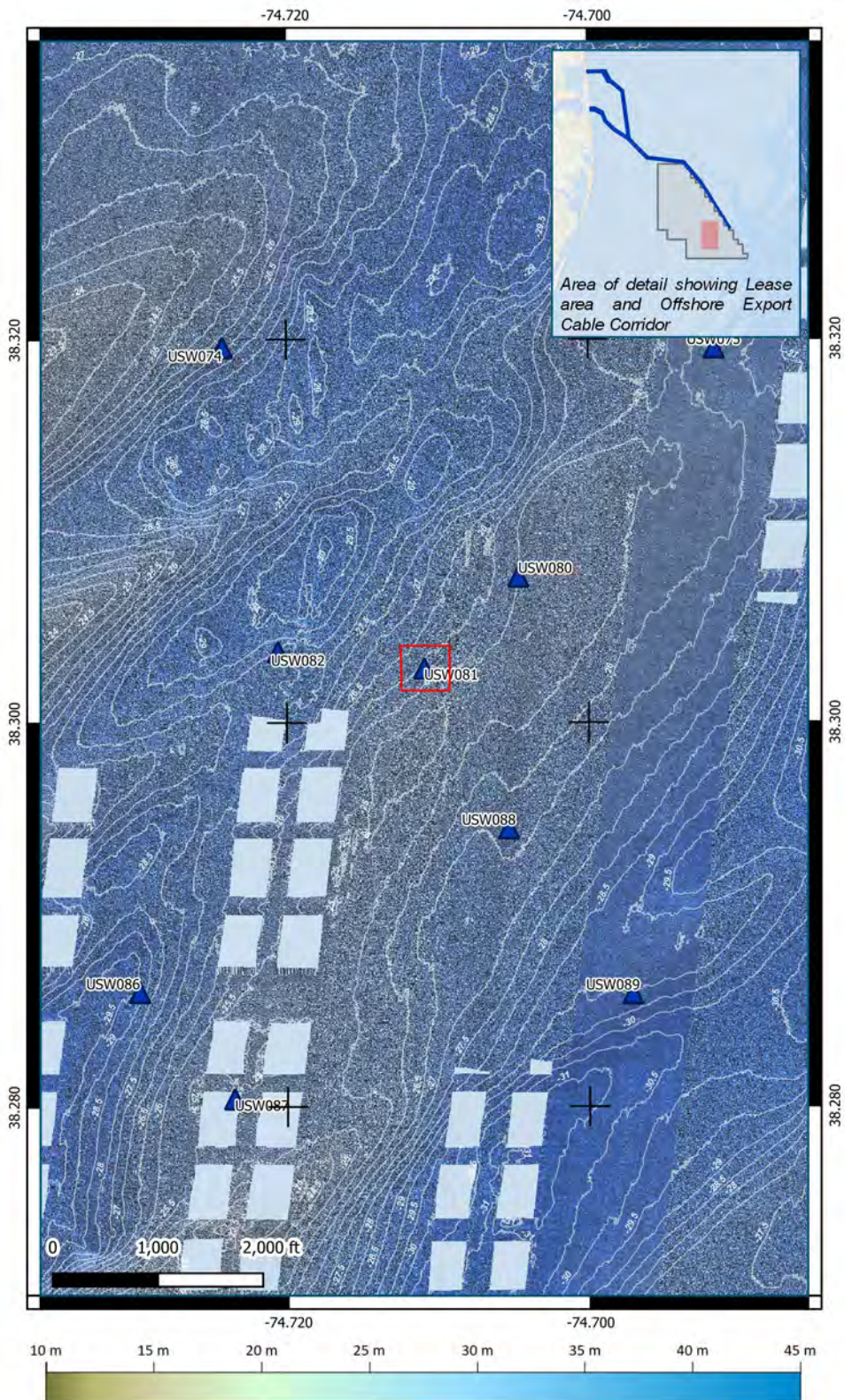


### Sample Photograph





### Map of Benthic Grab Location

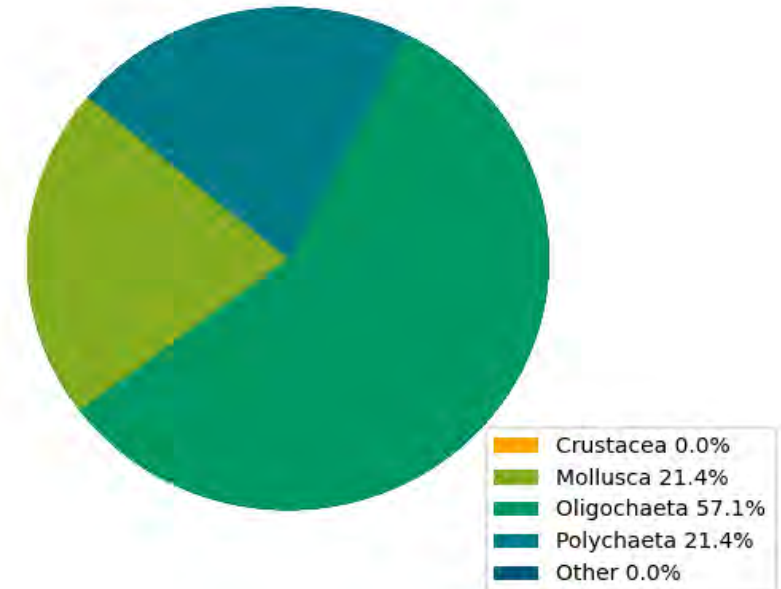


### Benthic Grab USW081

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1050                            |
| Taxa Richness <sup>1</sup> :   |                     | 11                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

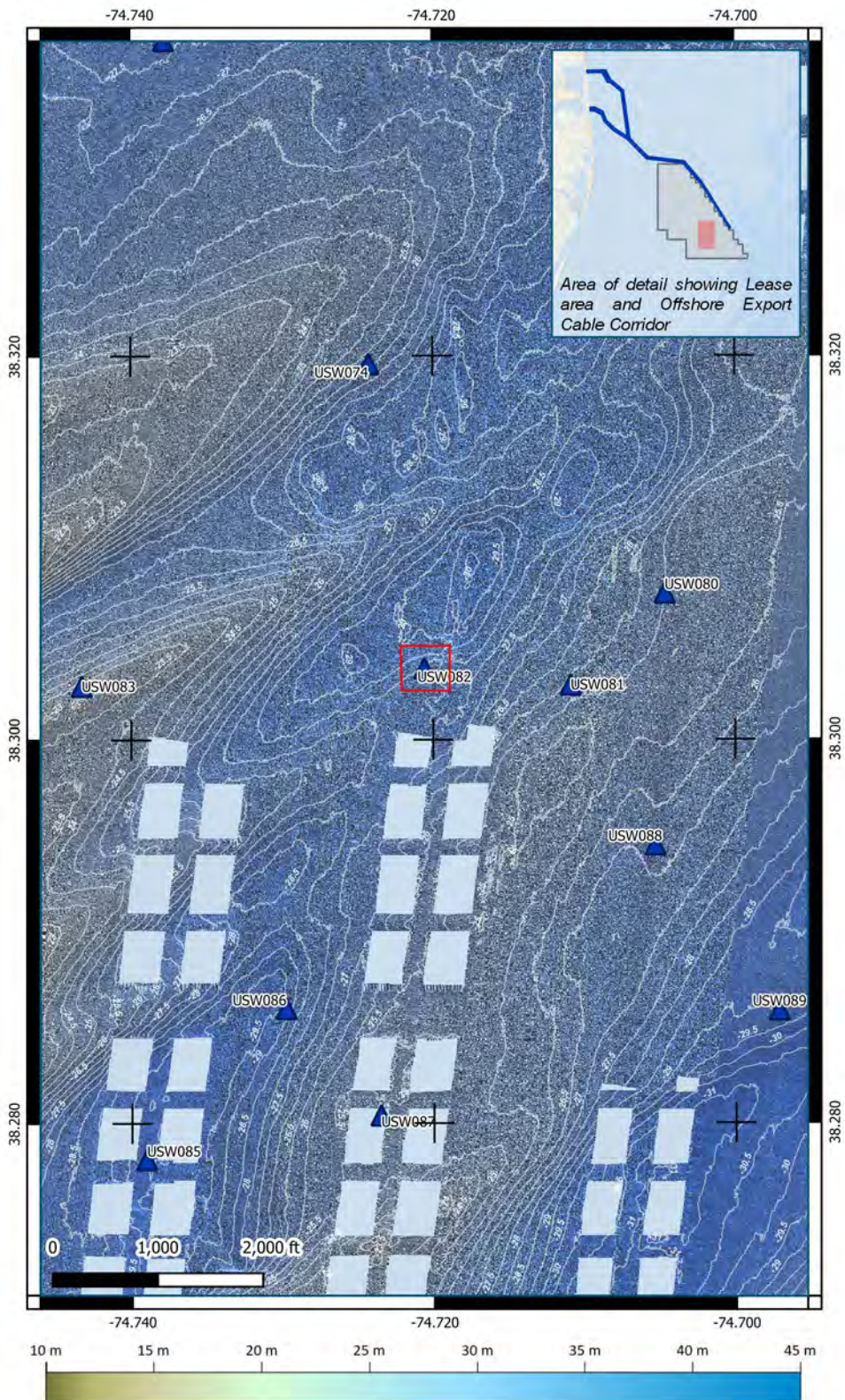


### Sample Photograph





### Map of Benthic Grab Location

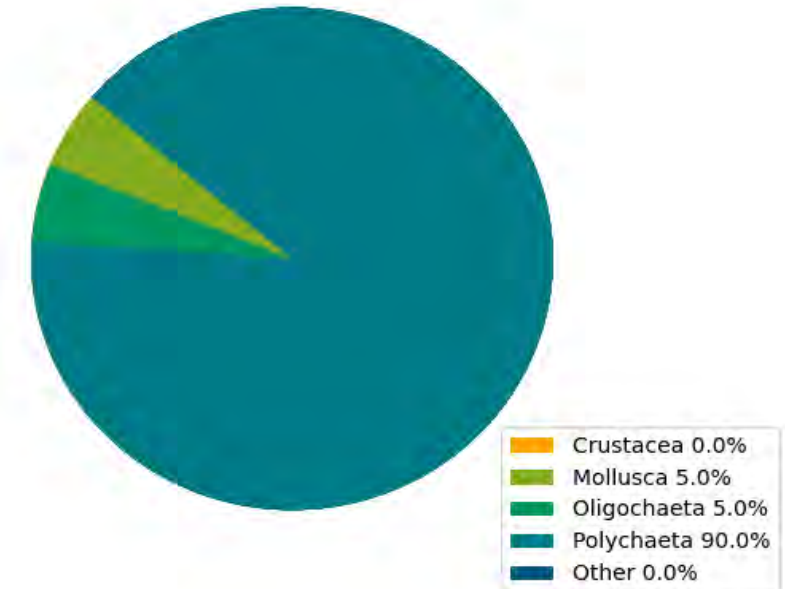


### Benthic Grab USW082

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1000                            |
| Taxa Richness <sup>1</sup> :   |                     | 9                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

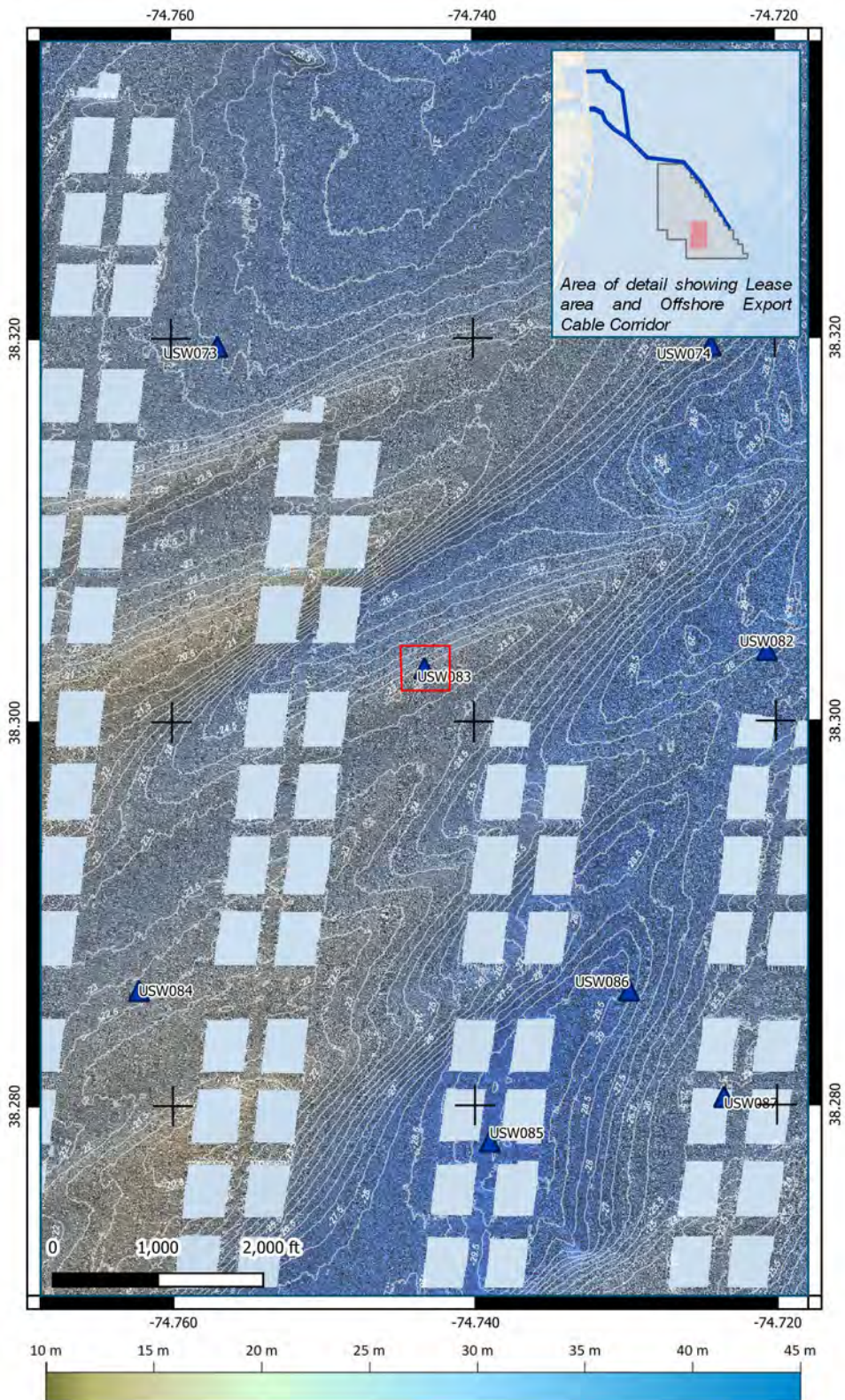


### Sample Photograph





### Map of Benthic Grab Location

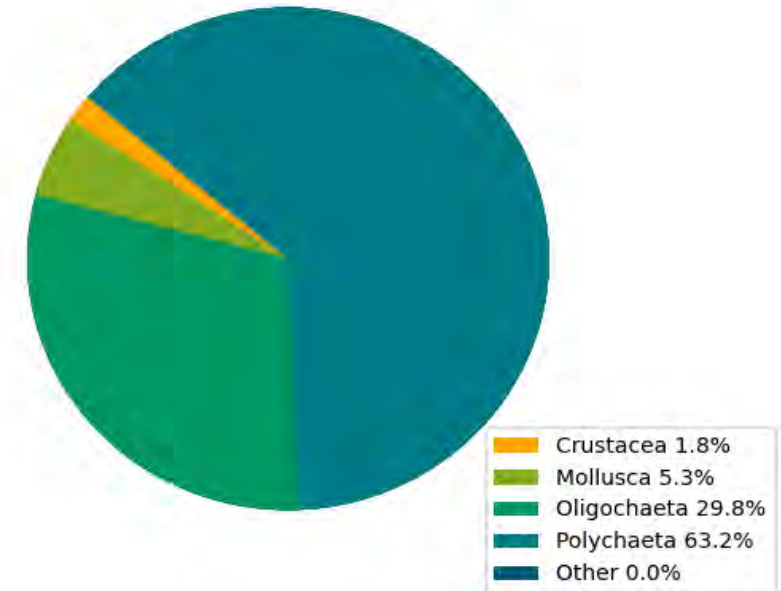


### Benthic Grab USW083

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1425                            |
| Taxa Richness <sup>1</sup> :   |                     | 11                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

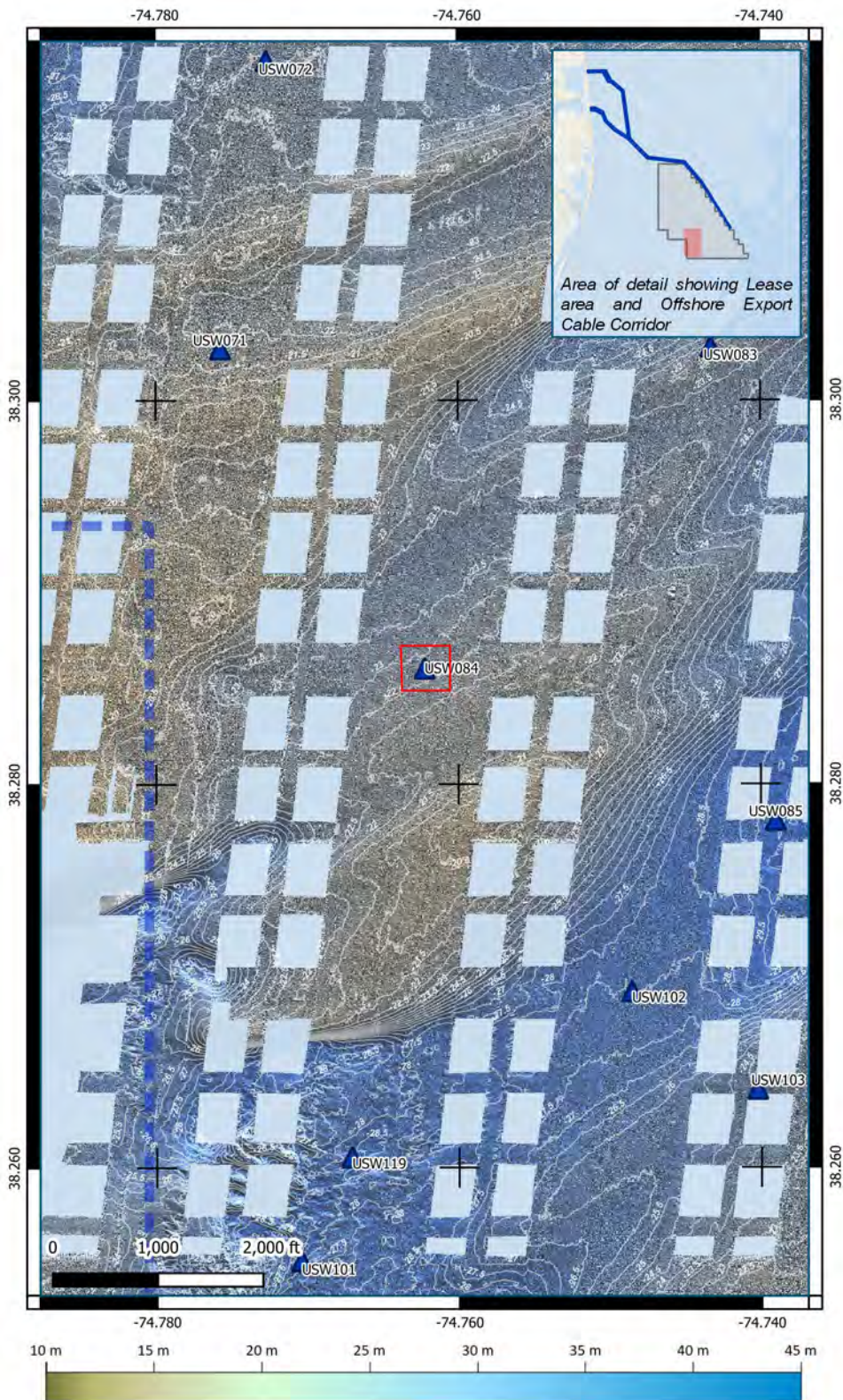


### Sample Photograph





### Map of Benthic Grab Location

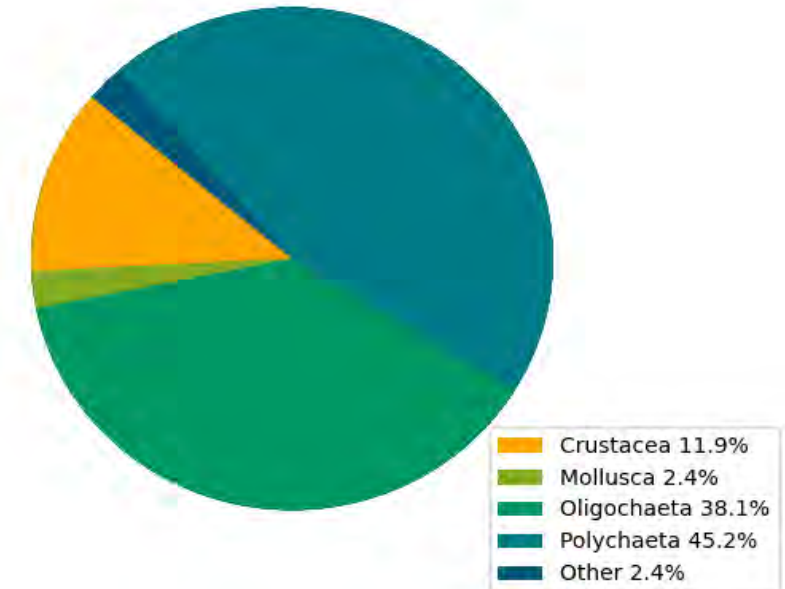


### Benthic Grab USW084

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1050                            |
| Taxa Richness <sup>1</sup> :   |                     | 15                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

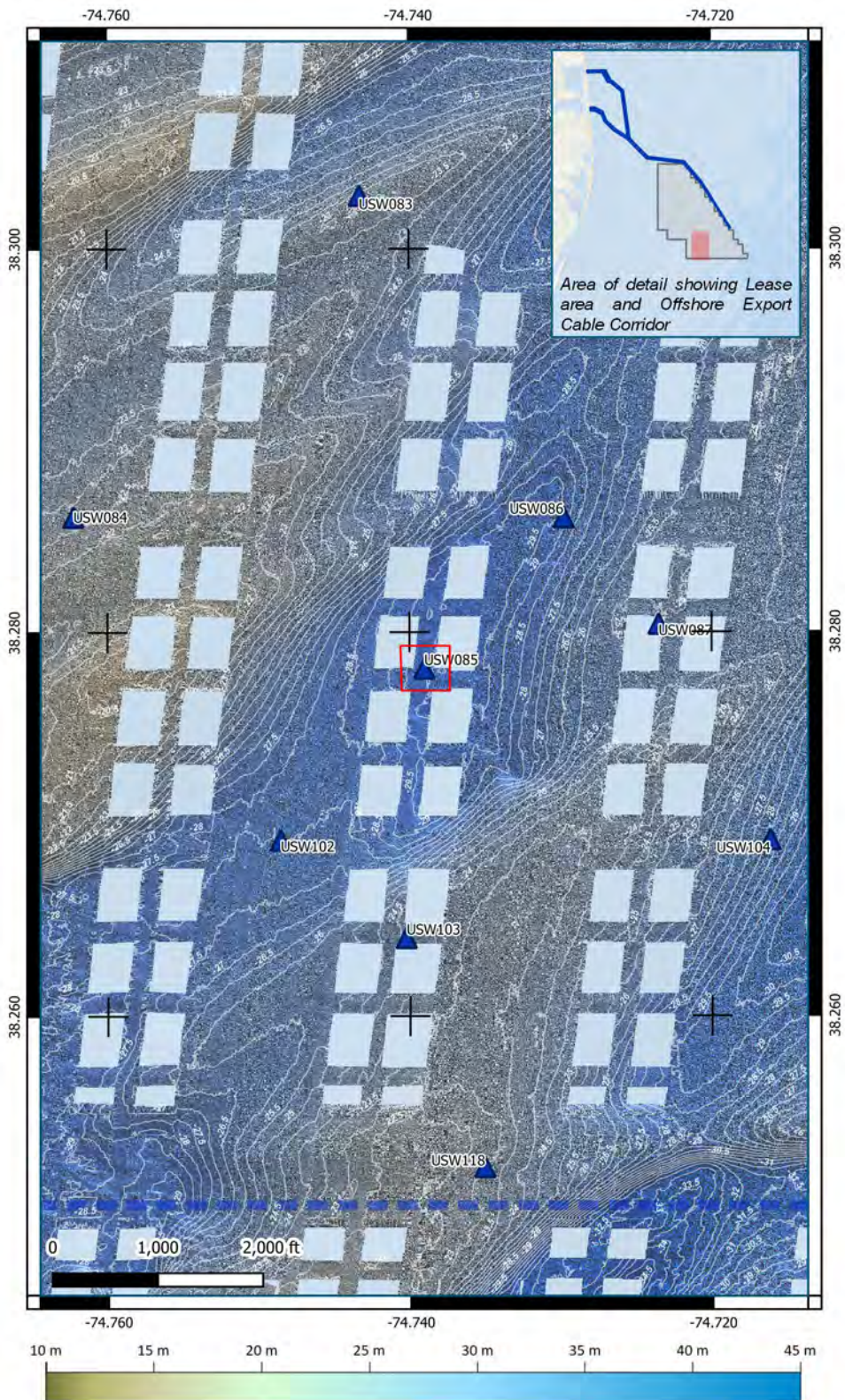


### Sample Photograph





### Map of Benthic Grab Location

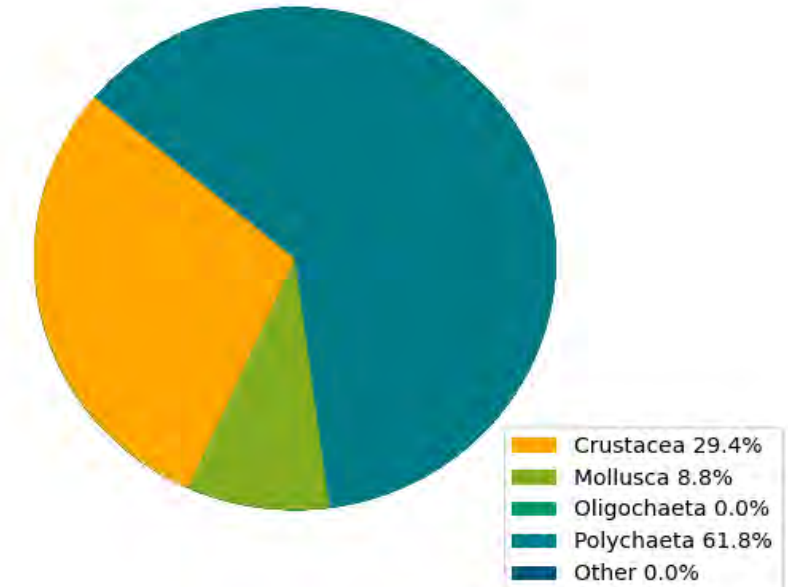


### Benthic Grab USW085

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 850                             |
| Taxa Richness <sup>1</sup> :   |                     | 11                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

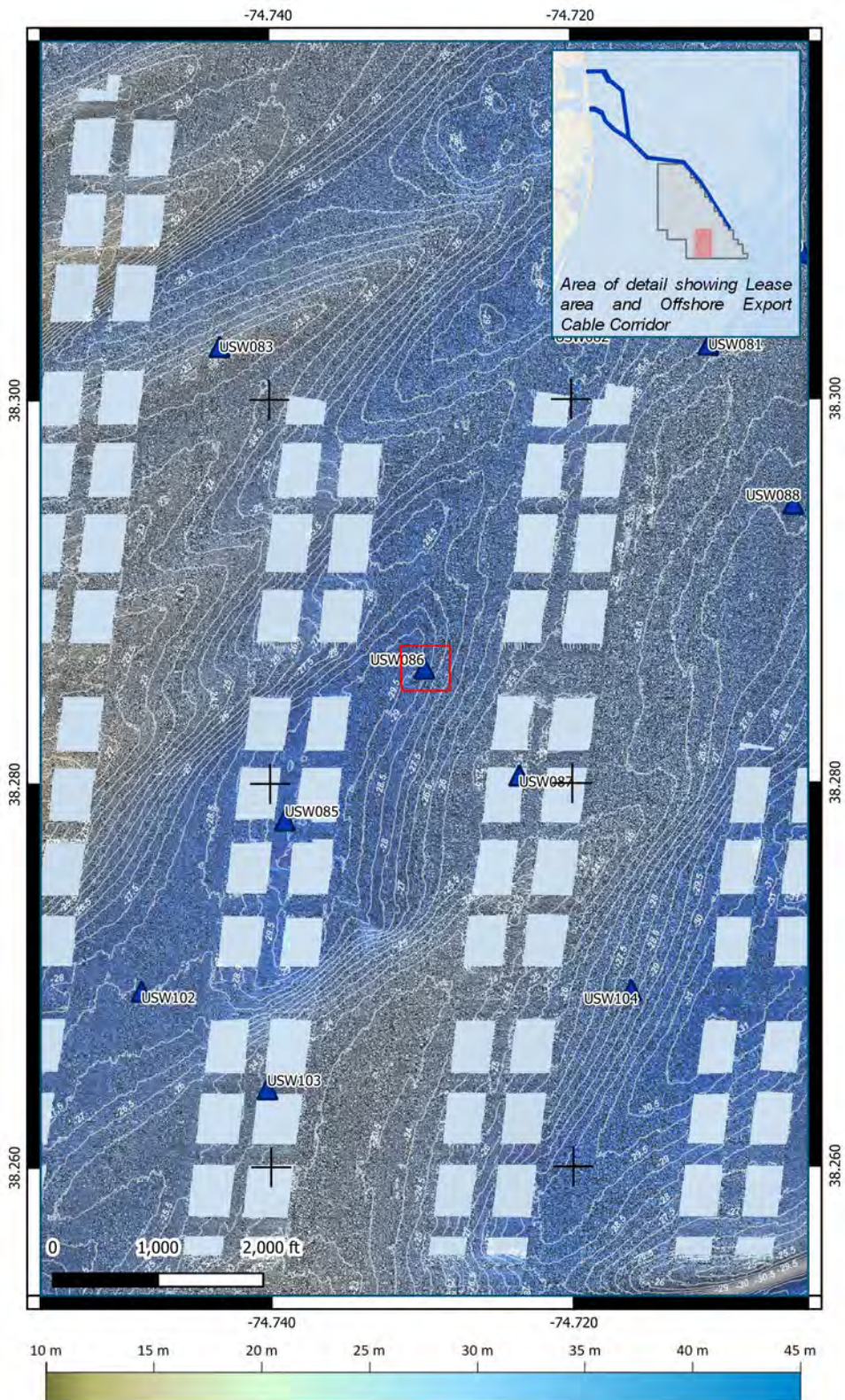


### Sample Photograph





### Map of Benthic Grab Location

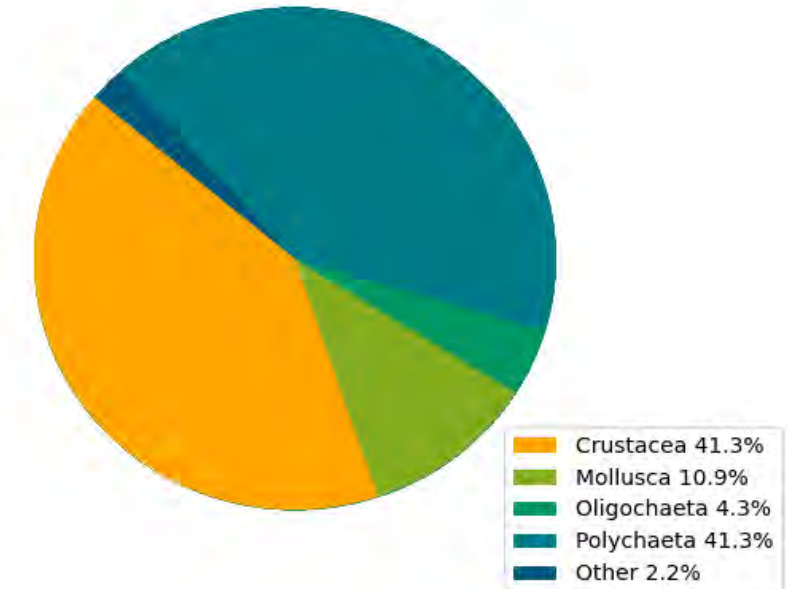


### Benthic Grab USW086

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1150                          |
| Taxa Richness <sup>1</sup> :   |                     | 25                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

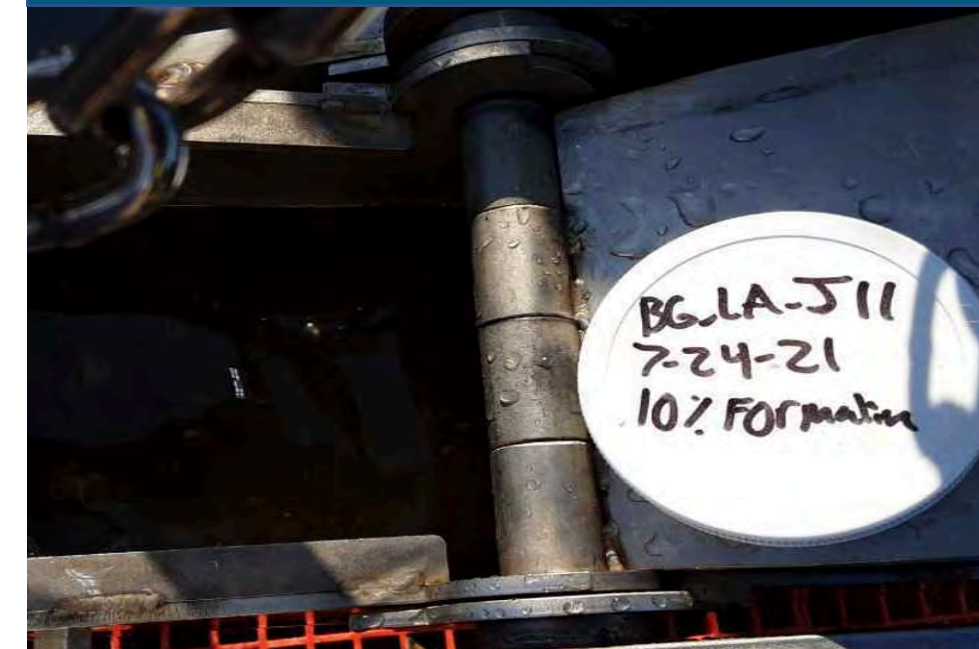
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

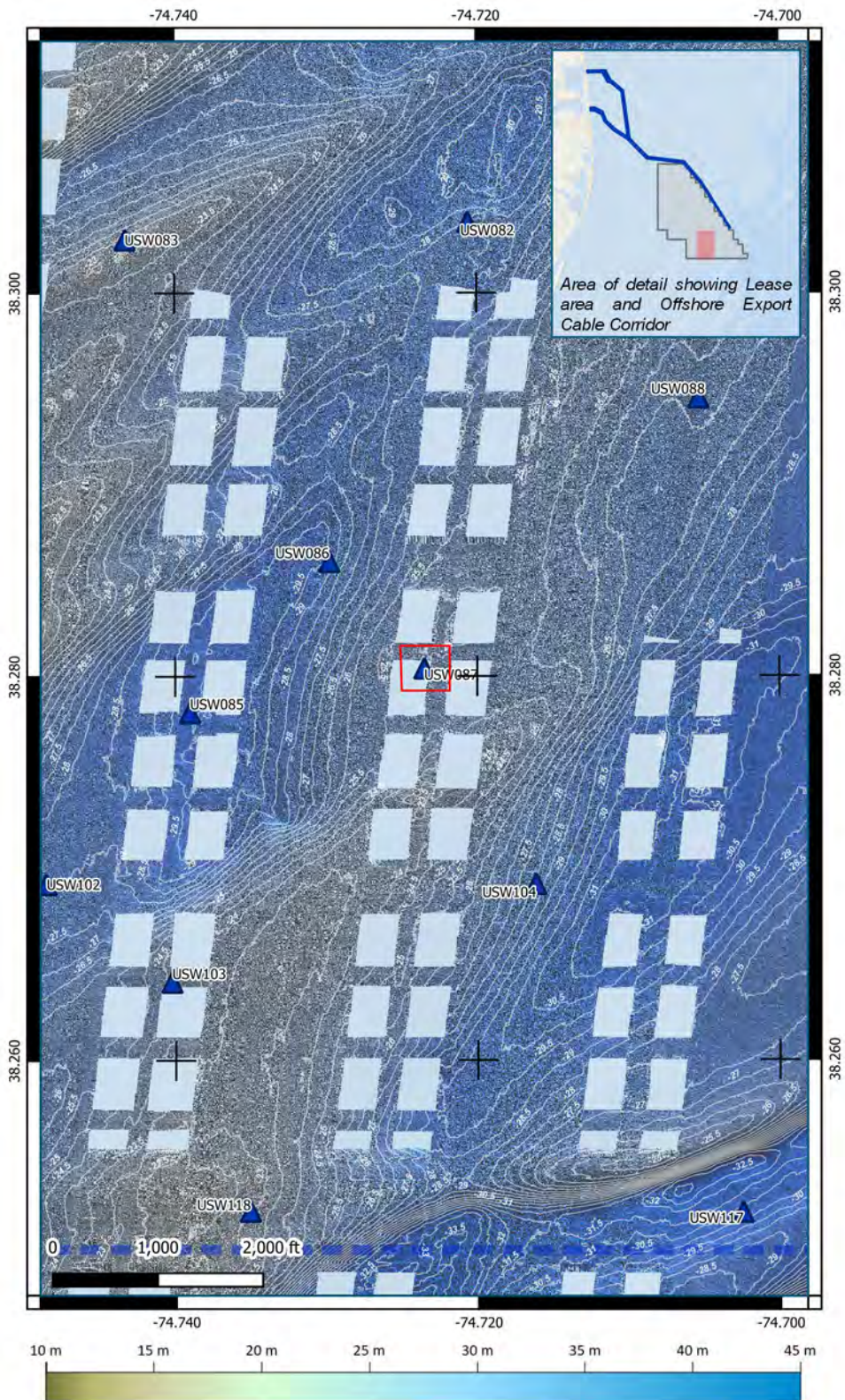


### Sample Photograph





### Map of Benthic Grab Location

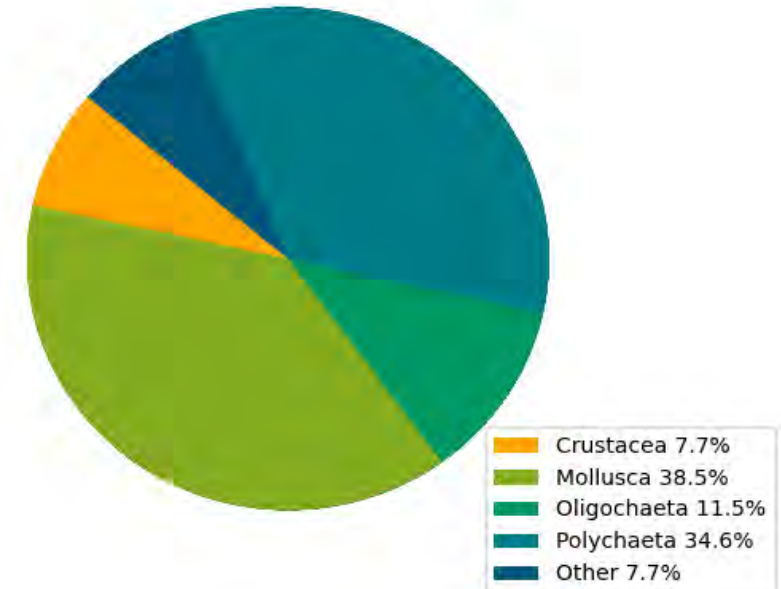


### Benthic Grab USW087

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 650                             |
| Taxa Richness <sup>1</sup> :   |                     | 14                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

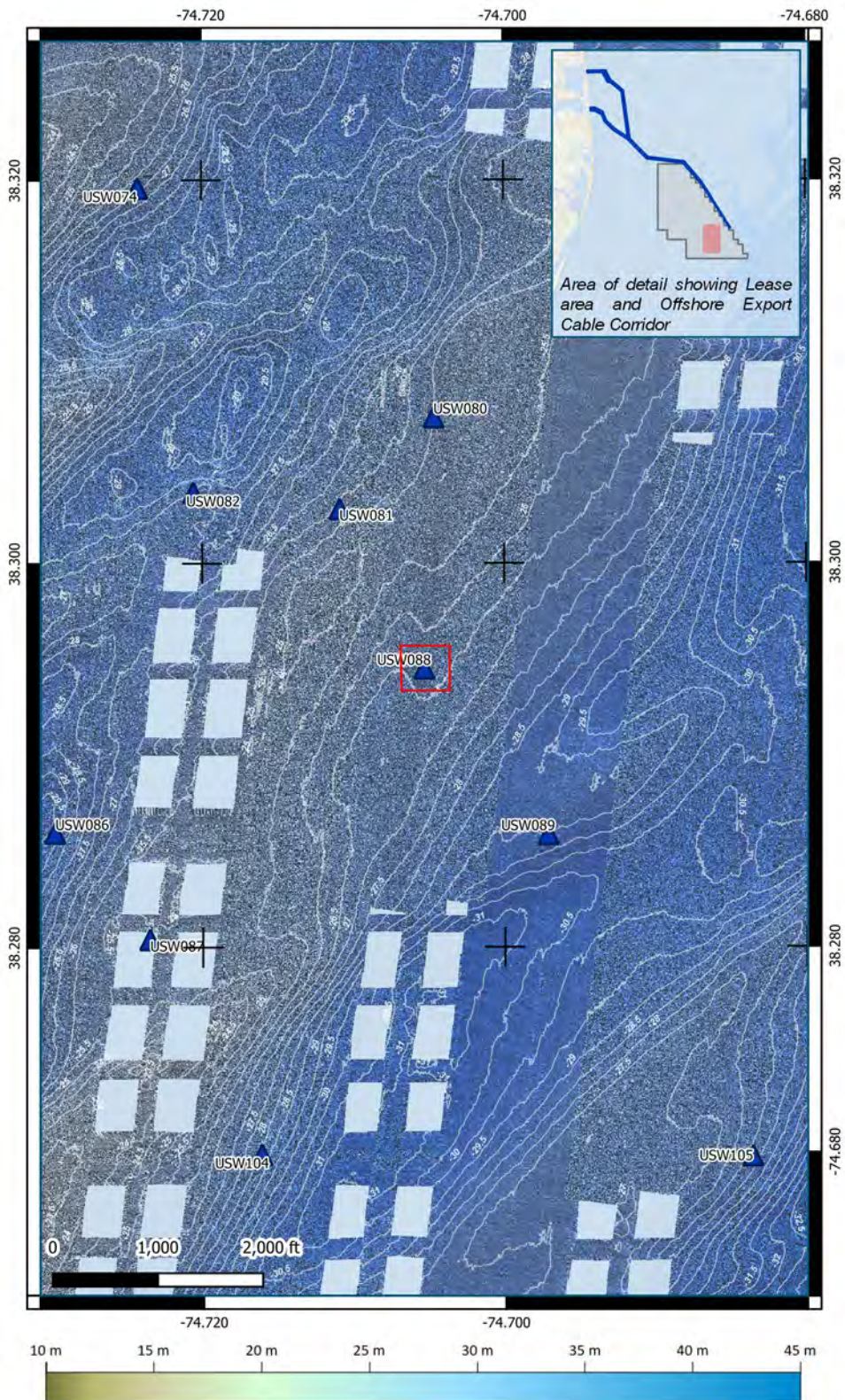


### Sample Photograph





### Map of Benthic Grab Location

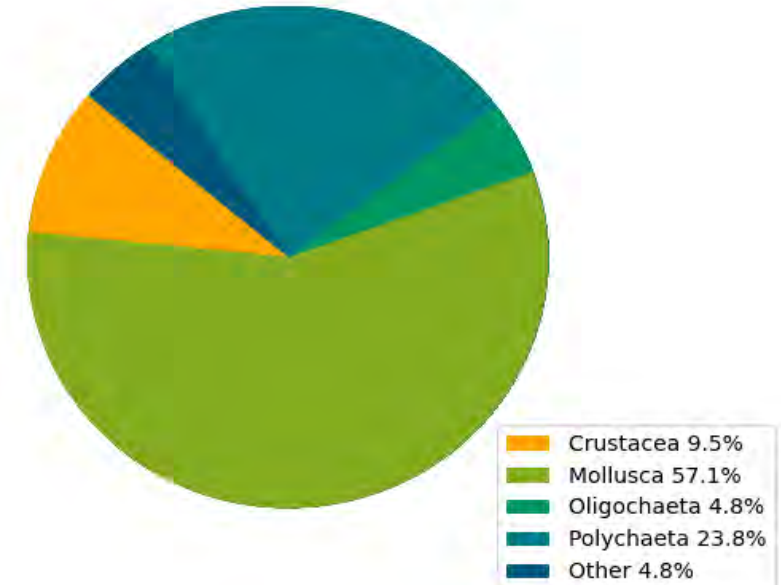


### Benthic Grab USW088

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 525                             |
| Taxa Richness <sup>1</sup> :   |                     | 9                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

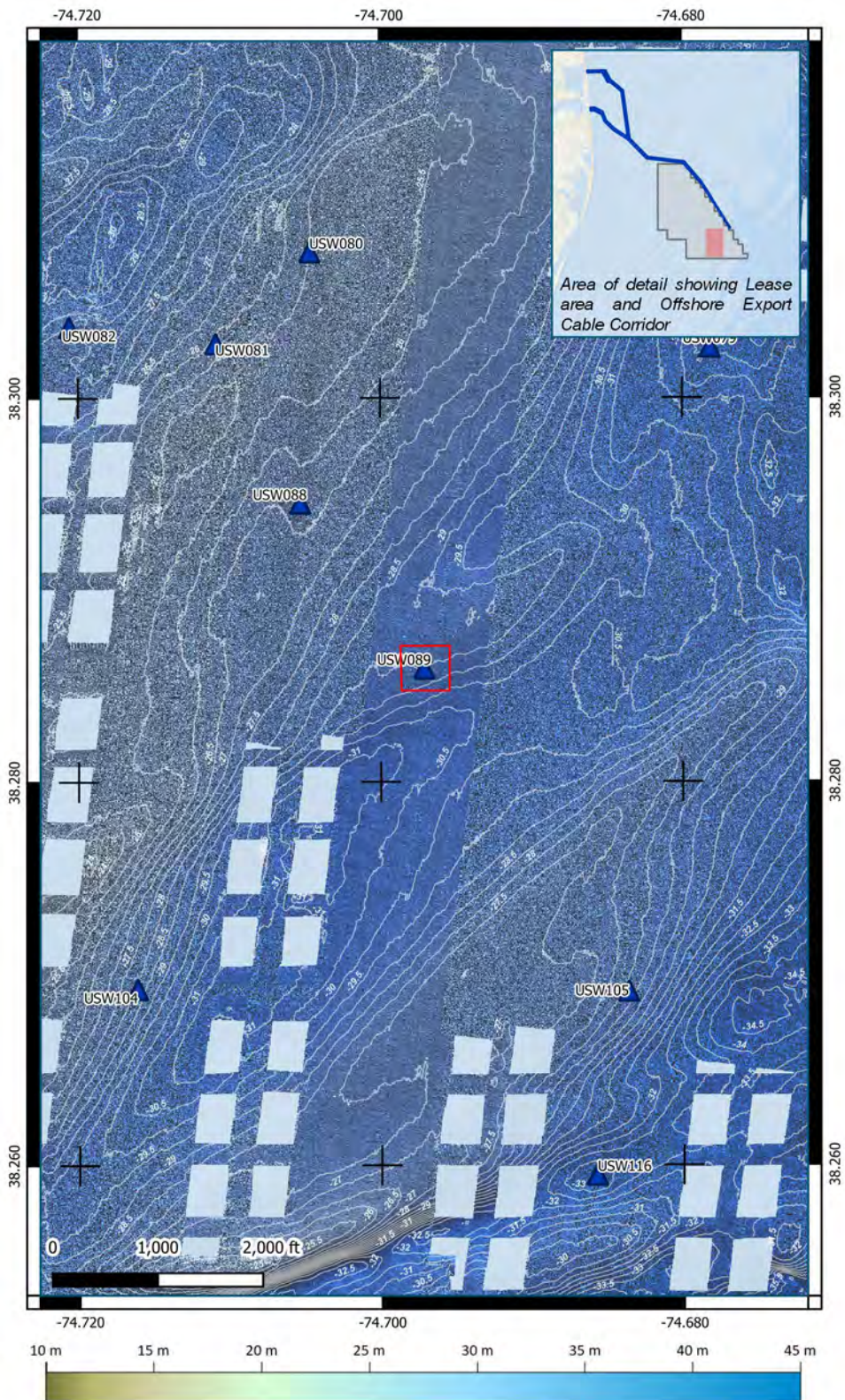


### Sample Photograph





### Map of Benthic Grab Location

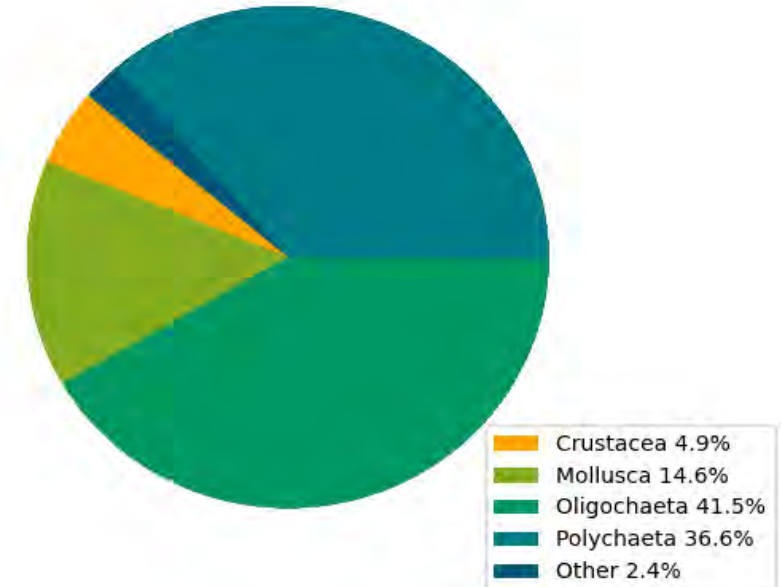


### Benthic Grab USW089

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Very Coarse/Coarse Sand       |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1025                          |
| Taxa Richness <sup>1</sup> :   |                     | 17                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

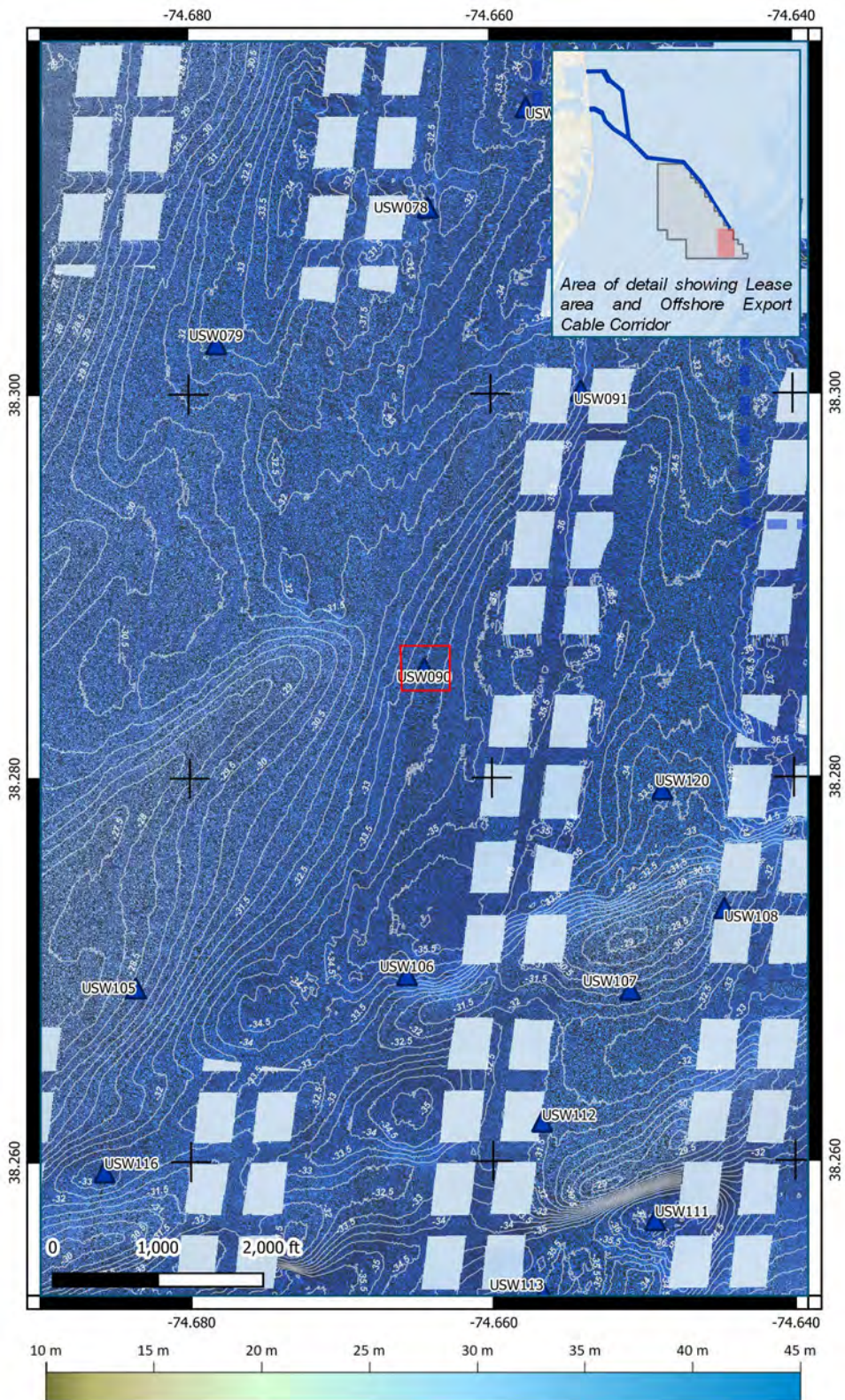


### Sample Photograph





### Map of Benthic Grab Location

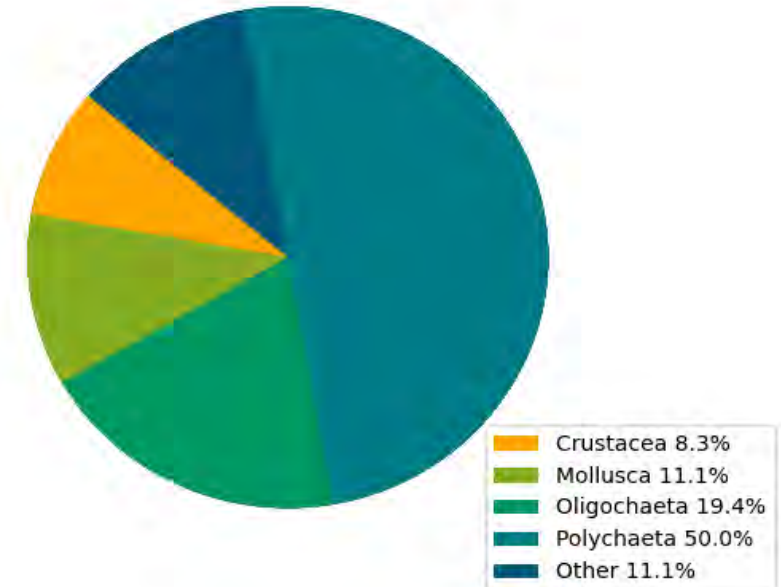


### Benthic Grab USW090

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 900                             |
| Taxa Richness <sup>1</sup> :   |                     | 16                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

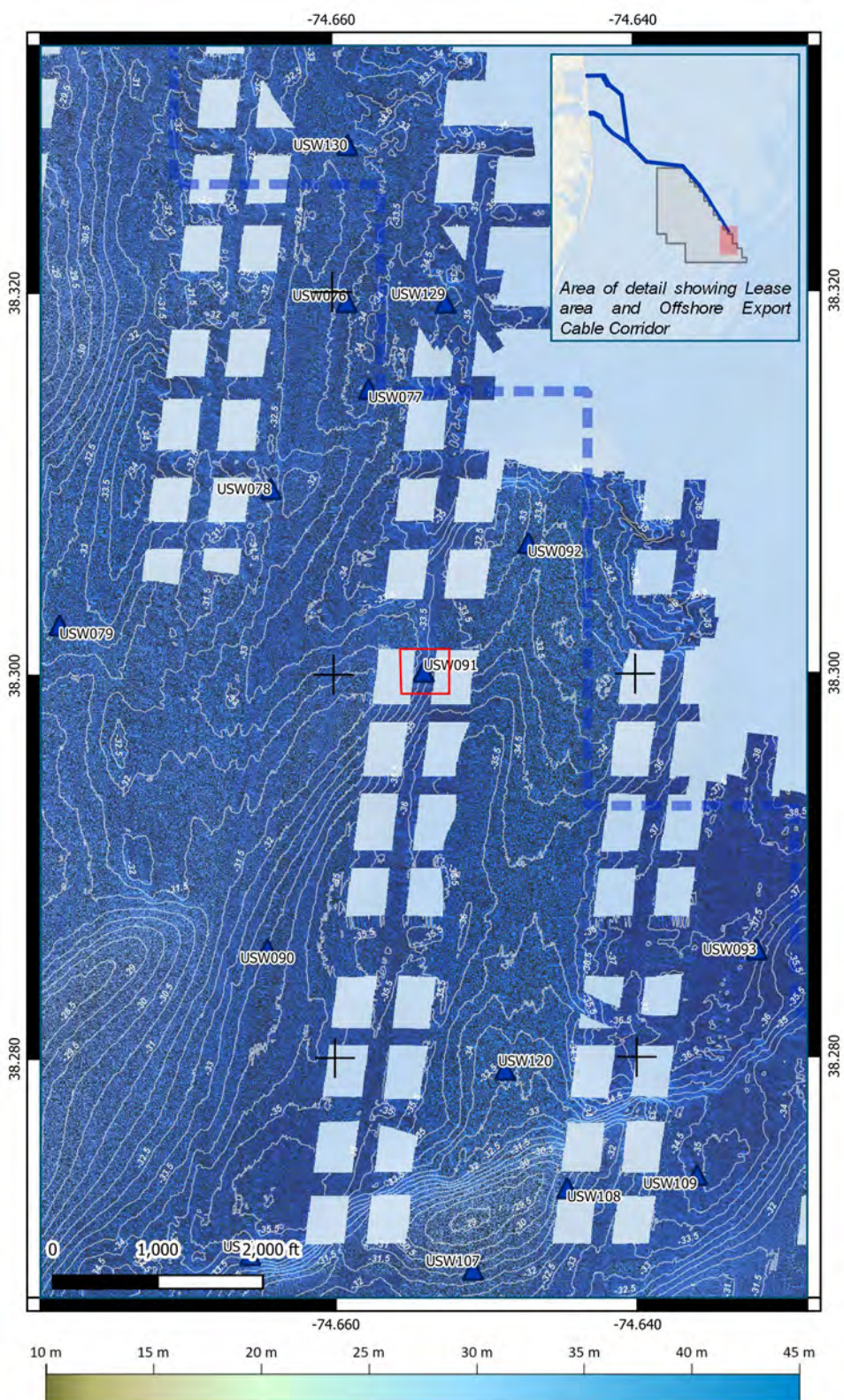


### Sample Photograph





### Map of Benthic Grab Location

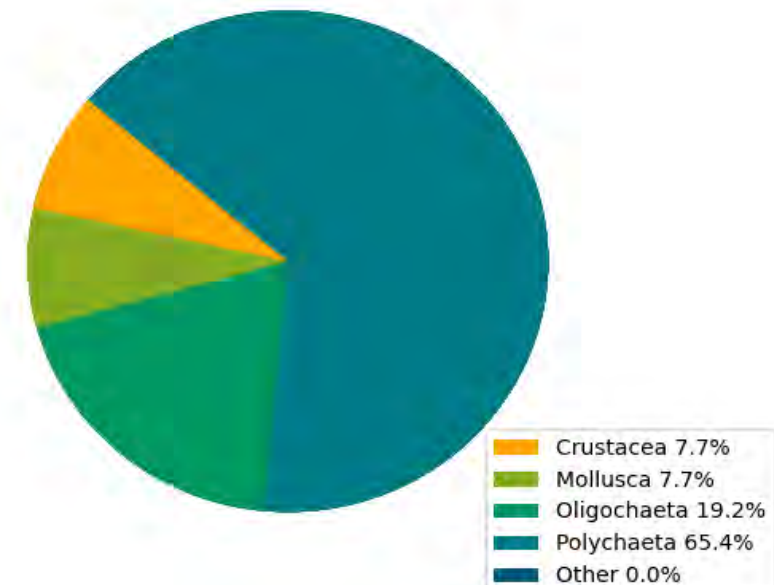


### Benthic Grab USW091

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 650                             |
| Taxa Richness <sup>1</sup> :   |                     | 15                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

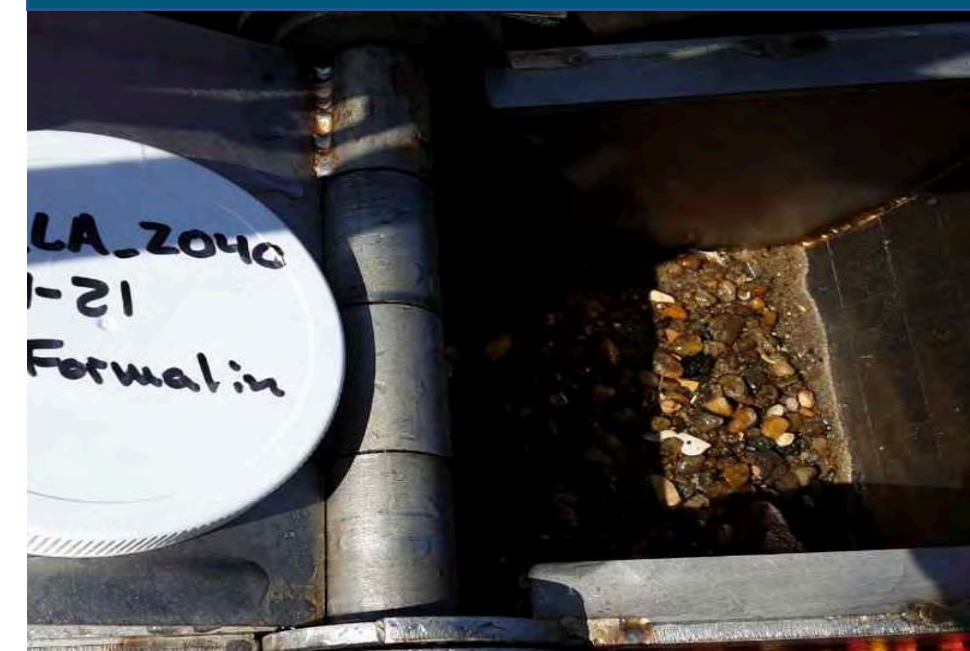
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

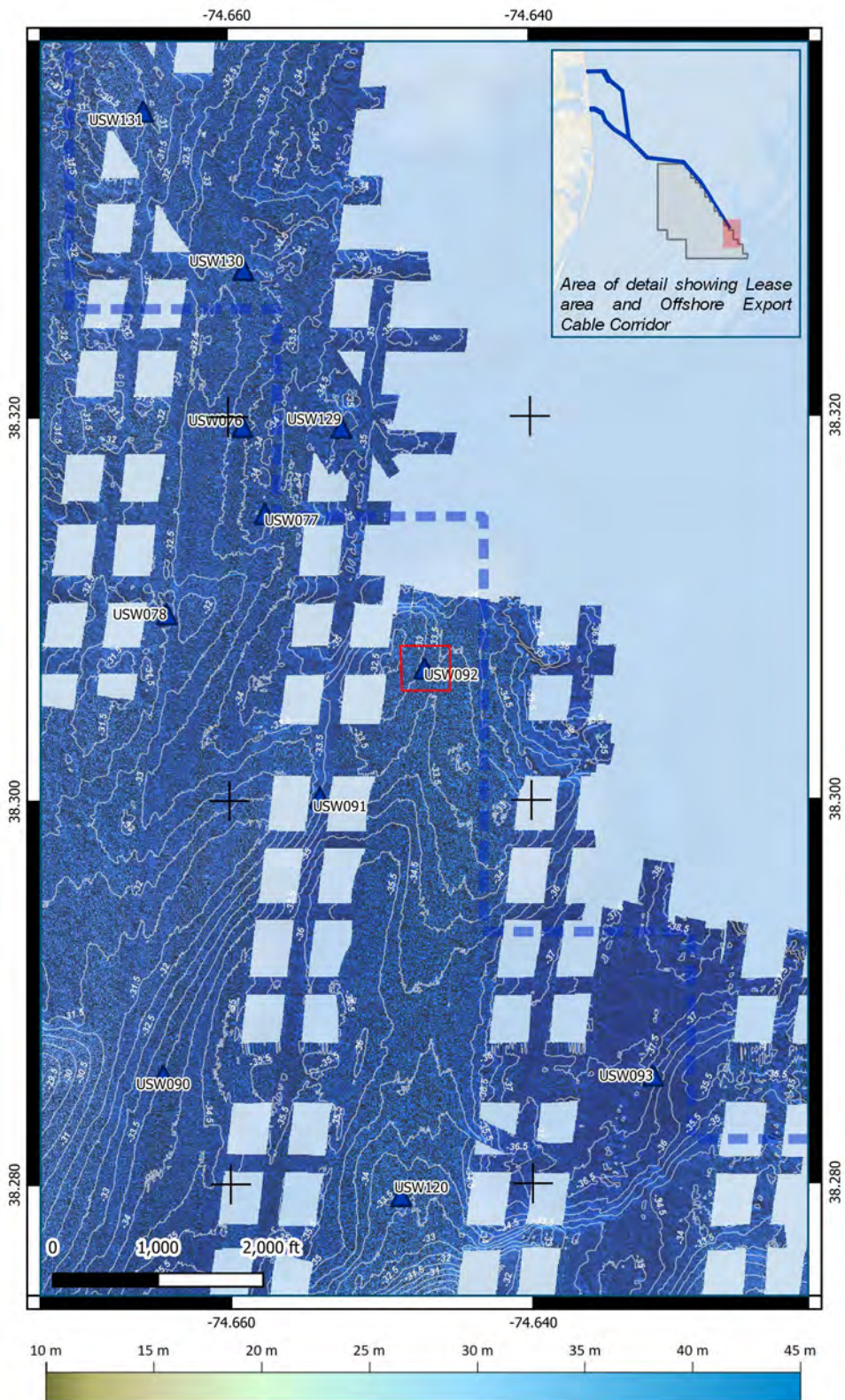


### Sample Photograph





### Map of Benthic Grab Location

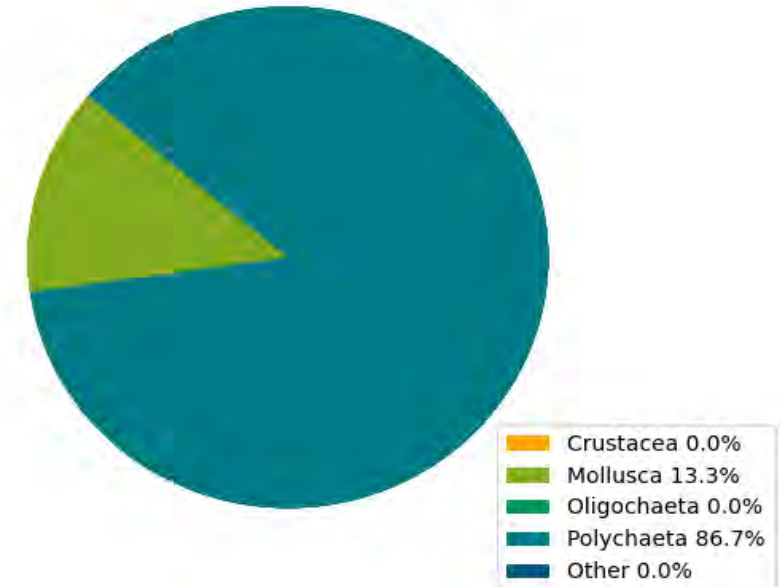


### Benthic Grab USW092

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 375                             |
| Taxa Richness <sup>1</sup> :   |                     | 10                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

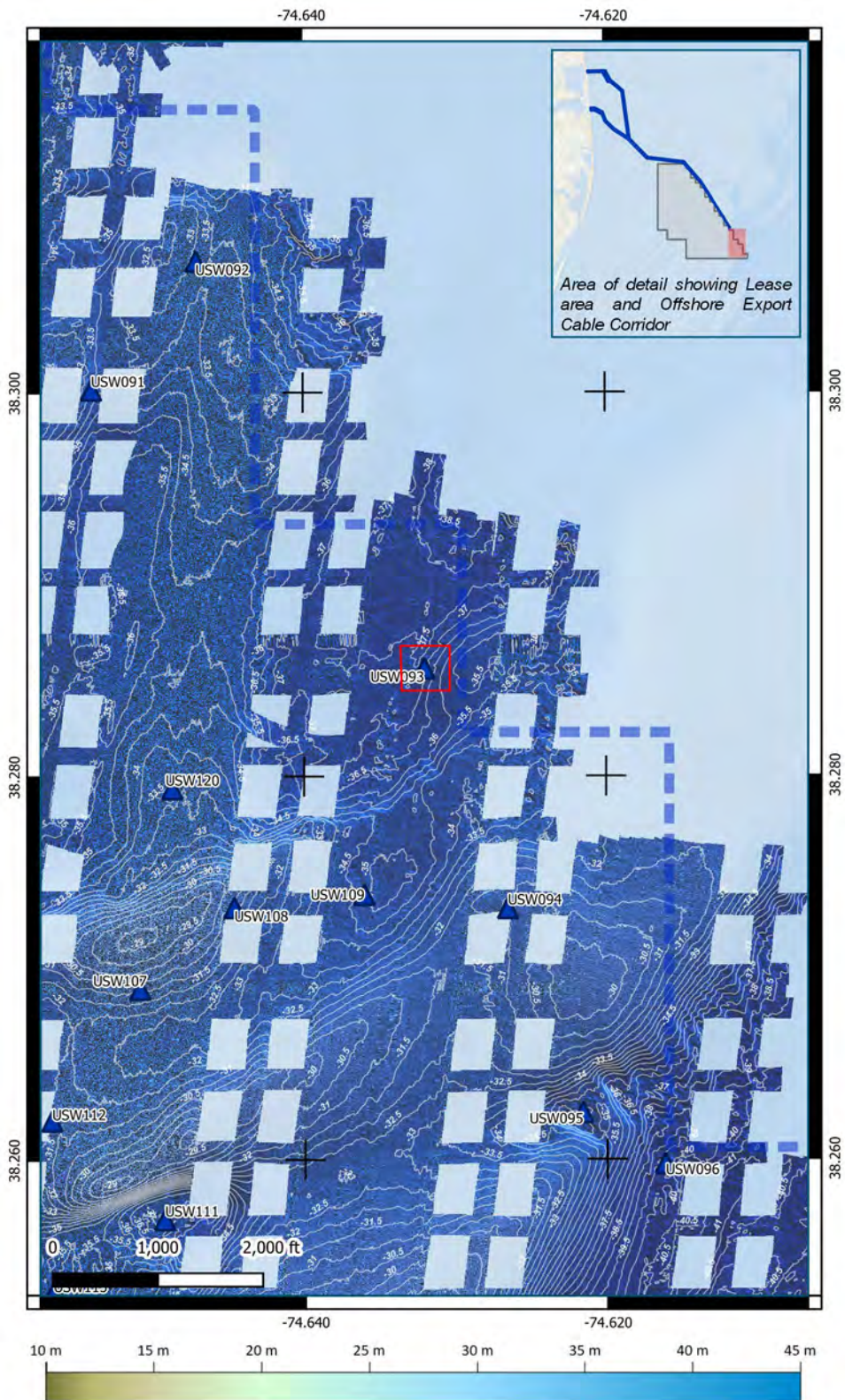


### Sample Photograph





### Map of Benthic Grab Location

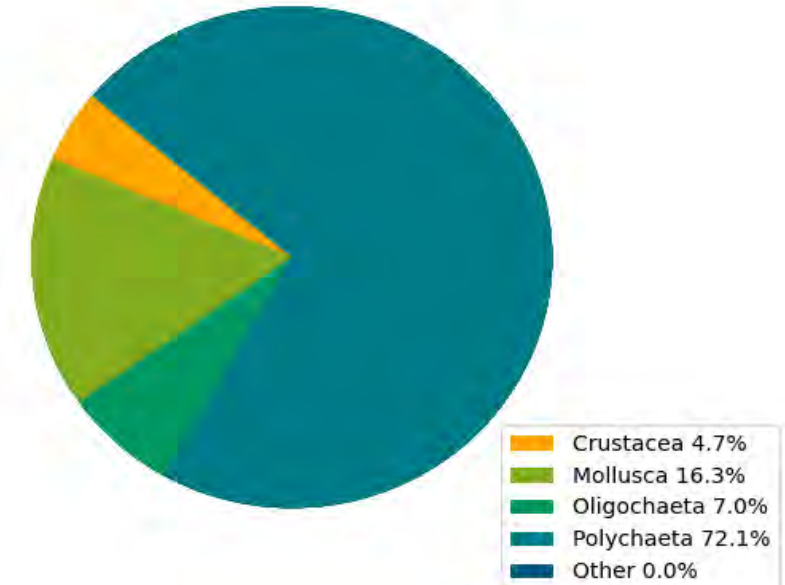


### Benthic Grab USW093

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1075                            |
| Taxa Richness <sup>1</sup> :   |                     | 17                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

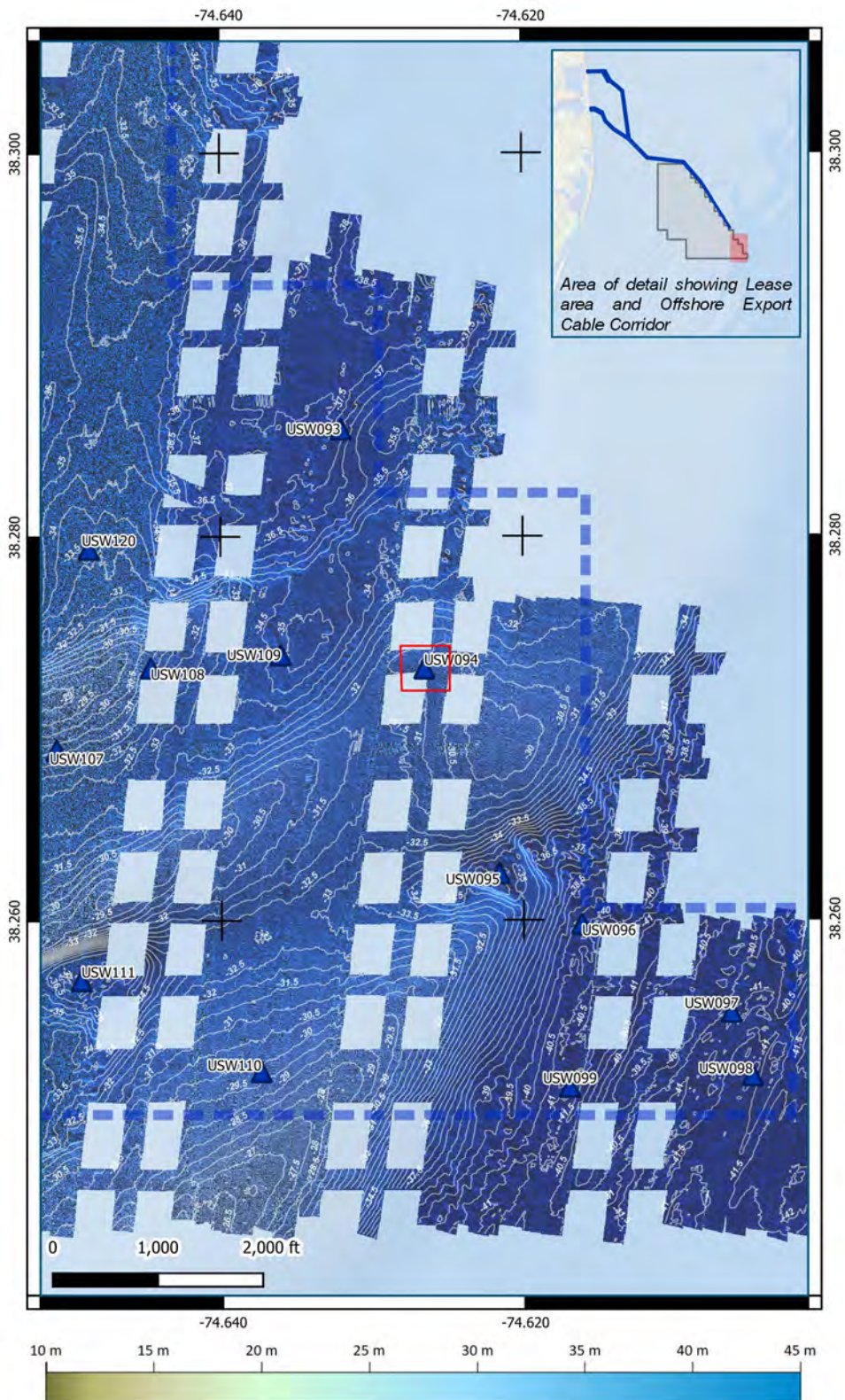


### Sample Photograph





### Map of Benthic Grab Location

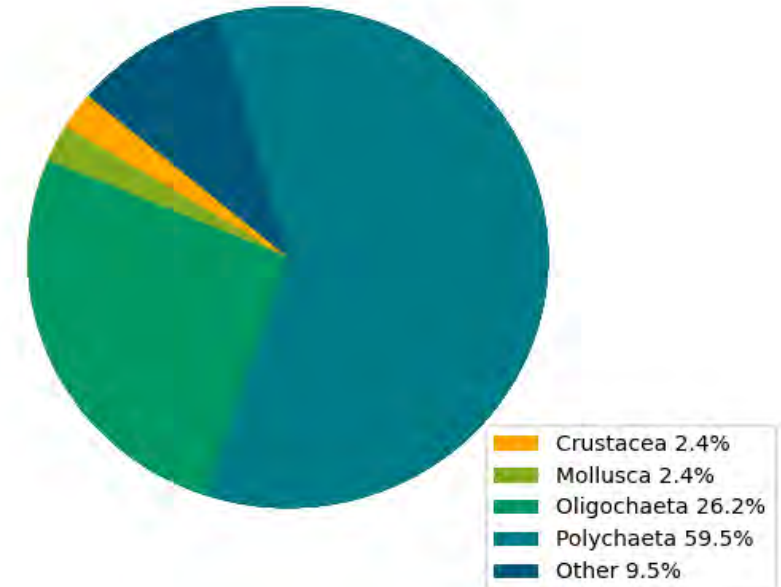


### Benthic Grab USW094

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1050                            |
| Taxa Richness <sup>1</sup> :   |                     | 12                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

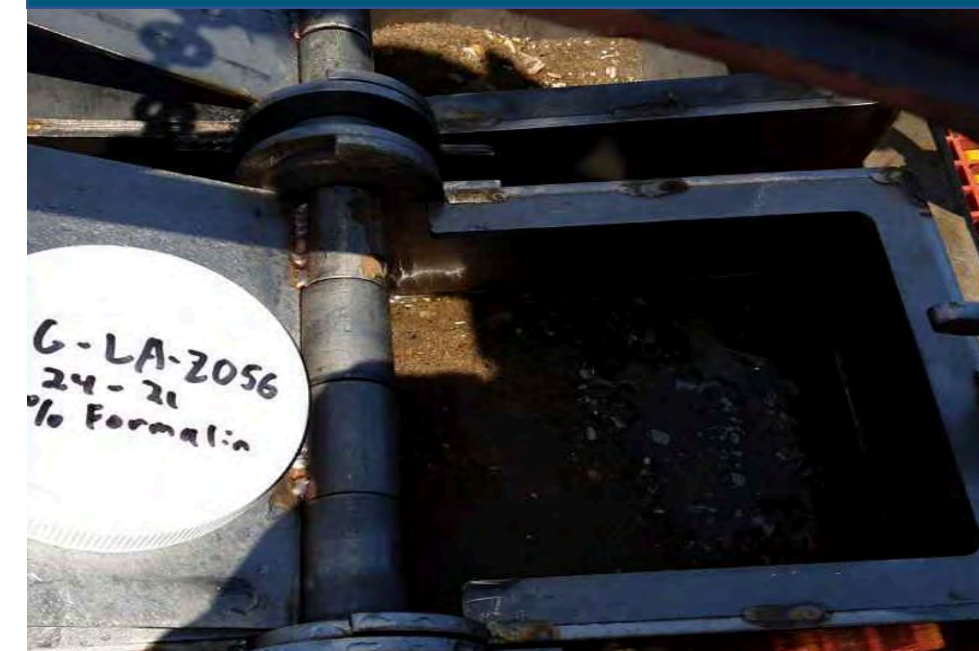
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

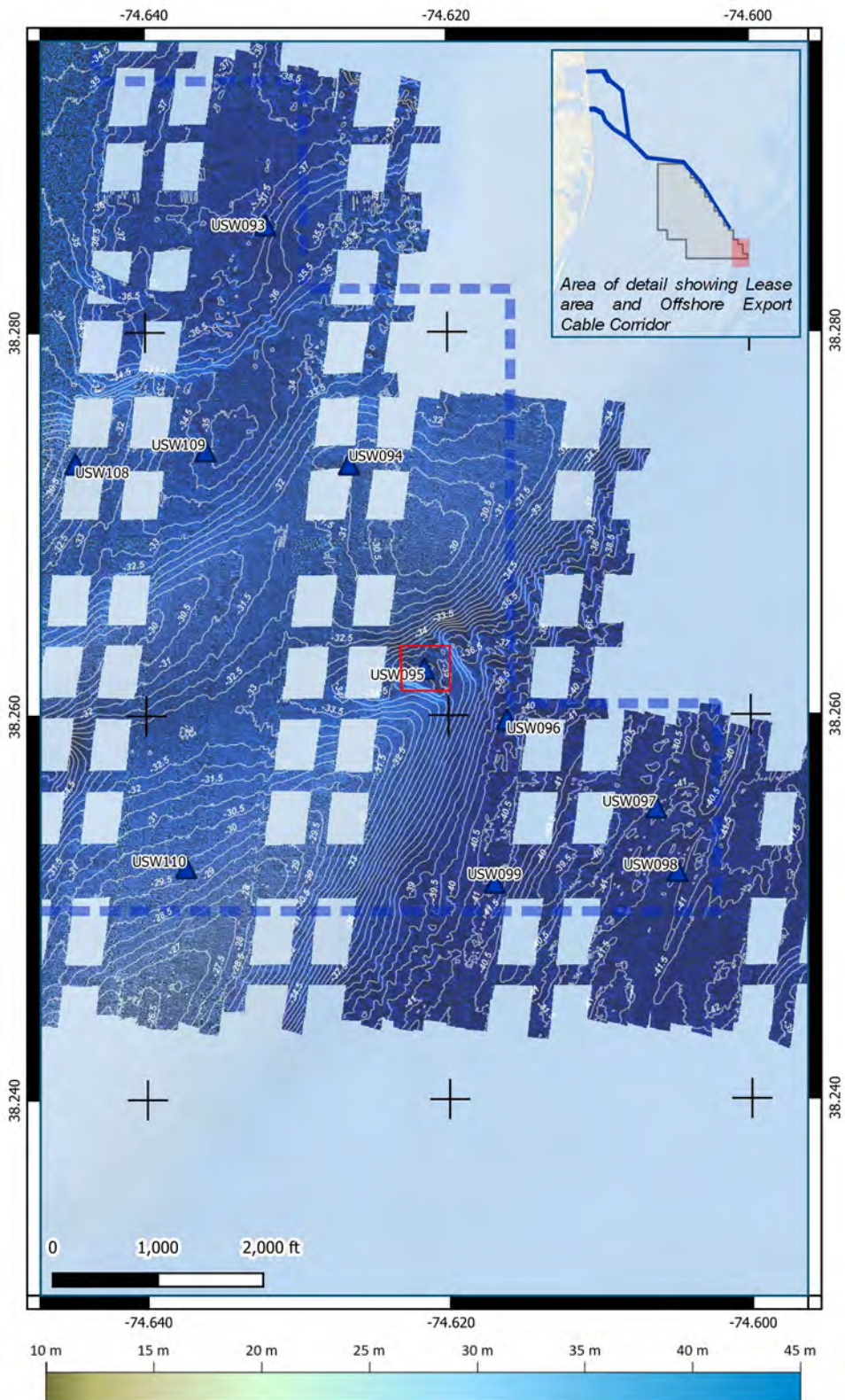


### Sample Photograph





### Map of Benthic Grab Location

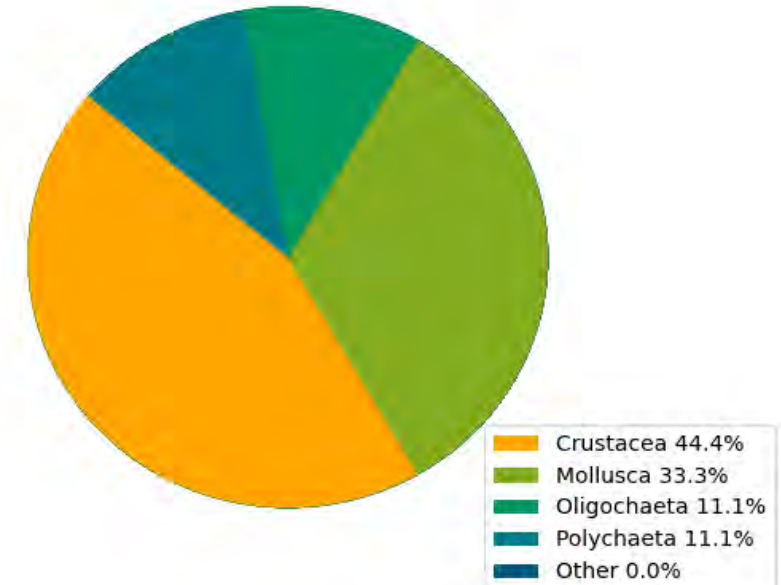


### Benthic Grab USW095

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 225                           |
| Taxa Richness <sup>1</sup> :   |                     | 7                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

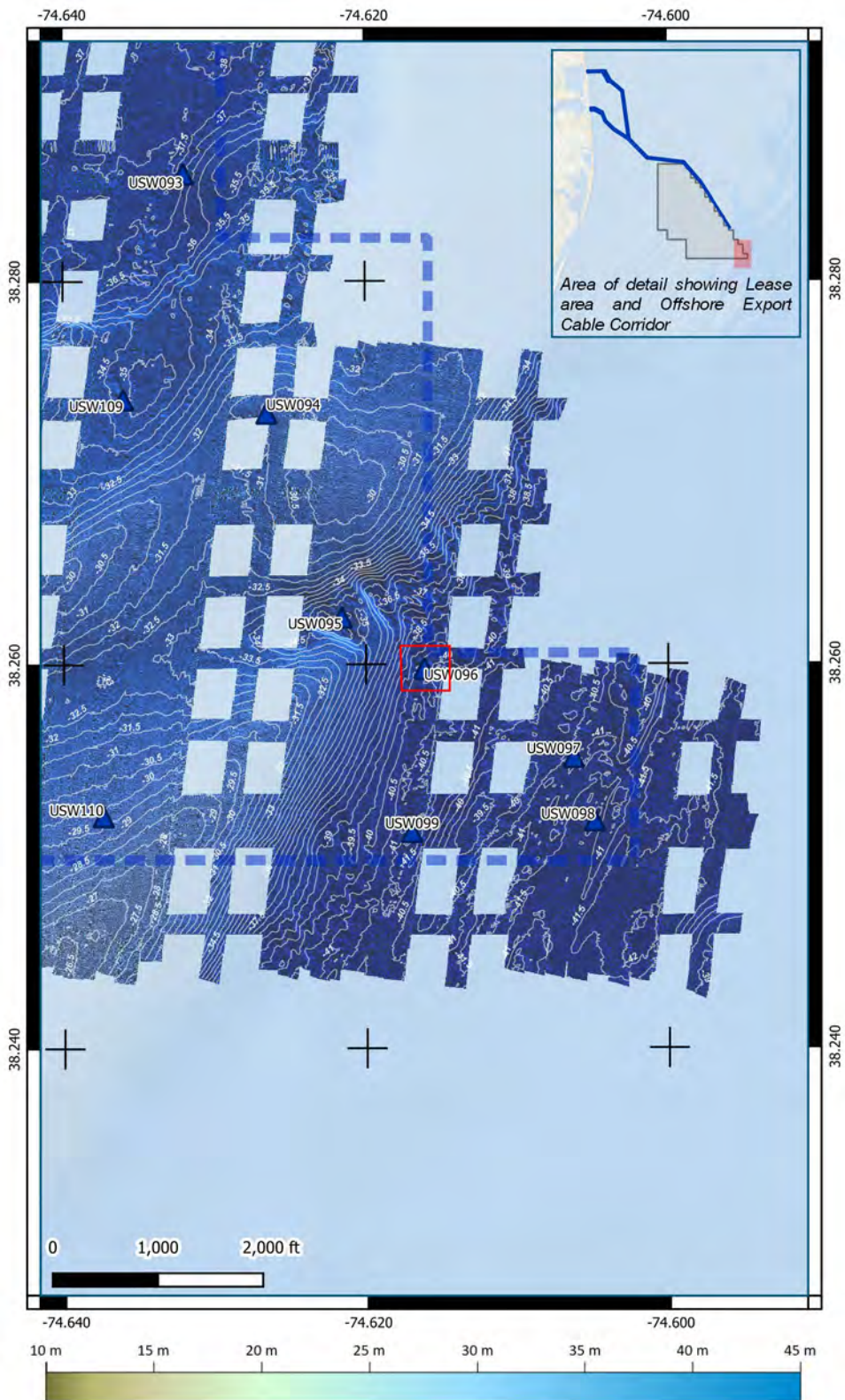


### Sample Photograph





### Map of Benthic Grab Location

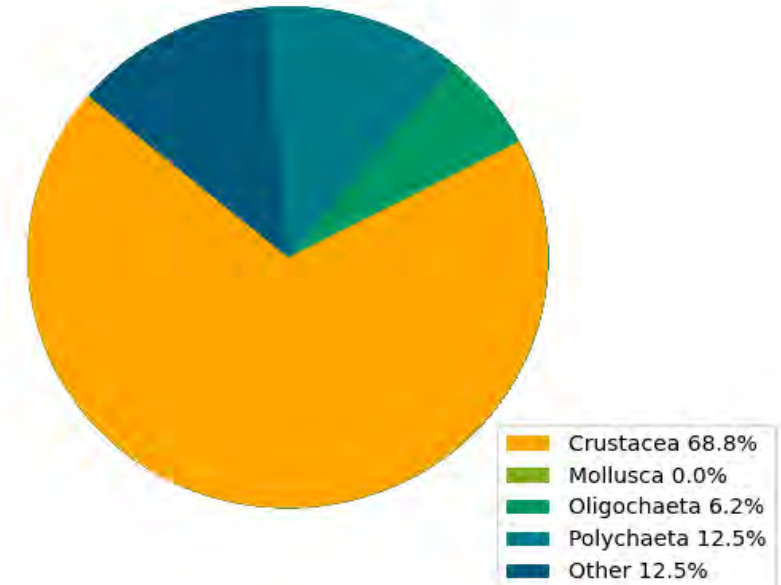


### Benthic Grab USW096

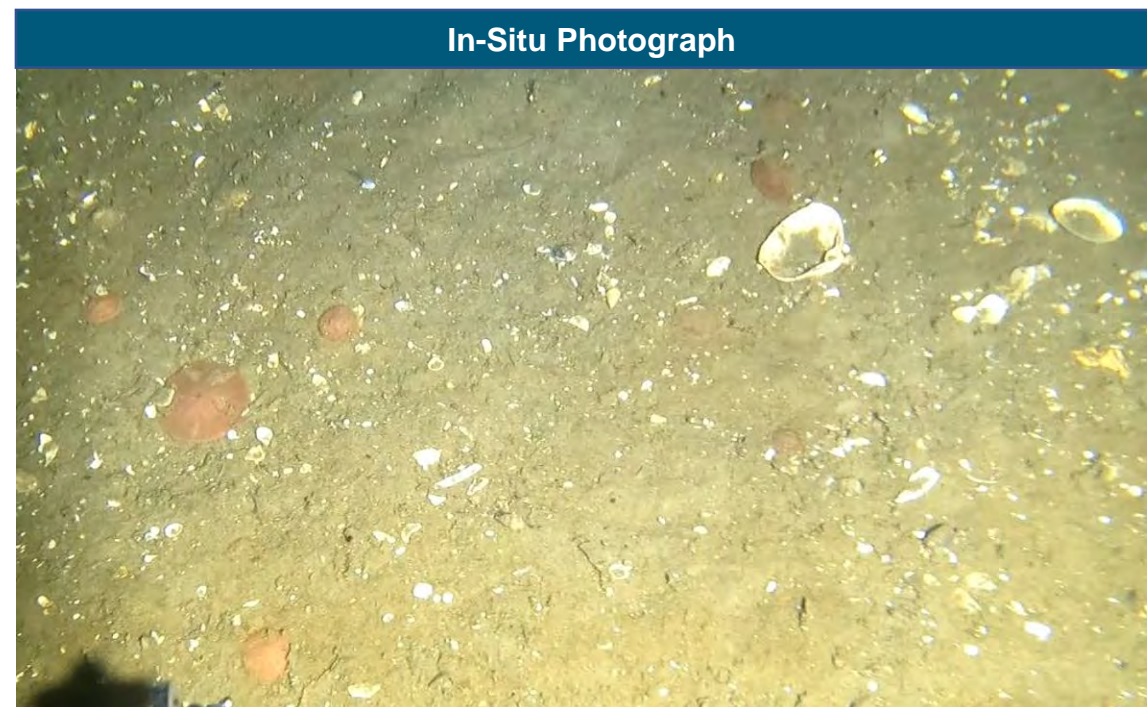
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 400                           |
| Taxa Richness <sup>1</sup> :   |                     | 6                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

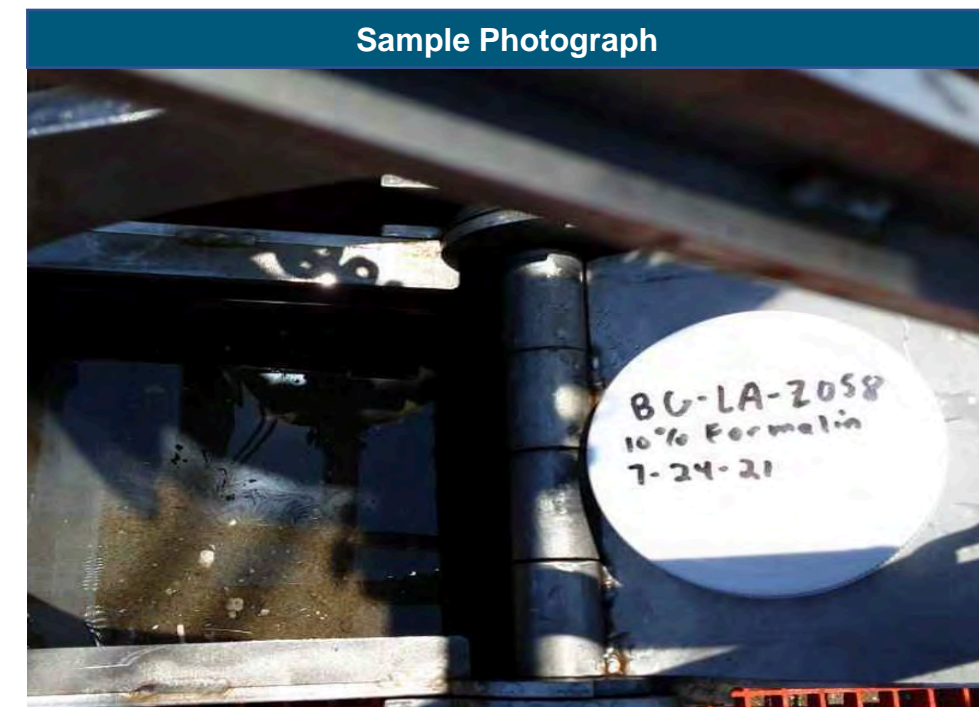
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

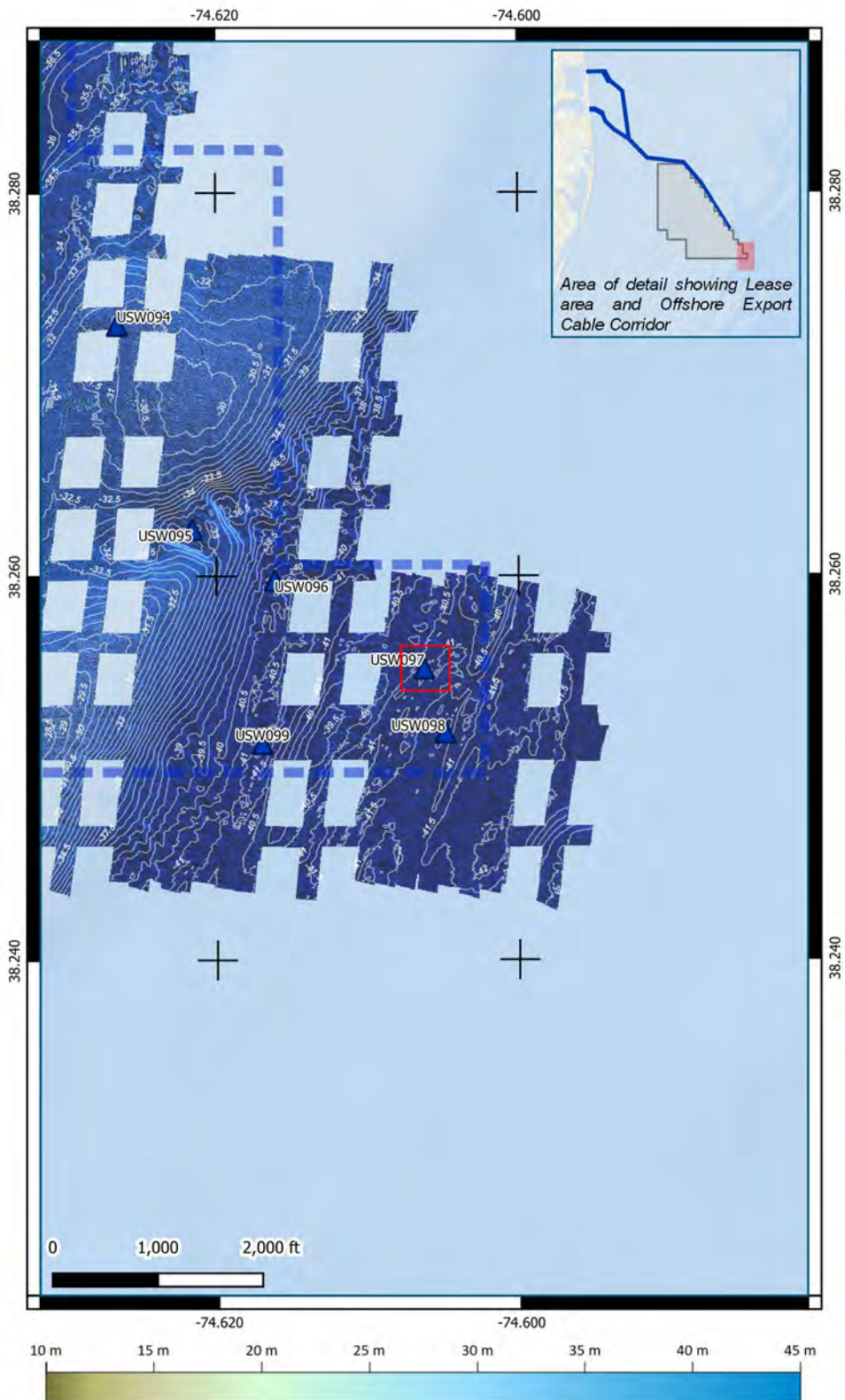


### Sample Photograph





### Map of Benthic Grab Location

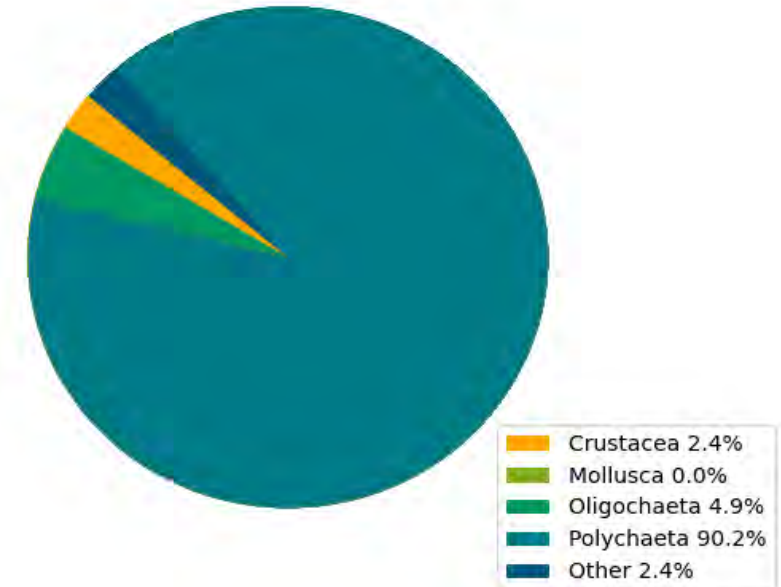


### Benthic Grab USW097

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1025                            |
| Taxa Richness <sup>1</sup> :   |                     | 15                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

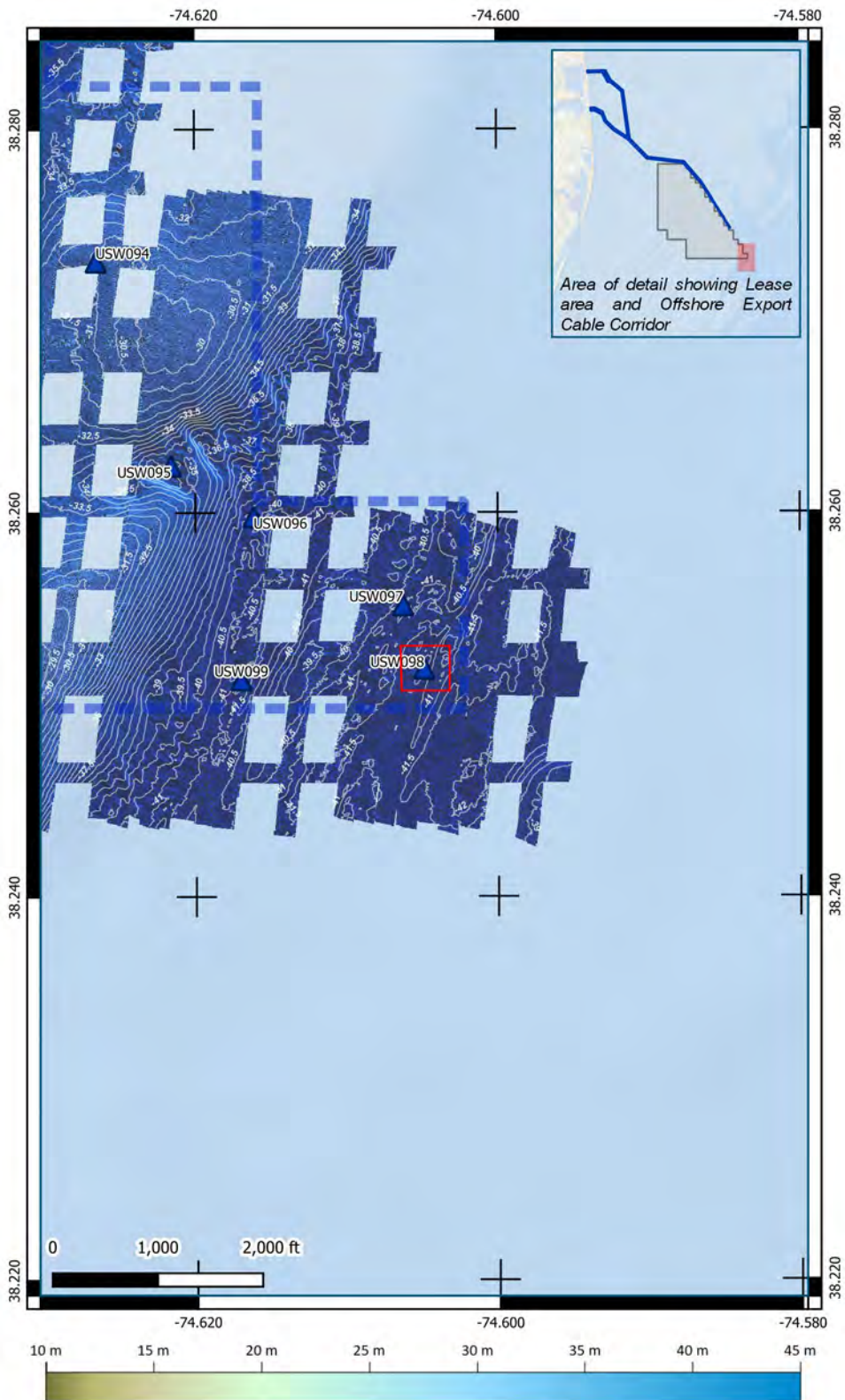


### Sample Photograph





### Map of Benthic Grab Location

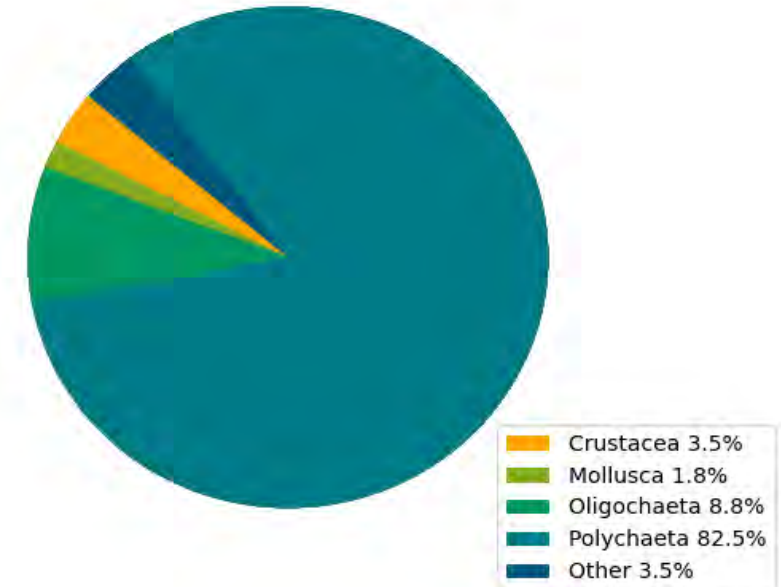


### Benthic Grab USW098

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1425                            |
| Taxa Richness <sup>1</sup> :   |                     | 22                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

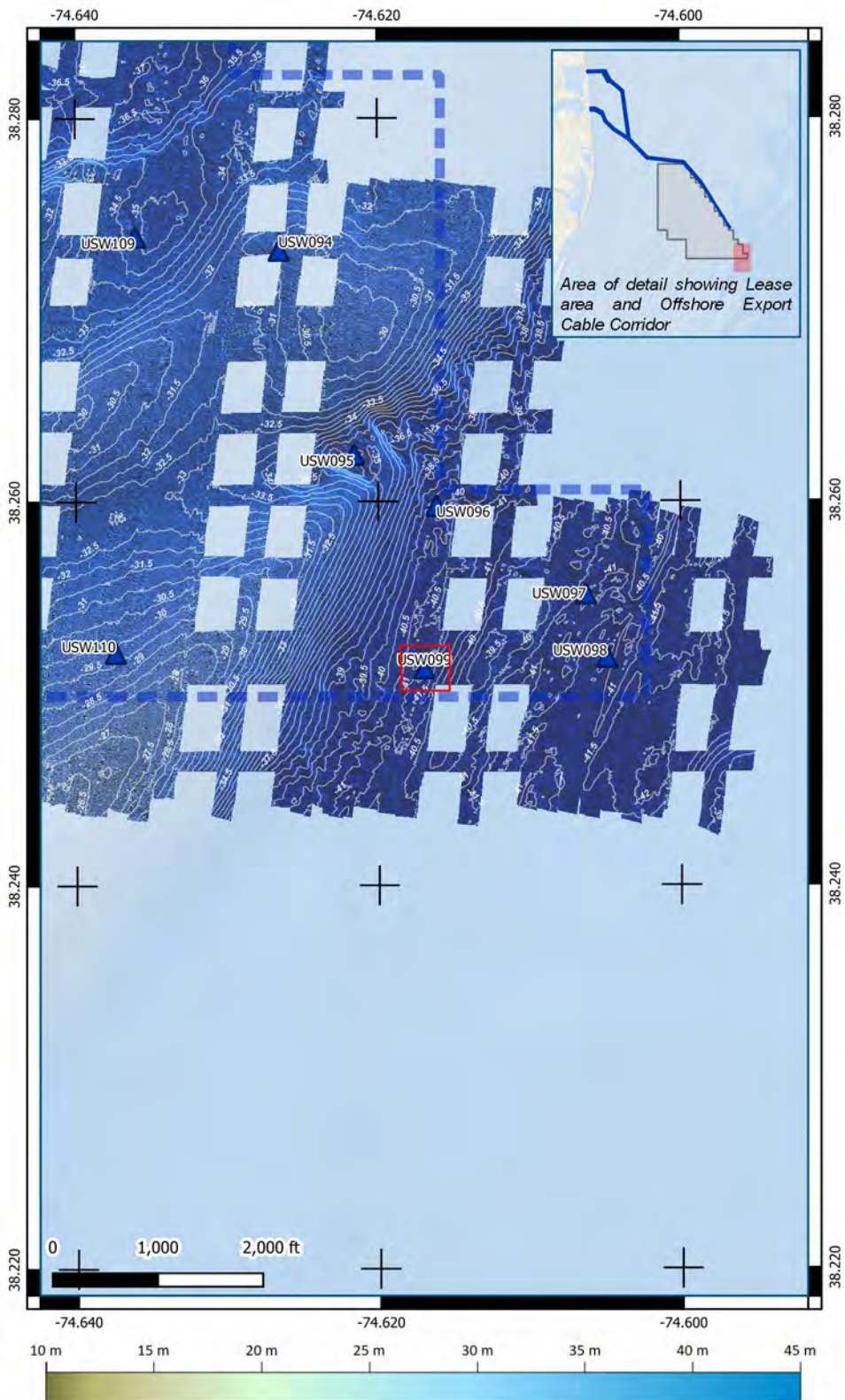


### Sample Photograph





### Map of Benthic Grab Location

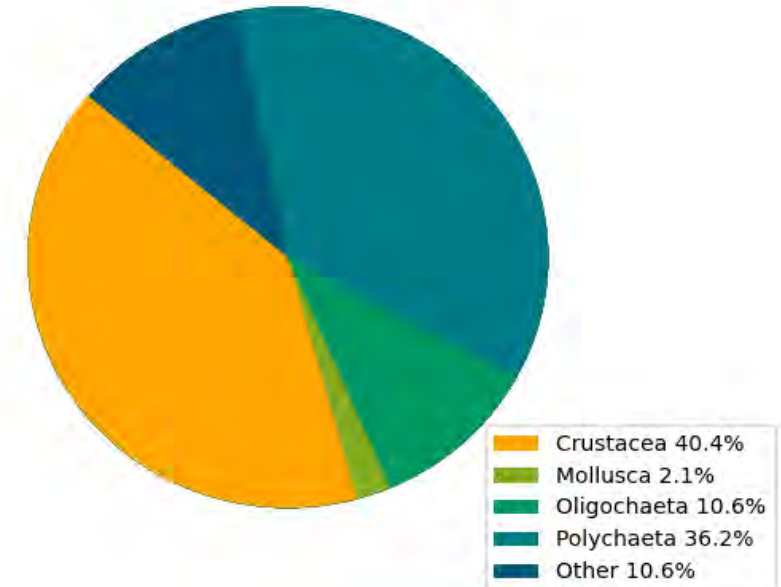


### Benthic Grab USW099

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1175                          |
| Taxa Richness <sup>1</sup> :   |                     | 15                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

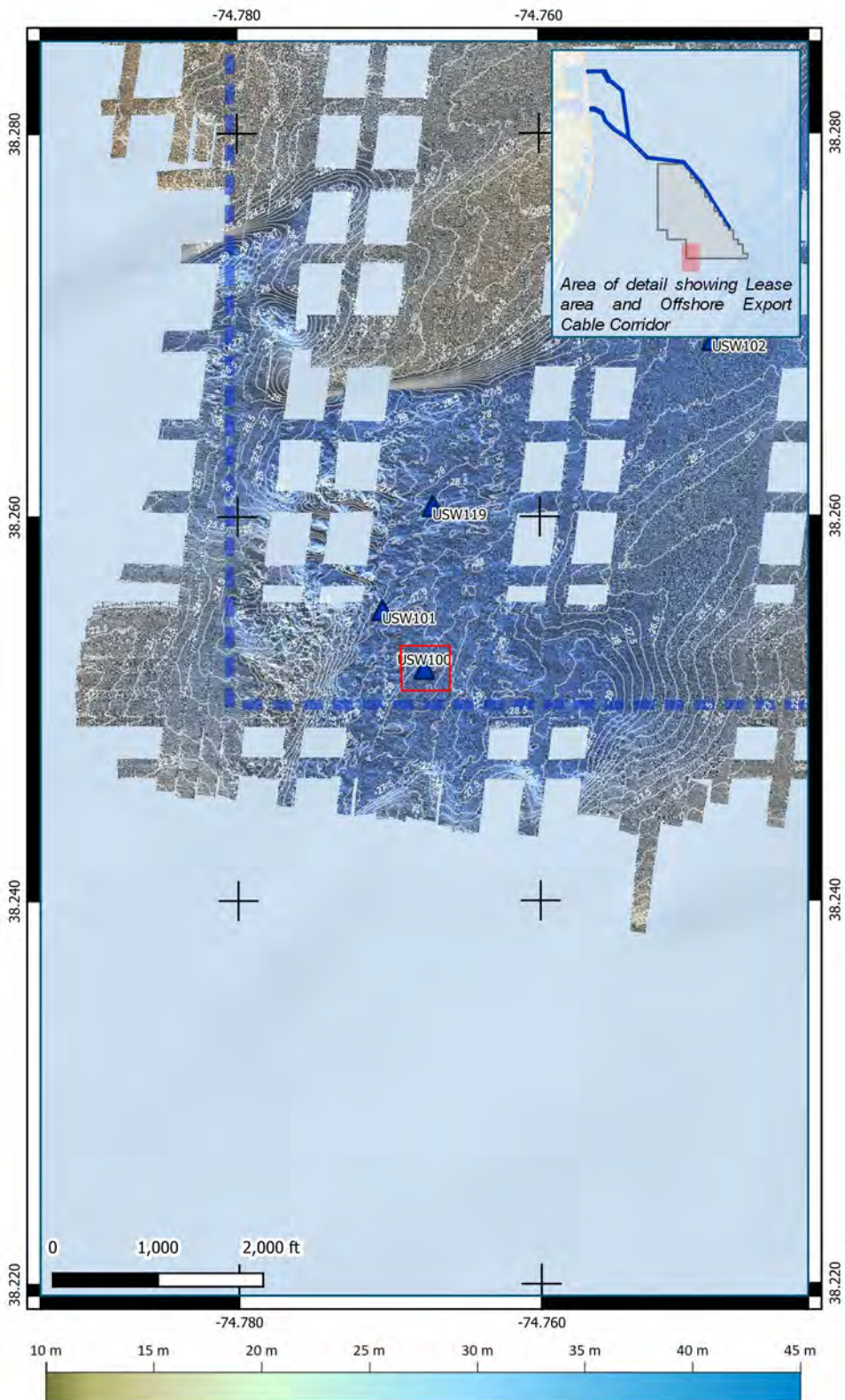


### Sample Photograph





### Map of Benthic Grab Location

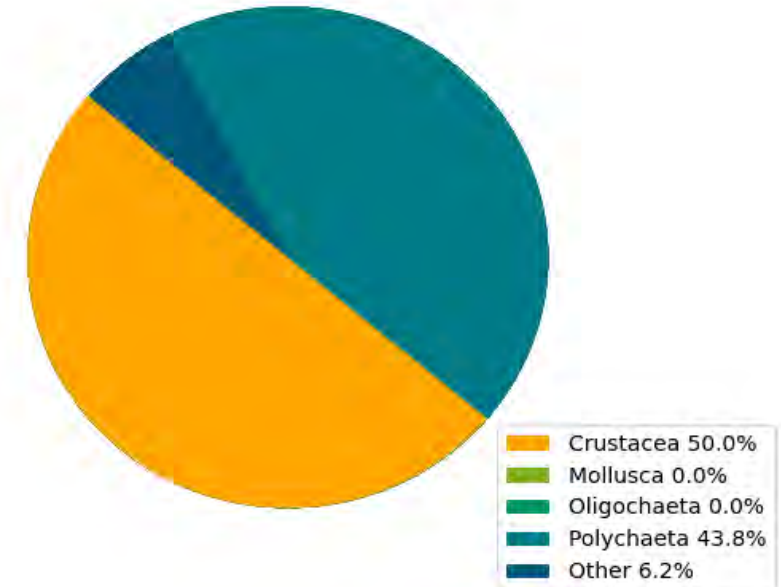


### Benthic Grab USW100

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 400                           |
| Taxa Richness <sup>1</sup> :   |                     | 11                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

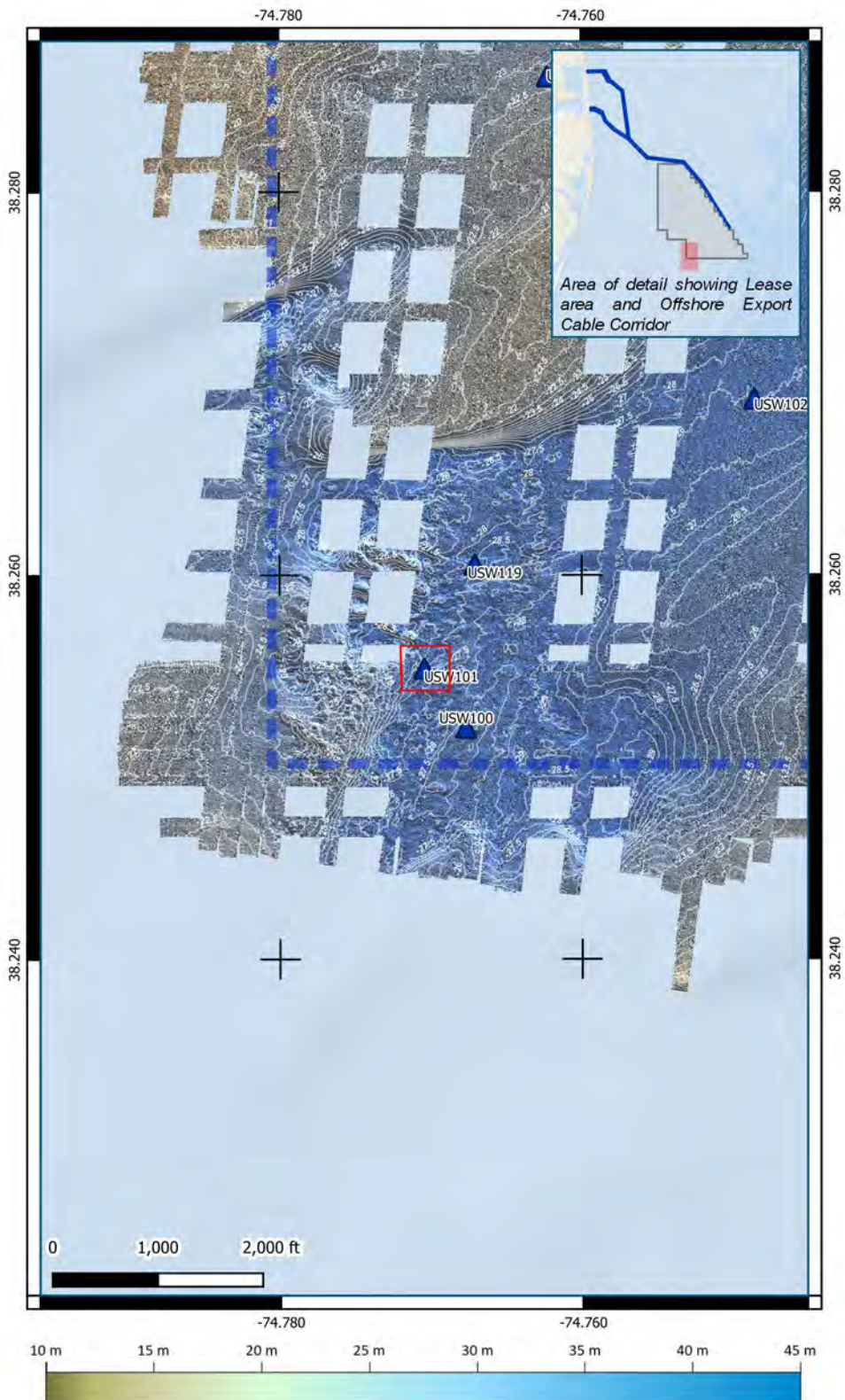


### Sample Photograph





### Map of Benthic Grab Location

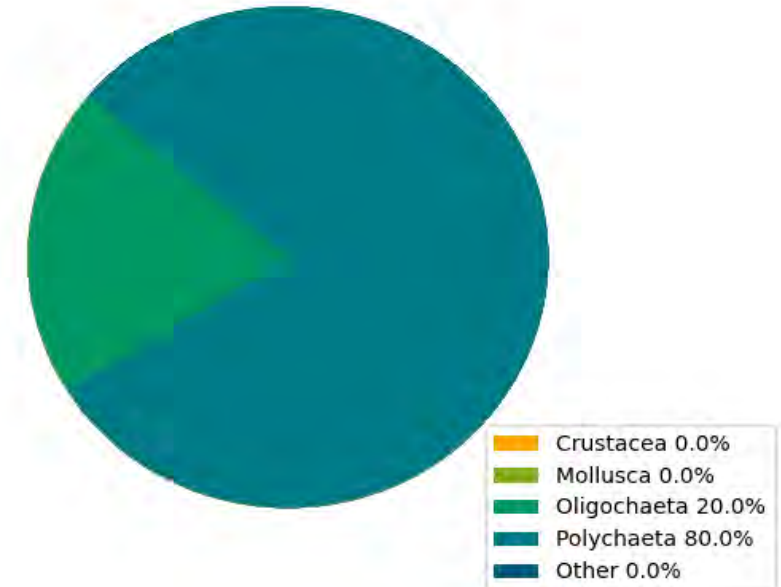


### Benthic Grab USW101

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 125                             |
| Taxa Richness <sup>1</sup> :   |                     | 5                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

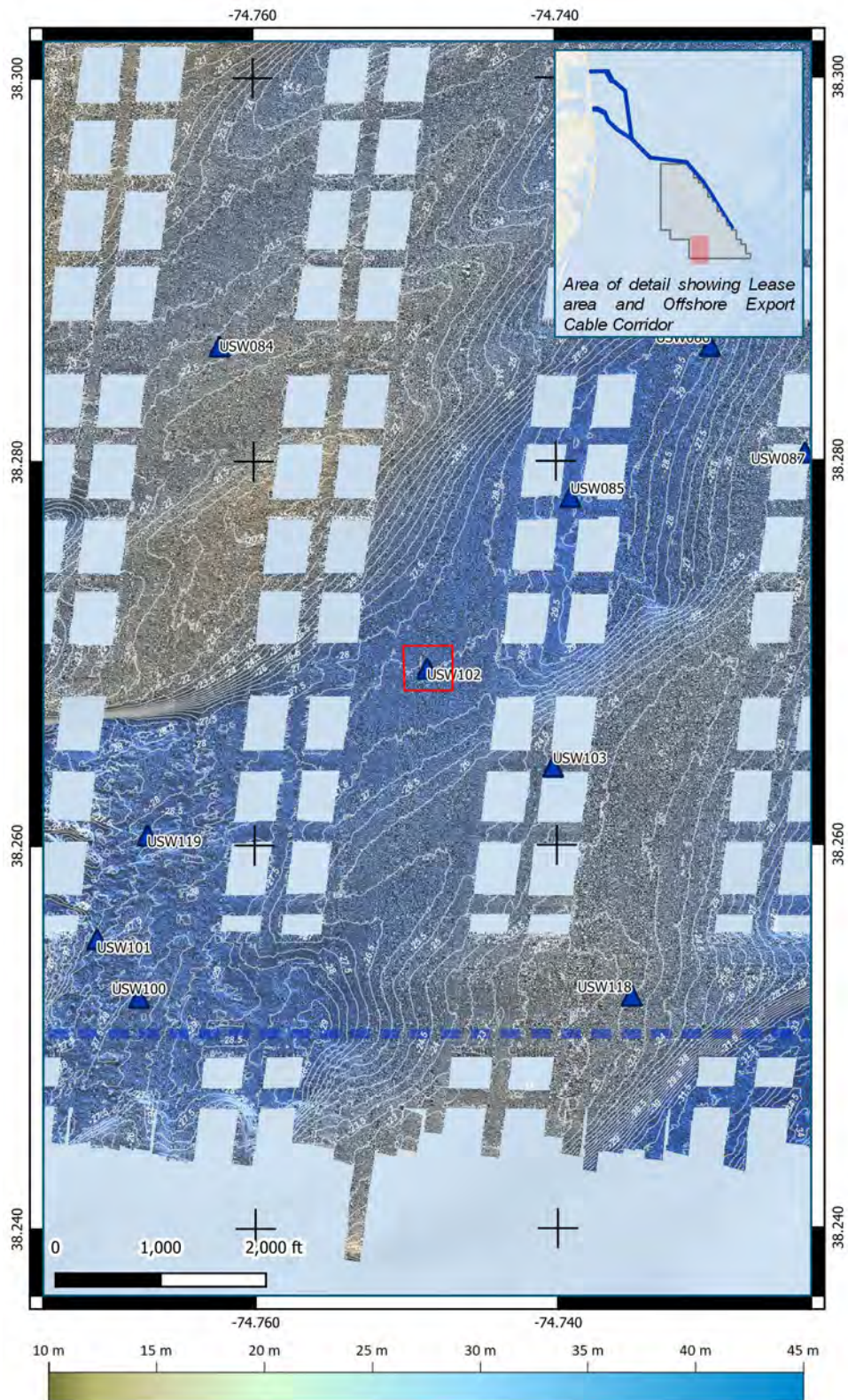


### Sample Photograph





### Map of Benthic Grab Location

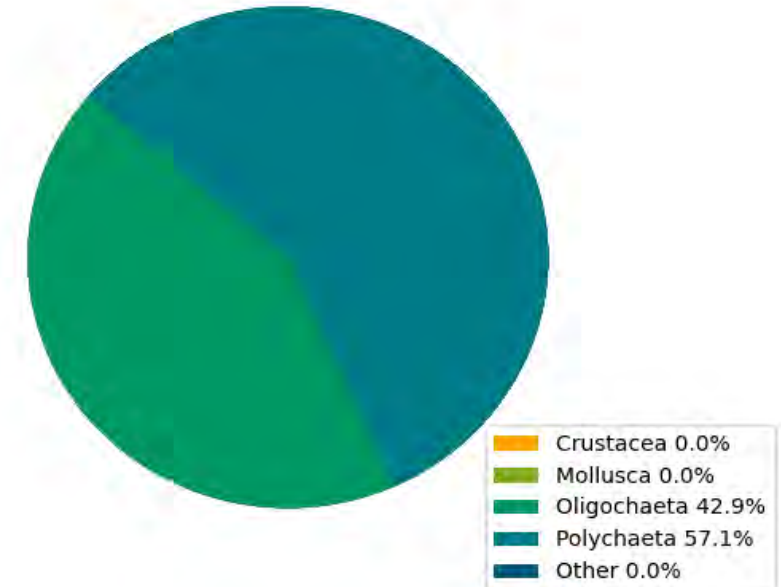


### Benthic Grab USW102

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 700                           |
| Taxa Richness <sup>1</sup> :   |                     | 9                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

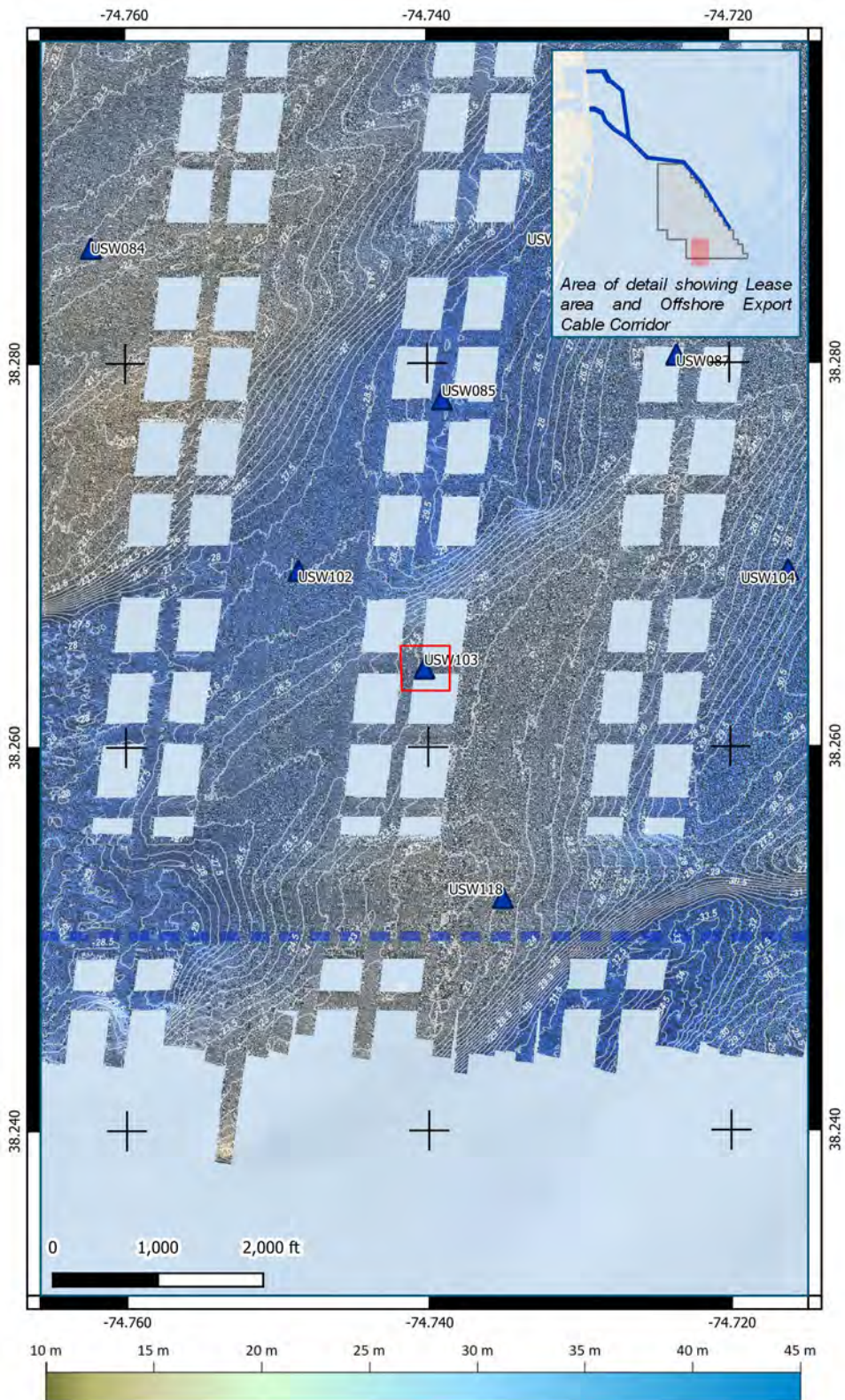


### Sample Photograph





### Map of Benthic Grab Location

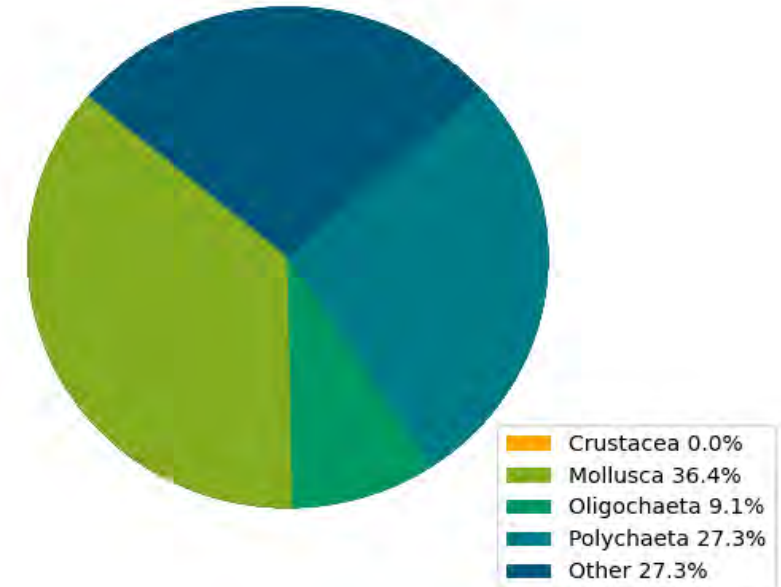


### Benthic Grab USW103

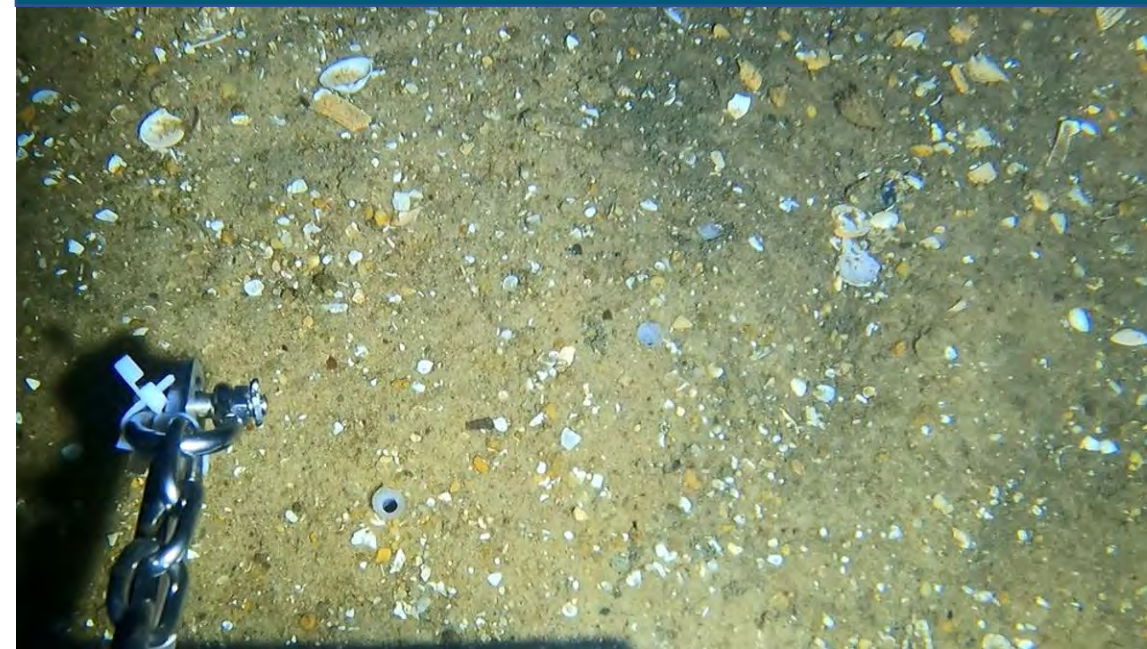
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 275                             |
| Taxa Richness <sup>1</sup> :   |                     | 9                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

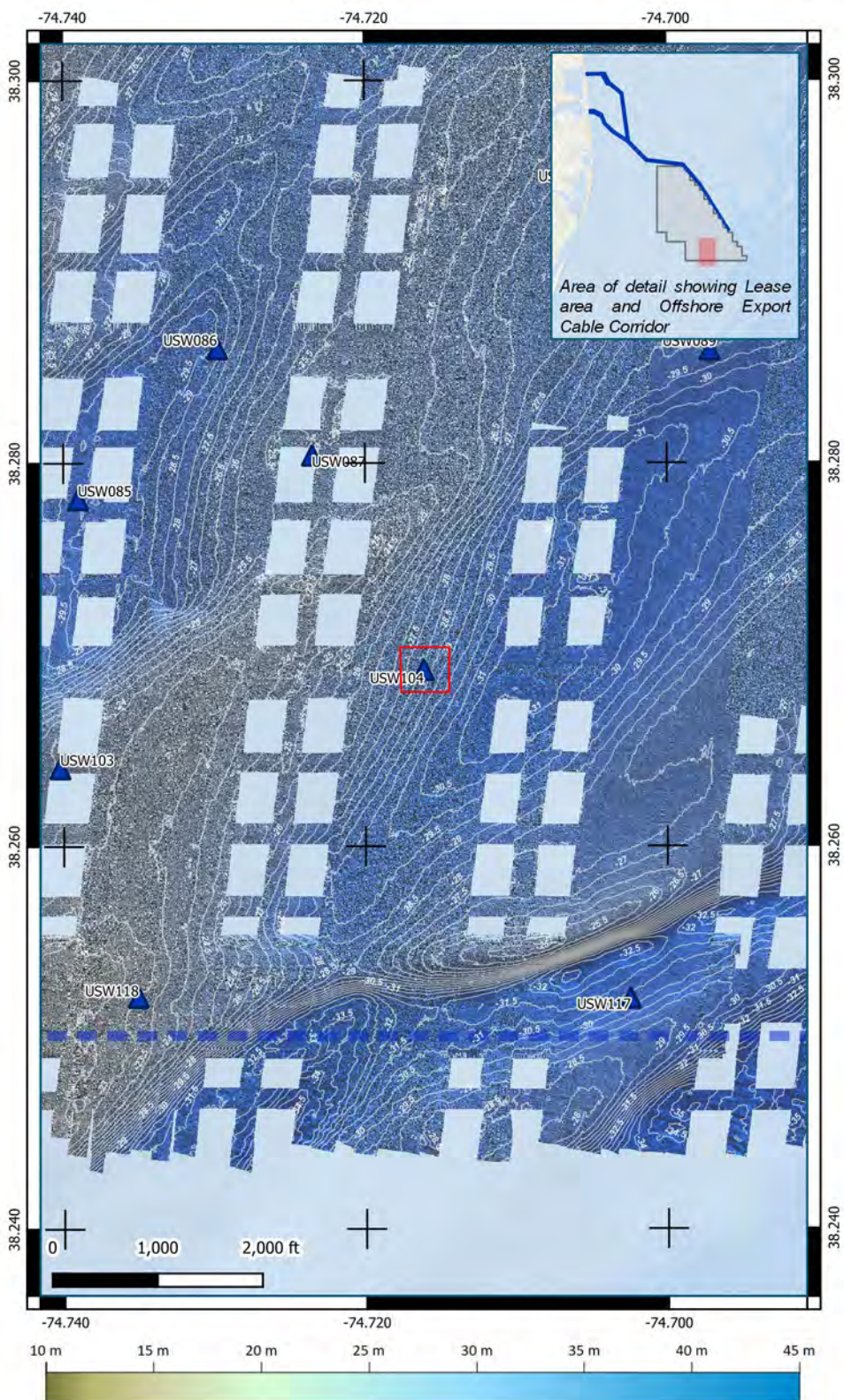


### Sample Photograph





### Map of Benthic Grab Location

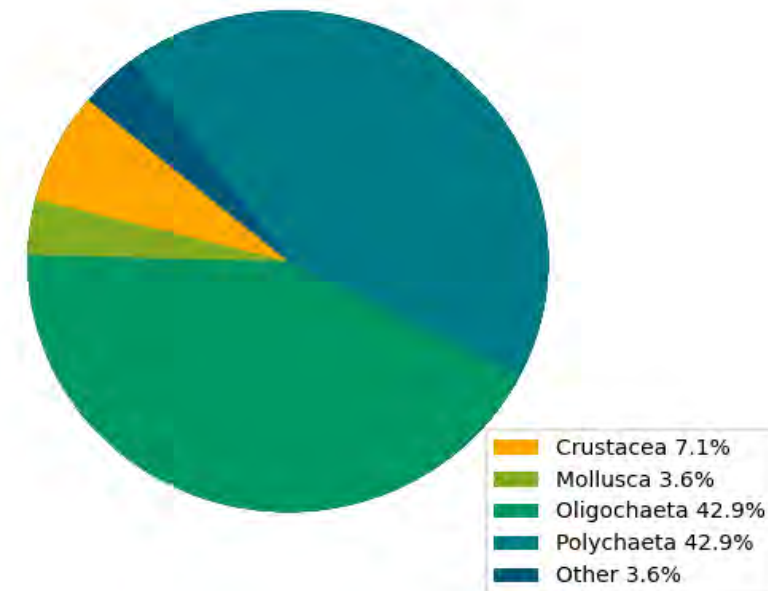


### Benthic Grab USW104

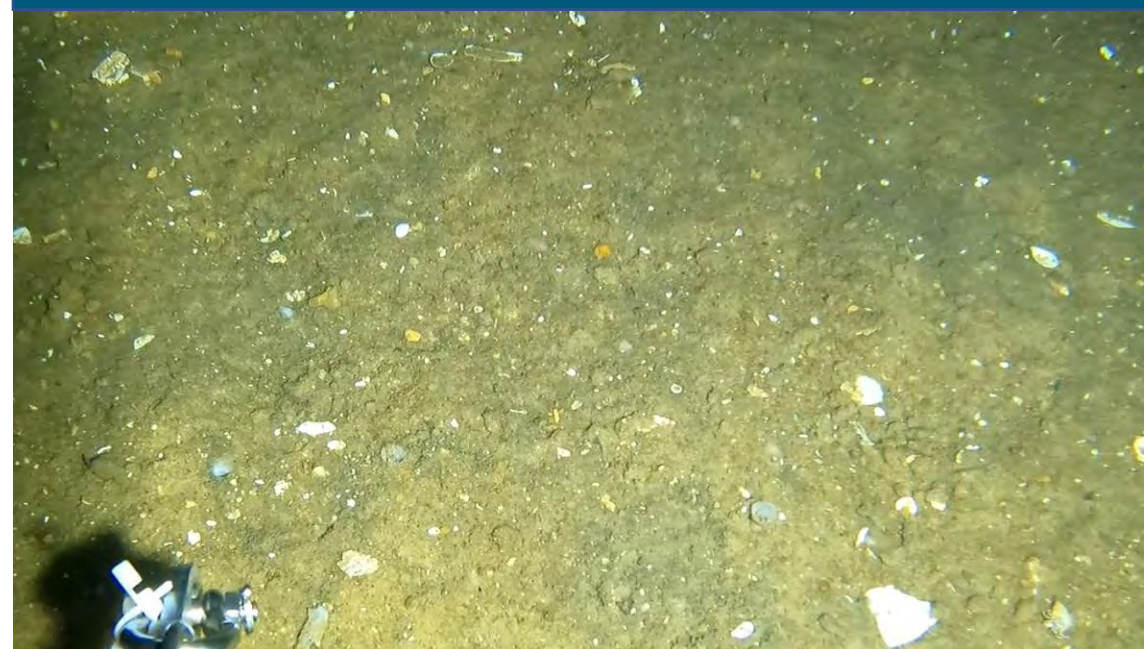
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 700                             |
| Taxa Richness <sup>1</sup> :   |                     | 13                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

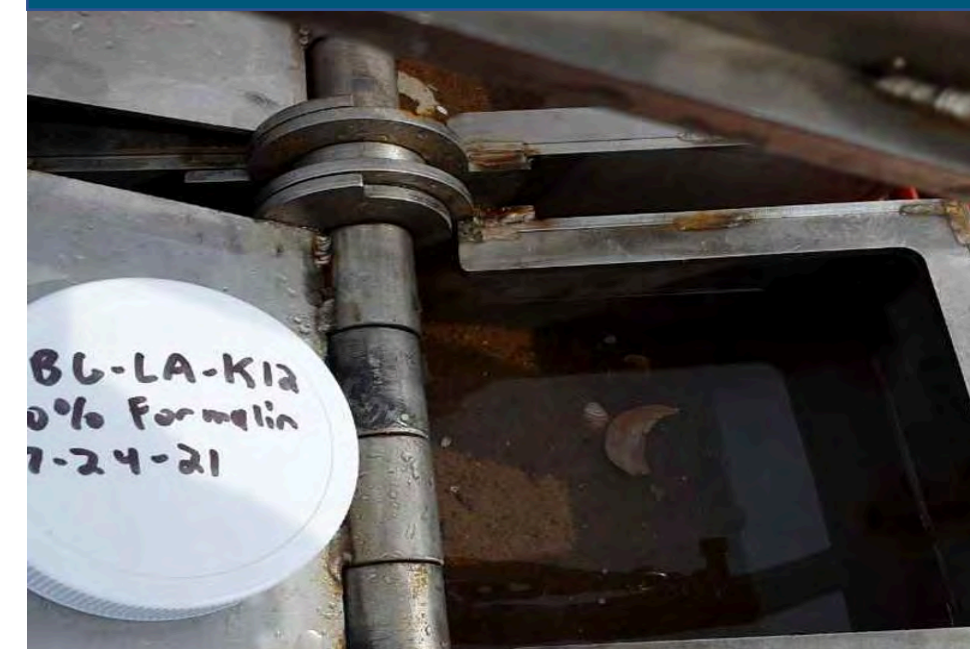
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

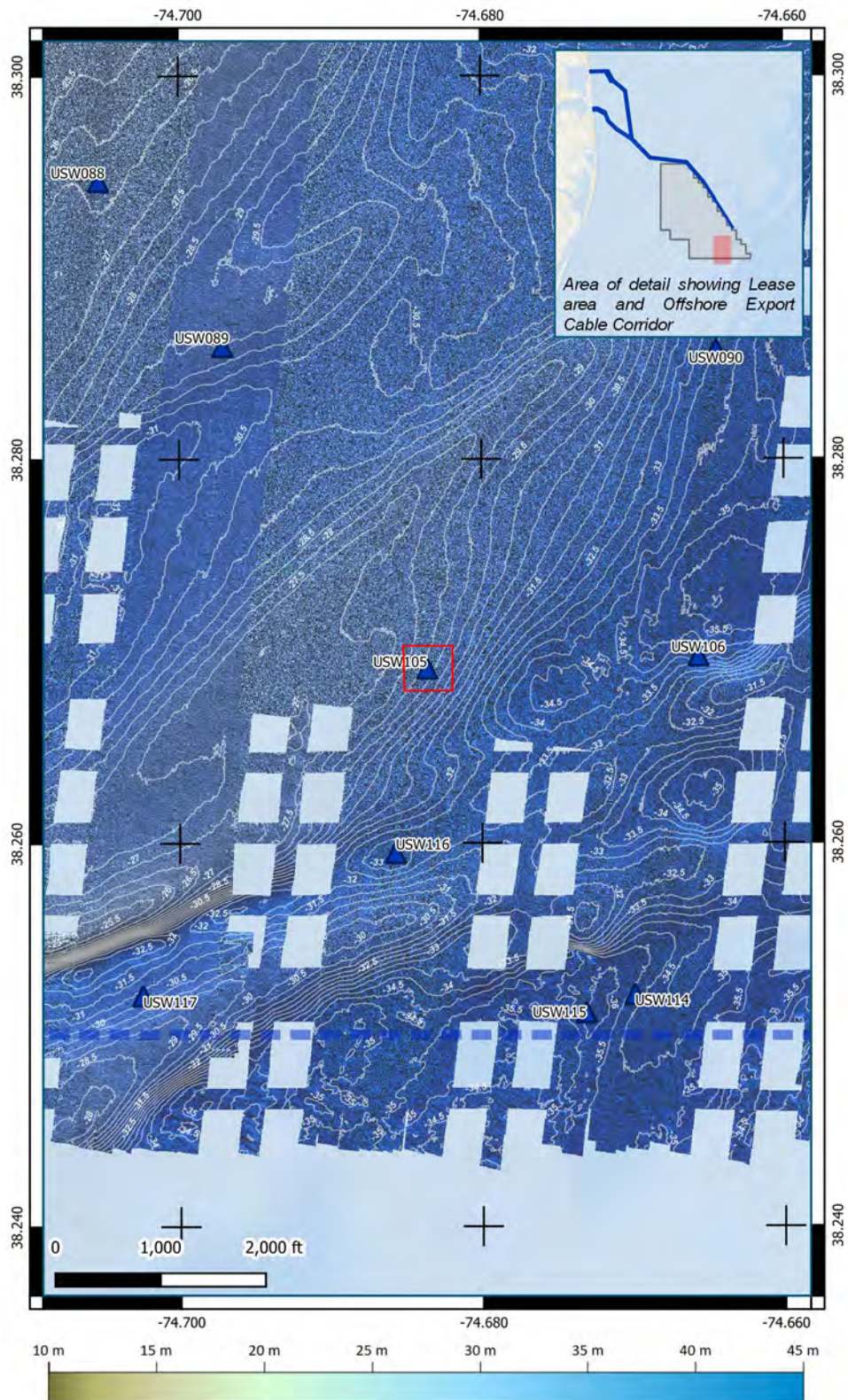


### Sample Photograph





### Map of Benthic Grab Location

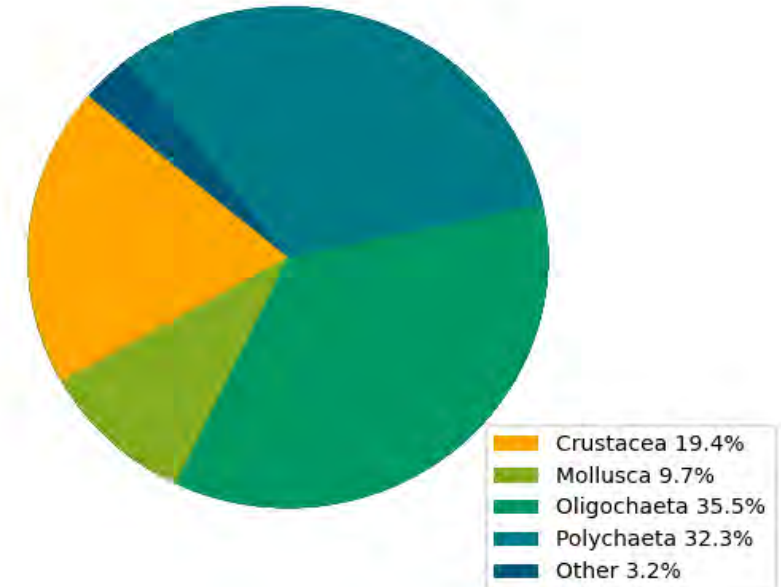


### Benthic Grab USW105

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 775                             |
| Taxa Richness <sup>1</sup> :   |                     | 17                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

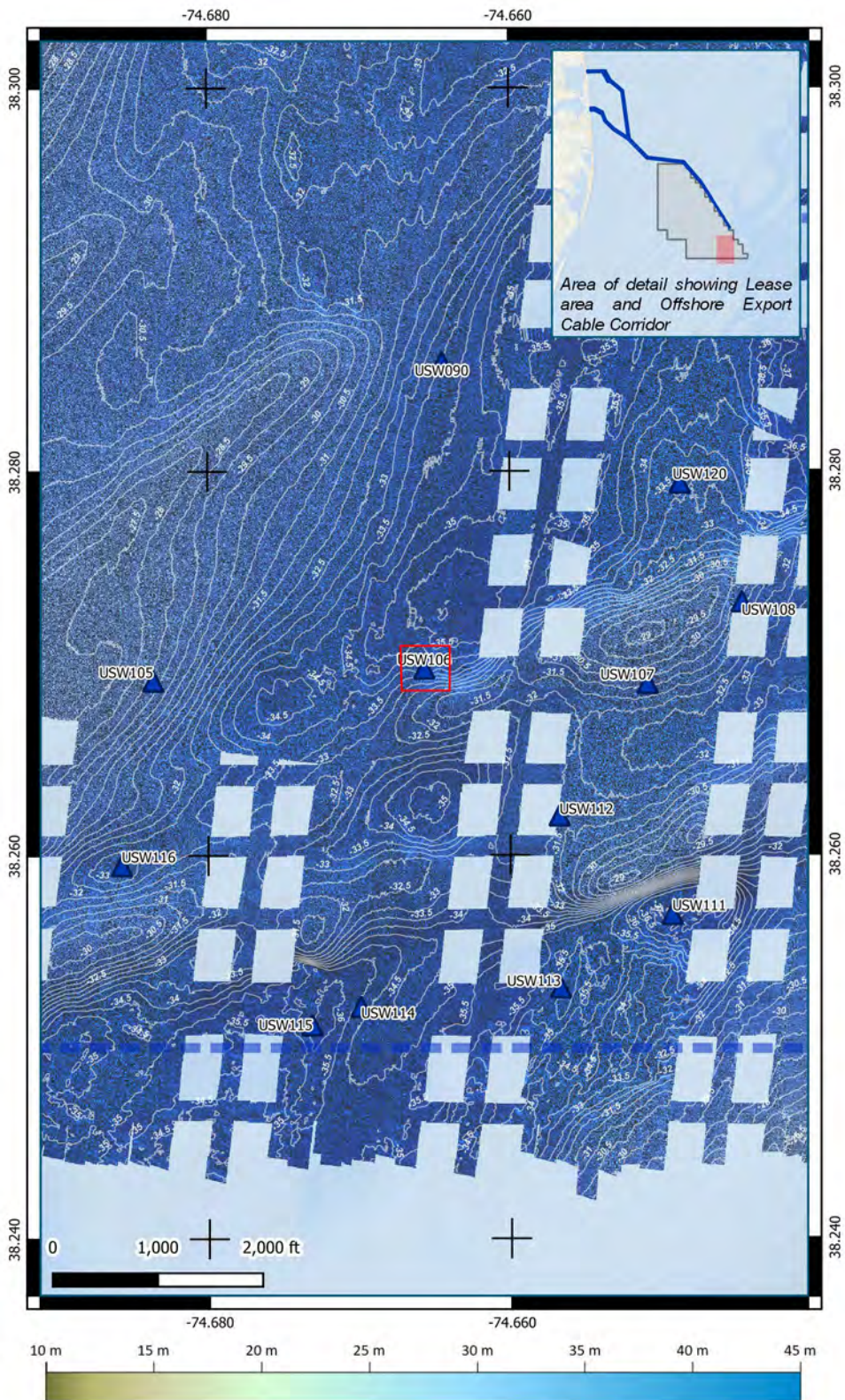


### Sample Photograph





### Map of Benthic Grab Location

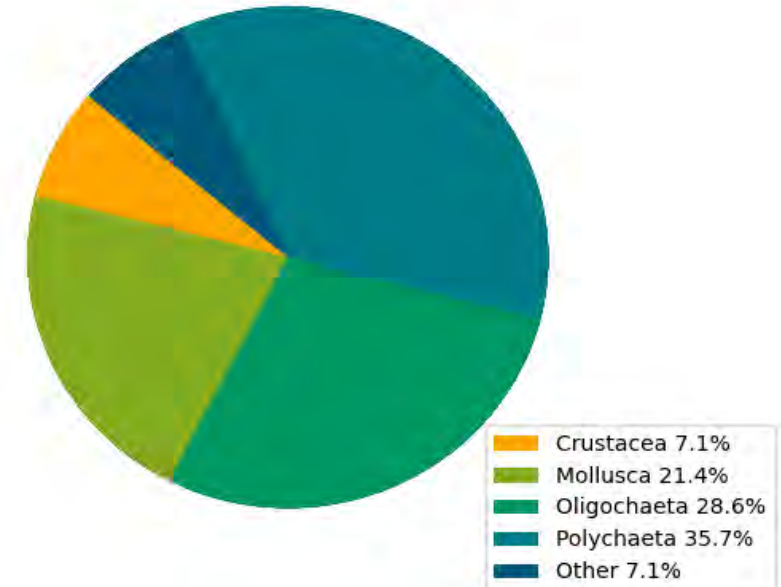


### Benthic Grab USW106

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 350                             |
| Taxa Richness <sup>1</sup> :   |                     | 8                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

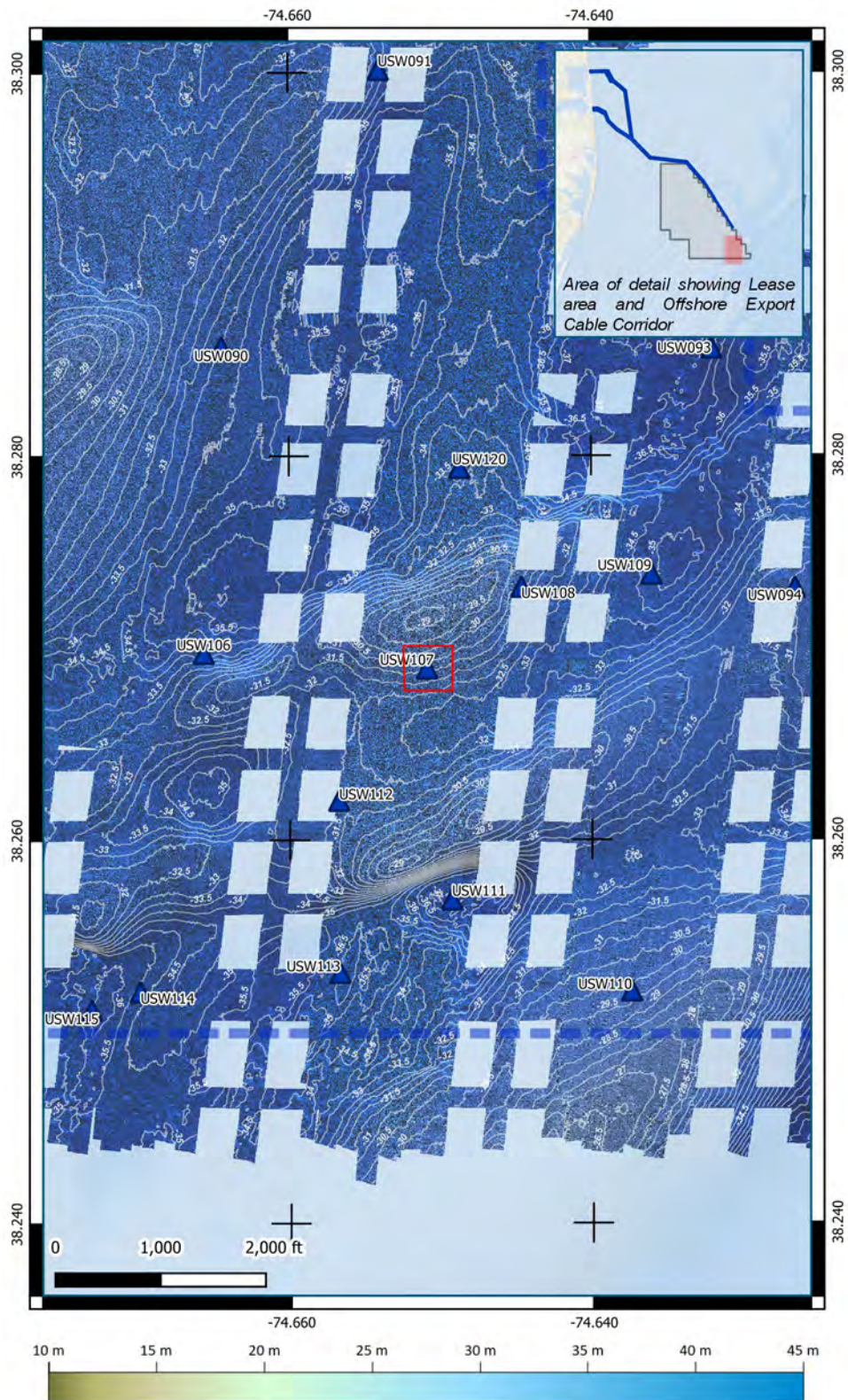


### Sample Photograph





### Map of Benthic Grab Location

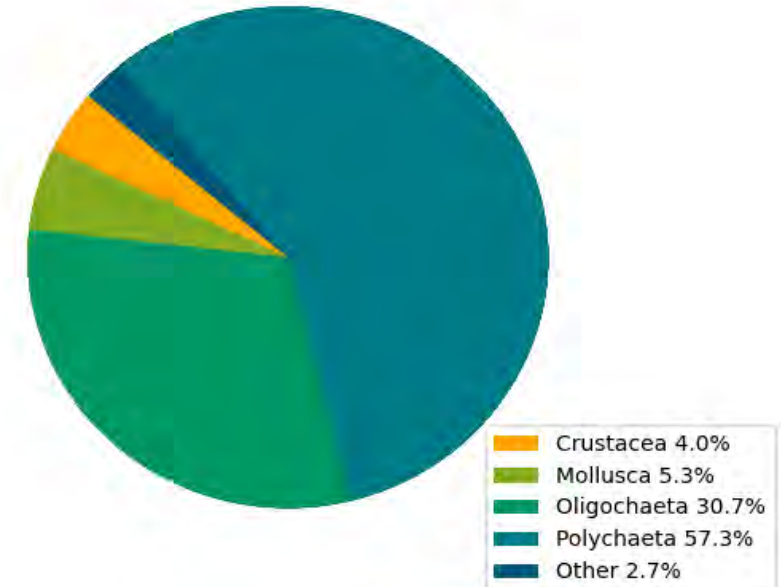


### Benthic Grab USW107

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1875                            |
| Taxa Richness <sup>1</sup> :   |                     | 24                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

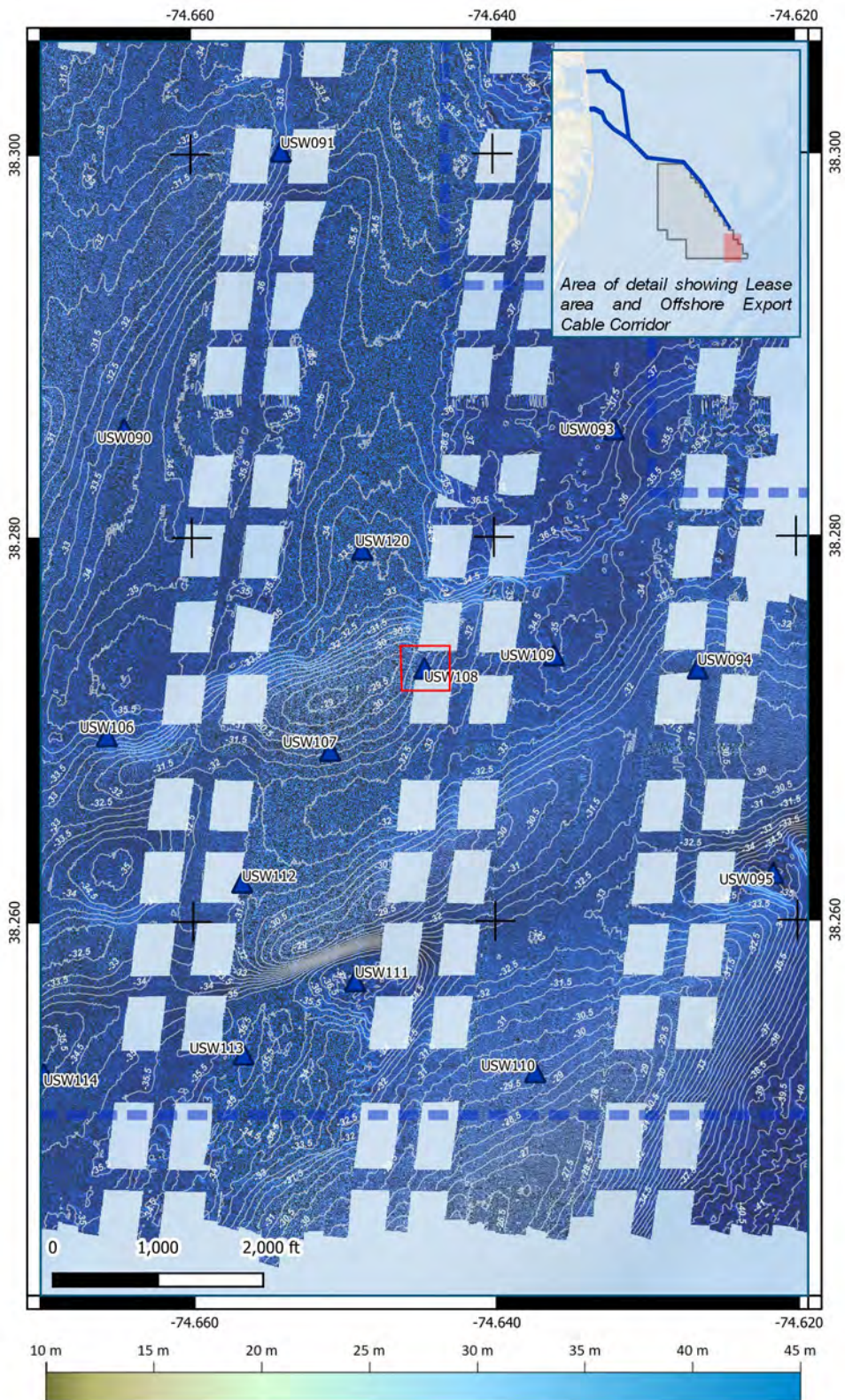


### Sample Photograph





### Map of Benthic Grab Location

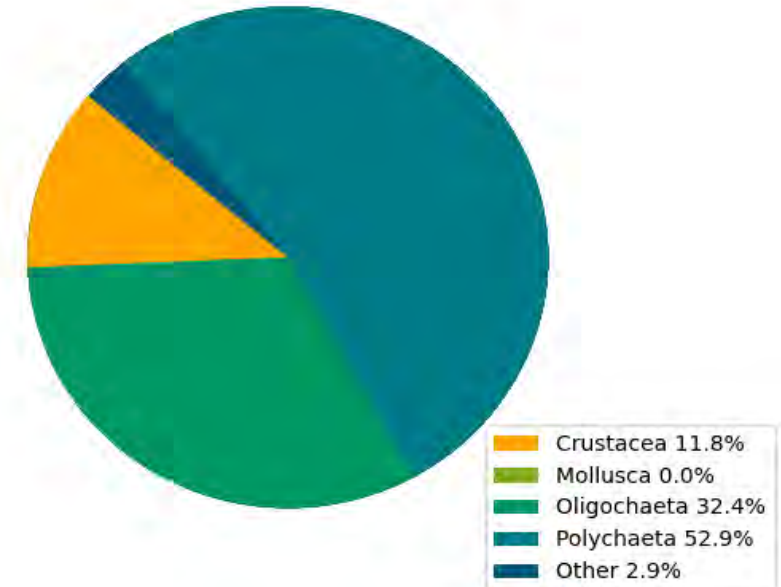


### Benthic Grab USW108

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 850                             |
| Taxa Richness <sup>1</sup> :   |                     | 16                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

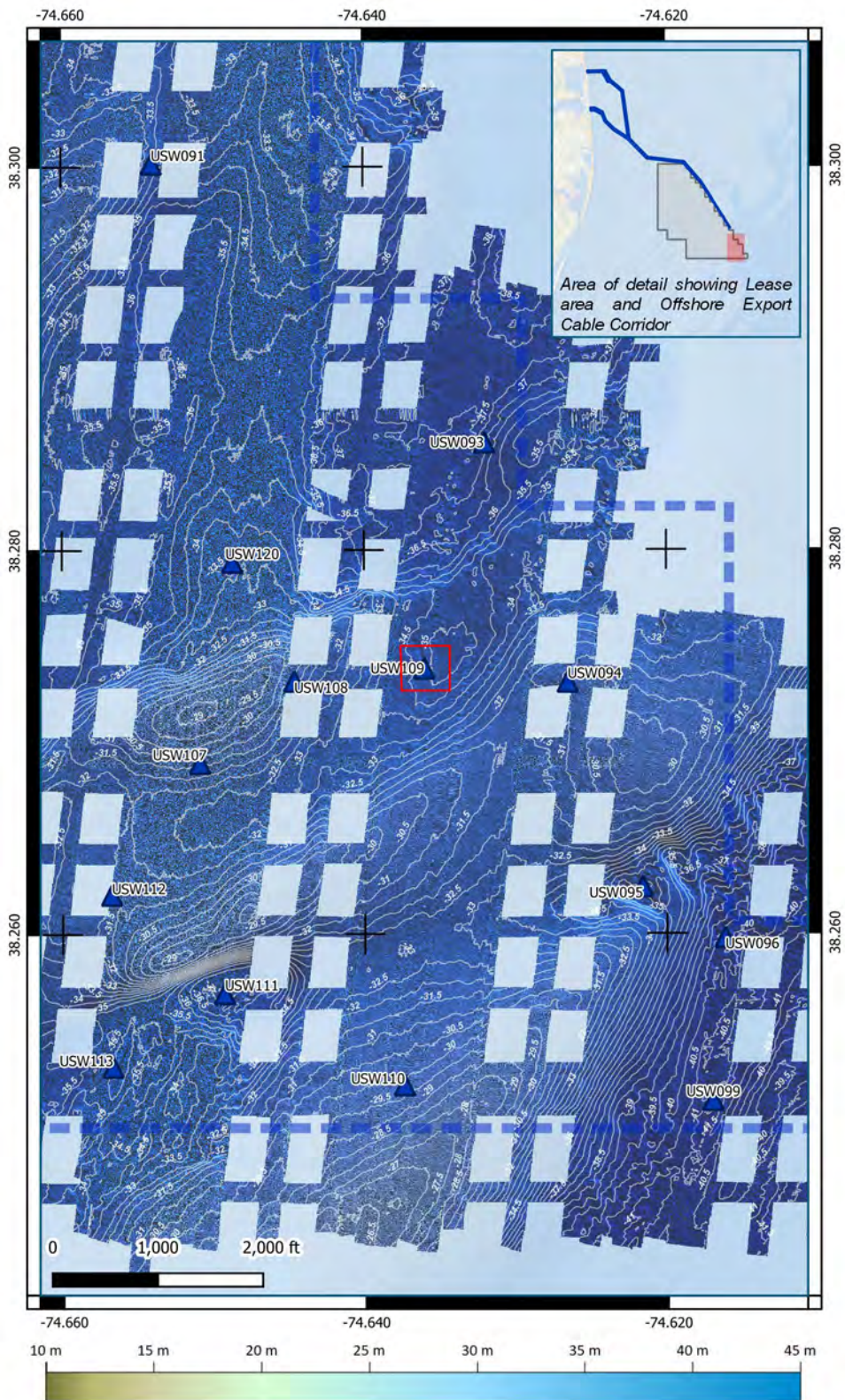


### Sample Photograph





### Map of Benthic Grab Location

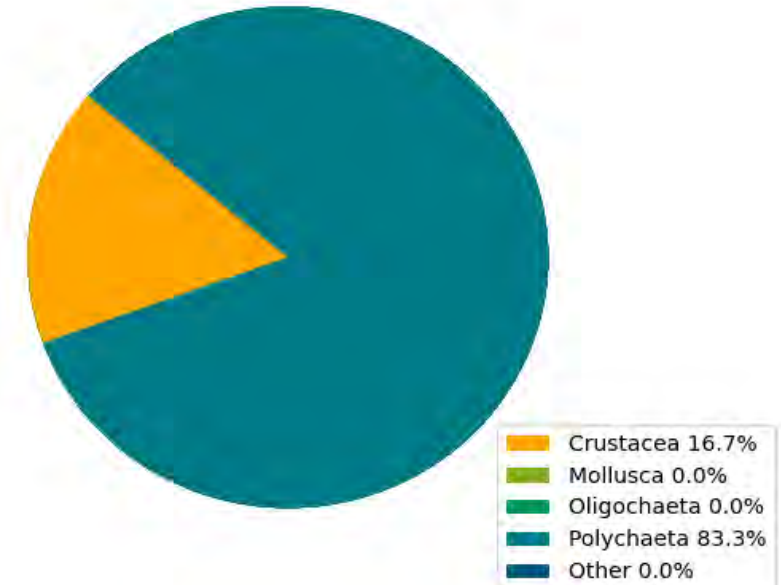


### Benthic Grab USW109

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 300                             |
| Taxa Richness <sup>1</sup> :   |                     | 8                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

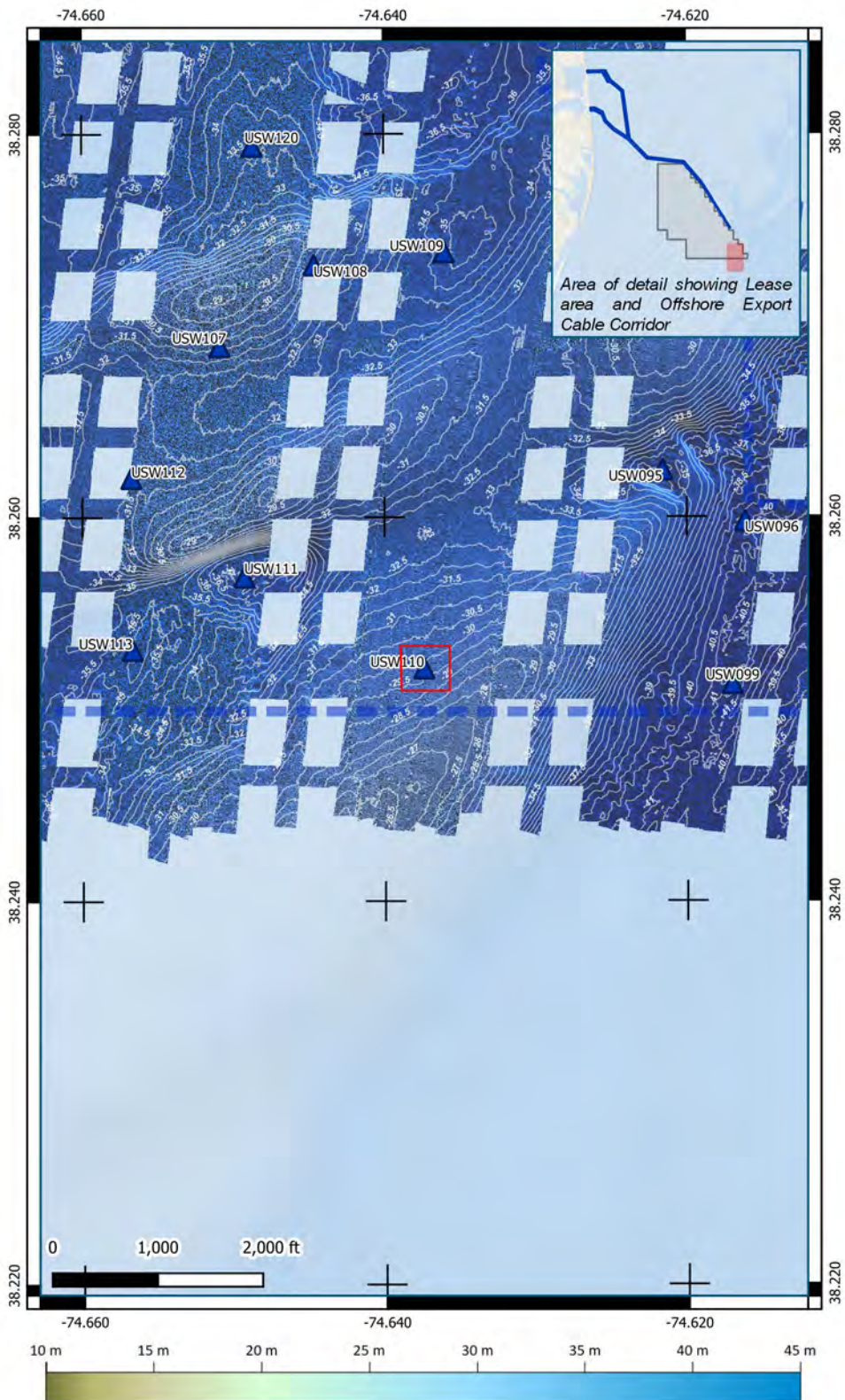


### Sample Photograph





### Map of Benthic Grab Location

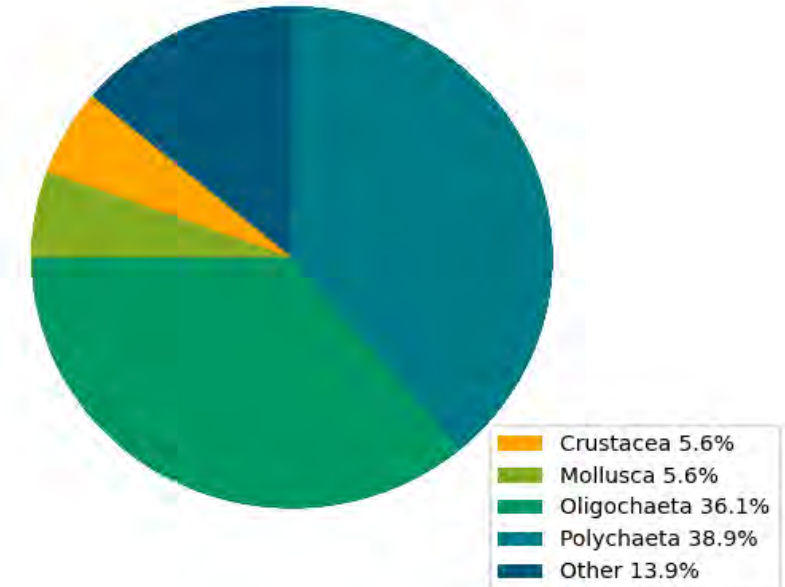


### Benthic Grab USW110

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 900                             |
| Taxa Richness <sup>1</sup> :   |                     | 18                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

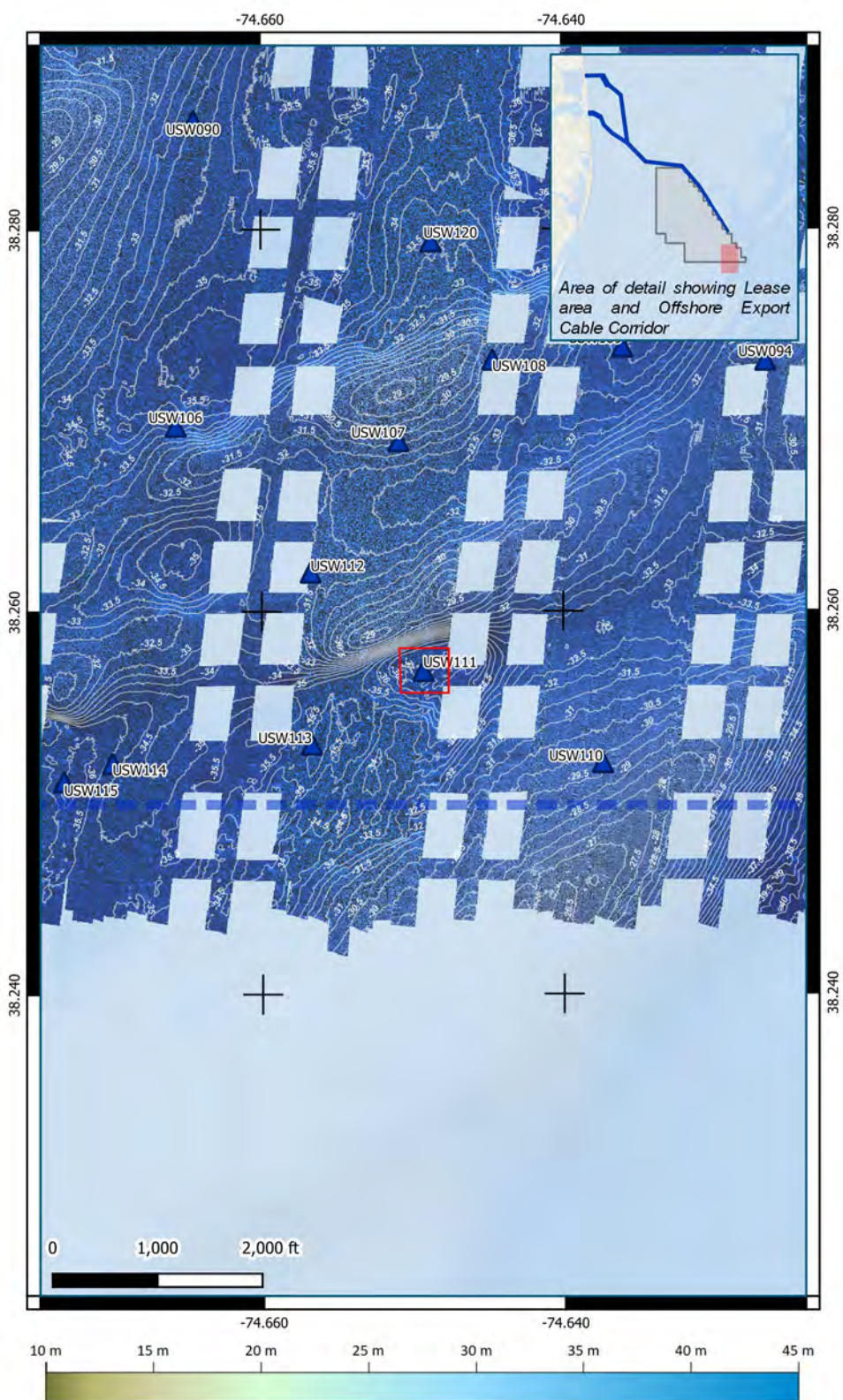


### Sample Photograph





### Map of Benthic Grab Location

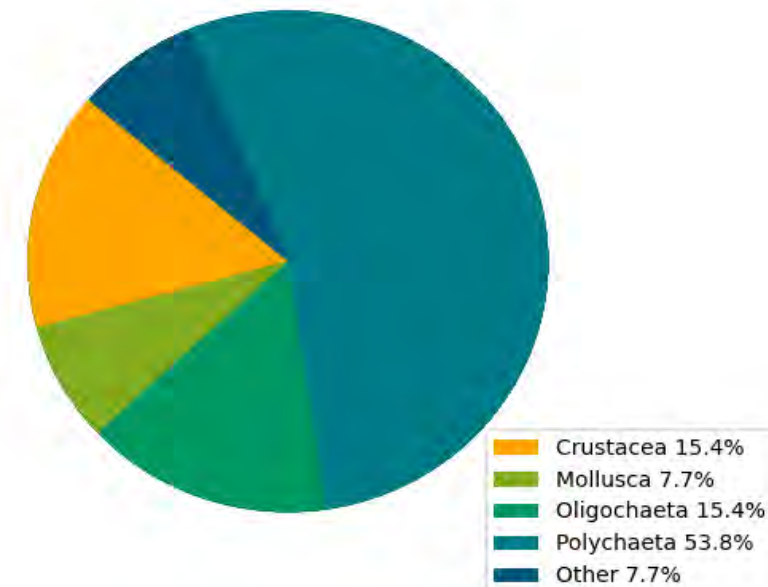


### Benthic Grab USW111

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 325                             |
| Taxa Richness <sup>1</sup> :   |                     | 11                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

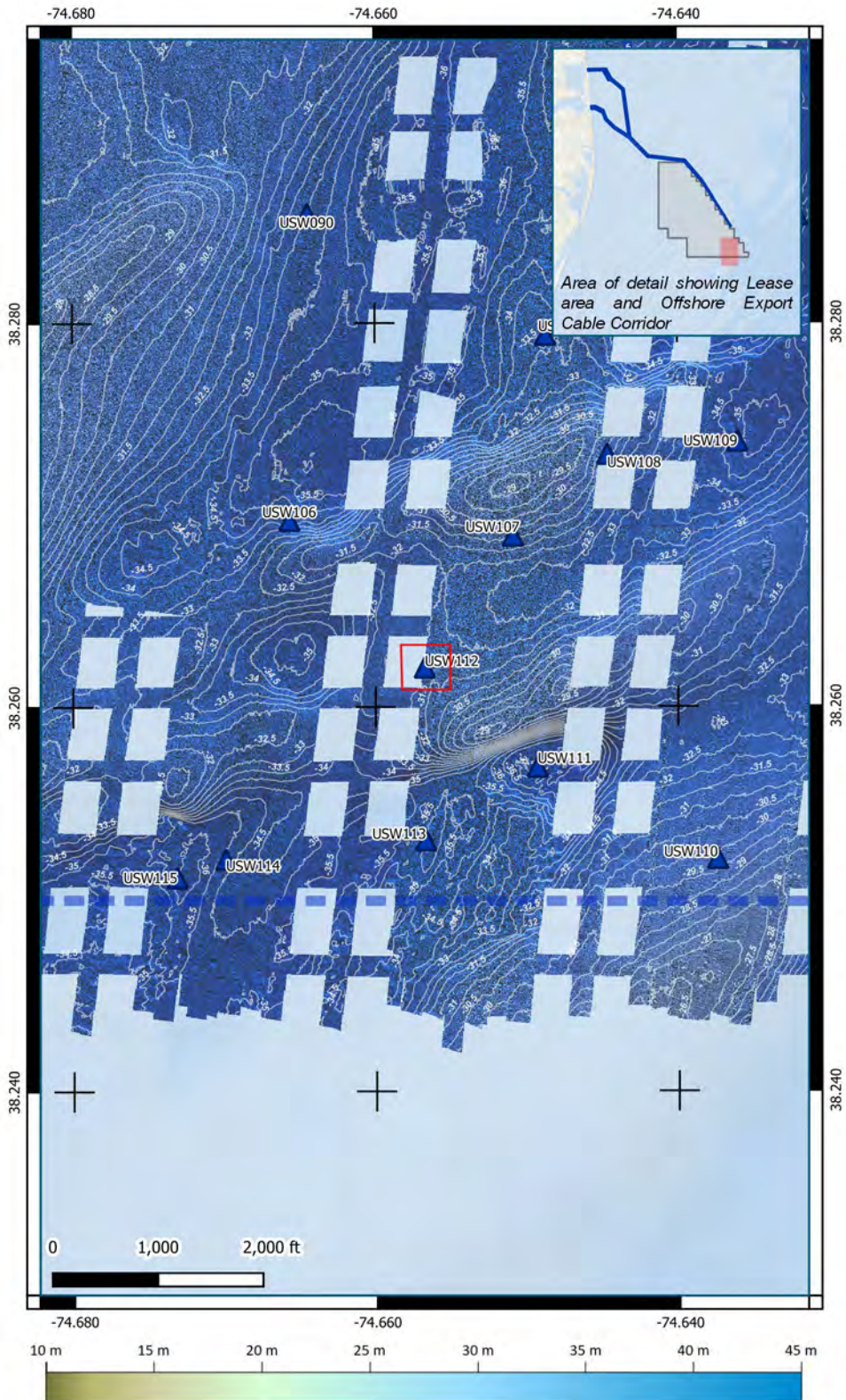


### Sample Photograph





### Map of Benthic Grab Location

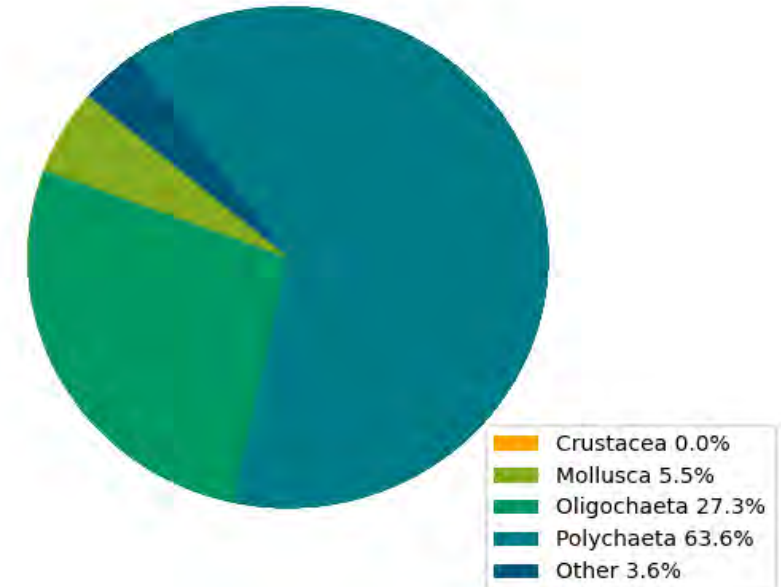


### Benthic Grab USW112

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1375                            |
| Taxa Richness <sup>1</sup> :   |                     | 19                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

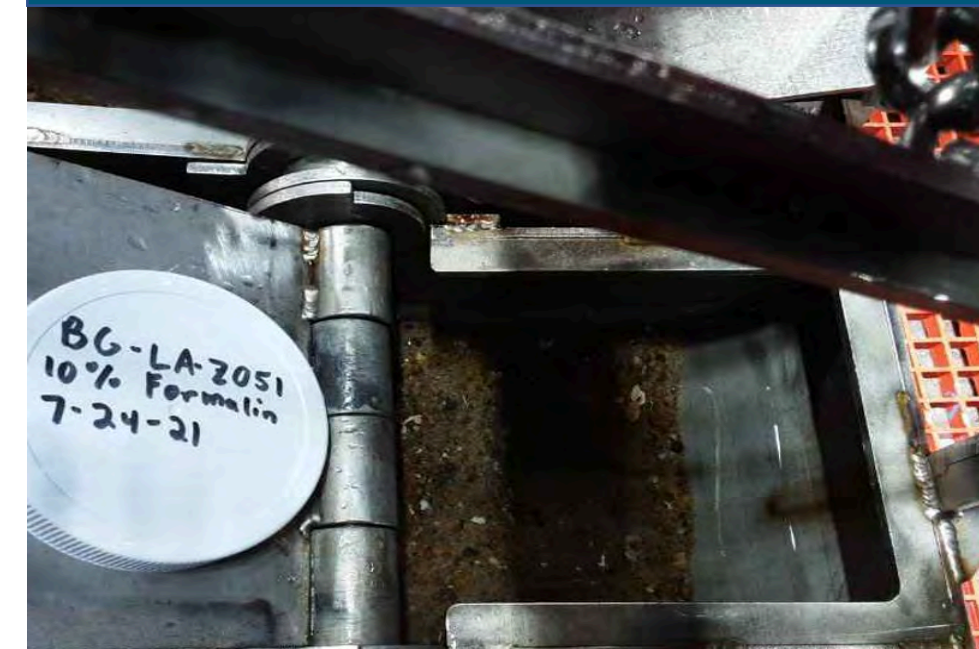
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

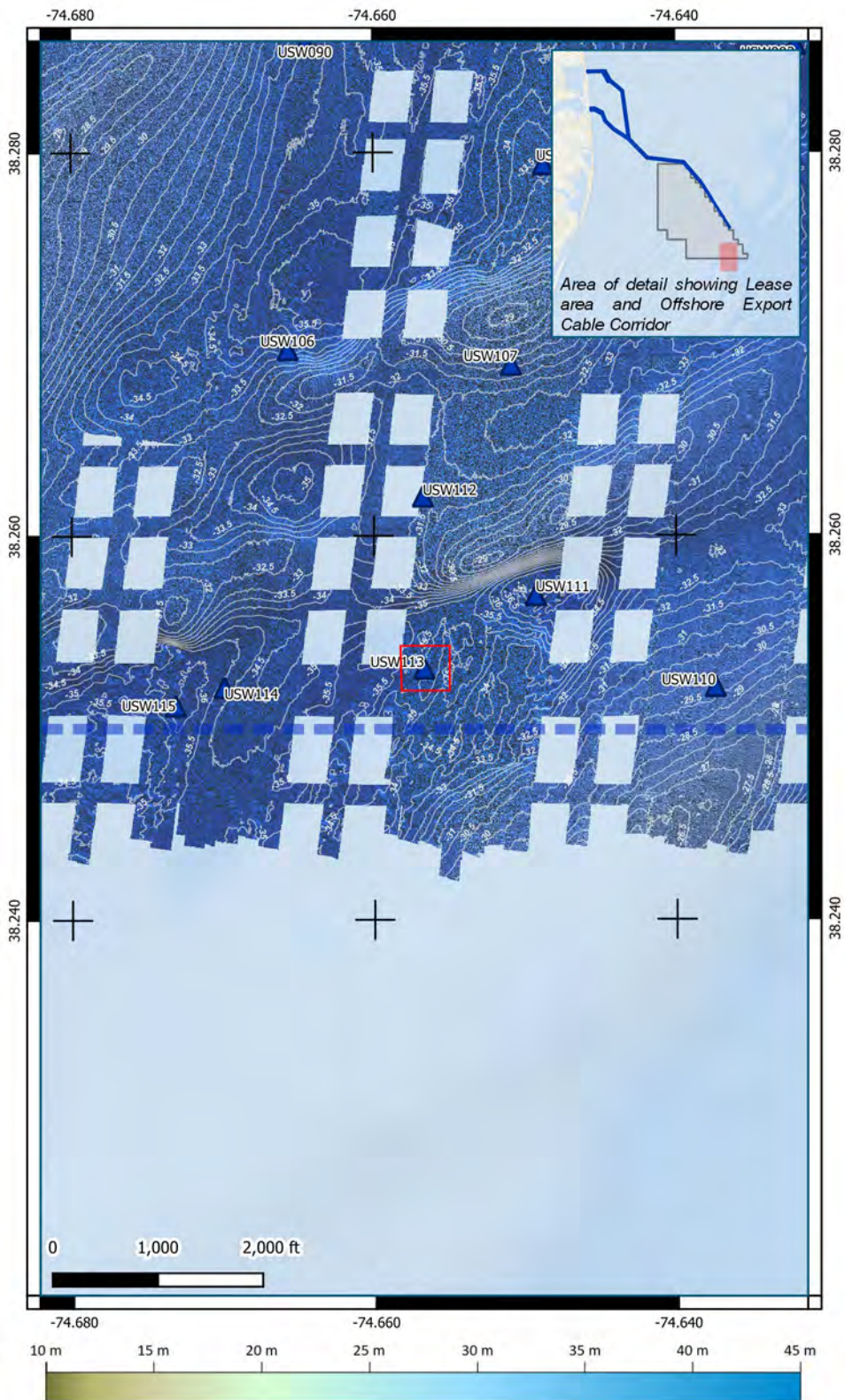


### Sample Photograph





### Map of Benthic Grab Location

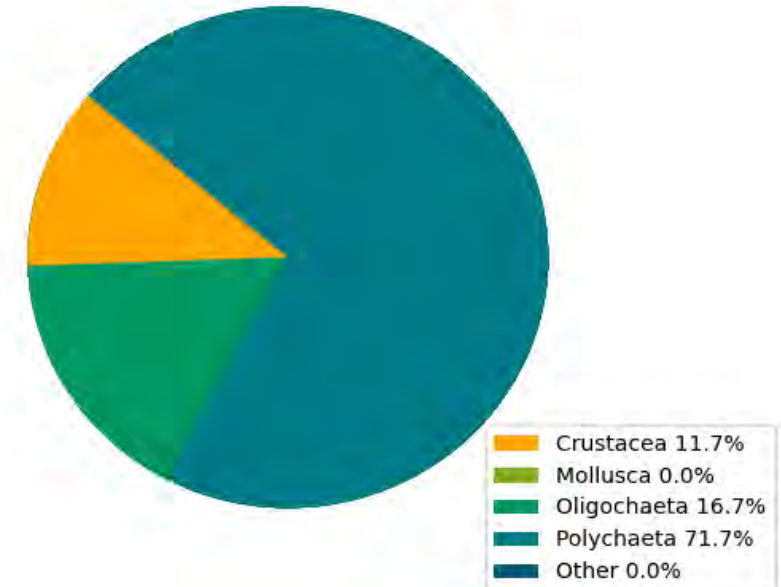


### Benthic Grab USW113

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1500                            |
| Taxa Richness <sup>1</sup> :   |                     | 19                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

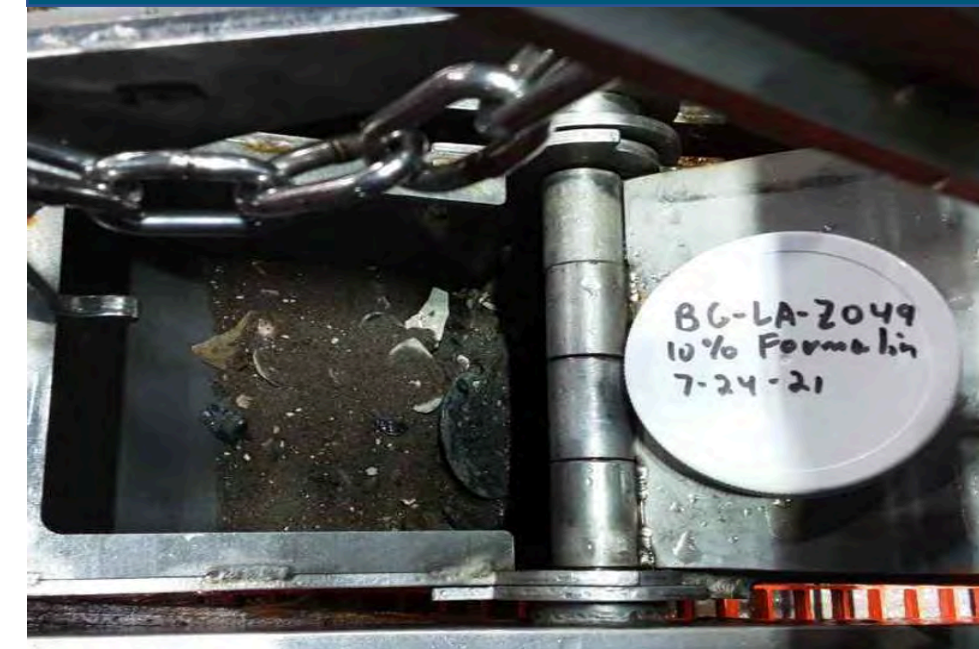
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

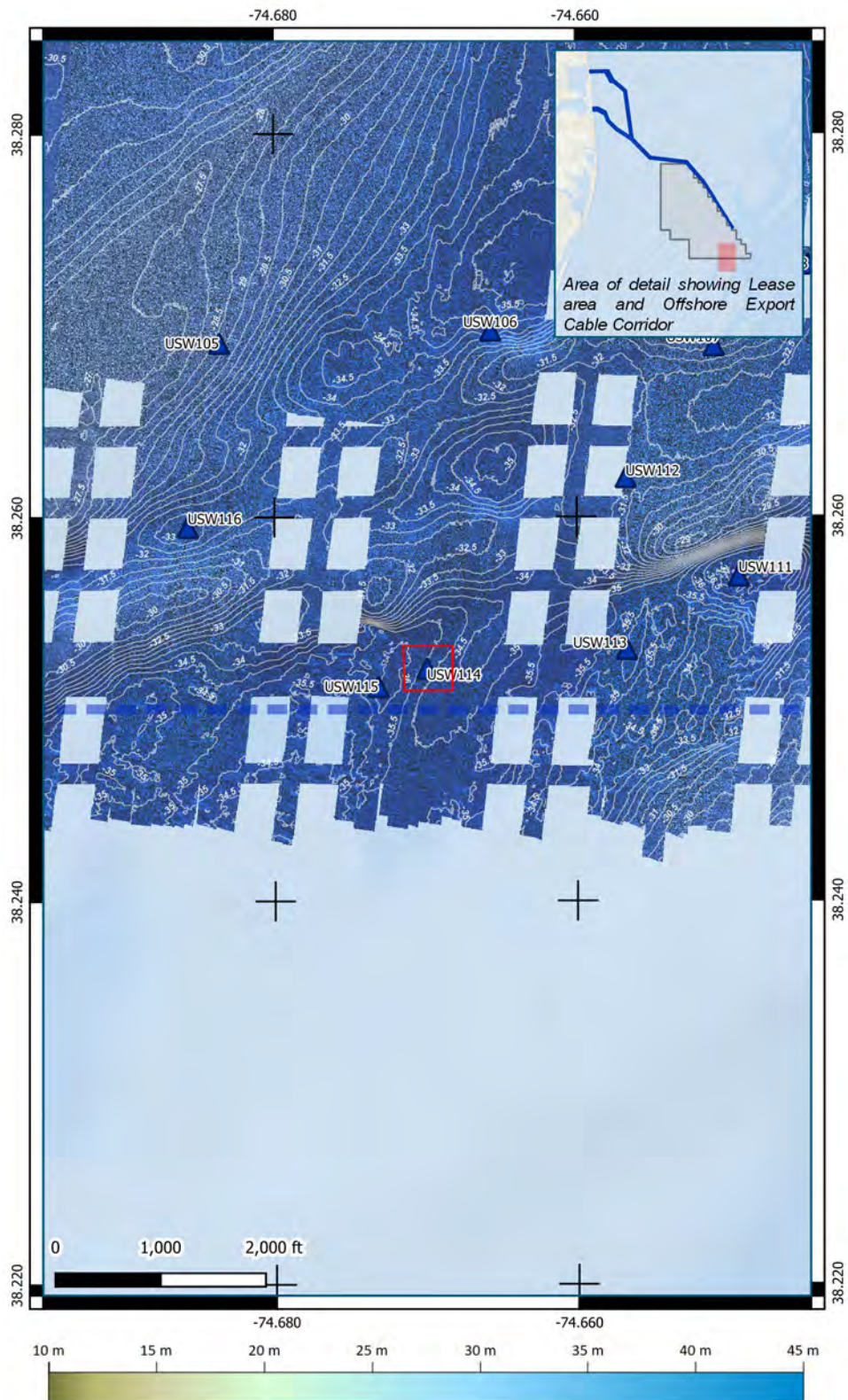


### Sample Photograph





### Map of Benthic Grab Location

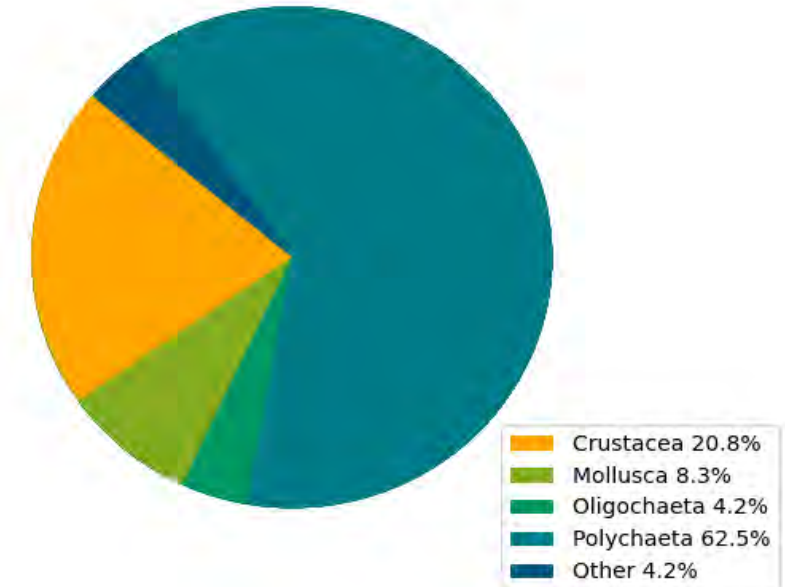


### Benthic Grab USW114

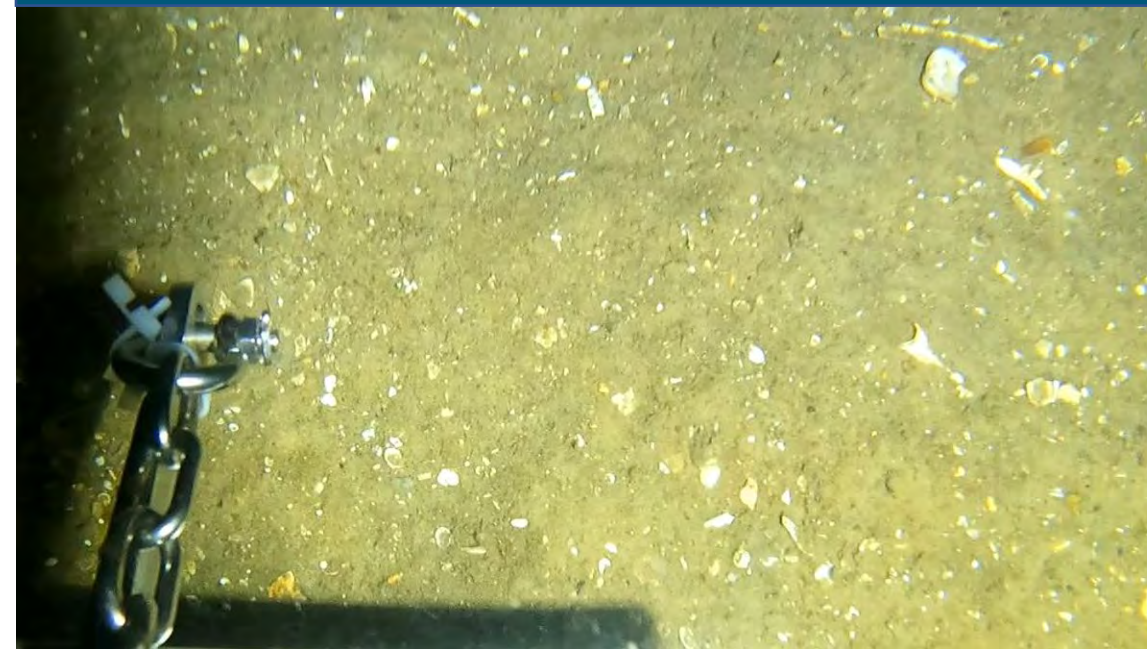
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 600                             |
| Taxa Richness <sup>1</sup> :   |                     | 15                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

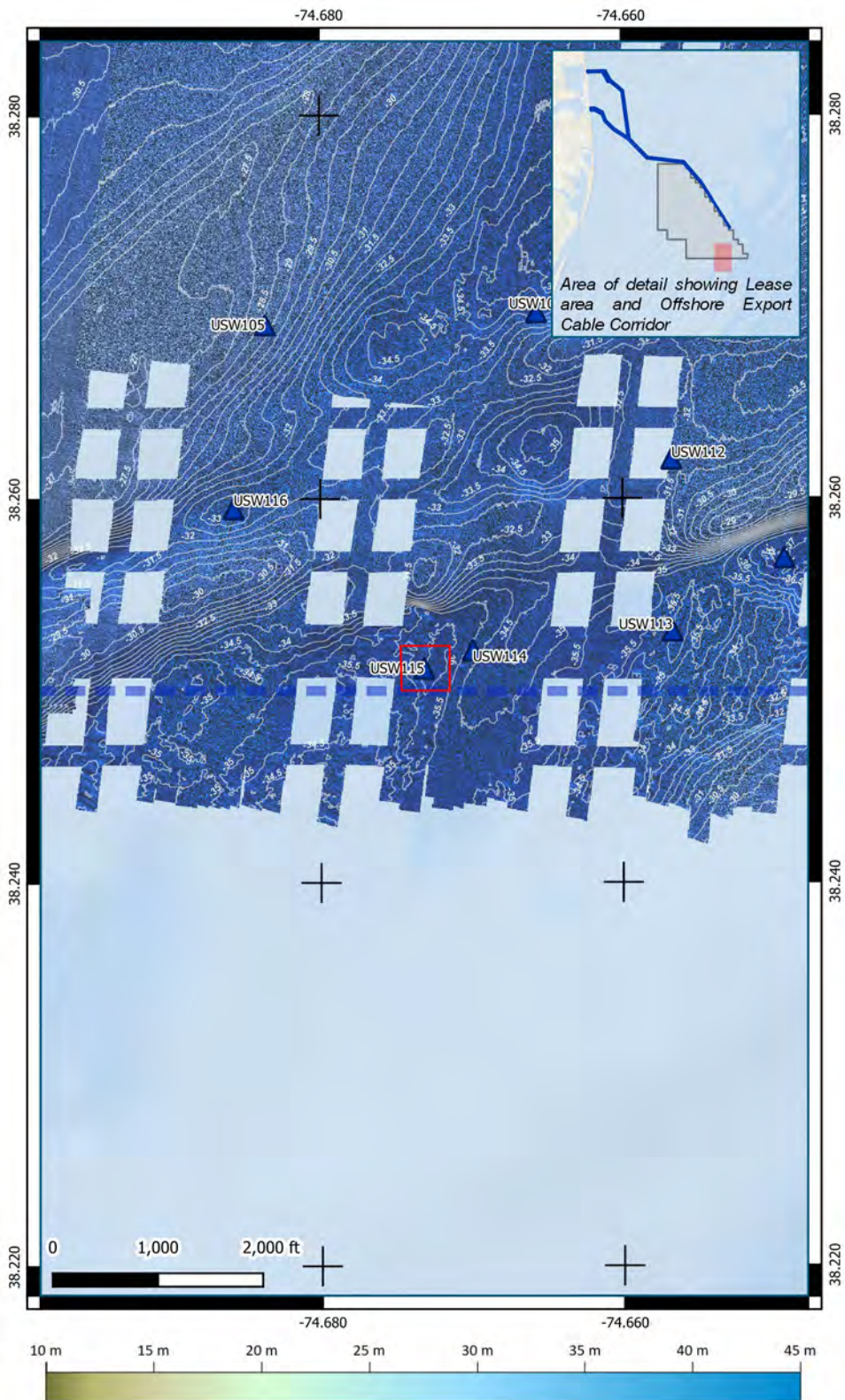


### Sample Photograph





### Map of Benthic Grab Location

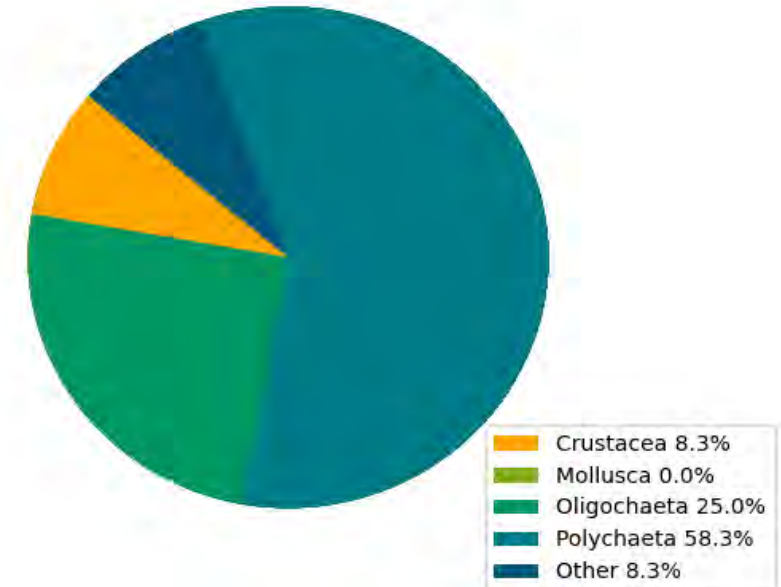


### Benthic Grab USW115

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 300                             |
| Taxa Richness <sup>1</sup> :   |                     | 9                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

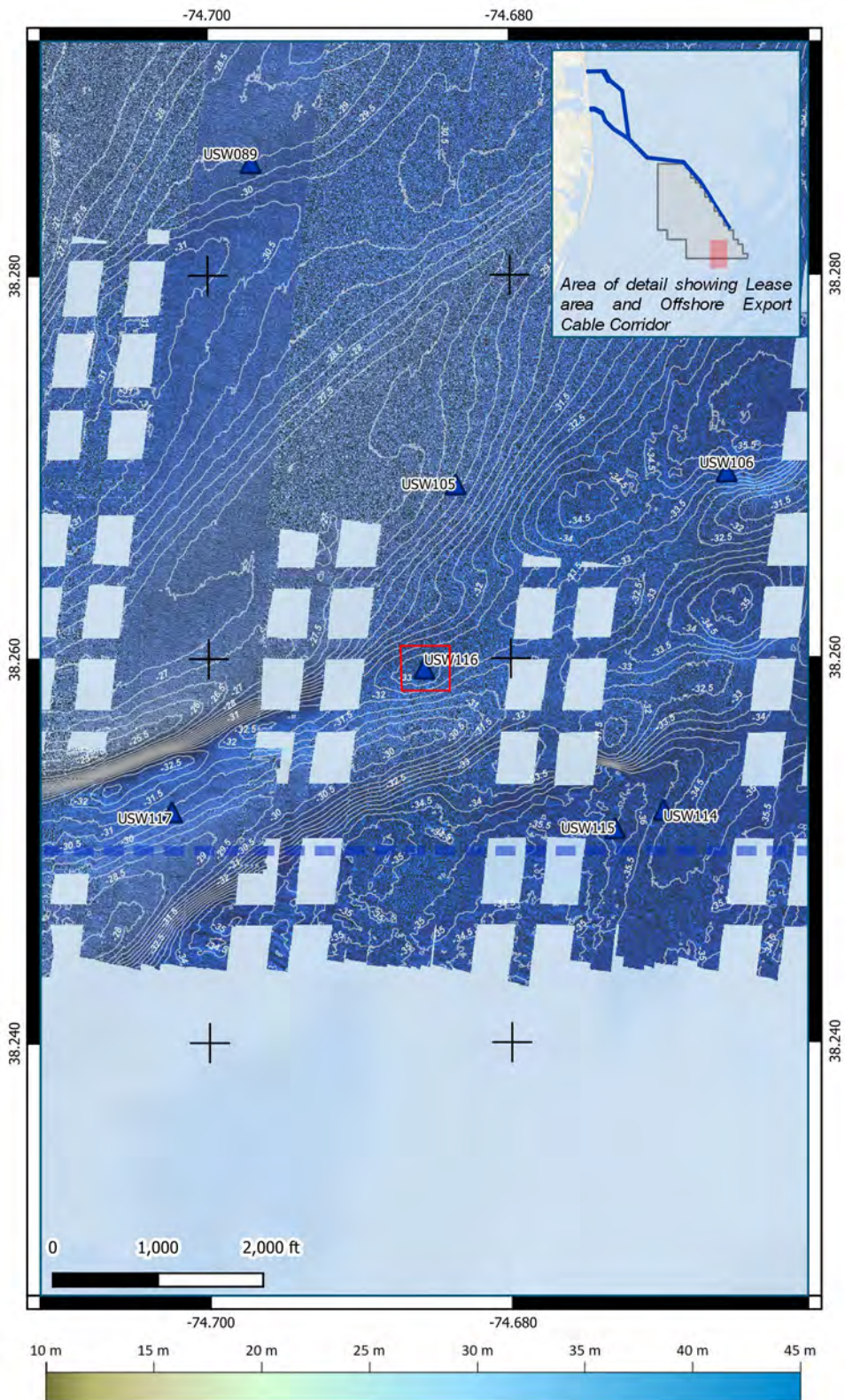


### Sample Photograph





### Map of Benthic Grab Location

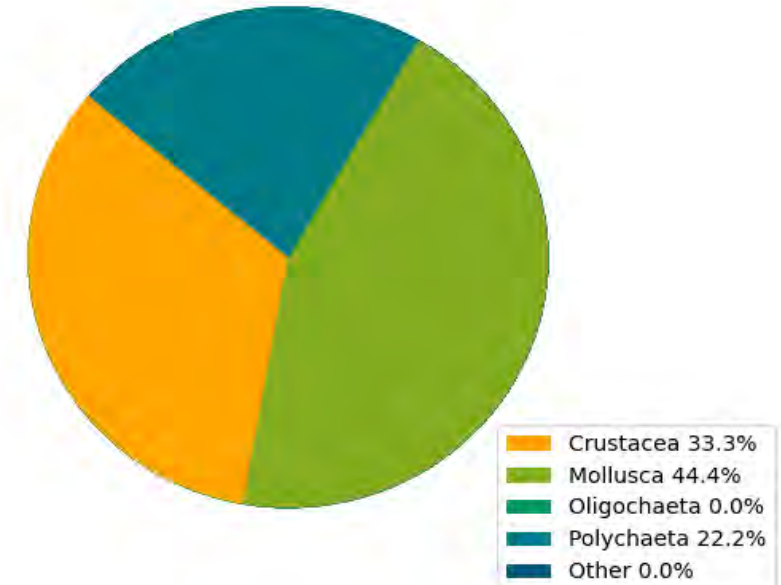


### Benthic Grab USW116

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 225                           |
| Taxa Richness <sup>1</sup> :   |                     | 9                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

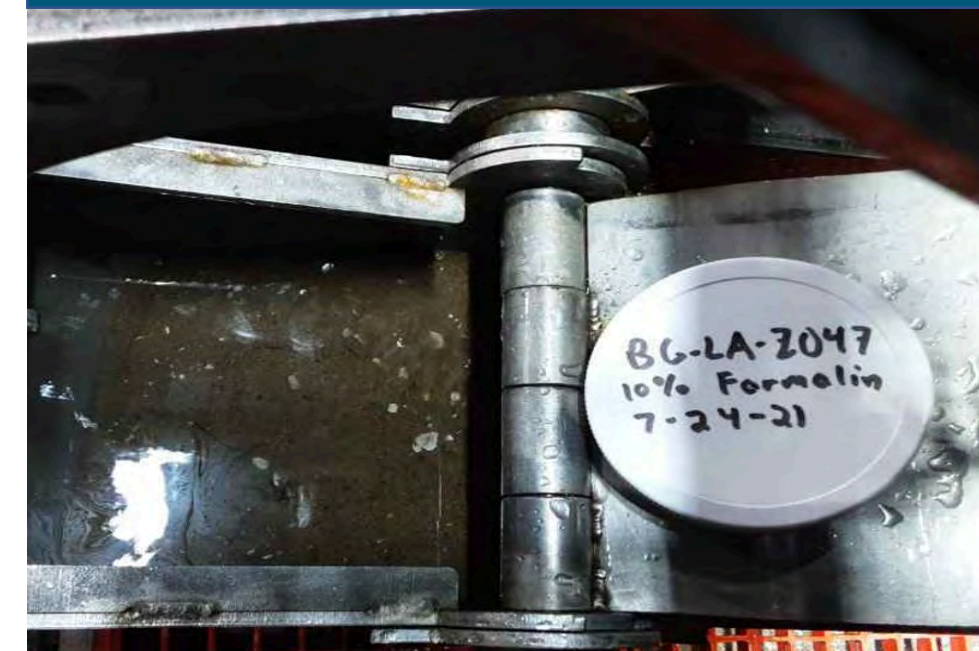
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

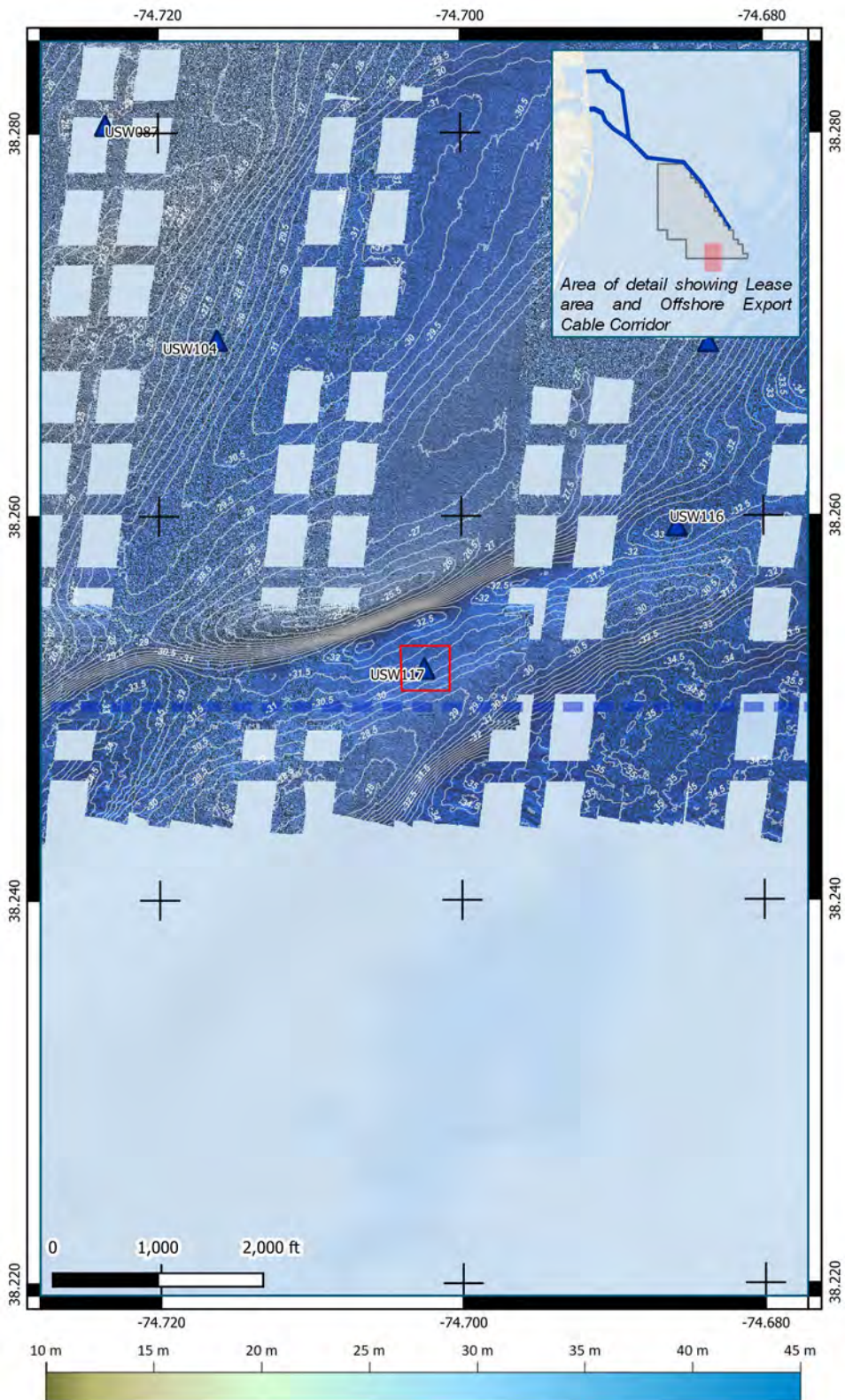


### Sample Photograph





### Map of Benthic Grab Location

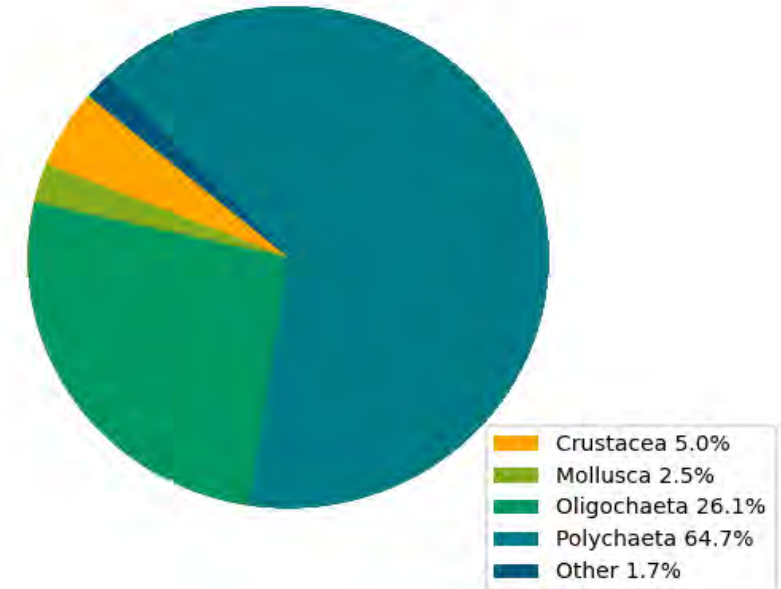


### Benthic Grab USW117

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 2975                            |
| Taxa Richness <sup>1</sup> :   |                     | 22                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

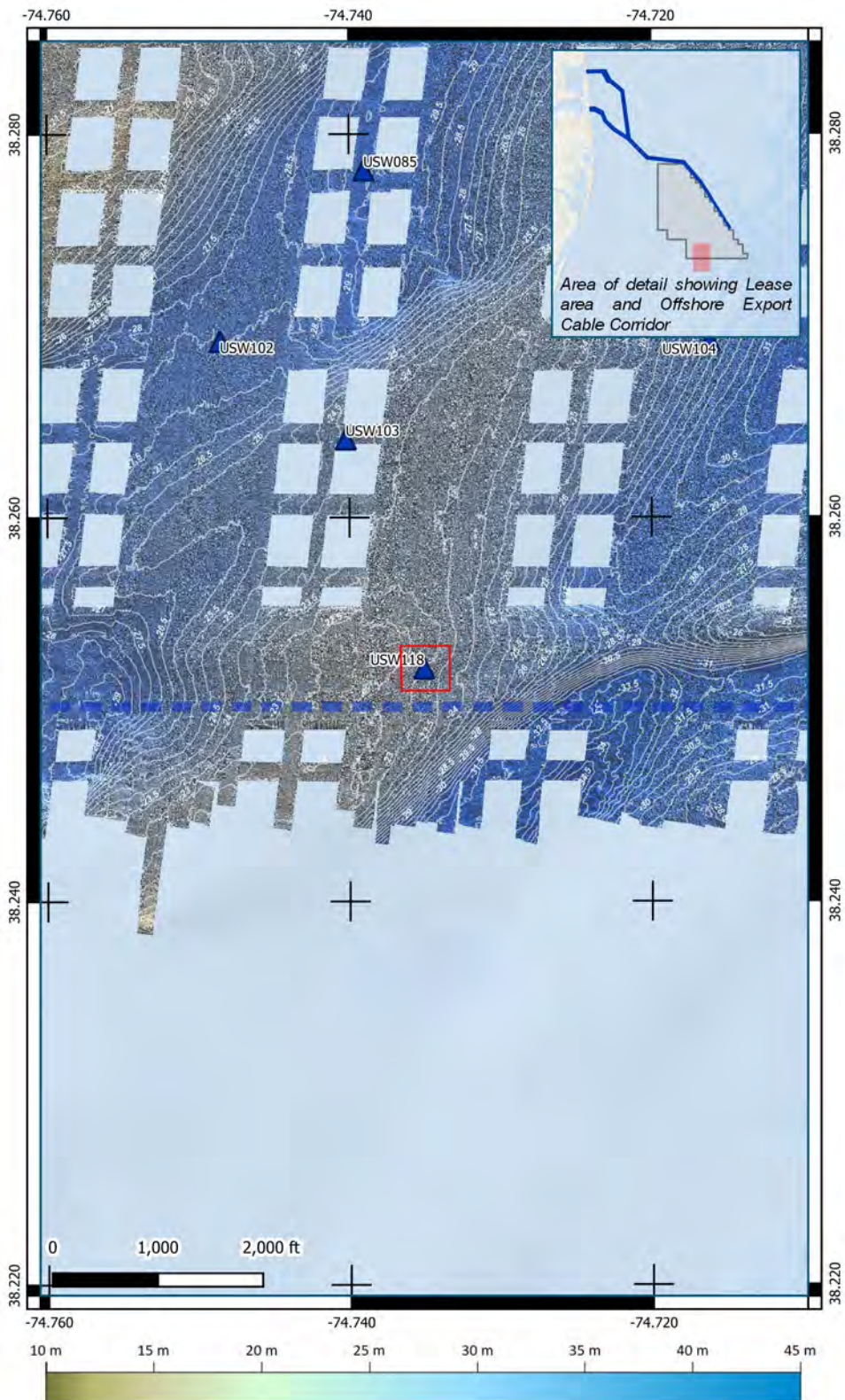


### Sample Photograph





### Map of Benthic Grab Location

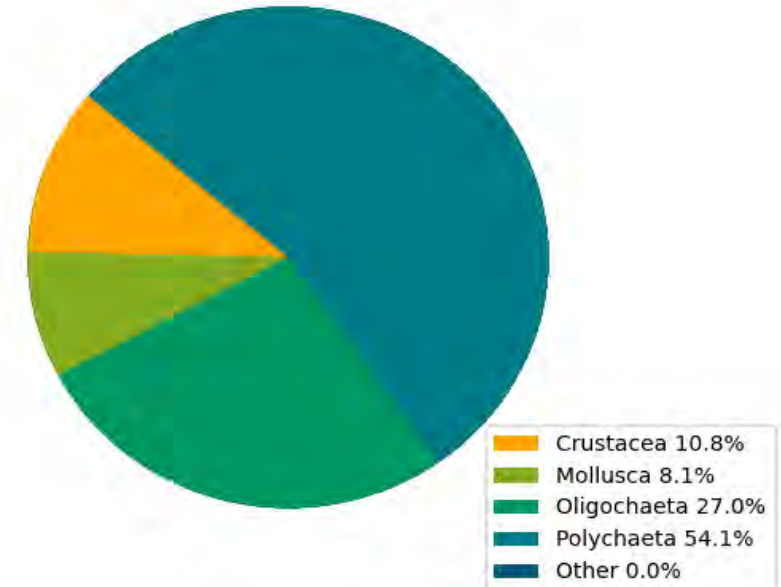


### Benthic Grab USW118

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 925                             |
| Taxa Richness <sup>1</sup> :   |                     | 17                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

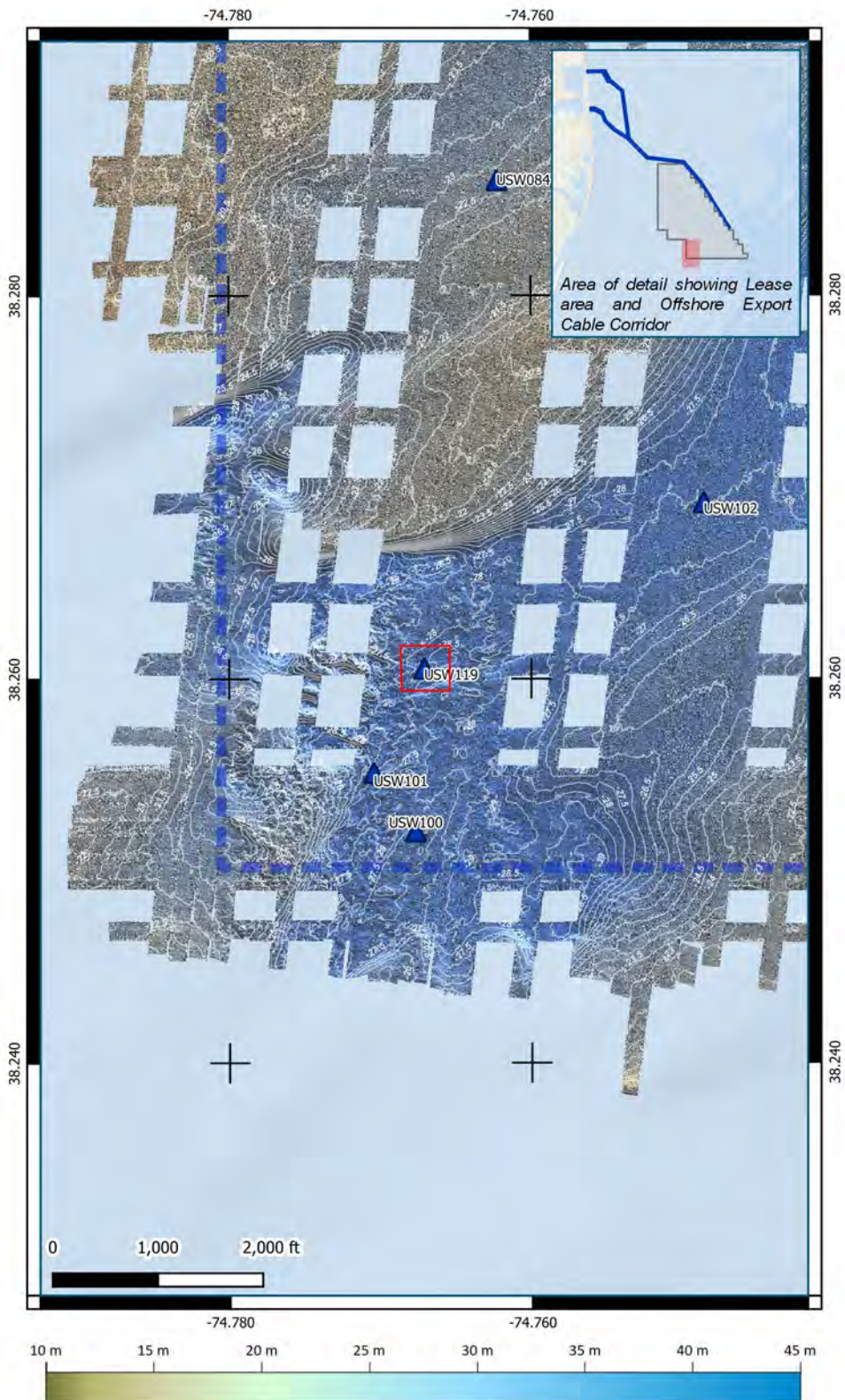


### Sample Photograph





### Map of Benthic Grab Location

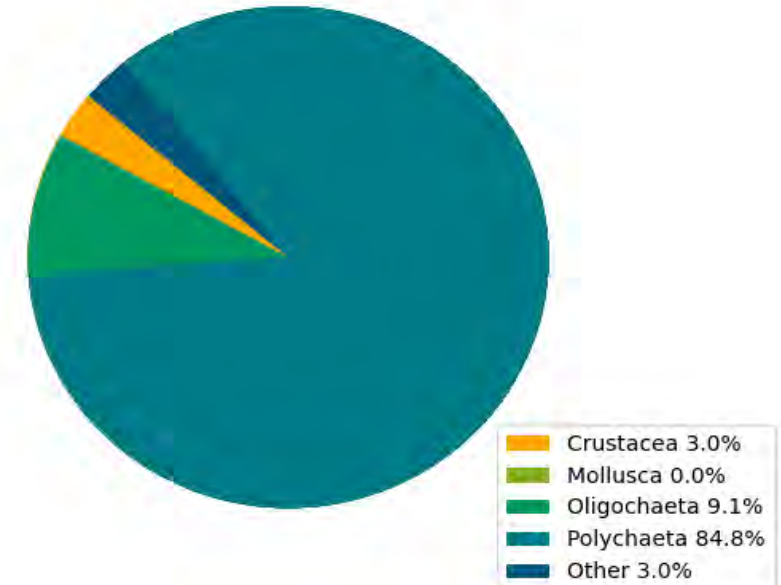


### Benthic Grab USW119

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 825                           |
| Taxa Richness <sup>1</sup> :   |                     | 13                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

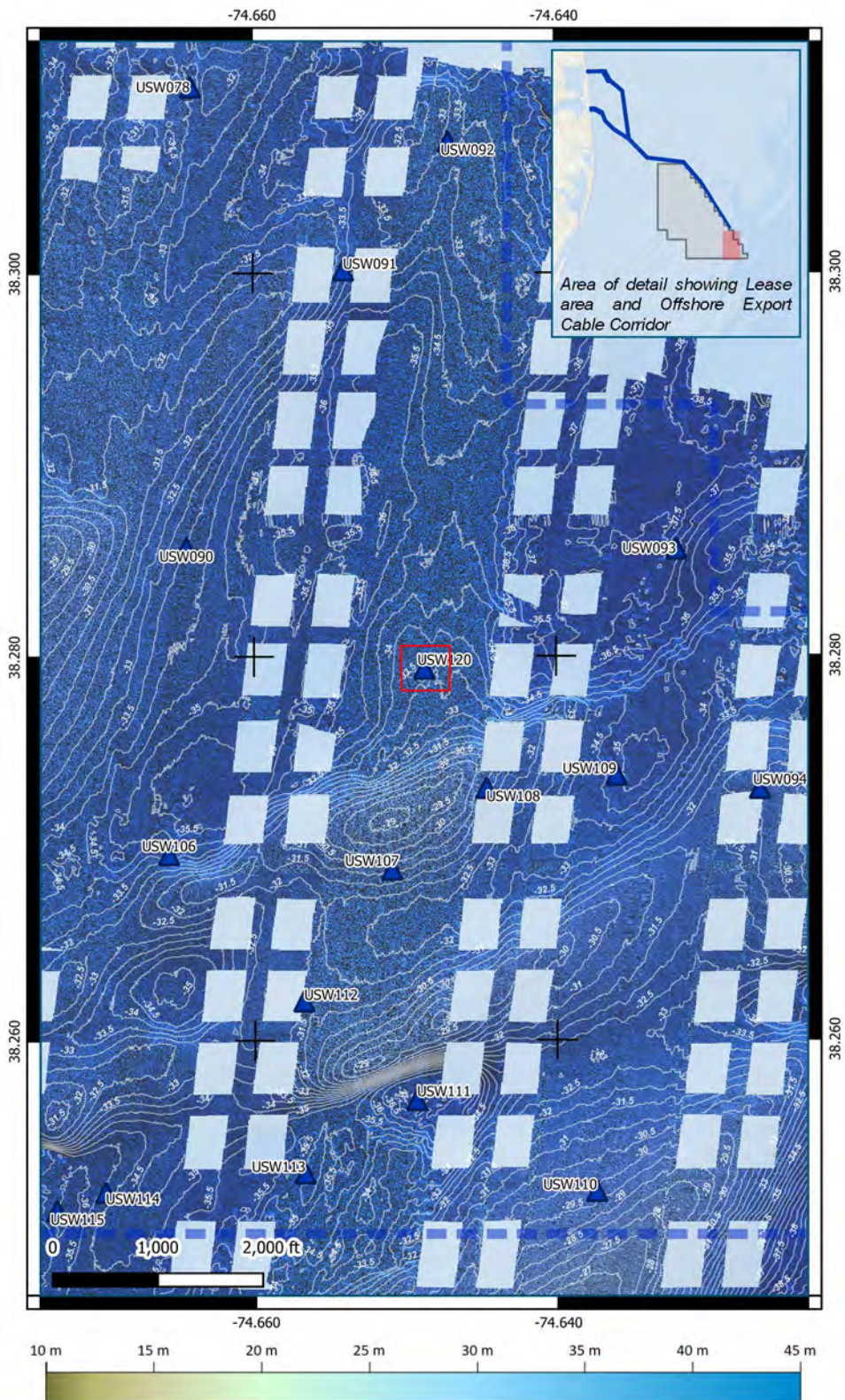


### Sample Photograph





### Map of Benthic Grab Location

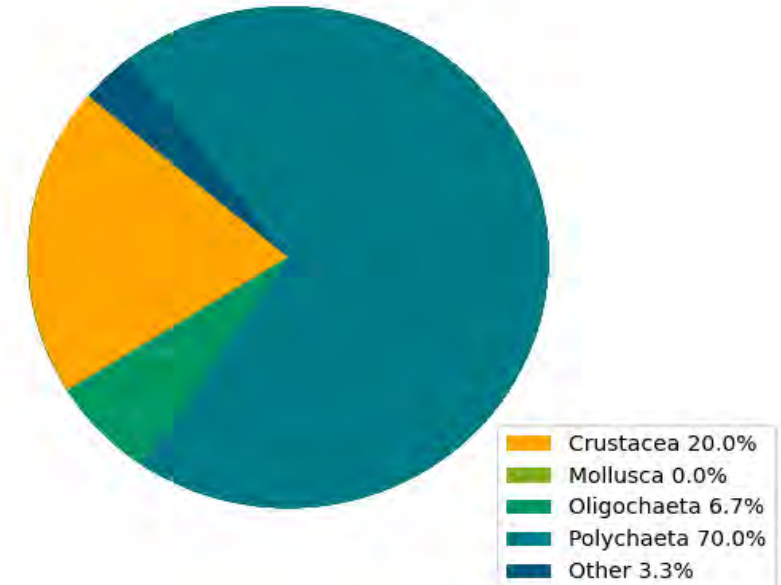


### Benthic Grab USW120

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 750                             |
| Taxa Richness <sup>1</sup> :   |                     | 17                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

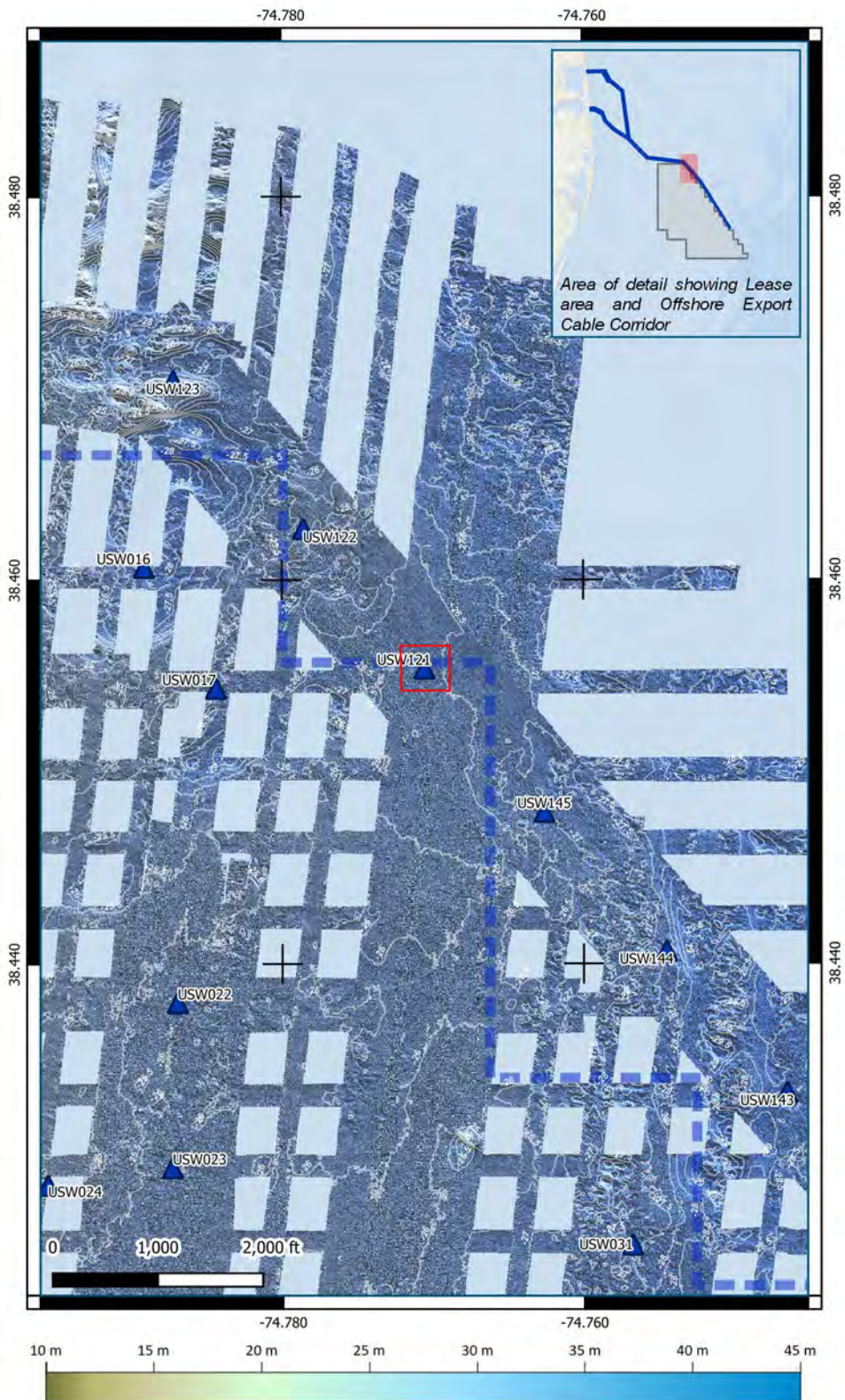


### Sample Photograph





### Map of Benthic Grab Location

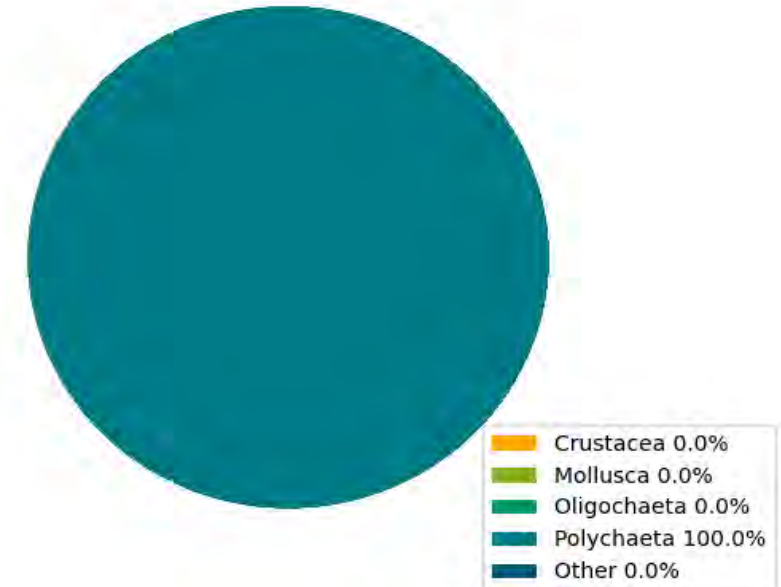


### Benthic Grab USW121

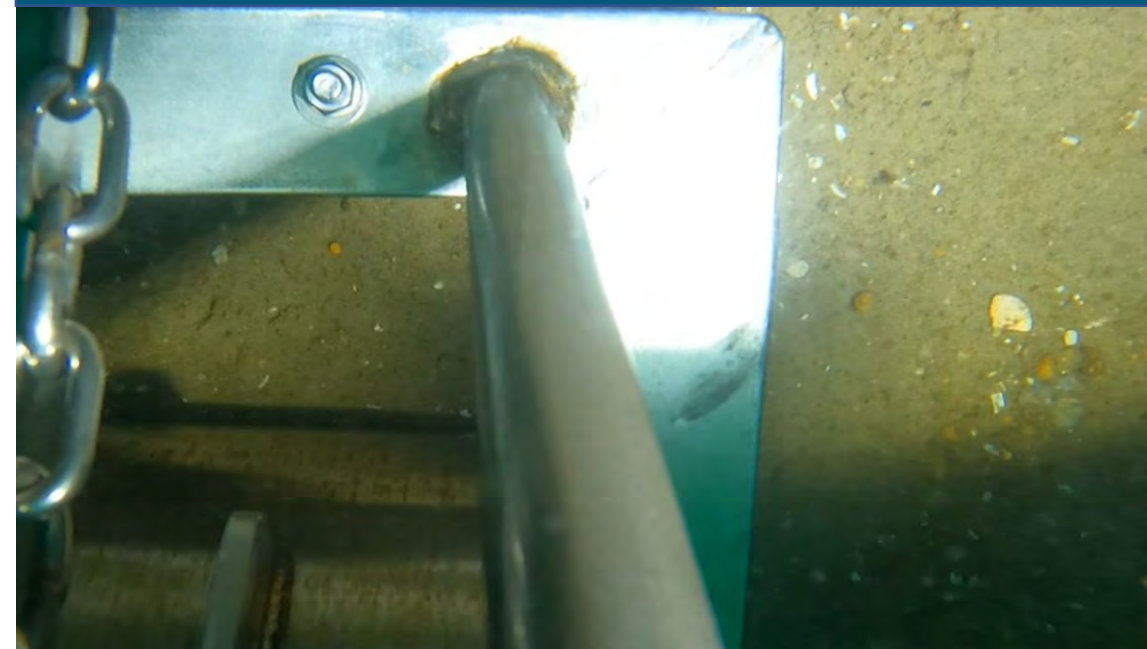
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 125                           |
| Taxa Richness <sup>1</sup> :   |                     | 2                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

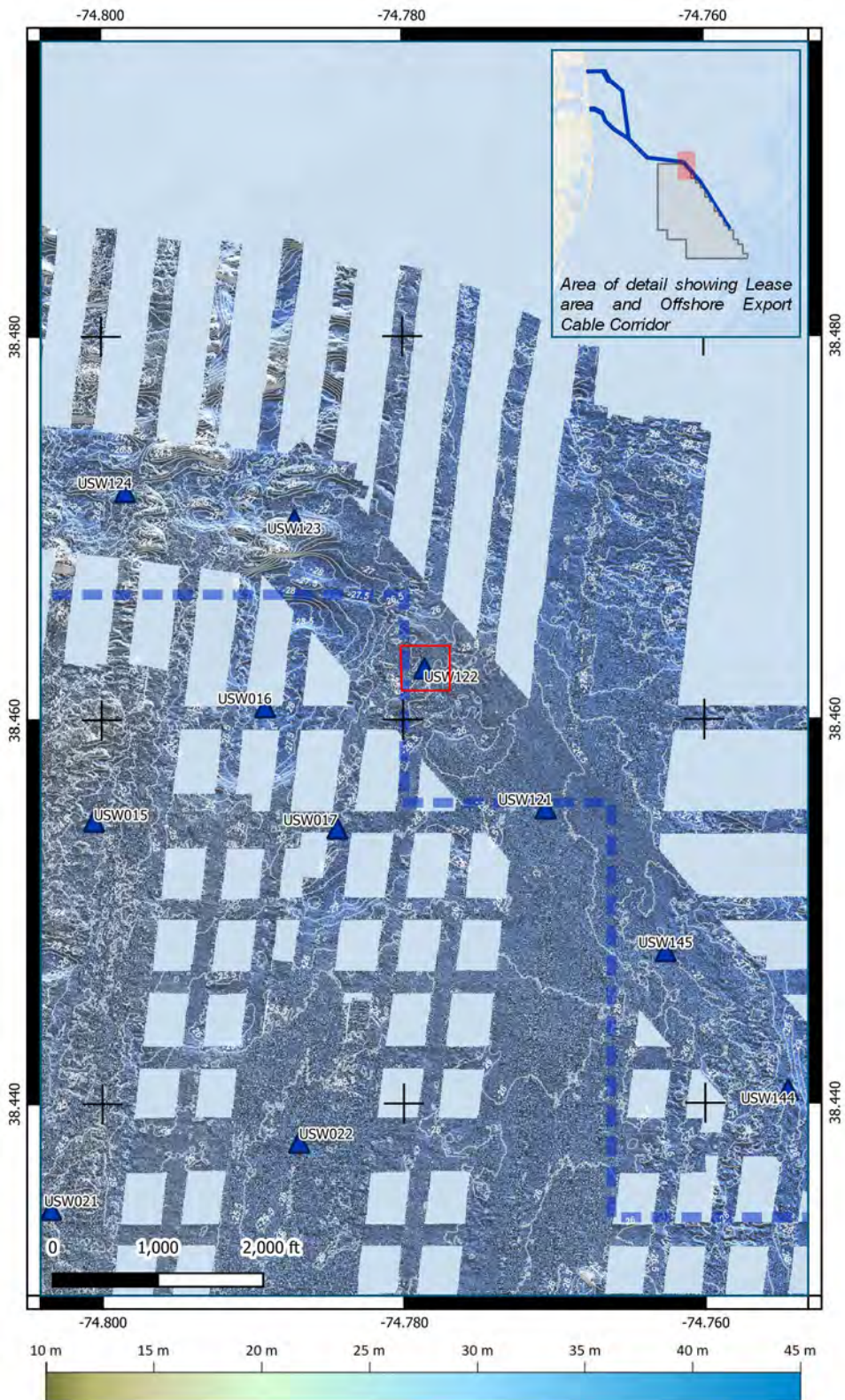


### Sample Photograph





### Map of Benthic Grab Location

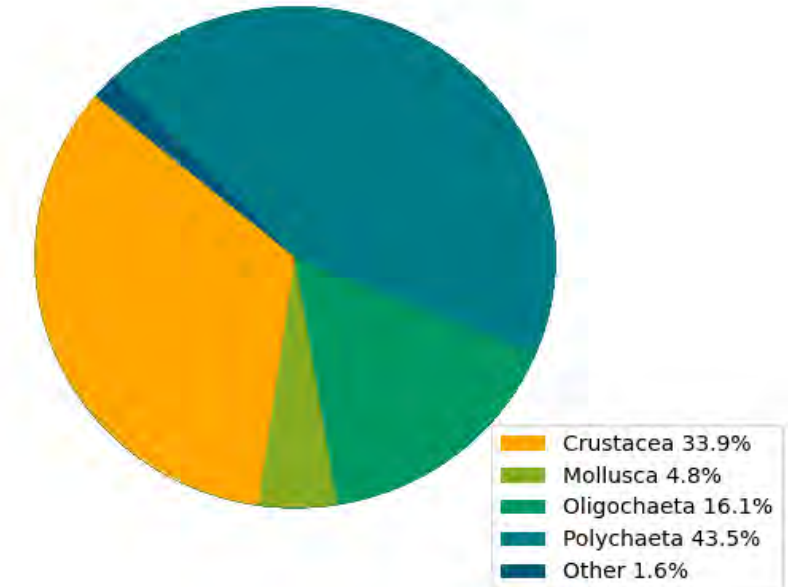


### Benthic Grab USW122

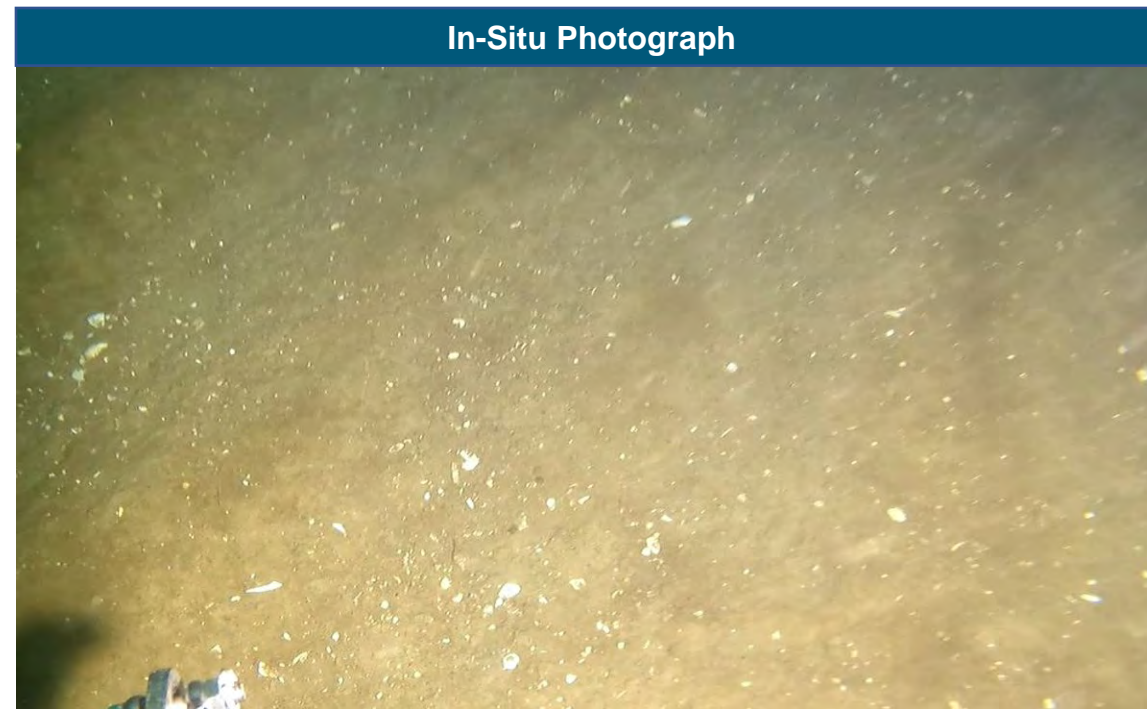
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1550                          |
| Taxa Richness <sup>1</sup> :   |                     | 26                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

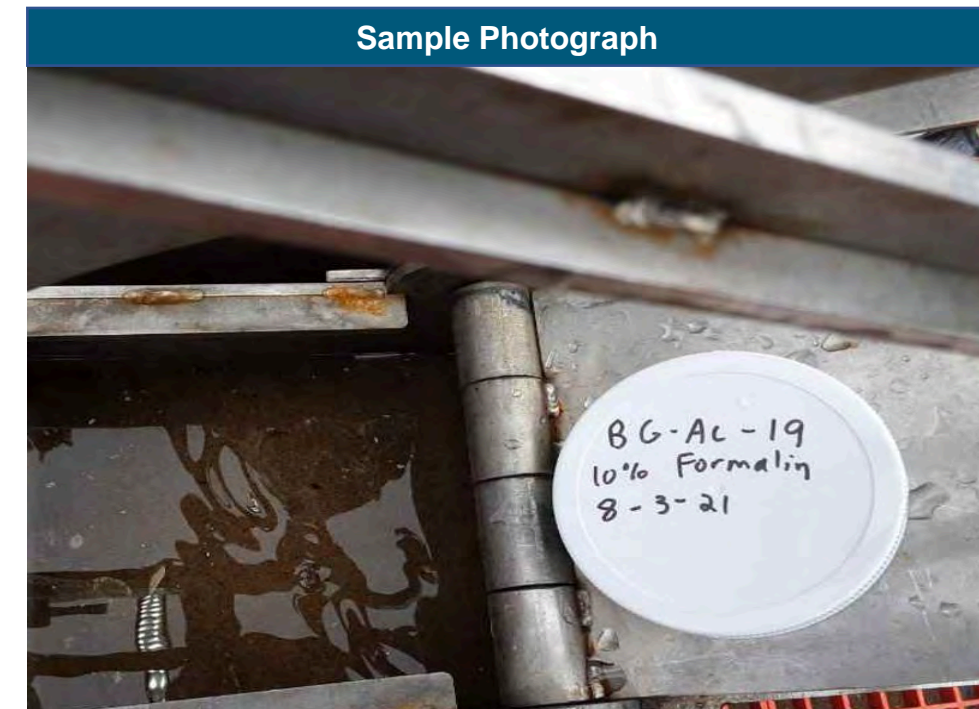
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

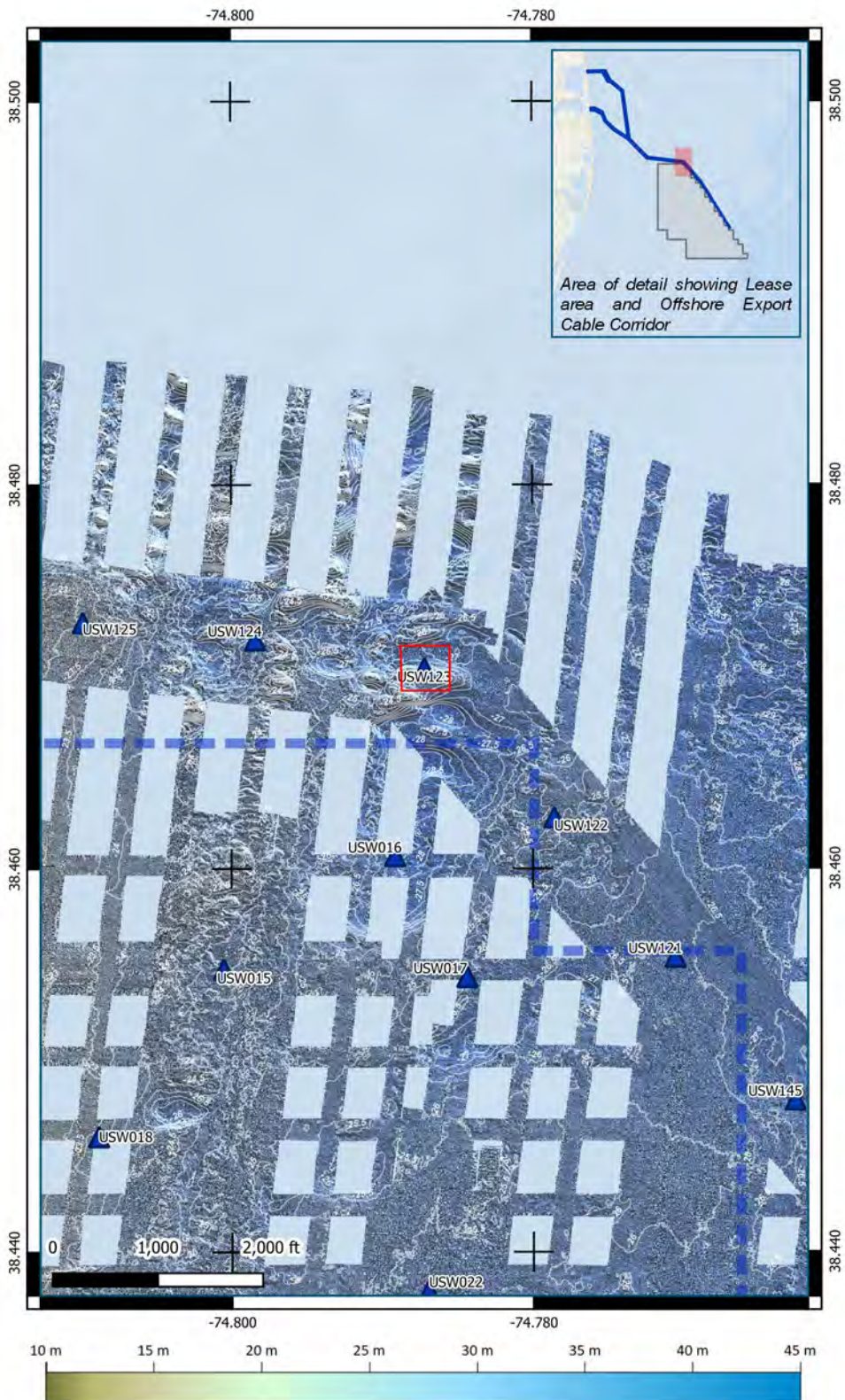


### Sample Photograph





### Map of Benthic Grab Location

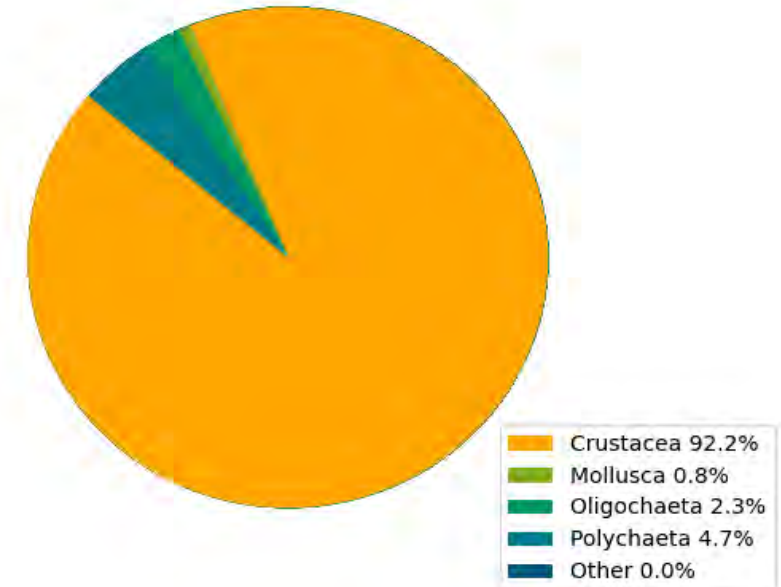


### Benthic Grab USW123

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 3225                          |
| Taxa Richness <sup>1</sup> :   |                     | 16                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

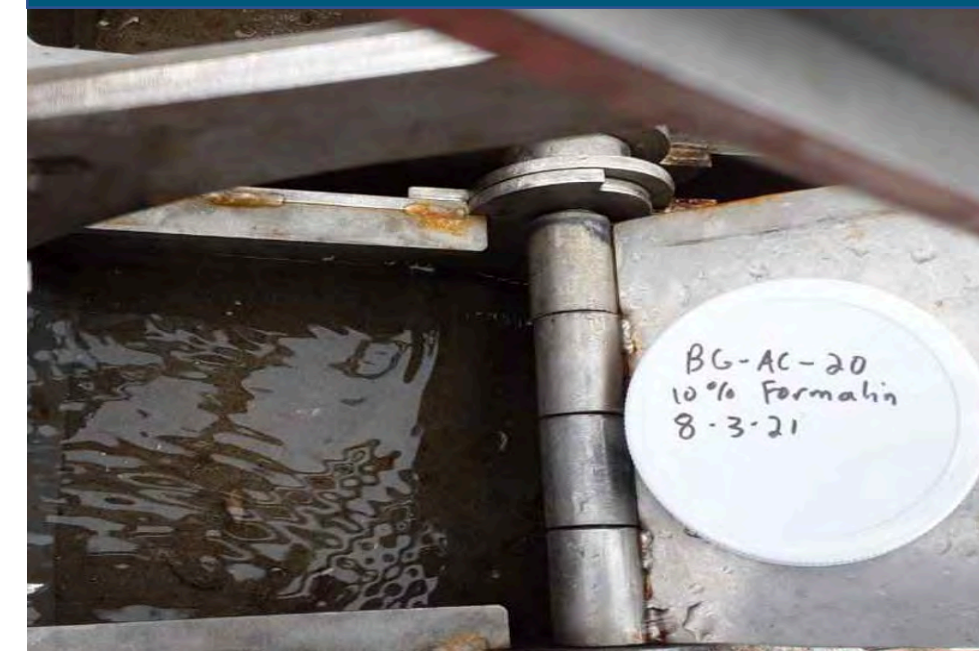
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

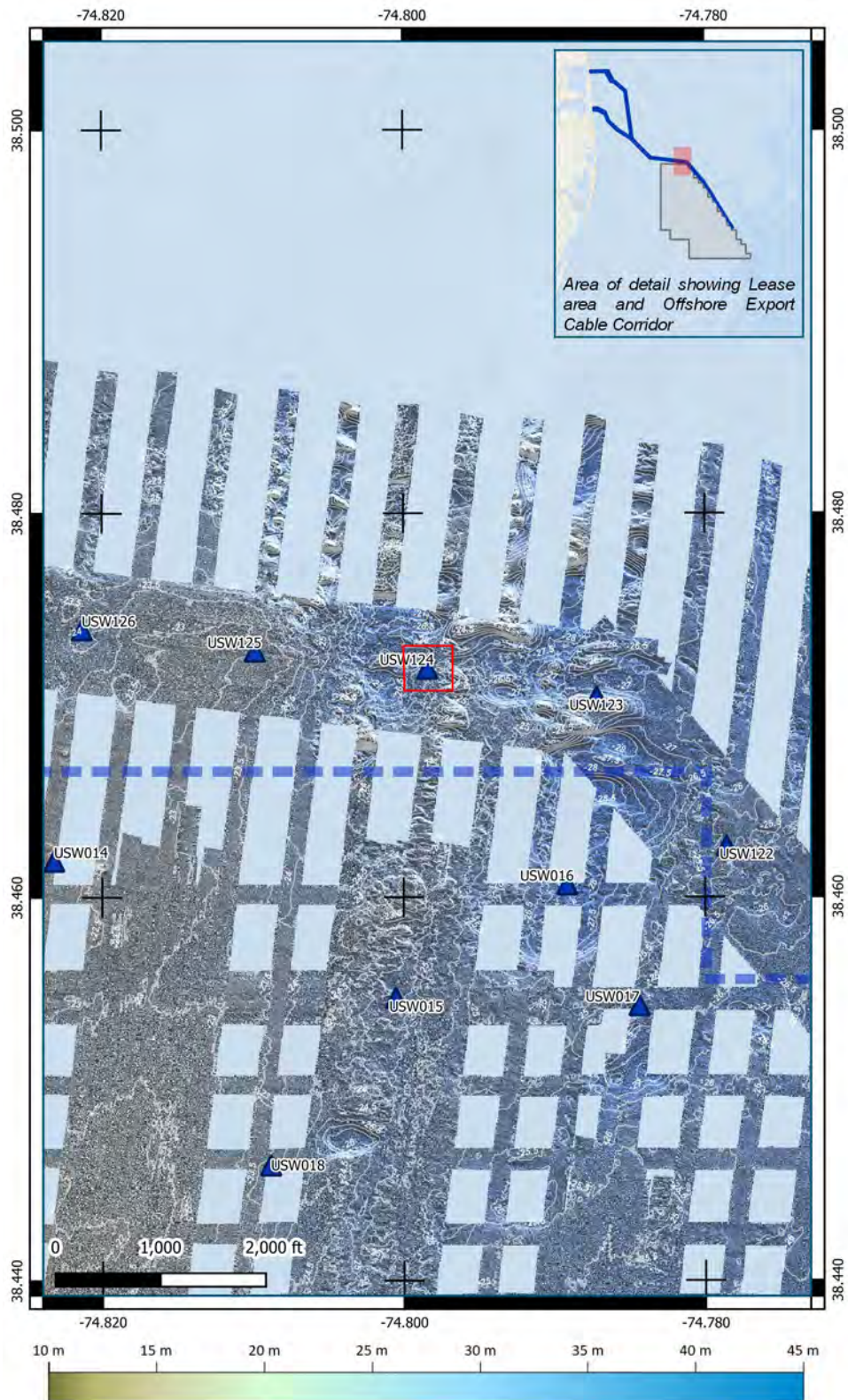


### Sample Photograph





### Map of Benthic Grab Location

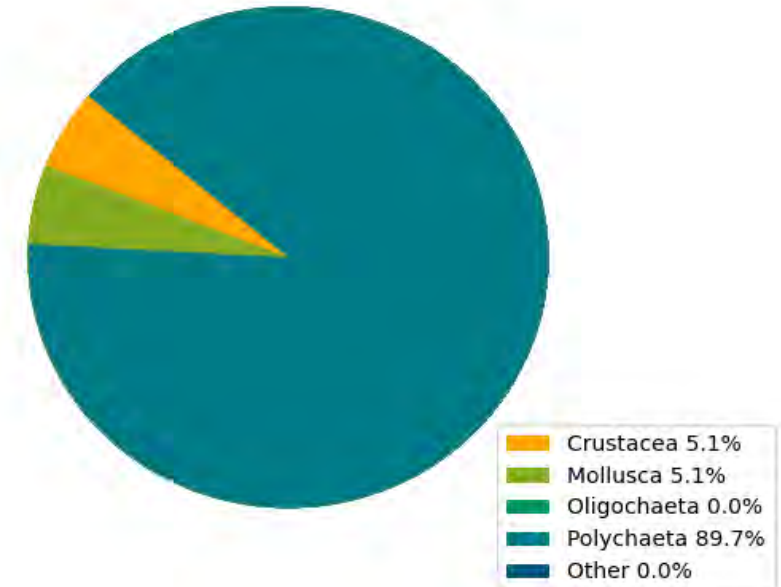


### Benthic Grab USW124

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 975                             |
| Taxa Richness <sup>1</sup> :   |                     | 8                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

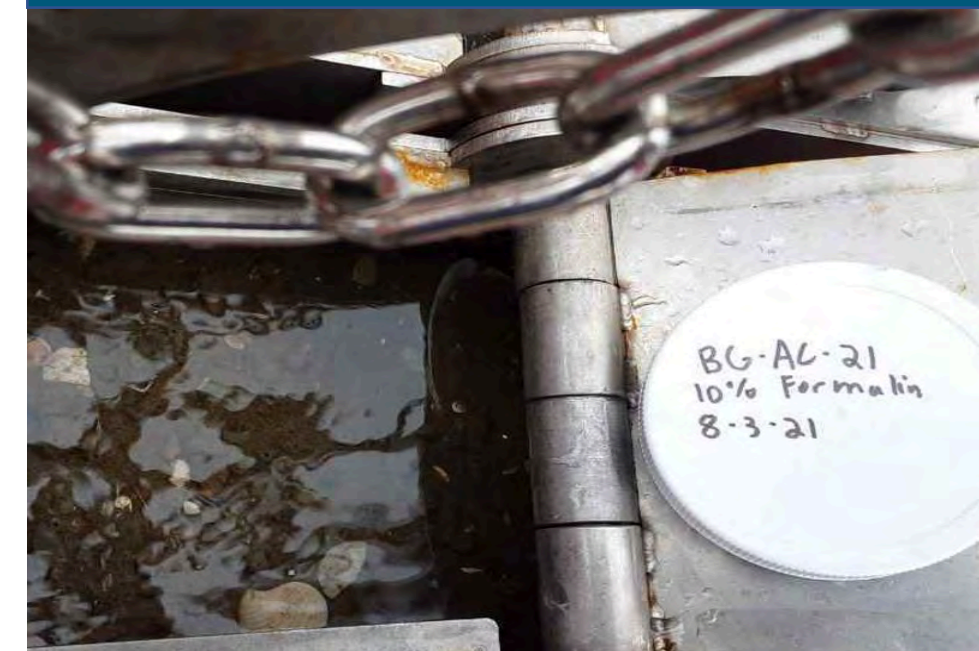
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

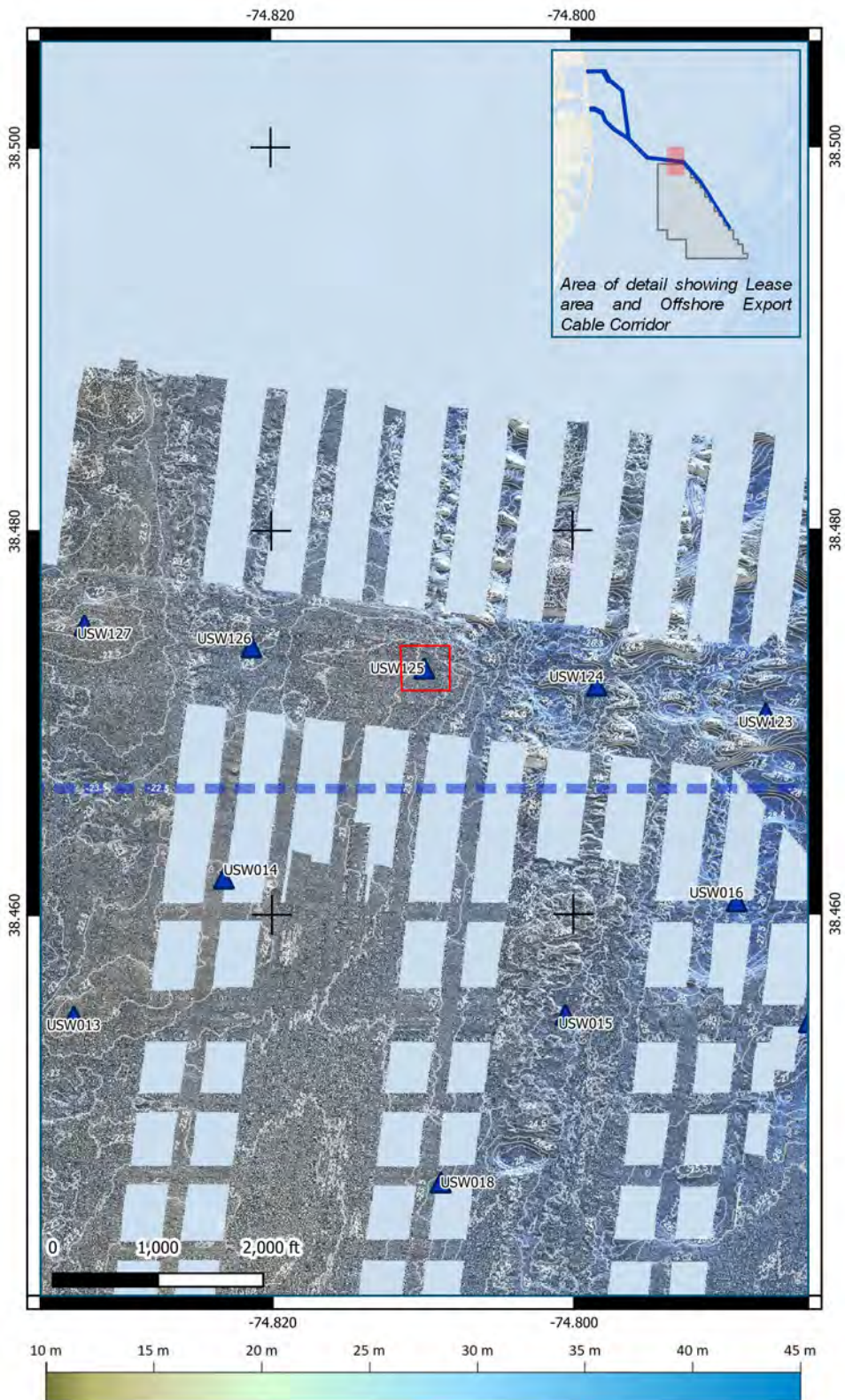


### Sample Photograph





### Map of Benthic Grab Location

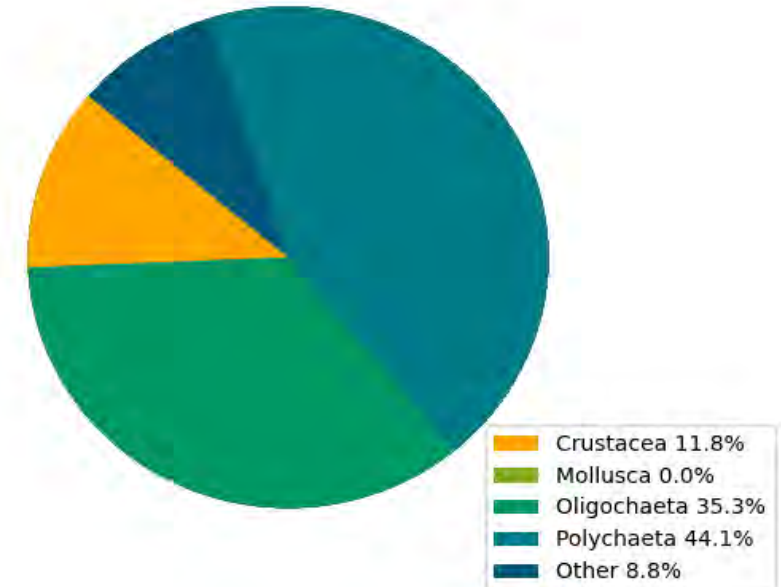


### Benthic Grab USW125

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 850                             |
| Taxa Richness <sup>1</sup> :   |                     | 16                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

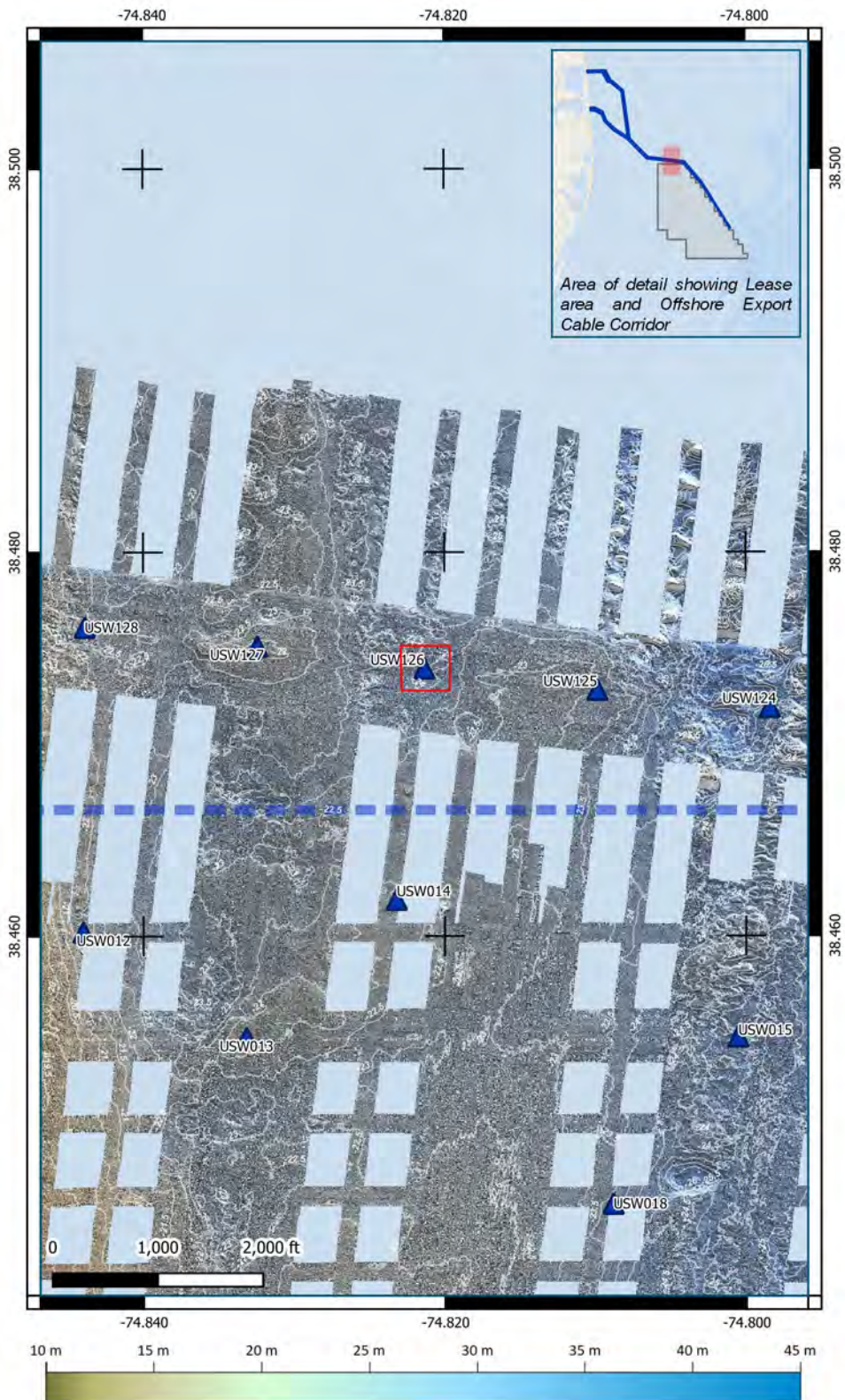


### Sample Photograph





### Map of Benthic Grab Location

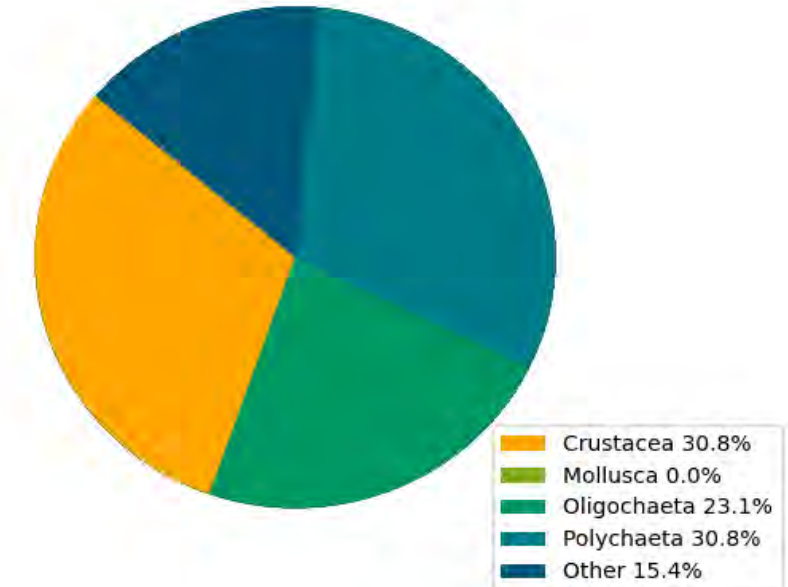


### Benthic Grab USW126

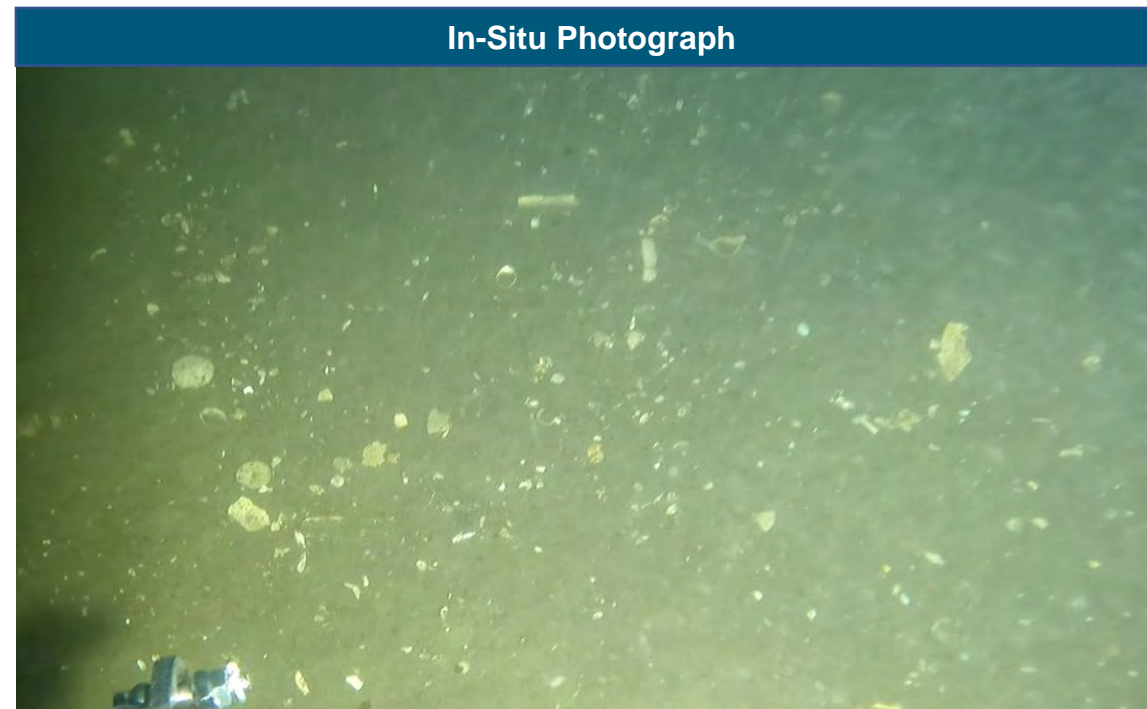
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 325                             |
| Taxa Richness <sup>1</sup> :   |                     | 8                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

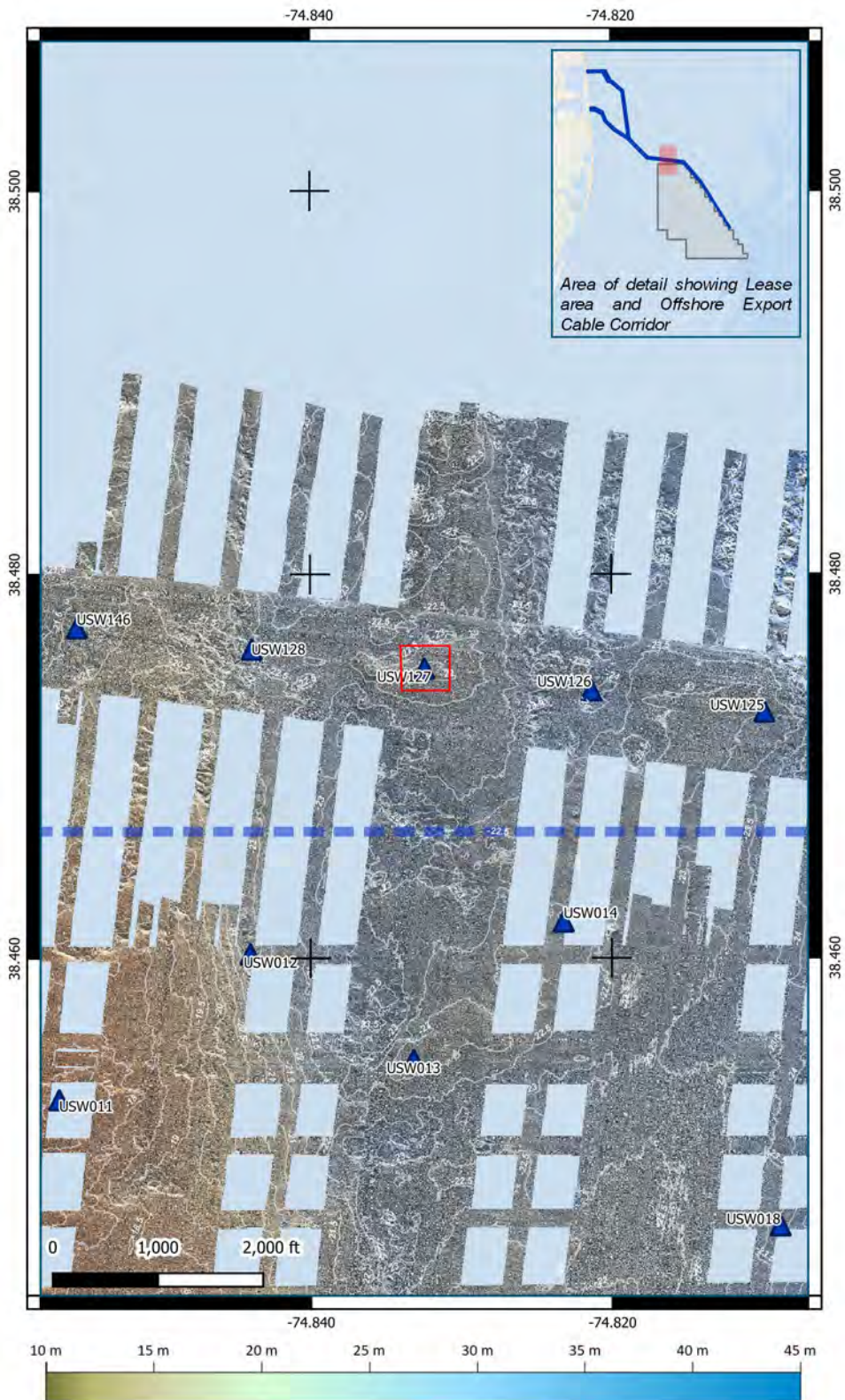


### Sample Photograph





### Map of Benthic Grab Location

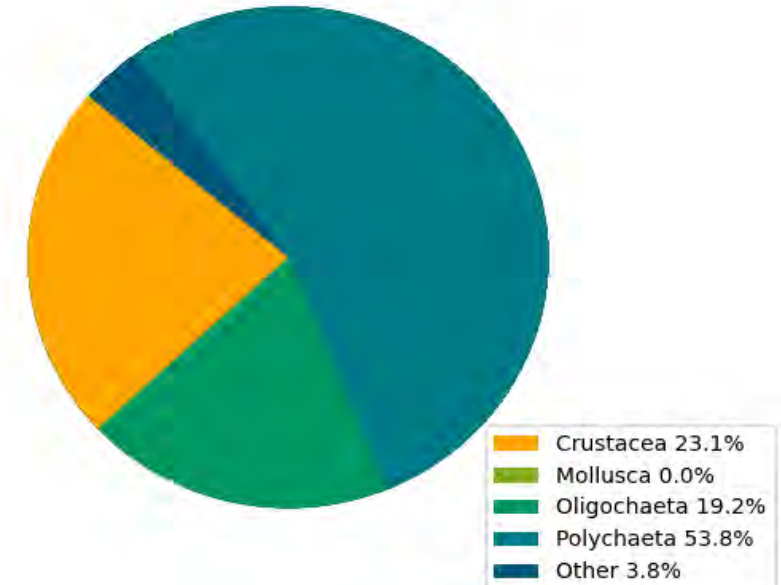


### Benthic Grab USW127

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 650                             |
| Taxa Richness <sup>1</sup> :   |                     | 10                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

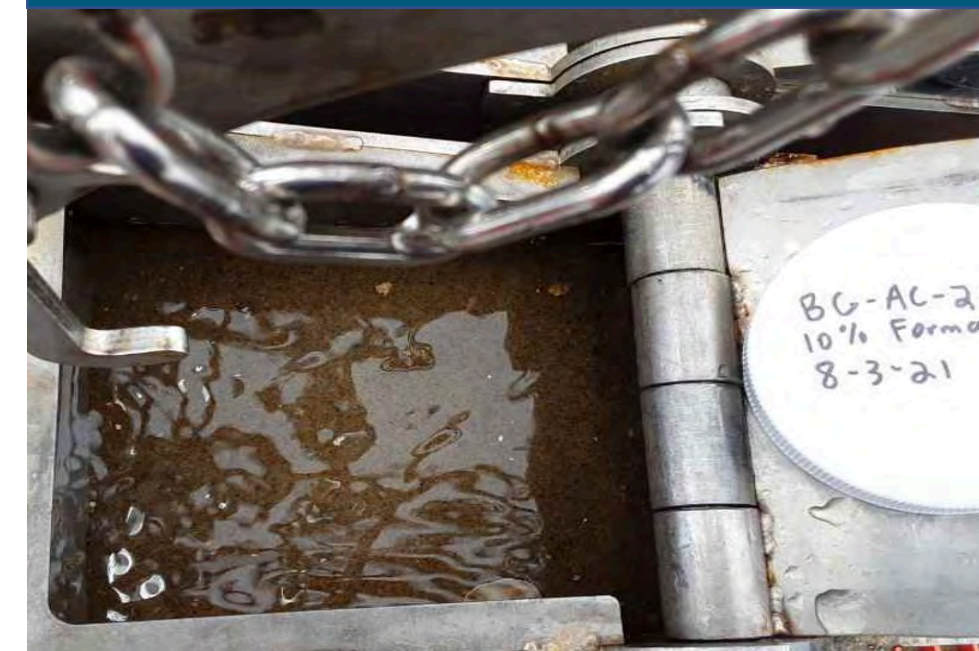
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

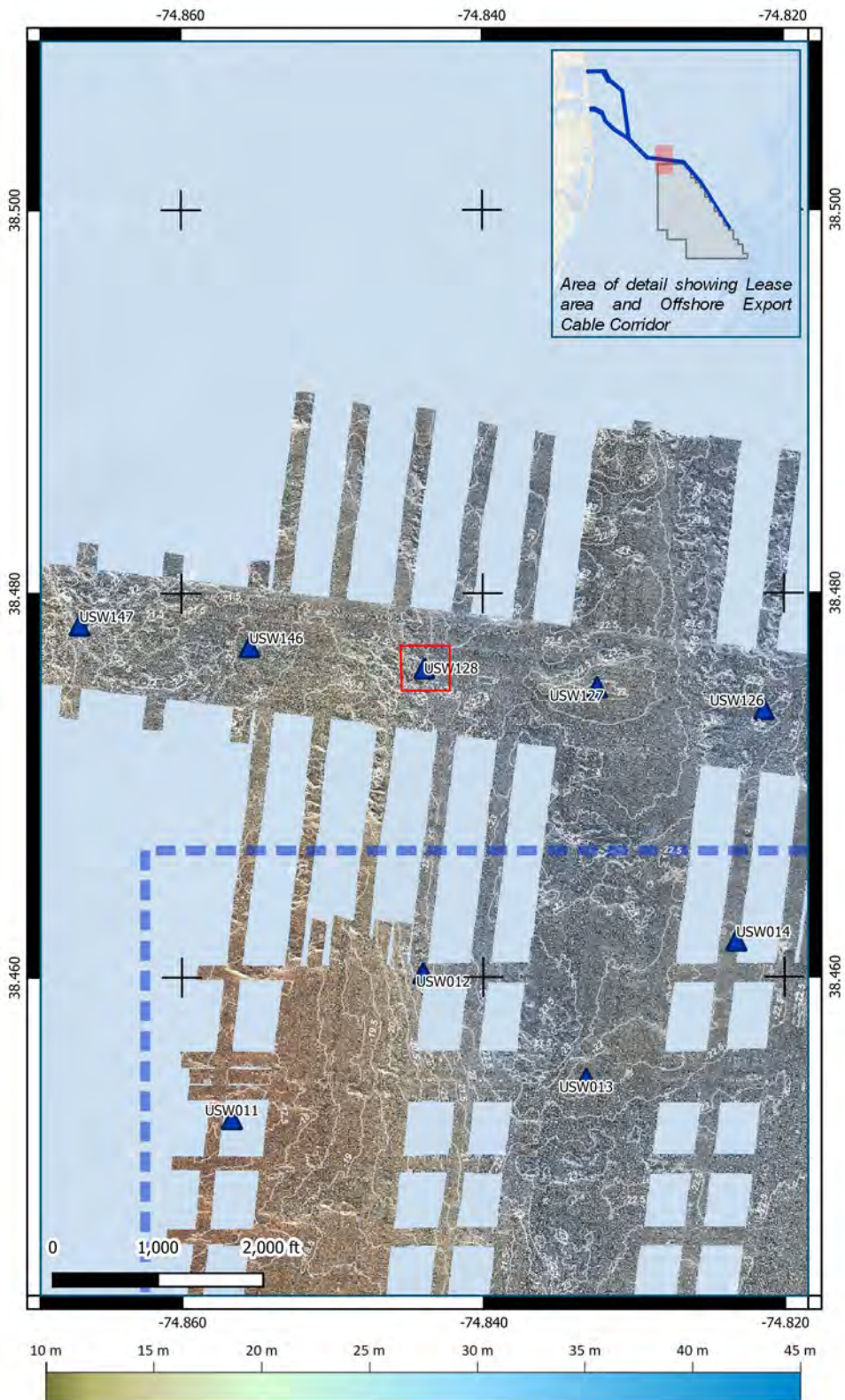


### Sample Photograph





### Map of Benthic Grab Location

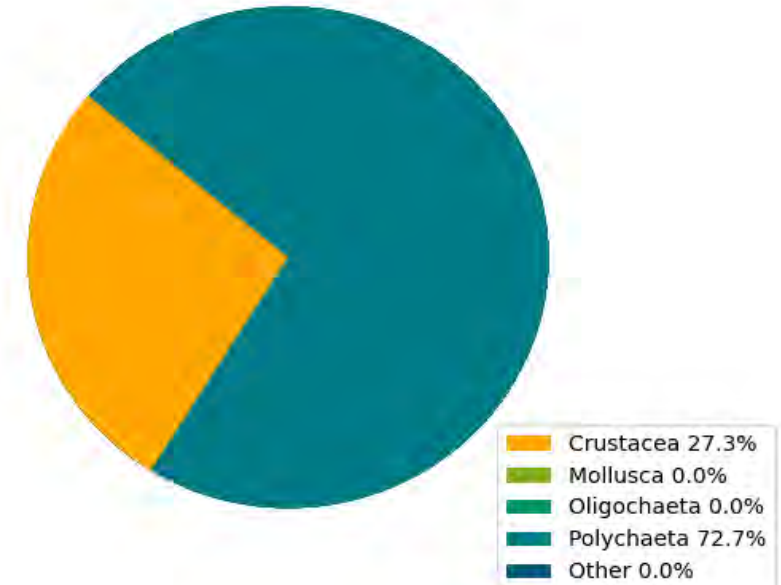


### Benthic Grab USW128

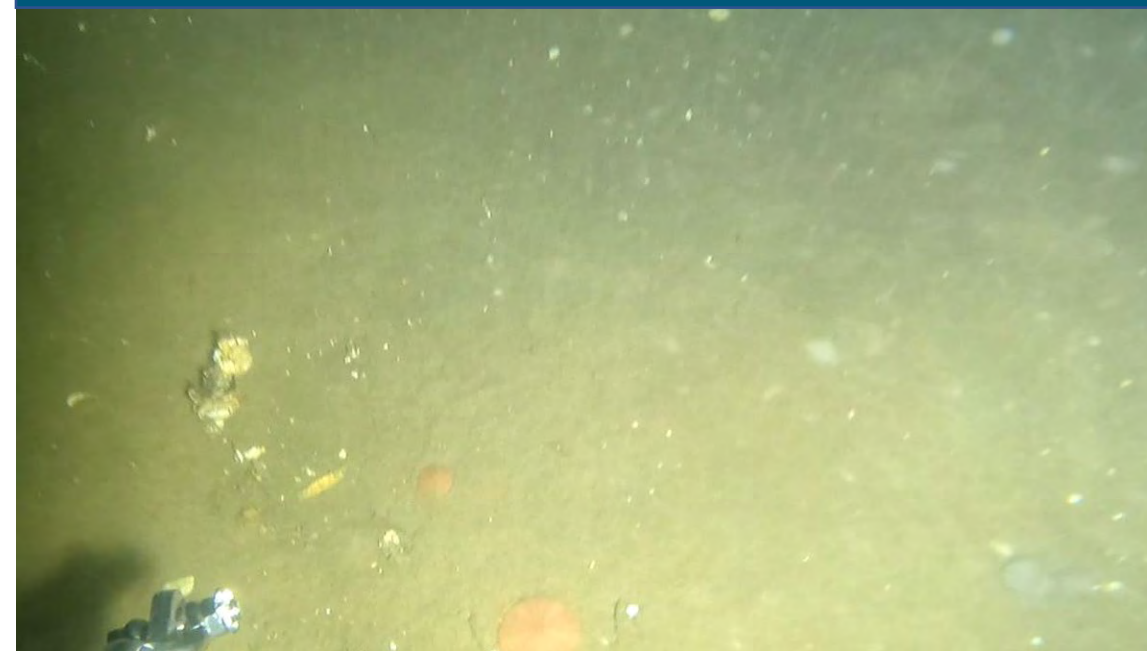
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 275                           |
| Taxa Richness <sup>1</sup> :   |                     | 7                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

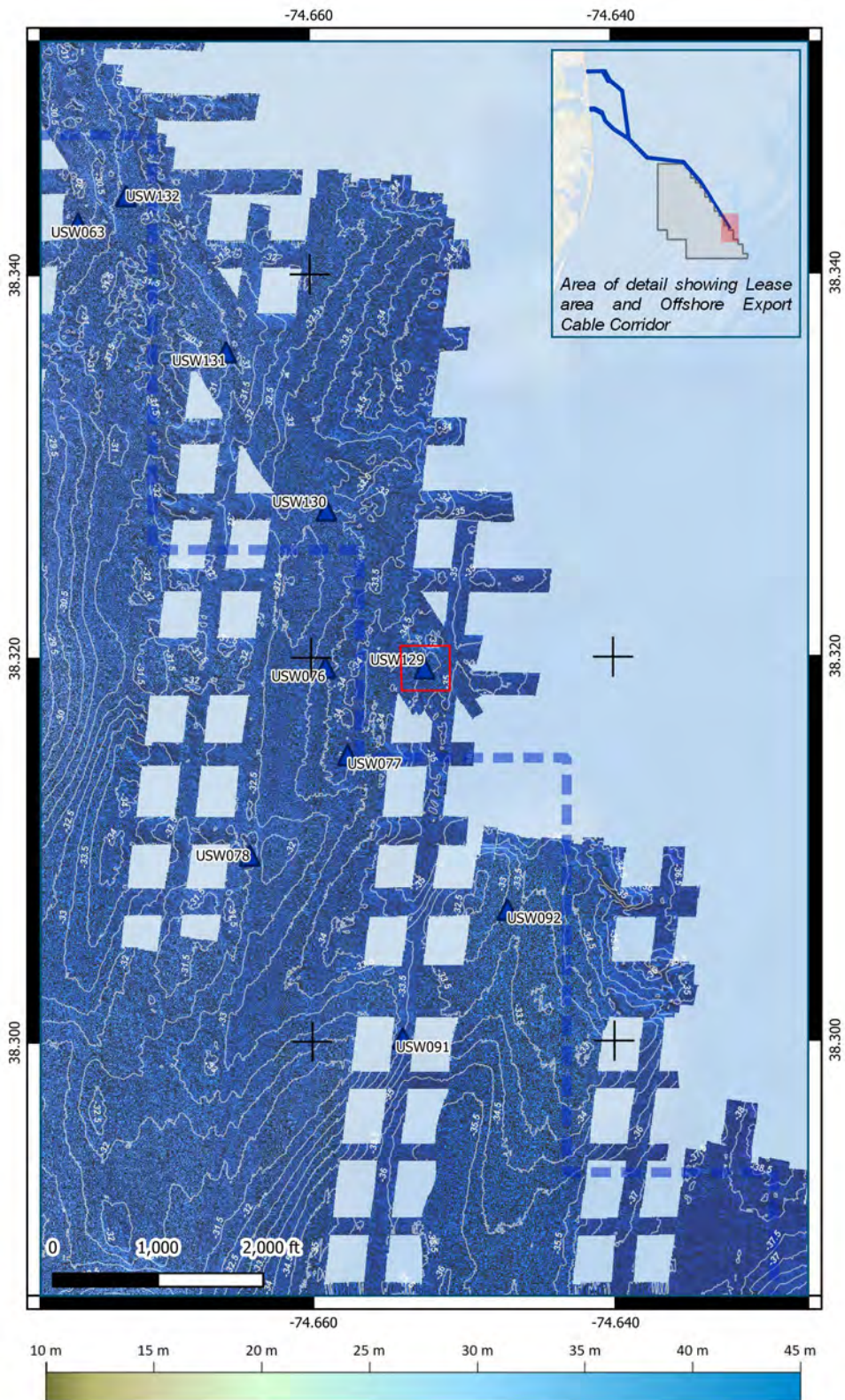


### Sample Photograph





### Map of Benthic Grab Location

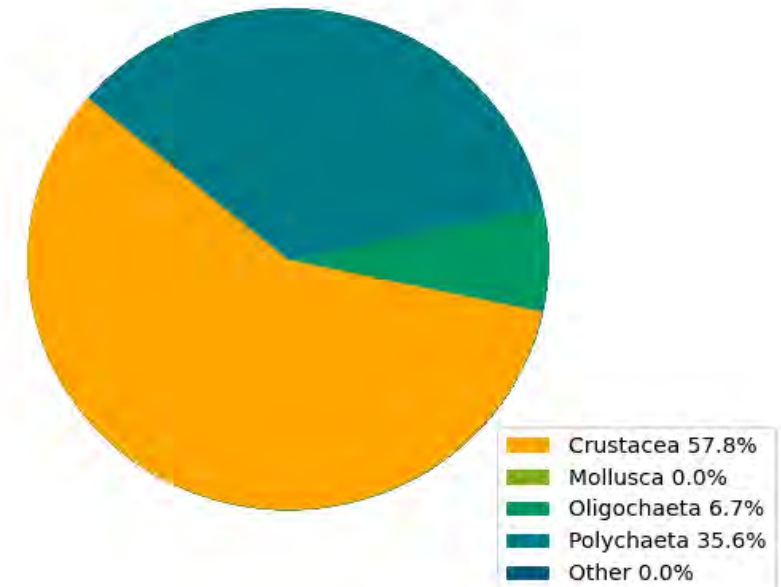


### Benthic Grab USW129

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1125                            |
| Taxa Richness <sup>1</sup> :   |                     | 14                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

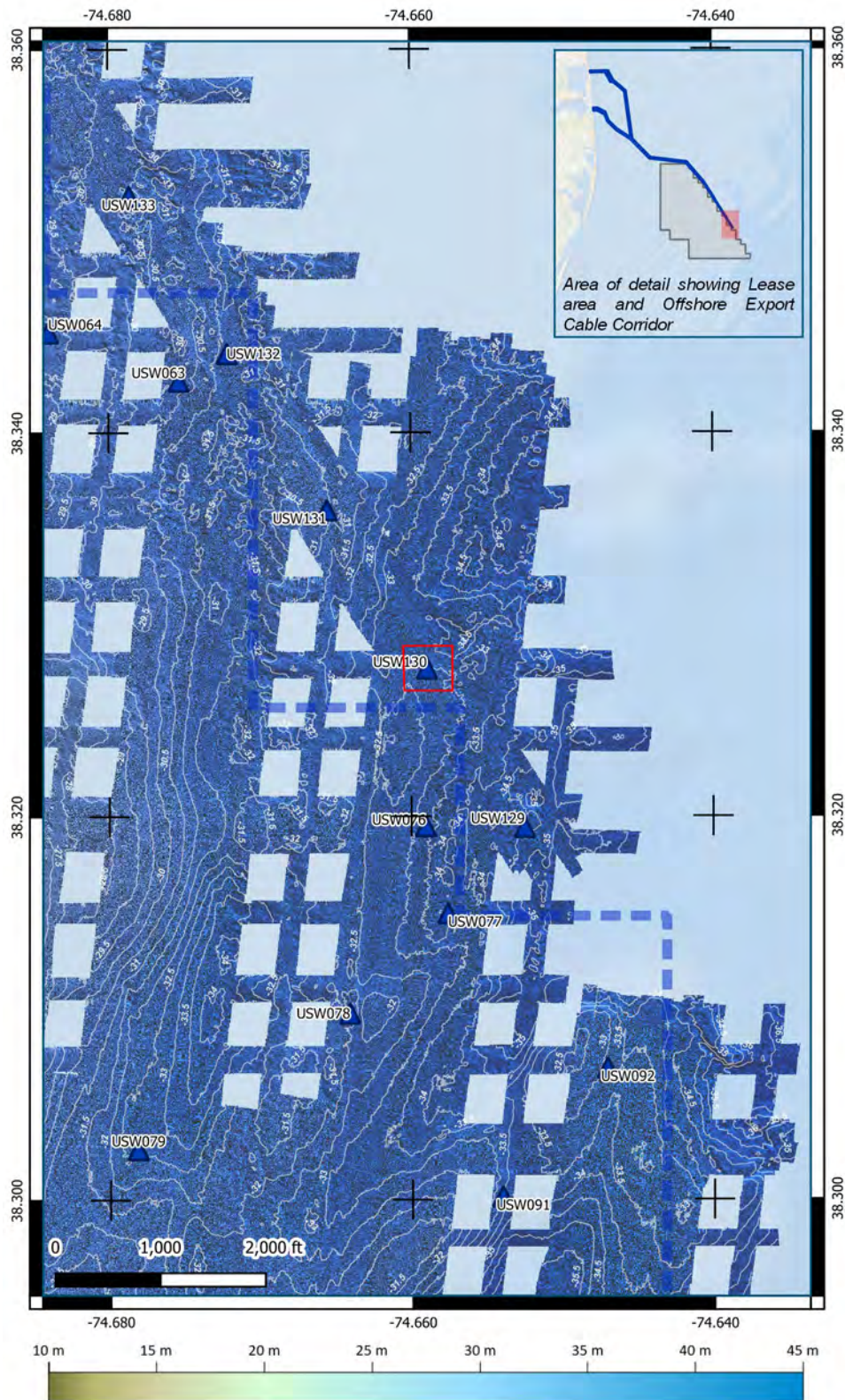


### Sample Photograph





### Map of Benthic Grab Location

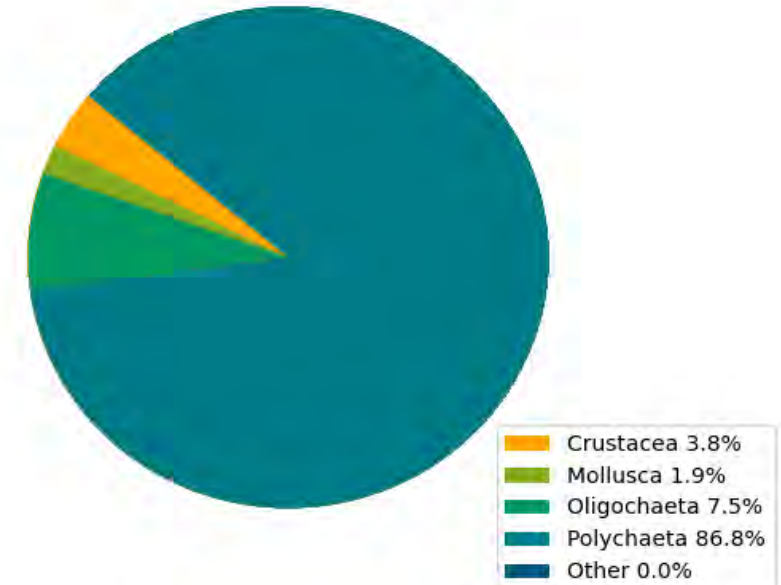


### Benthic Grab USW130

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1325                            |
| Taxa Richness <sup>1</sup> :   |                     | 18                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

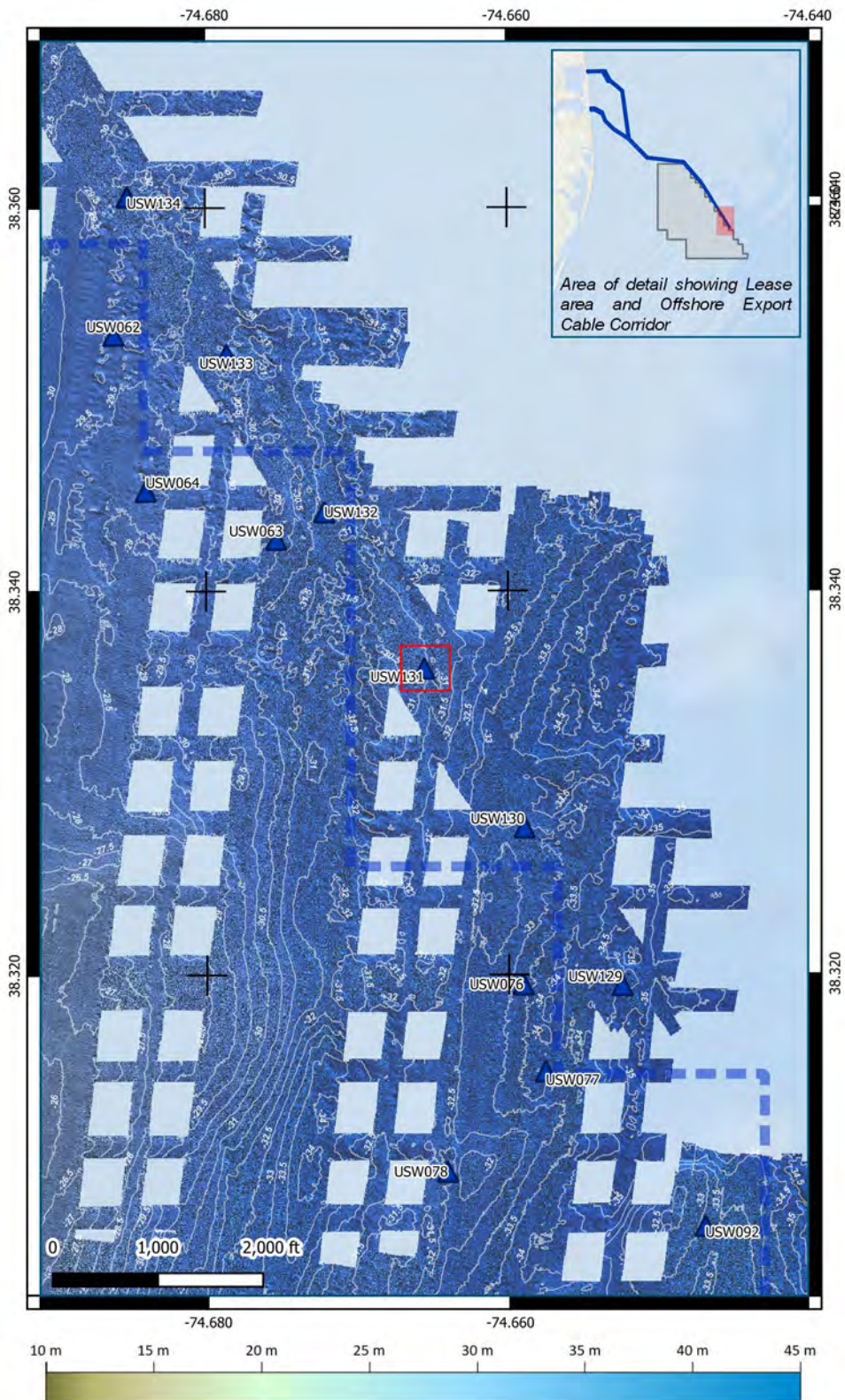


### Sample Photograph





### Map of Benthic Grab Location

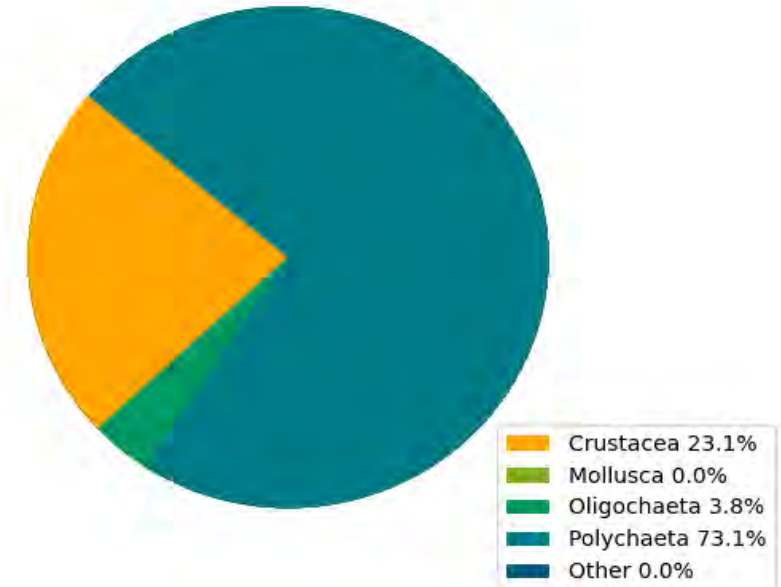


### Benthic Grab USW131

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 650                             |
| Taxa Richness <sup>1</sup> :   |                     | 11                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

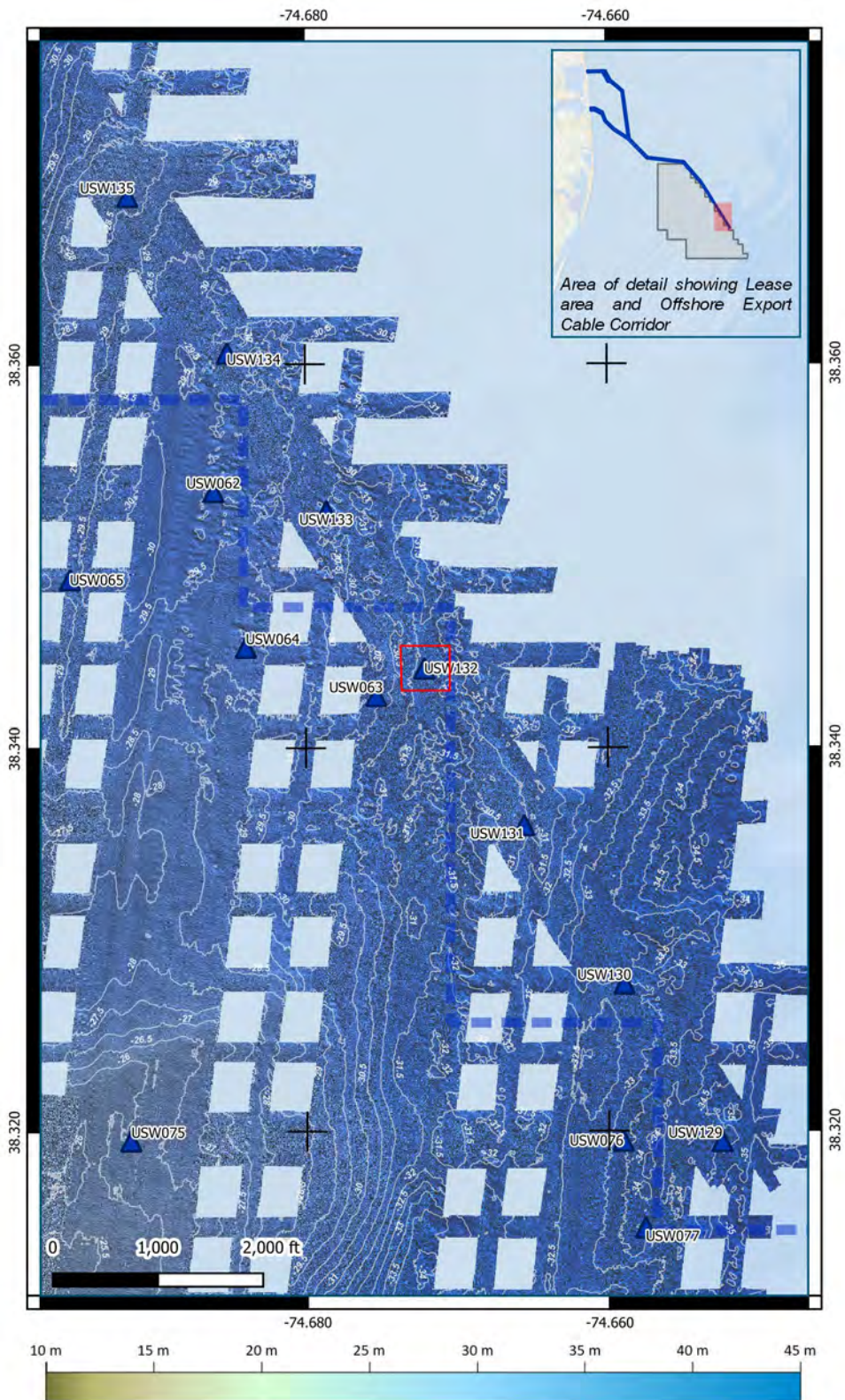


### Sample Photograph





### Map of Benthic Grab Location

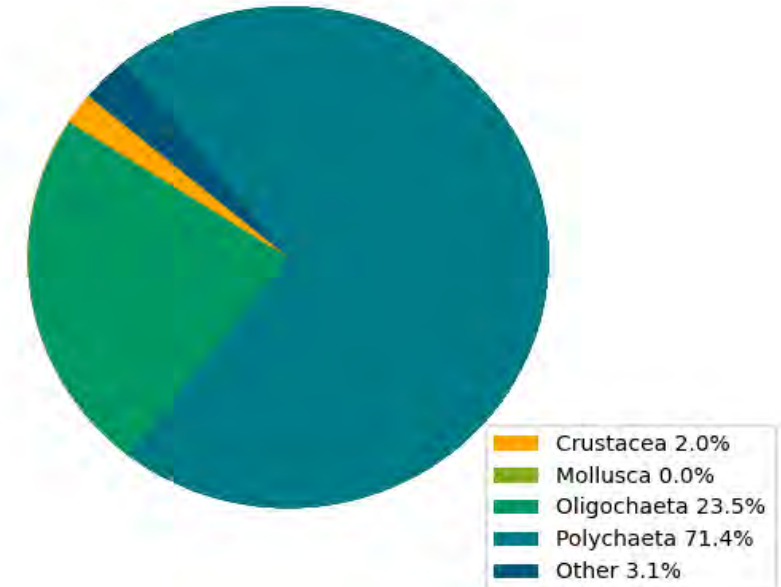


### Benthic Grab USW132

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 2450                            |
| Taxa Richness <sup>1</sup> :   |                     | 20                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

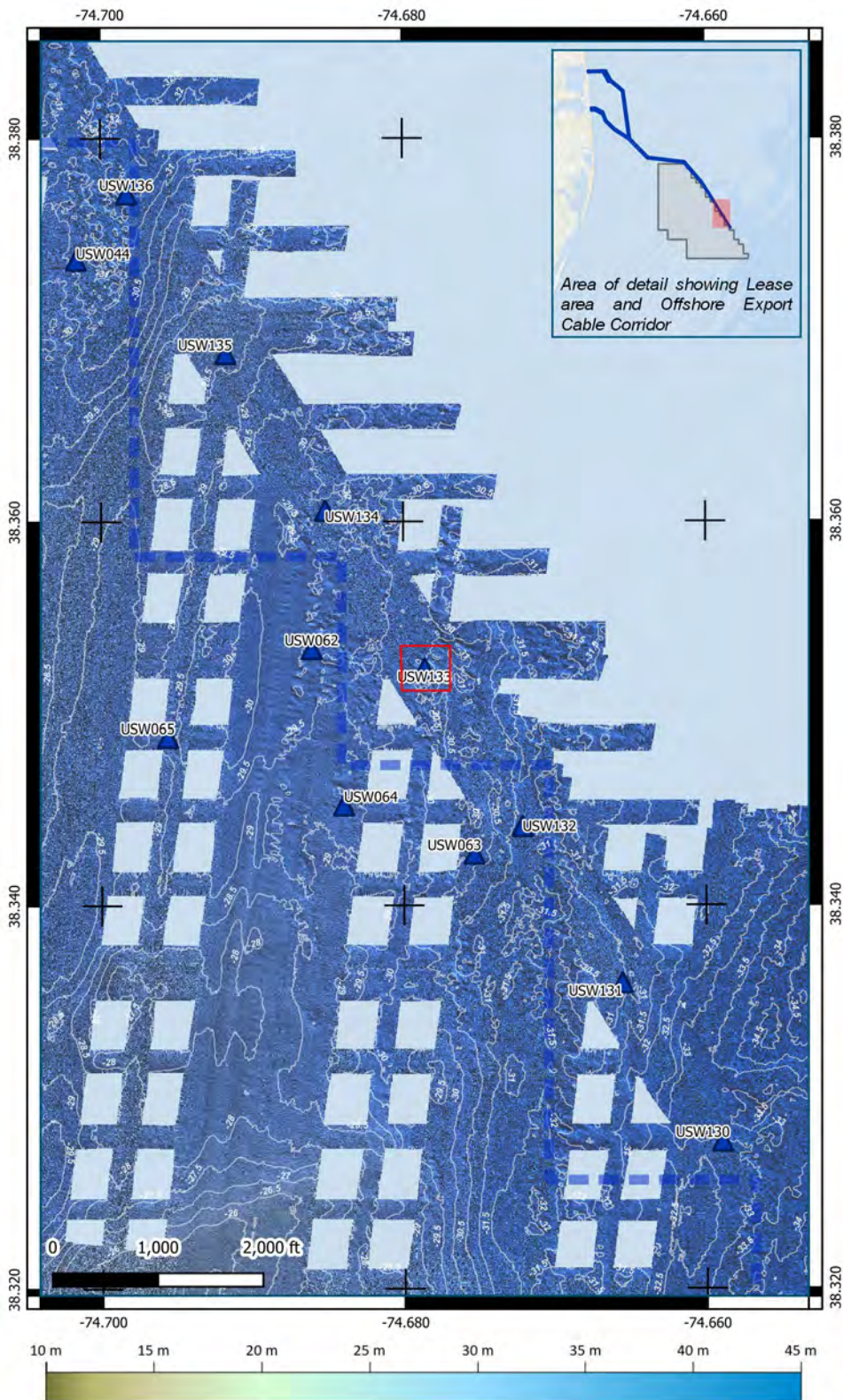


### Sample Photograph





### Map of Benthic Grab Location

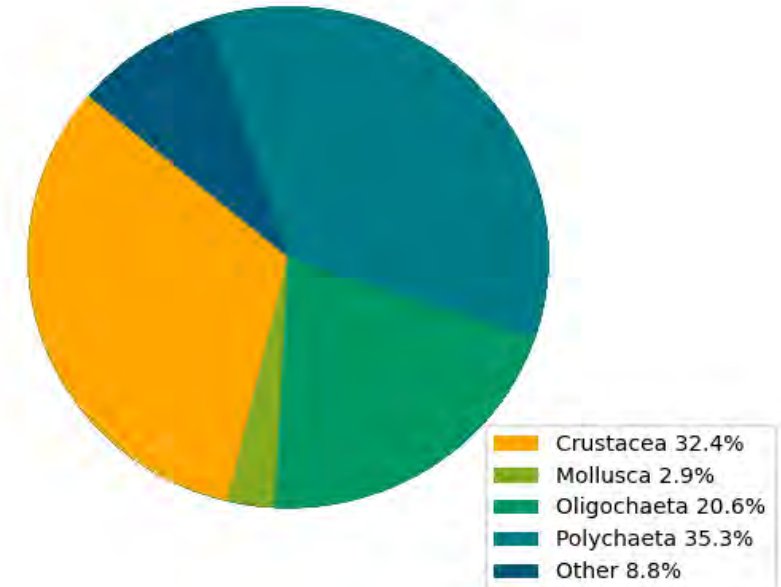


### Benthic Grab USW133

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 850                           |
| Taxa Richness <sup>1</sup> :   |                     | 18                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

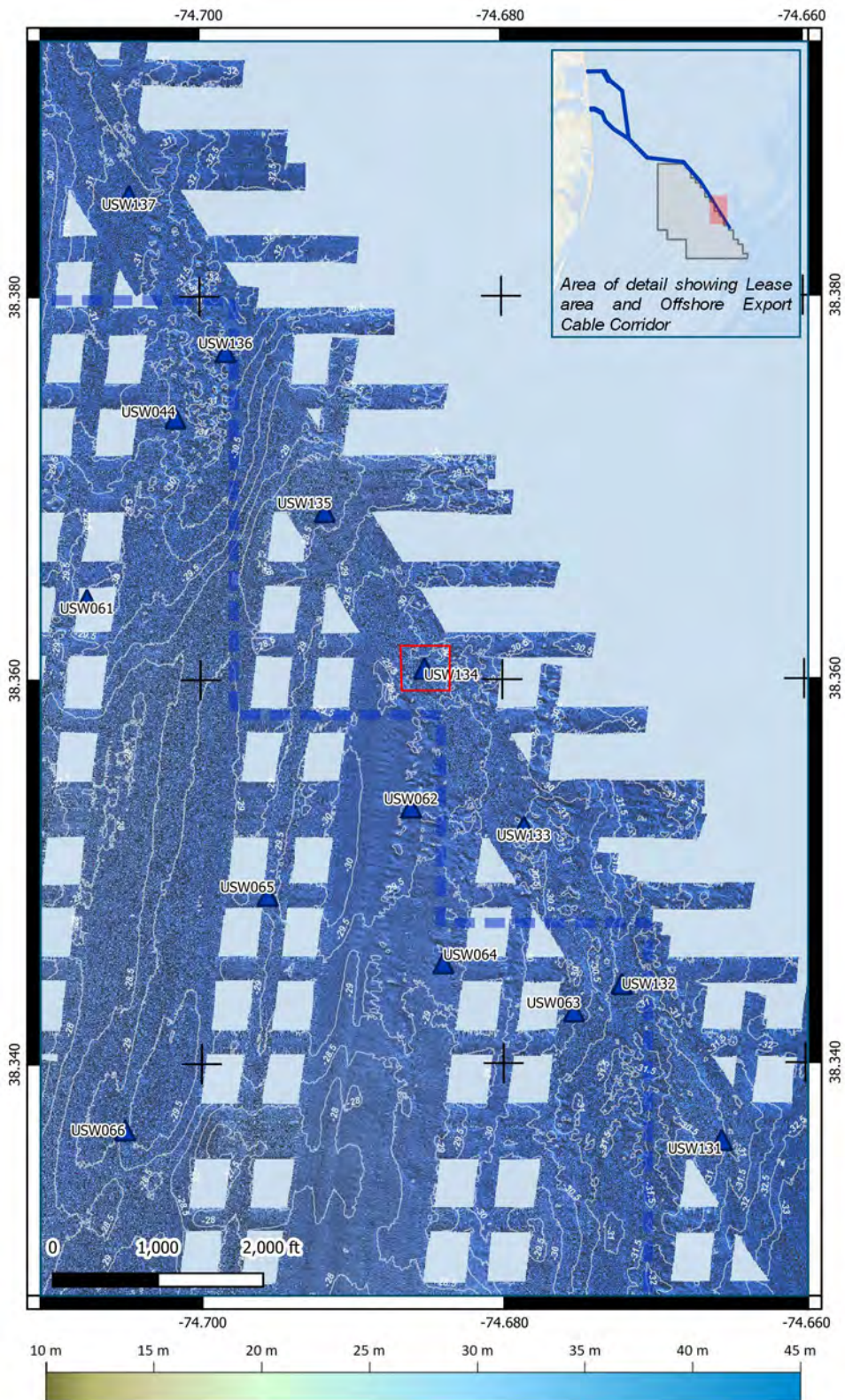


### Sample Photograph





### Map of Benthic Grab Location

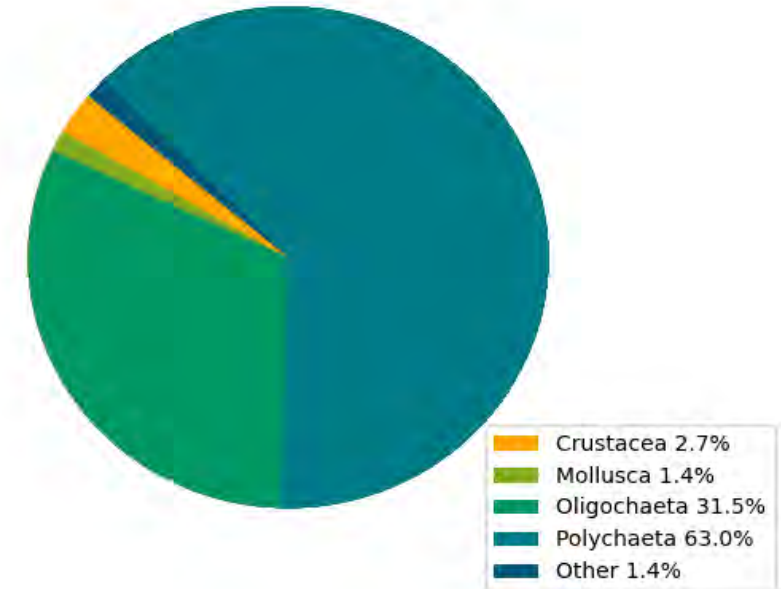


### Benthic Grab USW134

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1825                            |
| Taxa Richness <sup>1</sup> :   |                     | 21                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

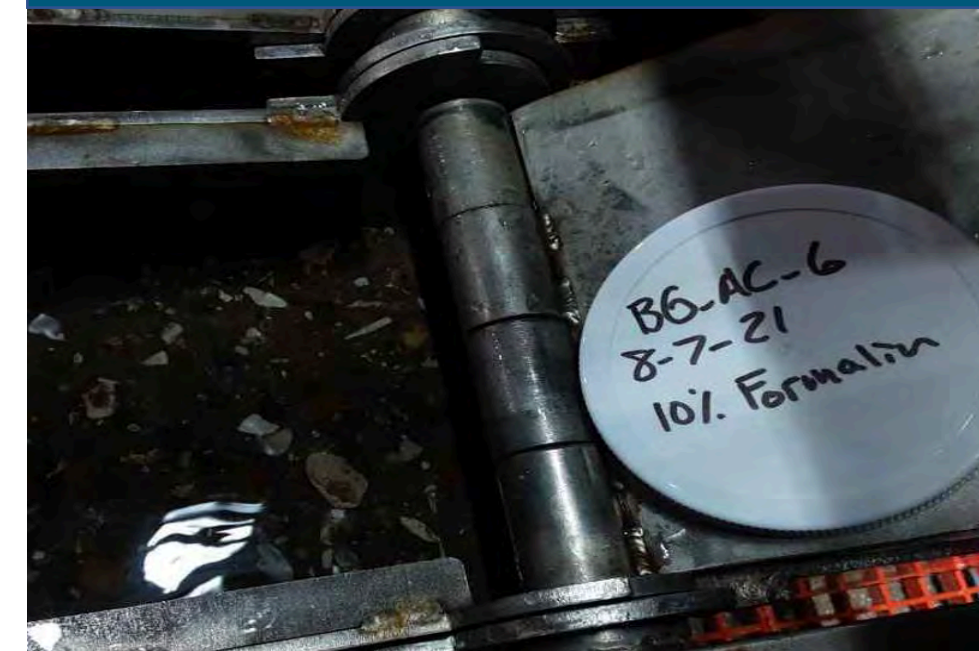
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

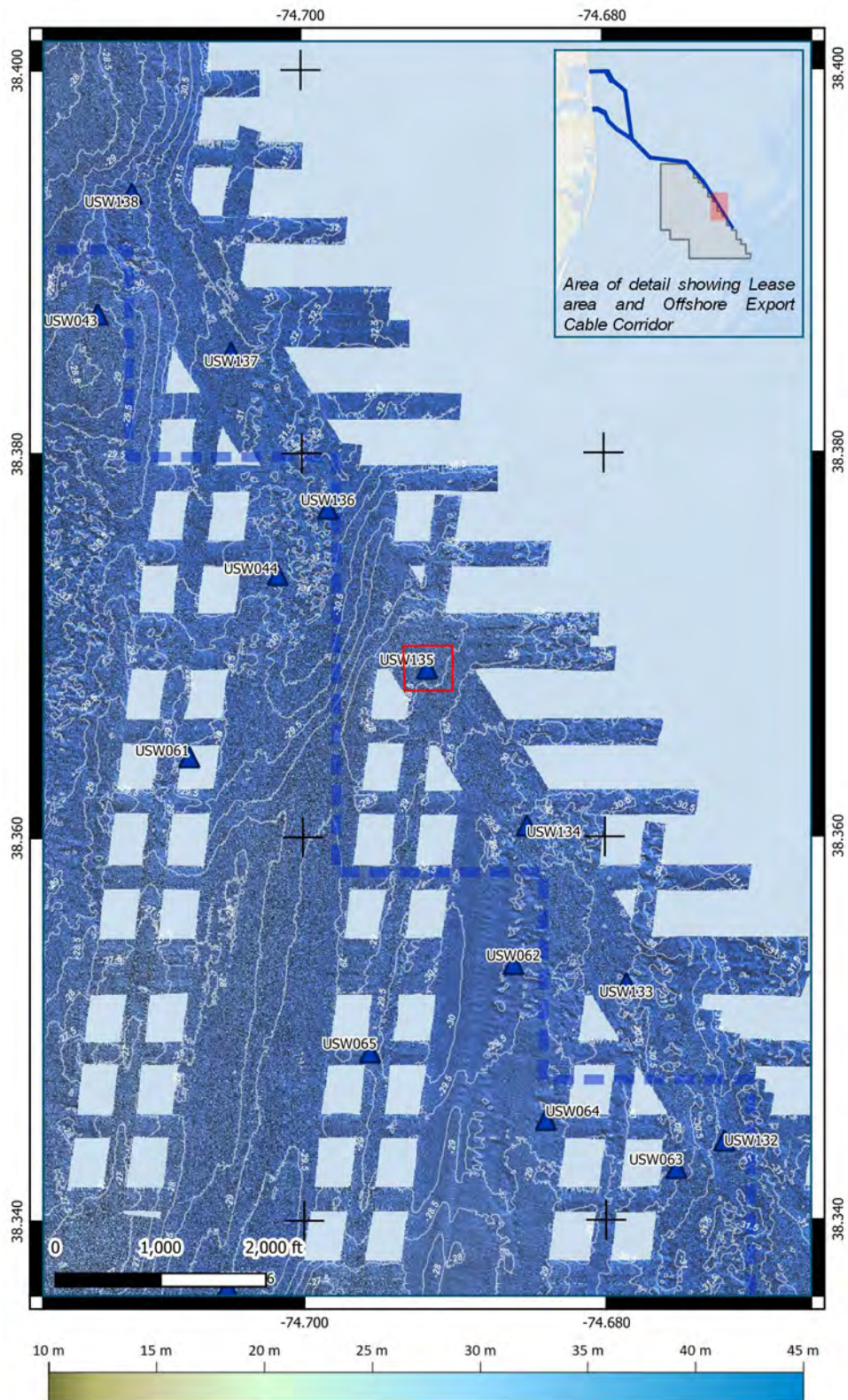


### Sample Photograph





### Map of Benthic Grab Location

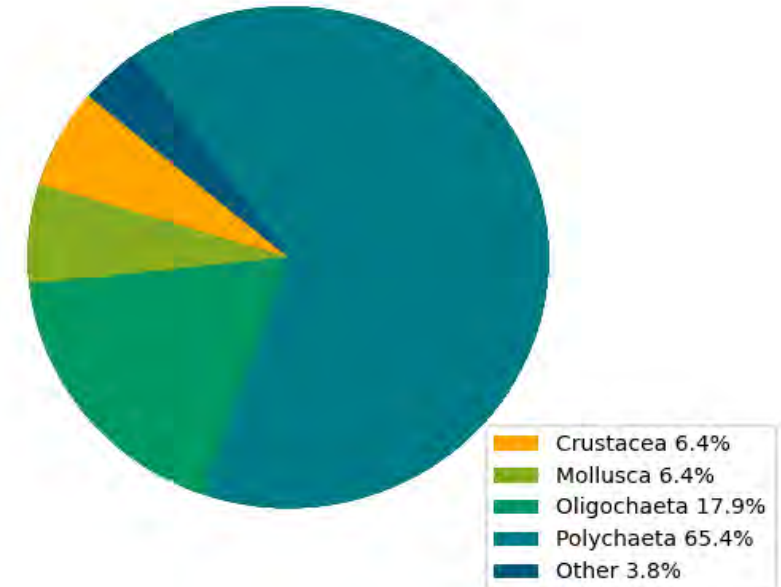


### Benthic Grab USW135

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1950                            |
| Taxa Richness <sup>1</sup> :   |                     | 19                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

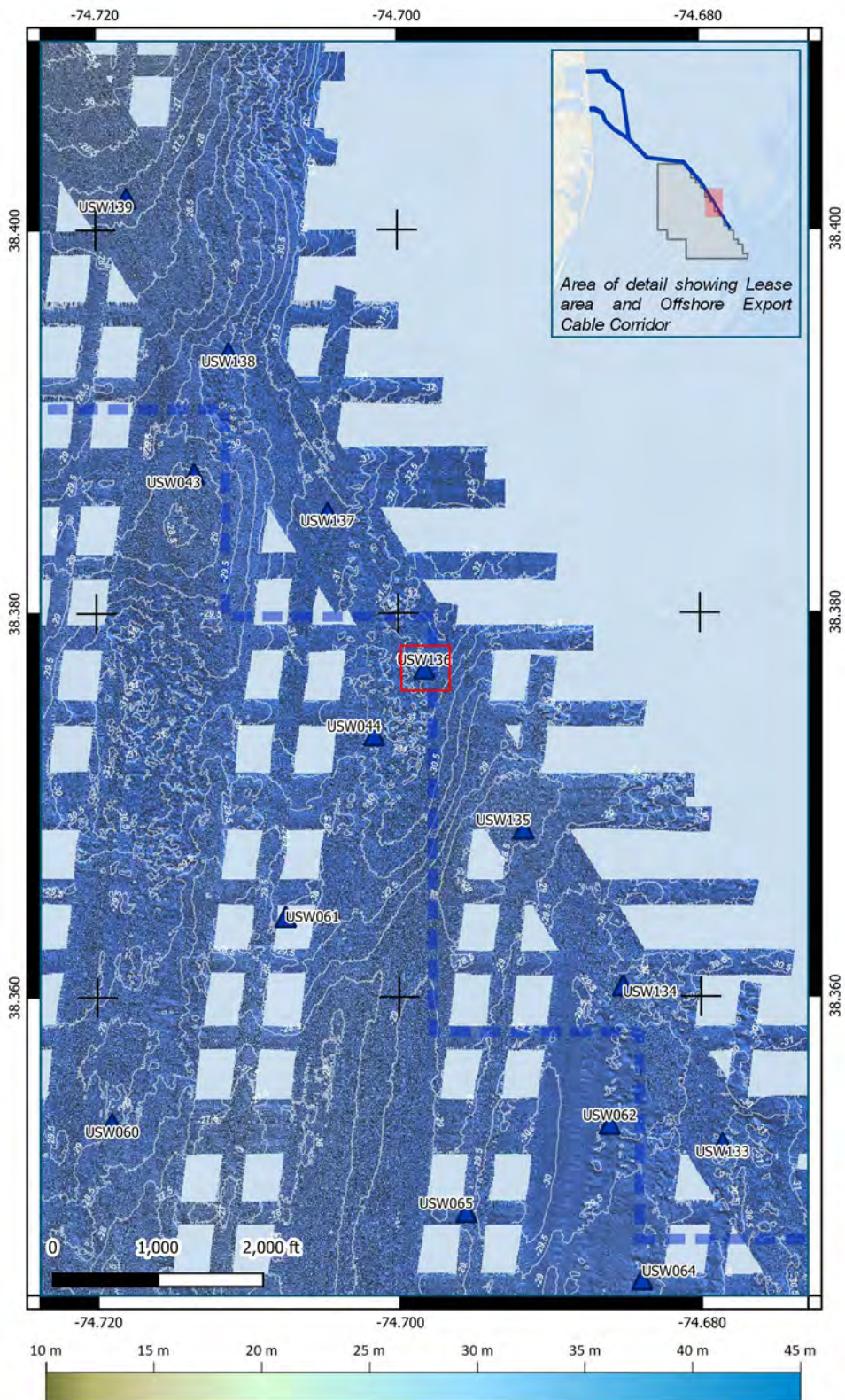


### Sample Photograph





### Map of Benthic Grab Location

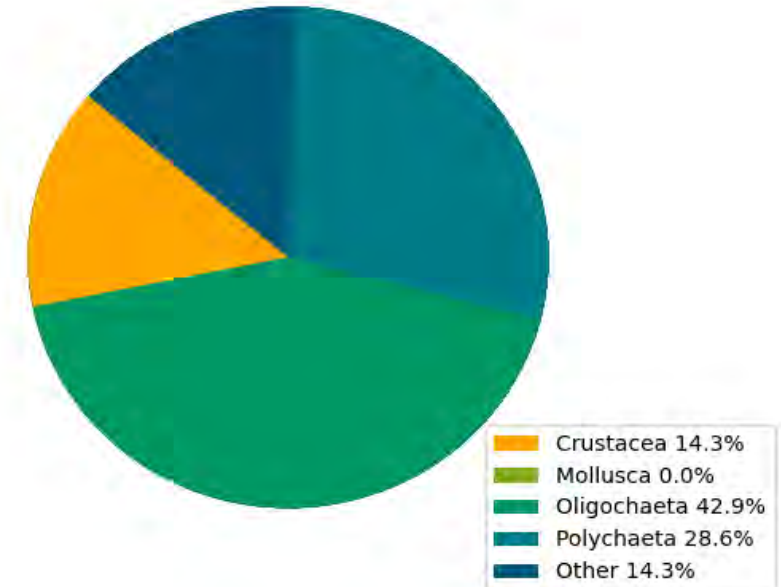


### Benthic Grab USW136

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Very Coarse/Coarse Sand       |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 175                           |
| Taxa Richness <sup>1</sup> :   |                     | 5                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

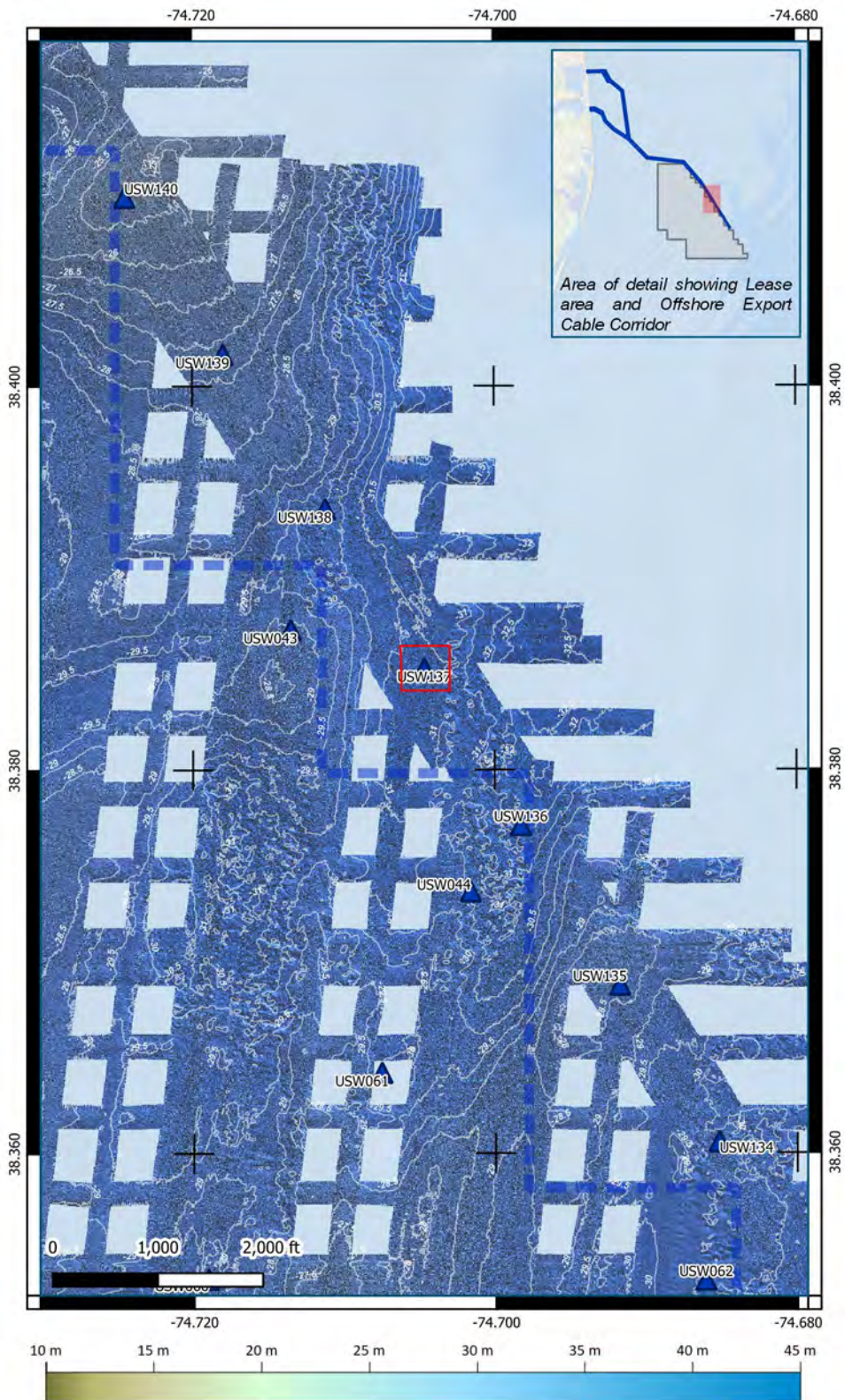


### Sample Photograph





### Map of Benthic Grab Location

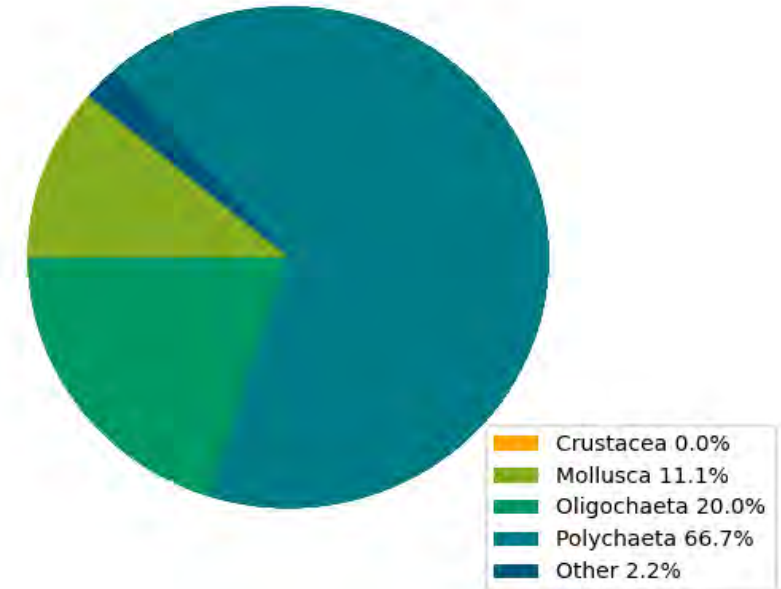


### Benthic Grab USW137

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1125                            |
| Taxa Richness <sup>1</sup> :   |                     | 17                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

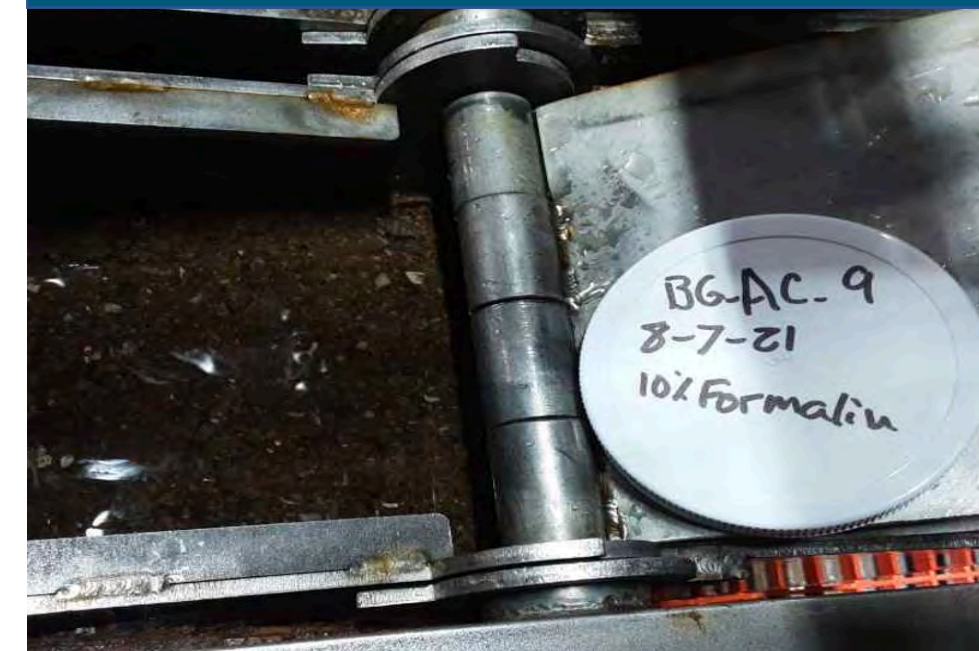
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

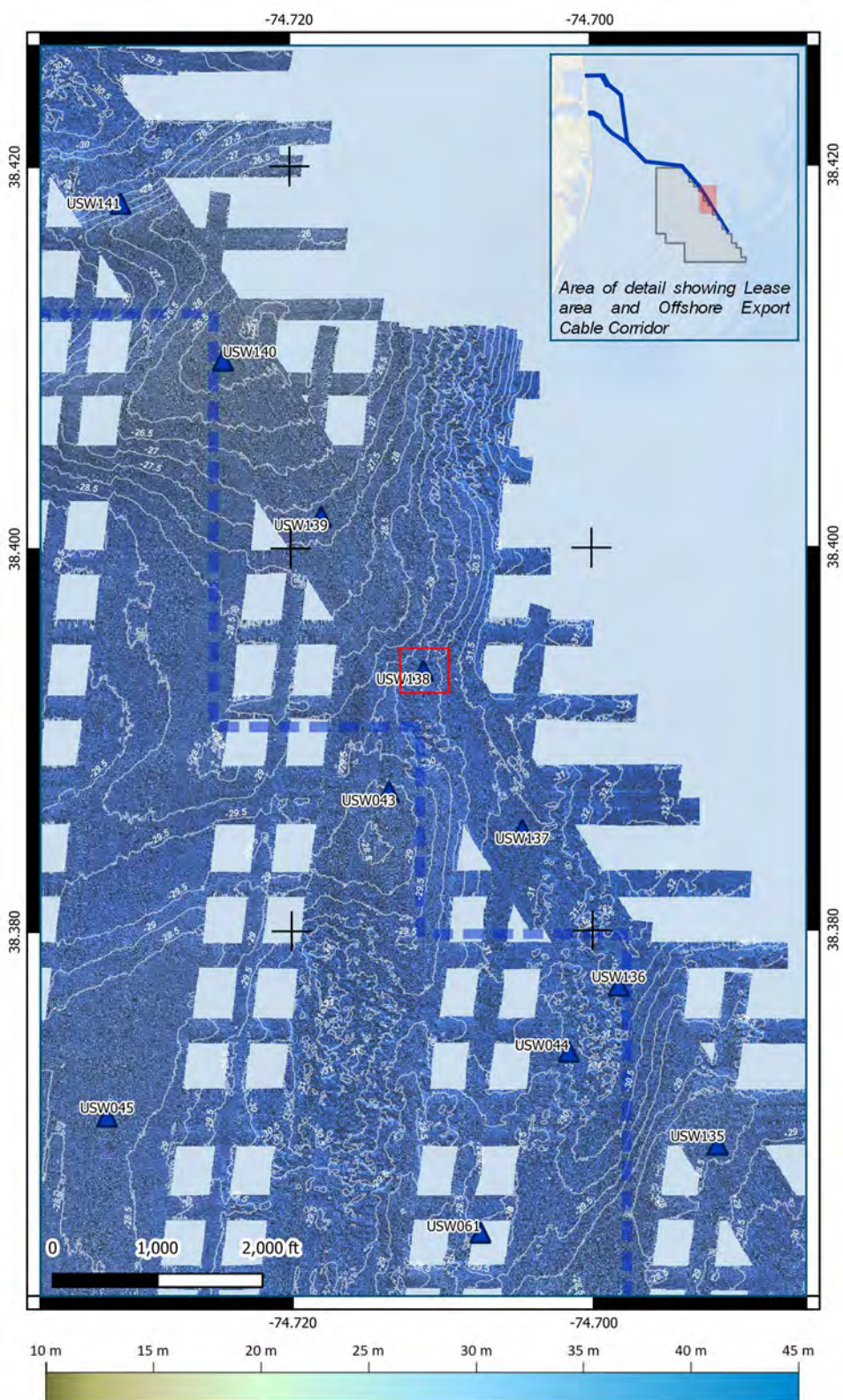


### Sample Photograph





### Map of Benthic Grab Location

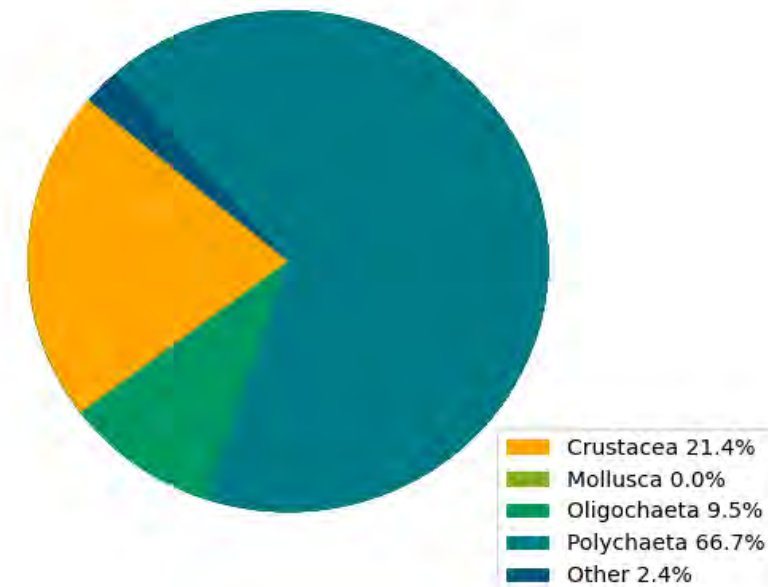


### Benthic Grab USW138

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1050                          |
| Taxa Richness <sup>1</sup> :   |                     | 18                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

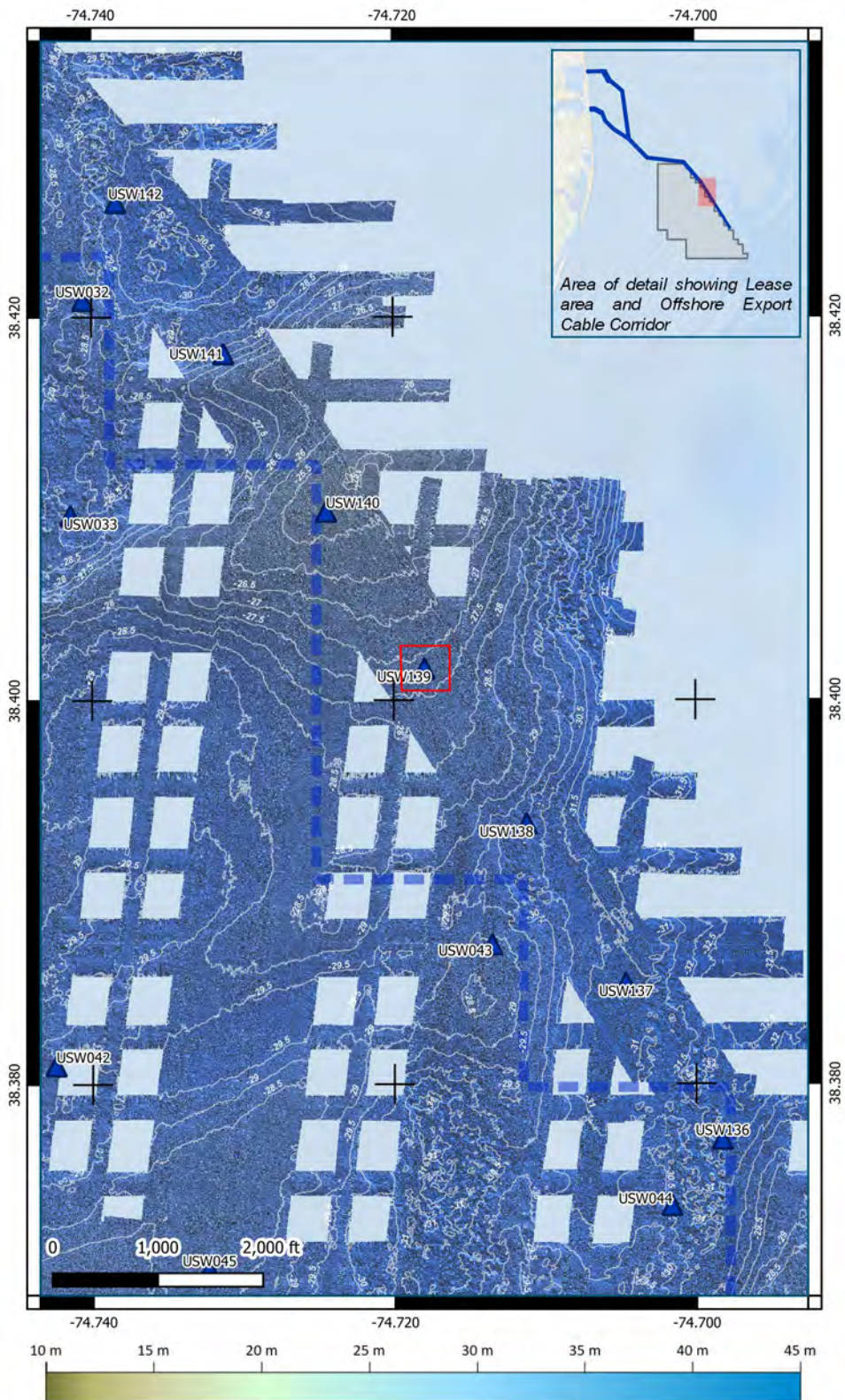


### Sample Photograph





### Map of Benthic Grab Location

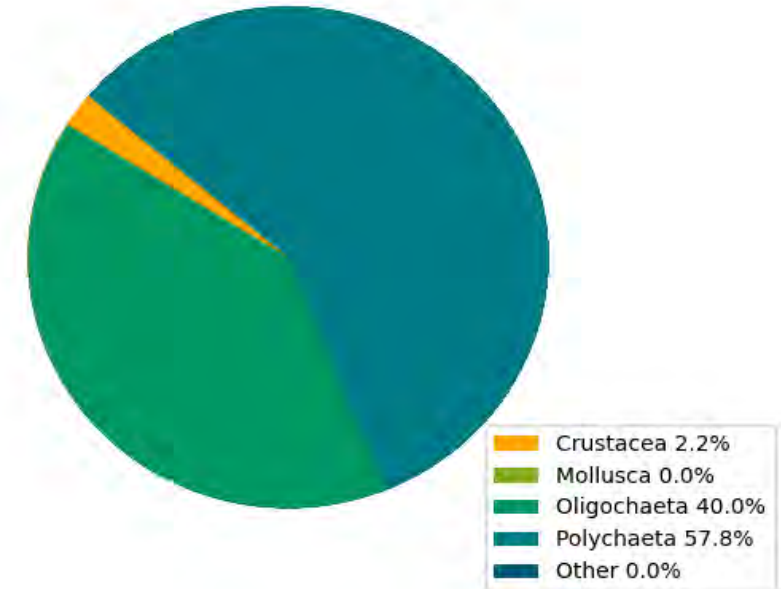


### Benthic Grab USW139

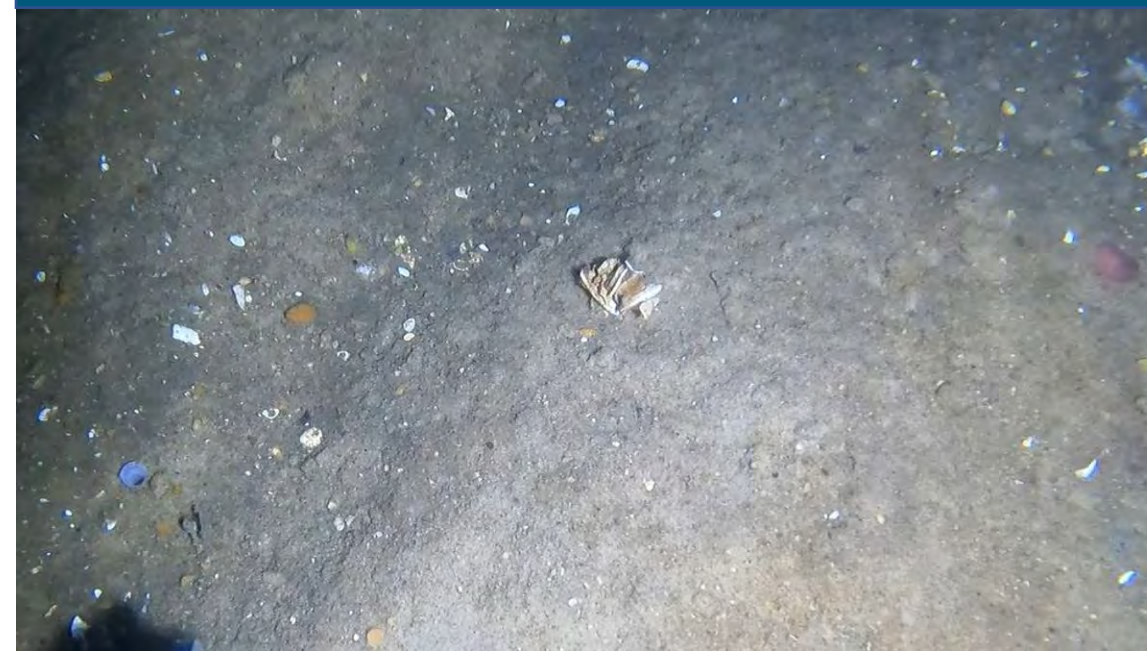
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1125                            |
| Taxa Richness <sup>1</sup> :   |                     | 12                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

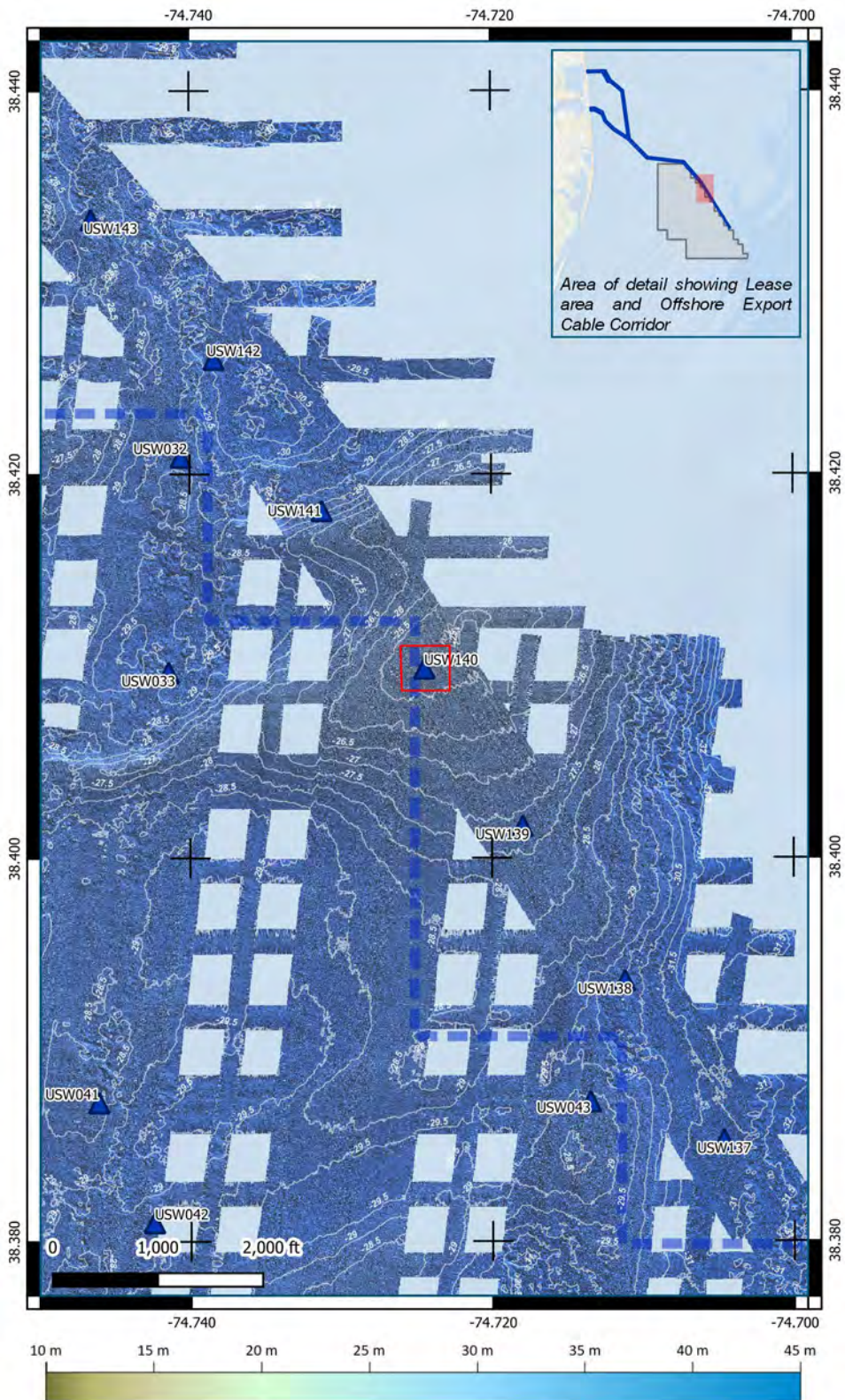


### Sample Photograph





### Map of Benthic Grab Location

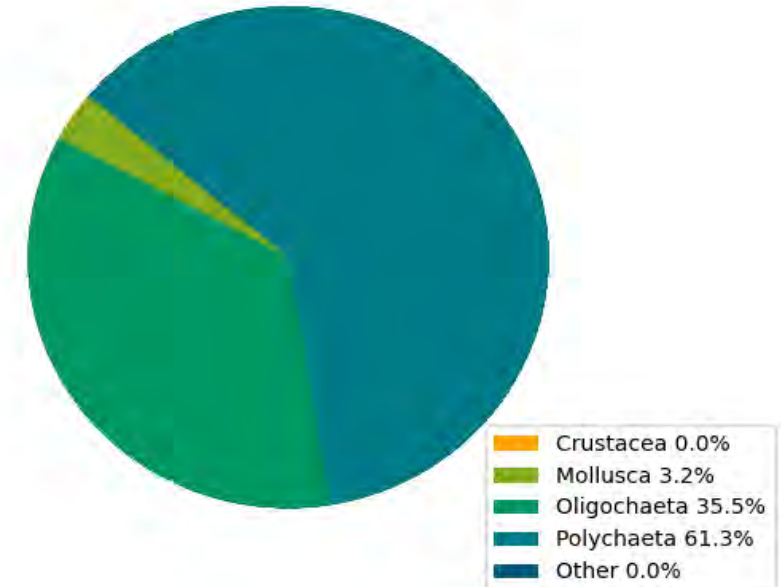


### Benthic Grab USW140

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 775                             |
| Taxa Richness <sup>1</sup> :   |                     | 10                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

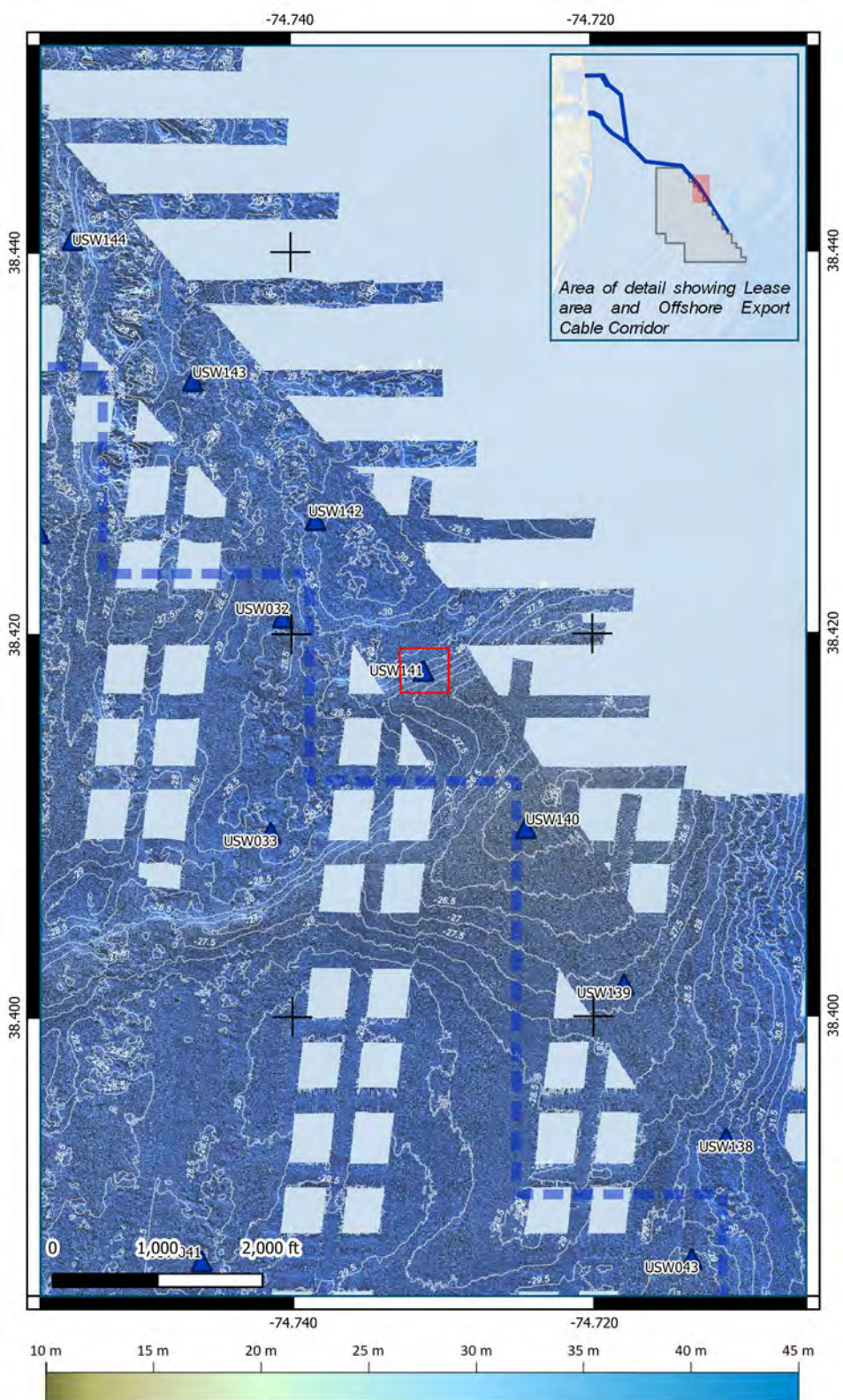


### Sample Photograph





### Map of Benthic Grab Location

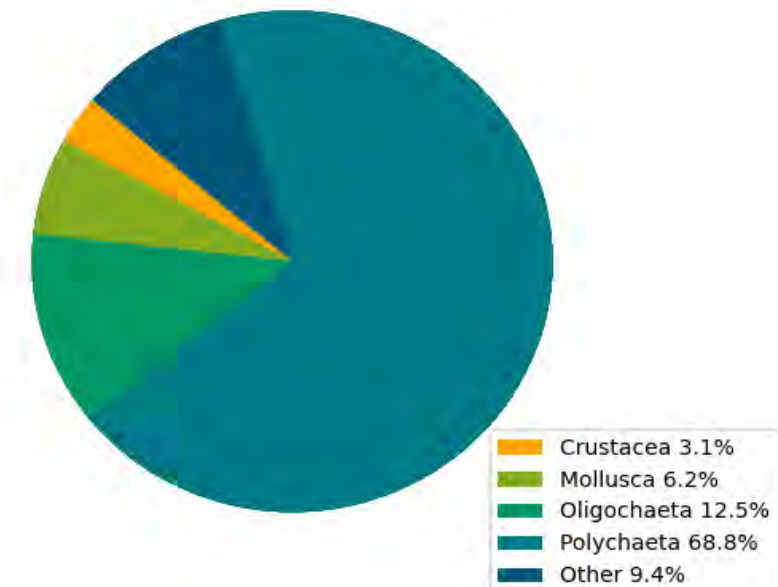


### Benthic Grab USW141

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 800                             |
| Taxa Richness <sup>1</sup> :   |                     | 18                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

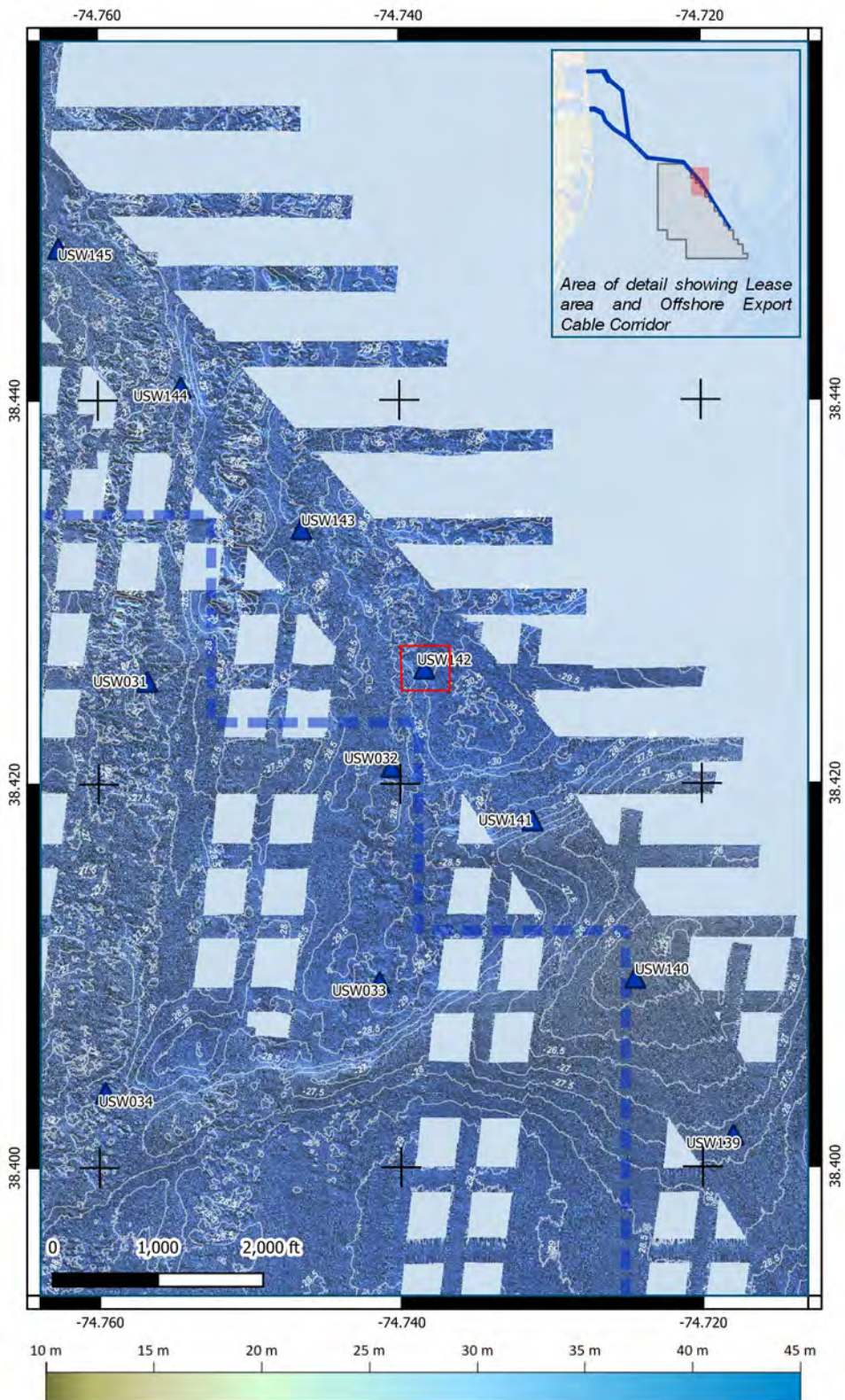


### Sample Photograph





### Map of Benthic Grab Location

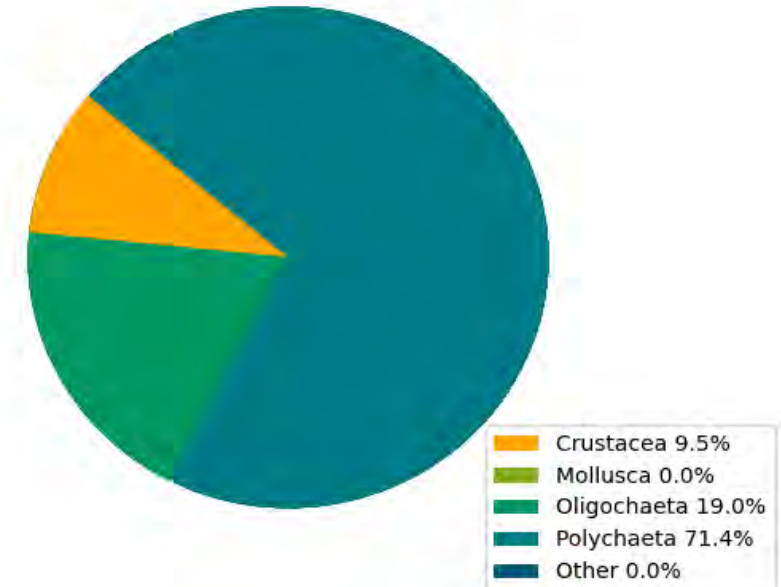


### Benthic Grab USW142

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1575                            |
| Taxa Richness <sup>1</sup> :   |                     | 18                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

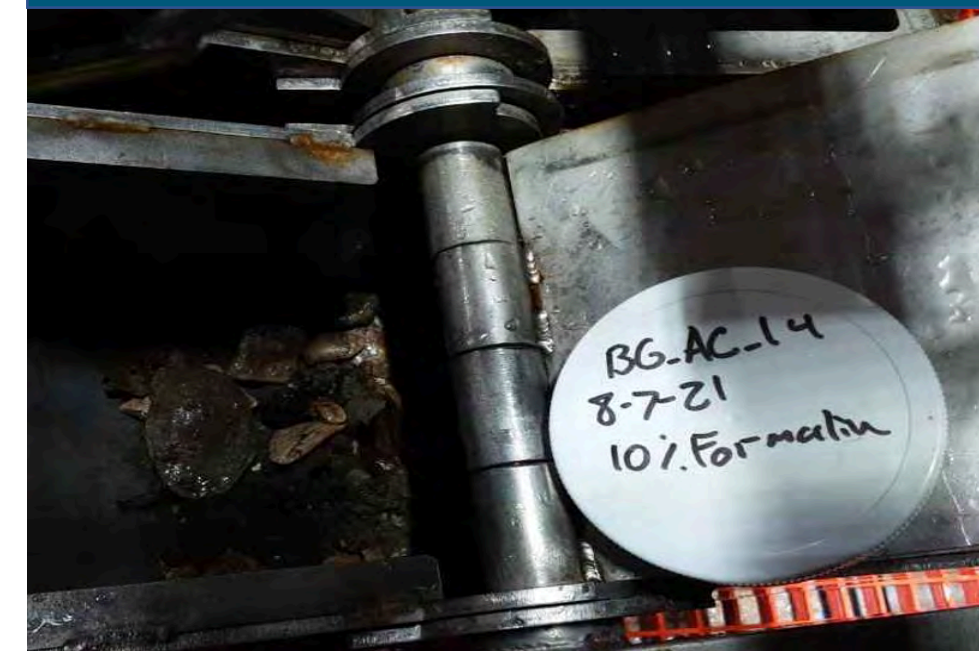
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

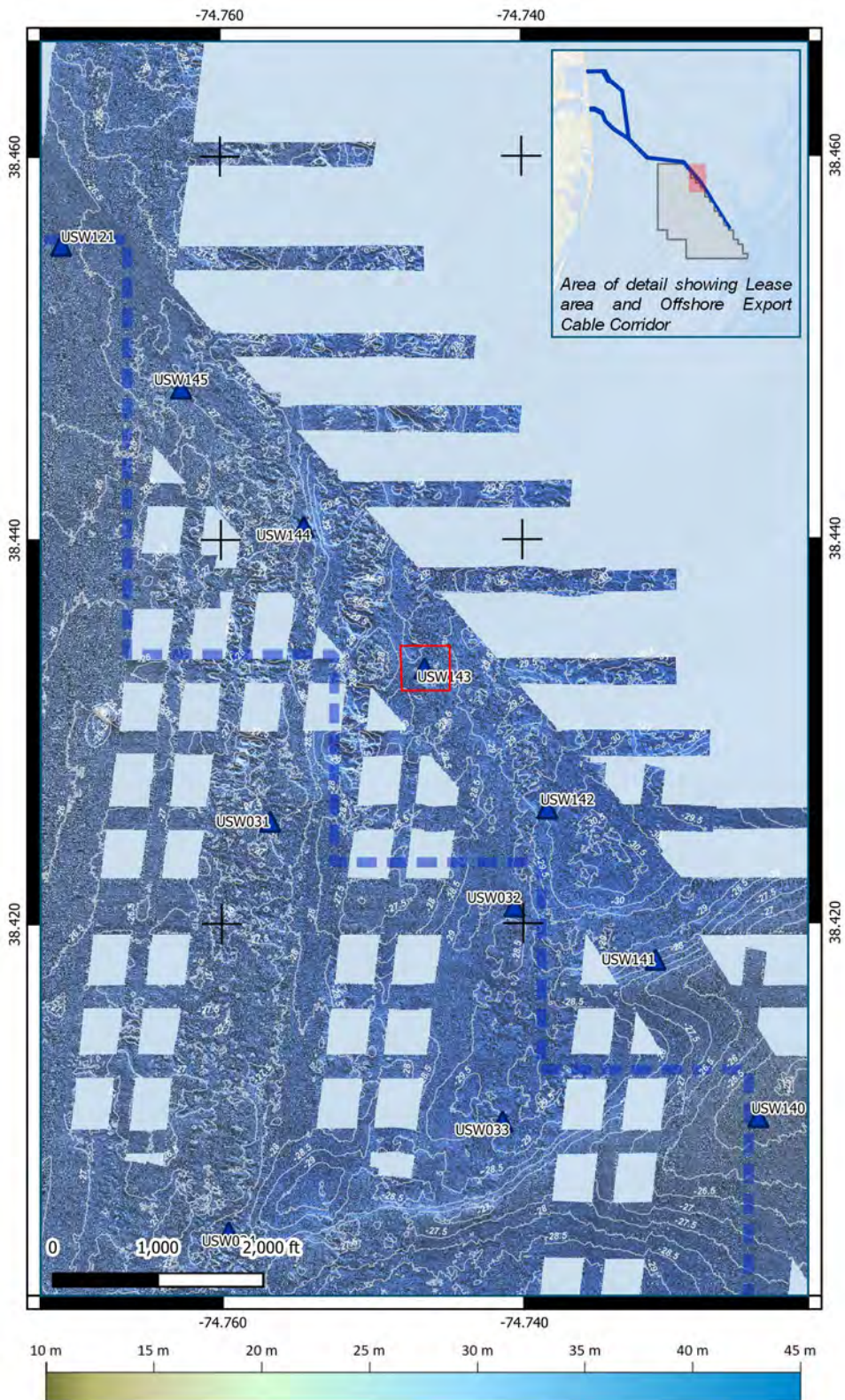


### Sample Photograph





### Map of Benthic Grab Location

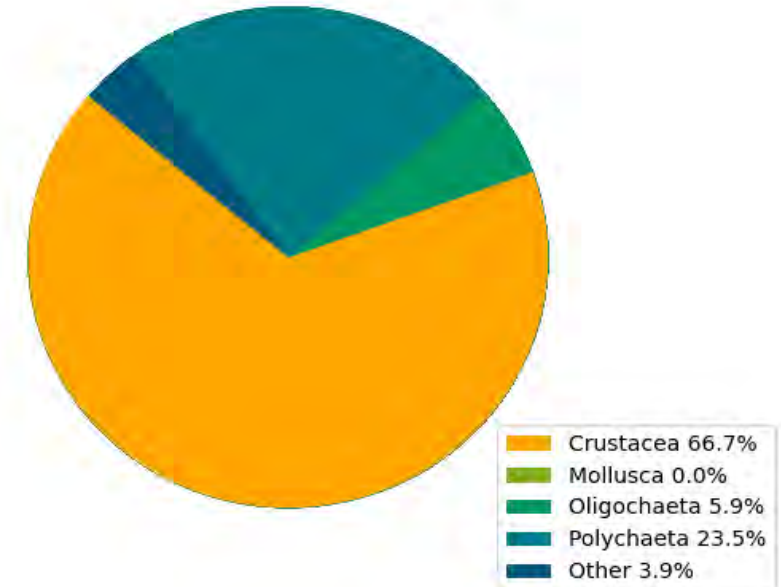


### Benthic Grab USW143

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1275                          |
| Taxa Richness <sup>1</sup> :   |                     | 14                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

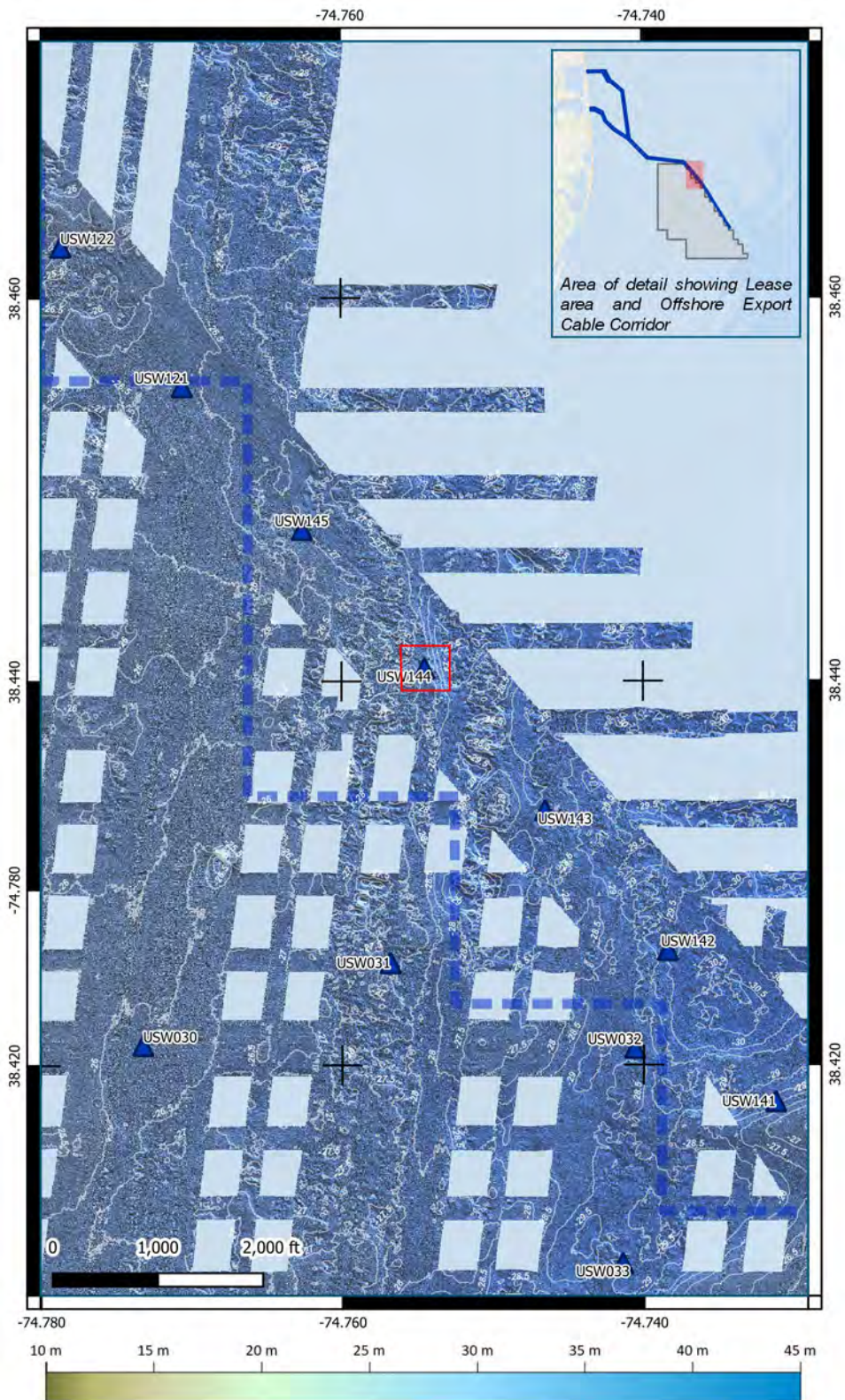


### Sample Photo Not Available





### Map of Benthic Grab Location

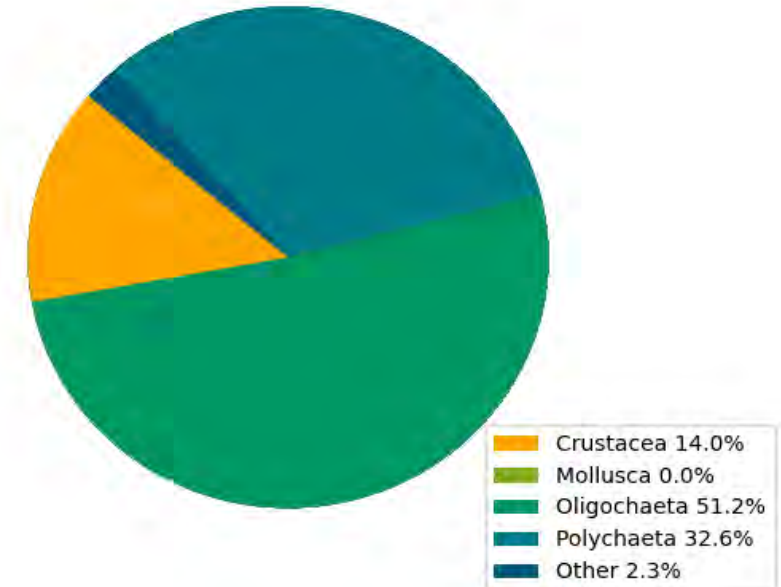


### Benthic Grab USW144

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1075                            |
| Taxa Richness <sup>1</sup> :   |                     | 16                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

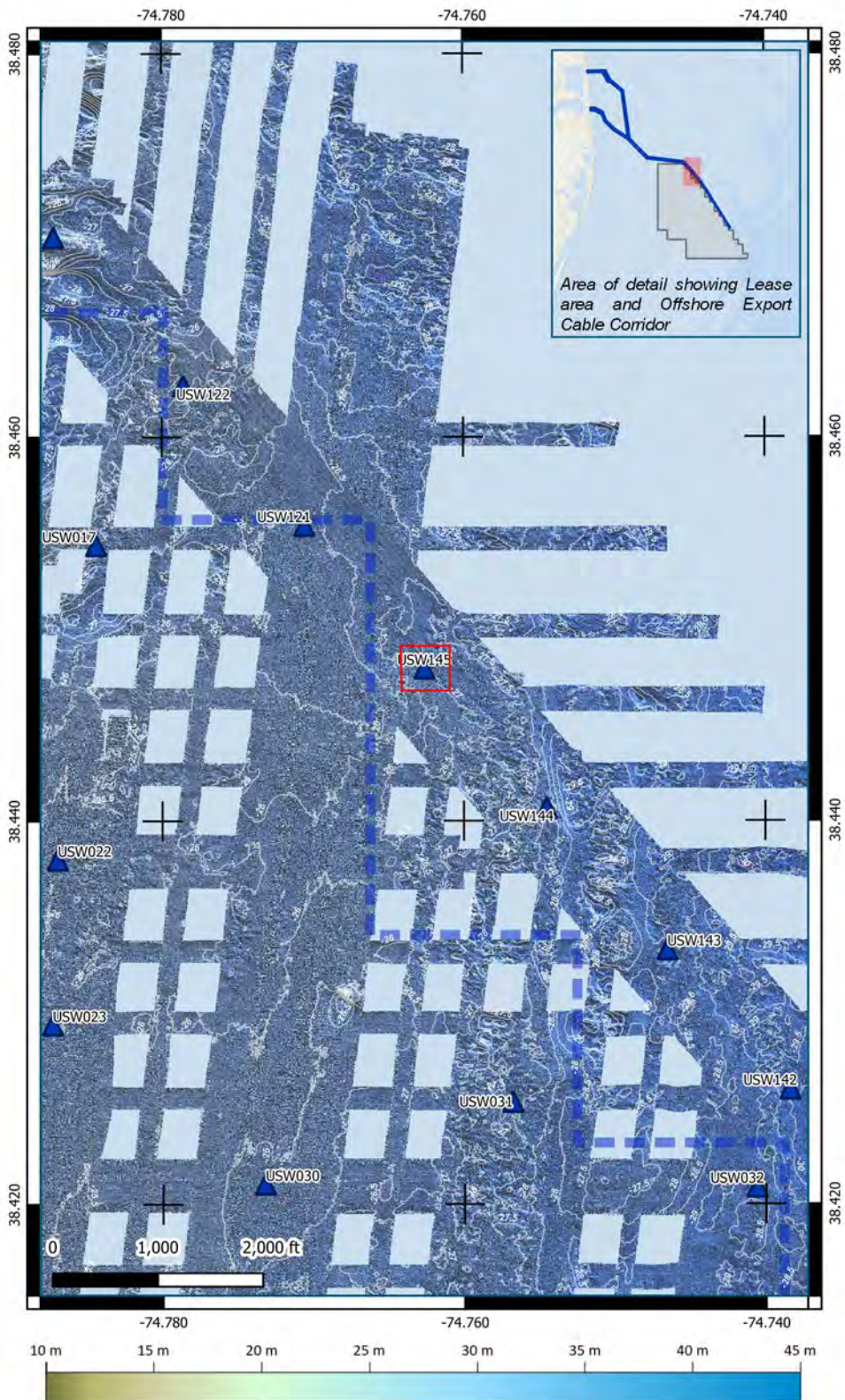


### Sample Photograph





### Map of Benthic Grab Location

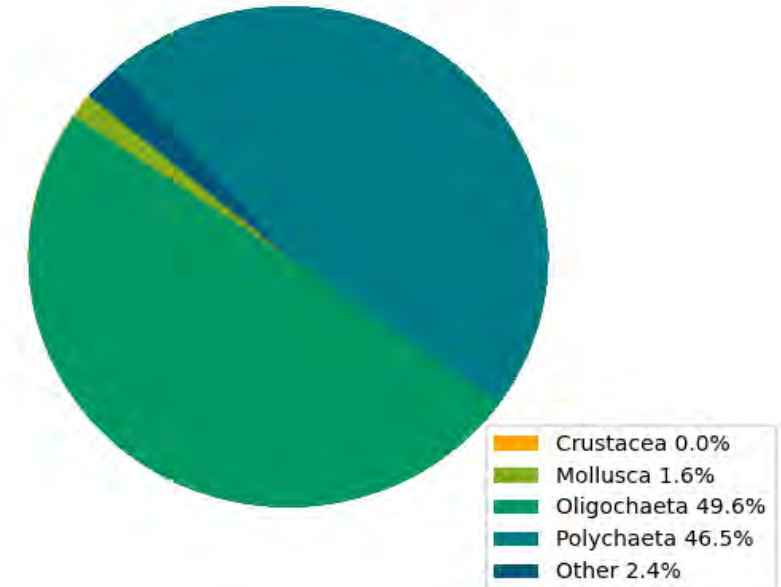


### Benthic Grab USW145

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 3175                            |
| Taxa Richness <sup>1</sup> :   |                     | 18                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

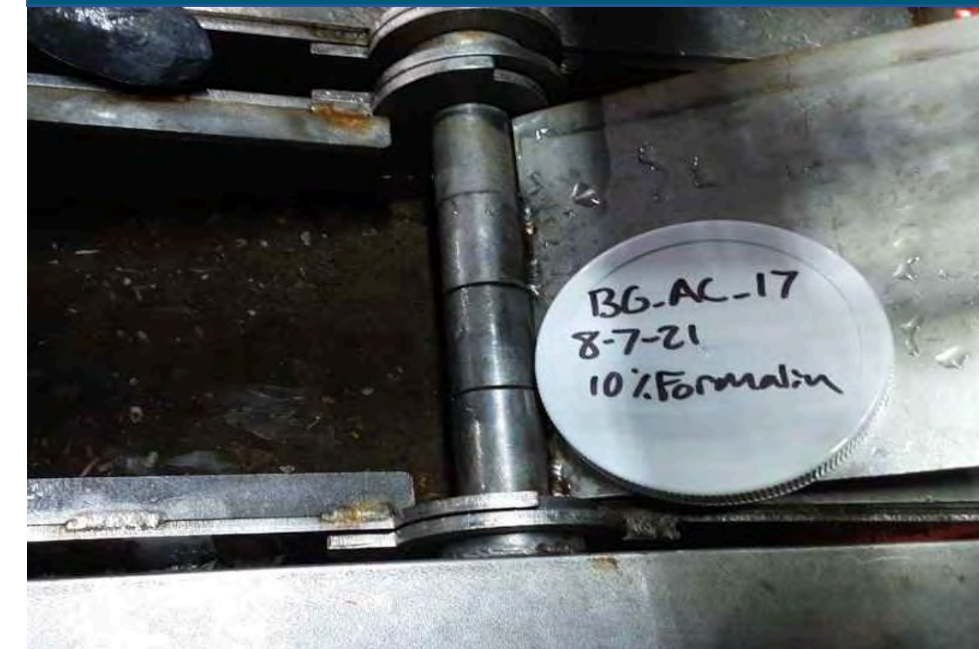
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

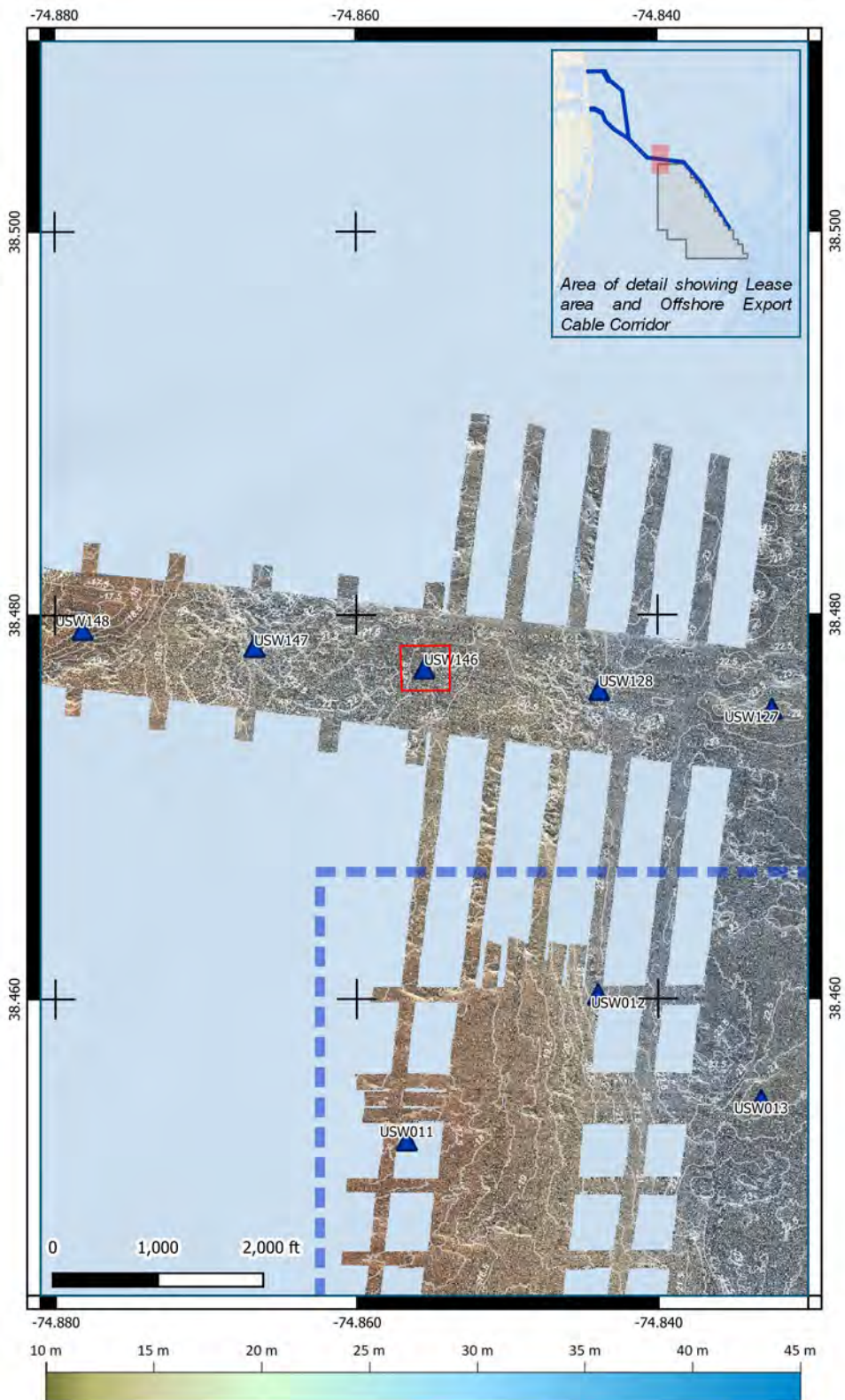


### Sample Photograph





### Map of Benthic Grab Location

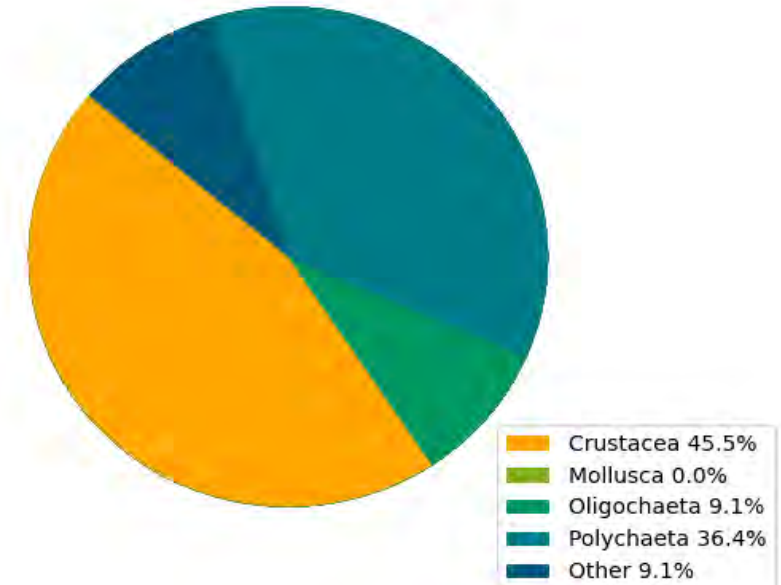


### Benthic Grab USW146

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 275                           |
| Taxa Richness <sup>1</sup> :   |                     | 7                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

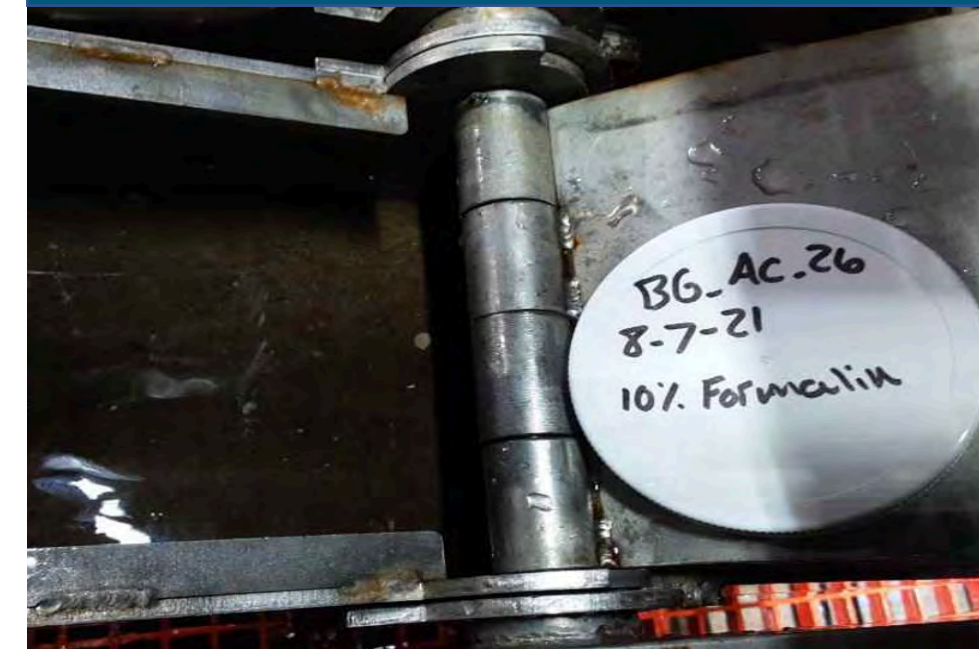
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

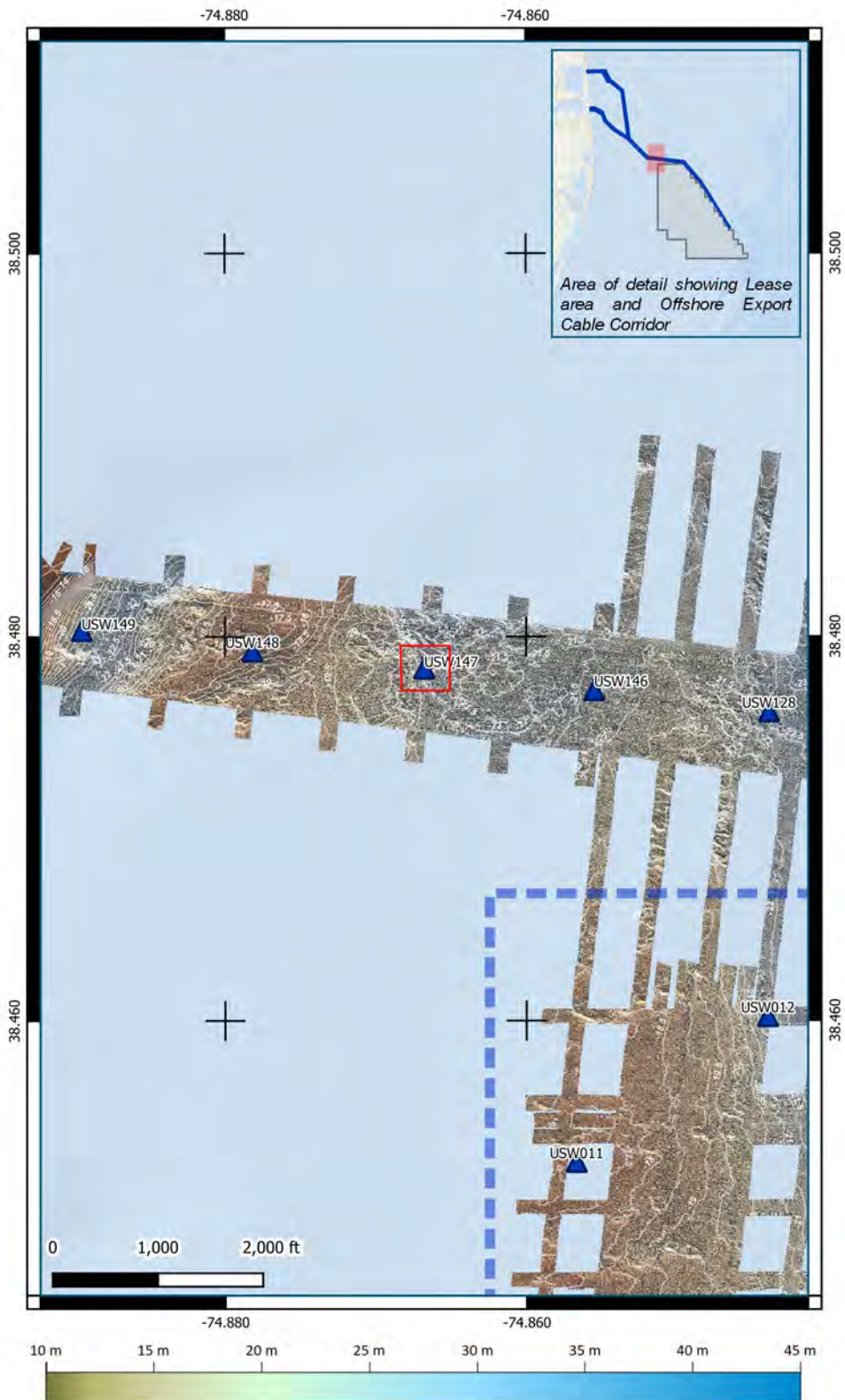


### Sample Photograph





### Map of Benthic Grab Location

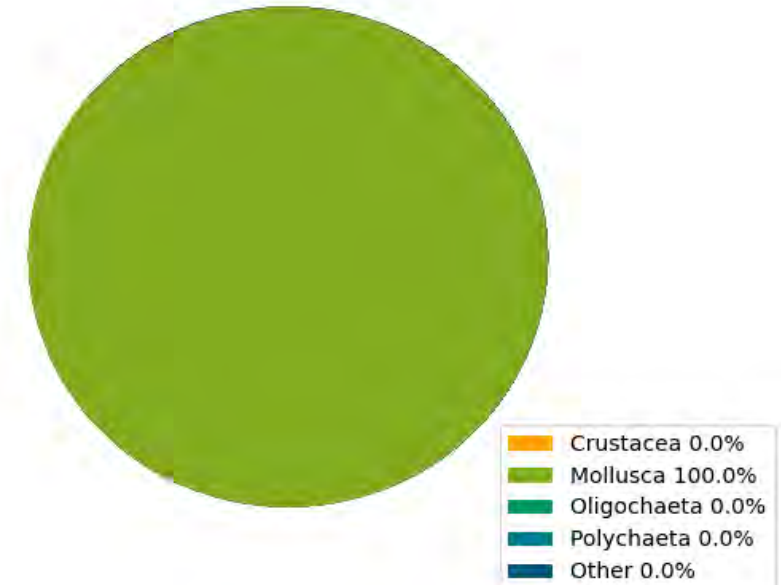


### Benthic Grab USW147

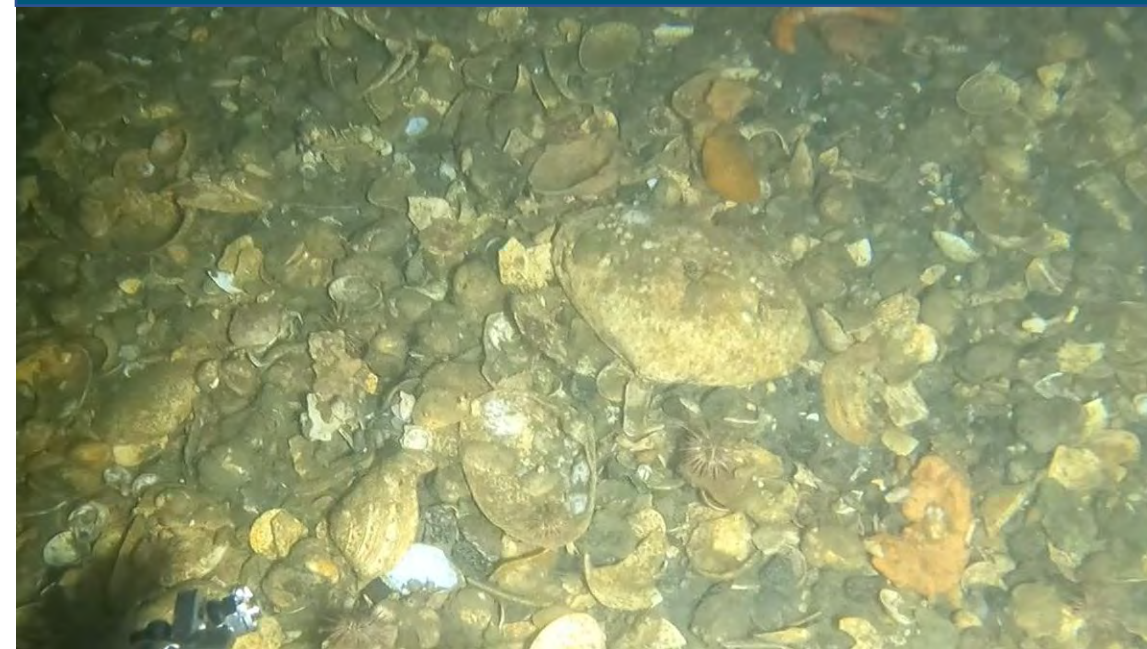
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 450                             |
| Taxa Richness <sup>1</sup> :   |                     | 3                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

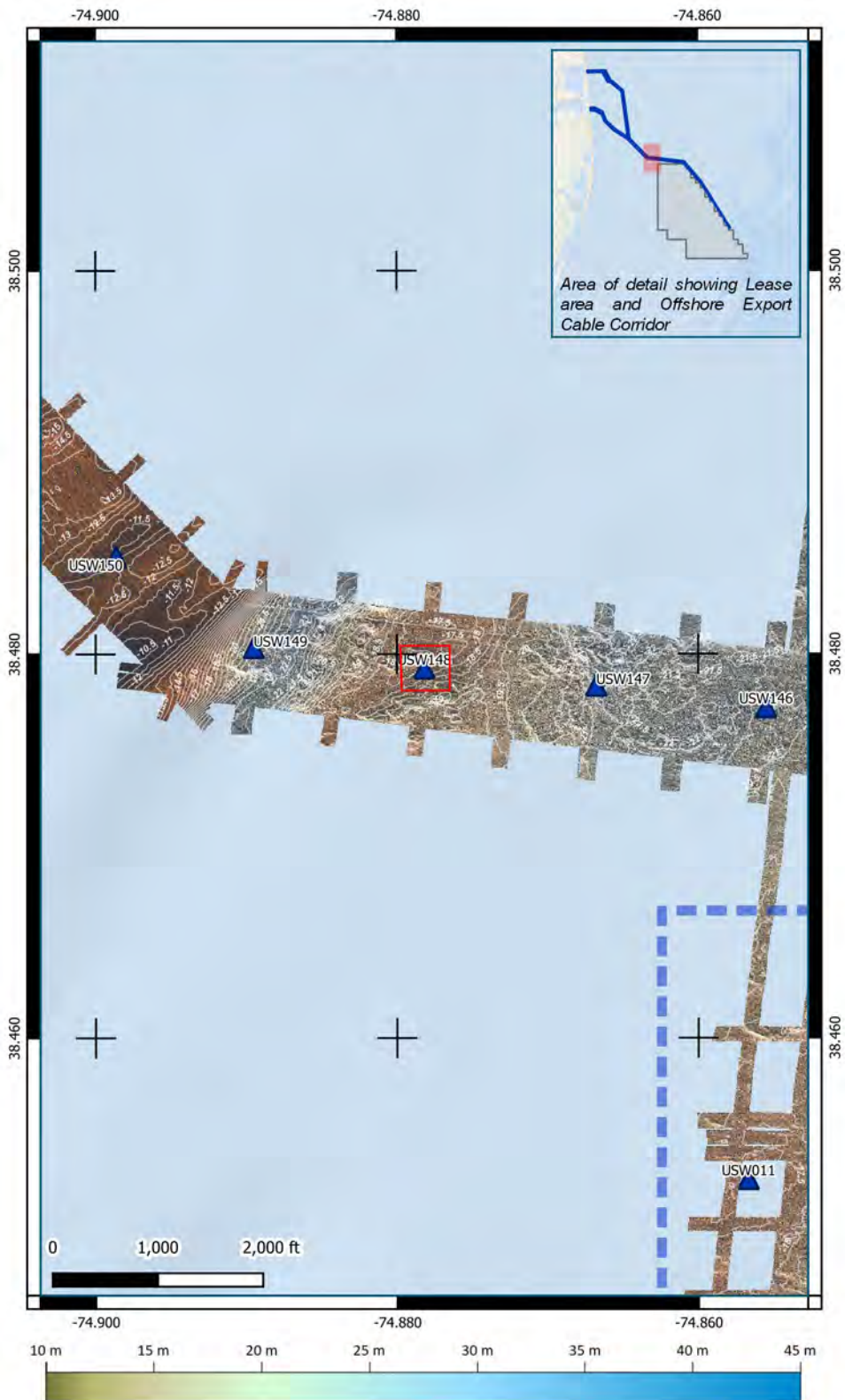


### Sample Photograph





### Map of Benthic Grab Location

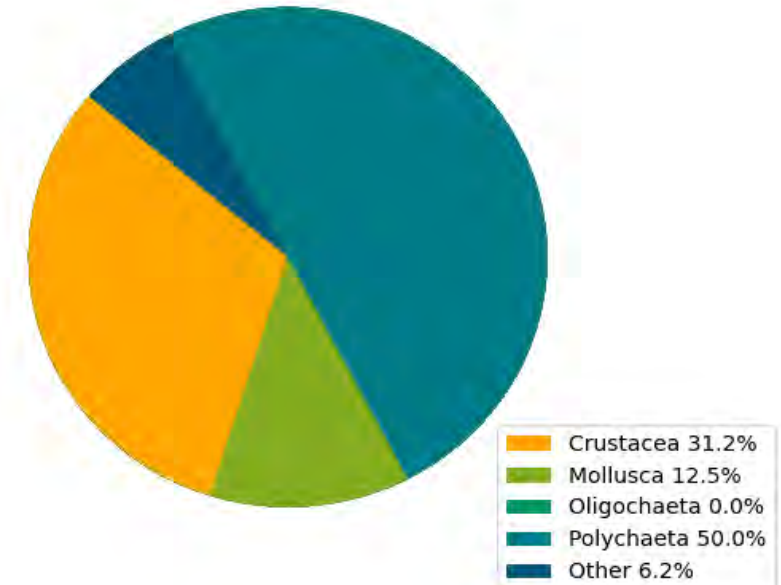


### Benthic Grab USW148

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 400                           |
| Taxa Richness <sup>1</sup> :   |                     | 10                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

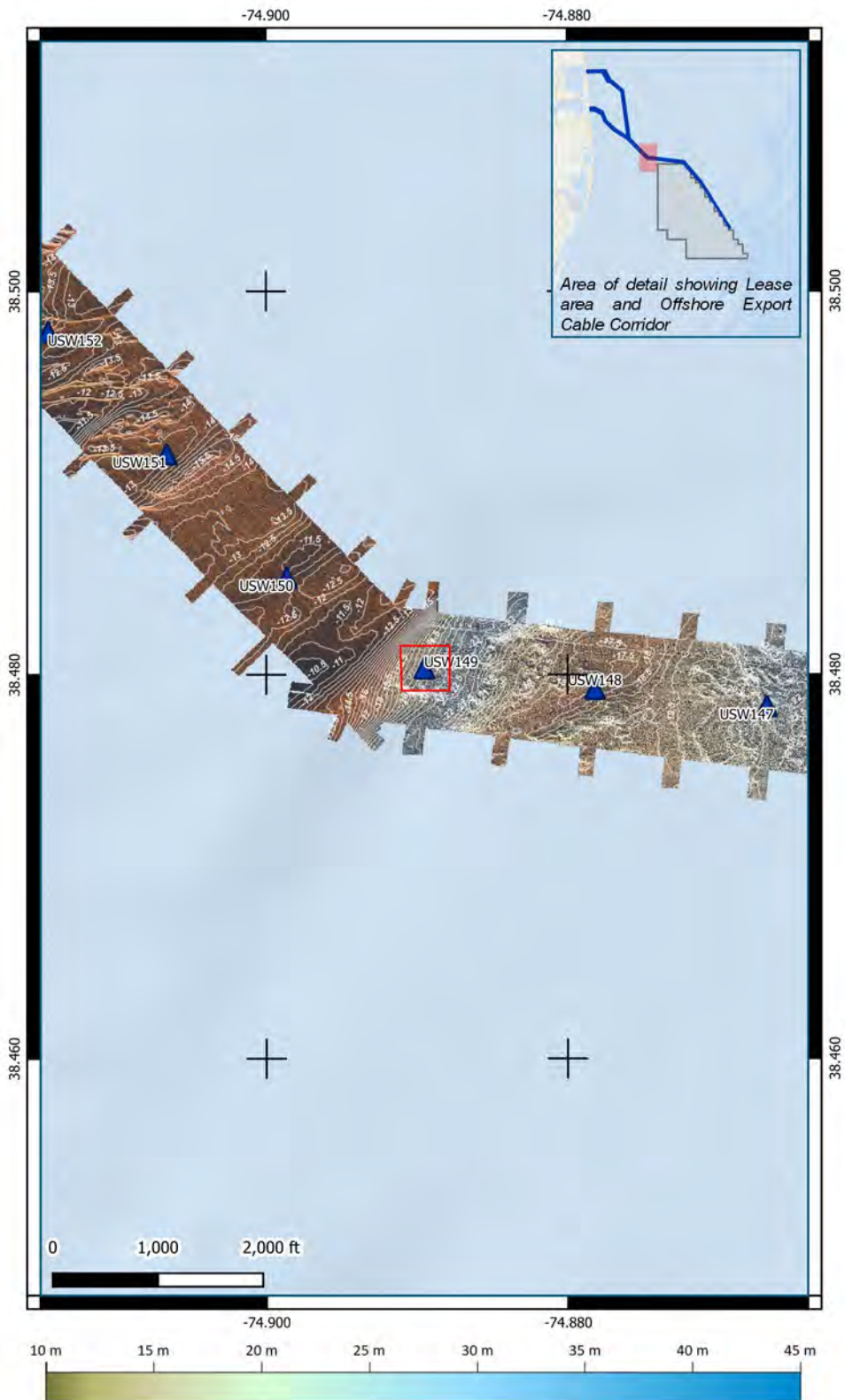


### Sample Photograph





### Map of Benthic Grab Location

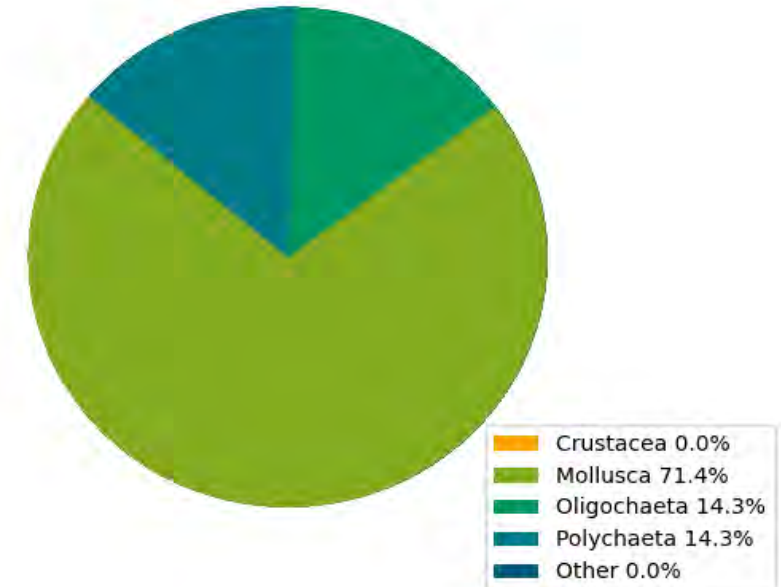


### Benthic Grab USW149

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 175                           |
| Taxa Richness <sup>1</sup> :   |                     | 5                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

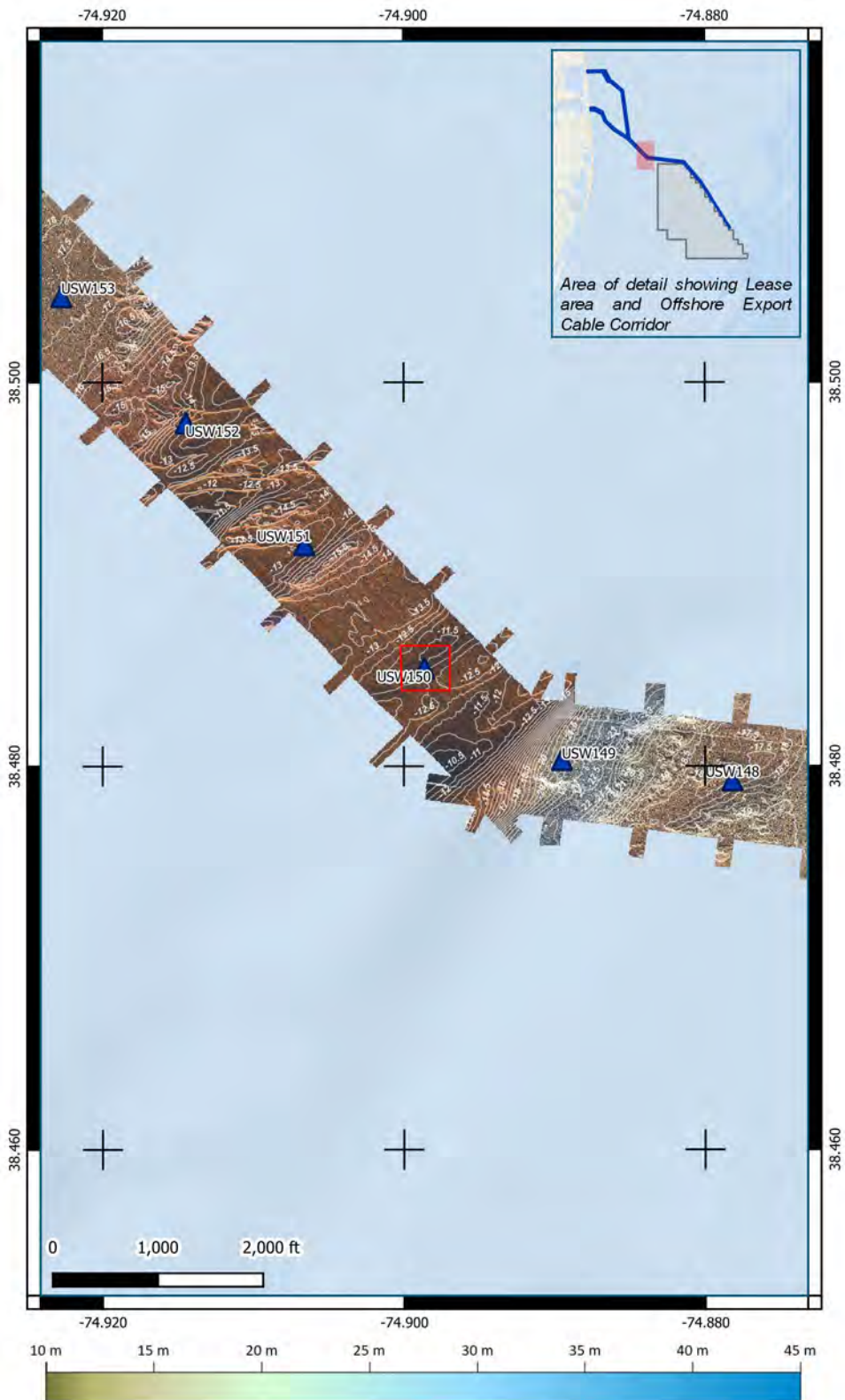


### Sample Photograph





### Map of Benthic Grab Location

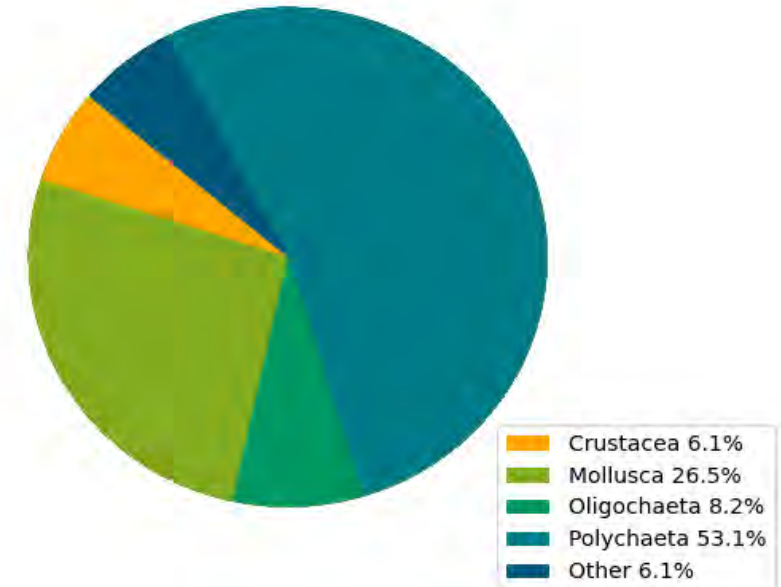


### Benthic Grab USW150

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1225                            |
| Taxa Richness <sup>1</sup> :   |                     | 16                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph



### Sample Photograph





### Map of Benthic Grab Location

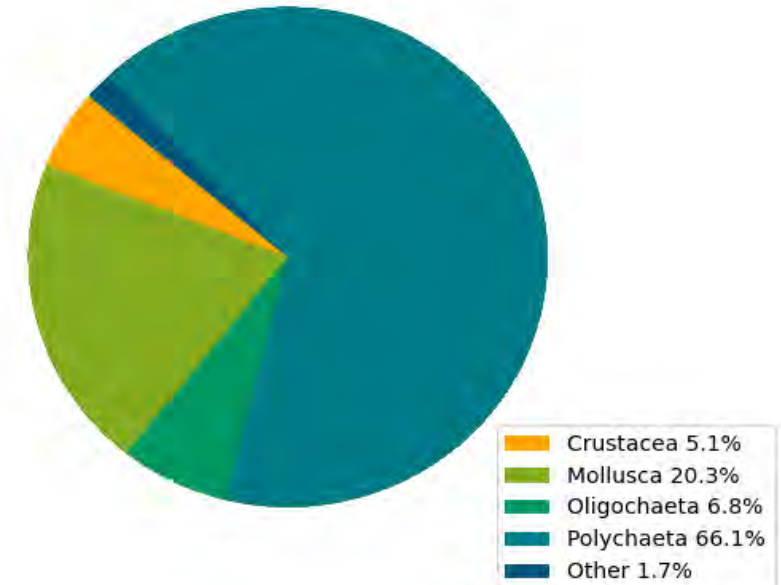


### Benthic Grab USW151

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1475                            |
| Taxa Richness <sup>1</sup> :   |                     | 13                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph



### Sample Photograph





### Map of Benthic Grab Location

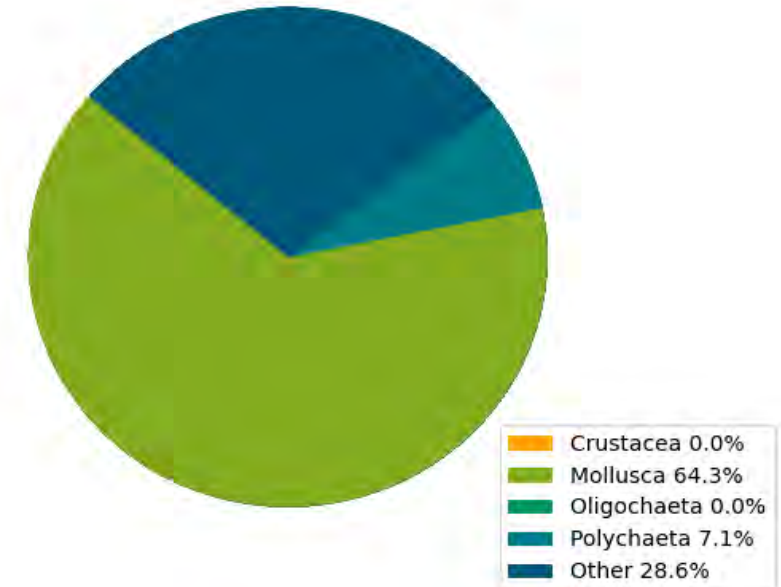


### Benthic Grab USW152

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 350                           |
| Taxa Richness <sup>1</sup> :   |                     | 6                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

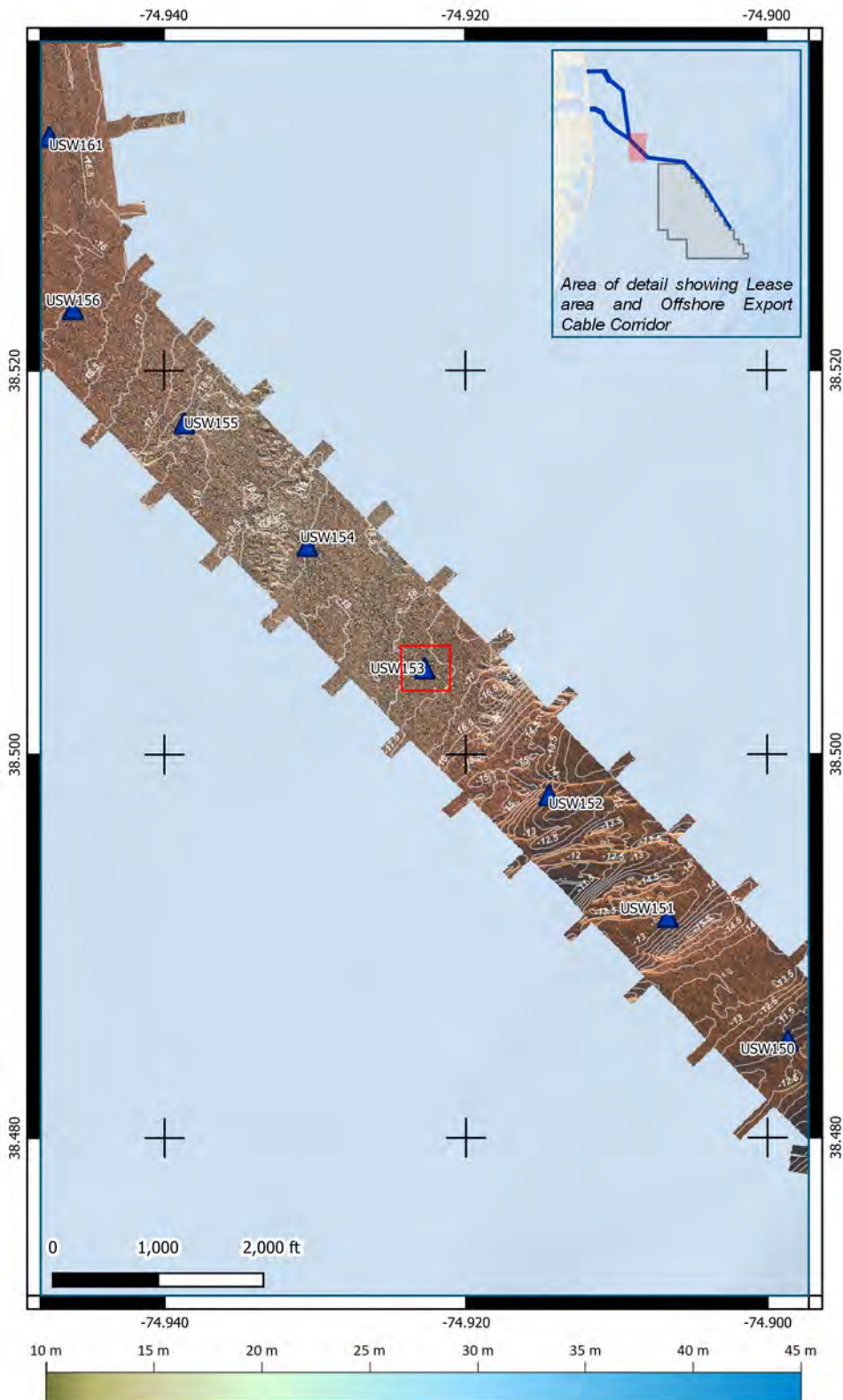


### Sample Photograph





### Map of Benthic Grab Location

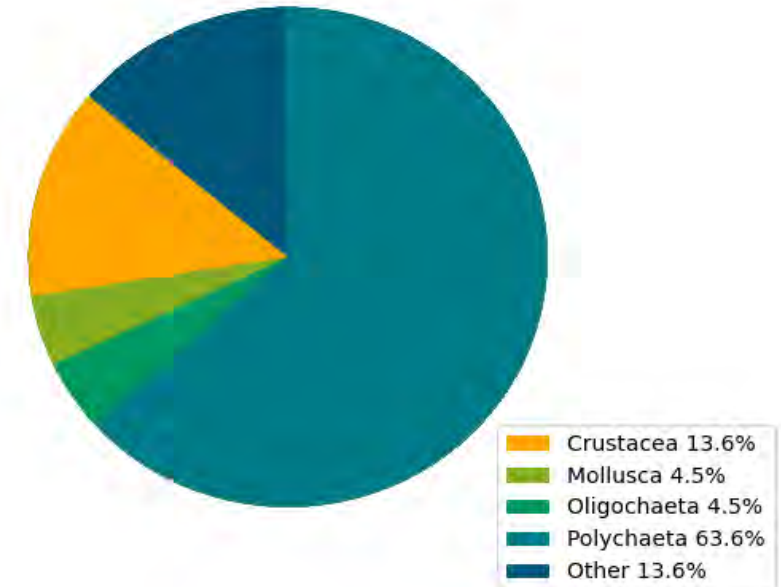


### Benthic Grab USW153

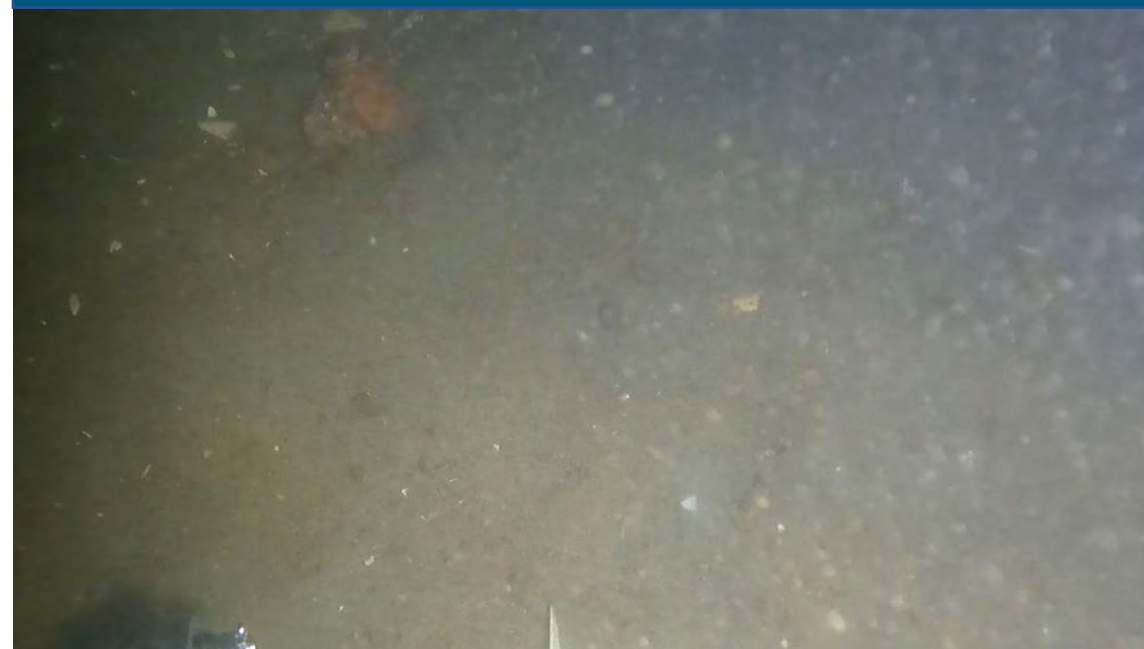
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 550                             |
| Taxa Richness <sup>1</sup> :   |                     | 14                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph



### Sample Photograph





### Map of Benthic Grab Location

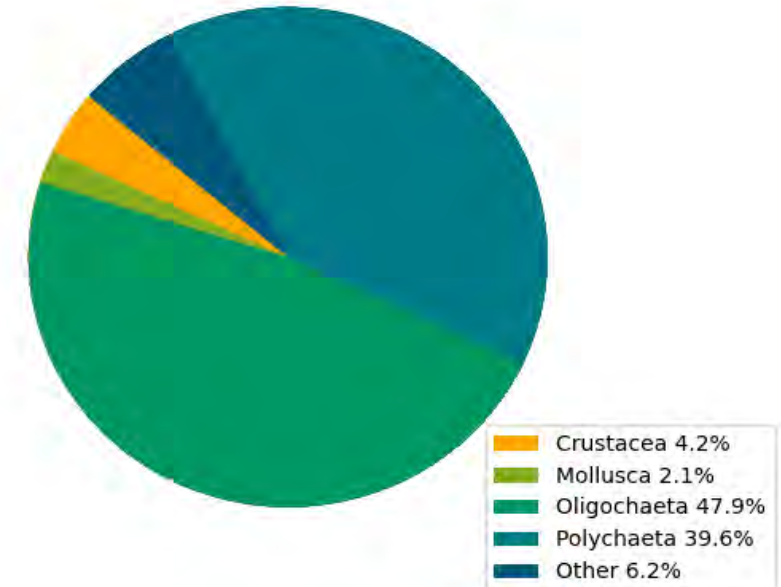


### Benthic Grab USW154

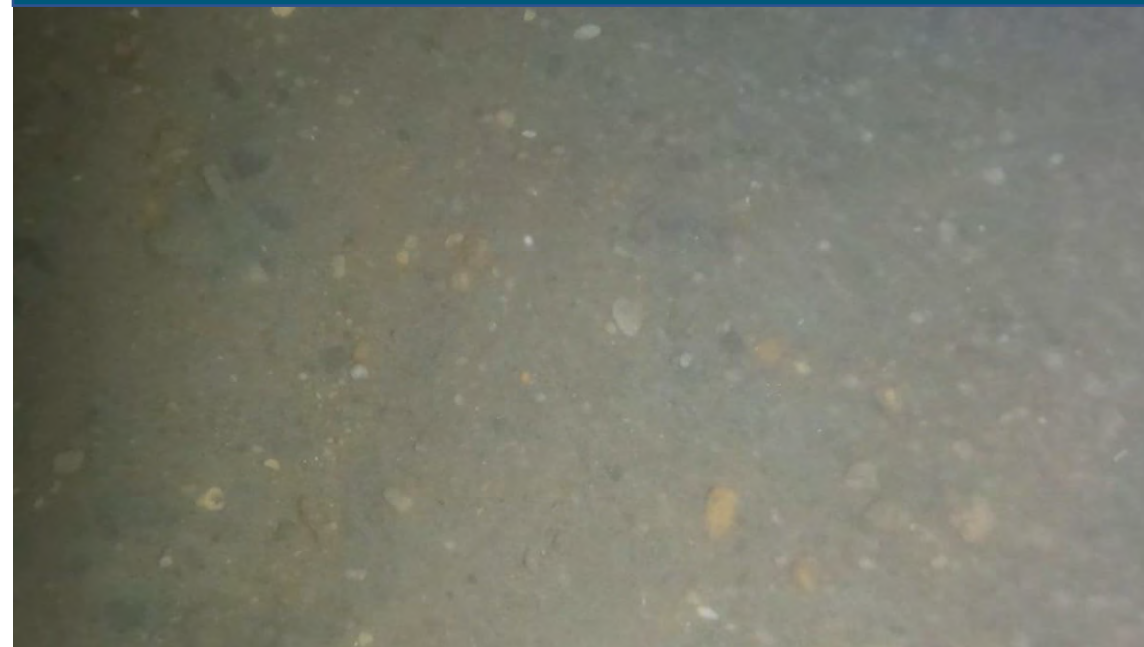
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1200                            |
| Taxa Richness <sup>1</sup> :   |                     | 17                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

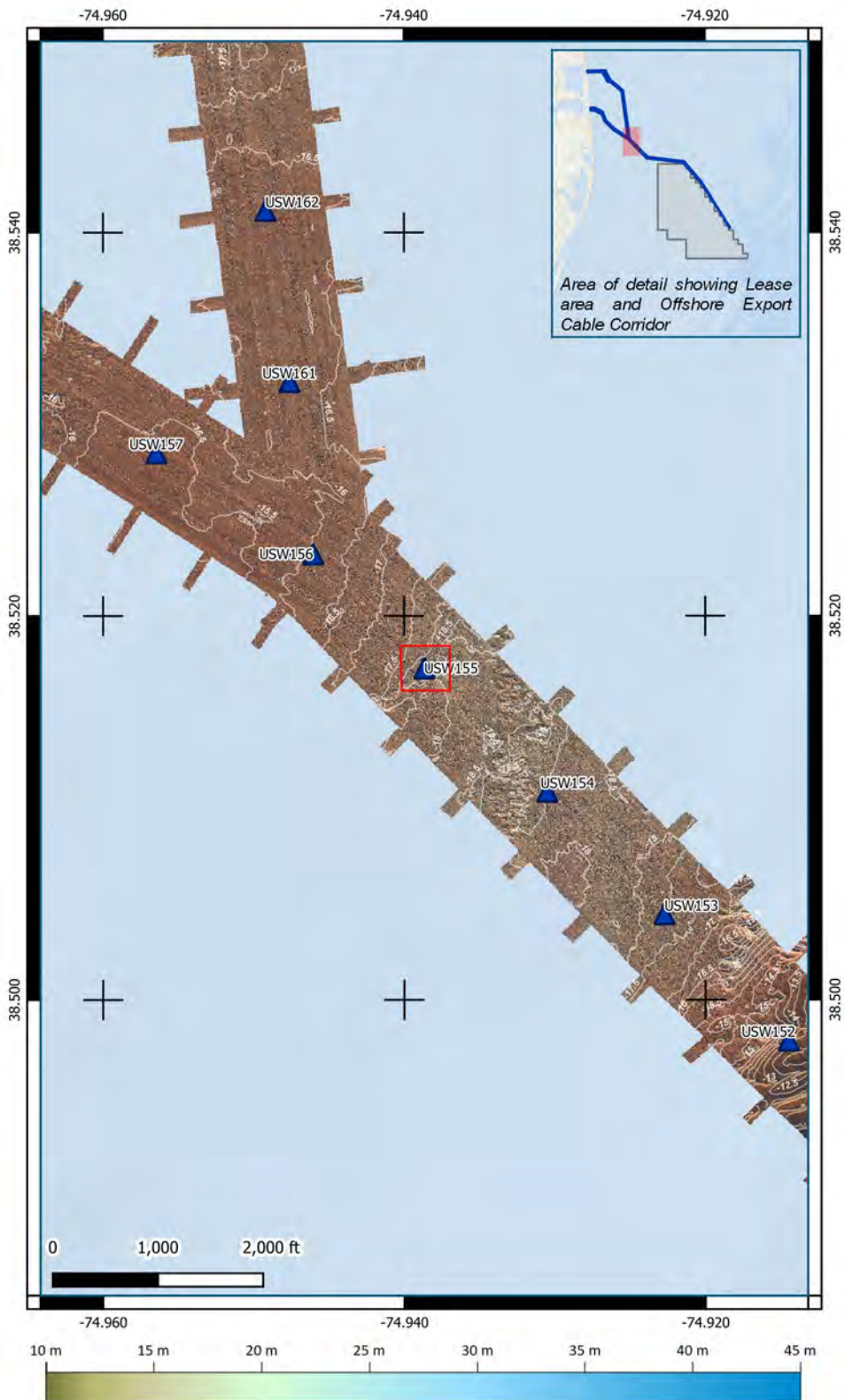


### Sample Photograph





### Map of Benthic Grab Location

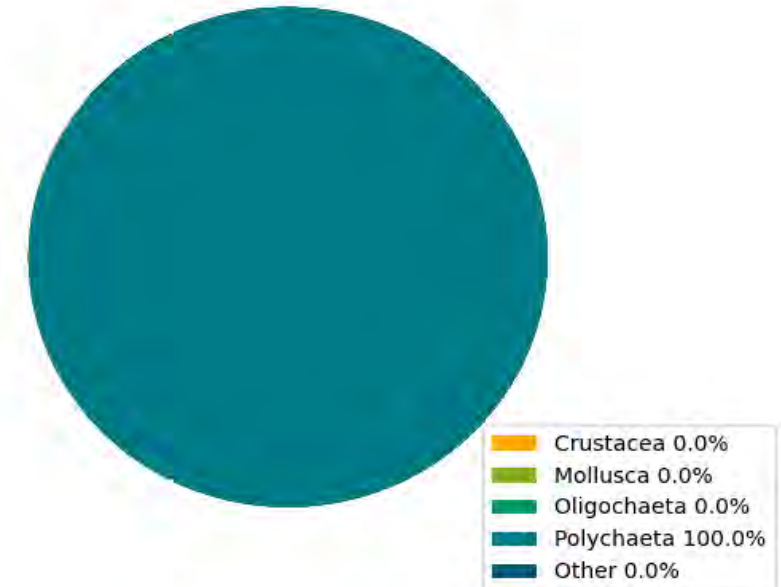


### Benthic Grab USW155

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Muddy Sand             |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 500                             |
| Taxa Richness <sup>1</sup> :   |                     | 3                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

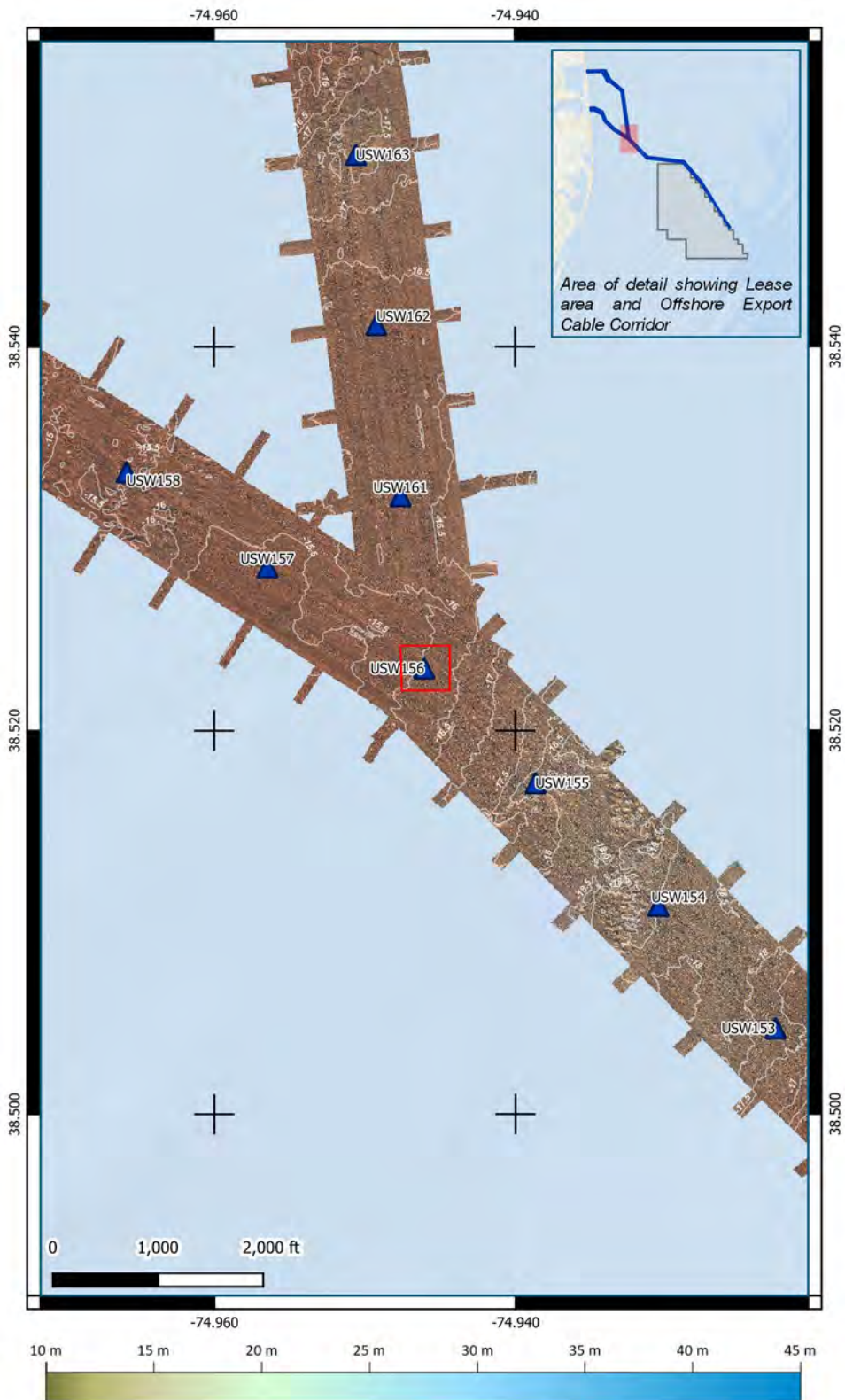


### Sample Photograph





### Map of Benthic Grab Location

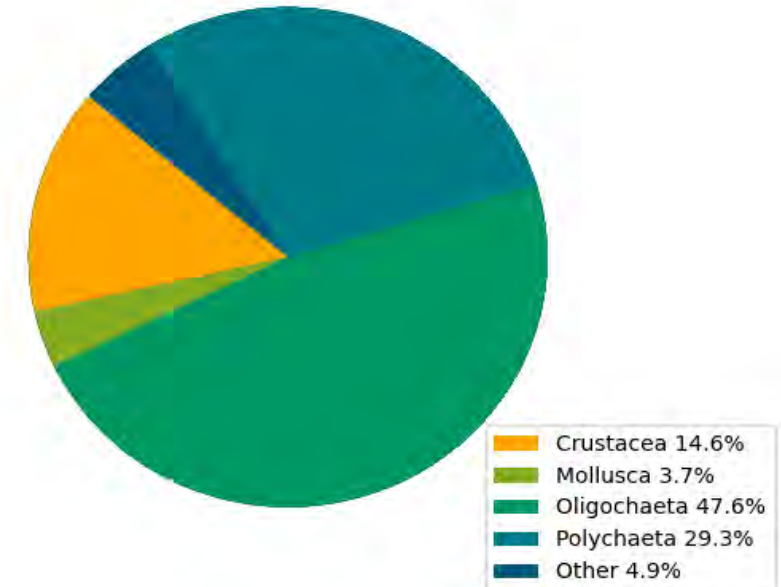


### Benthic Grab USW156

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 2050                            |
| Taxa Richness <sup>1</sup> :   |                     | 19                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

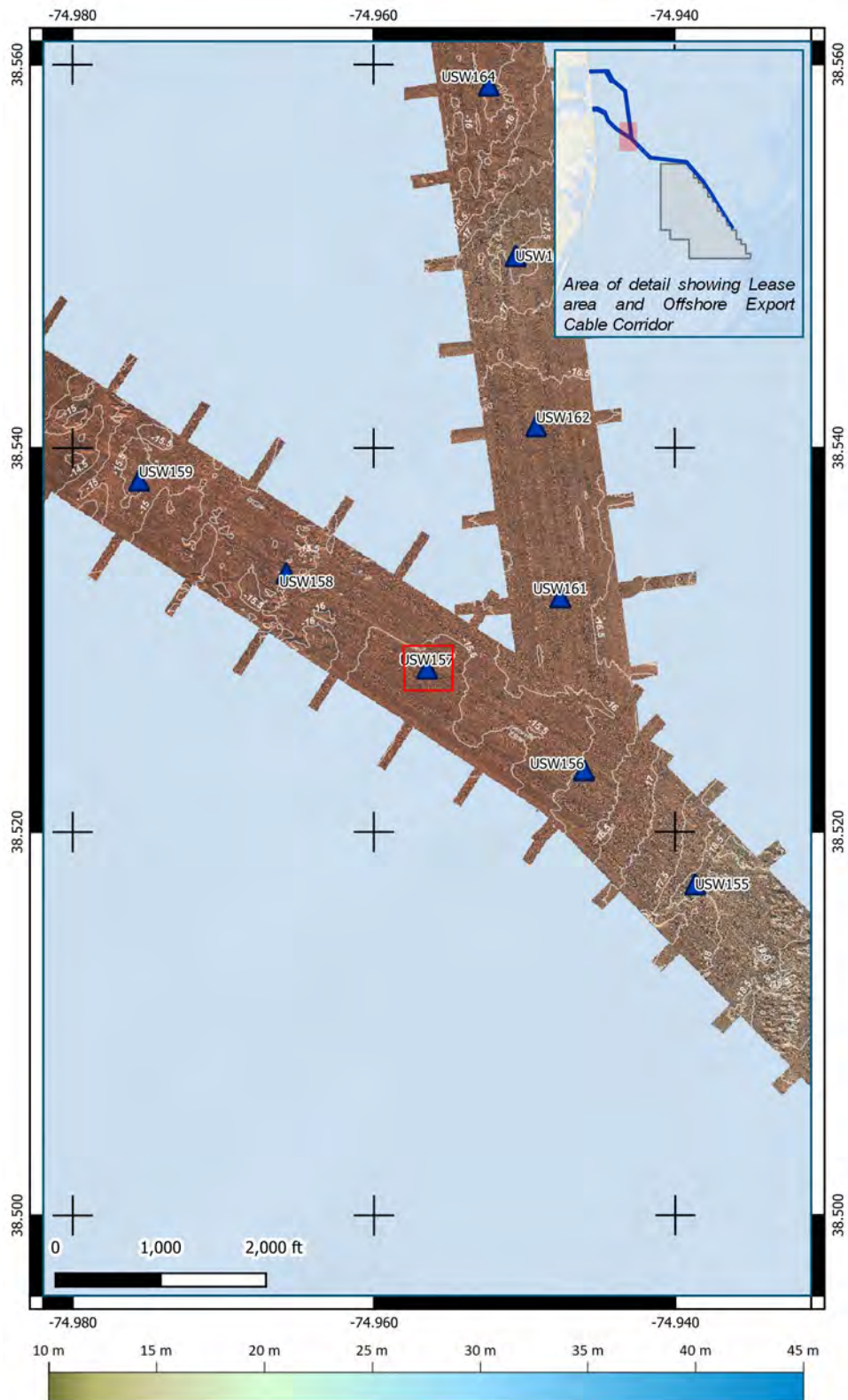


### Sample Photograph





### Map of Benthic Grab Location

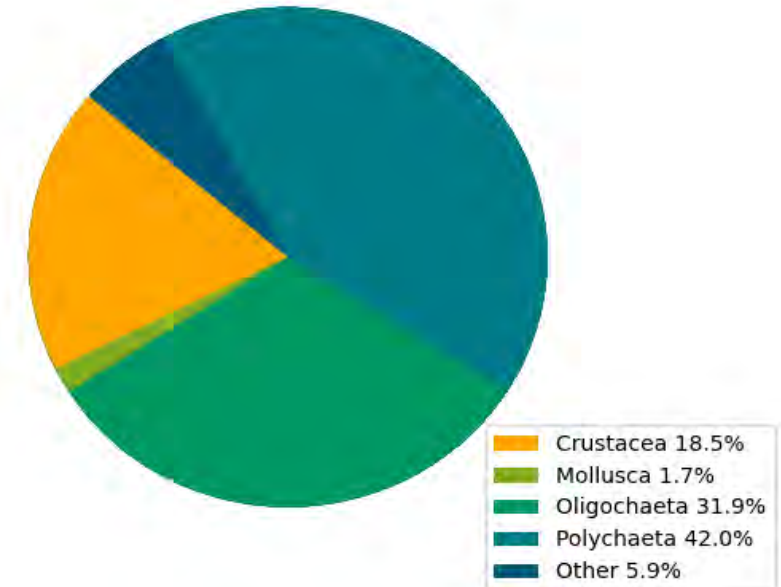


### Benthic Grab USW157

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 2975                            |
| Taxa Richness <sup>1</sup> :   |                     | 23                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

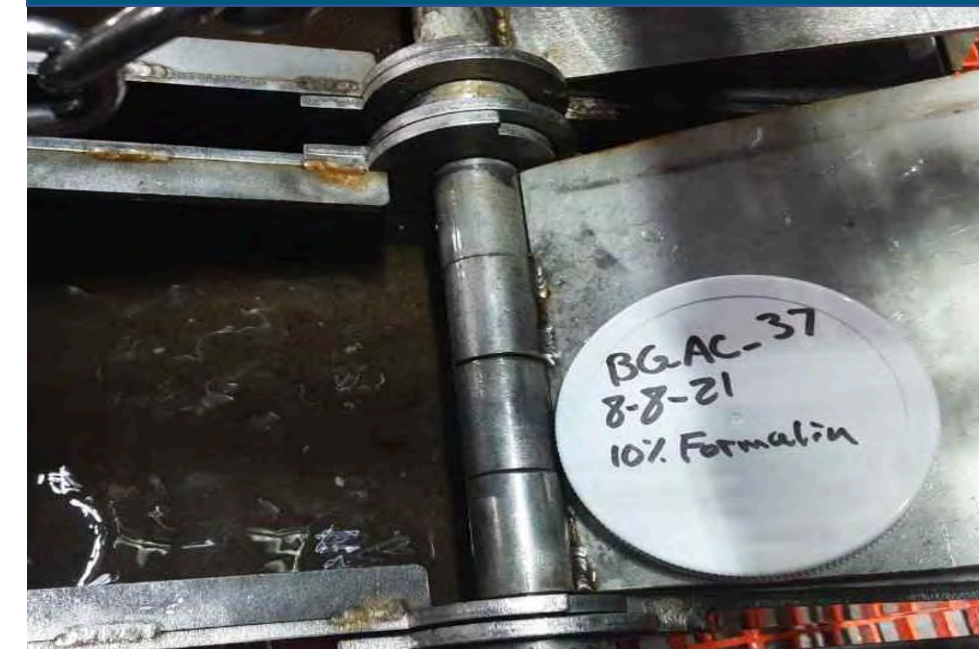
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

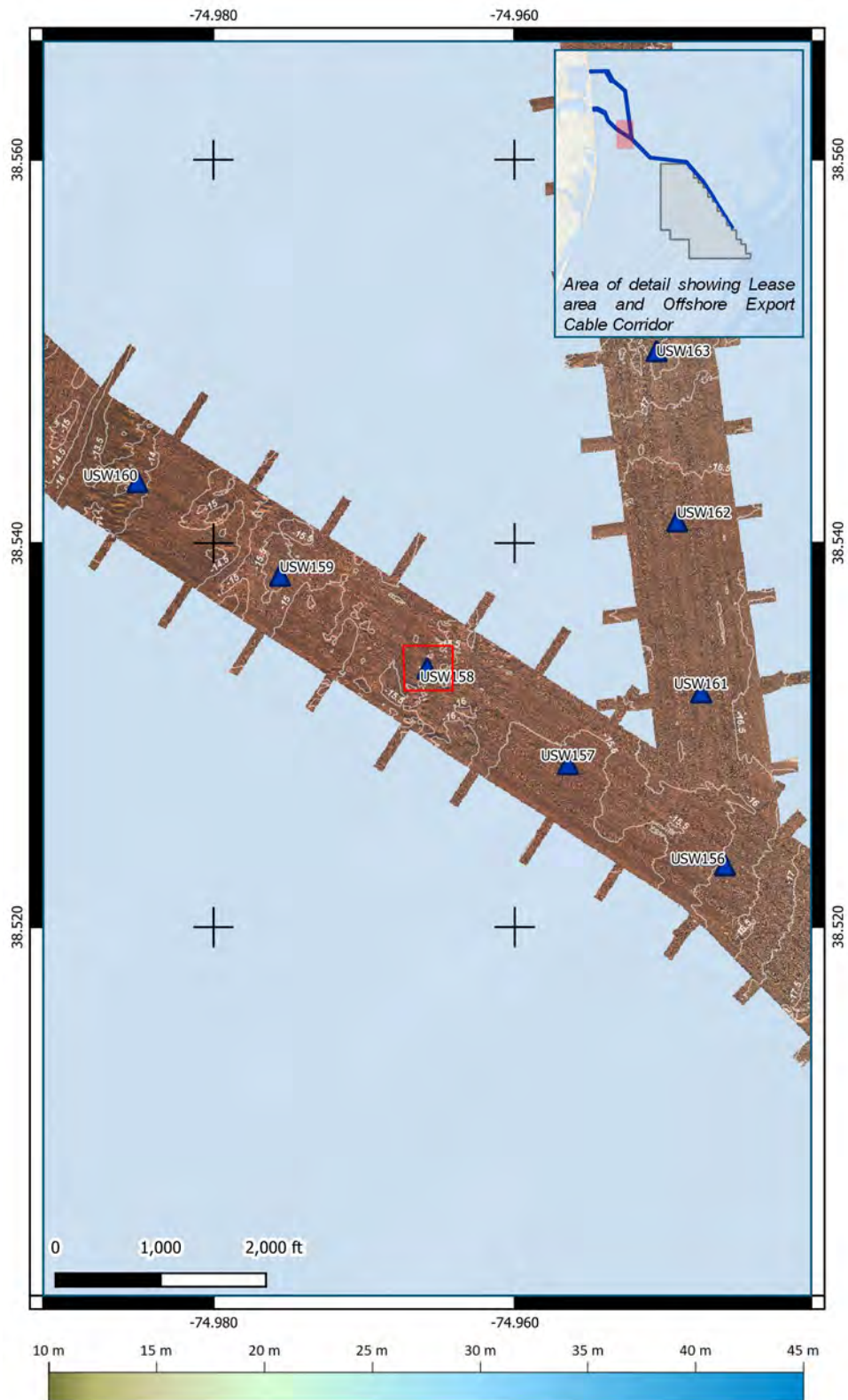


### Sample Photograph





### Map of Benthic Grab Location

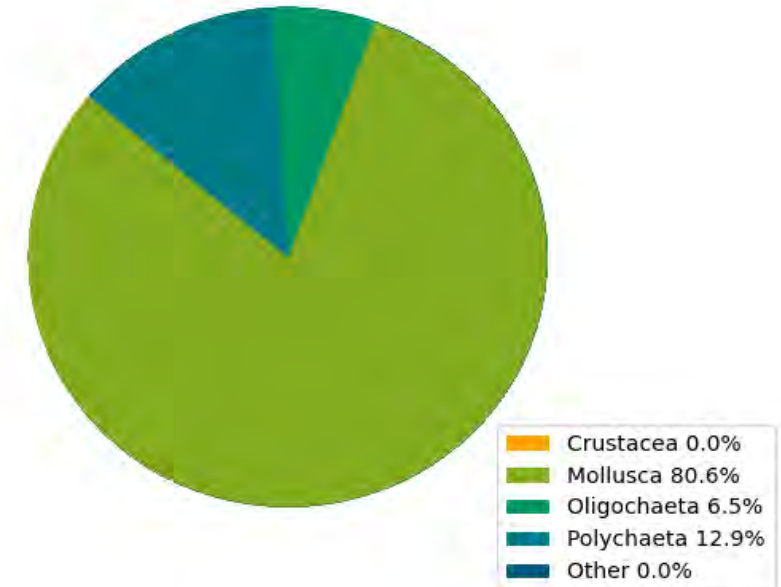


### Benthic Grab USW158

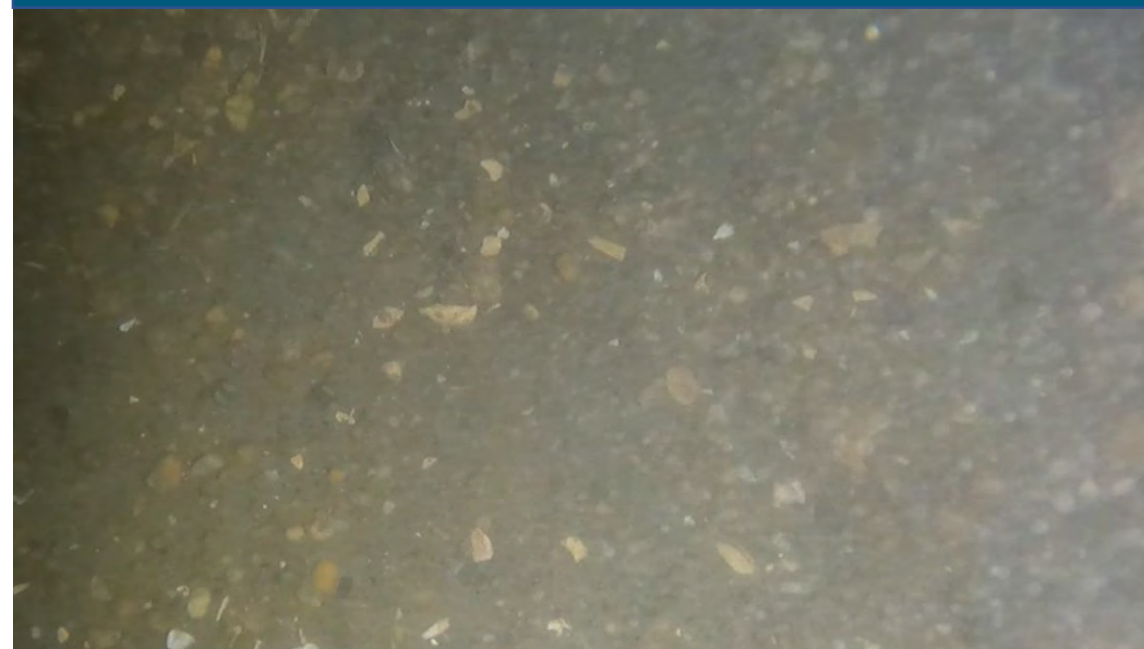
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 775                             |
| Taxa Richness <sup>1</sup> :   |                     | 7                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

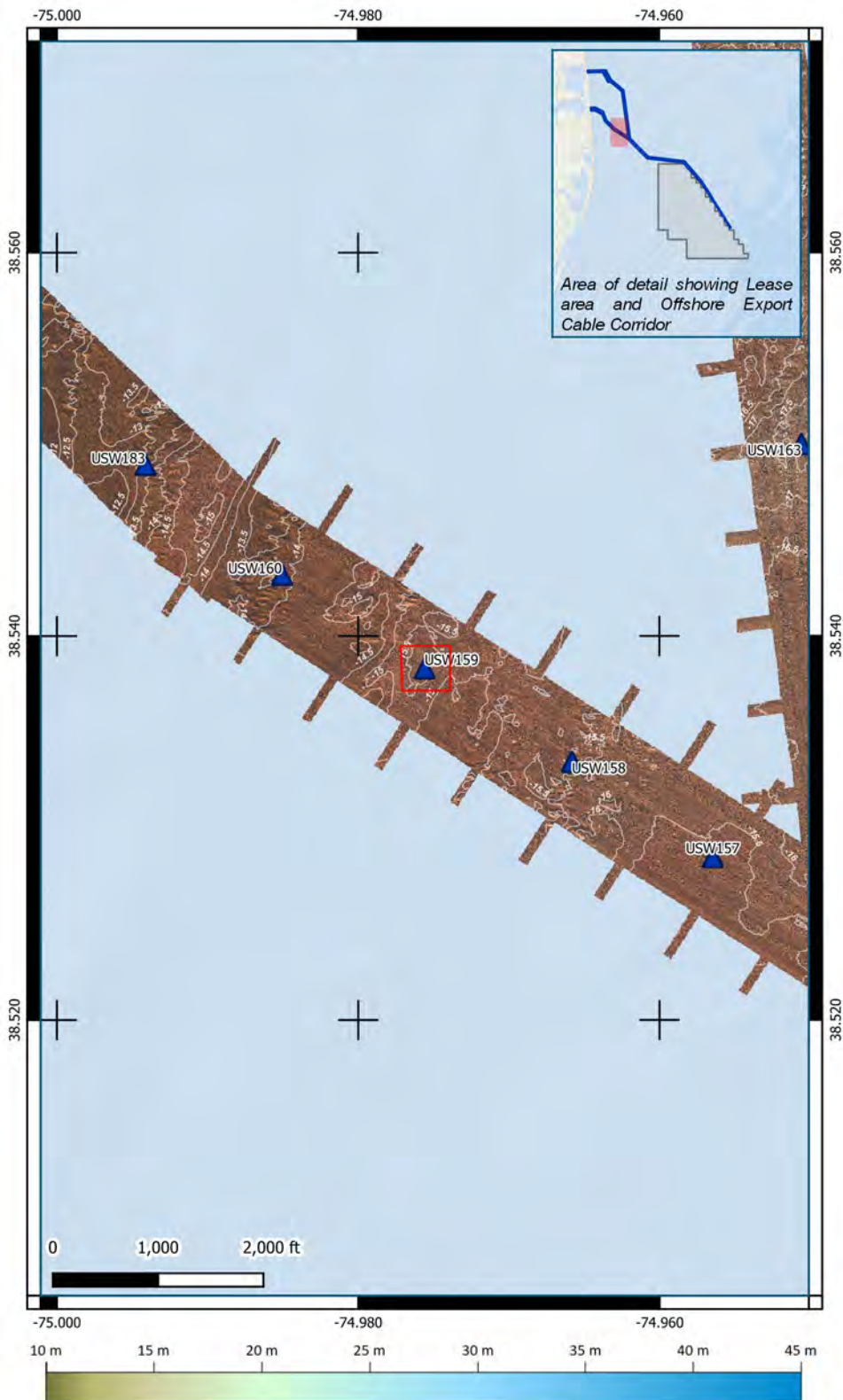


### Sample Photo Not Available





### Map of Benthic Grab Location

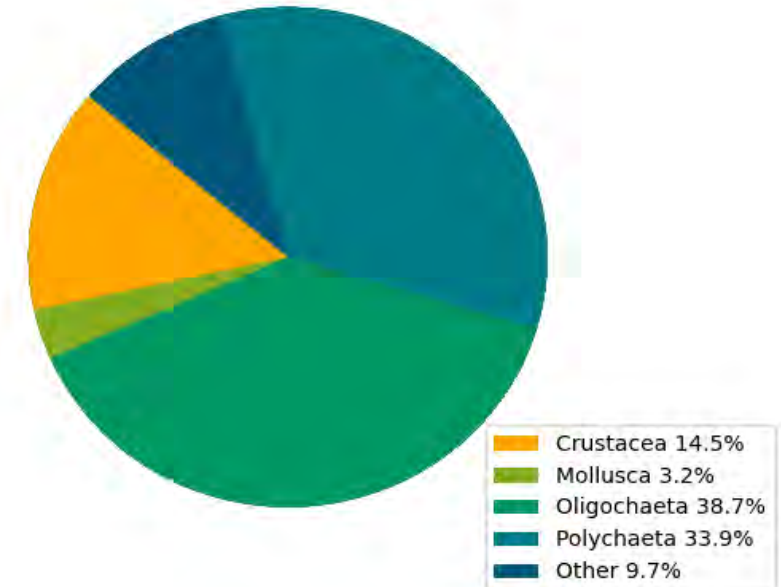


### Benthic Grab USW159

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1550                            |
| Taxa Richness <sup>1</sup> :   |                     | 22                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

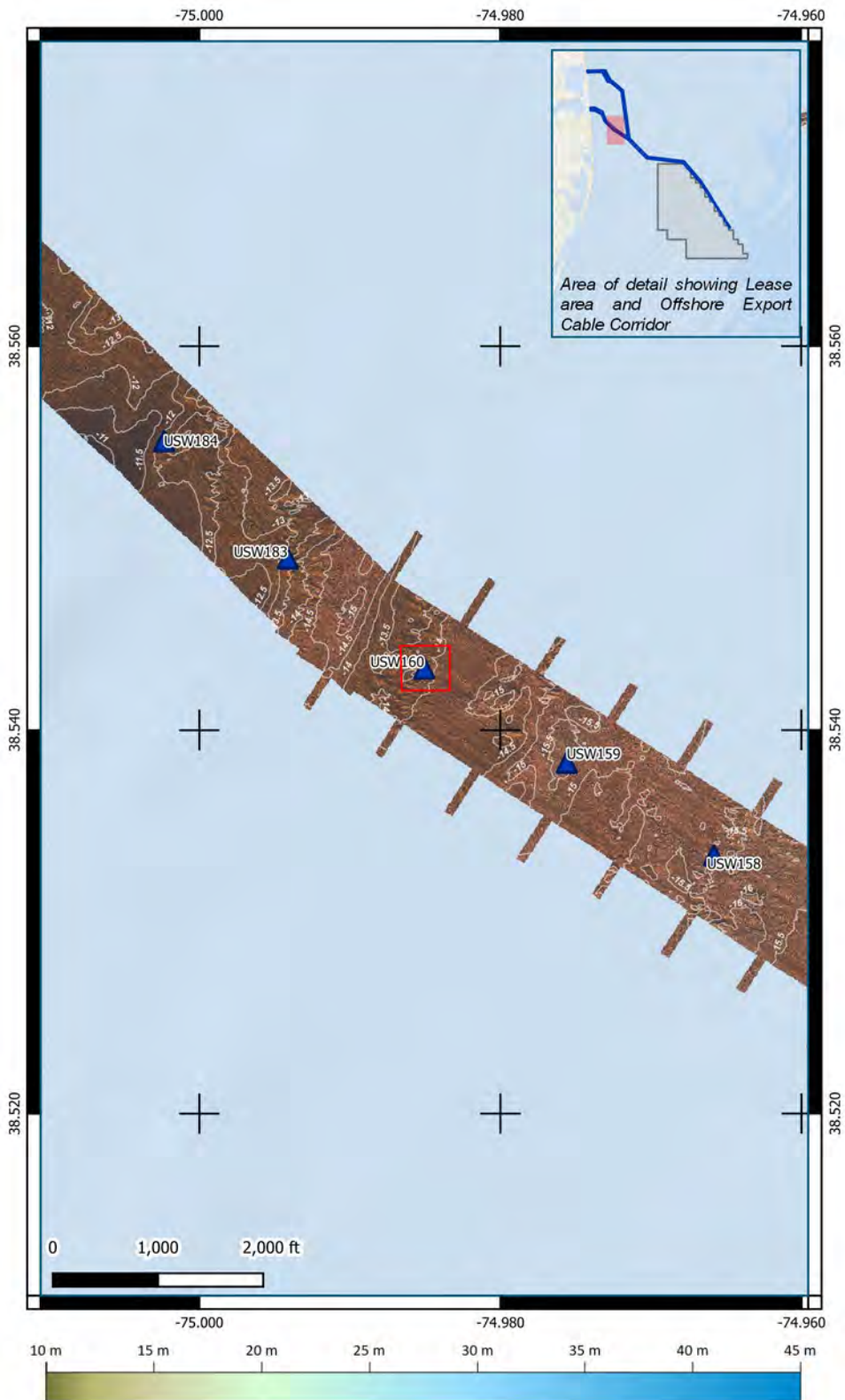


### Sample Photograph





### Map of Benthic Grab Location

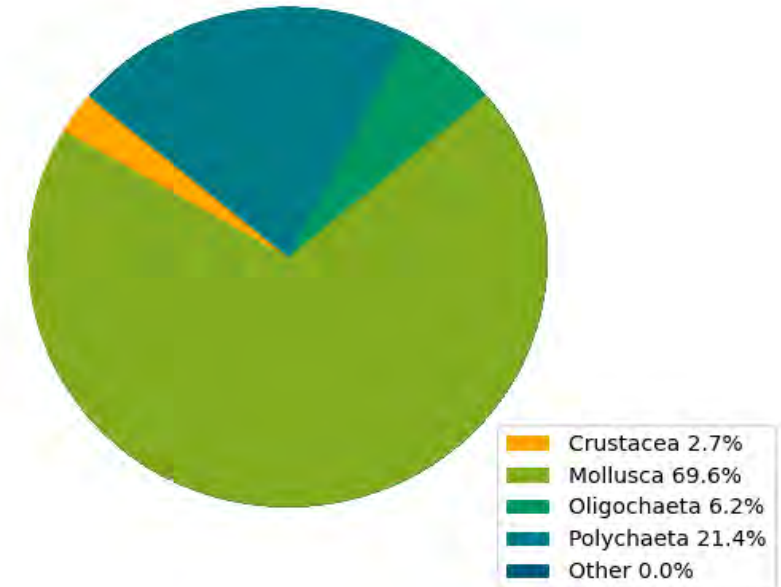


### Benthic Grab USW160

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 2800                            |
| Taxa Richness <sup>1</sup> :   |                     | 19                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

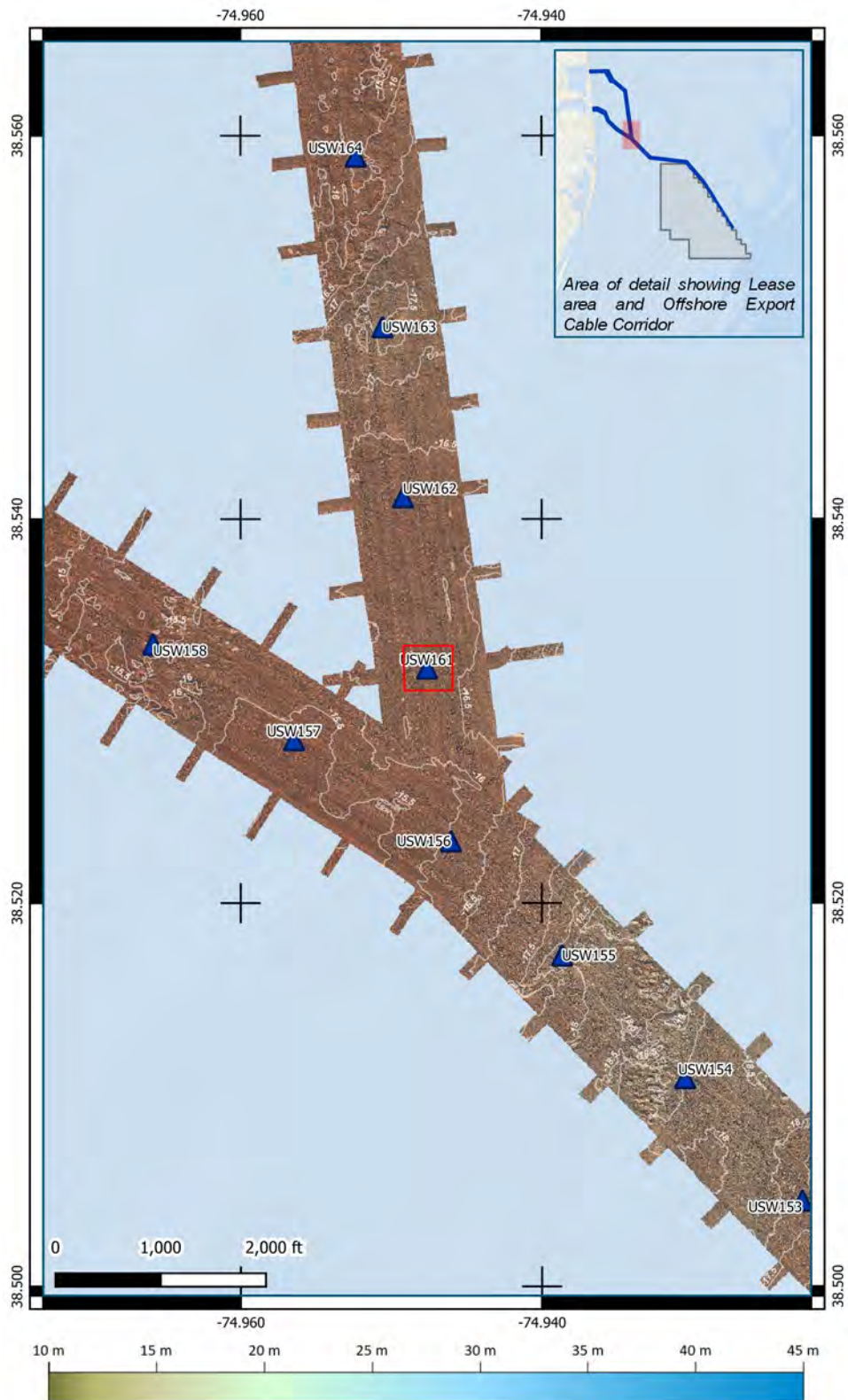


### Sample Photograph





### Map of Benthic Grab Location

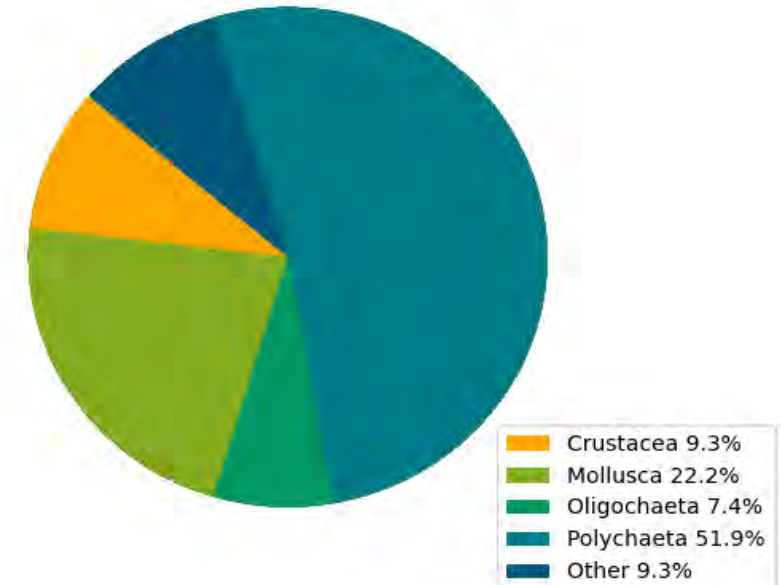


### Benthic Grab USW161

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1350                            |
| Taxa Richness <sup>1</sup> :   |                     | 17                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

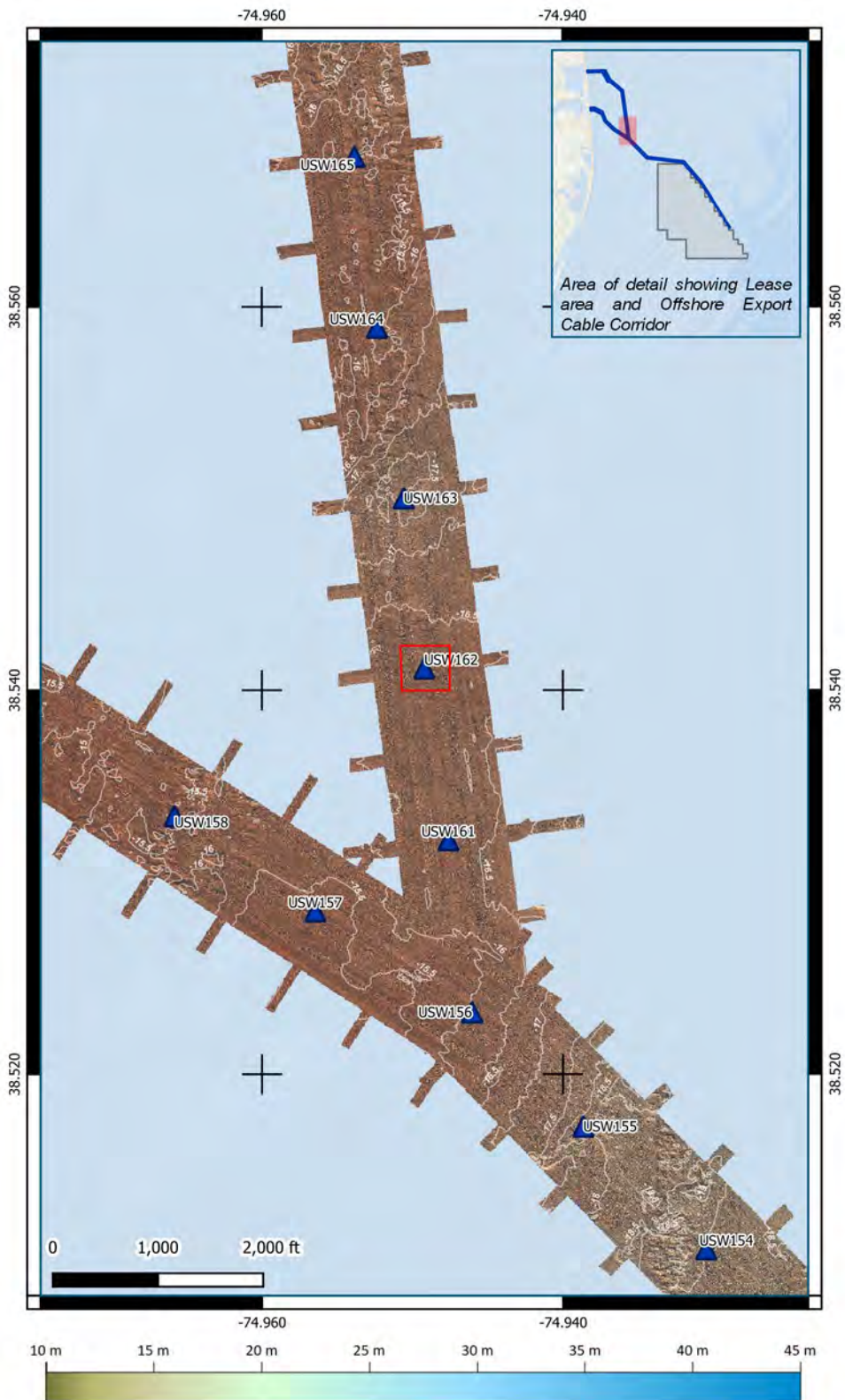


### Sample Photograph





### Map of Benthic Grab Location

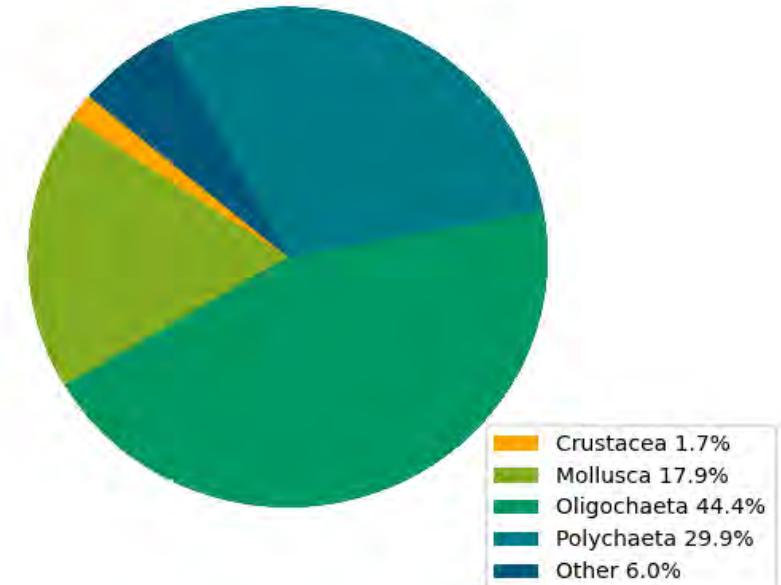


### Benthic Grab USW162

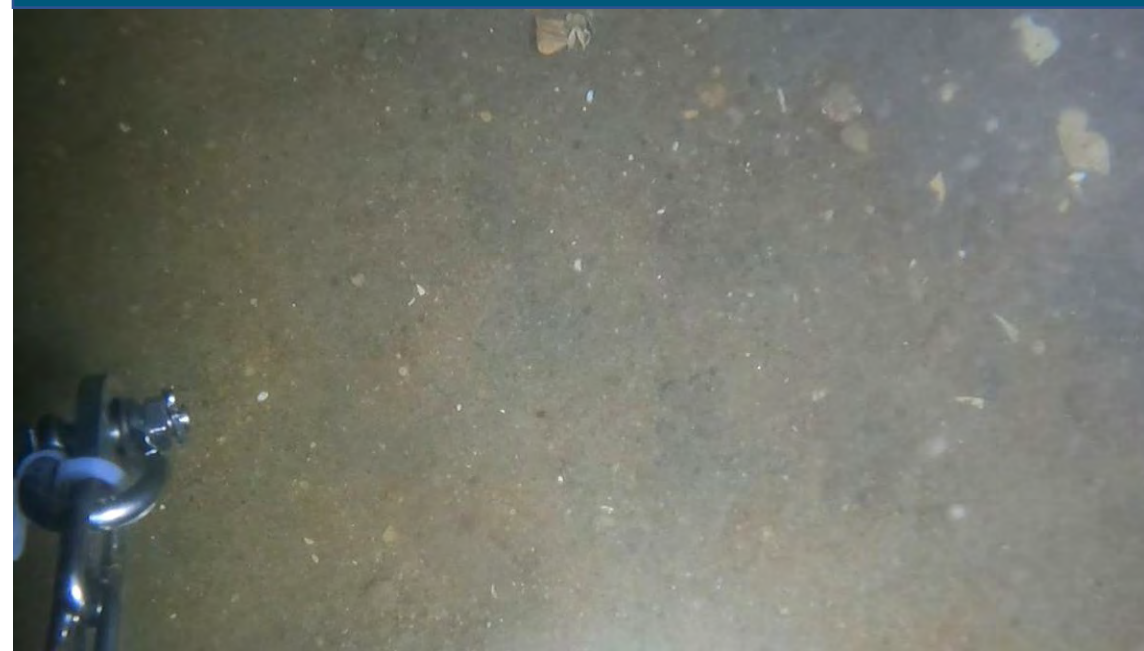
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 2925                            |
| Taxa Richness <sup>1</sup> :   |                     | 20                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

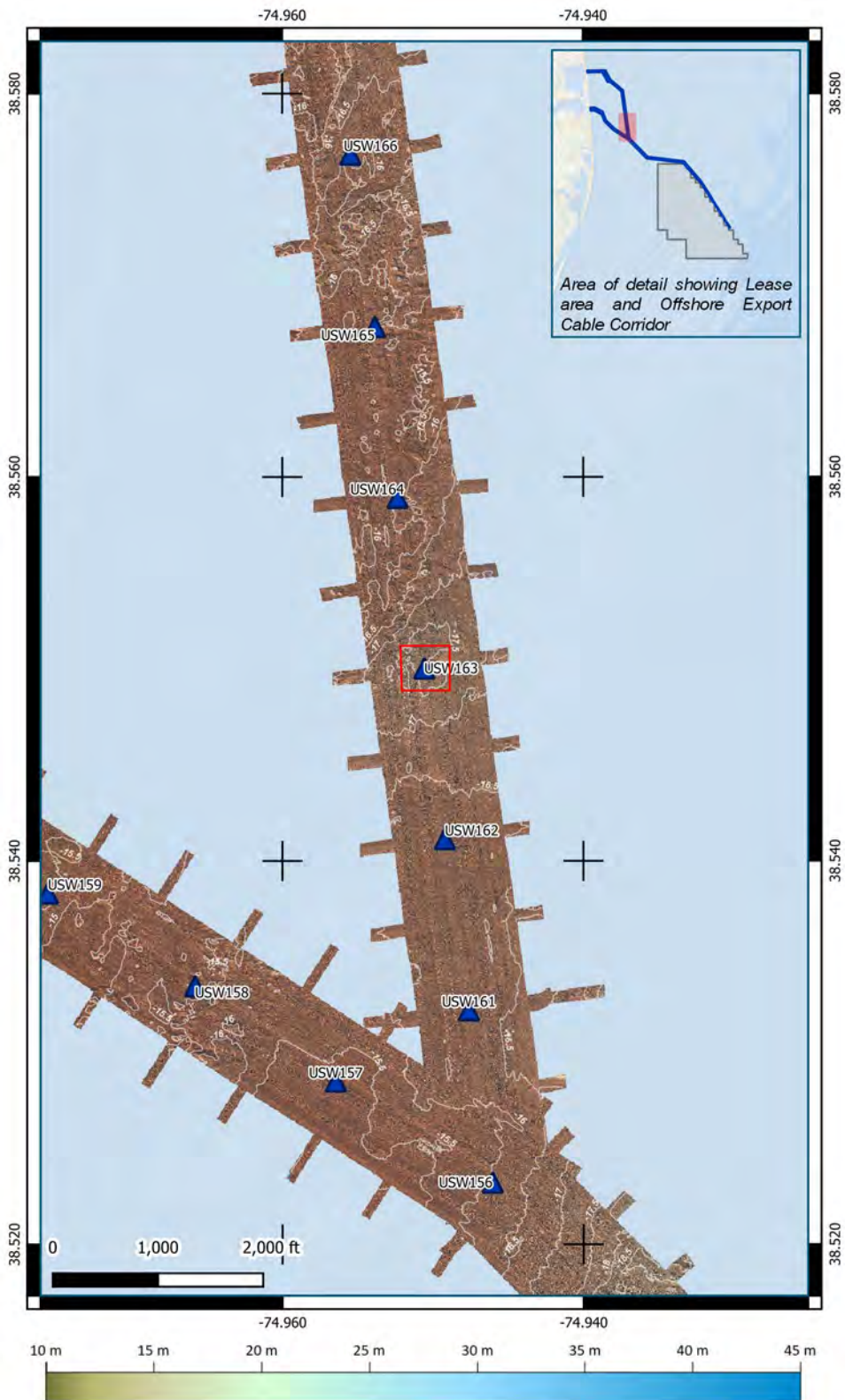


### Sample Photograph





### Map of Benthic Grab Location

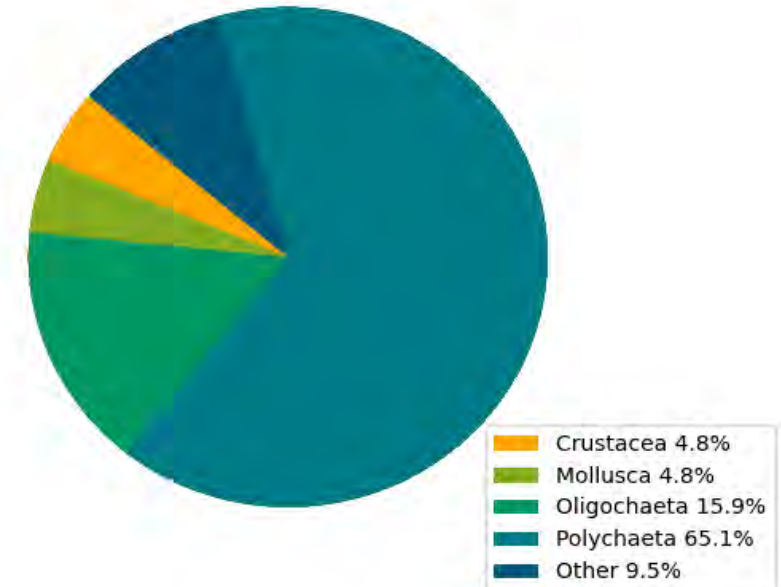


### Benthic Grab USW163

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1575                            |
| Taxa Richness <sup>1</sup> :   |                     | 20                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

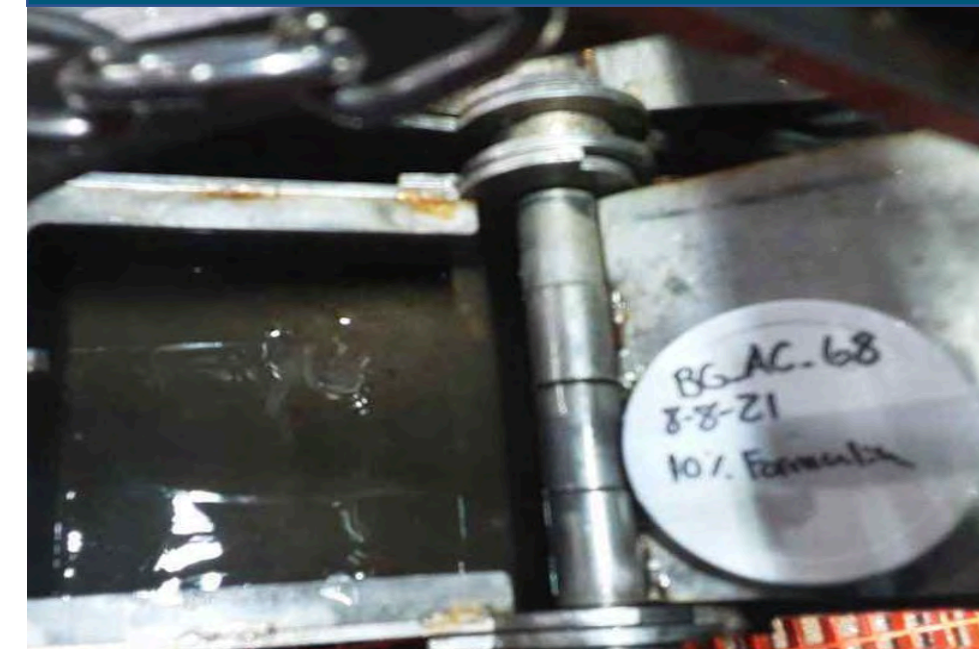
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

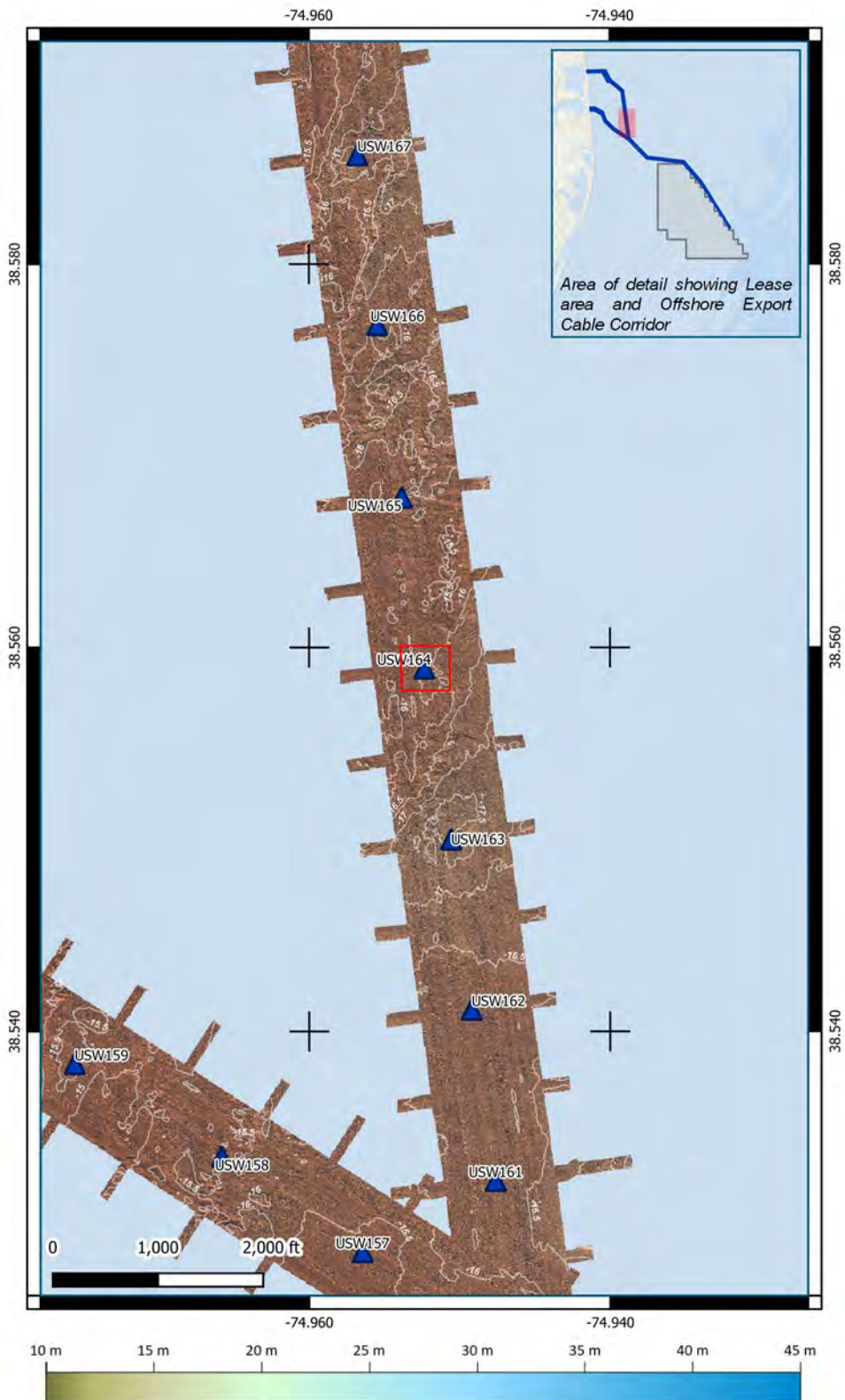


### Sample Photograph





### Map of Benthic Grab Location

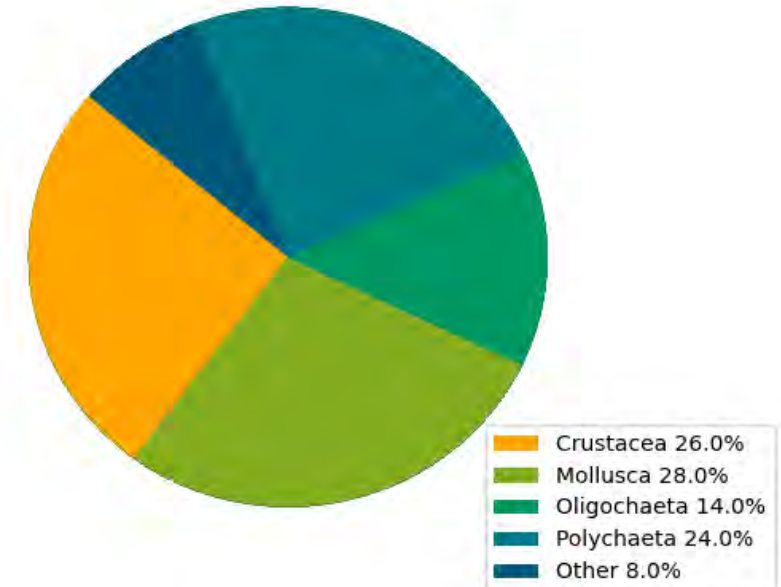


### Benthic Grab USW164

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1250                            |
| Taxa Richness <sup>1</sup> :   |                     | 21                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

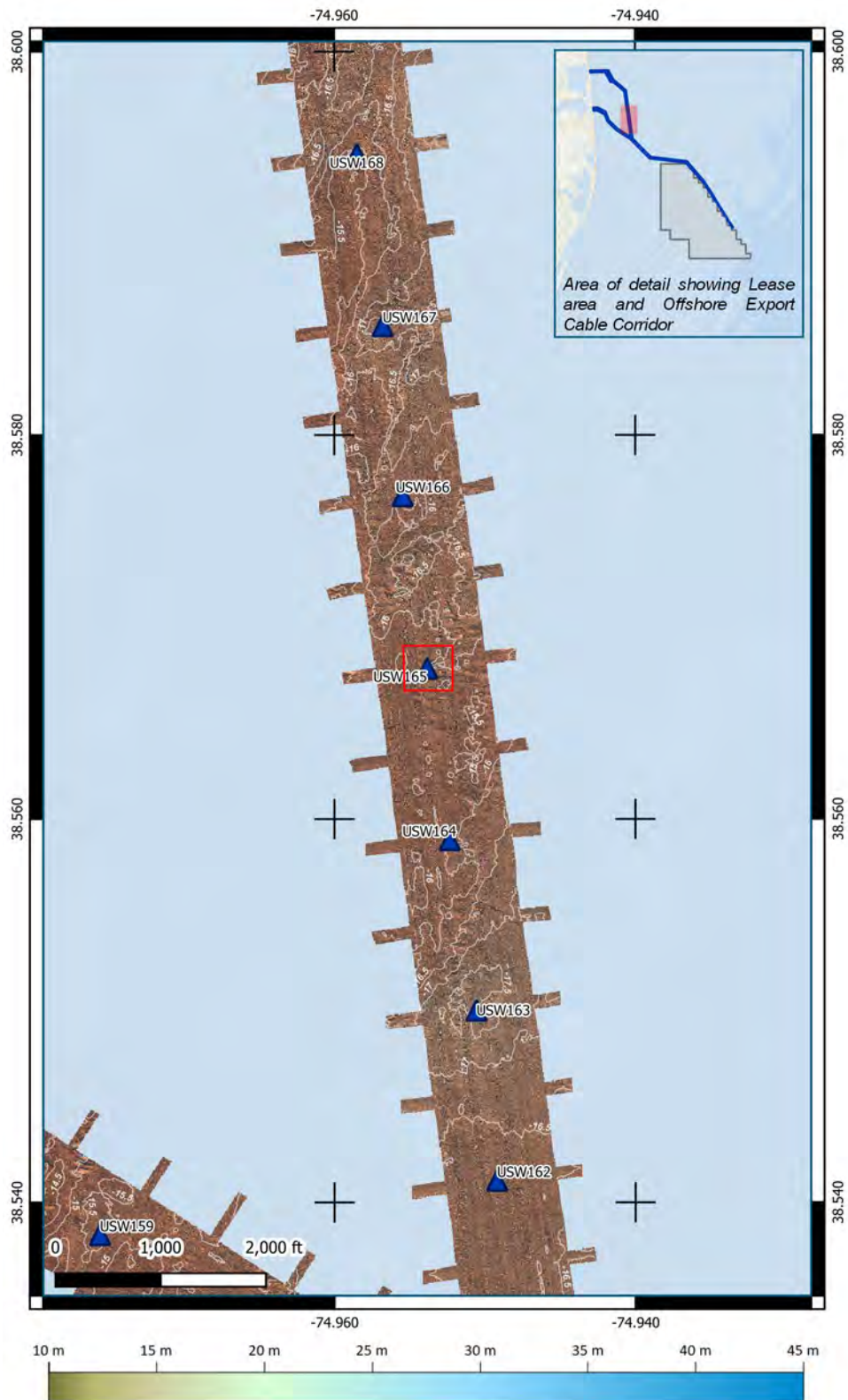


### Sample Photograph





### Map of Benthic Grab Location

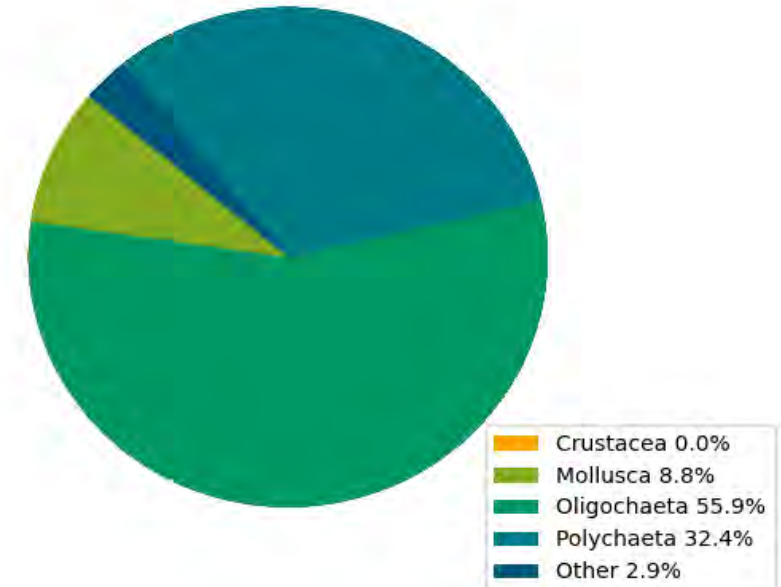


### Benthic Grab USW165

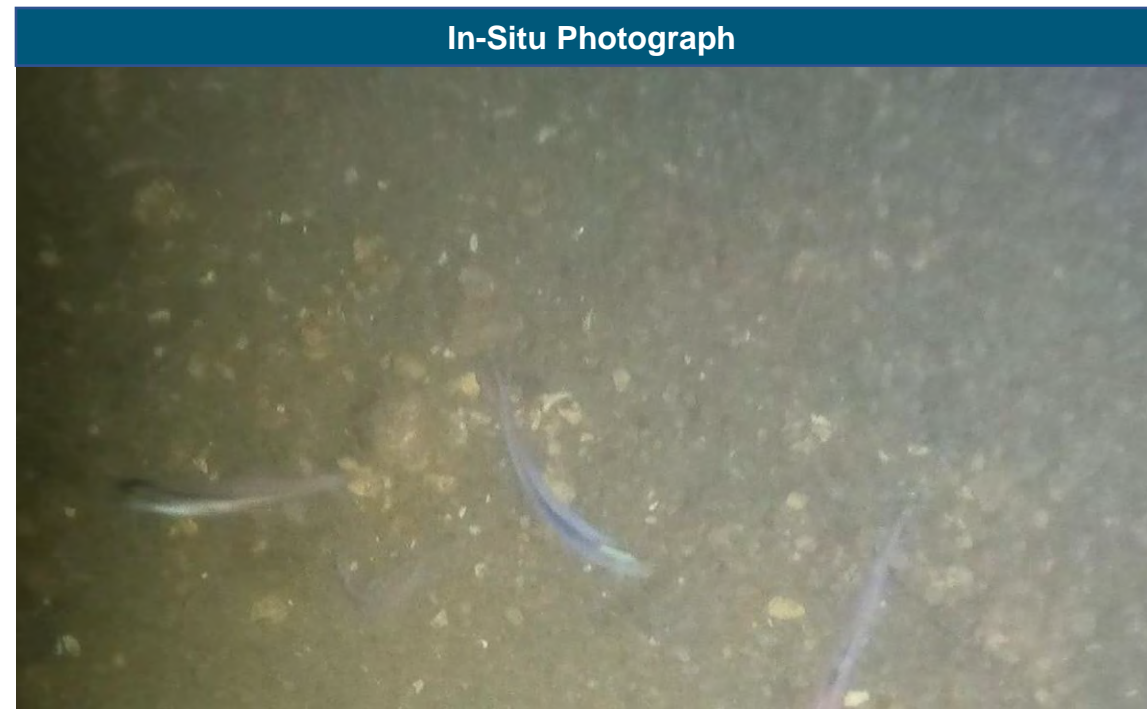
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 850                             |
| Taxa Richness <sup>1</sup> :   |                     | 13                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

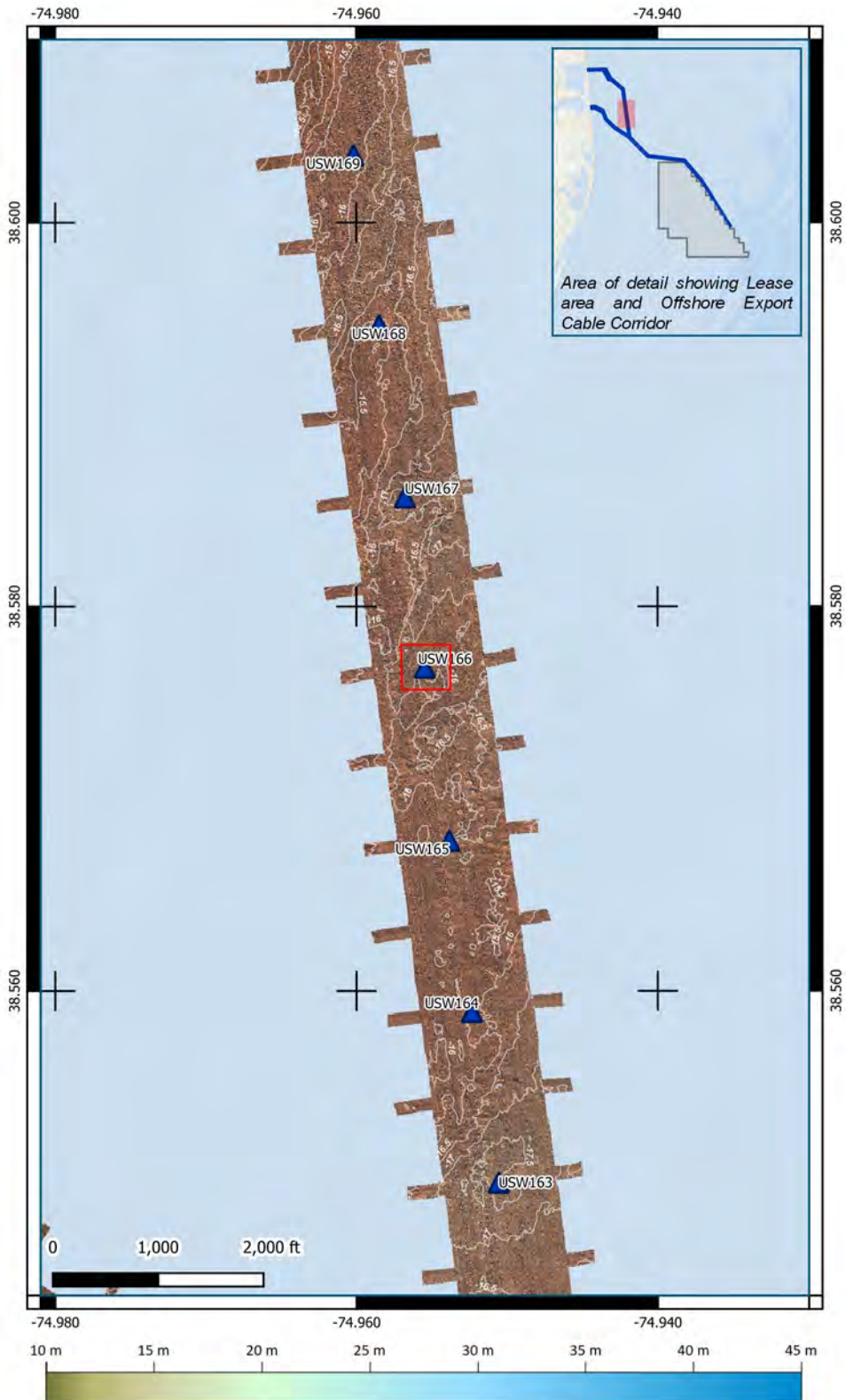


### Sample Photograph





### Map of Benthic Grab Location

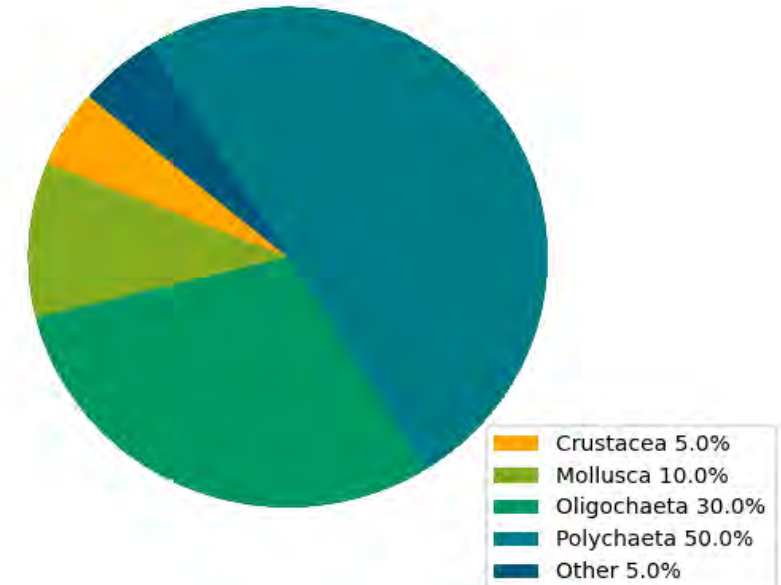


### Benthic Grab USW166

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 500                             |
| Taxa Richness <sup>1</sup> :   |                     | 10                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

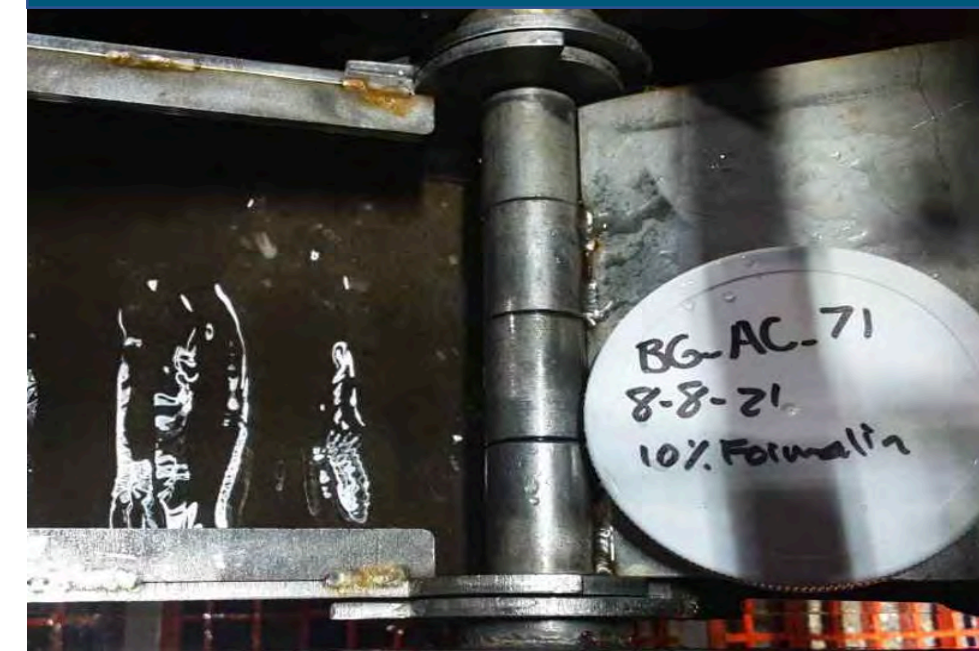
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

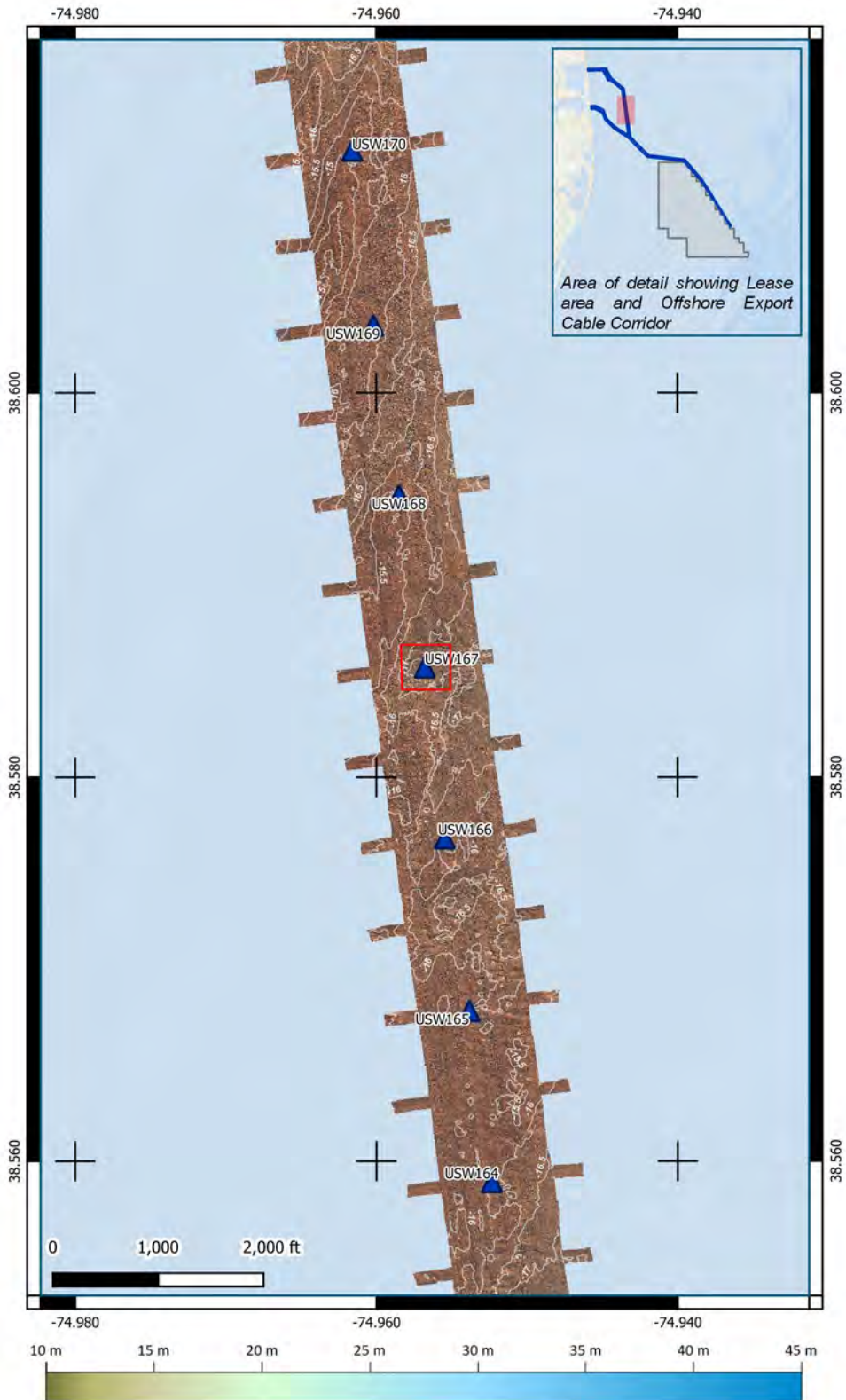


### Sample Photograph





### Map of Benthic Grab Location

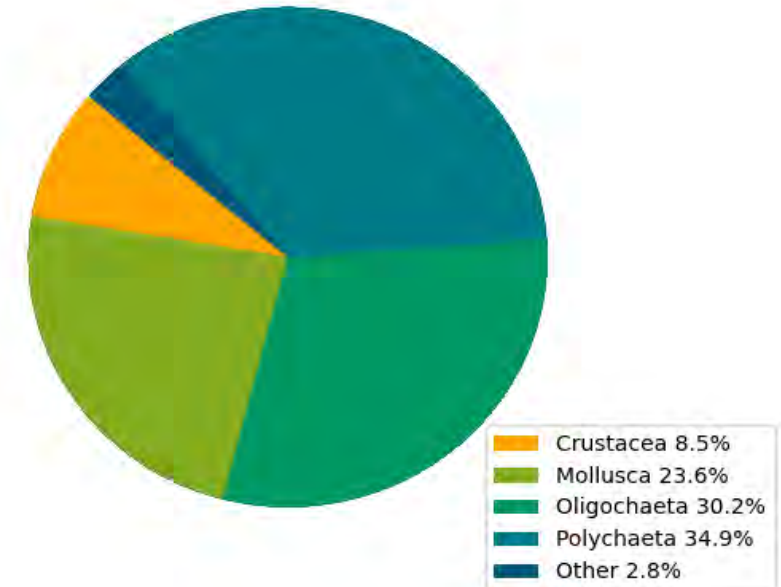


### Benthic Grab USW167

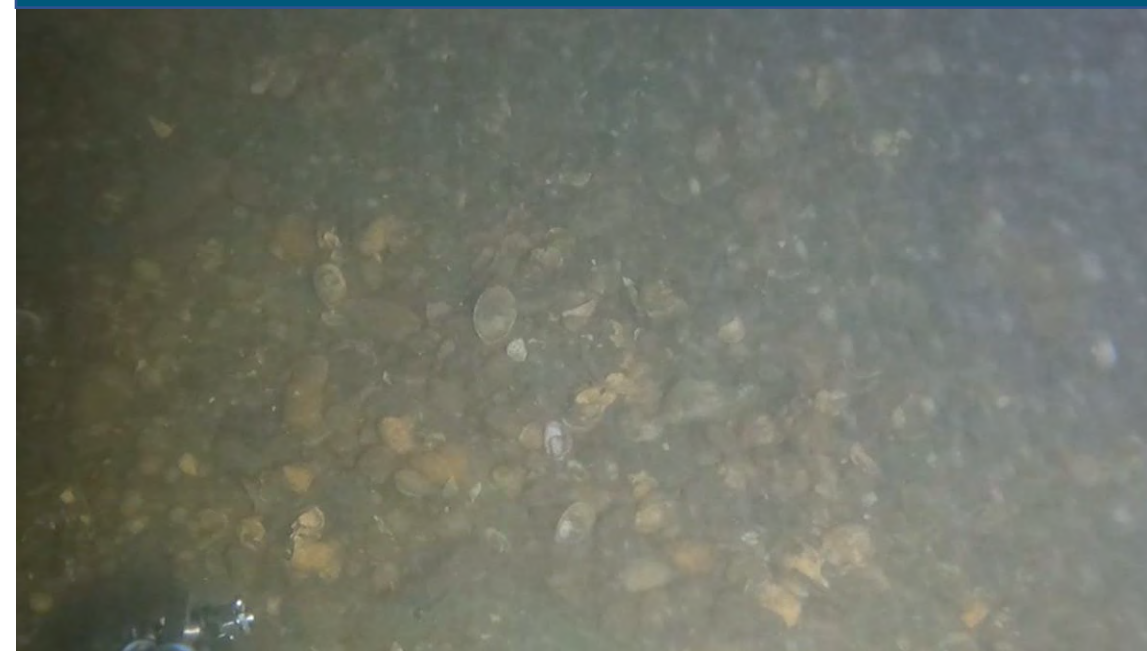
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 2650                            |
| Taxa Richness <sup>1</sup> :   |                     | 17                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

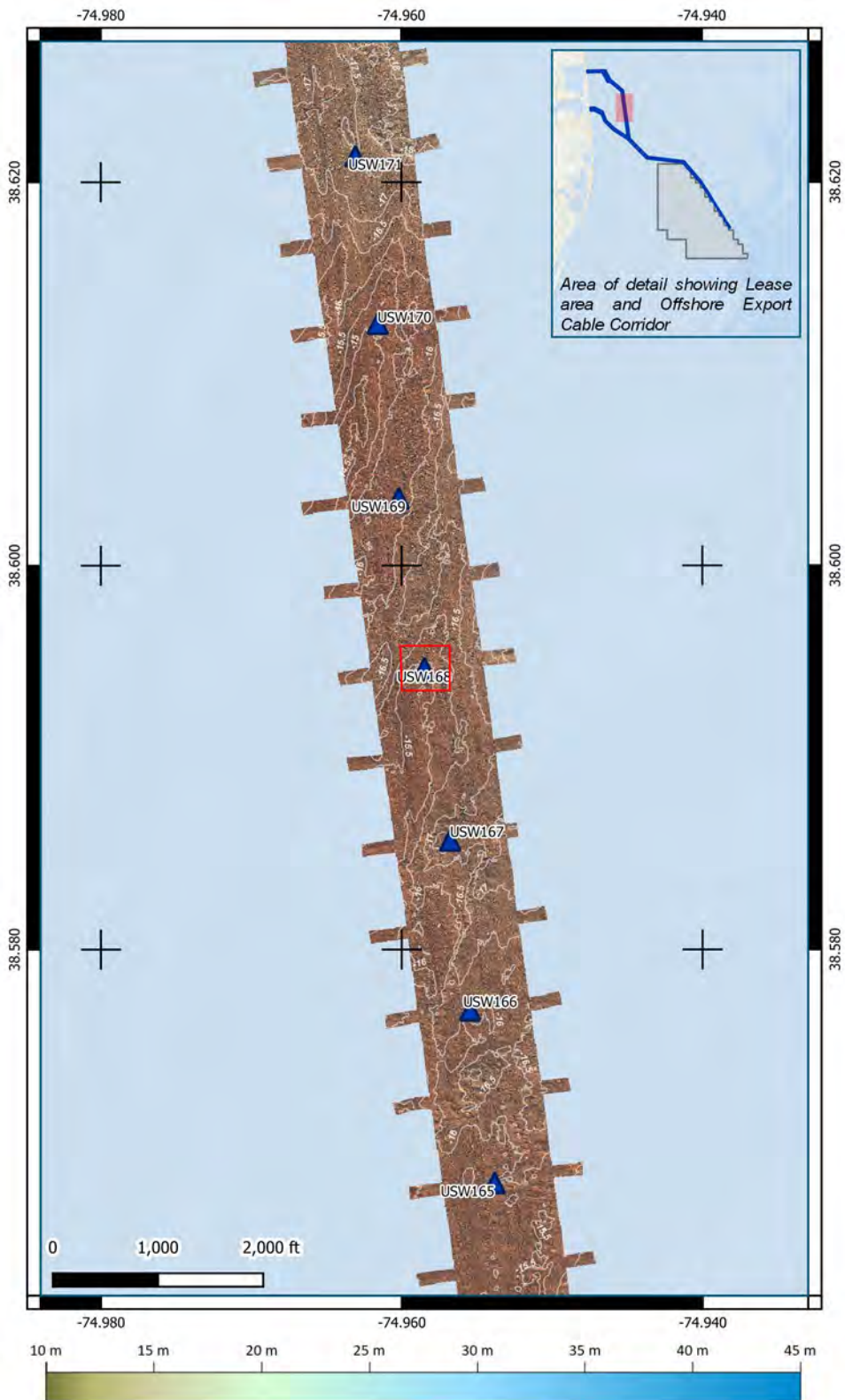


### Sample Photograph





### Map of Benthic Grab Location

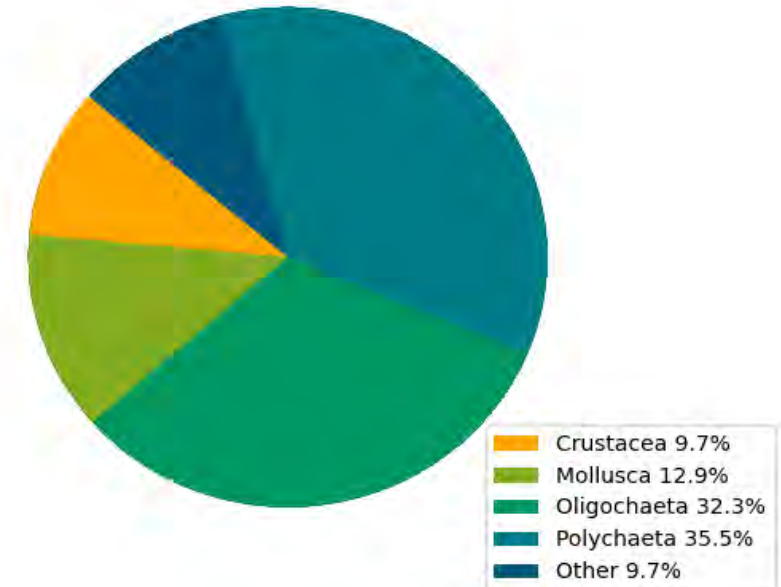


### Benthic Grab USW168

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 775                             |
| Taxa Richness <sup>1</sup> :   |                     | 12                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

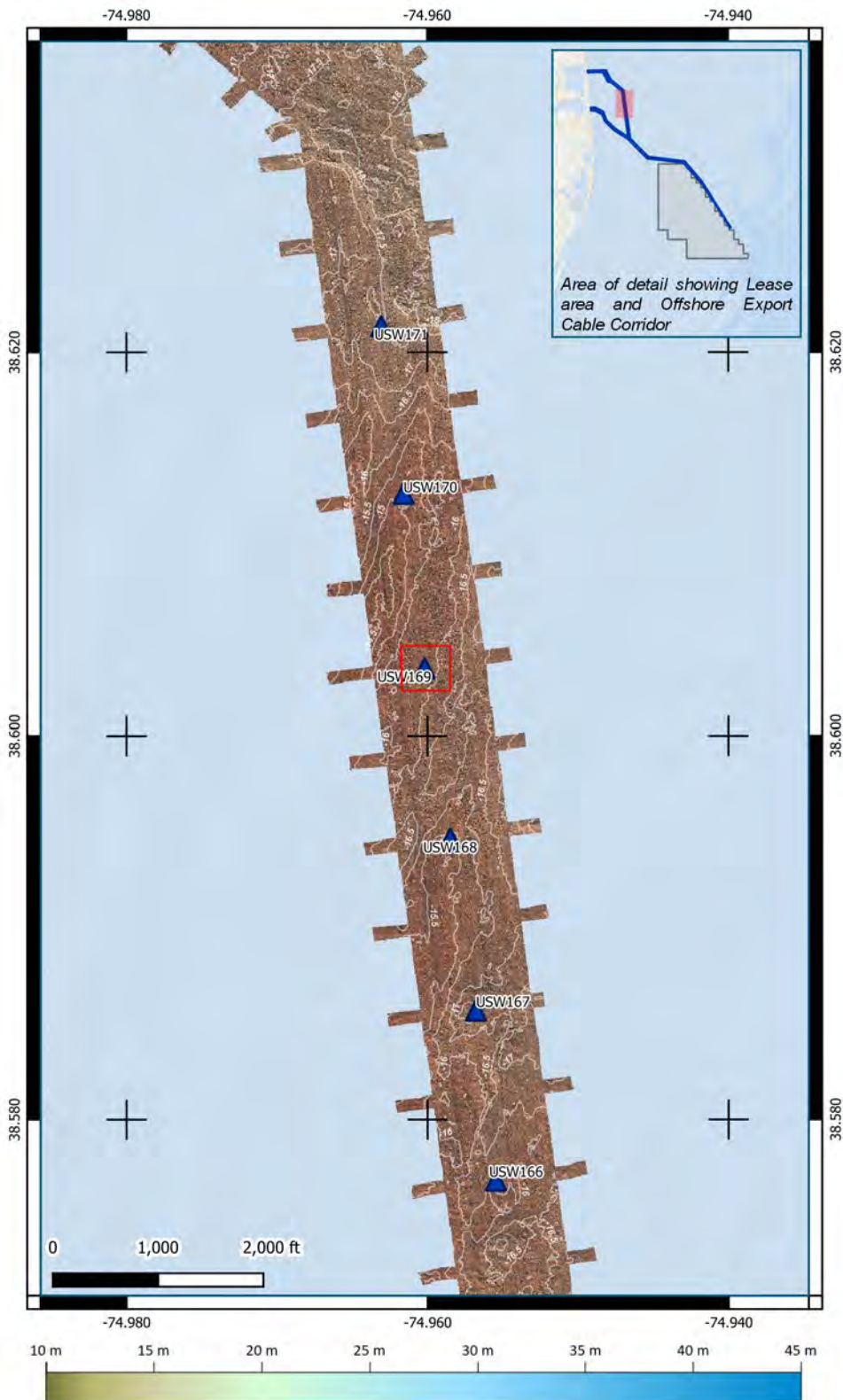


### Sample Photograph





### Map of Benthic Grab Location

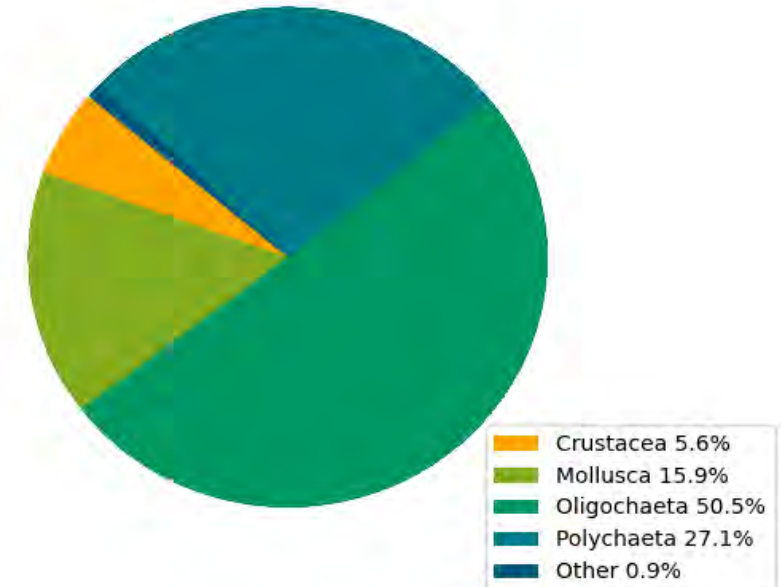


### Benthic Grab USW169

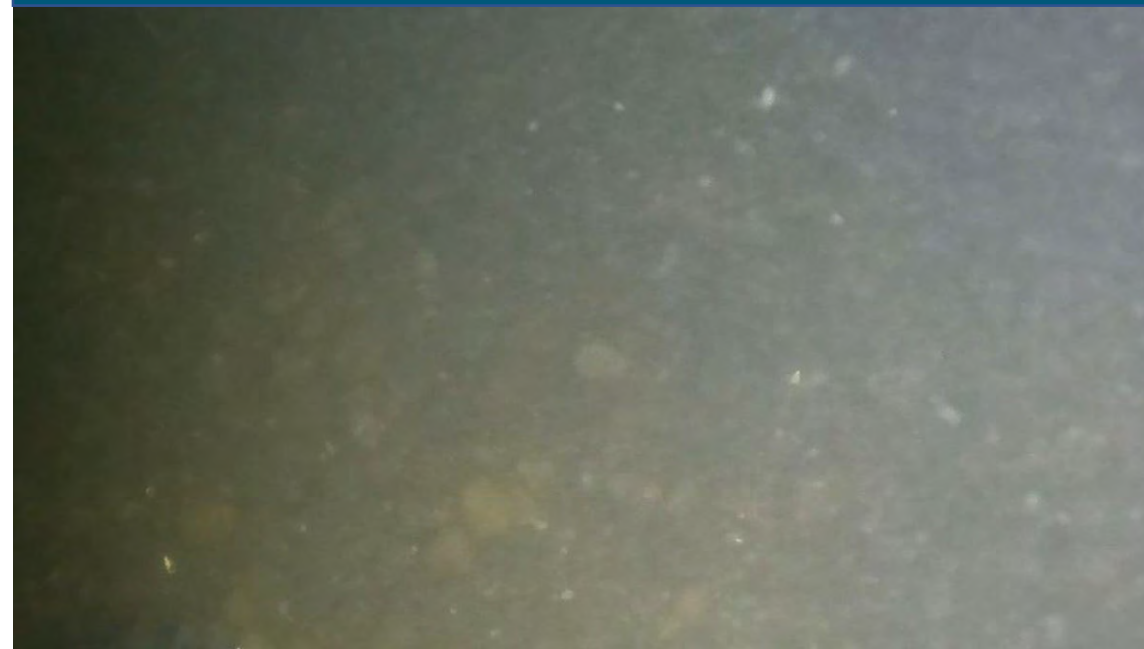
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 2675                            |
| Taxa Richness <sup>1</sup> :   |                     | 23                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

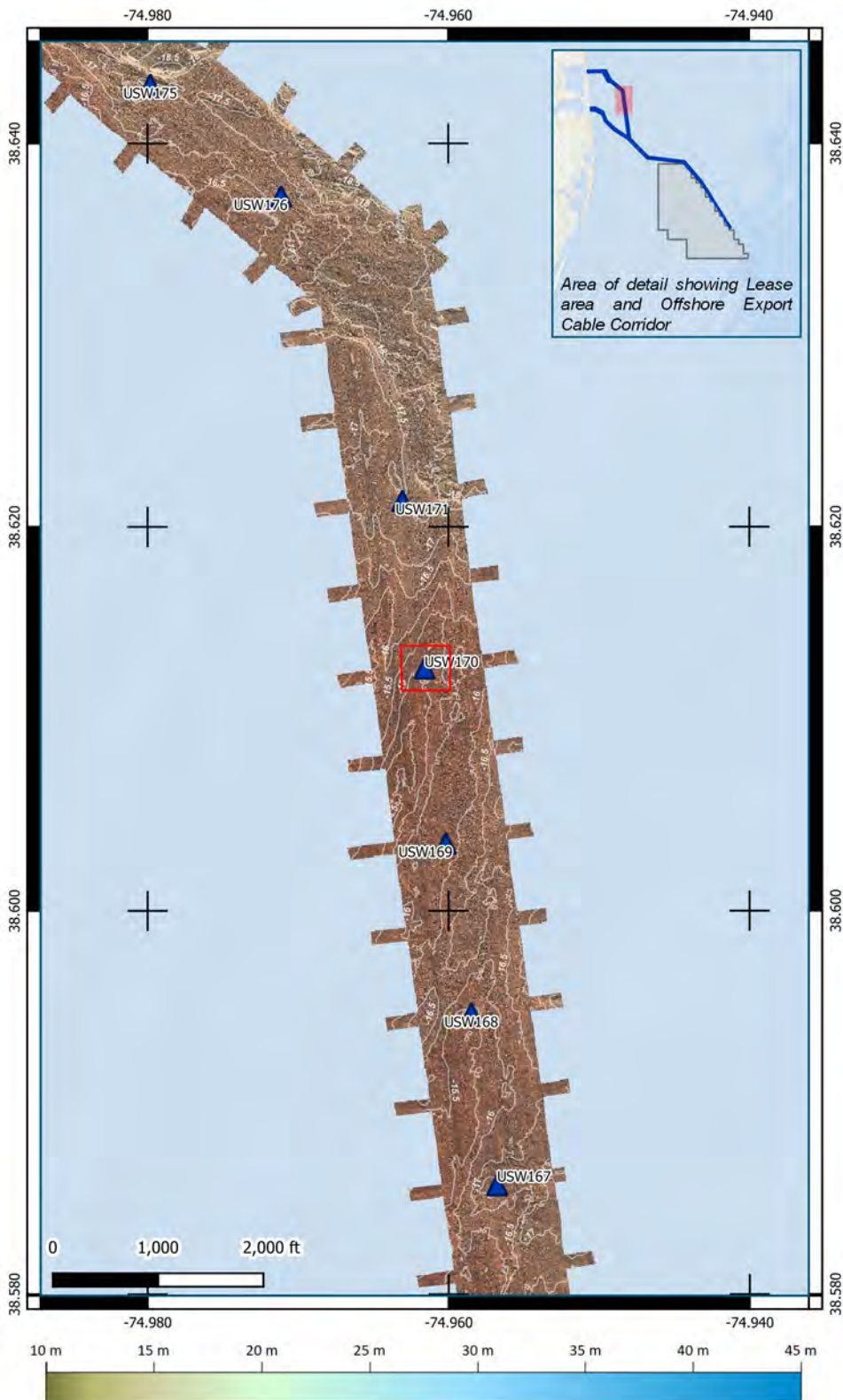


### Sample Photograph





### Map of Benthic Grab Location

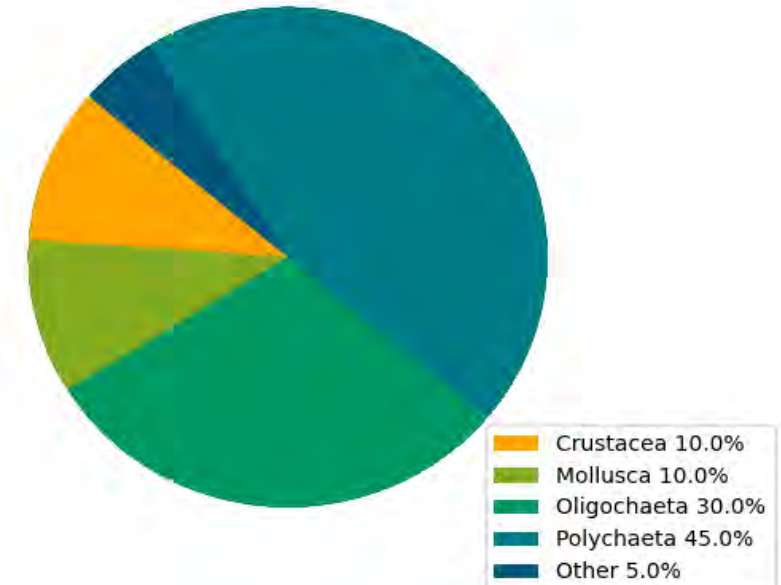


### Benthic Grab USW170

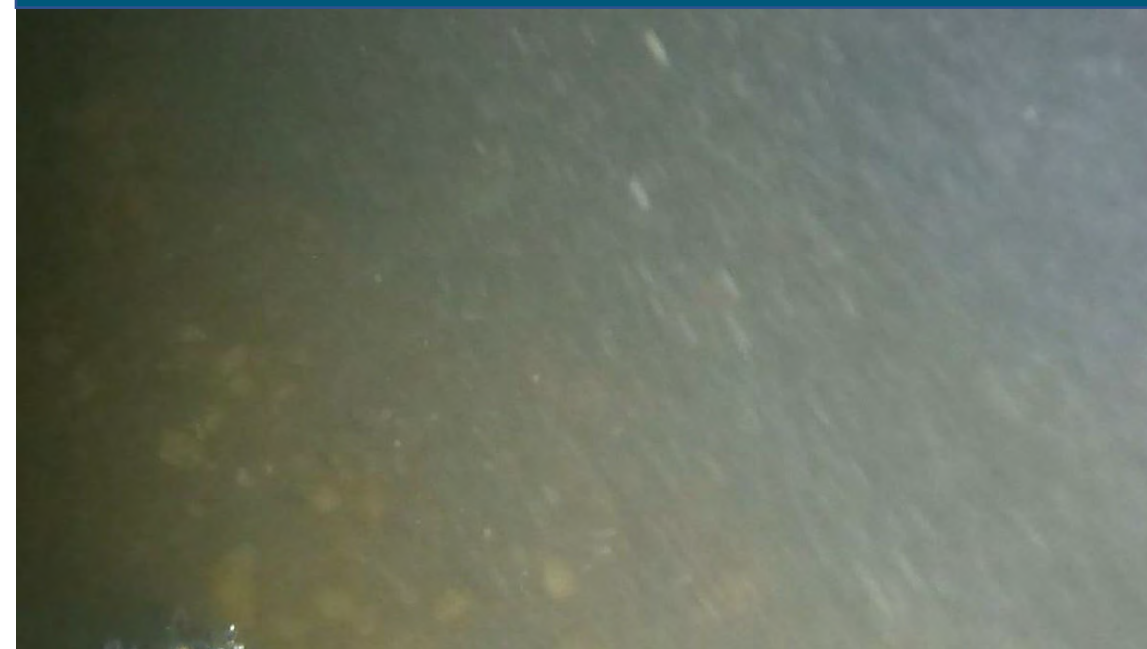
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel                          |
|  | Substrate Subgroup: | Pebble/Granule                  |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 500                             |
| Taxa Richness <sup>1</sup> :   |                     | 13                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

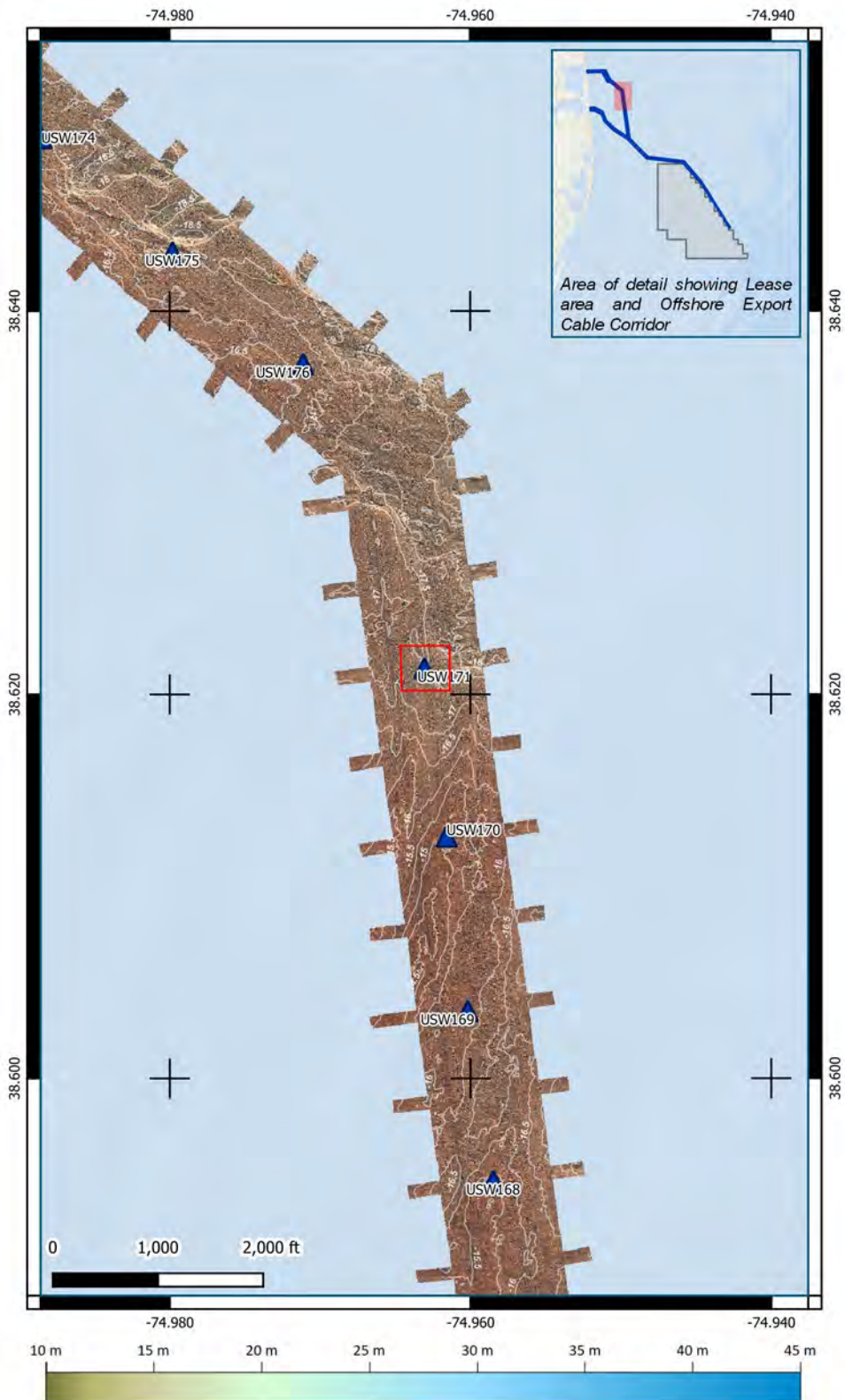


### Sample Photograph





### Map of Benthic Grab Location

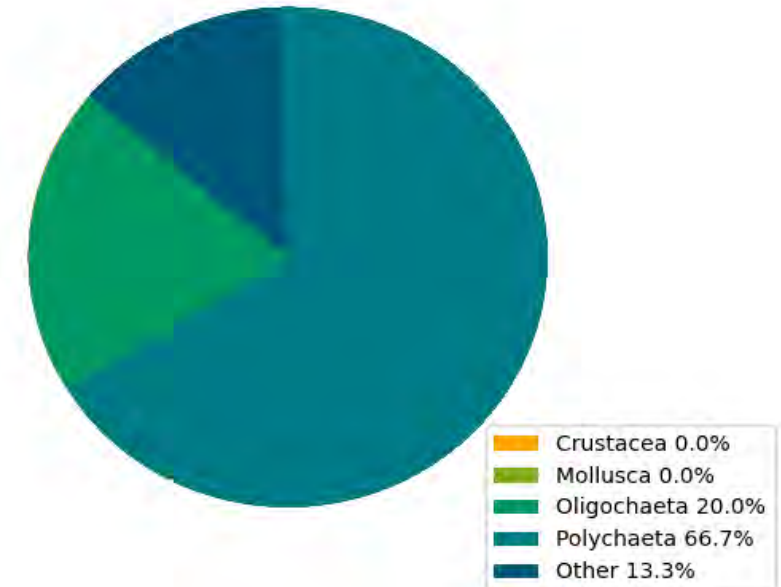


### Benthic Grab USW171

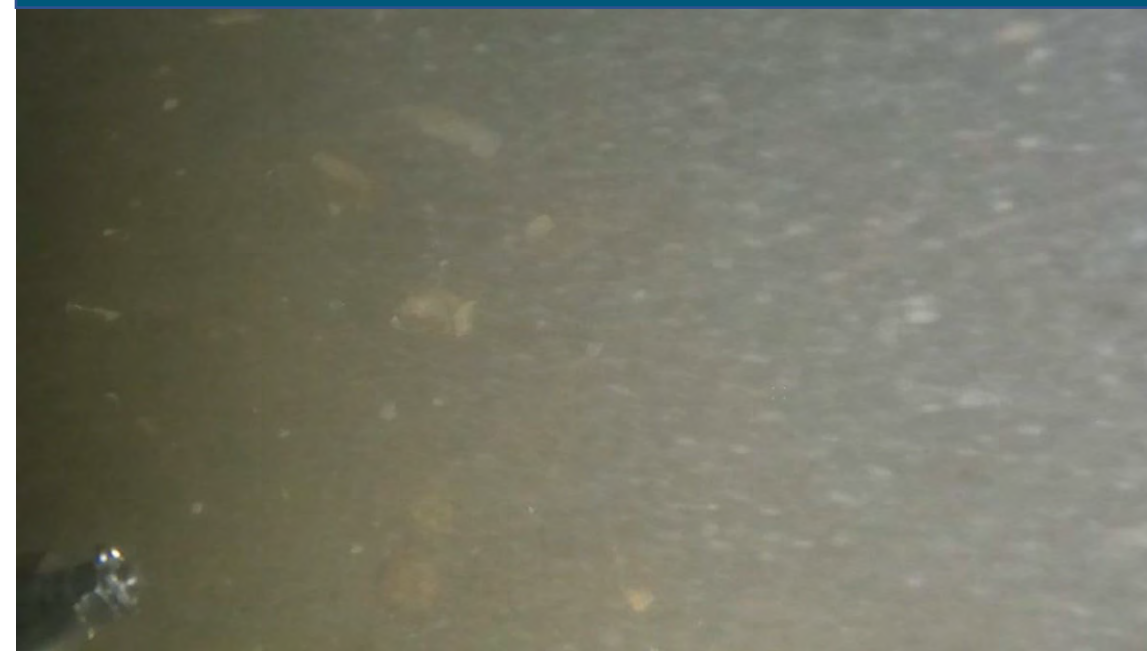
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 375                             |
| Taxa Richness <sup>1</sup> :   |                     | 8                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph



### Sample Photograph





### Map of Benthic Grab Location

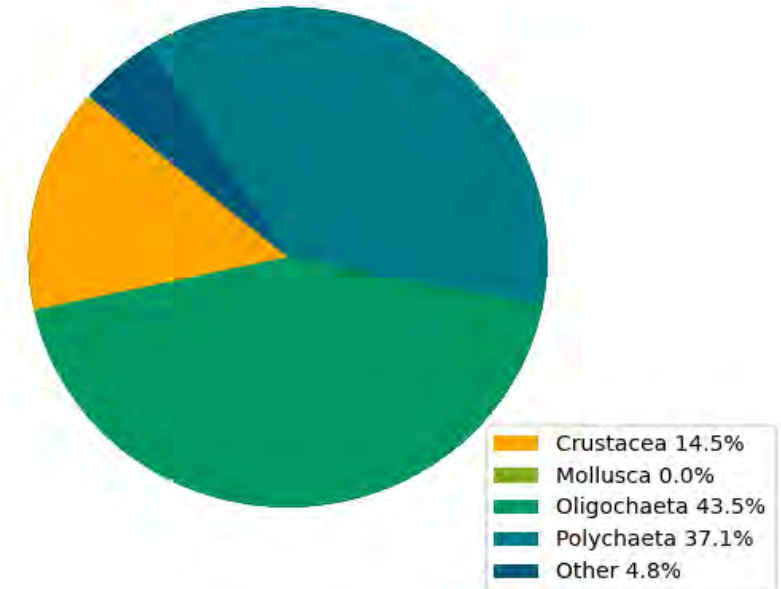


### Benthic Grab USW173

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1550                          |
| Taxa Richness <sup>1</sup> :   |                     | 16                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

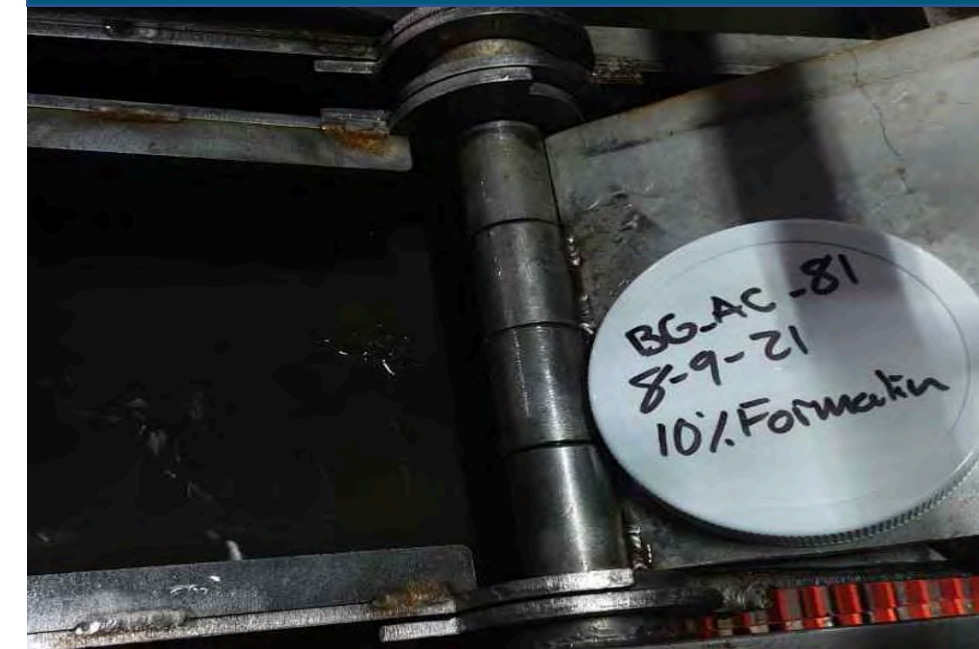
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

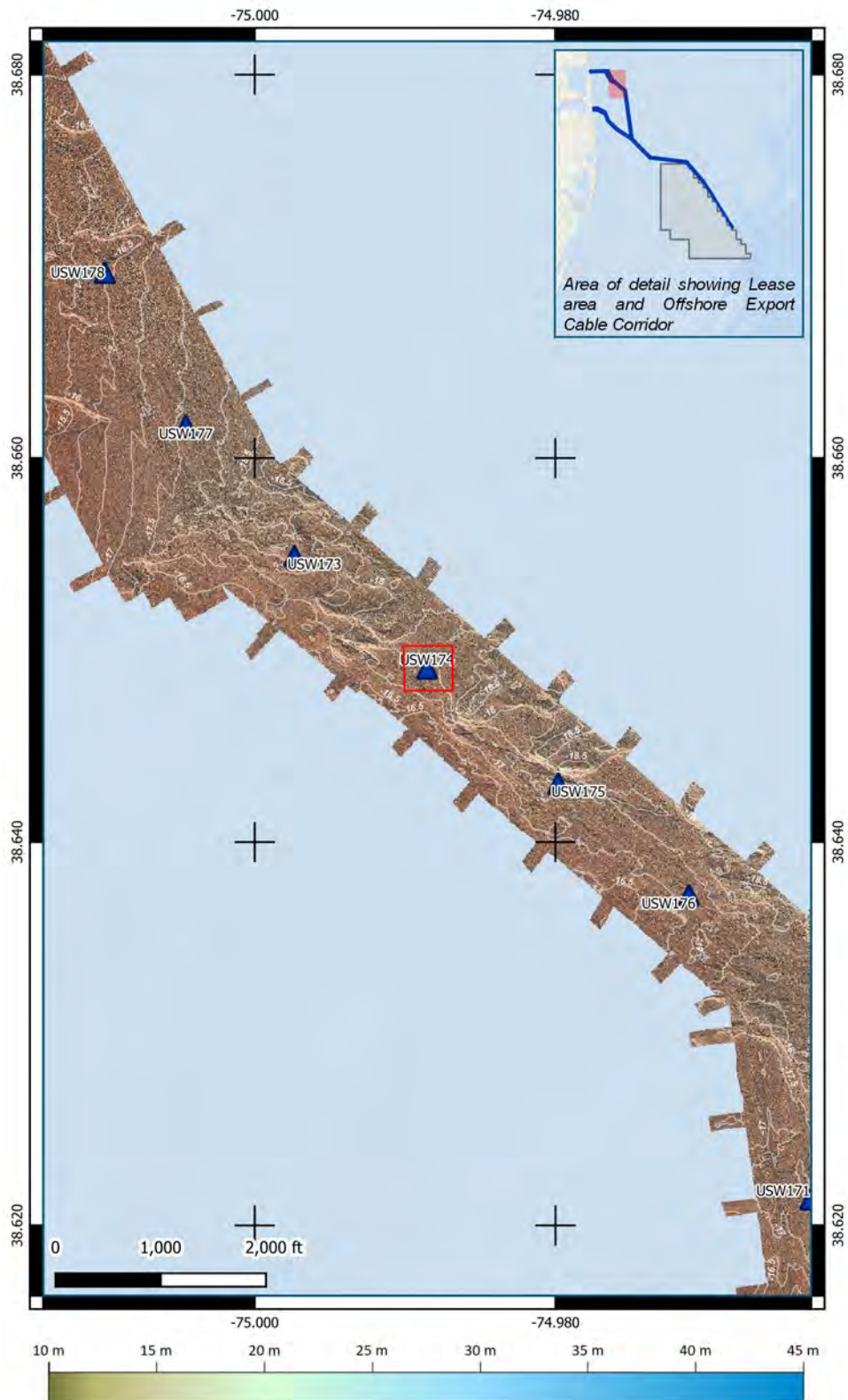


### Sample Photograph





### Map of Benthic Grab Location

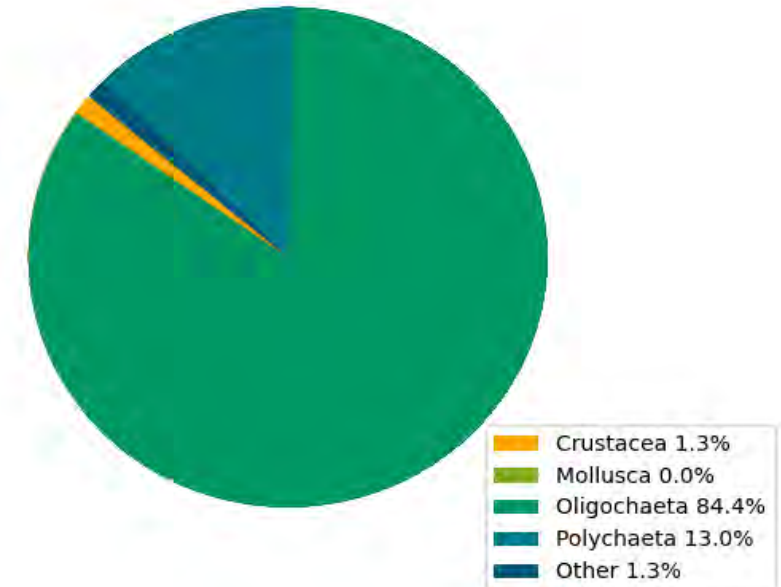


### Benthic Grab USW174

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Very Coarse/Coarse Sand       |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1925                          |
| Taxa Richness <sup>1</sup> :   |                     | 13                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

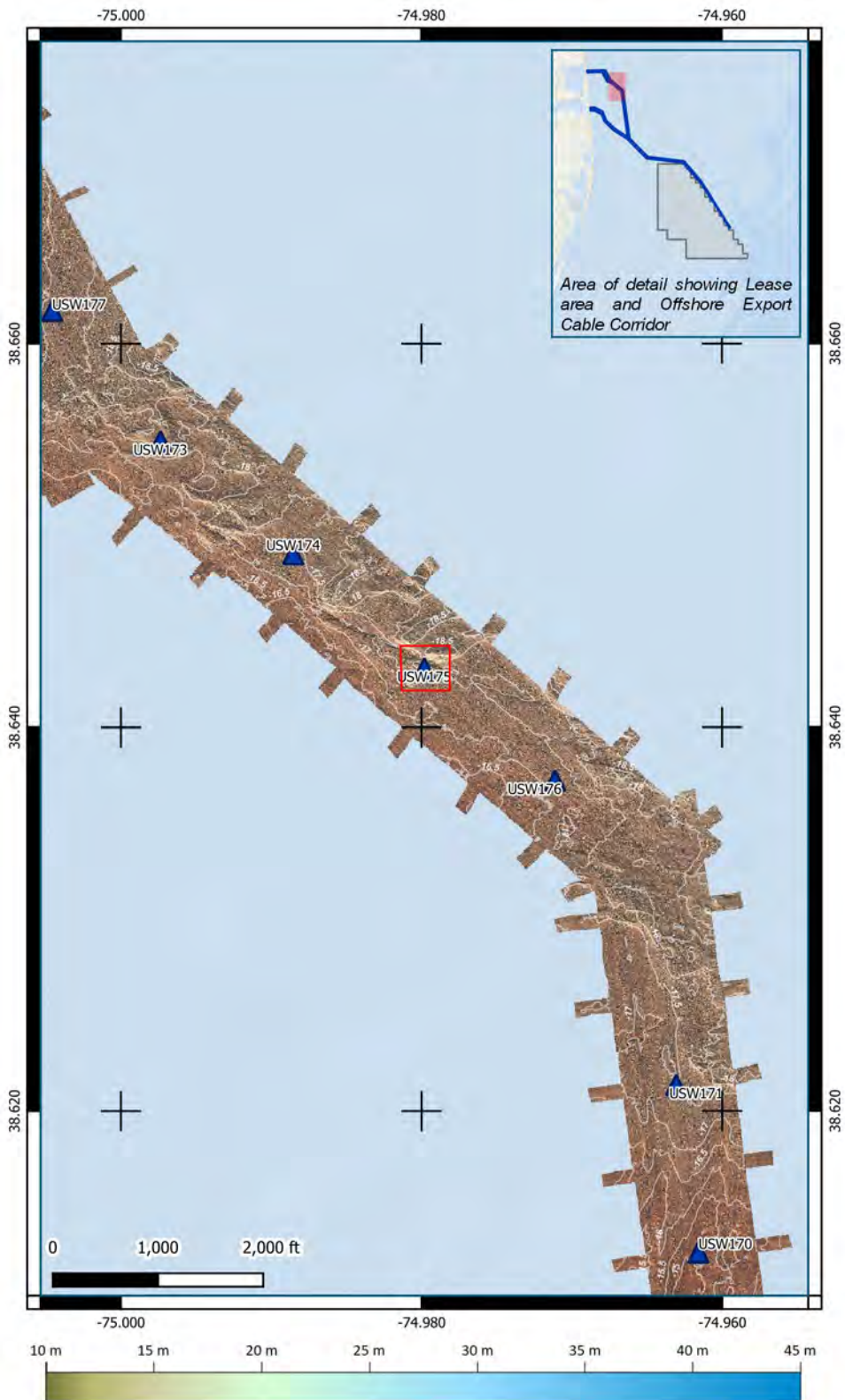


### Sample Photograph





### Map of Benthic Grab Location

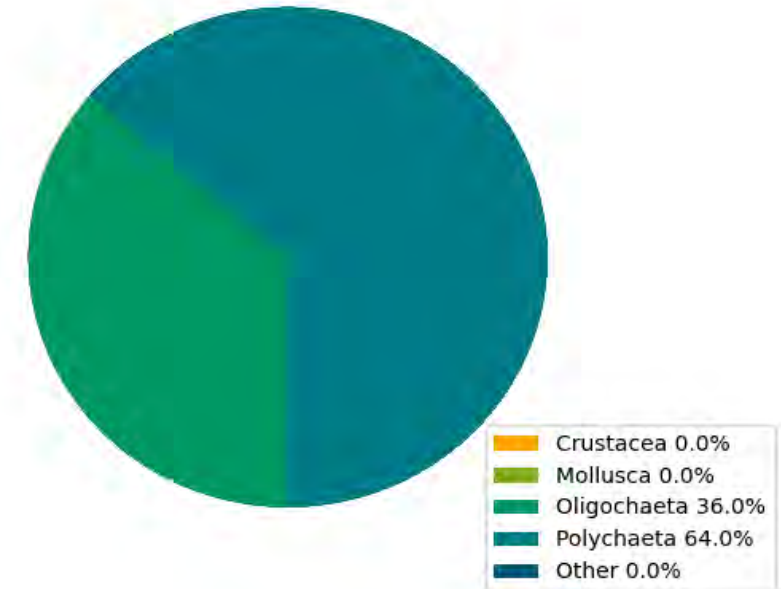


### Benthic Grab USW175

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 625                             |
| Taxa Richness <sup>1</sup> :   |                     | 8                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph



### Sample Photograph





### Map of Benthic Grab Location

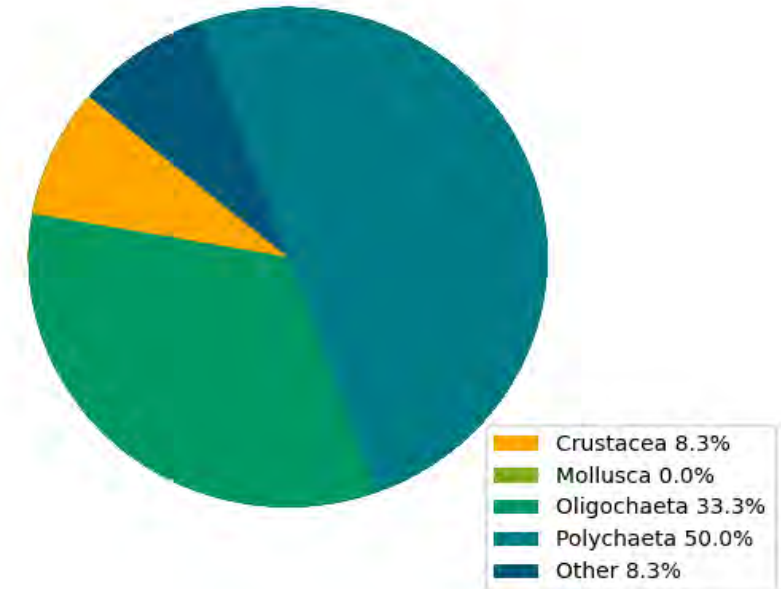


### Benthic Grab USW176

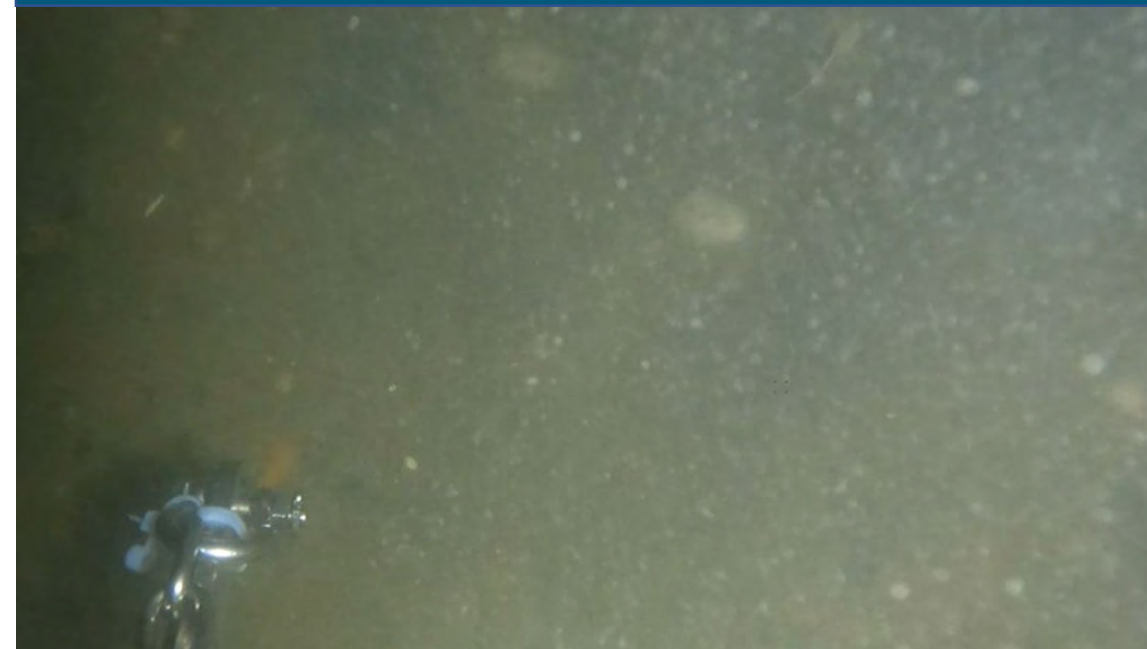
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 300                             |
| Taxa Richness <sup>1</sup> :   |                     | 7                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

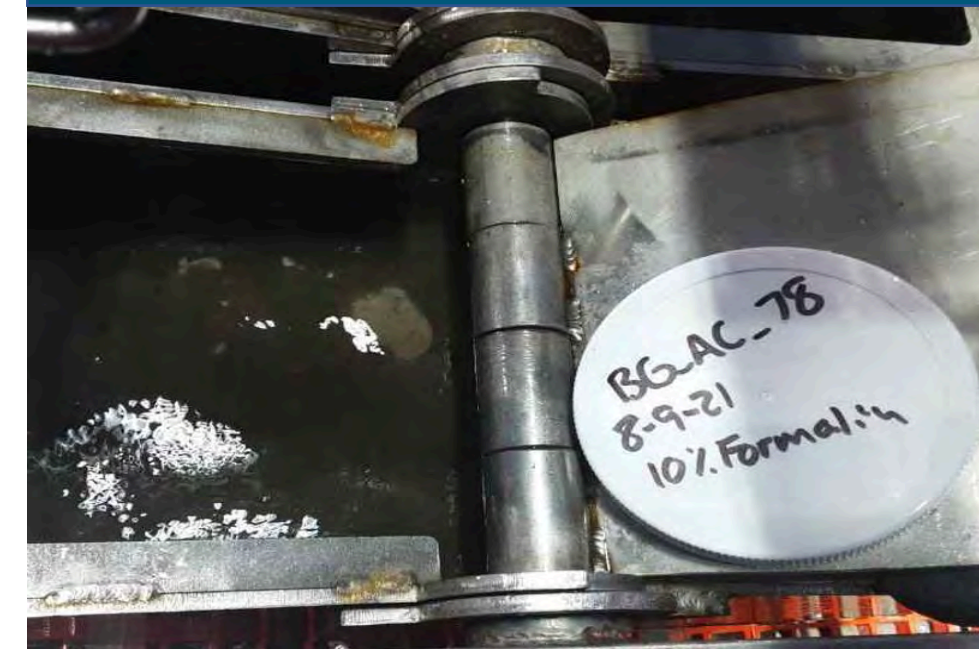
### Benthic Organism Density by Taxa Group



### In-Situ Photograph



### Sample Photograph





### Map of Benthic Grab Location

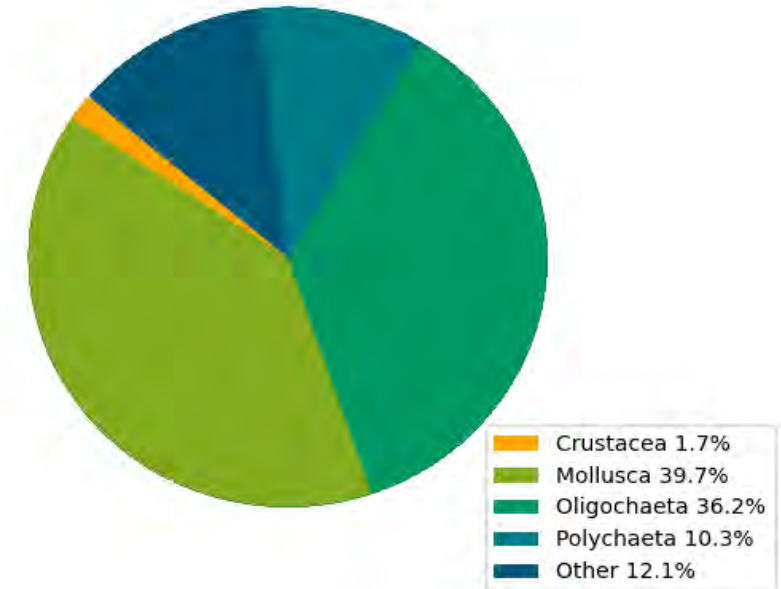


### Benthic Grab USW177

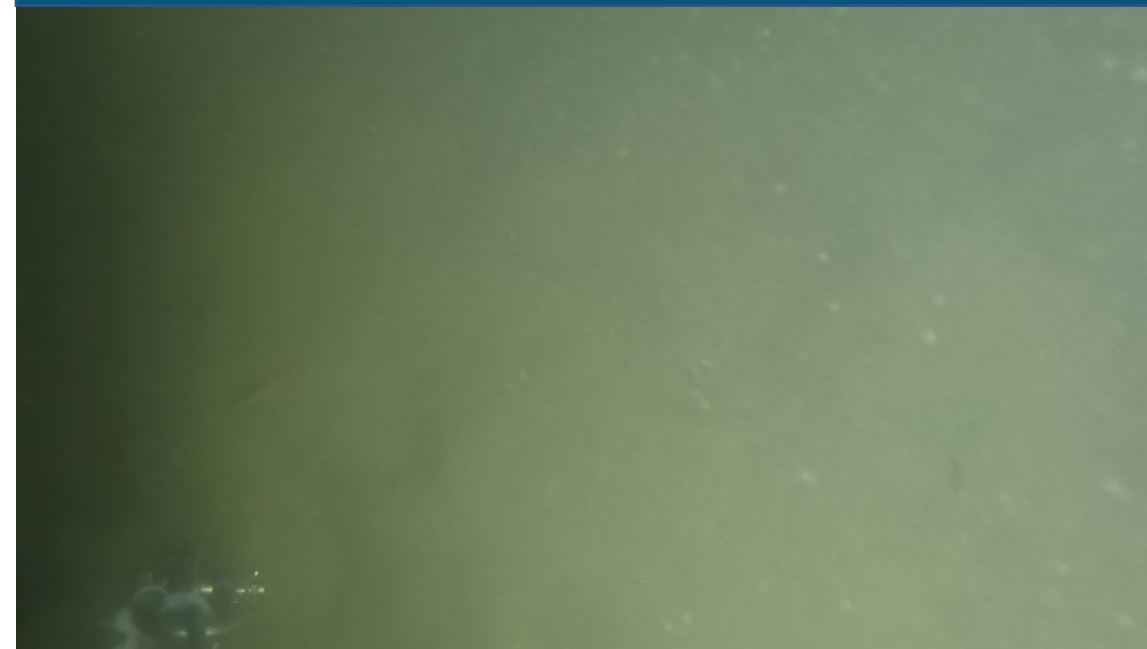
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Fine/Very Fine Sand           |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1450                          |
| Taxa Richness <sup>1</sup> :   |                     | 13                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

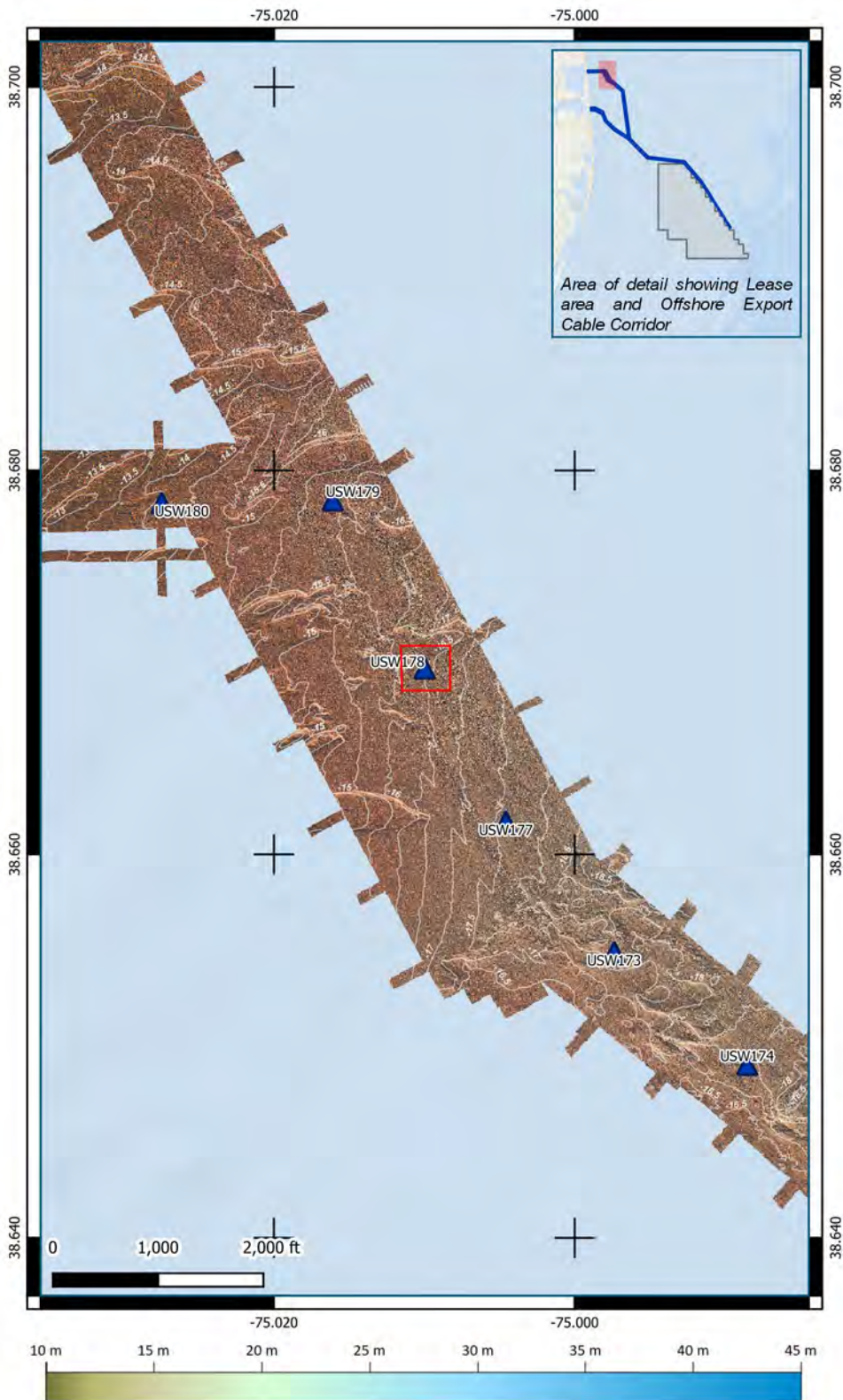


### Sample Photograph





### Map of Benthic Grab Location

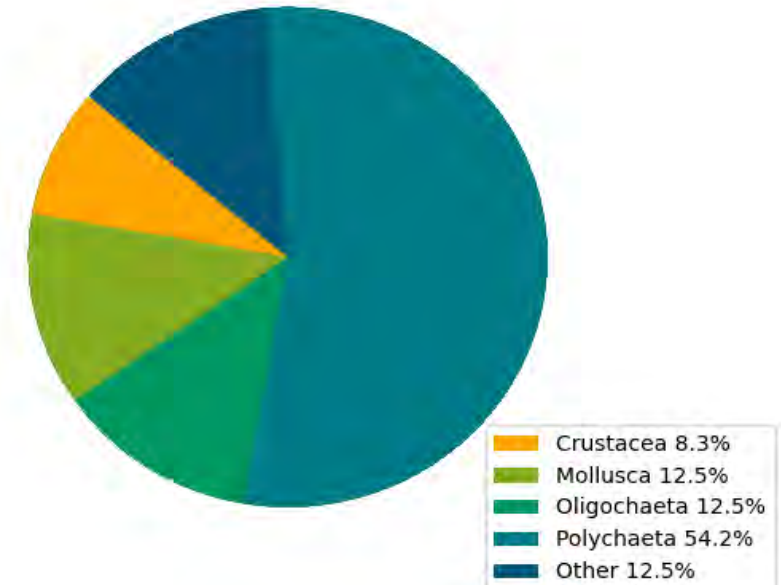


### Benthic Grab USW178

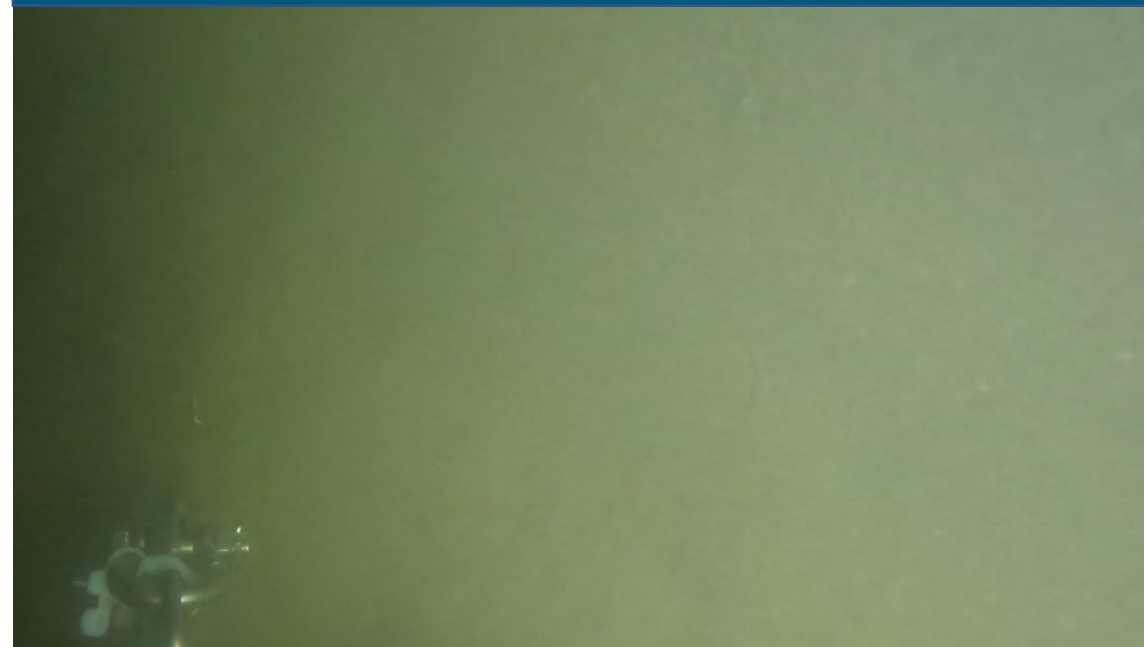
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Fine/Very Fine Sand           |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 600                           |
| Taxa Richness <sup>1</sup> :   |                     | 8                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

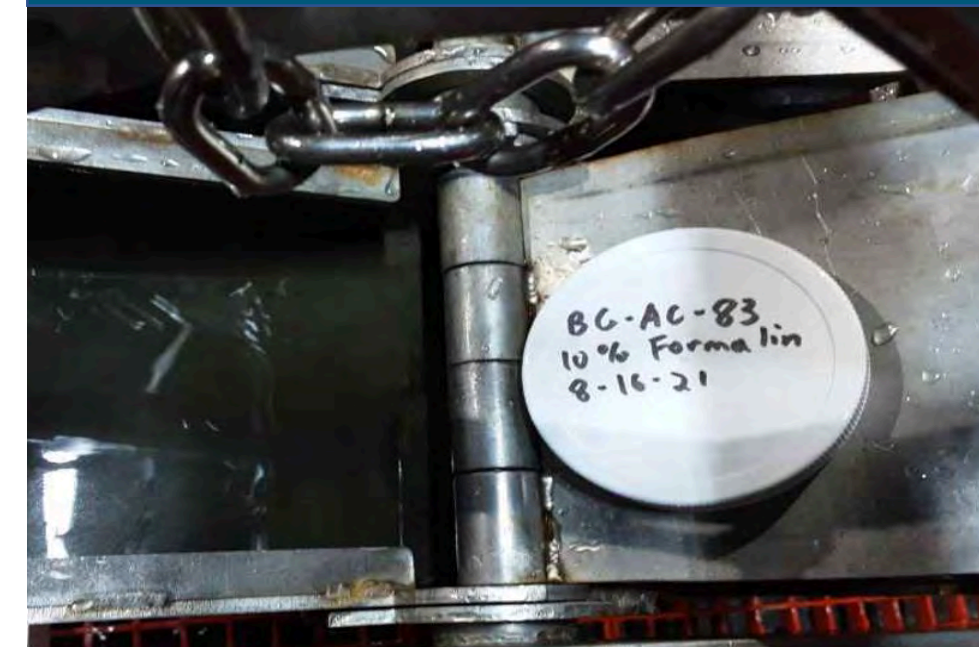
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

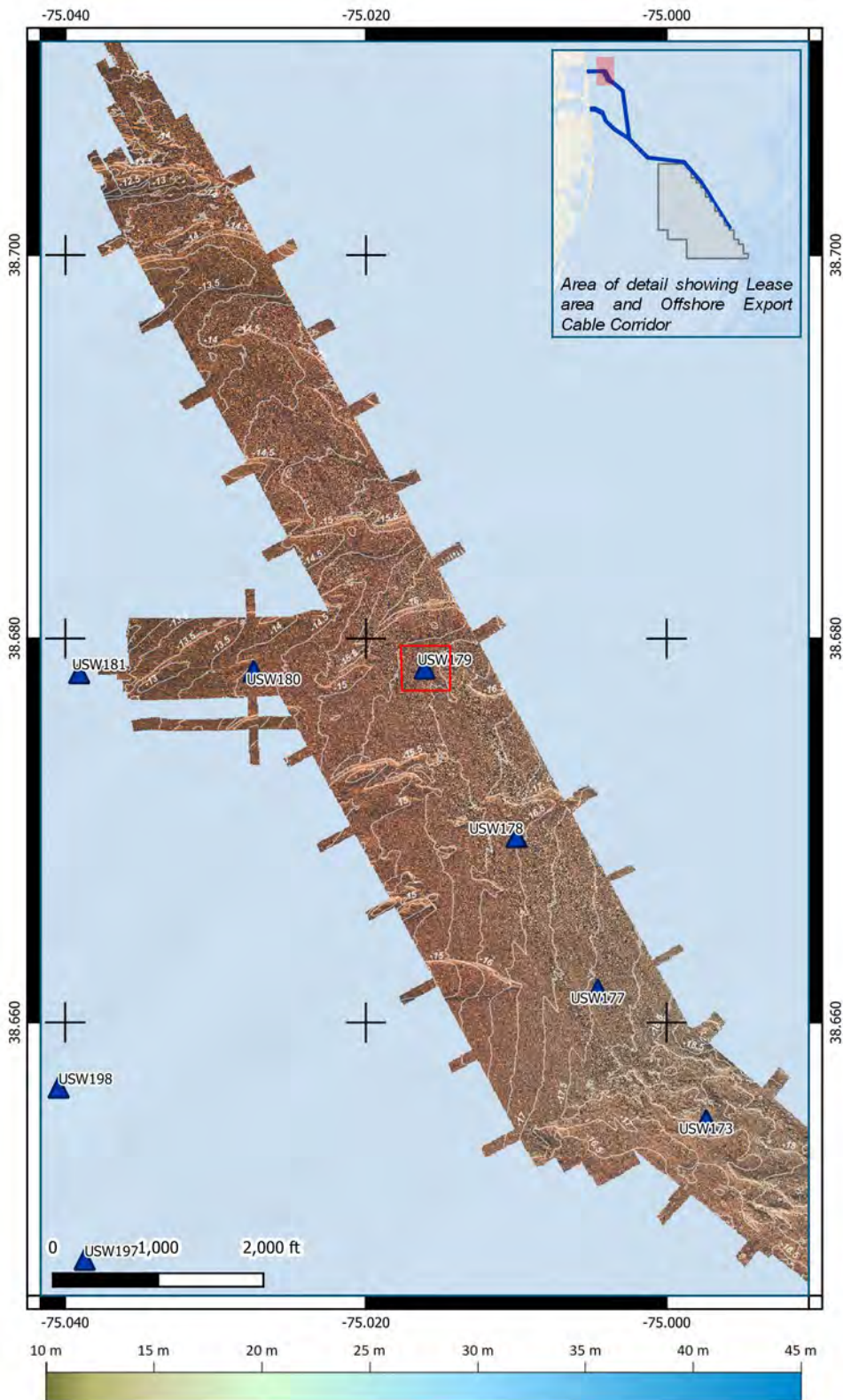


### Sample Photograph





### Map of Benthic Grab Location

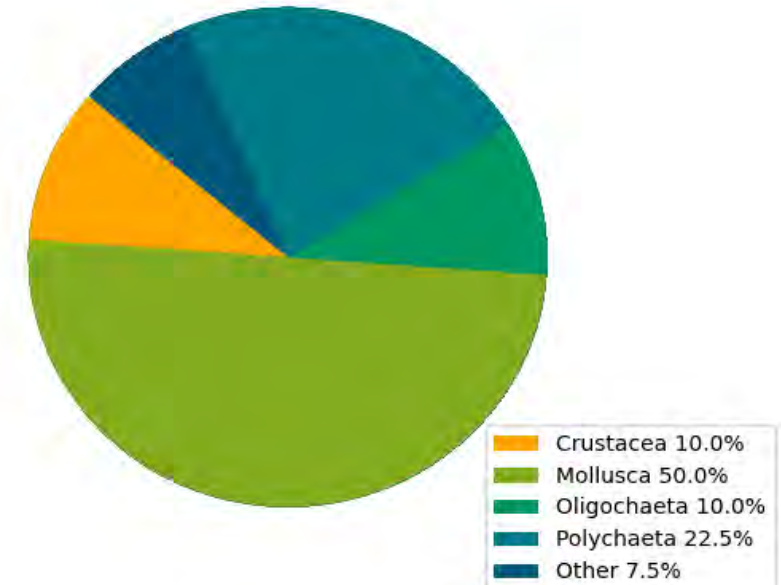


### Benthic Grab USW179

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Fine/Very Fine Sand           |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1000                          |
| Taxa Richness <sup>1</sup> :   |                     | 10                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

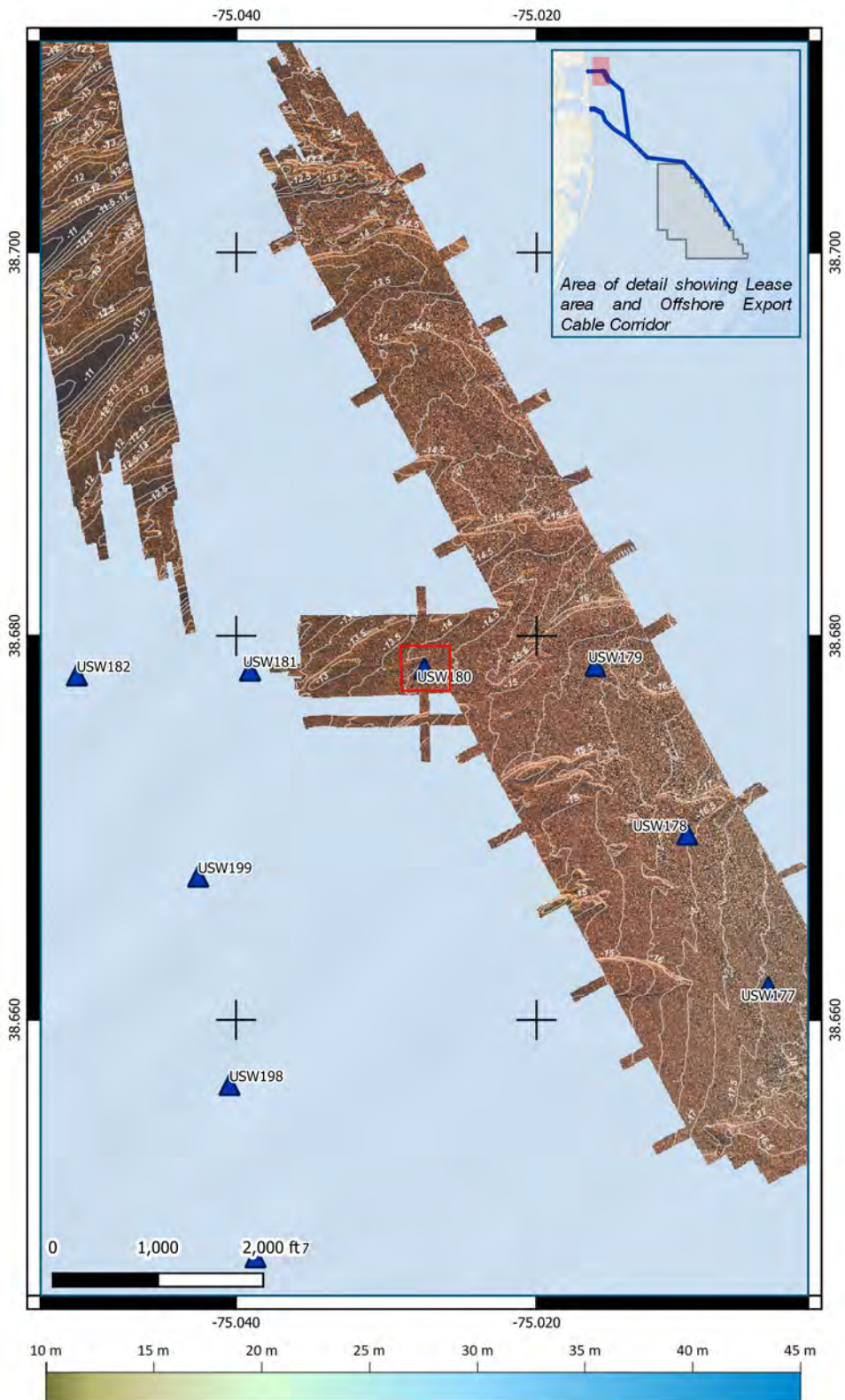


### Sample Photograph





### Map of Benthic Grab Location

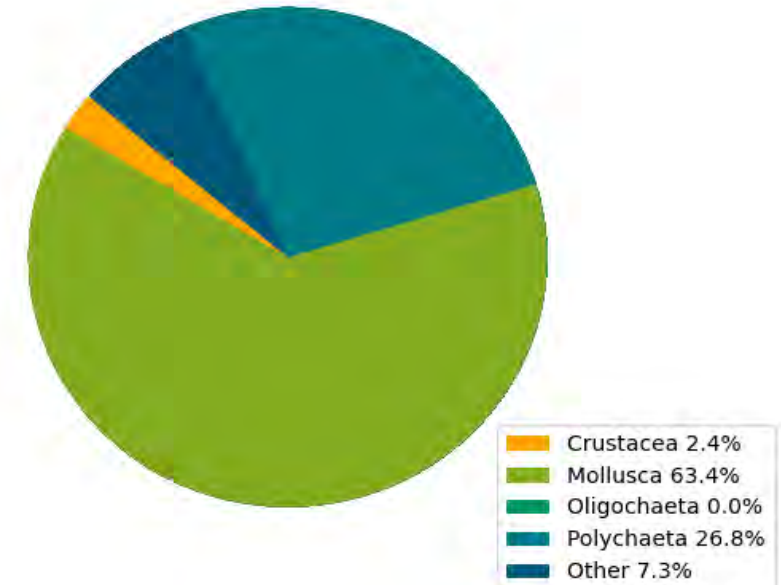


### Benthic Grab USW180

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Fine/Very Fine Sand           |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1025                          |
| Taxa Richness <sup>1</sup> :   |                     | 13                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

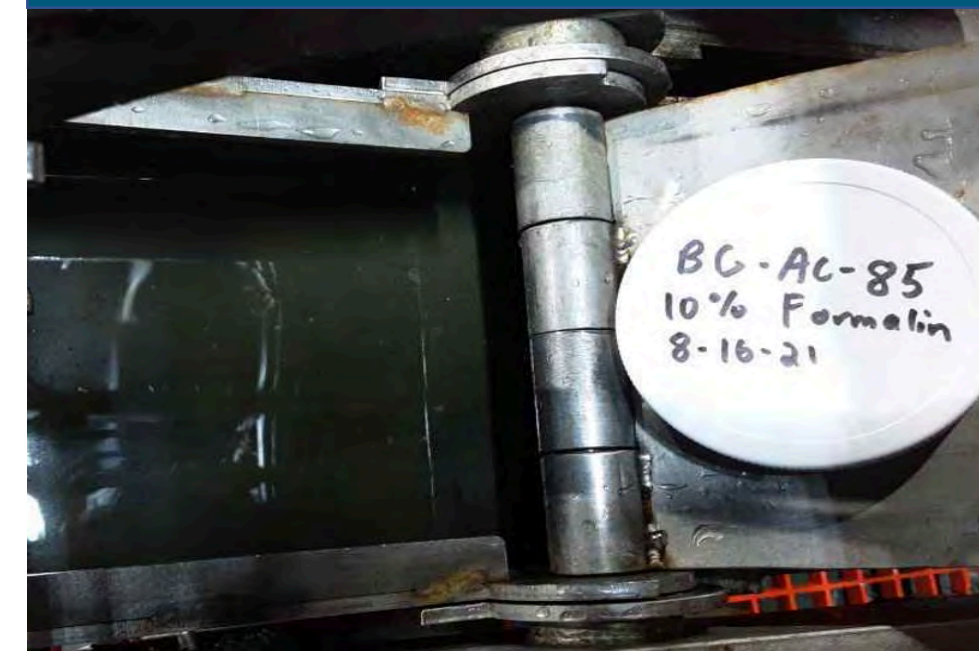
### Benthic Organism Density by Taxa Group



### In-Situ Photograph



### Sample Photograph





### Map of Benthic Grab Location

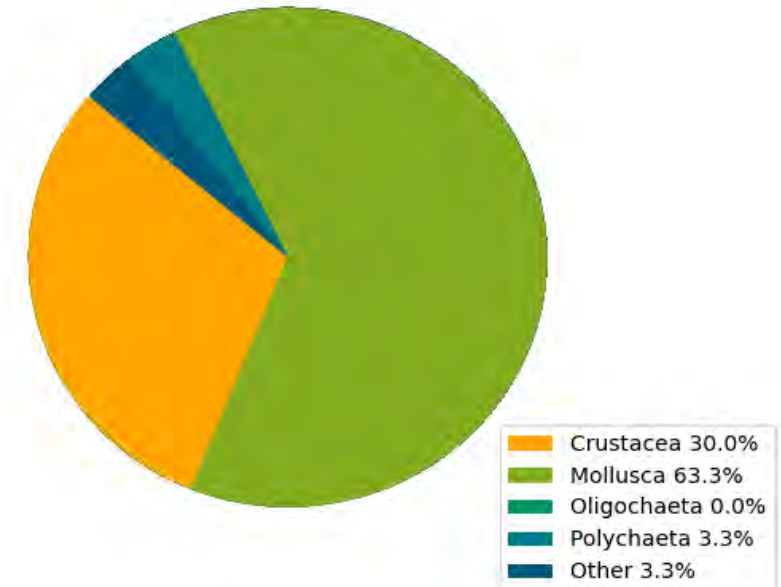


### Benthic Grab USW181

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 750                           |
| Taxa Richness <sup>1</sup> :   |                     | 6                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

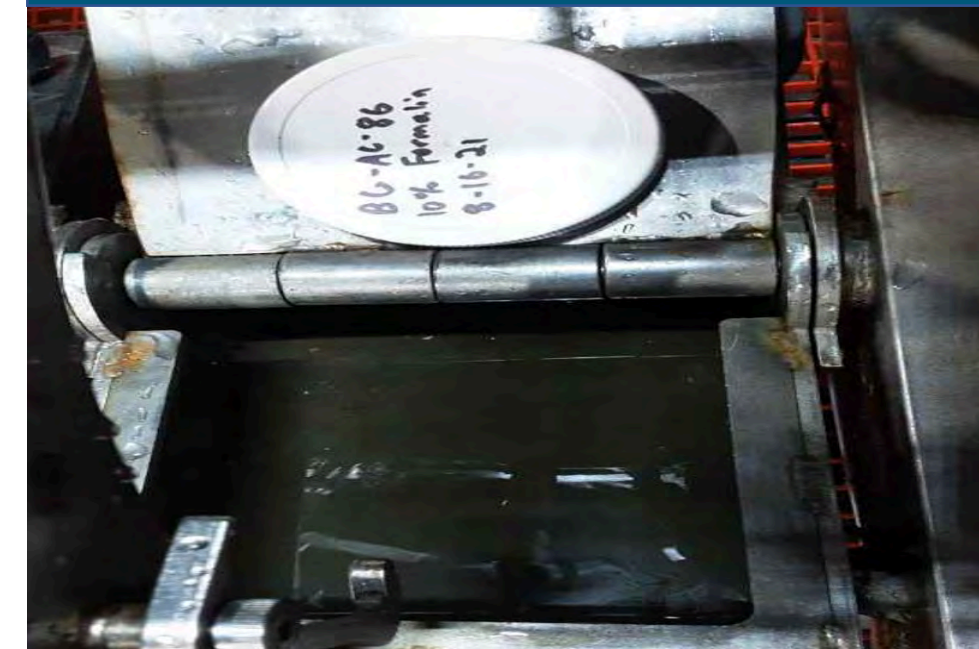
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

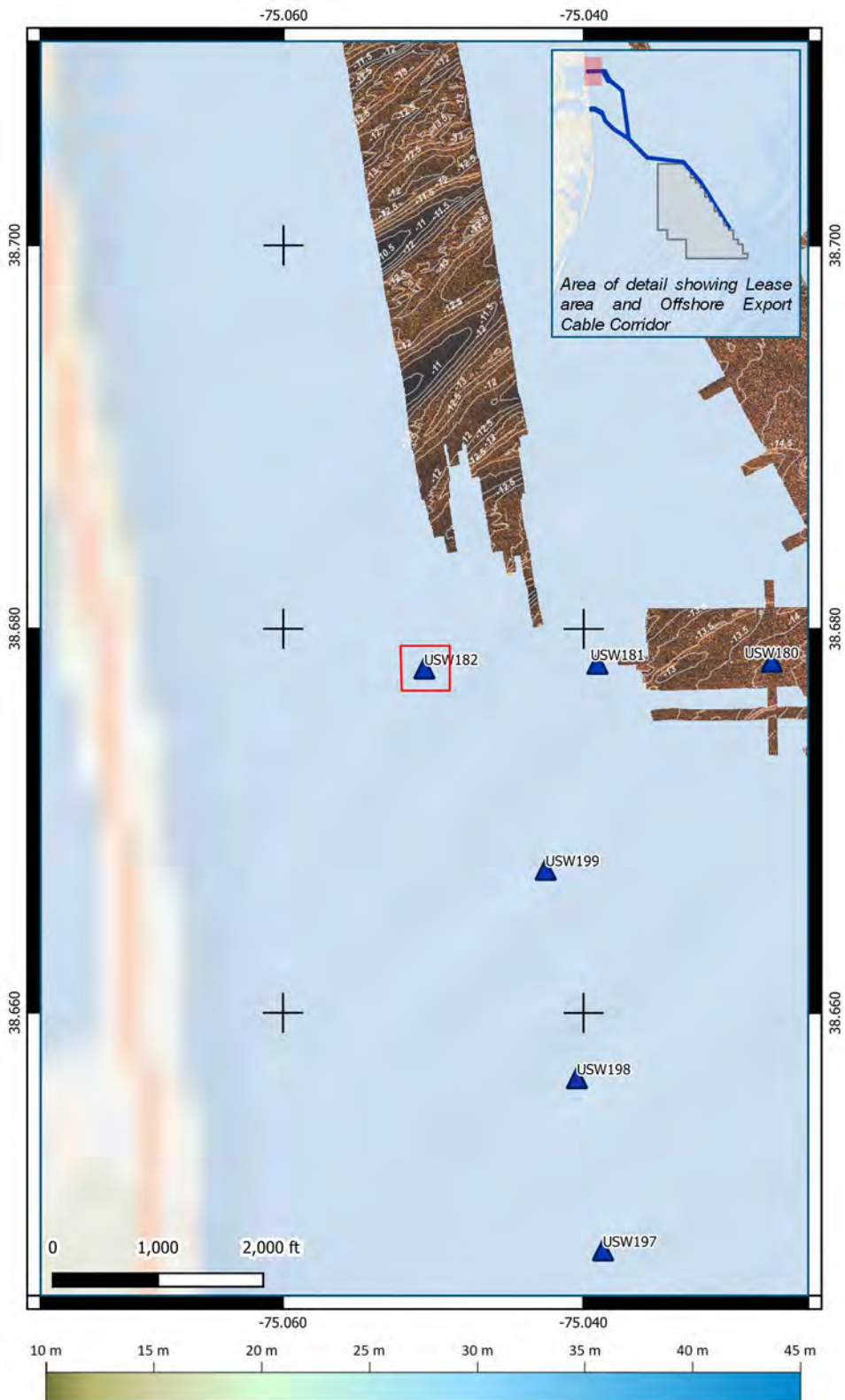


### Sample Photograph





### Map of Benthic Grab Location

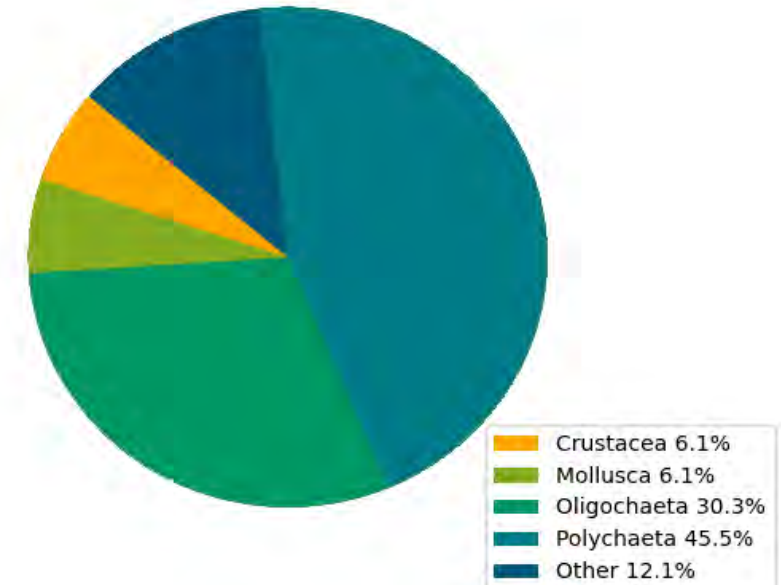


### Benthic Grab USW182

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 825                           |
| Taxa Richness <sup>1</sup> :   |                     | 14                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

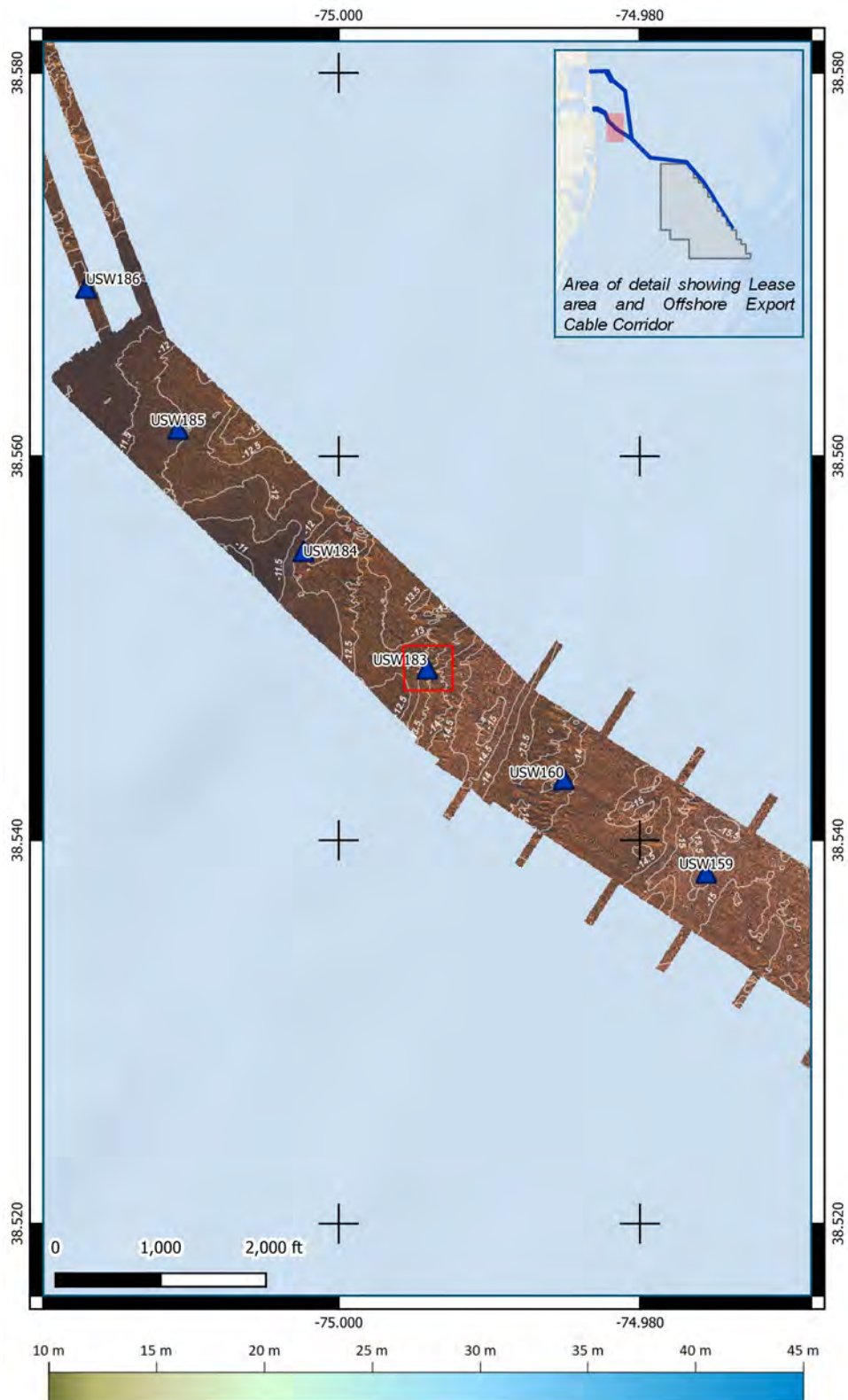


### Sample Photograph





### Map of Benthic Grab Location

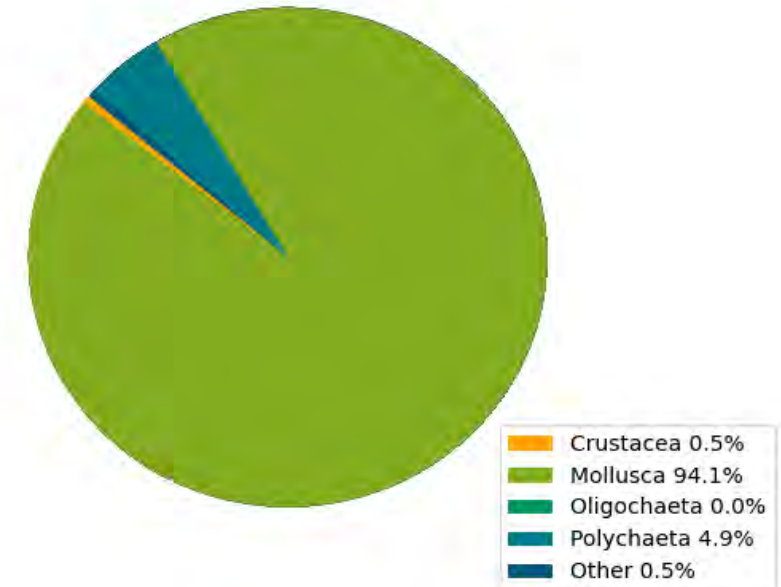


### Benthic Grab USW183

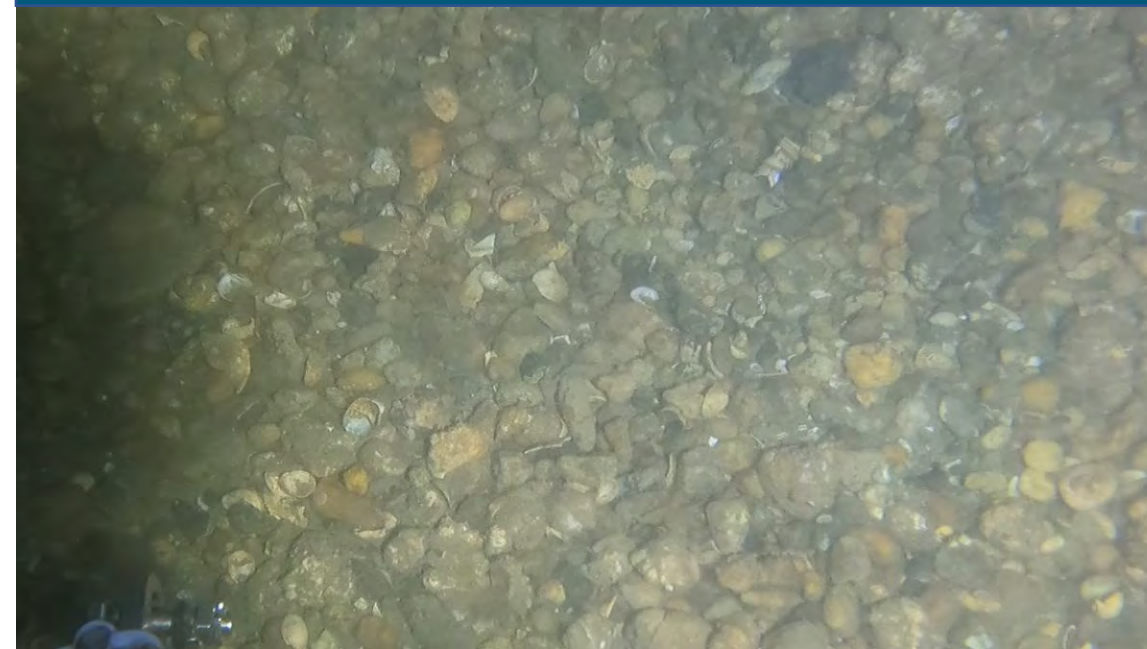
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel                          |
|  | Substrate Subgroup: | Pebble/Granule                  |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 5100                            |
| Taxa Richness <sup>1</sup> :   |                     | 11                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

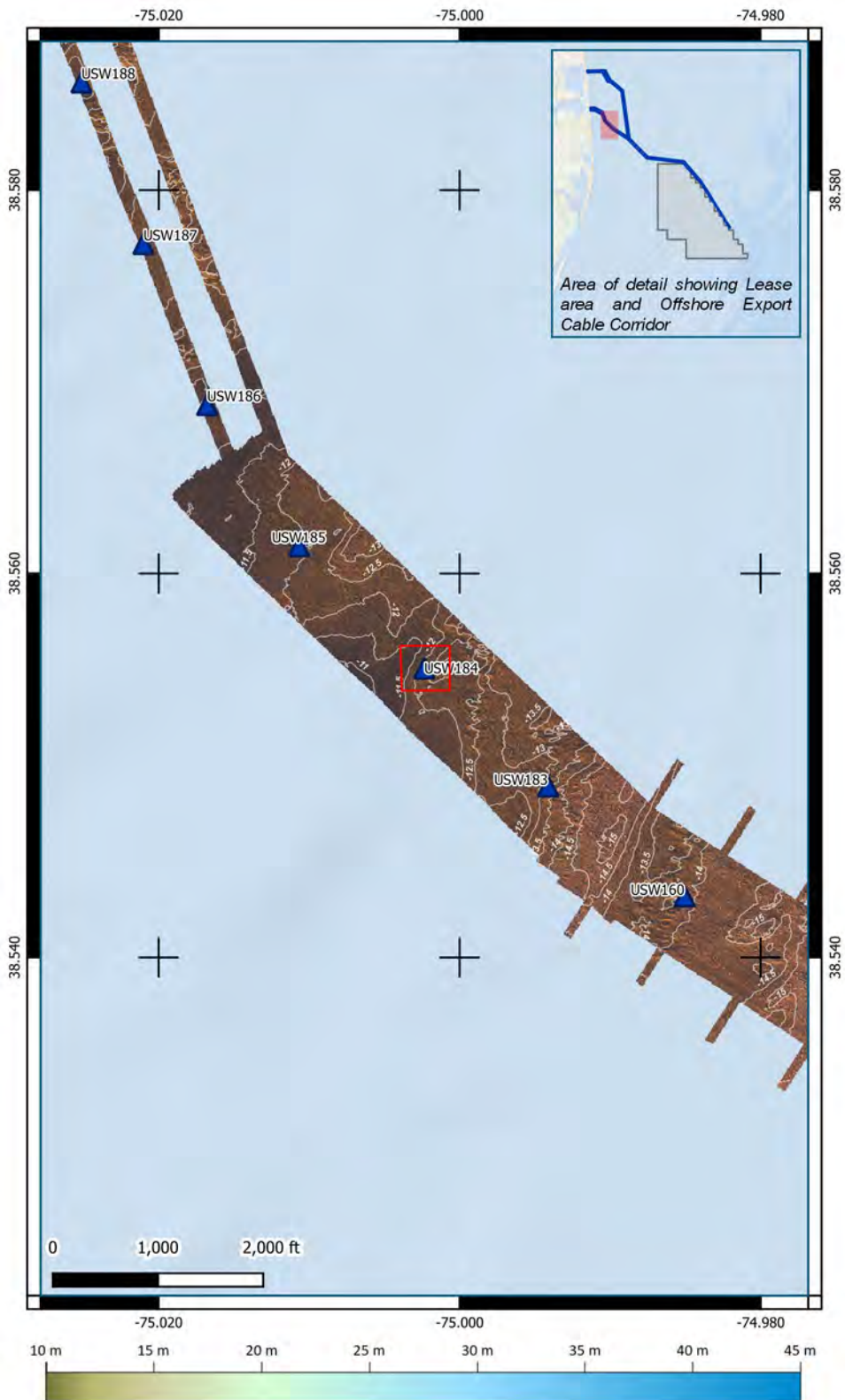


### Sample Photograph





### Map of Benthic Grab Location

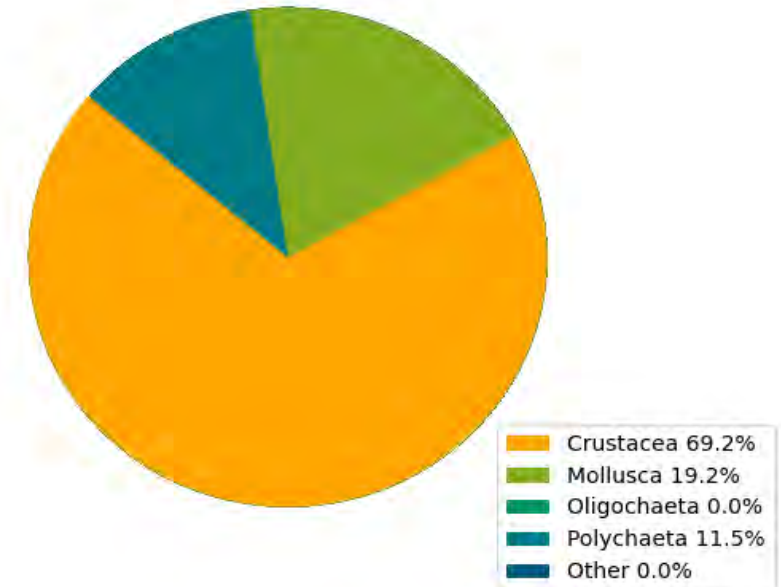


### Benthic Grab USW184

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 650                           |
| Taxa Richness <sup>1</sup> :   |                     | 7                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

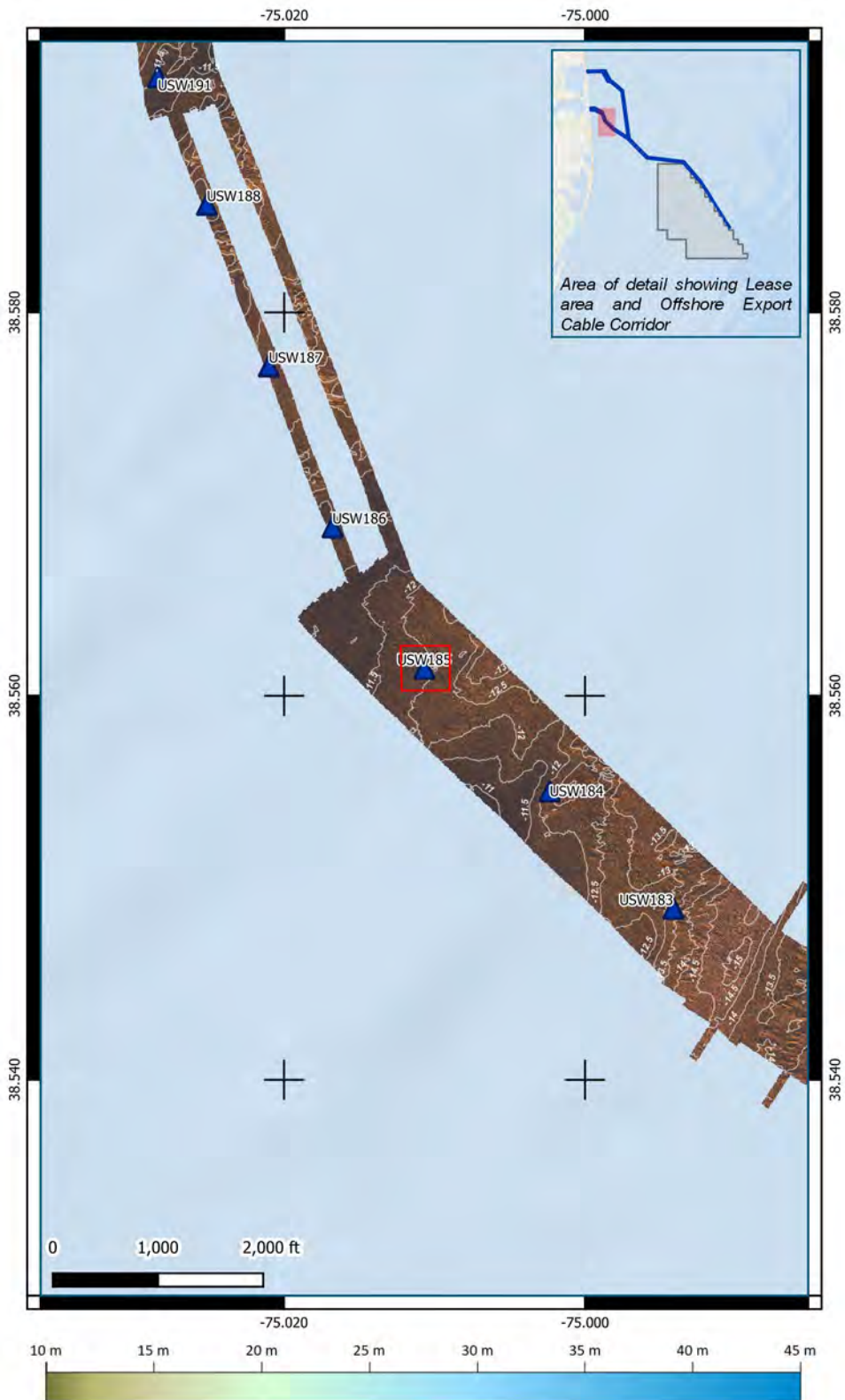


### Sample Photograph





### Map of Benthic Grab Location

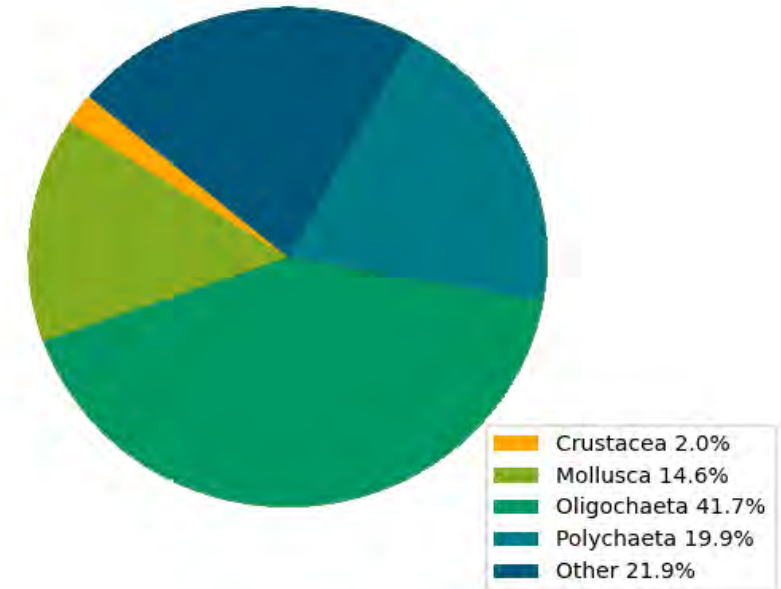


### Benthic Grab USW185

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 3775                            |
| Taxa Richness <sup>1</sup> :   |                     | 19                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

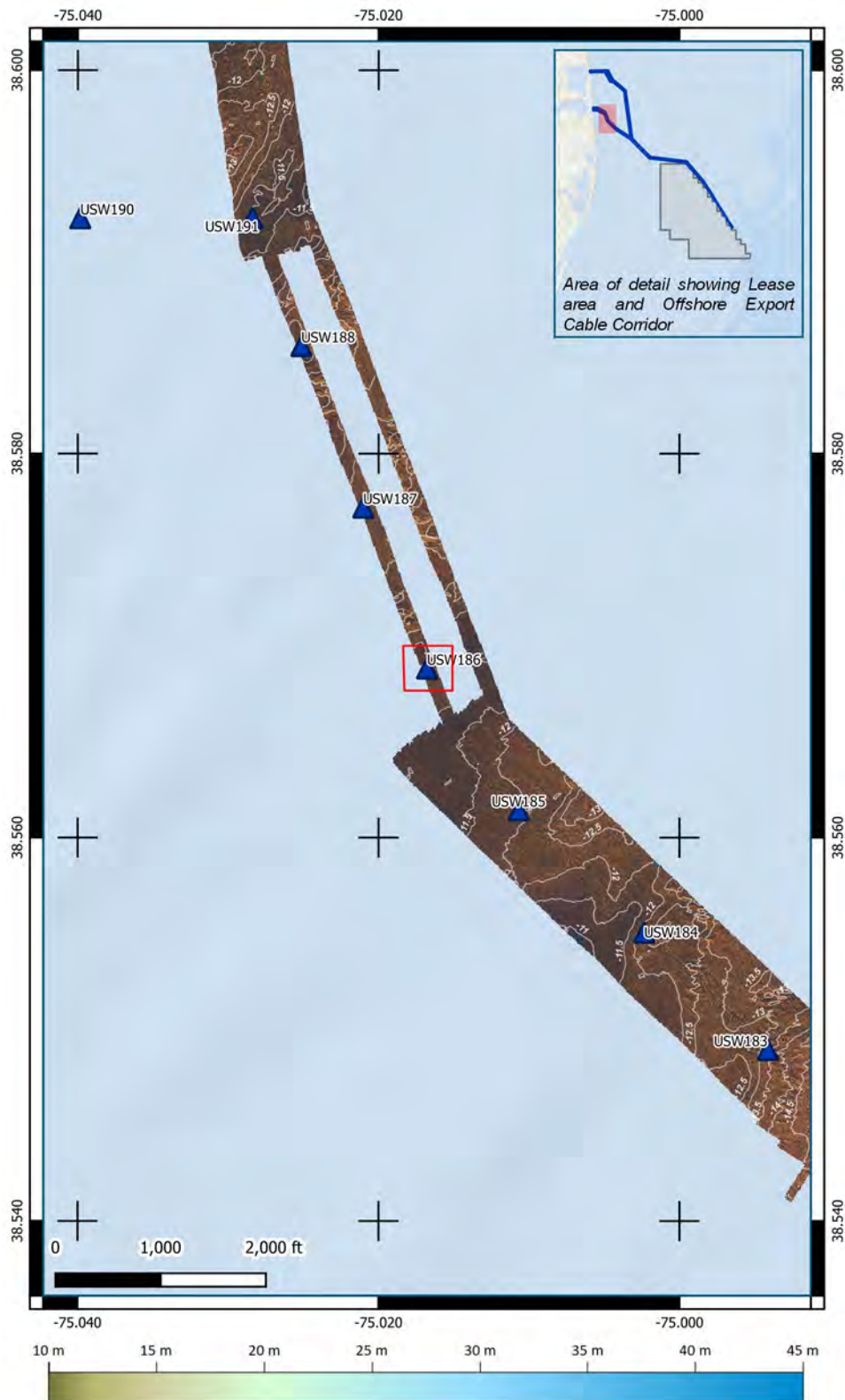


### Sample Photograph





### Map of Benthic Grab Location

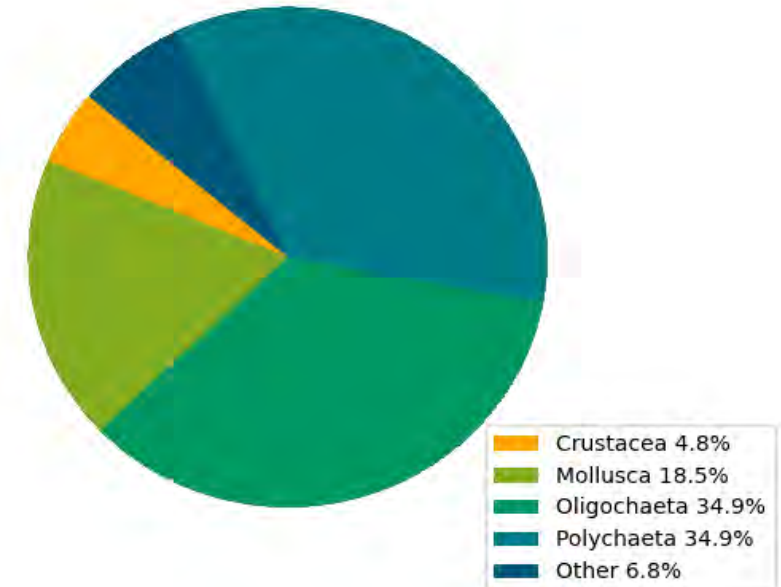


### Benthic Grab USW186

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 3650                            |
| Taxa Richness <sup>1</sup> :   |                     | 21                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

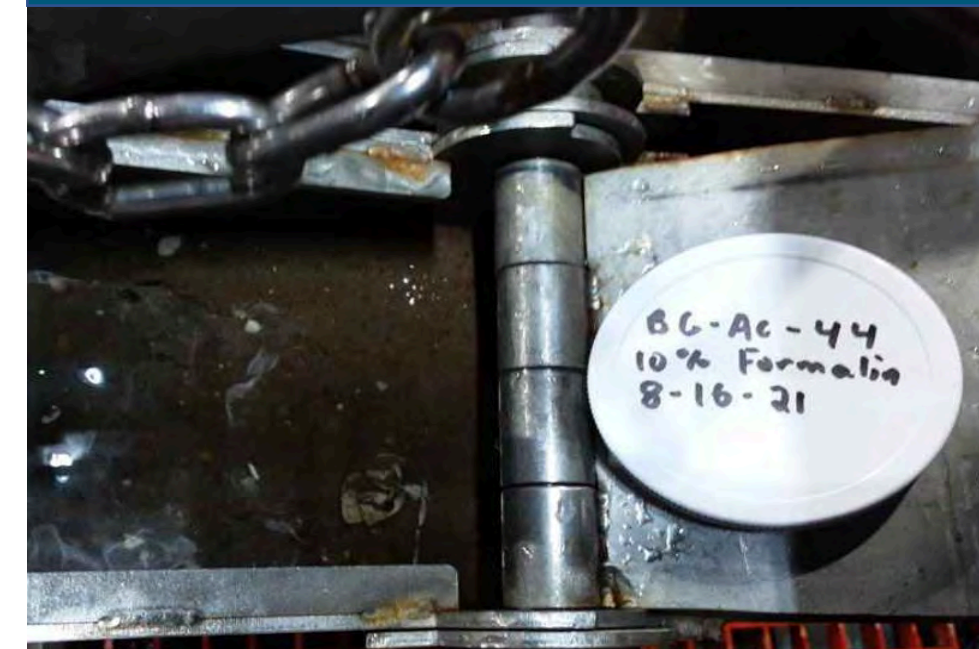
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

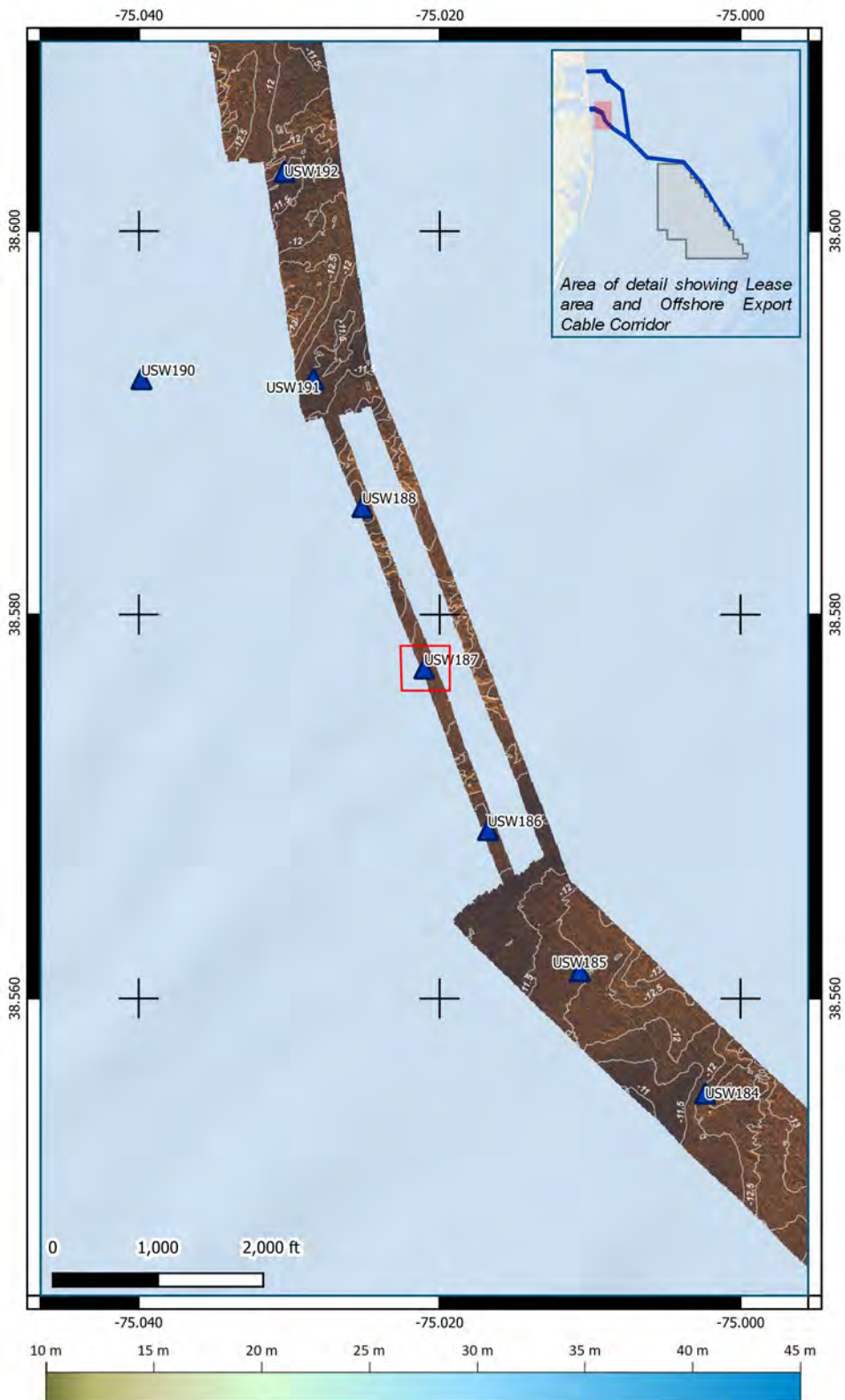


### Sample Photograph





### Map of Benthic Grab Location

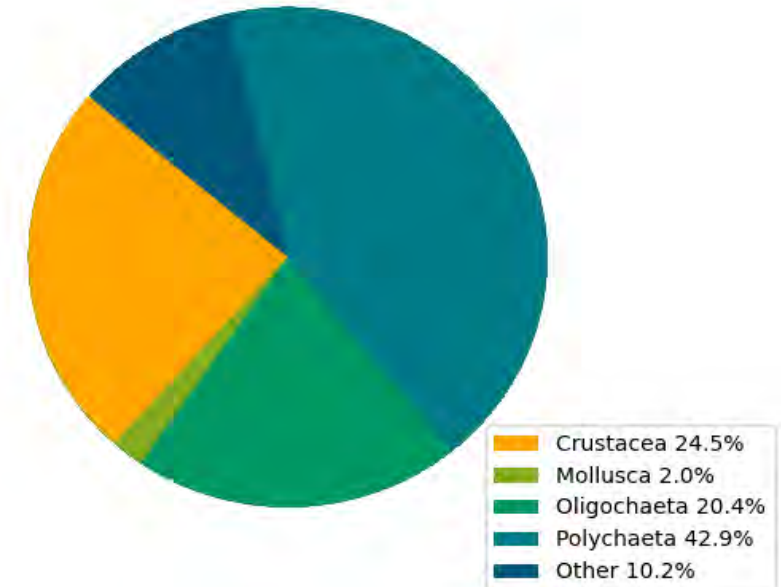


### Benthic Grab USW187

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1225                            |
| Taxa Richness <sup>1</sup> :   |                     | 17                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

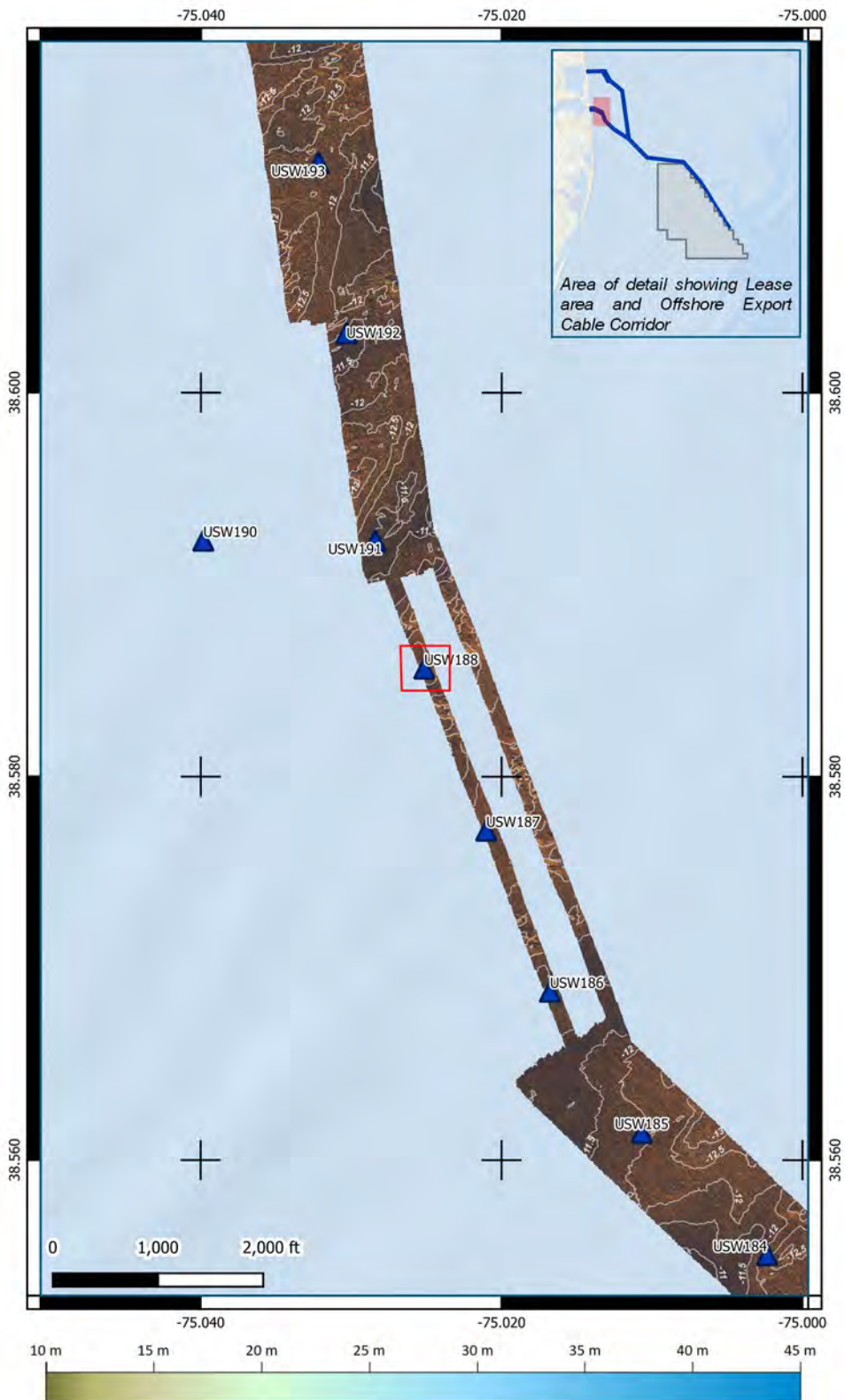


### Sample Photograph





### Map of Benthic Grab Location

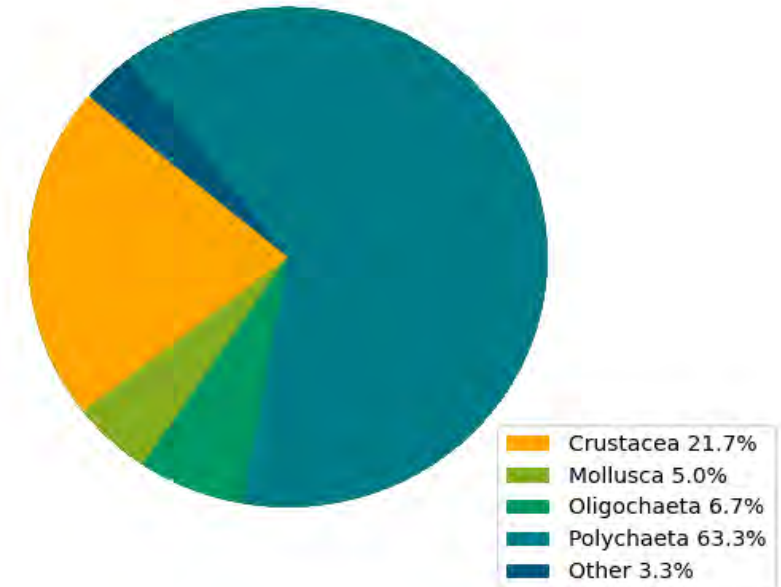


### Benthic Grab USW188

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1500                            |
| Taxa Richness <sup>1</sup> :   |                     | 15                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph



### Sample Photograph





### Map of Benthic Grab Location

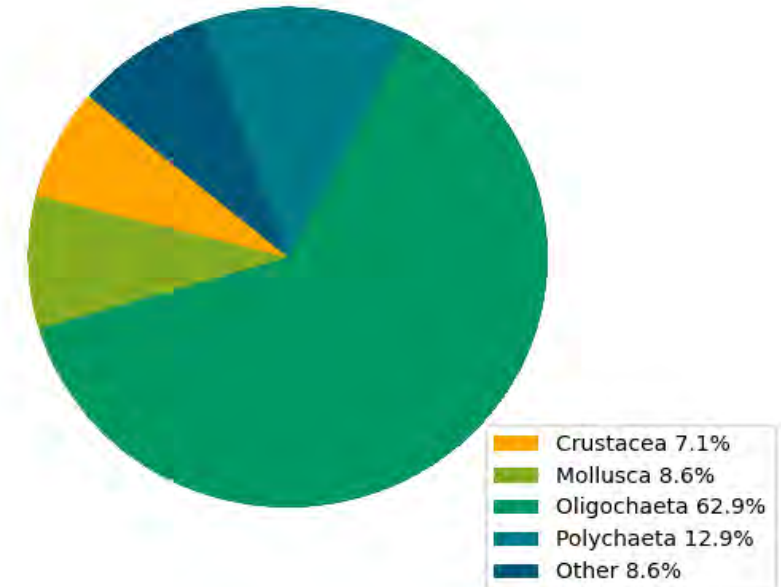


### Benthic Grab USW189

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1750                          |
| Taxa Richness <sup>1</sup> :   |                     | 16                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

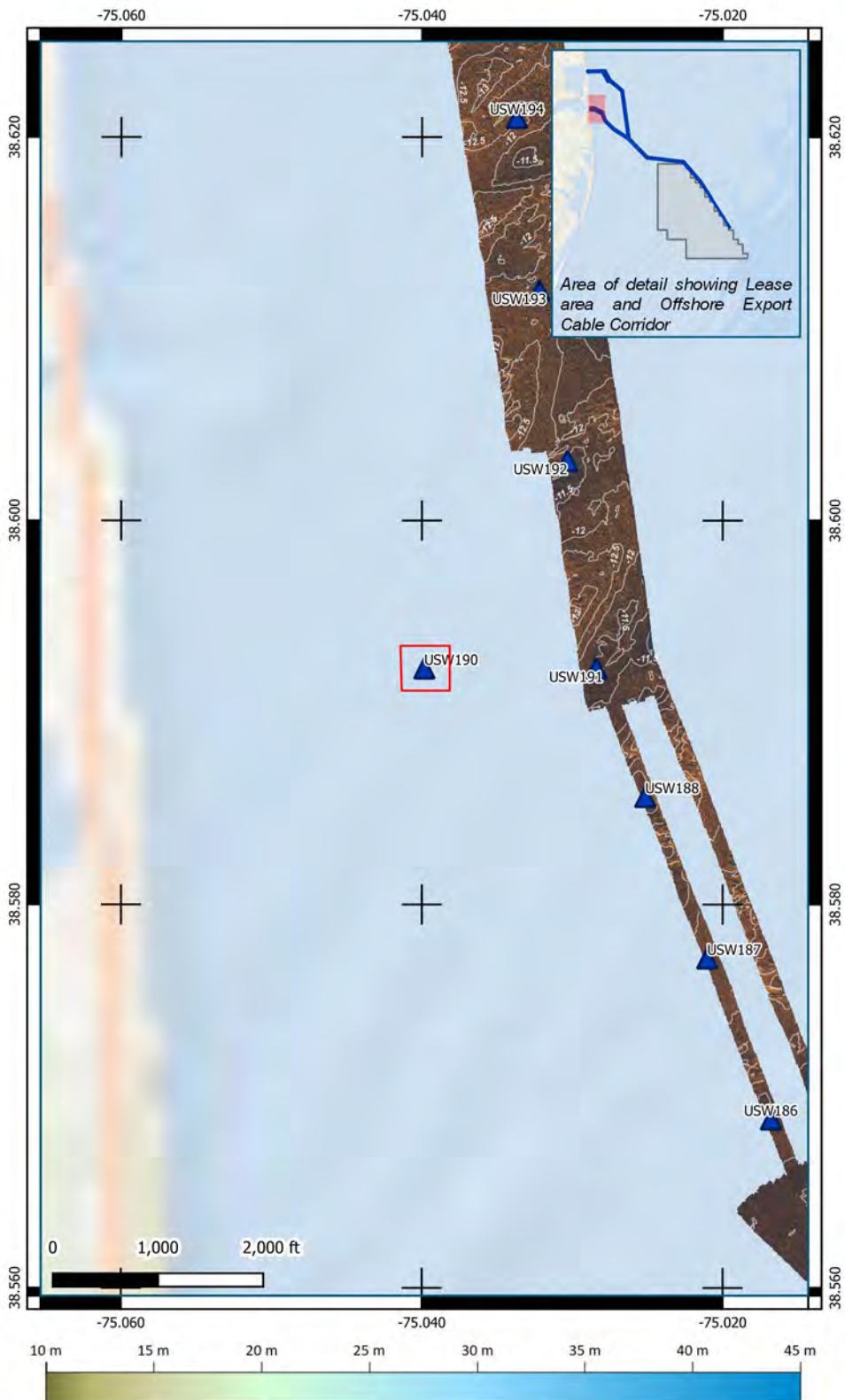


### Sample Photograph





### Map of Benthic Grab Location

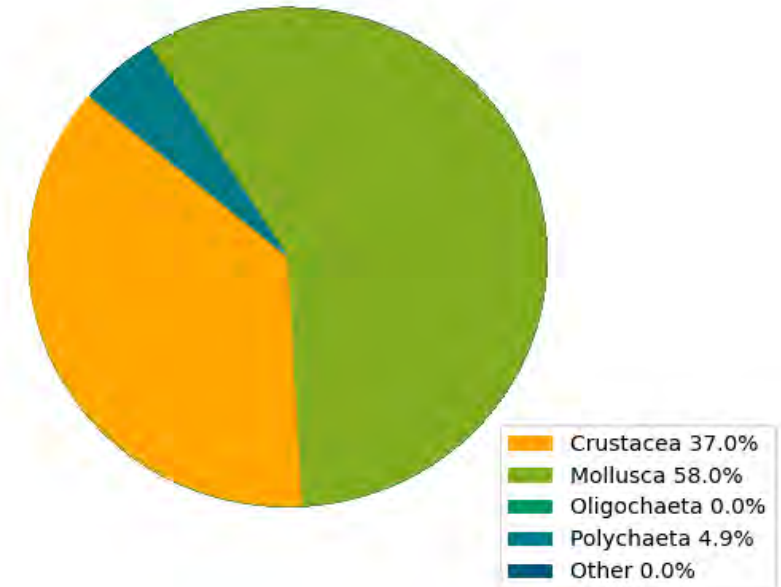


### Benthic Grab USW190

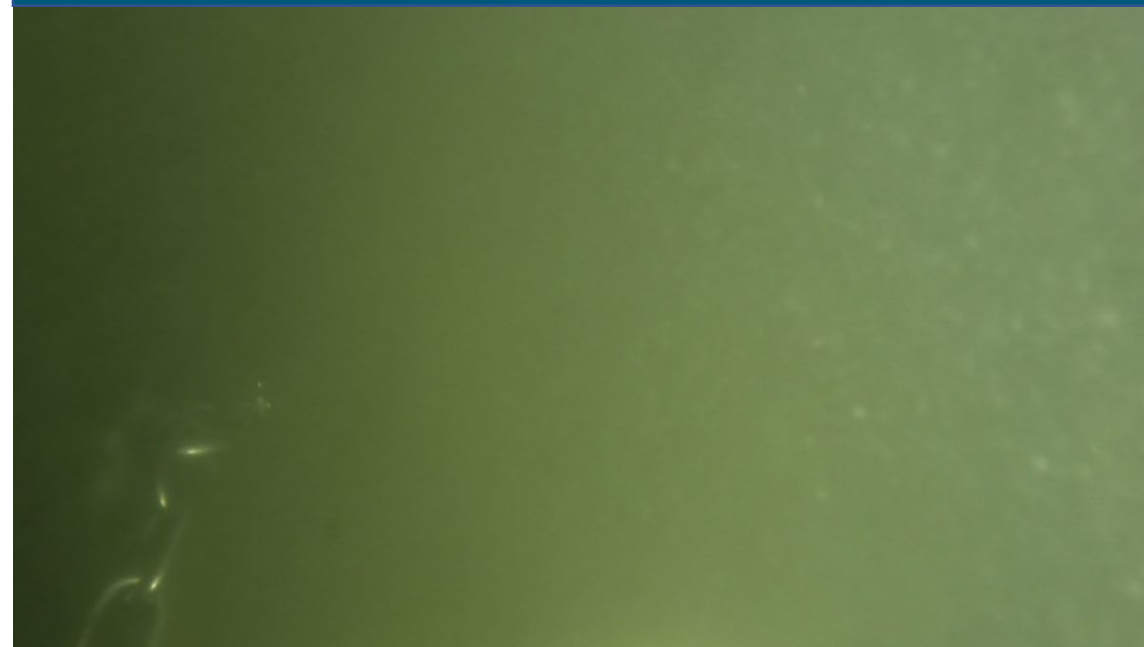
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 2025                          |
| Taxa Richness <sup>1</sup> :   |                     | 14                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

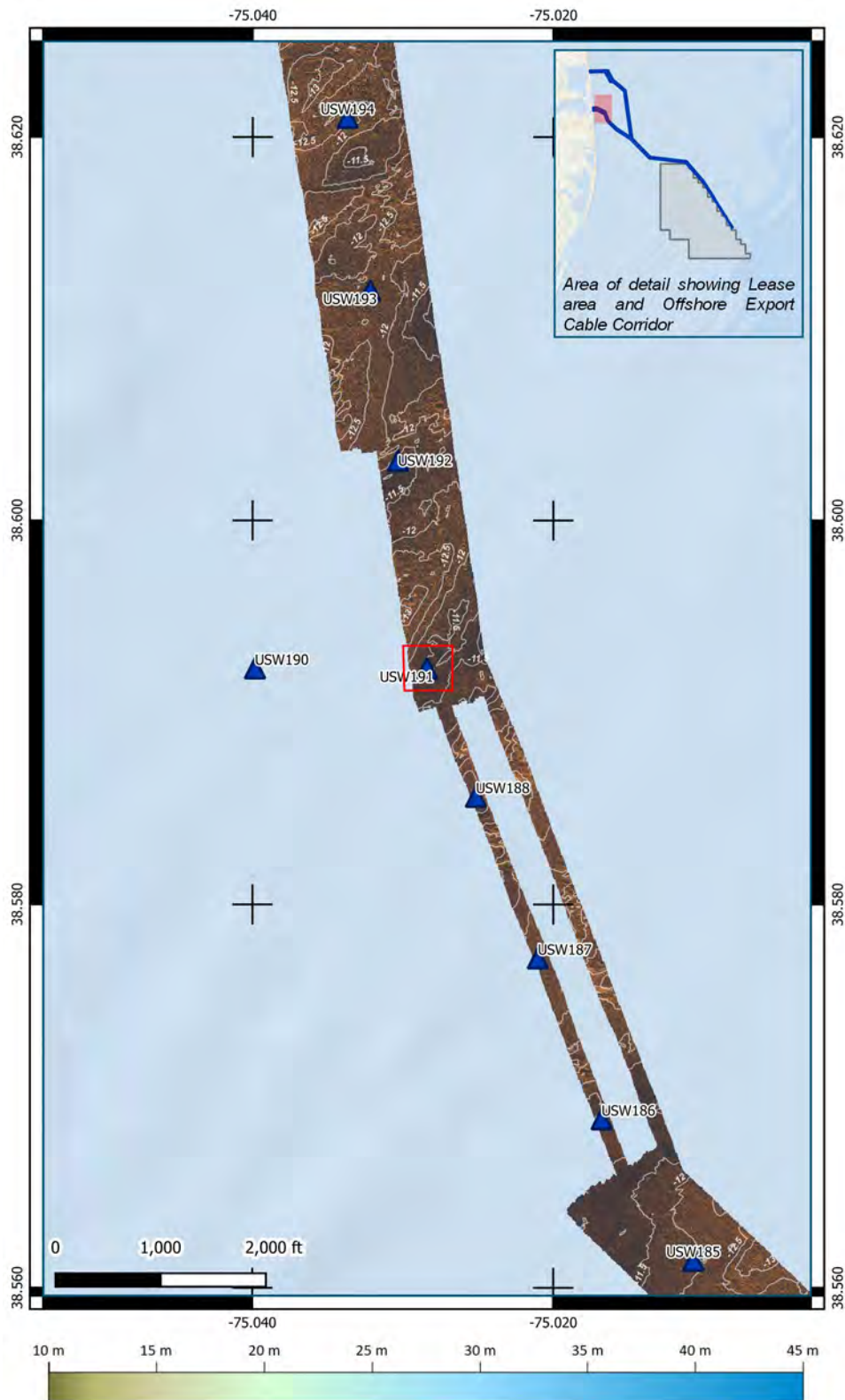


### Sample Photograph





### Map of Benthic Grab Location

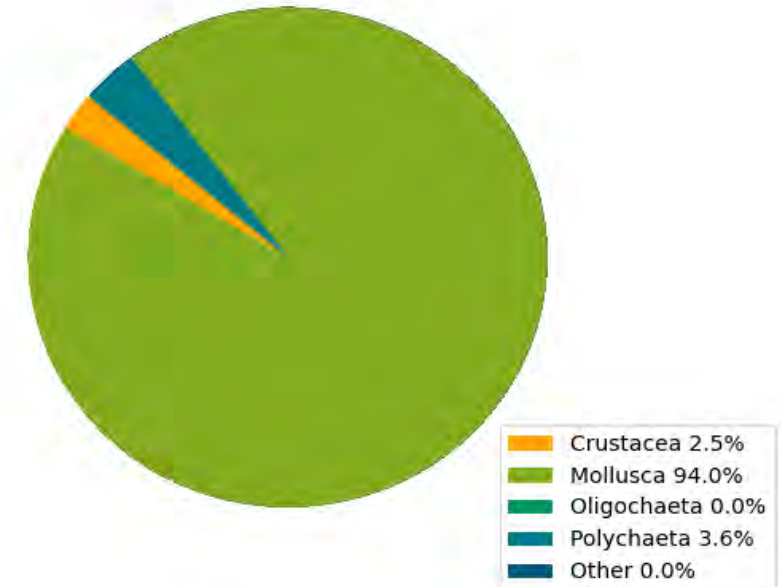


### Benthic Grab USW191

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravel Mixes                    |
|  | Substrate Subgroup: | Sandy Gravel                    |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 9125                            |
| Taxa Richness <sup>1</sup> :   |                     | 17                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

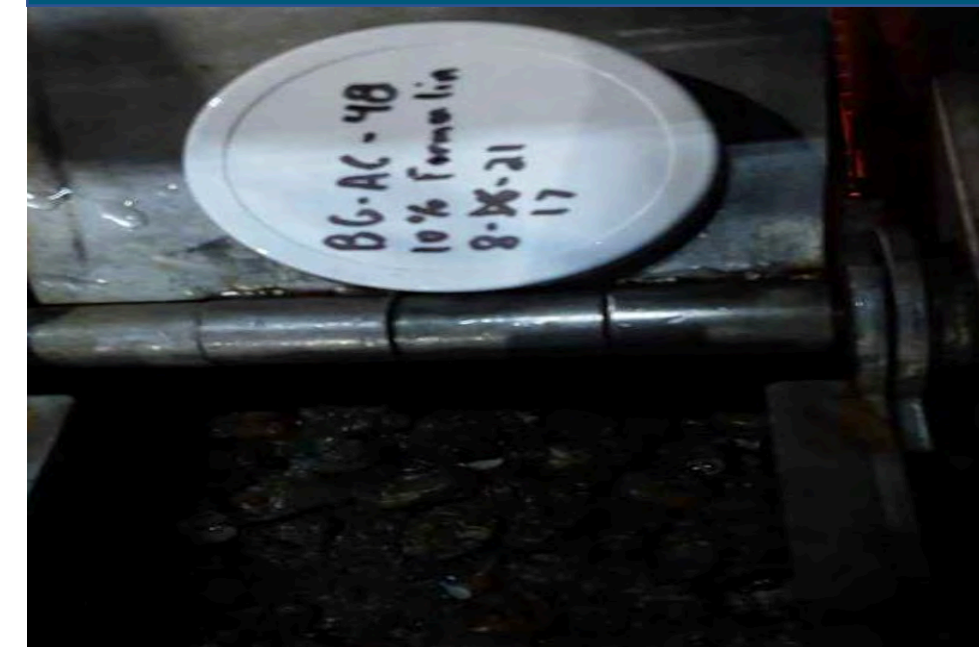
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

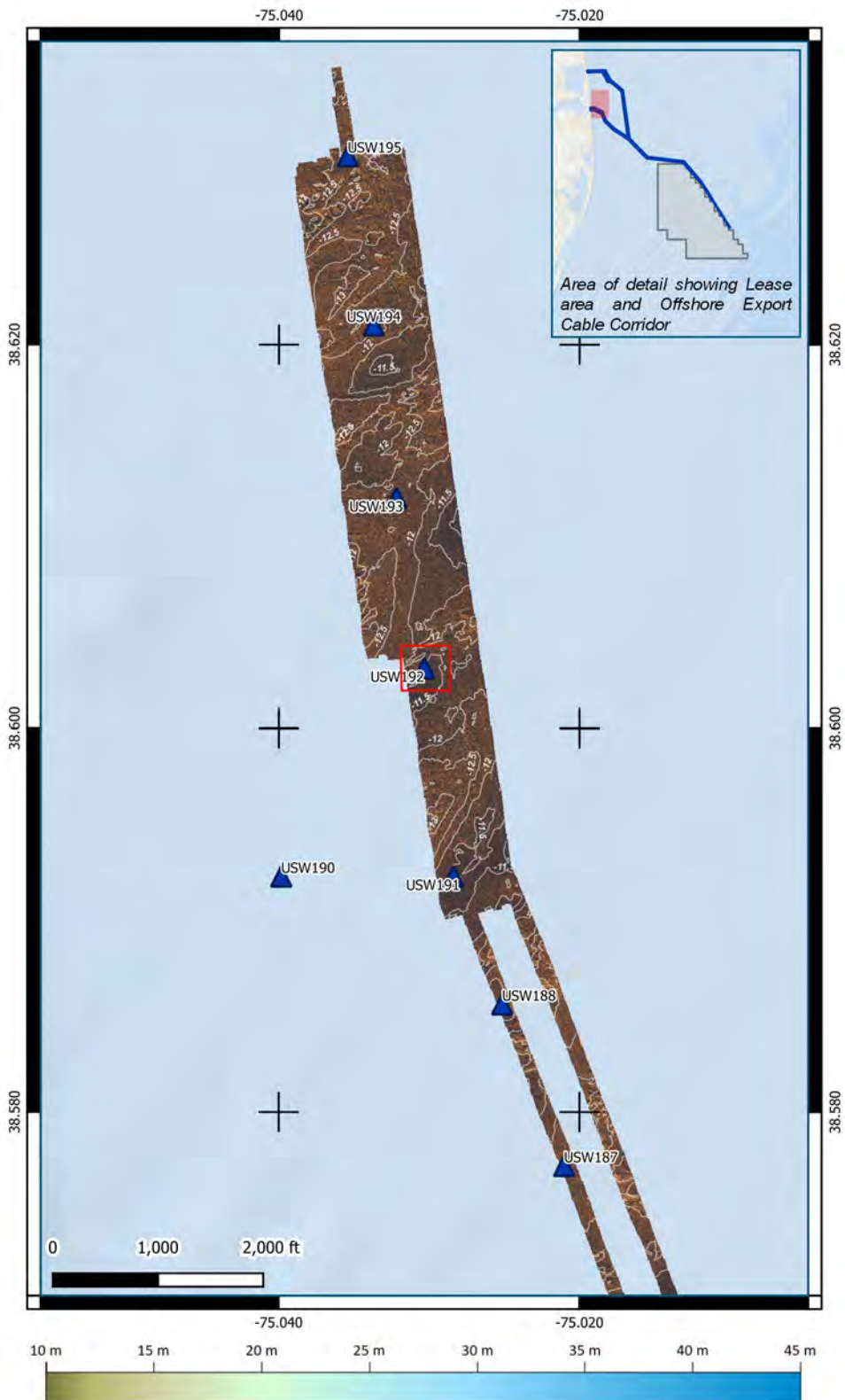


### Sample Photograph





### Map of Benthic Grab Location

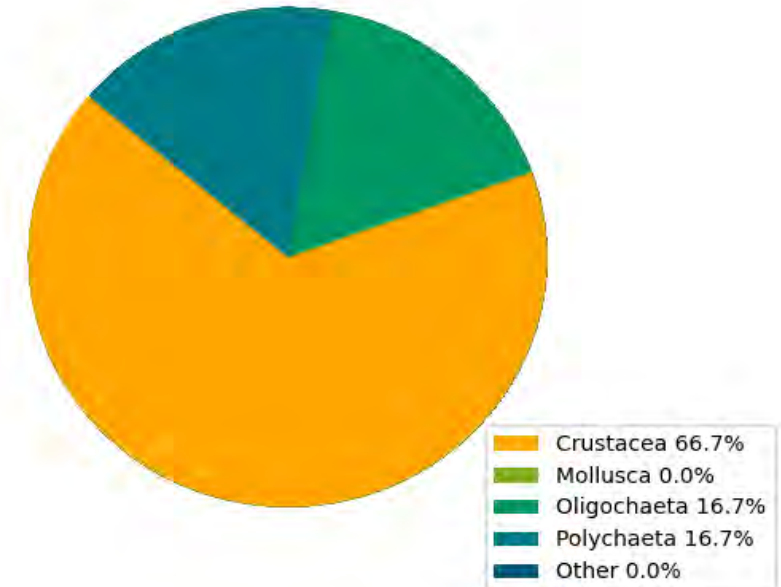


### Benthic Grab USW192

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 150                             |
| Taxa Richness <sup>1</sup> :   |                     | 4                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

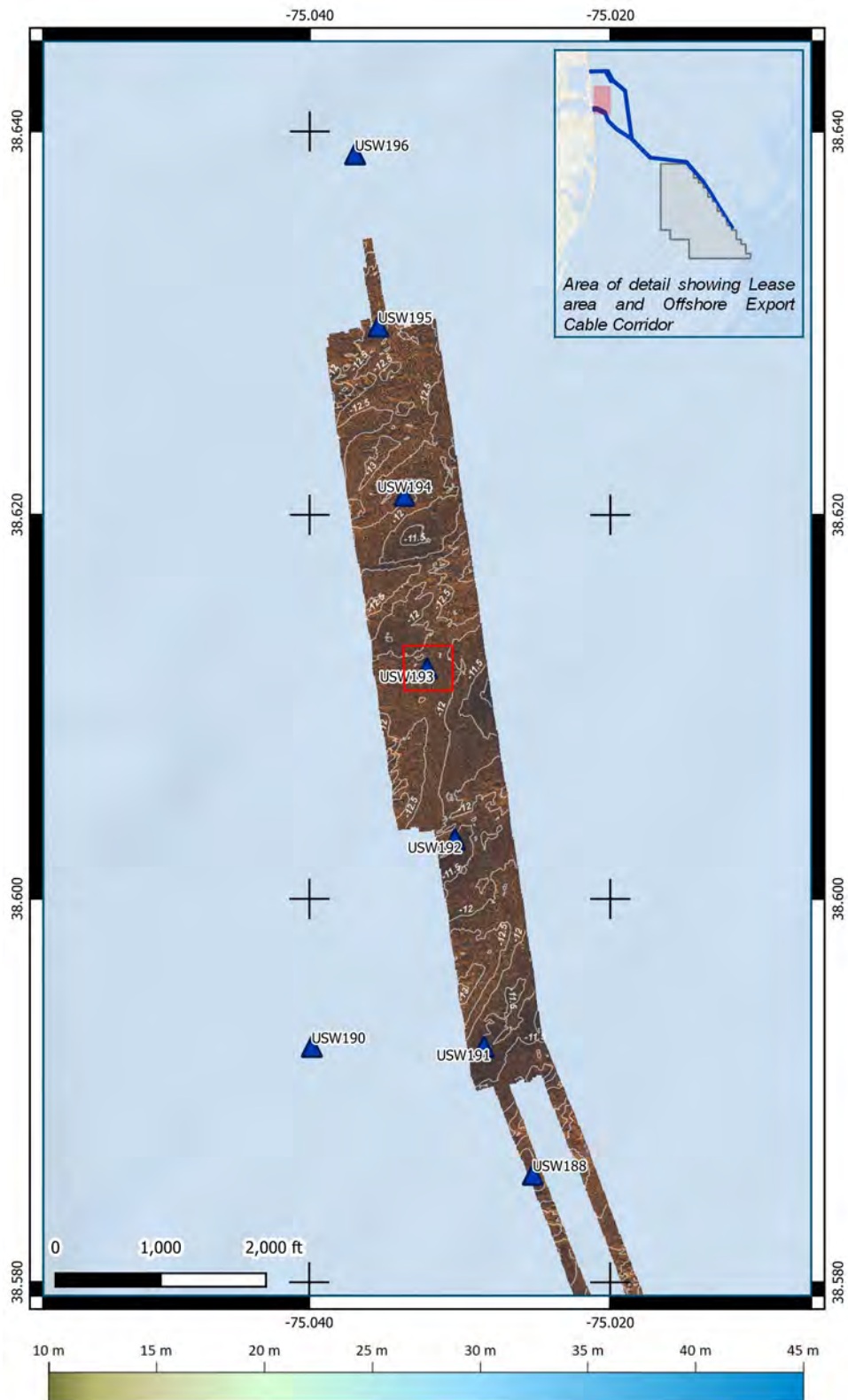


### Sample Photograph





### Map of Benthic Grab Location

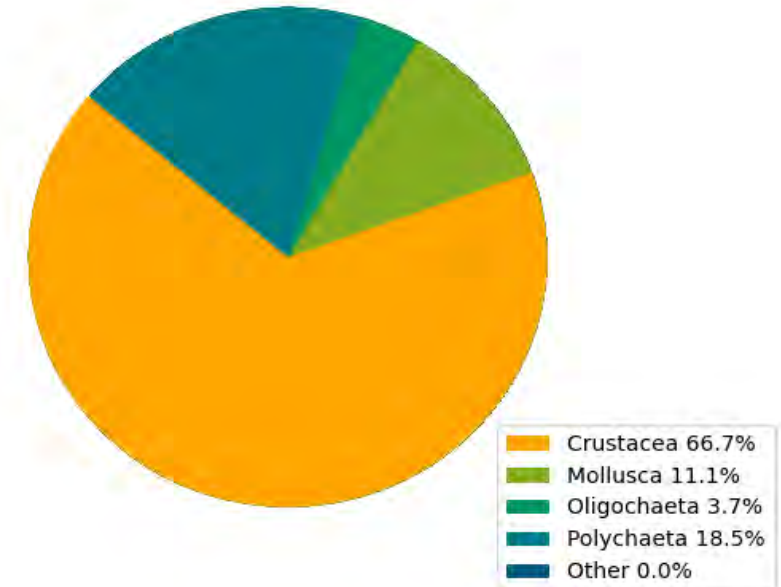


### Benthic Grab USW193

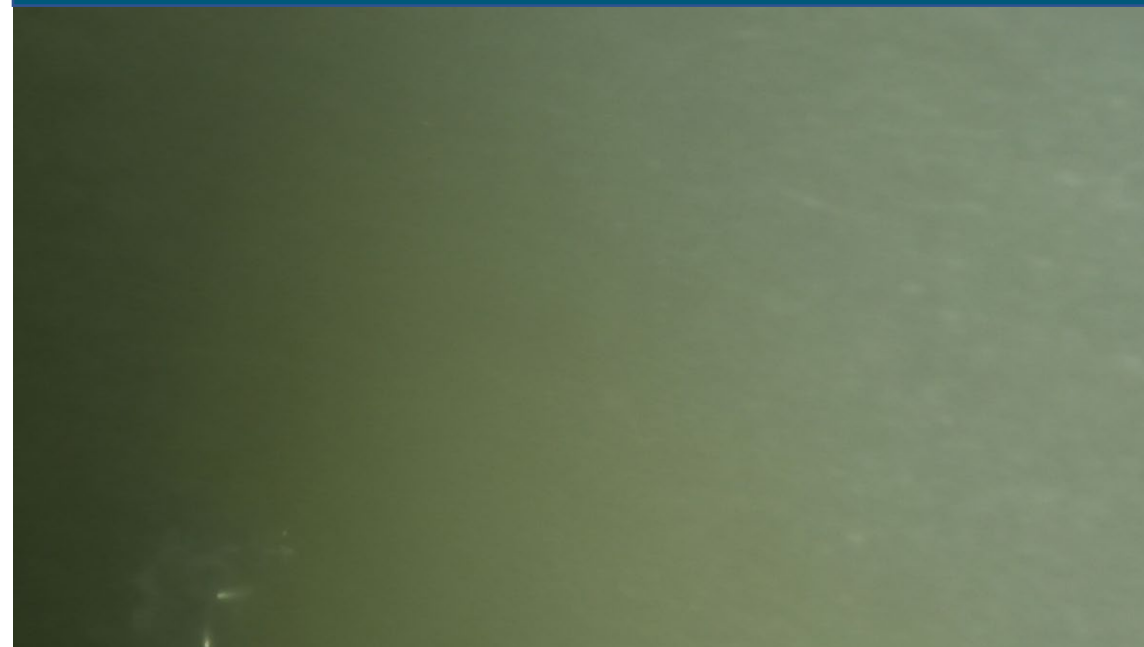
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1350                            |
| Taxa Richness <sup>1</sup> :   |                     | 15                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph



### Sample Photograph





### Map of Benthic Grab Location

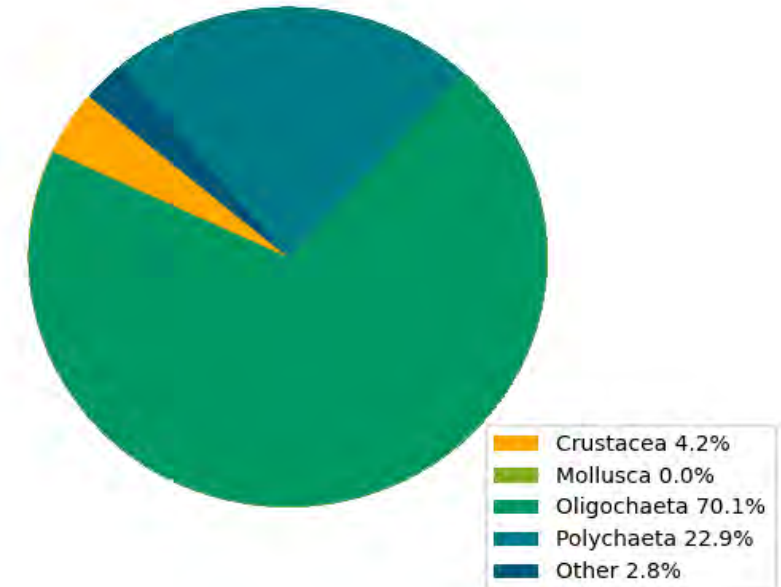


### Benthic Grab USW194

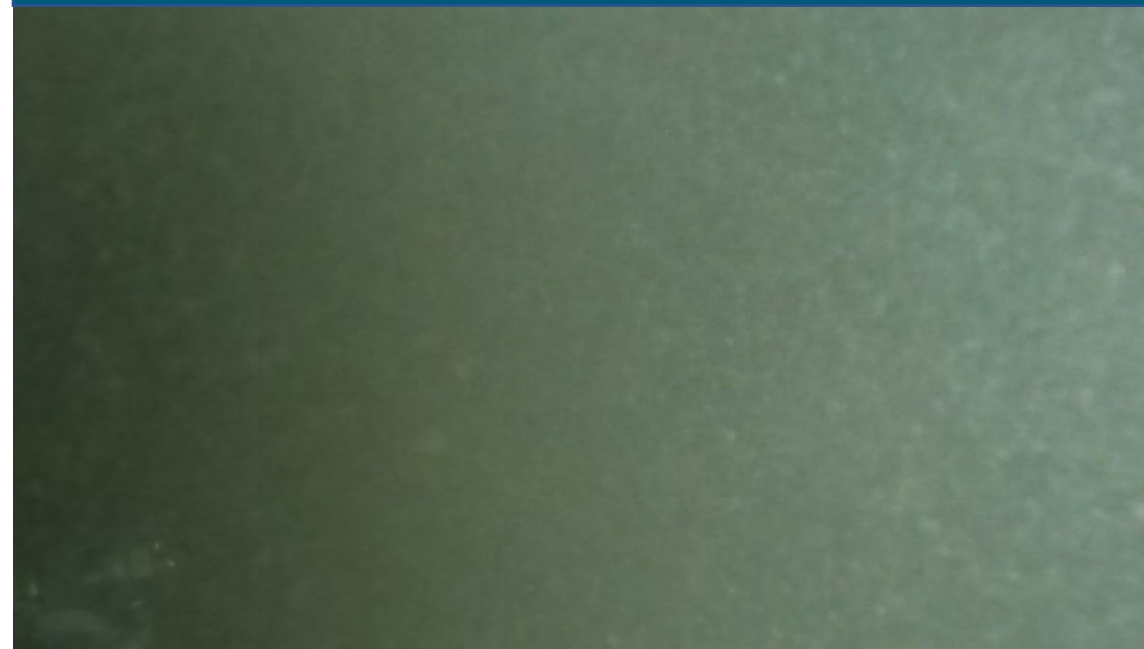
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 3600                            |
| Taxa Richness <sup>1</sup> :   |                     | 16                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

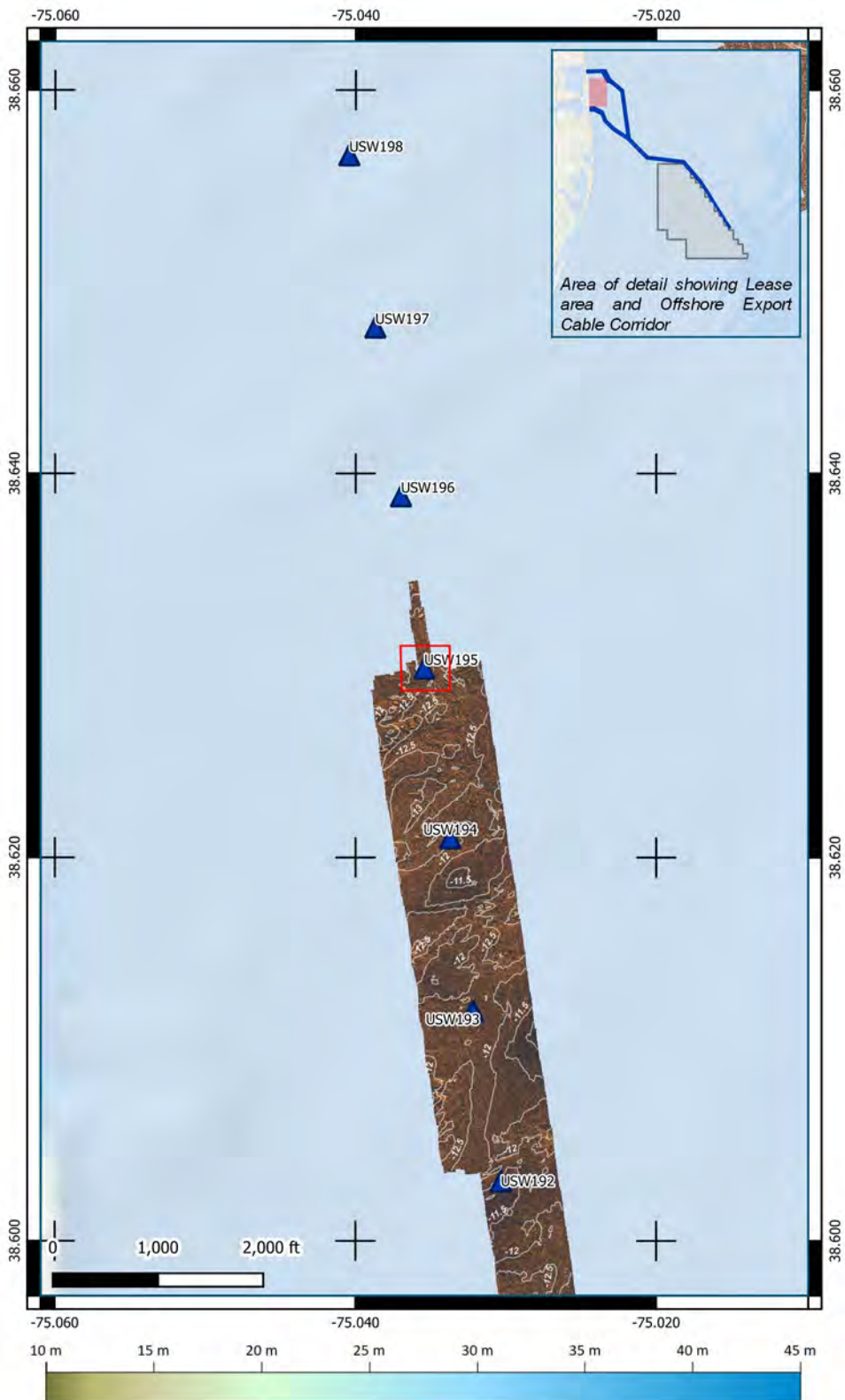


### Sample Photograph





### Map of Benthic Grab Location

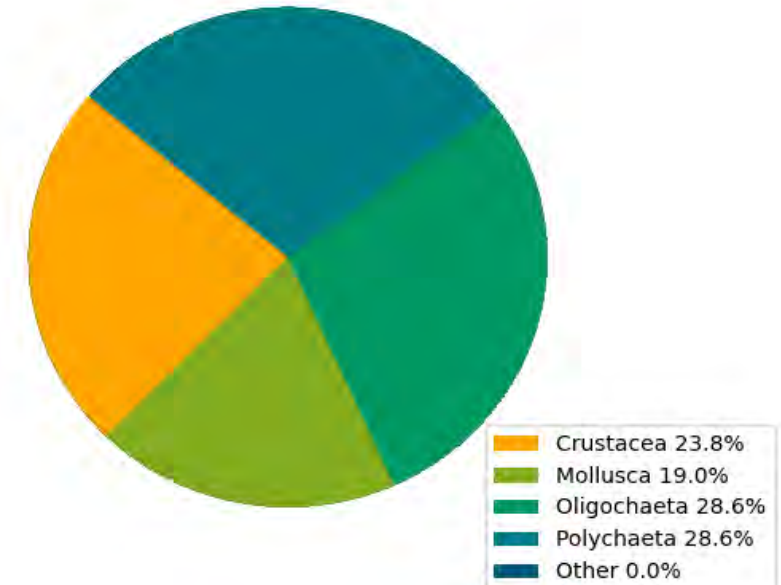


### Benthic Grab USW195

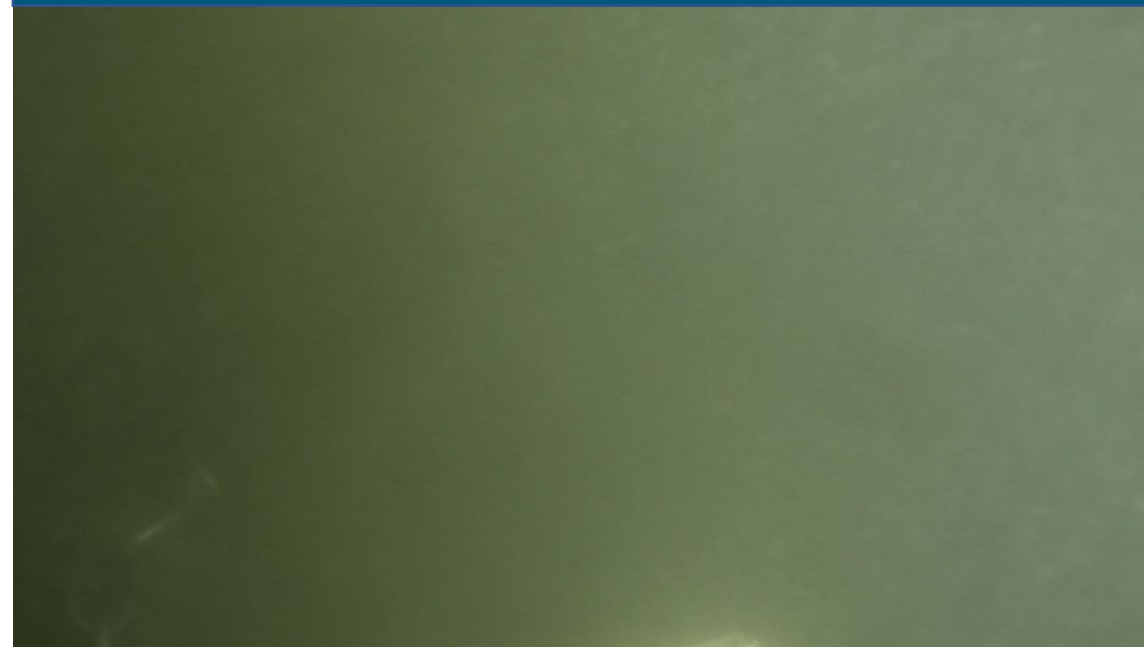
|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 525                             |
| Taxa Richness <sup>1</sup> :   |                     | 9                               |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

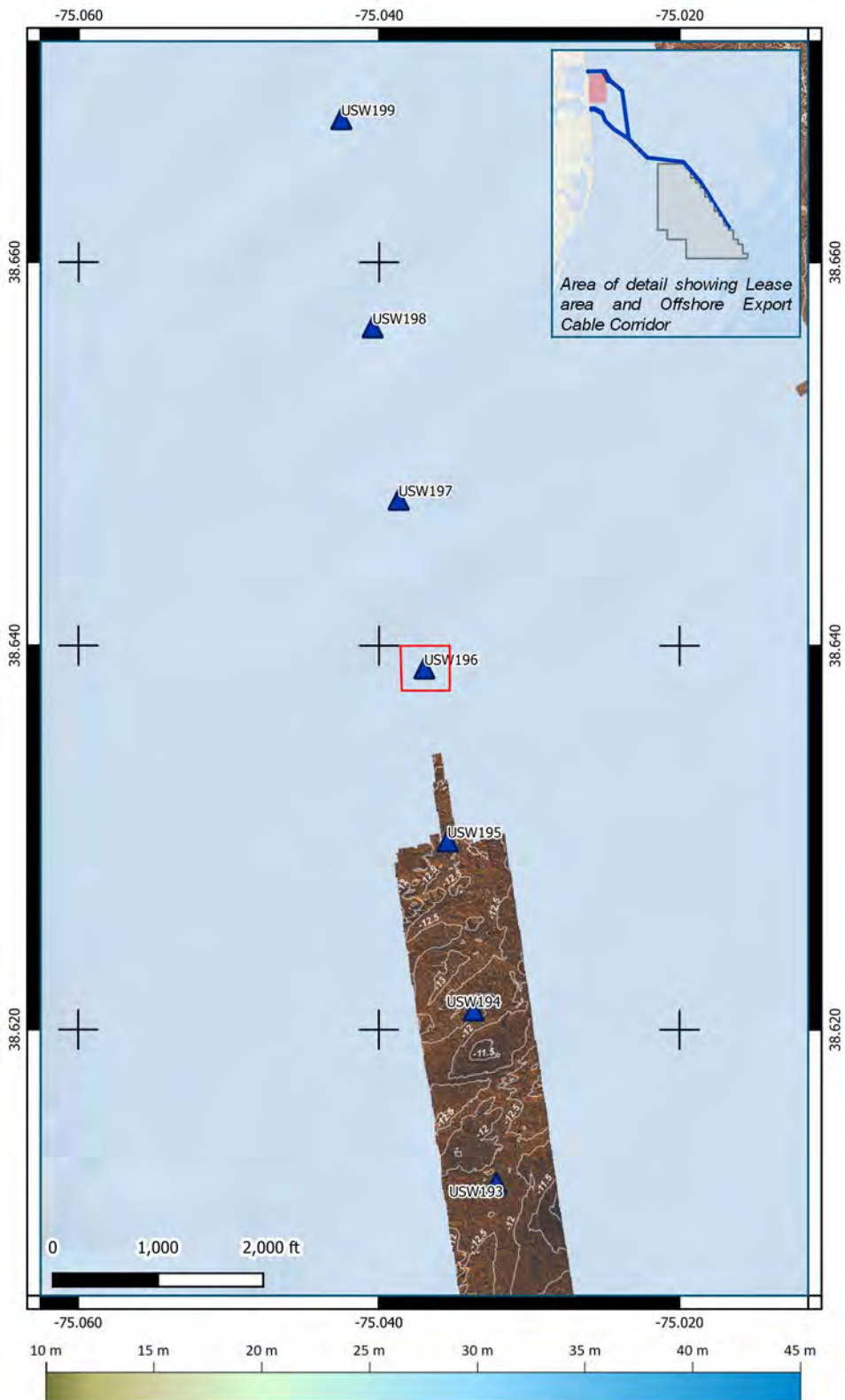


### Sample Photograph





### Map of Benthic Grab Location

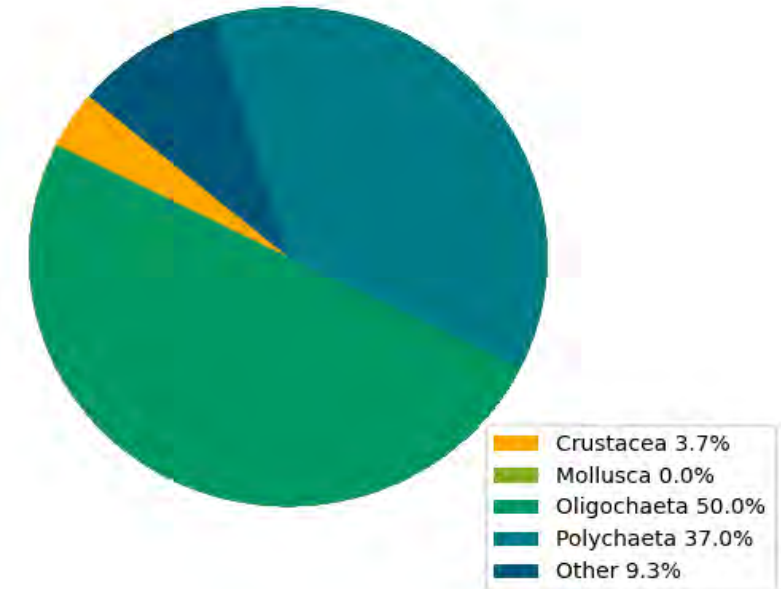


### Benthic Grab USW196

|  |                     |                                 |
|--|---------------------|---------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Coarse Unconsolidated Substrate |
|  | Substrate Group:    | Gravelly                        |
|  | Substrate Subgroup: | Gravelly Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1350                            |
| Taxa Richness <sup>1</sup> :   |                     | 13                              |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph

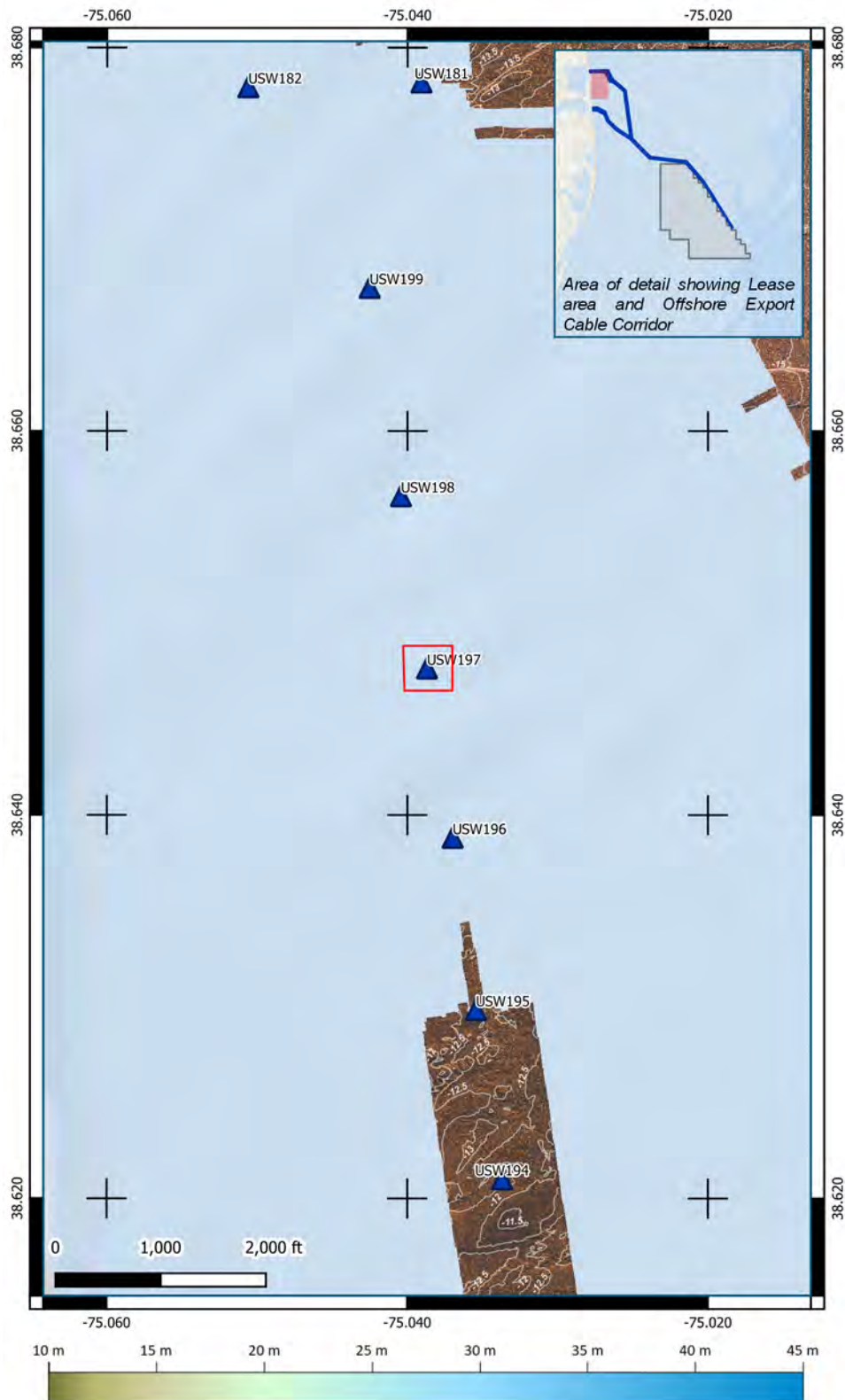


### Sample Photograph





### Map of Benthic Grab Location

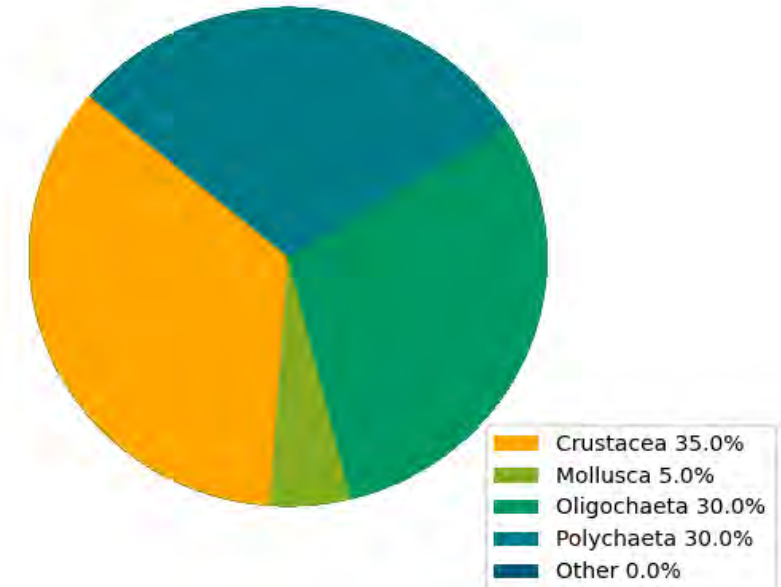


### Benthic Grab USW197

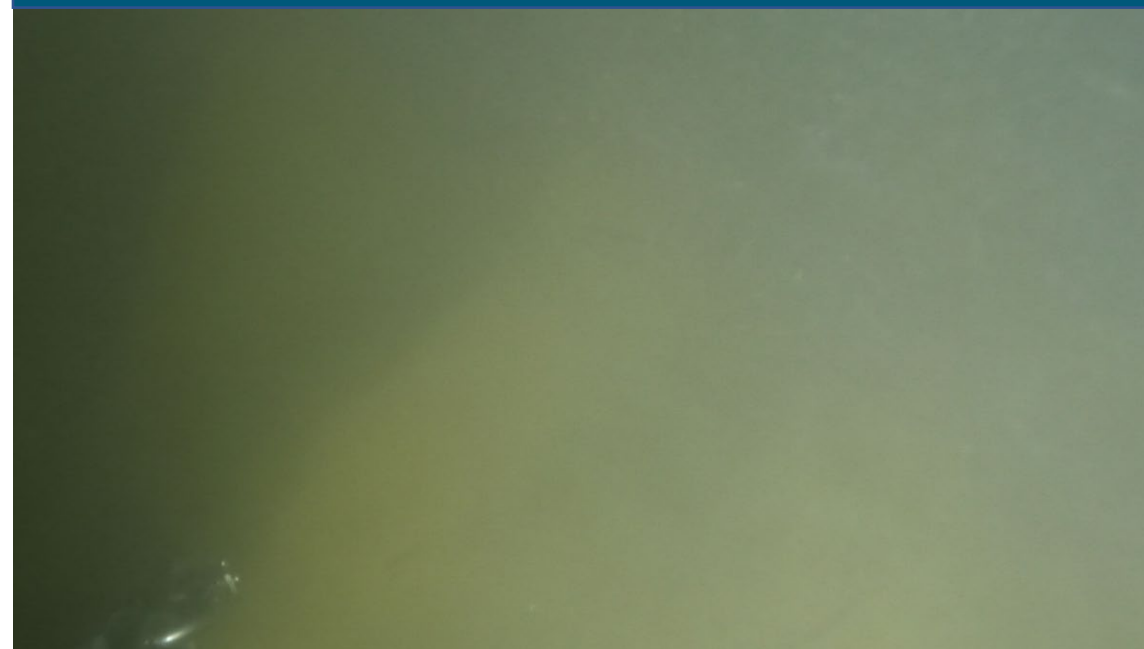
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 500                           |
| Taxa Richness <sup>1</sup> :   |                     | 9                             |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMC-G method described in Cuffney et al. (2007),

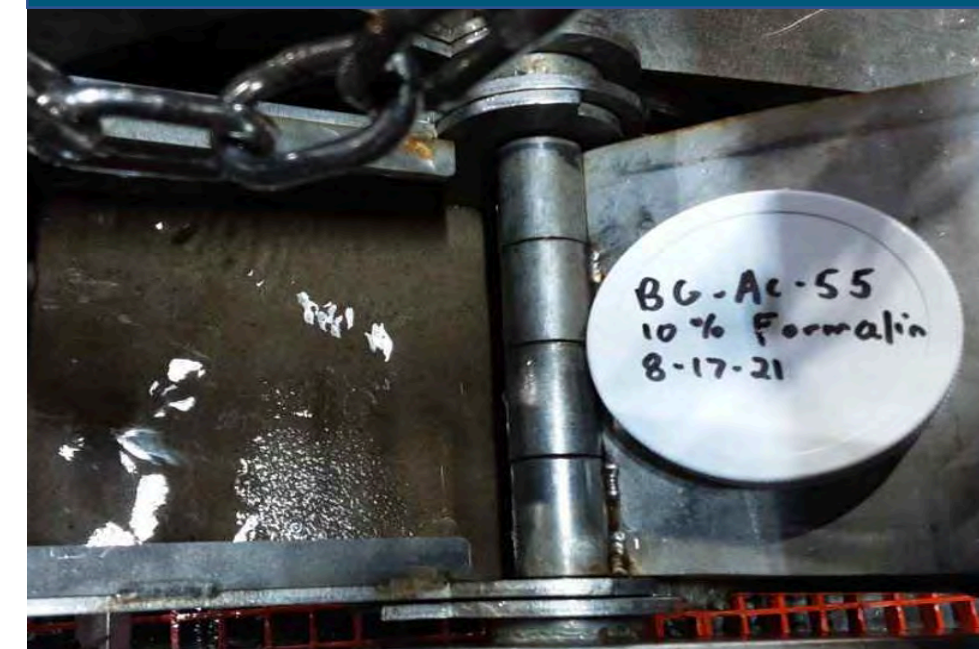
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

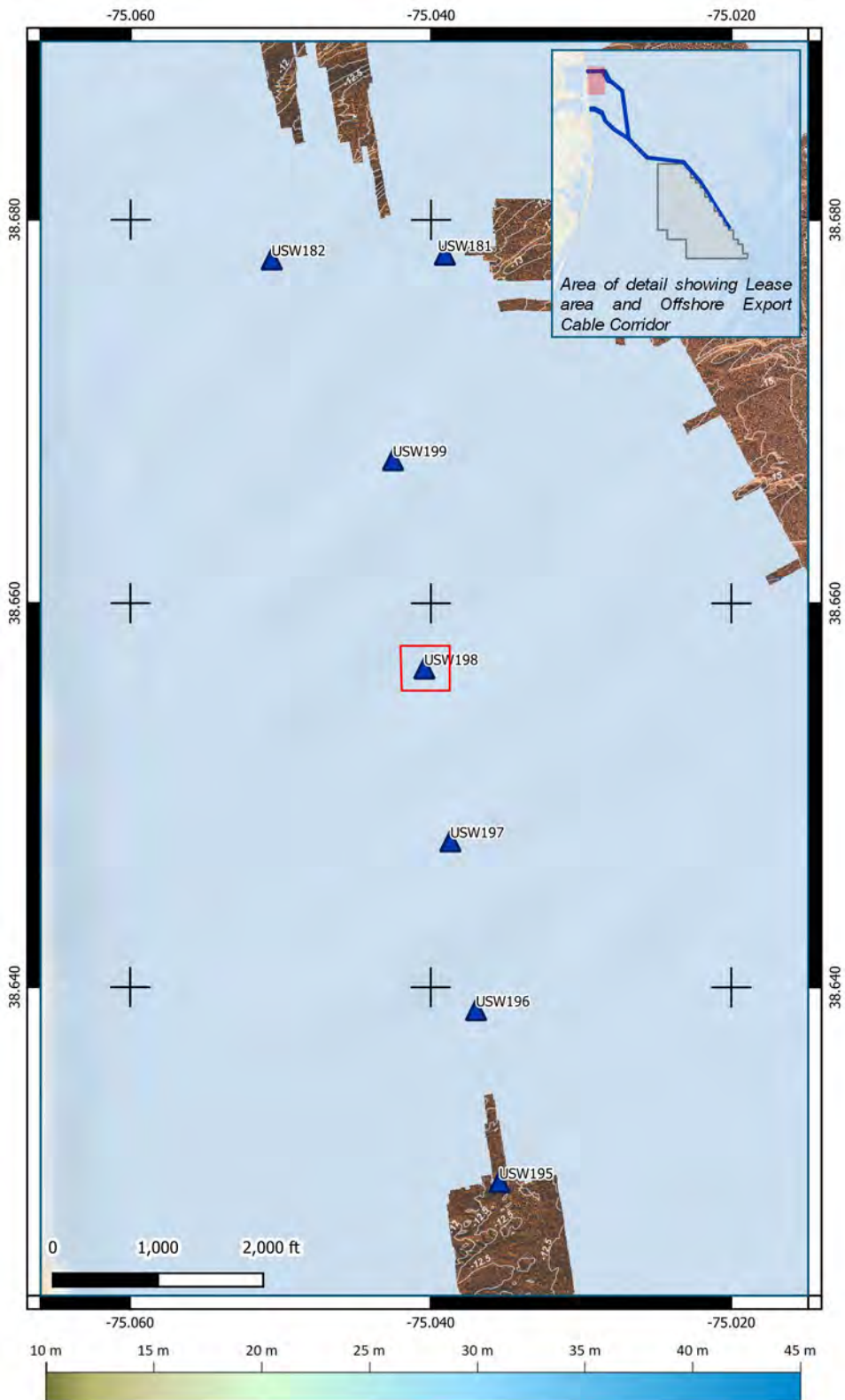


### Sample Photograph





### Map of Benthic Grab Location

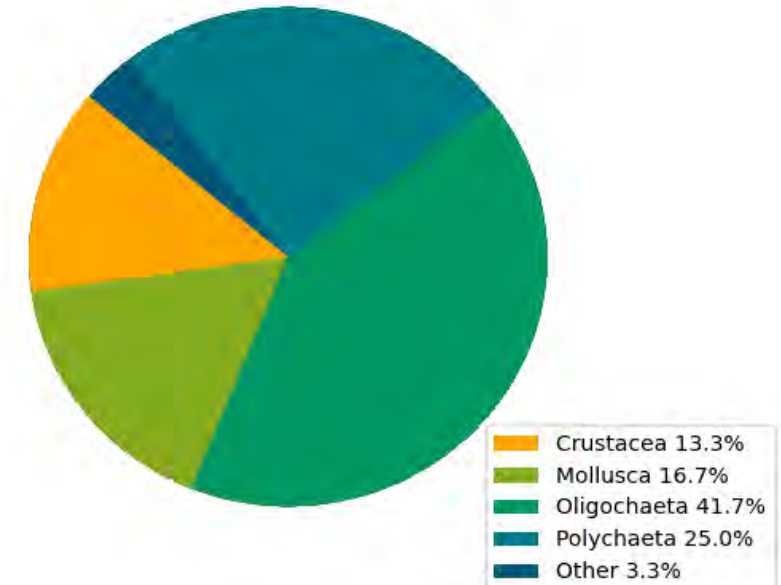


### Benthic Grab USW198

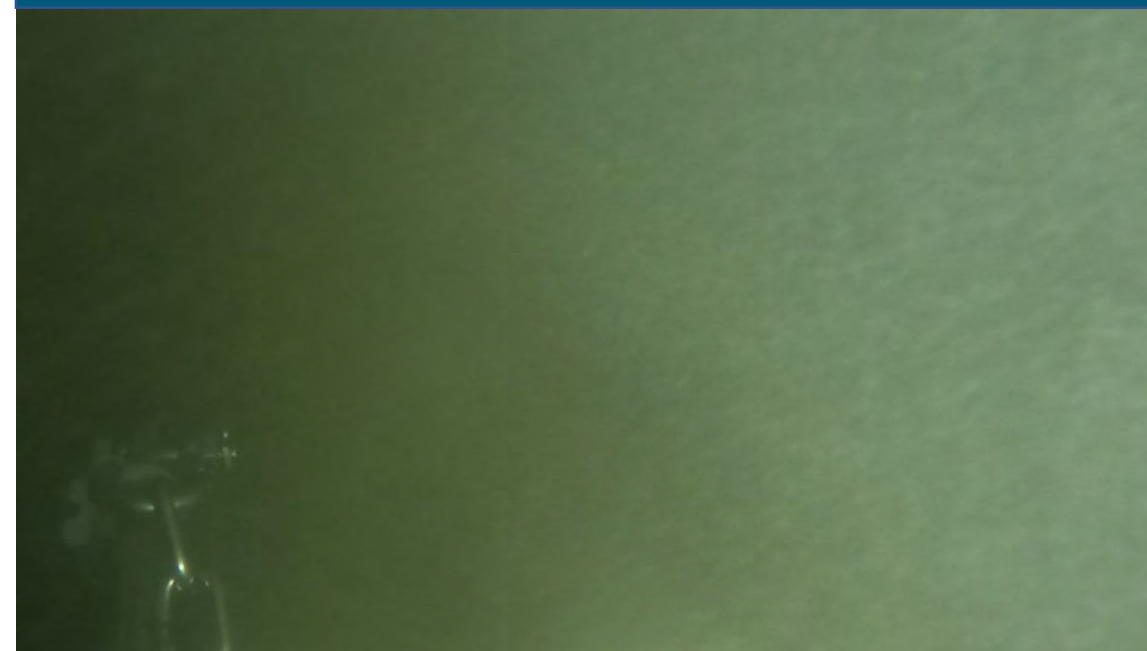
|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1500                          |
| Taxa Richness <sup>1</sup> :   |                     | 14                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

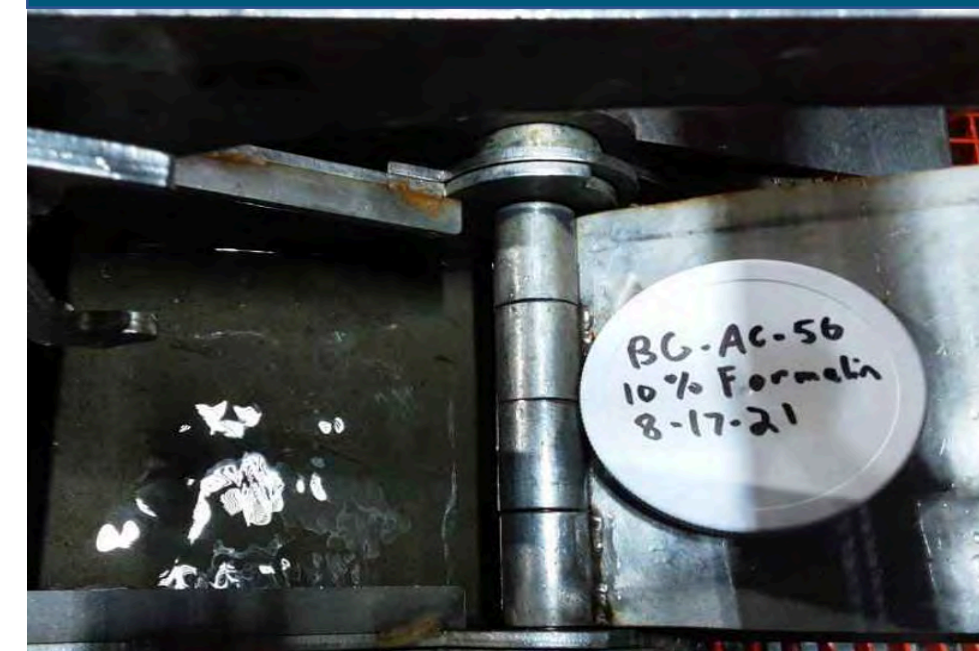
### Benthic Organism Density by Taxa Group



### In-Situ Photograph

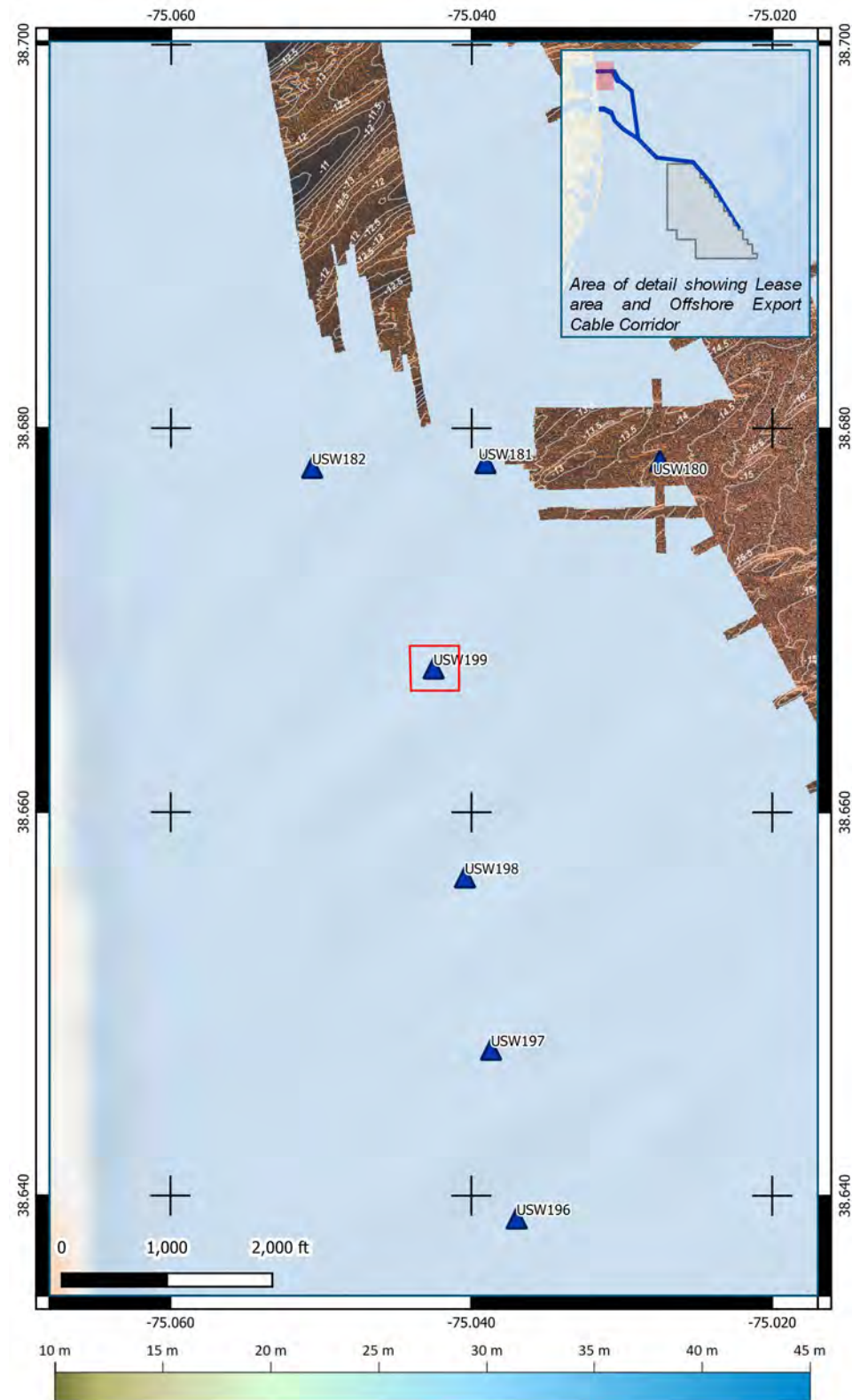


### Sample Photograph





### Map of Benthic Grab Location

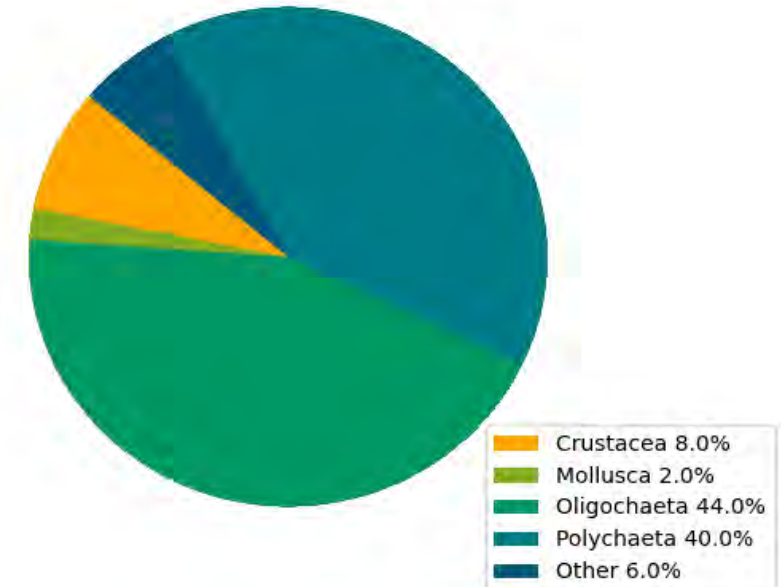


### Benthic Grab USW199

|  |                     |                               |
|--|---------------------|-------------------------------|
| CMECS<br>Habitat<br>Classification                                       | Substrate Subclass: | Fine Unconsolidated Substrate |
|  | Substrate Group:    | Sand                          |
|  | Substrate Subgroup: | Medium Sand                   |
| Benthic Organism Density<br>(individuals/m <sup>2</sup> ) <sup>1</sup> : |                     | 1250                          |
| Taxa Richness <sup>1</sup> :   |                     | 18                            |

<sup>1</sup>All metrics calculated after taxonomic ambiguity in the dataset was resolved using the RPMG-G method described in Cuffney et al. (2007),

### Benthic Organism Density by Taxa Group



### In-Situ Photograph



### Sample Photograph

