MONA OFFSHORE WIND PROJECT

Environmental Statement

Volume 6, Annex 2.1: Benthic subtidal and intertidal ecology technical report

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F02

Image of an offshore wind farm

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RPS	**Mona Offshore Wind Limited.**

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Glossary

Term	Meaning
Annelida	An invertebrate belonging to the phylum annelid. Also known as the ringed worms or segmented worms, are a large phylum, including ragworms, earthworms, and leeches.
Benthic Ecology	Benthic ecology encompasses the study of the organisms living in and on the sea floor, the interactions between them and impacts on the surrounding environment
Biotope	The combination of physical environment (habitat) and its distinctive assemblage of conspicuous species.
Bivalve	A large class of molluscs, also known as pelecypods. They have a hard calcareous shell made of two parts or 'valves'.
Circalittoral	The subzone of the rocky sublittoral below that dominated by algae (i.e. the infralittoral), and dominated by animals.
CLUSTER Analysis	CLUSTER analysis is a statistical method for processing data. It works by organising items into groups, or clusters, on the basis of how closely associated they are.
Crustacean	An invertebrate belonging to the subphylum of Crustacea, of the phylum Arthropoda. Includes crabs, lobsters, shrimps, barnacles and sand hoppers.
Diamictons	A general term used to describe a non-sorted or poorly sorted, sometimes non-calcareous, terrigenous or marine sediment containing a wide range of particle sizes derived from a broad origin.
Echinoderm	An invertebrate animal belonging to the phylum Echinodermata that includes sea stars, brittle stars, feather stars, sea urchins and sea cucumbers.
Environmental DNA	Genetic material obtained directly from environmental samples (soil, sediment, water, etc.) without any obvious signs of biological source material.
Epifauna	Animals living on the surface of the seabed.
Eulittoral	Applied to the habitat formed on the lower shore of an aquatic ecosystem, below the littoral zone. The marine eulittoral zone is marked by the presence of barnacles.
Evidence Plan	The Evidence Plan is a mechanism to agree upfront what information the Applicant needs to supply to the Planning Inspectorate as part of the Development Consent Order (DCO) applications for the Mona Offshore Wind Project.
Evidence Plan Expert Working Group (EWG)	Expert working groups set up with relevant stakeholders as part of the Evidence Plan process.
Faunal Group	A collections of sample stations identified by Simprof tests to similar enough to each other and dissimilar enough to other sample stations to be considered a distinct group.
Habitat	The environment that a plant or animal lives in.
Infauna	The animals living in the sediments of the seabed.
Infralittoral	A subzone of the sublittoral in which upward-facing rocks are dominated by erect algae.
Intertidal area	The area between Mean High Water Springs (MHWS) and Mean Low Water Springs (MLWS).
Landfall	The area in which the offshore export cables make landfall and is the transitional area between the offshore cabling and the onshore cabling.

Term	Meaning
Littoral	Residing within the littoral zone which extends from the high water mark, which is rarely inundated, to shoreline areas that are permanently submerged.
Mollusc	Invertebrate animal belonging to the phylum Mollusca that includes the snails, clams, chitons, tooth shells, and octopi.
Morgan Array Area	The area within which the wind turbines, foundations, inter-array cables, interconnector cables, offshore export cables and offshore substation platforms (OSPs) forming part of the Morgan Offshore Wind Project will be located.
Multivariate	Having or involving a number of independent mathematical or statistical variables.
Polyaromatic hydrocarbons	A class of chemicals that occur naturally in coal, crude oil, and gasoline.
Polychlorinated biphenyls	They belong to a broad family of human-created organic chemicals known as chlorinated hydrocarbons. Although most were banned in 1986, they linger on in detectable levels in animals, fish and humans.
Porifera	A phylum of aquatic invertebrate animals that comprises the sponges.
SIMPER	Calculates the contribution of each species (%) to the dissimilarity between each two groups.
Simprof	A series of similarity profile permutation tests run on biotic data which looks for statistically significant evidence of genuine clusters of sites which were previously unstructured.
Special Area of Conservation (SAC)	A site designation specified in the Habitats Directive (Council Directive 92/43/EEC). Each site is designated for one or more of the habitats and species listed in the Directive.
Site of Special Scientific Interest (SSSI)	A Site of Special Scientific Interest (SSSI) is a formal conservation designation. Usually, it describes an area that's of particular interest to science due to the rare species of fauna or flora it contains - or even important geological or physiological features that may lie in its boundaries.
Species	A group of living organisms consisting of similar individuals capable of exchanging genes or interbreeding.
Sublittoral	Area extending seaward of low tide to the edge of the continental shelf.
Subtidal	Area extending from below low tide to the edge of the continental shelf.
Univariate	Analysis of one variable, with the purpose being to understand the distribution of values for a single variable.

Acronyms

Acronym	Description
AL1/AL2	Action Level 1/Action Level 2
CCW	Countryside Council Wales
Cefas	Centre for Environment, Fisheries and Aquaculture Science
CMACS	Centre for Marine and Coastal Studies
DDV	Drop Down Video
eDNA	Environmental DNA
EIA	Environmental Impact Assessment

Acronym	Description
EMODnet	European Marine Observation and Data Network
ERL	Effect Range Low
ERM	Effect Range Median
EUNIS	European Nature Information System
EWG	Expert Working Group
GPS	Global Positioning System
IEF	Important Ecological Feature
ISQG	Interim Marine Sediment Quality Guidelines
JNCC	Joint Nature Conservation Committee
LOD	Limit of Detection
MCZ	Marine Conservation Zone
MDS	Multi-Dimensional Scaling
MHWS	Mean High Water Spring
MLWS	Mean Low Water Spring
MMO	Marine Management Organisation
MNR	Marine Nature Reserve
NBN	National Biodiversity Network
NMBAQC	North East Atlantic Marine Biological Analytical Quality Control
NQ	Not Quantifiable
NRW	Natural Resources Wales
OSPAR	Oslo and Paris Conventions
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
PEIR	Preliminary Environmental Information Report
PEL	Probable Effect Level
PSA	Particle Size Analysis
SAC	Special Areas of Conservation
SEA	Strategic Environmental Assessment
SNCB	Statutory Nature Conservation Body
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
UK BAP	United Kingdom Biodiversity Action Plan
WFD	Water Framework Directive
ZoI	Zone of Influence

Units

Unit	Description
%	Percentage
mm	Millimetre
cm	Centimetre
m	Metre
km	Kilometre
m^2	Square metre
km^2	Square kilometres
nm	Nautical mile
g	Grams
mg/kg	Milligrams per kilogram
µg/g	Micrograms per gram
µg/kg	Micrograms per kilogram
cfu/g	Colony-forming unit per gram
µm	Micrometre
ml	Millilitre
l	Litre
^oC	Degrees Celsius

1 Benthic subtidal and intertidal ecology technical report

1.1 Introduction

1.1.1.1 This benthic subtidal and intertidal ecology technical report provides a detailed baseline characterisation of the benthic subtidal and intertidal ecology (e.g. species, communities and habitats) associated with the Mona Offshore Wind Project. The Mona Offshore Wind Project is located within the east Irish Sea, north of Conwy, Wales, and west of Lancashire, England. The Mona Offshore Wind Project is located southeast of the Isle of Man.

1.1.1.2 Data was collected through a detailed desktop study of the existing resources available for benthic subtidal and intertidal ecology within the regional benthic subtidal and intertidal ecology study area, incorporating site-specific survey data and data from third party organisations.

1.1.1.3 The aim of this technical report is to provide a robust baseline characterisation of the benthic subtidal and intertidal ecology resources within the defined study areas (see section 1.2) against which the potential impacts of the Mona Offshore Wind Project can be assessed. To support the assessment of effects in the Environmental Impact Assessment (EIA), the ecological information presented in this technical report was used to identify a number of Important Ecological Features (IEFs). Benthic IEFs were determined based on the conservation, ecological and commercial importance of each identified feature within the Mona Offshore Wind Project and therefore within the Mona benthic subtidal and intertidal ecology study area.

1.1.1.4 This technical report is structured as follows:

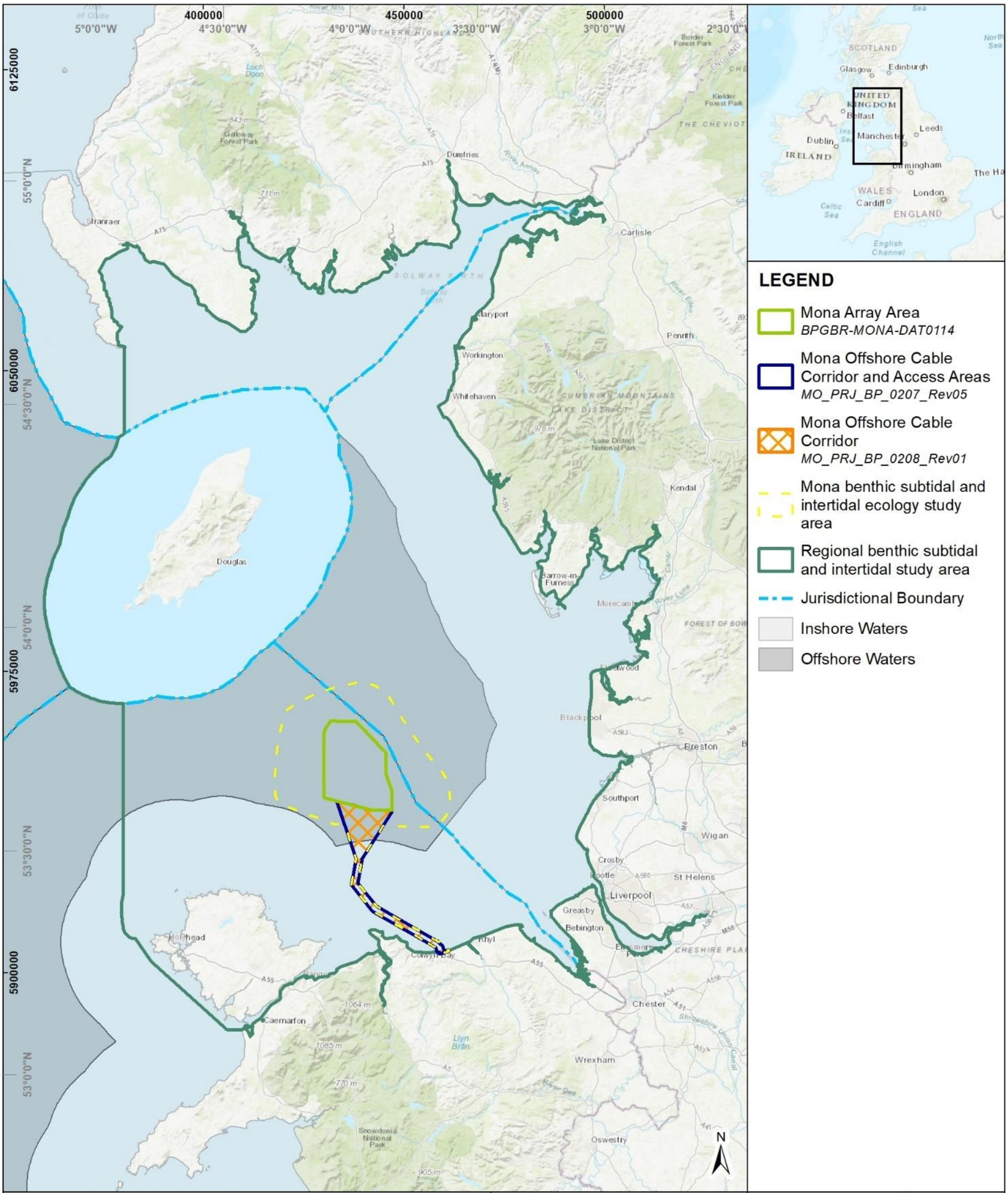
- Section 1.2: Study area – Overview of the study areas that are relevant to the report
- Section 1.3: Consultation – Communication with Statutory Nature Conservation Bodies (SNCBs) and other stakeholders
- Section 1.4: Methodology – Overview of desktop study and site-specific surveys used to inform the baseline
- Section 1.5: Desktop study baseline characterisation – Details the results of the desktop study
  - Section 1.5.1: Regional benthic subtidal and intertidal ecology study area
  - Section 1.5.2: Benthic subtidal and intertidal ecology study area
- Section 1.6: Designated Sites
  - Section 1.6.1: International designations
  - Section 1.6.2: National designations - SSSIs
  - Section 1.6.3: National designations - MCZs
  - Section 1.6.4: National designations - MNRs
- Section 1.7: Site-specific subtidal survey baseline characterisation – Details the results of the site-specific subtidal surveys.
  - Section 1.7.2: Methodology
  - Section 1.7.3: Results - Sediment analysis

  - Section 1.7.4: Results - Infaunal analysis
  - Section 1.7.5: Results - Epifaunal analysis
  - Section 1.7.6: Results - Habitat assessments
  - Section 1.7.7: Results - Combined infaunal and epifaunal subtidal biotopes
- Section 1.8: Site-specific intertidal survey baseline characterisation – Details the results of the site specific intertidal survey.
  - Section 1.8.2: Methodology
  - Section 1.8.3: Results – Mona landfall
- Section 1.9: Summary.

1.2 Study area

1.2.1.1 For the purposes of the benthic subtidal and intertidal ecology assessment, two study areas have been defined:

- The Mona benthic subtidal and intertidal ecology study area has been defined as the area encompassing the Mona Array Area and the Mona Offshore Cable Corridor. The Mona benthic subtidal and intertidal study area also includes the area within one tidal excursion around the Mona Array Area, referred to as the Zone of Influence (ZoI), and associated landfall and intertidal habitats (up to the Mean High Water Springs Mark (MHWS)) (Figure 1.1). These are the areas within which the site-specific benthic subtidal and intertidal surveys have been undertaken. The site-specific subtidal surveys within the Mona benthic subtidal and intertidal ecology study area were undertaken in conjunction with the site-specific benthic surveys for the neighbouring Morgan Offshore Wind Project Generation Assets (hereafter referred to as the Morgan Generation Assets). The statistical analysis, presented in this technical report, has been undertaken on the combined dataset collected within both the Mona Array Area (including the ZoI) and the Morgan Array Area with the data collected for the Morgan Generation Assets used to provide additional context for the data within the Mona Array Area. A separate analysis has been undertaken on the data collected from the Mona Offshore Cable Corridor.
- The regional benthic subtidal and intertidal ecology study area encompasses the wider east Irish Sea habitats and includes the neighbouring consented offshore wind farms and designated sites (Figure 1.1). It has been characterised by desktop data and provides a wider context to the site-specific data collected within the Mona benthic subtidal and intertidal ecology study area.



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Data Sources: Client, MMO, MarineScotland

Project Name: MONA OFFSHORE WIND PROJECT

0 2.5 5 10 15 20 nm
0 5 10 20 30 40 km

Drawing Number: RPSE-MN-ES-BEN-002-05

Drawing Title: MONA BENTHIC SUBTIDAL AND INTERTIDAL ECOLOGY STUDY AREA AND THE REGIONAL BENTHIC SUBTIDAL AND INTERTIDAL ECOLOGY STUDY AREA.

Geodetic Information:
Datum: ETRS 1989
Projection: ETRS 1989 UTM Zone 30N
Scale@160mmx220mm: 1:1,600,000

VER	DATE	DETAILS	BY	CHECK
00	12/07/23	First Issue	MJ	TH
05	26/09/23	Revision	NA	TH

Figure 1.1: Mona benthic subtidal and intertidal ecology study area and the regional benthic subtidal and intertidal ecology study area.

1.3 Consultation

1.3.1.1 A summary of the key issues raised during consultation activities undertaken to date specific to benthic subtidal and intertidal ecology is presented in Table 1.1 below.

Table 1.1: Summary of key consultation topics raised during consultation activities undertaken for the Mona Offshore Wind Project relevant to benthic subtidal and intertidal ecology.

Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this technical report
March 2021	Joint Nature Conservation Committee (JNCC), Natural England and Natural Resources Wales (NRW) - email	Provision of initial information on the geophysical and benthic survey for the Mona Array Area only, the aerial bird and marine mammal surveys, met ocean surveys and other information.	No response required
May 2021	JNCC, Natural England and NRW - email	Provision of the benthic survey strategy for the Mona Array Area only.	No response required
June 2021	JNCC, Natural England and NRW – email/meeting	Provision of the updated benthic survey strategy and summary of changes. Benthic survey scope meeting. Provision of updated survey plan and final meeting minutes incorporating stakeholder comments.	No response required
December 2021	RPS - email	Provision of various guidance documents on Water Framework Directive (WFD), Marine Mammal and benthic topics. High level comments on the cable routing study.	No response required
February 2022	Benthic ecology, fish and shellfish and physical process Expert Working Group (EWG) meeting 1	The purpose of this meeting was to introduce the project, discuss the remit of the EWG and Ways of Working. Also discussed were the ongoing surveys and preliminary results from these. Historic feedback received from SNCBs on the surveys and approach to addressing these comments (e.g. filling any potential data gaps) as part of the wider baseline characterisation for the relevant topics was also discussed.	No response required
March 2022	JNCC – EWG meeting response	JNCC note the presence and initial analysis of sea-pen and burrowing megafauna communities within the array area and welcome the opportunity to review the assessment of this feature. JNCC provided information which may prove useful in further analysis.	The seapens and burrowing megafauna habitats assessments are presented in section 1.7.6.

Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this technical report
		JNCC also notes the presence of habitat which is being categorised as “low” resemblance to stony reef habitat and provided guidance to ensure JNCC Report 6562 published in September 2020 is considered in the assessment of this habitat.	The stony reef assessments are presented in section 1.7.6 with the full data provided in Appendix B. This assessment has been undertaken in accordance with the Irving (2009) and Golding *et al*. (2020) guidance.
March 2022	NRW - email	Confirmation that NRW benthic specialists with input from WFD and water quality specialist are sufficient to review the benthic survey scope of work.	No response required
April 2022	RPS - email	Provision of the Survey Scope of Work for the Mona 2022 Benthic Ecology Subtidal Survey covering the Mona Offshore Cable Corridor and ZoI for the Mona Array Area. Provision of the Intertidal Survey Scope for the intertidal surveys of the landfall.	No response required
April 2022	JNCC - email	Requested clarification as to whether the number of stations specified is for both Morgan Generation Assets and Mona Offshore Wind Project or will apply separately to each. JNCC requested information on low resemblance reefs be shared. JNCC appreciate Ocean quahogs *Arctica islandica* being returned to the sea and recommend return to suitable habitat.	The number of stations assessed for the Mona Offshore Wind Project has been stated in section 1.7.2. The stony reef assessments are presented in section 1.7.6 with the full data provided in Appendix B.
April 2022	Marine Management Organisation (MMO) – EWG Meeting Response	The MMO requests confirmation that the benthic grab samples collected in relation to the developments will be processed to the recommended national processing guidelines (Worsfold and Hall, 2010) and that the resultant data will be made available as soon as possible.	The macrofaunal analysis was undertaken by Thomson Ecology to North East Atlantic Marine Biological Analytical Quality Control (NMBAQC) processing guidelines (Worsfold and Hall, 2010). The full data is available on request.
April 2022	Natural England – email	Natural England advised that the Intertidal Phase I Walkover Survey be set out in a report, reflecting full details once determined (i.e. location), reflecting and fully referencing any desk-based studies as well as relevant designated features. Natural England welcomed the wide scope of the 2022 survey area including the ZoI and Mona Offshore Cable Corridor. Any maps should include all relevant designated sites. Natural England also requested a map of the expected habitats within the 2022	The intertidal and subtidal ecology baseline characterisations of the Mona benthic subtidal and intertidal ecology study area are presented in sections 1.5.1 and 1.5.2 respectively. Full detail regarding the intertidal Phase I walkover surveys in 2022 and 2023 are presented in section 1.8.

Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this technical report
		survey area and the sample stations should be arranged to ground truth this information. Supported the use of video and stills to assess habitats. Welcomed the avoidance of sensitive habitats and the collection of environmental DNA (eDNA) information.	
April 2022	NRW - email	NRW recommend one sample station per habitat increasing accordingly depending on the coverage of the habitat. NRW notes sampling within the Mona Offshore Cable Corridor currently not possible as they are not yet defined. NRW broadly agree with the sample spacing but advise that frequency increase in the nearshore/intertidal. NRW welcome the avoidance of sensitive habitats (i.e. *Sabellaria spinulosa* reef, *Sabellaria alveolata* reef, *Modiolus* etc.) encountered during grab sampling. Recommend moving grab sample (e.g. 50 m based on habitat sensitivity or survey specificity).	The subtidal survey locations were determined based on desktop data and refined with geophysical data to ensure that a full range of habitats could be sampled in the Mona benthic subtidal and intertidal ecology study area. Sample stations within the Mona Offshore Cable Corridor are shown in Figure 1.5, which demonstrates even spacing.
May 2022	Isle of Man Department of Infrastructure – Scoping Opinion	The Territorial Sea Committee would draw the applicant's attention to the Manx Marine Environmental Assessment which provides a useful overview of the Island's marine environment and should be taken into account as part of both the transboundary and possibly also the cumulative impacts assessment as part of this application. Specifically, Chapter 3.3 of the Scoping Report (Subtidal Ecology) contains information that would improve upon the data provided, including in sections 4.1.4.18 (*Sabellaria spinulosa*) and 4.1.4.19 (*Modiolus* reefs).	No response required
		The Mona regional benthic subtidal and intertidal ecology study area for the generation assets (Figure 4.1): The straight line seems rather arbitrary from an effects perspective. It appears odd that the south-west part of the Manx territorial sea has not been included. This appears to be neither an ecological or jurisdictional- based boundary decision and warrants further clarification.	The regional benthic subtidal and intertidal ecology study area (Figure 1.1) has been amended to include the Isle of Man's territorial waters.

Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this technical report
		Given the inclusion of a substantial part of the Manx territorial sea, and a request for complete inclusion, there are no datasets or reports indicated for the area of the Manx territorial sea.	Figure 1.5 shows all the relevant designated sites, including sites within the Isle of Man territorial waters, within the regional benthic subtidal and intertidal ecology study area.
May 2022	Natural Resources Wales – Scoping Opinion	NRW (A) would add the following data sources to Parts 2 & 3: Table 4.1 Summary of key desktop datasets and reports: • Lle Geo-Portal for Wales: Lle - Home (gov.wales) • Data Map Wales: Home | DataMapWales (gov.wales)	The Lle Geo-portal and the DataMapWales have both been used to define the baseline for the regional benthic subtidal and intertidal ecology study area (section 1.5).
		NRW (A) advise that Table 4.3 Relevant protected benthic species and habitats which have the potential to occur within the Mona benthic subtidal and intertidal ecology study area for the generation assets, should also include Annex I features outside Special Area of Conservation (SAC) that might potentially occur within the Mona benthic subtidal and intertidal study area. For further information on how NRW (A) advise on Annex I features outside SACs please refer to Paragraph 22 of NRWs Scoping Opinion response.	The Constable Bank, an Annex I sandbank outside an SAC, is discussed in paragraph 1.5.2.6. Discussion of the results of site-specific sampling within Constable Bank is presented in section 1.7 and the feature is included as an IEF in Table 1.25. Any Annex I habitats or species (including those outside an SAC) identified within the Mona benthic subtidal and intertidal ecology study area have been identified and highlighted in Table 1.25.
		Please note that all reference to 'Cobble reef' should be amended to 'Stony reef' as this is the correct habitat name/definition under the Habitats Directive.	Noted and reference is made to stony reef. All references to cobble reef have been removed and replaced with stony reef.
June 2022	The Planning Inspectorate – Scoping Opinion	The regional benthic subtidal and intertidal study area includes a straight-line boundary on the west edge which appears arbitrary from an effects perspective. The study area should sufficiently encompass the full extent of any receptors likely to be significantly affected.	The regional benthic subtidal and intertidal ecology study area is shown in (Figure 1.1 and has been expanded to) has been amended to account for all of the Isle of Man's territorial waters instead of cutting through them.
		The Scoping Report states that from initial analysis of data, the Mona Potential Array Area is unlikely to have more than a low resemblance to the habitat 'sea pen and burrowing megafauna communities'. There is a possible presence of two areas that show a low resemblance to a 'stony reef' habitat. The Applicant's attention is directed to	The stony reef assessments are presented in section 1.7.6 with the full data provided in Appendix B. This assessment has been undertaken in accordance with the Irving (2009) and Golding *et al*. (2020) guidance.

Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this technical report
		JNCC Report No 656: Refining the criteria for defining areas with a 'low resemblance' to Annex I stony reef', which may be useful for the determination of such habitat.	
December 2022	Benthic ecology, fish and shellfish and physical process EWG meeting 2	The meeting presented the result of the baseline characterisation and the preliminary outputs of the impact assessment. NRW provided updated guidance for Wales on when low resemblance stony reef should be considered as Annex I features.	No response required
June 2023	JNCC - Section 42 Consultation on the PEIR	JNCC requested that analysis on the Mona Offshore Cable Corridor and ZoI be undertaken and presented to provide in order to enable a full assessment of the impact of the Mona Offshore Wind Project.	Full analysis of site specific data collected in the Mona Offshore Cable Corridor has been presented in section 1.7, the full data is available on request.
		JNCC highlighted advice on the assessment of geogenic reefs and seapens and burrowing megafauna habitats.	The guidance considered regarding the assessment of seapens and burrowing megafauna habitat and stony reefs has been presented in section 1.7.2.
June 2023	MMO – Section 42 Consultation on the Preliminary Environmental Information Report (PEIR)	The MMO requested clarification regarding the number of stations sampled for sediment chemistry analysis for metals, Polycyclic Aromatic Hydrocarbons (PAHs) and Polychlorinated Biphenyls (PCBs). They also requested the full data set be presented and that the appropriate thresholds be checked and clarified.	The number of sample stations which have been analysed for sediment chemistry has been presented in sections 1.7.2 and 1.7.3. The full sediment contamination data is presented in Appendix F.
June 2023	NRW - Section 42 Consultation on the PEIR	NRW requested that analysis on the Mona Offshore Cable Corridor and ZoI be undertaken and presented in order to understand the habitats that could be impacted in the Menai Strait and Conwy Bay SAC and other habitats.	Full analysis of site specific data collected in the Mona Offshore Cable Corridor has been presented in section 1.7, the full data is available on request. Furthermore specific text has been added for each analysis and assessment to specify the results within the Menai Strait and Conwy Bay SAC.
		NRW suggested it would be useful if photographs of what the isolated patches of *S. alveolata* located east of the main reef looked like.	Images related to *S. alveolata* target notes in the east of the landfall site have been flagged where relevant however for target

Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this technical report
			note 1 and 2 no relevant images could be identified.
		NRW requested that the PAH data be checked as one station which seems to exceed a relevant threshold needs reporting.	The PAH assessment data has been checked and it can be confirmed that no relevant thresholds were exceeded (section 1.7.3).
July 2023	Benthic ecology, fish and shellfish and physical process EWG meeting 4	This meeting outlined the key Section 42 responses from the SNCBs and how they will be addressed for the upcoming Environmental Statement.	No response required
		This meeting also outlined the baseline data which had been collected in the Mona Offshore Cable Corridor and the Mona Array Area ZoI in 2022. An overview was provided of the communities observed and as well as the physical environment.	The Mona Array Area ZoI data has been incorporated in to the Mona Array Area data for analysis and the Mona Offshore Cable Corridor data has been analysed separately in section 1.7.
		This meeting also highlighted the results of the 2023 intertidal survey which was conducted at the Mona landfall including detail on the *S. alveolata* reef and mussels beds as well as bacterial sampling.	The results of the site specific intertidal surveys in 2022 and 2023 are presented together in section 1.8.3.

1.4 Methodology

1.4.1.1 A desktop review has been undertaken to inform the baseline for benthic subtidal and intertidal ecology, including a review of a number of academic reports and reports from surveys undertaken to support other project consents. These provide further context to the site-specific surveys.

1.4.1.2 A benthic subtidal survey of the Mona Array Area was undertaken in 2021 and benthic subtidal surveys of the Mona Array Area ZoI and the Mona Offshore Cable Corridor were undertaken in 2022. Phase one intertidal walkover surveys of the landfall were initially undertaken in spring 2022 and then in 2023 to infill areas not covered by the 2022 survey. Furthermore as part of the 2023 intertidal surveys, the *S. alveolata* reef mapped in 2022 was remapped to determine if the extent of the *S. alveolata* reef in the west of the landfall had changed since 2022. The results of these surveys have been used to characterise the Mona benthic subtidal and intertidal ecology study area, for the purposes of informing the benthic subtidal and intertidal ecology EIA chapter (Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the Environmental Statement).

1.4.1.3 The subtidal benthic ecology surveys of the Mona Array Area, ZoI and Mona Offshore Cable Corridor consisted of grab sampling and Drop-down Video (DDV) sampling. Analysis of results included multivariate and univariate statistical analyses as well as descriptions of the raw data. As outlined in section 1.2, the surveys within the Mona Array Area were undertaken in conjunction with the site-specific benthic surveys for the neighbouring Morgan Generation Assets. The statistical analysis presented in this technical report, has been undertaken on the combined dataset collected within both the Mona Array Area (in 2021) and ZoI (in 2022) and the Morgan Array Area (in 2021). The data collected for the Morgan Generation Assets has been used to provide additional context for the data within the Mona Array Area and ZoI. The data collected within the Mona Offshore Cable Corridor in 2022 has been analysed separately to the Mona Array Area and ZoI data. This is because different communities and habitats were anticipated along the Mona Offshore Cable Corridor and a separate analysis enabled subtle changes in communities to be more easily detected as the Mona Offshore Cable Corridor shallows towards the landfall.

1.4.1.4 The 2022 and 2023 intertidal surveys involved a Phase 1 walkover at the proposed landfall location. Detailed notes were taken along with waypoint locations at habitat changes and photographs of the habitats. These were reviewed to provide a biotope map of the proposed landfall location.

1.4.1.5 Detailed methodologies for all site-specific surveys and analyses are presented in section 1.7.2.

1.4.2 Desktop study

1.4.2.1 Information on benthic subtidal and intertidal ecology within the regional benthic subtidal and intertidal ecology study area and the Mona benthic subtidal and intertidal ecology study area was collected through a detailed desktop review of existing studies and datasets. These are summarised at Table 1.2 below.

Table 1.2: Summary of key desktop sources.

Title	Source	Year	Author
Morgan Offshore Wind Project Generation Assets benthic baseline characterisation surveys	Morgan Offshore Wind Ltd.	2023	Morgan Offshore Wind Ltd.
Morecambe Offshore Windfarm benthic baseline characterisation surveys	Morecambe Offshore Windfarm Ltd.	2023	Morecambe Offshore Windfarm Ltd.
Morgan and Morecambe Offshore Windfarms Transmission Assets benthic baseline characterisation surveys	Morgan and Morecambe Offshore Windfarms Transmission Assets Ltd.	2023	Morgan and Morecambe Offshore Windfarms Transmission Assets Ltd.
Awel y Môr Environmental Impact Assessment, Volume 2, Chapter 5: Benthic Subtidal and Intertidal Ecology	RWE	2022	RWE
Lle Geo-Portal for Wales	Welsh Government	2021	Welsh Government
EMODnet broadscale seabed habitat map for Europe (EUSeaMap)	EMODnet-Seabed Habitats	2019	EMODnet-Seabed Habitats
The National Biodiversity Network (NBN) Gateway	https://nbnatlas.org/	Accessed April 2022	https://nbnatlas.org/
Subtidal Ecology. In: Manx Marine Environmental Assessment (2nd Ed).	The Government of the Isle of Man	2018	Lara Howe
Coastal Ecology. In: Manx Marine Environmental Assessment (2nd Ed).	The Government of the Isle of Man	2018	Lara Howe
Marine Phase 1 Intertidal Habitat Survey	Natural Resources Wales	2005	Natural Resources Wales

Title	Source	Year	Author
A Review of the Contaminant Status of the Irish Sea	JNCC	2005	untitled (publishing.service.gov.uk)
Rhiannon Wind Farm Preliminary Environmental Information Chapter 9 Benthic Ecology	Celtic Array Ltd	2014	Celtic Array Ltd
Gwynt y Môr offshore wind farm Marine Benthic Characterisation Survey	Gwynt y Môr offshore wind farm Ltd	2005	Centre for Marine and Coastal Studies (CMACS)
Ormonde Offshore Wind Farm Year 1 post-construction benthic monitoring technical survey report (2012 survey)	RPS Energy	2012	CMACS
Walney Offshore Wind Farm Year 1 postconstruction benthic monitoring technical survey report (2012 survey)	Walney Offshore Wind Farms (UK) Ltd/DONG Energy	2012	CMACS
Burbo Bank Offshore Wind Farm Benthic and Annex I Habitat Pre-construction Survey Field Report	Burbo Bank Offshore Wind Farms (UK) Ltd/DONG Energy	2015	CMACS
Phase I- Intertidal Survey- Standard Report'	Countryside Council for Wales	2004	Countryside Council for Wales
Burbo Bank Extension Offshore Wind Farm Environmental Statement Volume 2 – Chapter 12: Subtidal and Intertidal Benthic Ecology	Dong Energy Ltd	2013	Dong Energy Ltd
Volume 1 Environmental Statement Walney Extension, Chapter 10: Benthic Ecology	Dong Energy Ltd	2013	Dong Energy Ltd
Broadscale seabed survey to the east of the Isle of Man	Holt *et al.*	1997	Holt *et al.*
North Hoyle offshore windfarm Environmental Statement	Innogy NWP offshore Ltd.	2002	Innogy
Offshore benthic communities of the Irish Sea	Mackie	1990	Mackie

1.5 Desktop study baseline characterisation

1.5.1 Regional benthic subtidal and intertidal ecology study area

Subtidal sediments

1.5.1.1 The Offshore Energy Strategic Environmental Assessment (SEA) (2022) compiled a baseline of the offshore benthic environment around the UK. The SEA process aims to help inform licensing and leasing decisions by considering the environmental implications of the proposed plan/programme and the potential activities which could result from their implementation (Offshore Energy SEA, 2022). The benthic baseline information for the Offshore Energy SEA 4 was created from an amalgamation of sources such as Jones *et al.* (2004a-f), MESH (2004-2008), EUSeaMap2 (released in

2016) and EMODnet (2019). Offshore Energy SEA 4 divided the UKs exclusive economic zone into regional seas to characterise them; the regional benthic subtidal and intertidal ecology study area lies within regional sea 6, the Irish Sea. It identified that the offshore seabed in the east Irish Sea, within the regional benthic subtidal and intertidal ecology study area, is predominantly sedimentary, mainly of glacial origin, consisting mostly of sands and muddy sands, coarse and mixed sediments. In deeper sections tide-swept circalittoral mixed sediments were identified, in the south of the regional benthic subtidal and intertidal ecology study area. In the nearshore, along the north Wales coast, the sediment is largely sandy mud or muddy sand (where it has been defined). Similar sediments are located along the west coast of England.

1.5.1.2 A large broadscale subtidal survey carried out in 1997 by the University of Liverpool, on behalf of bp (Holt *et al*., 1997), used side scan sonar and video survey methods to characterise the benthos in the region east of the Isle of Man within the regional benthic subtidal and intertidal study area. The survey showed the area to be relatively uniform, consisting of fine and medium sands with varying proportions of stones and shells. The surveys also identified widespread areas of fine scale sand waves or ripples. The sand waves and ripples identified consisted of much coarser sands, stones and gravel often with very large proportions of dead shell material. Muddy sediments were recorded in only a few patches in the regional benthic subtidal and intertidal study area, the largest of which were to the west of the Isle of Man.

1.5.1.3 The European Marine Observation and Data Network (EMODnet) broad-scale habitat map for Europe (EUSeaMap) presents the European Nature Information System (EUNIS) habitat classifications for the Irish Sea (Figure 1.2). The subtidal sediments of the regional benthic subtidal and intertidal ecology study area have been recorded by the EMODnet (2019) as being dominated by deep circalittoral coarse sediment, offshore circalittoral sand, circalittoral mixed sediment and offshore circalittoral mud which is characteristic of the Irish Sea (EMODnet, 2019). The EMODnet broad-scale habitat map predicts large areas of high energy infralittoral habitat at the mouth of the river Mersey, the river Dee and river Conwy in the south and southeast of the regional benthic subtidal and intertidal study area, as well as the river Kent, river Leven, river Lune and the river Duddon in the east around Morecambe Bay. High energy infralittoral habitat is also predicted in Luce Bay and Wigtown Bay in the north of the regional benthic subtidal and intertidal study area. There is also a large area of infralittoral sand at the entrance of the Solway Firth which is determined to be a moderate energy environment (EMODnet, 2019). Deep circalittoral coarse sediments were recorded to the south and east of the Isle of Man, while infralittoral coarse sediments were recorded to the north of the Isle of Man (EMODnet, 2019). A mix of circalittoral coarse sediments and infralittoral coarse sediments were present in the east and west of the Isle of Man (EMODnet, 2019).

1.5.1.4 Surveys conducted by the Gwynt y Môr offshore wind farm, Burbo Banks offshore wind farm and Burbo Bank Extension (Figure 1.3) were located in the south of the regional benthic subtidal and intertidal ecology study area. Pre-construction and post-construction monitoring, and baseline characterisation surveys, were undertaken for these projects between 2010 and 2012. These surveys characterised the sediments in the south of the regional benthic subtidal and intertidal ecology study area as being dominated by circalittoral sand and coarse sediment, as well as muddy sand and sandy mud further inshore towards the north Wales coast (CMACS, 2011; SeaScape Energy, 2011; Dong Energy Ltd, 2013a). These areas of circalittoral sand in the south of the regional benthic subtidal and intertidal ecology study area were interspersed with areas of circalittoral rock around the northwest coast of Anglesey (EMODnet, 2019).

1.5.1.5 The EMODnet seabed map (2019) shows subtidal sediments along the north Wales coast as being dominated by circalittoral fine sand and circalittoral muddy sands in a high energy environment, with areas of coarse sediment closer to shore around the Great Orme headland, interspersed with sections of infralittoral rock close to shore on the east and west sides of the Great Orme headland. A larger area of coarse sediment is mapped north of Colwyn Bay which extends slightly east of Rhyl (shown in Figure 1.2; EMODnet, 2019).

1.5.1.6 The proposed, and now dropped, Rhiannon Wind Farm was to be located in the east of the regional benthic subtidal and intertidal ecology study area (Figure 1.3). Baseline characterisation surveys in 2010 and 2012 for the Rhiannon Wind Farm identified two large sandbanks off Lynas point, north Anglesey and in the east of the regional benthic subtidal and intertidal ecology study area. These were composed of very well sorted mobile sand that remained submerged at all times (Celtic Array Ltd, 2014). The banks consist of medium and coarse sands with minimal mud or gravel content (Celtic Array Ltd, 2014). These banks were considered to be examples of the Annex I habitat sandbanks which are slightly covered by sea water at all times (Celtic Array Ltd, 2014).

1.5.1.7 The subtidal site-specific surveys for the Morgan Generation Assets, in the north of the regional benthic subtidal ecology study area (Figure 1.3), showed that the subtidal sediments recorded across the Morgan Array Area ranged from muddy sandy gravel to gravelly muddy sand. In the Morgan Array Area sediments graded from coarser in the west to finer sediments in the east. The Morgan Array Area was predominantly gravelly muddy sand interspersed with areas of muddy sandy gravel and gravelly sand (Morgan Offshore Wind Ltd., 2023).

1.5.1.8 The Morgan and Morecambe Offshore Windfarms Transmission Assets is located in the east of the regional benthic subtidal ecology study area (Figure 1.3). Subtidal sediments recorded from infaunal grab samples collected across the survey area during the site-specific benthic subtidal surveys ranged from gravelly muddy sand to slightly gravelly sand (Morgan Offshore Wind Ltd and Morecambe Offshore Windfarm Ltd., 2023). The coarseness of sediments generally increased with increasing distance from the coast, with sediments in the west of the survey area typically comprising gravelly muddy sands and gravelly sands (Morgan Offshore Wind Ltd and Morecambe Offshore Windfarm Ltd., 2023).

1.5.1.9 The Morecambe Offshore Windfarm is located in the east of the regional benthic subtidal ecology study area (Figure 1.3). Baseline characterisation surveys for the of the Morecambe Offshore Windfarm determined that the most common sediment type was muddy sand but sediment types ranged from slightly gravelly sand to sandy mud (Morecambe Offshore Windfarm Ltd., 2023). Sediment composition at all stations was dominated by sand with sample stations in the west and south west of the survey area being slightly coarser than those in the east (Morecambe Offshore Windfarm Ltd., 2023).

1.5.1.10 The proposed Awel y Môr offshore wind farm, also in the south of the regional benthic subtidal ecology study area, undertook site specific baseline characterisation surveys in 2022 (RWE, 2022). The surveys identified the seafloor in the southeast of the array area was characterised by numerous sandwaves and megaripples, while the west of the site was relatively flat and featureless (RWE, 2022). Sandwaves were reported to be actively mobile and migrating. In the west of the survey area sediments contained a sand, gravel and a small fines fraction (RWE, 2022). In the east of the array area, sandwaves and megaripples were evident and were formed by sands with a low gravel content (RWE, 2022).

1.5.1.11 The Walney and Ormonde offshore wind farms are located in the east of the regional benthic subtidal and intertidal ecology study area (Figure 1.3). Pre-construction and post-construction monitoring and baseline characterisation surveys were undertaken for these projects between 2009 and 2014. Surveys conducted for Ormonde offshore wind farm and Walney offshore wind farm (Figure 1.3) found the subtidal sediments in the east of the regional benthic subtidal and intertidal ecology study area were dominated by circalittoral sandy mud or circalittoral muddy sand (CMACS, 2012a; CMACS, 2012b; CMACS, 2013; CMACS, 2014). The 1-year post-construction surveys (2012) for the Ormonde offshore wind farm recorded a higher percentage of mud further offshore and a lower percentage of mud in the southerly inshore areas (CMACS, 2012a). East of Morecambe Bay in the east of the regional benthic subtidal and intertidal ecology study the sediment becomes coarser than at the Ormonde offshore wind farm. During the 1 year post-construction monitoring of Walney offshore wind farm in 2013, the Walney array area was shown to be dominated by sandy mud with sediments transitioning to coarse sediment further offshore and inshore of the array area (CMACS, 2013).

1.5.1.12 The subtidal sediments in the southwest of the regional benthic subtidal and intertidal ecology study area, as determined by baseline characterisation surveys for the Rhiannon Wind Farm, have been recorded as being dominated by sandy gravels or gravelly sand, generally coarse sediments with generally low mud content (Celtic Array Ltd, 2014).

The Isle of Man territorial waters also fall within the regional benthic subtidal and intertidal ecology study area. A marine environmental assessment was undertaken by Howe (2018a) to bring together subtidal surveys which have been conducted around the Isle of Man to create an extensive characterisation of the subtidal environment. The subtidal habitats to the west of the island were shown to be predominantly mixed gravel, mixed stone and mixed sand seabed which extended to the north and the south with a small area of sand/muddy sand in the southeast. The seabed located to the southwest of the island comprises an extensive area of mud/fine sand. The EUSeaMap (Figure 1.2) is aligned with data from Howe (2018a) showing that sediment around the Isle of Man is made of coarse material with sections of fine sand in the southeast as well as the northeast.

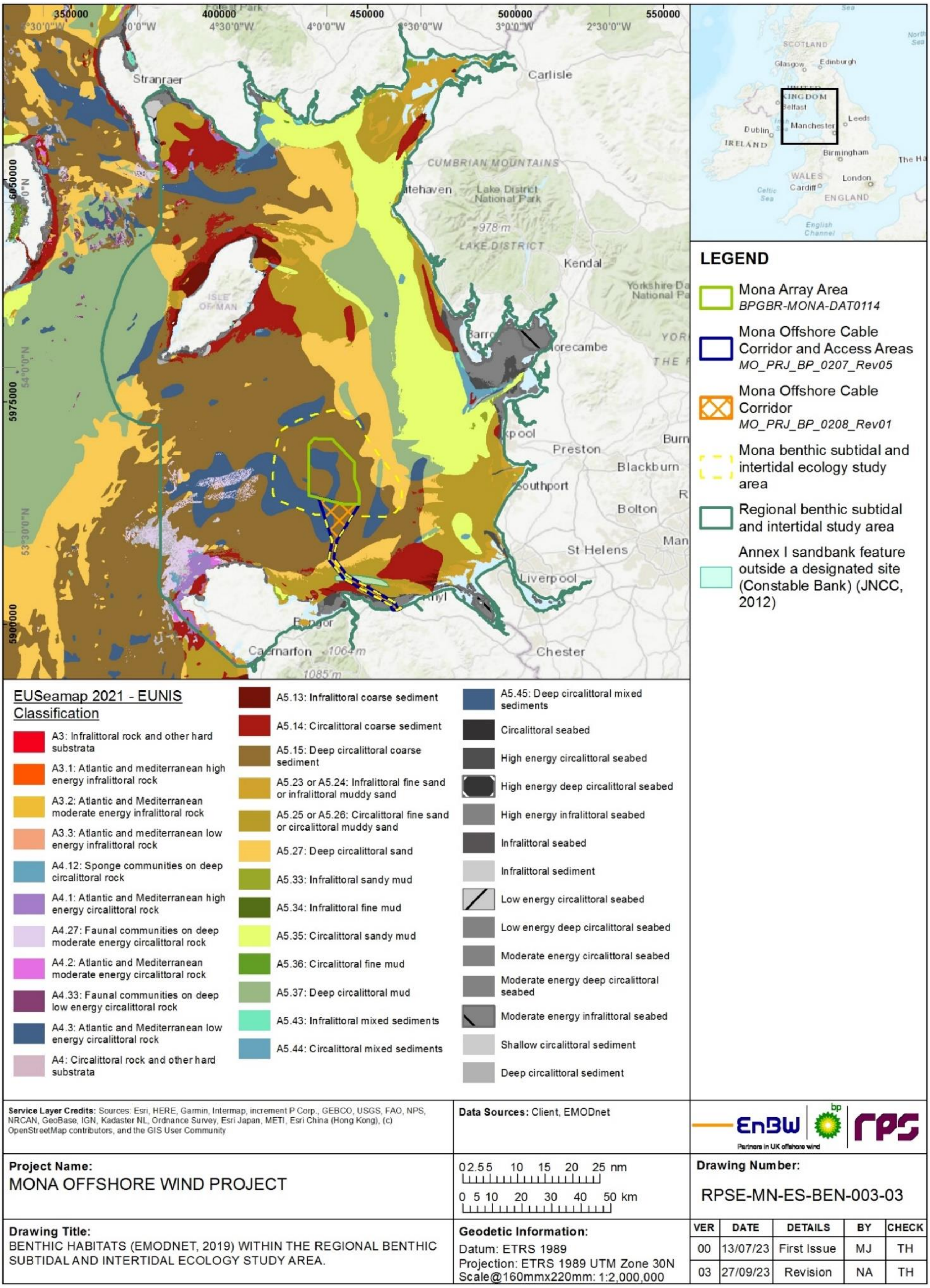


Figure 1.2: Benthic habitats (EMODNet, 2019) within the regional benthic subtidal and intertidal ecology study area.

Sediment contamination

1.5.1.13 Metals occur naturally in the marine environment. Generally elevated contaminant concentrations, such as metals, in the Irish Sea can originate from natural mineralisation or anthropogenic sources (Cefas, 2005). Rowlatt and Lovell (1994) recorded elevated levels of metals in the northeast Irish Sea, which is attributed to inputs from the industrial areas of northwest England for example, Merseyside and Lancashire.

1.5.1.14 Pre-construction surveys conducted for the Burbo Bank offshore wind farm (CMACS, 2005a) identified that seven of the nine core samples across the array area contained metals at, or above, Interim marine Sediment Quality Guidelines (ISQG) levels/Canadian Threshold Effects Levels (TEL). Additionally, two metals (lead and mercury) were present in excess of the Canadian Probable Effect Level (PEL). The PEL establishes the concentration range within which adverse effects frequently occur (CCME, 2001). A greater proportion of surface sediment samples, especially in the top metre, contained metals above ISQG/Canadian TEL. No metals were in excess of ISQG/Canadian TEL below 1.5 m. Six of these samples were collected in the Burbo Bank offshore wind farm array area (6.4 km from the Sefton coastline) and three in the export cable corridor. The pre-construction survey concluded that as the contamination occurred in the upper metre of the seabed they would be naturally mobile and therefore any additional works from offshore wind farms would not mobilise any sediment not naturally mobile.

1.5.1.15 Site-specific surveys for the Awel y Môr offshore wind farm found total PAH concentrations in the array area were higher than the median concentration recorded from the Strategic Environmental Assessment 6 (SEA6) (Cefas, 2005) Irish Sea surveys (0.0237 μg/g) at six stations; however, the median value from the site-specific survey was broadly comparable to the SEA6 median value (RWE, 2022). The bioavailable metals concentrations in sediments were all below their respective Cefas ALs (RWE, 2022).

1.5.1.16 Arsenic has regularly been recorded at elevated levels in the east Irish Sea (e.g. Camacho-Ibar *et al*., 1992). Arsenic was recorded above ISQG/Canadian TEL thresholds but below the Canadian PEL at four sites across the Walney offshore wind farm array area as part of the benthic baseline characterisation surveys (Dong Energy Ltd, 2013b) as well as across the former Rhiannon Wind Farm site (Centrica Plc and Dong Energy Ltd, 2014). Studies have found that such elevated arsenic levels were not attributable to anthropogenic sources, the source is considered to be weathering of glaciated regions of north Wales and the Lake District (e.g. Thornton *et al*., 1975).

1.5.1.17 Benthic characterisation surveys for the Walney offshore wind farm Environmental Statement (Dong Energy, 2013b) in the north of the regional benthic subtidal and intertidal ecology study area also identified one sample of mercury above ISQG/Canadian TEL levels. Mercury levels were thought to be reducing in the years leading up to 1993 based on samples from the muscles of plaice *Pleuronectes platessa*, reducing from a mean value of the order of 0.5 mg/kg wet weight in the early 1970s, to approximately 0.2 mg/kg in 1991 (Leah *et al*., 1993). These reductions are due to reduced discharge into the Mersey estuary by the chloro-alkali chemical industry (Dong Energy, 2013b).

1.5.1.18 Surveys at Burbo Bank Extension (Dong Energy Ltd, 2013a) in the southeast of the regional benthic subtidal and intertidal ecology study area (see Figure 1.3) found no contaminants were present above Canadian PEL however the array area had elevated levels of iron, aluminium, arsenic, copper, zinc and lead above natural background levels, no contaminant was present above Canadian PEL. These results are consistent with the results from surveys for other wind farms in the area which also found elevated levels of the same metals but no exceedances of Canadian PEL thresholds (Burbo Bank (Seascape Energy Ltd, 2002), North Hoyle (Innogy, 2002), and Gwynt y Môr (CMACS, 2005b)). The Environmental Statement for Burbo Bank Extension (Dong Energy Ltd, 2013a) found no organochlorine and organophosphorus pesticides were present at detectable levels and no sample at any depth contained PCBs in excess of the ISQC level. PAHs were present above the limit of detection in only one sample from a single depth in the southwest of the Burbo Bank offshore wind farm.

1.5.1.19 Levels of contamination were low across the Morgan Generation Assets. Concentrations of most metals were below the Cefas AL1 (Action Level 1) and the Canadian TEL and all were below the Cefas AL2 and Canadian PEL. The exception was arsenic which exceeded Cefas AL1 at three sample stations however all were below AL2, and 17 sample stations exceeded Canadian TEL but were below Canadian PEL. No samples were found to exceed the relevant thresholds for PCBs or PAHs in the Morgan benthic subtidal ecology study area. Concentrations of organotins were below the Limit of Detection (LOD) at all stations (Morgan Offshore Wind Ltd., 2023).

1.5.1.20 Trace and heavy metal concentrations were overall low across the Morecambe Offshore Windfarm site with none of the metals, except arsenic, analysed exceeding any of the reference levels (Cefas AL1, Cefas AL2 and Canadian PEL) (Morecambe Offshore Windfarm Ltd., 2023). In general metal concentrations were higher to the east, closer to land than stations located further offshore. Arsenic concentrations exceeded the Canadian TEL at three sample stations. Among all PAHs, naphthalene and pyrene were the ones found to exceed OSPAR Background Assessment Concentrations (BAC) reference levels at six stations. None of the other reference levels (AL1, AL2, ERL, Canadian TEL and Canadian PEL) were exceeded by any of the analysed PAHs.

1.5.1.21 The Morgan and Morecambe Offshore Wind Farms Transmission Assets also completed sediment chemistry analysis at 39 stations (Morgan Offshore Wind Ltd. and Morecambe Offshore Windfarm Ltd., 2023). No contaminants were present at levels exceeding the Cefas AL2 or the Canadian PEL thresholds where these exist. Concentrations of nickel exceeded the Cefas AL1 at one station (but was below the Cefas AL2). Concentrations of mercury at seven sites in the nearshore area exceeded the Canadian TEL (but were below the Canadian PEL). Concentrations of arsenic exceeded the Canadian TEL at 17 stations (but were below the Canadian PEL). Concentrations of some PAHs exceeded the Canadian TEL at five stations primarily near the landfall. No other contaminants exceeded any threshold levels.

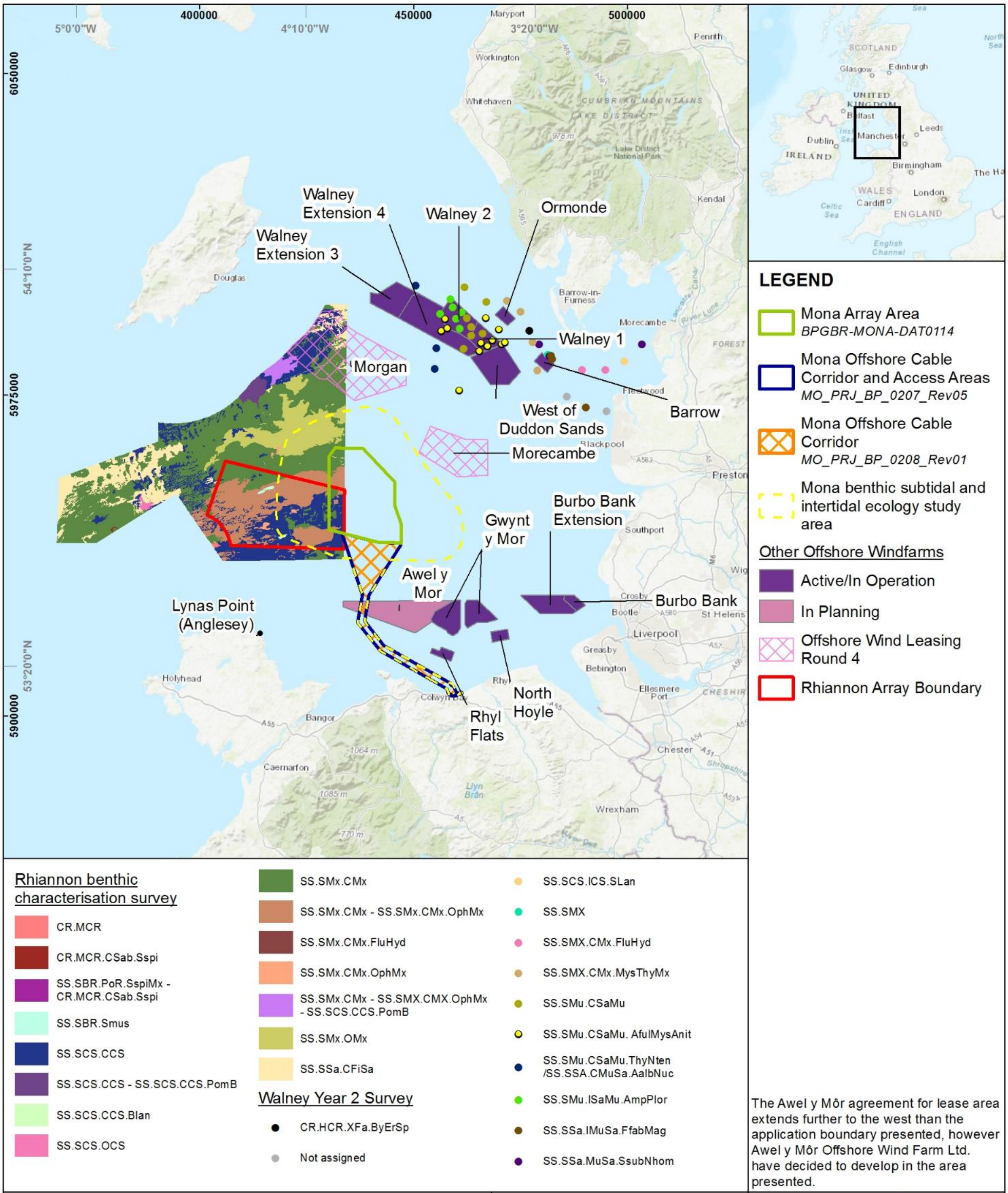
Subtidal benthic ecology

1.5.1.22 Figure 1.3 displays all the mapped subtidal ecology data available from the offshore wind farms which fall within the regional benthic subtidal and intertidal ecology study area. Appendix H provides the full names of all the biotopes which are presented in Figure 1.3 to enable a better understanding of the habitats being represented.

1.5.1.23 The subtidal benthic communities of the regional benthic subtidal and intertidal ecology study area were characterised by its sedimentary habitats, Mackie (1990) describes most of the east Irish Sea as being dominated by *Venus* communities. Deep *Venus* communities were characterised by occurrence at depths of 40 to 100 m in coarse sand/gravel/shell sediments and for containing species such as *Spatangus purpureus, Glycimeris*, *Asarte sulcata* and venus clams (Mackie, 1990) (full list of species' common names can be found in Appendix H). Deep *Venus* communities are present in the central and west sections of the regional benthic subtidal and intertidal ecology study area (Mackie, 1990). Much of the inshore area of the regional benthic subtidal and intertidal ecology study area can be characterised by shallow *Venus* communities on nearshore sand, tending to occur in waters 5 to 40 m deep, with strong currents and sand. Mackie (1990) also identified pockets of *Abra* communities along the north Wales coastline as well as in the east of the regional benthic subtidal and intertidal ecology study area. These communities are dominated by the bivalve species *Abra alba* and the polychaete worm *Lagis koreni* (Rees *et al.,* 1972) and the biotope *Abra alba* and *Nucula nitidosa* in circalittoral muddy sand or slightly mixed sediment (SS.SSa.CMuSa.AalbNuc).

1.5.1.24 The Gwynt y Môr (Figure 1.3) pre-construction benthic monitoring surveys (CMACS, 2011) identified the *Moerella* sp. with venerid bivalves in infralittoral gravelly sand (SS.SCS.ICS.MoeVen) biotope and the circalittoral fine sand (SS.SSa.CFiSa) biotope as the most extensively distributed biotopes throughout the survey site. These biotopes are common and widespread biotopes in the local area (i.e. Liverpool Bay and northeast Irish Sea). The biotope *Nephtys cirrosa* and *Bathyporeia* spp. in infralittoral sand (SS.SSa.IFiSa.NcirBat) was identified at a few locations within the Gwynt y Môr site but was more dominant at the inshore export cable route and inshore west reference sites. The *Fabulina fabula* and *Magelona mirabilis* with venerid bivalves and amphipods (SS.SSa.IMuSa.FfabMag) biotope was also described at stations on the south side of the array area, close to the Welsh coast.

1.5.1.25 The Burbo Bank offshore wind farm is located approximately 8 km to the east of Gwynt y Môr offshore wind farm (Figure 1.3). The Environmental Statement for the original Burbo Bank offshore wind farm (SeaScape Energy, 2011) confirms the biotopes found at the extension site. The array area was dominated by the SS.SSa.IMuSa.FfabMag with a small section of SS.SSa.CMuSa.AalbNuc identified in the east of the array area. The wider area around the array area was classified as SS.SSa.IFiSa.NcirBat.



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Data Sources: Client, The Crown Estate

Project Name:
MONA OFFSHORE WIND PROJECT

0 2.5 5 10 15 20 nm
0 5 10 20 30 40 km

Drawing Number:
RPSE-MN-ES-BEN-004-03

Drawing Title:
BENTHIC SURVEY RESULTS FOR THE OTHER OFFSHORE WIND PROJECTS IN RELATION TO THE MONA BENTHIC SUBTIDAL AND INTERTIDAL ECOLOGY STUDY AREA (ALL BIOTOPE CODES ARE DEFINED IN APPENDIX H).

Geodetic Information:
Datum: ETRS 1989
Projection: ETRS 1989 UTM Zone 30N
Scale@160mmx220mm: 1:1,500,000

VER	DATE	DETAILS	BY	CHECK
00	13/07/23	First Issue	MJ	TH
03	26/09/23	Revision	NA	TH

Figure 1.3: Benthic survey results for the other offshore wind projects in relation to the Mona benthic subtidal and intertidal ecology study area (all biotope codes are defined in Appendix H).

1.5.1.26 The Environmental Statement for the Burbo Bank offshore wind farm (Dong Energy Ltd, 2013a) reported a variety of biotopes. The south section of the array area was dominated by the *Amphiura filiformis*, *Kurtiella bidentata* and *Abra nitida* in circalittoral sandy mud (SS.SMu.CSaMu.AfilKurAnit) biotope with a large proportion of the north section characterised by the SS.SCS.ICS.MoeVen biotope. The west of the array was characterised by combinations of the biotopes *Lagis koreni* and *Phaxas pellucidus* in circalittoral sandy mud (SS.SMu.CSaMu.LkorPpel) and SS.SSa.CMuSa.AalbNuc. The cable corridor, which extends across the mouth of the river Dee, largely consisted of the *Nephtys cirrosa* and *Bathyporeia* spp. in infralittoral sand (SS.SSa.IFiSa.NcirBat) biotope.

1.5.1.27 Surveys conducted by CMACS (2009) at Walney offshore wind farm (Figure 1.3) found that SS.SMu.CSaMu.AfilKurAnit (in the east of the site) and *Thyasira sp.* and *Ennucula tenuis* in circalittoral sandy mud (SS.SMu.CSaMu.ThyEten) (in the west of the site where sediment has a higher gravel content) were the main biotopes in the survey area. Along the export cable corridor the biotopes SS.SMu.CSaMu.AfilKurAnit and SS.SSa.IMuSa.FfabMag were recorded.

1.5.1.28 Nearby Ormonde offshore wind farm (Figure 1.3) reported very similar results in its Environmental Statement which covered an area in the east of the regional benthic subtidal and intertidal ecology study area from Duddon sands to the Lune deep. The Environmental Statement found the array area itself to be mostly composed of SS.SMu.CSaMu.AfilKurAnit with bands of SS.SMu.CSaMu.LkorPpel and SS.SSa.CMuSa.AalbNuc with increasing proximity to the coast (Unicomarine Ltd, 2005).

1.5.1.29 The Rhiannon Wind Farm was proposed to be located in the west of the regional benthic subtidal and intertidal ecology study area (Figure 1.3). The dominant biotopes were circalittoral coarse sediment (SS.SCS.CCS) and *Ophiothrix fragilis* and/or *Ophiocomina nigra* brittlestar beds on sublittoral mixed sediment (SS.SMx.CMx.OphMx). The SS.SMx.CMx.OphMx biotope consists of circalittoral sediments dominated by brittlestars forming dense beds, living on boulder, gravel or sedimentary substrate. Large patches of circalittoral fine sand (SS.SSa.CFiSa) were recorded further west and to the north of the Rhiannon Wind Farm survey area in the central west of the regional benthic subtidal and intertidal ecology study area (Figure 1.3, Celtic Array Ltd, 2014).

1.5.1.30 The nationally scarce *Thia scutellata* has been recorded in the south of the regional benthic subtidal and intertidal ecology study area (Rees 2001; Moore, 2002). This small crab inhabits a specific habitat of loose, well-sorted medium sands into which it can easily burrow. This species was recorded during benthic surveys for the Burbo Bank, Burbo Bank Extension and the Gwynt y Môr offshore wind farms.

1.5.1.31 The Walney offshore wind farm (Figure 1.3) overlaps with a number of protected species which are protected by designated areas. There is an Annex I stony reef within the Shell Flats and Lune Deep Special Area of Conservation (SAC) (reefs are a designated feature of the SAC) which is located inshore of the Walney offshore wind farm array area in the central east section of the regional benthic subtidal and intertidal study area (Dong Energy Ltd, 2013b). Stony reefs have also been identified at a few sample locations along the export cable corridor of Walney extension and within Morecambe Bay, all were classified as low ‘reefiness’ (Dong Energy Ltd., 2013b). The habitat burrowed mud was also recorded in the east of the Walney offshore wind farm array area and is listed as a UK Biodiversity Action Plan (BAP) habitat as well as an ‘Oslo-Paris convention for the protection of the marine environment of the North-Eastern Atlantic’ (OSPAR) habitat under ‘seapens and burrowing megafauna’. This biotope has also been recorded in the Ormonde offshore wind farm, West of Duddon offshore wind farm and Walney offshore wind farm extension. The sample sites where the burrowed mud biotope has been found within the Ormonde and Walney offshore wind farms are both located within the West of Walney Marine Conservation Zone (MCZ) zone, west of the Ormonde offshore wind farm, and is designated for the protection of sea pens and burrowing megafauna among other features. Although no sea pens were recorded at the sample sites within the Walney offshore wind farms during the post-construction monitoring surveys, evidence of burrowing megafauna was present (CMACS, 2014).

1.5.1.32 The baseline characterisation surveys for the Awel y Môr offshore wind farm showed that the majority of the array area was classified as the *Protodorvillea kefersteini* and other polychaetes in impoverished circalittoral mixed gravelly sand (SS.SCS.CCS.PKef) biotope with some areas of higher sand content characterised by the *Branchiostoma lanceolatum* in circalittoral coarse sand with shell gravel (SS.SCS.CCS.Blan) biotope and the SS.SSa.IFiSa.NcirBat biotope (RWE, 2022). No Annex I habitats or Annex II species, OSPAR threatened and/ or declining species and habitats, or habitats and species listed under Section 7 of the Environment (Wales) Act 2016, were observed within the array area.

1.5.1.33 The baseline characterisation surveys for the Morgan Generation Assets showed that the benthic communities in the north, west and south sections of the Morgan Array Area were characterised by the polychaete-rich deep Venus community in offshore mixed sediments (SS.SMx.OMx.PoVen) biotope. The central area of the Morgan Array Area was characterised by circalittoral coarse sediment (SS.SCS.CCS) with a small area characterised by offshore circalittoral mixed sediment (SS.SMx.OMx). The east and most of the north edge of the Morgan Array Area were characterised by muddier sediments and the *Lagis koreni* and *Phaxas pellucidus* in circalittoral sandy mud (SS.SMu.CSaMu.LkorPpel) biotope (Morgan Offshore Wind Ltd., 2023). No areas of stony reef were identified in the Morgan Array Area.

1.5.1.34 The baseline characterisation surveys for the Morecambe Offshore Windfarm, in the east of the regional benthic subtidal ecology study area, identified two different biotopes (Morecambe Offshore Windfarm Ltd., 2023). The majority of the Morecambe Offshore Windfarm was characterised by the *Abra prismatica*, *Bathyporeia elegans* and polychaetes in circalittoral fine sand (SS.SSa.CFiSa.ApriBatPo) biotope transitioning to *Amphiura filiformis*, *Kurtiella bidentata* and *Abra nitida* in circalittoral sandy mud (SS.SMu.CSaMu.AfilKurAnit) in the west. Within the circalittoral muddy sand sediments which occurred across the majority of the central and east regions of the Morecambe Offshore Windfarm, burrows were identified. Areas where megafaunal burrows were present matched the criteria required to be classified as the OSPAR habitat ‘seapens and burrowing megafauna’. No seapens were however identified in the survey. No clear pattern in the distribution of burrow density was identified in the data, with areas of higher and lower burrow density interspersed throughout the windfarm site. No areas of potential Annex I reef were identified in DDV imagery.

1.5.1.35 The site-specific survey data for the Morgan and Morecambe Offshore Wind Farms Transmission Assets, collected in 2022, showed that the benthic communities were dominated by the SS.SMu.CSaMu.LkorPpel biotope in the west, with the SS.SMu.CSaMu.AfilKurAnit biotope being present throughout the centre of the Morgan and Morecambe Offshore Wind Farms Transmission Assets survey area (Morgan Offshore Wind Ltd. and Morecambe Offshore Windfarm Ltd., 2023). The infaunal communities graded into the SS.SSa.CMuSa.AalbNuc biotope in the nearshore area, and SS.SSa.IFiSa interspersed with SS.SSa.CMuSa.AalbNuc, approaching the landfall. The epifaunal analysis indicated the presence of SS.SSa.CMuSa throughout the majority of the Morgan and Morecambe Offshore Wind Farms Transmission Assets survey area. Circalittoral mixed sediments and circalittoral fine sands were also noted in areas corresponding to infaunal biotopes associated with these sediment types, and therefore most epifaunal biotopes assigned were consistent with the underlying infaunal biotope. The exception is in the north east of the Morgan Generation Assets, where a high SACFOR (Super abundant, Abundant, Common, Frequent, Occasional, Rare) abundance of *O. ophiura* indicated the presence of the biotope SS.SMx.CMx.OphMx.

1.5.1.36 No Annex I reefs (biogenic or geogenic) were recorded within the Morgan and Morecambe Offshore Wind Farms Transmission Assets. Sandy sediments in less than 20 m of water occurred within the Morgan and Morecambe Offshore Wind Farms Transmission Assets survey area but were considered unlikely to qualify as a Habitats Directive Annex I 'sandbanks which are slightly covered by seawater all of the time' habitat (Morgan Offshore Wind Ltd. and Morecambe Offshore Windfarm Ltd., 2023). The habitat assessment noted the presence of burrows at 22 stations within the Morgan and Morecambe Offshore Wind Farms Transmission Assets survey area. Whilst no seapens were observed, the presence of burrows was classified as 'frequent' or above at 13 stations; therefore, it was concluded that these stations showed some similarity to the 'sea pen and burrowing megafauna communities' habitat as defined by OSPAR. Evidence of hard substrate Porifera was observed at 12 stations, but no stations were considered to represent the fragile sponge and anthozoan communities on subtidal rocky habitat.

1.5.1.37 The Isle of Man territorial waters also fall within the regional benthic subtidal and intertidal ecology study area. A marine environmental assessment was undergone by Howe (2018a) to bring together subtidal surveys which have been conducted around the Isle of Man to create an extensive characterisation of the subtidal environment. Howe (2018a) describes the White (2011) analysis of 7,325 seabed images from a 2008 benthic survey around the Isle of Man and identified 20 different biotopes. Some of the most common included *Brissopsis lyrifera* and *Amphiura chiajei* in circalittoral mud (SS.SMu.CFiMu.BlyrAchi) which was recorded over a broad area in the southwest of the Isle of Man. *Cerianthus lloydii* with the *Nemertesia* spp. and other hydroids in circalittoral muddy mixed sediment (SS.SMx.CMx.ClloMx.Nem) biotope characterising an extensive area of the southwest of the Isle of Man. The sediments to the north of the island were characterised by biotopes typical of mixed sediment and sand-based habitats. Intermittently around the island there are also a number of rocky biotopes including sparse sponges, *Nemertesia* spp. and *Alcyonidium diaphanum* on circalittoral mixed substrata (CR.HCR.Xfa.SpNemAdia) and faunal and algal crusts on exposed to moderately wave-exposed circalittoral rock (CR.MCR.EcCr.FaAlCr). Three main habitats of international conservation interest were identified during the survey, horse mussel reefs, maerl beds and Ross worm habitats (*Sabellaria spinulosa*), all of which are OSPAR priority habitats (OSPAR 2008). Individuals of the UK BAP priority species, the sea anemone *Edwardsia timida*, were also recorded. *Arctica islandica*, a threatened or declining species in the North Sea region as defined by the OSPAR Convention, has long been known to populate Laxey Bay in the east of the Isle of Man, as well as in Niarbyl Bay and Port Erin Bay. *Zostera marina* meadows are an important nursery area for many marine species (Davison and Hughes 1998) and play an important role as a marine carbon sink. In recent years, eelgrass has only been recorded in four sites in Isle of Man waters spread along the east coast of the island.

1.5.1.38 Areas of stony and rocky reefs have also been identified within and around the Rhiannon Wind farm array area and all of which are present in the northwest of the

Rhiannon Wind Farm coinciding with the central west area of the regional benthic subtidal and intertidal ecology study area. The stony reefs identified have 'reefiness' classifications (stony reef criteria of Irving *et al*. (2009) and redescribed for stony reef in Limpenny *et al*. (2010)) of low to moderate. Additionally, there was an area of Annex I rocky reef composed of bedrock occurring entirely within the Rhiannon Wind Farm which was assigned a high 'reefiness' (Celtic Array Ltd., 2014). Sabellaria *spinulosa* reefs were identified 20 km northwest of the Rhiannon array area (in the central west part of the regional benthic subtidal and intertidal ecology study area) with some small areas closer. All were deemed to be of low or low to medium 'reefiness' when assessed against the criteria proposed by Gubbay (2007). The Gwynt y Môr pre-construction benthic survey recorded seven *S. spinulosa* individuals across five stations out of a total of 126 stations overall, however no reefs were identified in these pre-construction surveys (CMACS, 2011). No Annex I *S. spinulosa* reefs were recorded within the Rhiannon Wind Farm but a small area of low to moderate 'reefiness' *S. spinulosa* reef of 0.22 km^2 in extent was recorded within the export cable area and one small area of low 'reefiness' was associated with less coarse sediments 20 km to the northwest of the Rhiannon Wind Farm array area (in the central west area of the regional benthic subtidal and intertidal ecology study area).

1.5.1.39 Bangor University conducted benthic habitat survey of waters around the Isle of Man in 2008 and recorded *S. spinulosa* to the south of Manx waters, the habitat had not previously been formally recorded. The coast of the Isle of Man from Peel round to Maughold Head is primarily rocky, creating rocky reef habitat subtidally. The rocky reef habitats of the Isle of Man are deemed to be of high diversity. There are also extensive *Modiolus modiolus* reefs around the Isle of Man with recent surveys identifying clusters of reefs at the north and south points of the island (Howe, 2018a). Other notable habitats around the Isle of Man include extensive sandbanks off the north coast. Under the EU Habitats Directive, subtidal mobile sandbanks are included under "Sandbanks which are slightly covered by seawater at all times". Additionally, brittlestar beds were identified as important biogenic habitats in the UK Marine SAC review in the 1990s (Hughes 1998). The Bangor University benthic survey in 2008 indicated that seabed dominated by brittlestar beds is widespread in Manx waters.

1.5.1.40 One individual of *Arctica islandica* which is on the OSPAR threatened species list was recorded in a grab sample which was taken for the baseline characterisation surveys for the Walney Extension offshore wind farm (Dong Energy Ltd, 2013b).

1.5.1.41 Desktop baseline information from Celtic Array Ltd (2014) shows that there is an Annex I sandbanks within the regional benthic subtidal and intertidal ecology study area. Side scan sonar data from Rhiannon Wind Farm also showed that in the far southwest of the regional benthic subtidal and intertidal ecology study area there are numerous *Modiolus modiolus* reefs (class 2 reefs) (Celtic Array Ltd, 2014).

Intertidal benthic ecology

1.5.1.42 The north of the regional benthic subtidal and intertidal study area includes the Solway Firth. Reef building honeycomb worms *S. alveolata* reach the most north extent of their geographic range in the north of the Solway Firth, northwest of the regional benthic subtidal and intertidal ecology study area, growing primarily on intertidal and subtidal rock. *S. alveolata* are a protected feature of the Cumbria Coast MCZ and Allonby Bay MCZ. The Cumbria Coast MCZ is also designated for intertidal biogenic reefs, intertidal sand and muddy sand, high energy intertidal rock and intertidal under-boulder communities (Defra, 2019b). The Cumbrian coast more generally can be characterised by intertidal mudflats and sandflats, saltmarshes and intertidal scars (exposed boulders and rocks), although intertidal scars are restricted to specific areas such as St Bees Head (Cumbria Biological Data Network, 2010). Further south along the west English Coast the Morecambe Bay region is protected by an SAC, which is designated for Annex I habitats including large shallow inlets and bays, reefs, *Salicornia* and other annuals colonizing mud and sand, *Glauco-Puccinellietalia maritimae* and mudflats and sandflats not covered by seawater at low tide (Antil and Pérez-Domínguez, 2021). Intertidal surveys undertaken in the Morecambe Bay SAC in 2015 found the most common biotopes to be *Mytilus edulis* beds on littoral mixed substrata (LS.LBR.Lmus.Myt.Mx), barnacles and *Littorina* sp. on unstable eulittoral mixed substrata (LR.FLR.Eph.BlitX) and ephemeral green and red seaweeds on variable salinity and/or disturbed eulittoral mixed substrata (LR.FLR.Eph.EphX).

1.5.1.43 The results of an NRW Phase 1 Intertidal habitat survey around Wales were presented in a report which characterised the full coastline (CCW, 2007). The north Wales coast includes large areas of moderately wave exposed sandy shores (CCW, 2007). The infauna has similar polychaetes and amphipods throughout the shore but varies in the abundance of certain species. Raised and consequently drier areas of sand tend to support *A. marina*, *Nephtys* spp. and amphipods *Bathyporeia* spp. Lower lying areas of sand, usually remaining wet at low water, support communities of *Macoma balthica*, *A. marina, E. tenuis, Cerastoderma edule* and the sand mason worm *Lanice conchilega*. Mud, muddy sands, sandy muds and muddy gravel dominate sheltered sediment shores. This less mobile sediment typically supports a high invertebrate biomass, particularly in the Conwy estuary. Conspicuous members of muddy shore communities include *Hediste diversicolor*, *M. balthica, A. marina* and *Scrobicularia plana*. At the far southwest edge of the regional benthic subtidal and intertidal study area, the Isle of Anglesey has a large proportion of rocky coastline especially along the north coast, which has moderately wave exposed rocky shores. Fucoid algae dominate the upper and mid shore rock with zones of *Pomacea canaliculata, Fucus spiralis, Fucus vesiculosus* and *Ascophyllum nodosum*. There is a large under boulder community including *Porcellana platycheles*, tube worms, *Pomatoceros triqueter*, *Asterina gibbosa* and gastropods including *Nucella. Lapillus*, and *Littorina littorea*, in areas of boulders. Across the shore there are many rockpools of differing character; green pools at the top of the shore are characterised by the green seaweeds including *Cladophora* spp. and gutweed *Enteromorpha* sp.; shallow pools are characterised by coralline crustose algae and *Corallina officinalis* and deeper pools are characterised by *Fucus serratus, Laminaria digitata* and many other associated species.

1.5.1.44 A sanitary survey report conducted by the Centre for Environment, Fisheries and Aquaculture Science (Cefas) (2014) found the intertidal zone of Colwyn Bay, Llandudno and Great Ormes Head is dominated by intertidal flats. Two (Rhos-on-Sea and Llandudno Pier) are more established beds with larger mussels, with another ephemeral bed within the Mona Offshore Cable Corridor landfall.

1.5.1.45 More recently NRW conducted another Phase 1 Intertidal habitat survey of the intertidal zone around Wales (NRW, 2016). The results of this study show the areas surrounding the land fall for the Mona Offshore Wind Project is largely composed of burrowing amphipods and polychaetes (often with *A. marina*) in clean sand shores (LGS.S.AP.P). At Mean Low Water Spring (MLWS) the intertidal zone as well as some small sections further landward are composed of dense *Lanice conchilega* in tide-swept lower shore sand (LGS.S.Lan). In the mid shore zone there are some large areas of burrowing amphipods and *Eurydice pulchra* in well-drained clean sand shores (LGS.S.Aeur) as well as smaller areas of *Mytilus edulis* beds on eulittoral mixed substrate (SLR.MX.MytX) and barnacles and *L. littorea* on unstable eulittoral mixed substrata (SLR.FX.Bllit).

1.5.1.46 The south coast of the Isle of Man is dominated by rocky shores however within this coastal section there are a number of sheltered fine sand beaches. These sandy beaches support populations of isopods, amphipods and polychaetes such as *A. marina* as well as *Arenicola defodiens*. Near the low water there are more diverse assemblages including sea urchins and bivalves. The coastline around the north of the island is composed of coarse sands and shingle with small areas of saltmarsh and estuary habitat (Howe, 2018b). A CMACS (2002) intertidal survey of the Isle of Man described by Howe (2018b) found that, where the shores are very coarse and mobile, the communities were characterised by the biotope barren shingle or gravel shores (LS.LCS.Sh.BarSh). Where the sediments are finer and more stable the biotope burrowing amphipods and polychaetes in clean sand shores becomes dominant (LS.LGS.S.Aeur) characterised by *A. marina*. Muddy shores are present in a few locations around the Isle of Man including outside the estuary in Derbyhaven which supports a population of the bivalve *Loripes lucinalis*, which depends upon symbiotic sulphur bacteria for its nutrition.

1.5.1.47 The northwest England and Wales shoreline management plan (North West and North Wales Coastal Group, 2011) shows that in the short term (0 to 20 years) this shoreline is largely in net gain (shoreline is slowly moving further seaward) which will result in more intertidal saltmarsh, sandflat and mudflat habitat in the short and medium term.

1.5.2 Mona benthic subtidal and intertidal ecology study area

Subtidal sediment

Mona Array Area and ZoI

1.5.2.1 Based on the EUSeaMap, sediments in the Mona Array Area are dominated by deep circalittoral coarse sediment (A5.15) and deep circalittoral mixed sediment (A5.45) (EMODnet, 2019). The same sediment types are also present across most of the Mona Array Area ZoI, however in the east of the Mona Array Area ZoI the sediment transitions to circalittoral sand and circalittoral mixed sediment (Figure 1.2).

Mona Offshore Cable Corridor

1.5.2.2 In the north of the Mona Offshore Cable Corridor the sediment type continues from the Mona Array Area and is dominated by deep circalittoral coarse sediment (A5.15) and deep circalittoral mixed sediment (EMODnet, 2019). In the centre of the Mona Offshore Cable Corridor Figure 1.2 shows that the sediments become dominated by deep circalittoral sand (A5.27) and circalittoral fine sand or circalittoral muddy sand (A5.23 and A5.24). The Mona benthic subtidal and intertidal ecology study area also encompasses large areas of deep circalittoral sand (A5.27) near the north Wales coastline as well as moderate/high energy infralittoral habitat in the inshore section of the Mona Offshore Cable Corridor. Where the Mona Offshore Cable Corridor overlaps with the Constable Bank the sediment is predominantly characterised as circalittoral fine sand or circalittoral muddy sand (A5.23 and A5.24) (Figure 1.2). Where the Mona Offshore Cable Corridor overlaps with the Menai Strait and Conwy Bay SAC the sediment is characterised as circalittoral coarse sediment (A5.14).

Subtidal benthic ecology

Mona subtidal benthic ecology

1.5.2.3 Site-specific surveys conducted for the Rhiannon Wind Farm benthic ecology PEIR (Celtic Array Ltd, 2014) overlap with the west of the Mona benthic subtidal and intertidal ecology study area (Figure 1.3).

1.5.2.4 Where the Rhiannon Wind Farm PEIR site-specific surveys overlap with the Mona benthic subtidal and intertidal ecology study area four dominant biotopes were be identified (Celtic Array Ltd, 2014) (Figure 1.3). In the northwest of the Mona benthic subtidal and intertidal ecology study area (i.e. in the Mona Array ZoI) offshore circalittoral mixed sediments (SS.SMx.OMx) creates the first horizontal biotope band, further south circalittoral mixed sediments (SS.SMx.CMx) and SS.SMx.CMx/SS.SMx.CMx.OphMx created two horizontal bands in the central west of the Mona benthic subtidal and intertidal ecology study area. From the central west region to the southwest of the Mona benthic subtidal and intertidal ecology study area the habitats were predominantly circalittoral coarse sediment (SS.SCS.CCS) interspersed with SS.SMx.CMx/SS.SMx.CMx.OphMx and SS.SMx.CMx. In the southwest there were also some very small areas of CR.MCR and SS.SCS.CCS.Blan.

1.5.2.5 Desktop baseline information from Celtic Array Ltd (2014) shows that the Mona benthic subtidal and intertidal ecology study area contains rocky reefs within its boundary. Within the Mona benthic subtidal and intertidal ecology study area, brittlestar beds were also identified (SS.SMx.CMx.OphMx) (Celtic Array Ltd, 2014).

1.5.2.6 Constable Bank is also present within the nearshore area of the Mona Offshore Cable Corridor (Figure 1.2). Constable Bank is an Annex I sandbank which lies outside an SAC which lies in shallow coastal waters with high wave stress (NRW, 2015). Constable Bank has been recognised as unusual as it extends from offshore right to the coastline with no gap between it and the beach (Kenyon and Cooper, 2005). The bank is over 20 km long and up to 2 km wide in its outer part widening towards the coast and is up to 10 m high (Kenyon and Cooper, 2005). Furthermore, the nationally scarce species *T. scutellata* has been recorded on Constable Bank (Rees, 2001).

Intertidal benthic ecology.

Mona intertidal benthic ecology

1.5.2.7 The intertidal area of the Mona Offshore Cable Corridor within the Mona benthic subtidal and intertidal ecology study area crosses Pensarn beach north of the town of Abergele. This intertidal area for the Mona Offshore Wind Farm Project overlaps the Traeth Pensarn Site of Special Scientific Interest (SSSI) which has been designated for the presence of a vegetated shingle bank which exists above the high-water mark.

1.5.2.8 The export cable landfall location for Gwynt y Môr offshore wind farm falls within the Mona benthic subtidal and intertidal ecology study area. The intertidal phase one walkover surveys for Gwynt y Môr at Pensarn identified two dominant biotopes on the beach, LGS.S.aEur and mid shore clean sand with burrowing amphipods, *Nephtys cirrosa* and *Arenicola marina* (LGS.S.AP.P) (npower renewables Ltd, 2005). In the west of the site where it overlaps with the Mona Offshore Cable Corridor there a small patch of *Mytilus edulis* beds on eulittoral mixed substrata (SLR.MX.MytX) was also recorded. The top of the shore line contains an extended band of barren shingle with no evident fauna (LGS.Sh.BarSh).

1.5.2.9 Baseline analysis from the scoping report for Awel y Môr offshore wind farm (Innogy, 2020) described an area between Rhos-on-sea and New Brighton (most of this intertidal area falls within the Mona benthic subtidal and intertidal ecology study area) which was investigated by Bamber (1988) and Garwood and Foster-Smith (1991) as well as NRW (NRW formerly the Countryside Council for Wales (CCW, 2004)) (Figure 1.4). Results from these studies describe mostly areas of medium sands supporting populations of polychaetes such as *Scolelepis squamata*, burrowing crustaceans including the amphipod *Bathyporeia pelagica* and the isopod *E. pulchra*, found above the mid-tide level on the open shore. Below the mid-tide level, communities were dominated by the polychaetes *Spio martinensis*, *Magelona mirabilis*, *N. cirrosa*, *L. conchilega* and *A. marina*. Areas of hard substratum were noted as being usually artificial (e.g. sea defences) and these tended to be encrusted by species such as *M. edulis*, *Elminius modestus* and *Semibalanus balanoides*, in addition to lichens and algae.

1.5.2.10 Additional information shows that the landfall site for the Mona Offshore Cable Corridor is dominated by LGS.S.AP.P, burrowing amphipods and LGS.S.aEur (NRW, 2005) (Figure 1.4). The full list of biotopes and the full names of the biotopes at the Mona Offshore Cable Corridor landfall, hereafter referred to as the Mona landfall, can be found Figure 1.4 and Appendix H.

1.5.2.11 A sanitary survey report conducted by Cefas (2014) found the intertidal zone of Colwyn Bay, Llandudno and Great Ormes Head is dominated by intertidal flats. This survey described a mussel bed which lies within the west of the Mona Offshore Cable Corridor landfall. It is an ephemeral seed mussel bed at Llanddulas which has only been used as a source of seed in recent years. The other two (Rhos-on-Sea and Llandudno Pier) are more established beds with larger mussels.

1.5.2.12 In the intertidal zone of the Mona benthic subtidal and intertidal ecology study area the brown algae *Ascophyllum nodosum* as well as common oyster *Ostrea edulis* have been recorded and both of which are included on the UK BAP species list. Additionally, *Obelia bidentata* has also been recorded which is a UK nationally rare species, although there has only been one recorded sighting (NBN Atlas, 2021).

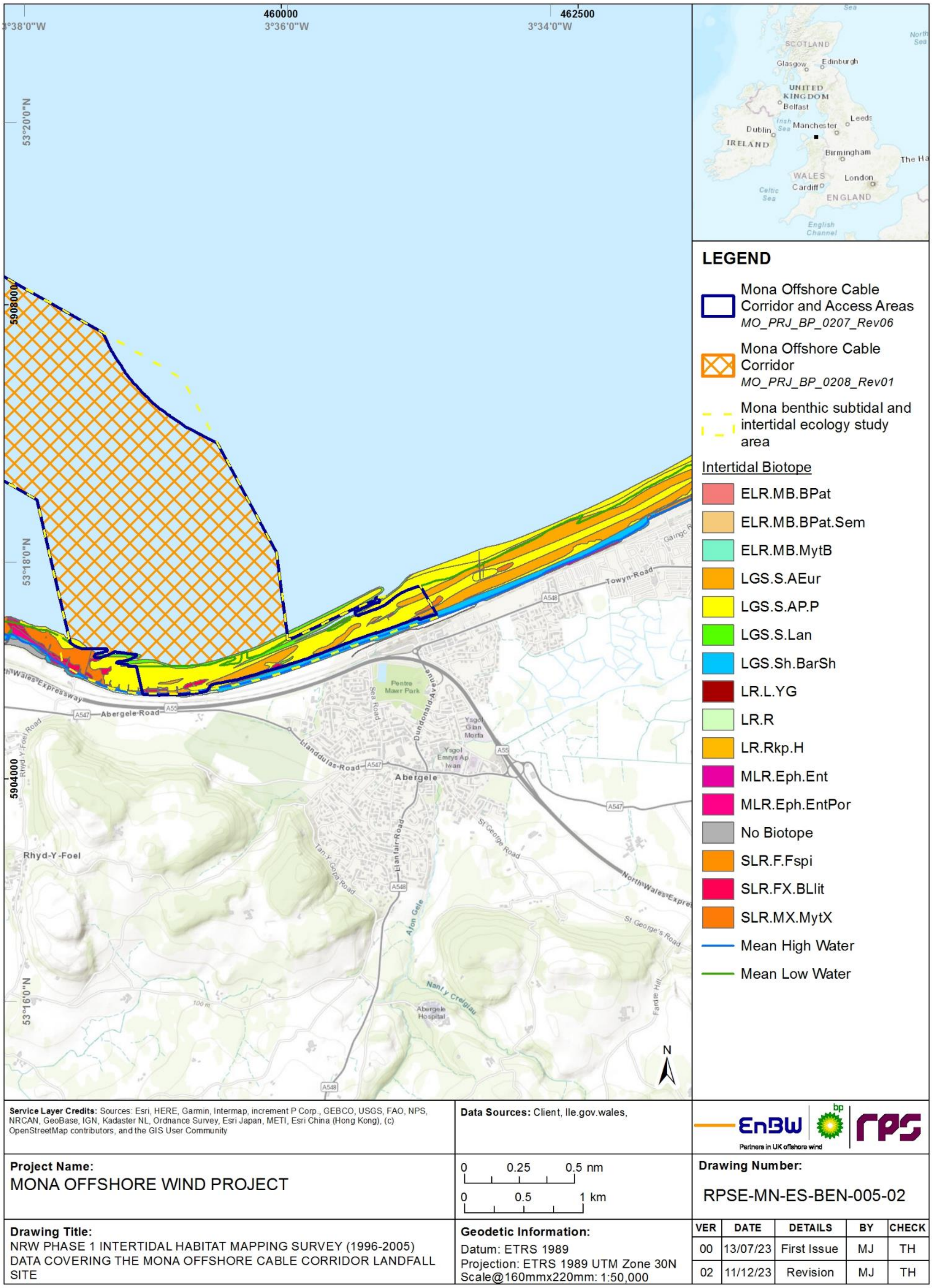


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Figure 1.4: NRW Phase 1 intertidal habitat mapping survey (1996-2005) data covering the Mona Offshore Cable Corridor landfall site.

1.6 Designated sites

1.6.1.1 There are a number of sites of nature conservation importance, which are designated for relevant benthic subtidal and intertidal ecology features, within the regional benthic subtidal and intertidal ecology study area. The designated sites are described in Table 1.3 and shown in Figure 1.5. Those sites potentially located within the ZoI of the Mona Offshore Wind Project have been discussed in full in sections 1.6.1 and 1.6.2.

Table 1.3: Summary of designated sites within the Mona benthic subtidal and intertidal ecology regional study area and relevant qualifying interest features.

Designated site	Distance from the Mona Offshore Wind Project (km)	Relevant qualifying features
Liverpool Bay SPA	0 (Mona Offshore Cable Corridor) 15.88 (Mona Array Array)	• Supporting habitat (for designated ornithological features)
Menai Strait and Conwy Bay Special Area of Conservation (SAC)	0 (Mona Offshore Cable Corridor) 29.82 (Mona Array Array)	• Sandbanks which are slightly covered by sea water all the time • Mudflats and sandflats not covered by seawater at low tide • Submerged or partially submerged sea caves • Large shallow inlets and bays • Reefs.
Traeth / Pensarn Site of Special Scientific Interest (SSSI)	0 (Mona Offshore Cable Corridor) 37.58 (Mona Array Array)	• Coastal vegetated shingle ridge.
Creigiau Rhiwledyn / Little Ormes Head SSSI	2.35 (Mona Offshore Cable Corridor) 31.48 (Mona Array Array)	• Caves and overhangs • Moderately exposed rock • Rockpools • Soft piddock bored substrata • Under-boulders.
Pen Y Gogarth / Great Ormes Head SSSI	3.26 (Mona Offshore Cable Corridor) 30.35 (Mona Array Array)	• Caves and overhangs • Moderately exposed rock • Rockpools • Soft piddock bored substrata • Under boulders.
Aber Afon / Conwy SSSI	4.86 (Mona Offshore Cable Corridor) 30.51 (Mona Array Array)	• Coastal plain estuary ecology.
Dee Estuary / Aber Dyfrdwy SAC	14.12 (Mona Offshore Cable Corridor)	• Estuaries • Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

Designated site	Distance from the Mona Offshore Wind Project (km)	Relevant qualifying features
	39.19 (Mona Array Array)	• Mudflats and sandflats not covered by seawater at low tide.
Dee Estuary Ramsar Site	14.12 (Mona Offshore Cable Corridor) 39.19 (Mona Array Array)	• Ramsar criterion 1–- Extensive intertidal mud and sand flats with large expanses of saltmarsh towards the head of the estuary.
Fylde Marine Conservation Zone (MCZ)	31 (Mona Array Array) 31.33 (Mona Offshore Cable Corridor)	• Subtidal sand • Subtidal mud.
West of Walney MCZ	30.51 (Mona Array Array) 42.64 (Mona Offshore Cable Corridor)	• Subtidal sand • Subtidal mud • Sea-pen and burrowing megafauna communities.
West of Copeland MCZ	32.21 (Mona Array Array) 52.4 (Mona Offshore Cable Corridor)	• Subtidal coarse sediment • Subtidal sand • Subtidal mixed sediment.
Shell Flat and Lune Deep SAC	33.44 (Mona Array Array) 39.74 (Mona Offshore Cable Corridor)	• Sandbanks which are slightly covered by sea water all the time • Reefs.
Langness Marine Nature Reserve (MNR)	40.98 (Mona Array Array) 56.51 (Mona Offshore Cable Corridor)	• Eelgrass meadow; • Intertidal mud • Kelp forest • Sea caves.
Little Ness MNR	44.64 (Mona Array Array) 64.2 (Mona Offshore Cable Corridor)	• Horse mussel reef • Maerl.
Ribble Estuary SSSI	48.96 (Mona Array Array) 48.96 (Mona Offshore Cable Corridor)	• Intertidal mudflats • Intertidal sandflats.
Douglas Bay MNR	46.68 (Mona Array Array)	• Beaumonts nudibranch *Cumanotus beaumonti* • Maerl beds • Rocky reef

Designated site	Distance from the Mona Offshore Wind Project (km)	Relevant qualifying features
	64.58 (Mona Offshore Cable Corridor)	• Kelp forest.
Laxey Bay MNR	48.92 (Mona Array Array) 67.82 (Mona Offshore Cable Corridor)	• Eel grass meadow • Rocky reef • Sandy seabed • Maerl • Ocean quahog *Arctica islandica* • Common whelk.
Baie y Carrickey MNR	49.94 (Mona Array Array) 64.58 (Mona Offshore Cable Corridor)	• Rocky reef • Sea caves • Kelp forest • Eelgrass meadows.
Morecambe Bay SAC	55.16 (Mona Array Array) 60.73 (Mona Offshore Cable Corridor)	• Estuaries • Mudflats and sandflats not covered by seawater at low tide • Large shallow inlets and bays • Sandbanks slightly covered by sea water at all times • Large shallow inlets and bays • Coastal lagoon • *Salicornia* and other annuals colonising mud and sand • Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) • Reefs.
Calf of Man and Wart Bank MNR	53.63 (Mona Array Array) 66.58 (Mona Offshore Cable Corridor)	• Rocky reef • Sand banks • Kelp forest.
Ramsey Bay MNR	56.99 (Mona Array Array) 76.89 (Mona Offshore Cable Corridor)	• Maerl beds • Eelgrass meadows • Horse mussel reefs • Rocky shore and reef.
Port Erin Bay MNR	57.06 (Mona Array Array) 70.81 (Mona Offshore Cable Corridor)	• Rocky reef • Brittlestar beds • Kelp forest • Stalked jellyfish • Flame shell.
Niarbyl Bay MNR	58.64 (Mona Array Array)	• Rocky reef • Kelp forest

Designated site	Distance from the Mona Offshore Wind Project (km)	Relevant qualifying features
	72.71 (Mona Offshore Cable Corridor)	• Sea caves • Intertidal blue mussel beds • Ocean quahog *Arctica islandica*.
West Coast MNR	60.71 (Mona Array Array) 76.5 (Mona Offshore Cable Corridor)	• Rocky reef • Intertidal blue mussel • Mixed soft sediment • Kelp forest • Burrowing anemone *Edwardsia timida*.
Cumbria Coast MCZ	67.95 (Mona Array Array) 86.19 (Mona Offshore Cable Corridor)	• Intertidal under boulder communities • *Sabellaria alveolata* reefs.
Luce Bay and Sands SAC	99.67 (Mona Array Array) 119.46 (Mona Offshore Cable Corridor)	• Large shallow inlets and bays • Sandbanks which are slightly covered by sea water all the time • Mudflats and sandflats not covered by seawater at low tide • Reefs.
Allonby Bay MCZ	106.67 (Mona Array Array) 126.26 (Mona Offshore Cable Corridor)	• Blue mussel beds • *Sabellaria alveolata* reefs.
Solway Firth SAC	114.7 (Mona Array Array) 134.36 (Mona Offshore Cable Corridor)	• Sandbanks which are slightly covered by sea water all the time • Reefs.

1.6.1 International designations

Y Fenai a Bae Conwy/Menai Strait and Conwy Bay SAC

1.6.1.1 The Menai Strait and Conwy Bay SAC is located in northwest Wales, between mainland Wales and the island of Anglesey. The site is located 25.55 km from the Mona Array Area and overlaps with the Mona Offshore Cable Corridor. The variation in physical and environmental conditions throughout the site, including rock and sediment type, water clarity and exposure to tidal currents and wave action result in a wide range of habitats and associated marine communities.

1.6.1.2 For the qualifying habitats (sandbanks which are slightly covered by sea water all the time, mudflats and sandflats not covered by seawater at low tide, submerged or partially submerged sea caves and reefs), the SAC is considered to be one of the best areas in the UK for mudflats and sandflats not covered by seawater at low tide, reefs, and sandbanks which are slightly covered by seawater all the time. The features are distributed throughout the SAC with no single feature occupying the entire SAC and with features overlapping in some locations. According to the most recent condition assessment (NRW, 2019), most features of the SAC are considered to be in favourable condition (sandbanks which are slightly covered by sea water all the time and mudflats and sandflats not covered by seawater at low tide and reefs) and the large shallow inlets and bays feature is in unfavourable condition.

1.6.1.3 Within the Menai Strait SAC the sandbanks which are slightly covered by seawater all the time and reefs are the features closest to the Mona Offshore Cable Corridor. A map of the distribution of the designated features of the SAC shows two point sample location where reefs were found as well as a large sandbank feature within 10 km of the overlap between the SAC and the Mona Offshore Cable Corridor. Both of these features are currently thought to be in favourable condition. The reef feature is further defined by the JNCC (2022a) as rocky reef dominated by communities of filter feeders such as sponges. The sandbanks vary from stable muddy sands in areas with weak tidal streams to relatively clean well-sorted and rippled sand where tidal streams were stronger (JNCC, 2022a). In very shallow waters relatively species-rich sandy communities are dominated by polychaetes (JNCC, 2022a).

Aber Dyfrdwy/Dee Estuary SAC

1.6.1.4 The Aber Dyfrdwy/Dee Estuary SAC is located on the north Wales coast in the southeast of the east Irish sea, 14.12 km southeast of the Mona Offshore Cable Corridor at its closest point.

1.6.1.5 The Aber Dyfrdwy/Dee Estuary SAC covers an area of 158.05 km^2 (JNCC,2022b). This site is designated for three main features: mudflats and sandflats not covered by seawater at low tide, *Salicornia* and other annuals colonising mud and sand and Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*). Other Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site include estuaries and various dune habitats. The majority of these features are in good condition and targets are currently in place to maintain this condition.

Shell Flats and Lune Deep SAC

1.6.1.6 The Shell Flats and Lune Deep SAC is located on the north boundary of Fylde MCZ in the east Irish sea, 31.05 km north of the Mona Array Area at its closest point.

1.6.1.7 Shell Flat sandbank runs northeast from the south corner of the site. The bank is an example of a Banner Bank, which are generally only a few kilometres in length with an elongated pear/sickle-shaped form, located in water depths less than 20 m below chart datum (Natural England, 2012). This feature is designated as a sandbank which is slightly covered by seawater all the time. Lune Deep is designated for its reef habitat which represents a good example of boulder and bedrock reef (Natural England, 2012). The presence of stony reef, cobbles and small boulders supports tide-swept fauna including hydroids, bryozoans, anemones and sponges.

Morecambe Bay SAC

1.6.1.8 The Morecambe Bay SAC is located on the west coast of England, in the county of Lancashire. The site is located 51.39 km from the Mona Array Area at its nearest point to the Mona Offshore Wind Project. The variation in physical and environmental conditions throughout the site, including rock and soft sediment types, water clarity and exposure to tidal currents and wave action result in a wide range of habitats and associated marine communities.

1.6.1.9 This SAC is designated for numerous Annex I habitats throughout the subtidal and intertidal environment. One of the key habitats being the estuaries in this area. Within the SAC four rivers contribute to the estuary resulting in the largest single area of continuous intertidal mudflats and sandflats in the UK and the best example of muddy sandflats on the west coast (JNCC, 2022c). Mudflats and sandflats not covered by seawater at low tide is another Annex I habitat that this SAC is designated for. Furthermore, Morecambe Bay is the second-largest embayment in the UK, after the Wash and, as such, has also been designated for its large shallow inlets and bays habitat (JNCC, 2022c).

Luce Bay and Sands SAC

1.6.1.10 The Luce Bay and Sands SAC is located on the southwest coast of Scotland. The site is located 94.48 km from the Mona Array Area at its nearest point to the Mona Offshore Wind Project. The variation in physical and environmental conditions throughout the site, including rock and soft sediment types, water clarity and exposure to tidal currents and wave action result in a wide range of habitats and associated marine communities.

1.6.1.11 In the marine environment this SAC is designated for one Annex I feature, large shallow inlets and bays, of which Luce Bay and Sands is a high-quality example (JNCC, 2022d). The JNCC (2002d) describe the sediments within Luce Bay as ranging from boulders to highly mobile sands, which support rich plant and animal communities, typical of a large bay in southwest Scotland. The shallow depths of the bay (0 to 10m) contain major sandbanks along the west and north shores. Most of the intertidal area of the bay comprises small boulders on sandy sediment. Some larger boulders on the lower shores have spaces beneath and between them which provide shelter for false Irish moss *Mastocarpus stellatus* and allowing for under-boulder communities to develop, including ascidians, sponges and crustose coralline algae. In the subtidal area, communities of sparse cuvie kelp, *Laminaria hyperborean,* sea-oak *Halidrys siliquos*, red algae and the dahlia anemone *Urticina feline* have been identified. Much of the central part of Luce Bay consists of slightly deeper water that support a rich community of polychaete worms, bivalves, echinoderms and brittlestars, particularly Ophiura sp.

Solway Firth SAC

1.6.1.12 The Solway Firth SAC is located on the west coast boarder between England and Scotland and is formed by the river Solway. It is one of the least-industrialised and most natural large estuaries in Europe (JNCC, 2022e). The site is located 109.46 km from the Mona Array Area at its nearest point to the Mona Offshore Wind Project. The variation in physical and environmental conditions throughout the site, including rock and soft sediment types, water clarity and exposure to tidal currents and wave action result in a wide range of habitats and associated marine communities.

1.6.1.13 This SAC is designated for numerous Annex I habitat including sandbanks which are slightly covered by sea water all the time, estuaries and mudflats and sandflats not covered by seawater at low tide (JNCC, 2022e). The sandbanks in the Solway Firth are mainly composed of gravelly and clean sands, due to the very dynamic nature of the estuary. The dominant species of the infaunal communities comprise different annelid worms, crustaceans, molluscs and echinoderms, depending on the nature of the substrate. As a very natural estuary with limited industrialisation highly mobile, predominantly sandy intertidal flats have been able to form on the west coast. The Solway Firth contains the third-largest area of continuous littoral mudflats and sandflats in the UK.

Liverpool Bay SPA

1.6.1.14 The Liverpool Bay SPA overlaps with the Mona Offshore Cable Corridor and borders the coastlines of northwest England and north Wales. It is designated for the protection of red-throated diver *Gavia stellata*, common scoter *Melanitta nigra*, and little gull *Hydrocoloeus minutus* in the non-breeding season; common tern *Sterna hirundo* and little tern *Sterna albifrons* in the breeding season, and an internationally important waterbird assemblage (JNCC, 2020), all of which at least partially depend upon benthic habitats as a feeding environment.

1.6.2 National designations – Sites of Special Scientific Interest (SSSI)

Traeth Pensarn SSSI

1.6.2.1 Traeth Pensarn SSSI is located on the north Wales coastline and overlaps the landfall site for the Mona Offshore Wind Project. The site is located 34.6 km from the Mona Array Area. Traeth Pensarn SSSI covers an area of 51.67 km^2, of which 42.46 km^2 (82%) is within the intertidal zone. This site is notable for its coastal vegetated shingle beach as well as exposed sand and littoral sediment. All designated features of this site are located above the MHWS mark.

Creigiau Rhiwledyn/Little Ormes Head SSSI

1.6.2.2 Creigiau Rhiwledyn / Little Ormes Head SSSI is located on the north Wales coastline and overlaps the Y Fenai a Bae Conwy/Menai Strait and Conwy Bay SAC. The site is located 2.35 km from the Mona Offshore Cable Corridor. Creigiau Rhiwledyn / Little Ormes Head SSSI covers an area of 0.36 km^2 (CCW, 2002). This site is notable for various marine biological features including specialised and nationally scarce cave, rockpool, overhang and rock-boring bivalve biotopes (physical habitats and their associated community of species including animals and plants) within the intertidal zone (CCW, 2002).

Pen Y Gogarth/Great Ormes Head SSSI

1.6.2.3 Pen Y Gogarth / Great Ormes Head SSSI is located on the north Wales coastline and overlaps the Y Fenai a Bae Conwy/Menai Strait and Conwy Bay SAC. The site is located 3.26 km from the Mona Offshore Cable Corridor. Pen Y Gogarth /Great Ormes Head SSSI covers an area of 3.03 km^2 (CCW, 2013). This site is notable for having a large area of moderately exposed rock, supporting a complete zonation of marine biotopes. It also has specialised and nationally scarce flora and fauna, most typically associated with rock pool, cave and limestone rock habitats found between the Great Orme and the Solway Firth (CCW, 2013).

Aber Afon/Conwy SSSI

1.6.2.4 Aber Afon/Conwy SSSI is located on the north Wales coastline, at the mouth of the river Conwy and overlapping with the Y Fenai a Bae Conwy/Menai Strait and Conwy Bay SAC. The site is located 4.86 km from the Mona Offshore Cable Corridor. Aber Afon / Conwy SSSI covers an area of 12.95 km^2 (CCW, 2003). This site is notable as a high-quality example of an intertidal estuarine community (CCW, 2003). The site supports nationally important ‘piddock’ communities on eulittoral peat, eulittoral firm clay with *Mytilus edulis*, lower eulittoral soft rock with *Fucus serratus* and sublittoral fringe soft rock with *Laminaria digitata* (CCW, 2003). In addition, the site supports specialised communities of shallow pools on mixed substrata with hydroids, ephemeral algae and *Littorina littorea* (CCW, 2003).

Ribble Estuary SSSI

1.6.2.5 The Ribble Estuary SSSI is located on the Irish Sea coast of the counties of Lancashire and Merseyside. The site is located 41.07 km from the Mona Array Area. This SSSI is 92.26 km^2 in area and also contains the Ribble Marshes National Nature Reserve.

1.6.2.6 The estuary and in particular its extensive sand flats, mud flats and salt marshes, is especially important for migratory birds, as well as overlapping with the Salter’s Bank unit designated for the presence of favourable status littoral sediments (Natural England, 2008). A survey in the north of the site (Natural England, 2015), near Lytham-St-Annes, found the upper shore to be characterised by sandy habitat with a range of polychaete species and amphipods. The fauna in sediments on the lower shore area identifying high numbers of juvenile brittlestars and fragments of hydroids and bryozoans. A large number of empty razor shells *Ensis* spp. were also present scattered over the sediment surface.

1.6.2.7 The Ribble Estuary is a highly dynamic environment subject to a range of environmental influences including wave and wind action as well as flow from the Ribble river channel. The locations of channels and surface features of the sandflats can vary weekly and seasonal variation in the faunal communities occurs both within and across years.

1.6.3 National designations – Marine Conservation Zones (MCZs)

Fylde MCZ

1.6.3.1 Fylde MCZ is located in Liverpool Bay, between 3 and 20 km off the Fylde coast and Ribble estuary respectively. The site is located 24.45 km from the Mona Array Area (Figure 1.5). The MCZ protects an area of approximately 260 km^2. The depth of the seabed within the site ranges from almost being exposed on low tide (just 35 cm depth) to 22 m at its deepest part (Defra, 2013).

1.6.3.2 The site was chosen for its extensive subtidal sediment habitats (subtidal sand and subtidal mud are the designated features) which are considered to be a good representation of the seabed habitats and communities found on the east side of Liverpool Bay. This habitat is known to support rich bivalve and mollusc populations. Fylde MCZ is situated next to Shell Flat and Lune Deep SAC and the MCZ offers an extended protection beyond the SAC for rich areas of seabed outside of the SAC including habitats such as sandbanks which are slightly covered by sea water all the time and reefs (bedrock reefs and stony reefs). The seabed in this area is highly productive and supports communities of animals such as crabs, starfish, shrimp-like crustaceans and bivalve shellfish, including the commonly found shiny nut clam *Nucula nitidosa*, bean razor clam *Pharus legumen* and *A. alba* (Defra, 2013).

West of Walney MCZ

1.6.3.3 West of Walney MCZ is located in the Irish Sea, off the coast of Cumbria and to the west of Walney Island. The MCZ is 26.99 km north of the Mona Array Area at its closest point. The MCZ covers an area of 388 km^2 most of which is in inshore waters, but with a small section crossing the 12 nm boundary into offshore waters (Defra, 2016). This site is notable as it is part of a network of mud-based sea pen and burrowing megafauna habitats in this region (Defra, 2016). All of the designated features (subtidal sand, subtidal mud and sea pens and burrowing megafauna communities) are currently recovering to favourable condition (Defra, 2016).

1.6.3.4 The seabed mud is an important habitat for animals such as worms, cockles, urchins and sea cucumbers. Other larger animals, such as mud shrimps and even fish, live within this habitat and burrow into the mud. This creates networks of burrows which shelter organisms like worms and brittlestars. The mud also provides a habitat for sea-pens, which are tall and luminous animals, which live in groups and get their name because they look like quill pens. The sand on the seabed is also an important habitat for flat fish, sand eels and worms living within it.

West of Copeland MCZ

1.6.3.5 West of Copeland MCZ is located in the east part of the Irish sea, 27.30 km north of the Mona Array Area and it covers an area of 158 km^2. The seabed within the West of Copeland MCZ is predominantly composed of a mix of subtidal sediments from fine sand through to coarse sediment (Defra, 2019a). It is these sedimentary habitats which are the protected features of this sites (subtidal sand, subtidal coarse sediment and subtidal mixed sediment). The subtidal sand habitat is in favourable condition, but the subtidal coarse and subtidal mixed sediments are recovering to favourable condition (Defra, 2019a).

1.6.3.6 This range of habitats supports a wide variety of species including bivalve molluscs (such as venus clams and razor clams), worms, sea urchins, anemones, starfish, crabs and sea mats (Defra, 2019a).

Cumbria Coast MCZ

1.6.3.7 The Coast of Cumbria MCZ is located on the west coast of England, within the county of Cumbria. The MCZ is 64.26 km northwest of the Mona Array Area at its closest point. The MCZ is an inshore site that stretches for approximately 27 km along the coast of Cumbria and in total it covers an area of 22 km^2 (Defra, 2019b). This site is notable as it is an extensive and important example of intertidal rocky shore habitats and associated communities on the sedimentary coast of northwest England (Defra, 2019b). All of the designated habitat features of this MCZ (high energy intertidal rock, *S. alveolata* reefs, intertidal biogenic reefs, intertidal sand and muddy sand, intertidal under boulder communities, moderate energy infralittoral rock and peat and clay exposures) are currently being maintained to preserve their favourable status (Defra, 2019b).

1.6.3.8 The diverse physical habitat at this MCZ helps to support this wide variety of designated features. The extensive intertidal boulder and cobble reefs, within the site support good examples of nationally important *S. alveolata* reefs (Defra, 2019b).

Where this habitat extends towards and below the low water mark examples of under-boulder communities are prevalent, supporting unusual algae and mobile animals such as long-clawed porcelain crabs, sea slugs and brittlestars shelter among sponges (Defra, 2019b).

Allonby Bay MCZ

1.6.3.9 The Allonby Bay MCZ is located on the west coast of England, within the county of Cumbria. The MCZ is 101.96 km northwest of the Mona Array Area at its closest point. The MCZ is an inshore site on the English side of the Solway Firth and in total it covers an area of 40 km^2 (Defra, 2022). This site is notable for large areas of reefs, including *S. alveolata* reefs and blue mussel beds (Defra, 2022). All of the designated habitat features of this MCZ (intertidal rock, *S. alveolata* reefs, intertidal biogenic reefs/sand and muddy sand/coarse sediment, subtidal biogenic reefs, subtidal coarse/sand/mixed sediment, moderate energy infralittoral rock and peat and clay exposures) are currently being maintained to preserve their favourable status (Defra, 2022).

1.6.4 National designations – Marine Nature Reserves (MNRs)

Langness MNR

1.6.4.1 The Langness MNR is located to the southeast of the Isle of Man and northwest of the Mona Offshore Wind Project, 36.97 km from the Mona Array Area at its closest point. Langness MNR is 88.67 km^2, or 10.67% of the 0-3 nm inshore zone, and is the third largest MNR around the Isle of Man (DEFA, 2022a).

1.6.4.2 The Langness MNR is important for a variety of fauna including sea birds and seals as well as benthic species such as grooved topshell *Jujubinus striatus* and the bivalve *Loripes lucinalis* (DEFA, 2022a). The site also hosts seagrass meadows growing at depths between 5 and 12 m, as well as kelp forests (DEFA, 2022a). At the coast there is also a series of small subtidal caves which are thought to be nursery sites for lobsters.

Little Ness MNR

1.6.4.3 The Little Ness MNR is located to the east of the Isle of Man and northwest of the Mona Offshore Wind Project, 44.4 km from the Mona Array Area at its closest point. Little Ness MNR is relatively small at 10 km^2 but is one of the most important sites because of its very high species diversity (DEFA, 2022b).

1.6.4.4 The Little Ness MNR encompasses a variety of habitats including horse mussel reefs and maerl beds (DEFA, 2022b). This site also has an important population of critically endangered European eels where young eels can be found in spring before travelling up rivers (DEFA, 2022b). As a result of this rich benthic environment a variety of seabird and marine mammals can also be found in this area.

Douglas Bay MNR

1.6.4.5 The Douglas Bay MNR is located to the east of the Isle of Man and northwest of the Mona Offshore Wind Project, 42.66 km from the Mona Array Area at its closest point. Douglas Bay MNR covers an area of 4.6 km^2 (DEFA, 2022c).

1.6.4.6 This MNR encompasses an area of maerl bed, a red coralline seaweed, which creates a fine layer over the seabed, this habitat attracts a high diversity of species including shellfish and anemones, as well as being a refuge for juvenile queen scallops and whelks which are commercially important to the Isle of Man (DEFA, 2022c). Rocky reefs and kelp forests are also found in this MNR. Beaumont's nudibranch is an important species in this MNR due to its limited range only occurring between the UK and Norway (DEFA, 2022c).

Laxey Bay MNR

1.6.4.7 The Laxey Bay MNR is located to the east of the Isle of Man and northwest of the Mona Offshore Wind Project, 44.4 km from the Mona Array Area at its closest point. Laxey Bay MNR is approximately 4 km^2 in size which equates to around 0.5% of the 0-3 nm area, or 1% of the reserves network (DEFA, 2022d).

1.6.4.8 The Laxey Bay MNR is one of the smallest MNRs around the Isle of Man however it contains a wide variety of benthic habitats such as seagrass meadows, rocky reefs, sandy seabed and maerl beds (DEFA, 2022d). This MNR support ocean quahog *A. islandica* as well as common whelk *Buccinum undatum*, which is one of the five commercially fished species around the Isle of Man (DEFA, 2022d).

Baie y Carrickey MNR

1.6.4.9 The Baie y Carrickey MNR is located to the south of the Isle of Man and northwest of the Mona Offshore Wind Project, 47.31 km from the Mona Array Area at its closest point. Baie y Carrickey MNR covers an area of 11.37 km^2 and was originally established as a fishery-restricted area in 2012 to reduce gear conflict between scallopers and pot fishermen and protect rocky reefs (DEFA, 2022e).

1.6.4.10 The Baie y Carrickey MNR encompasses area of rocky reef, kelp forest and seagrass meadows as well as sea caves which all contribute to its designated status (DEFA, 2022e).

Calf of Man and Wart Bank MNR

1.6.4.11 The Calf of Man and Wart Bank MNR is located to the southwest of the Isle of Man and northwest of the Mona Offshore Wind Project, 51.41 km from the Mona Array Area at its closest point. The Calf of Man and Wart Bank MNR is 20.15 km^2, or 2.4% of the 0-3 nm inshore zone (DEFA, 2022f).

1.6.4.12 The Calf of Man and Wart Bank MNR encompasses habitats such as rocky reefs and kelp forests (DEFA, 2022f). This MNR also contains sandbanks composed of sandy sediment and influenced by the waves and tide resulting in a dynamic habitat of mounds and ripples (DEFA, 2022f). This habitat is home to sandeels which are an important prey species for a number of marine mammals and seabirds.

Ramsey Bay MNR

1.6.4.13 The Ramsey Bay MNR is located to the northeast of the Isle of Man and north of the Mona Offshore Wind Project, 51.95 km from the Mona Array Area at its closest point. Ramsey Bay MNR covers an area of around 97 km^2, half of which is highly protected. Designated in 2011 as the island's first MNR, it is divided into five zones, four of which are highly protected for important habitats, including horse mussel reef and eelgrass meadow (DEFA, 2022g). Horse mussels can reach 15 cm in length and attach to the seabed with threadlike hairs. Over time the number of mussels increases, and they form reef structure with highly complex three-dimensional structure which can be colonised by sponges, tube worms, soft corals and barnacles. Rocky reefs are also present in the intertidal and subtidal environment (DEFA, 2022g).

Port Erin Bay MNR

1.6.4.14 The Port Erin Bay MNR is located to the west of the Isle of Man and northwest of the Mona Offshore Wind Project, 54.08 km from the Mona Array Area at its closest point. Port Erin Bay MNR is relatively small at approximately 4.5 km^2.

1.6.4.15 The Port Erin Bay MNR encompasses habitats such as rocky reefs, kelp forest and brittlestar beds (DEFA, 2022h). All of these habitats take advantage of the site being closed for fishing since 1989 (DEFA, 2022h). The site is also notable for having stalked jellyfish *Stauromedusae* which are rare across the British Isles as well as the Flame shell *Limaria hians* which is a species of marine clam named for its fiery orange colours.

Niarbyl Bay MNR

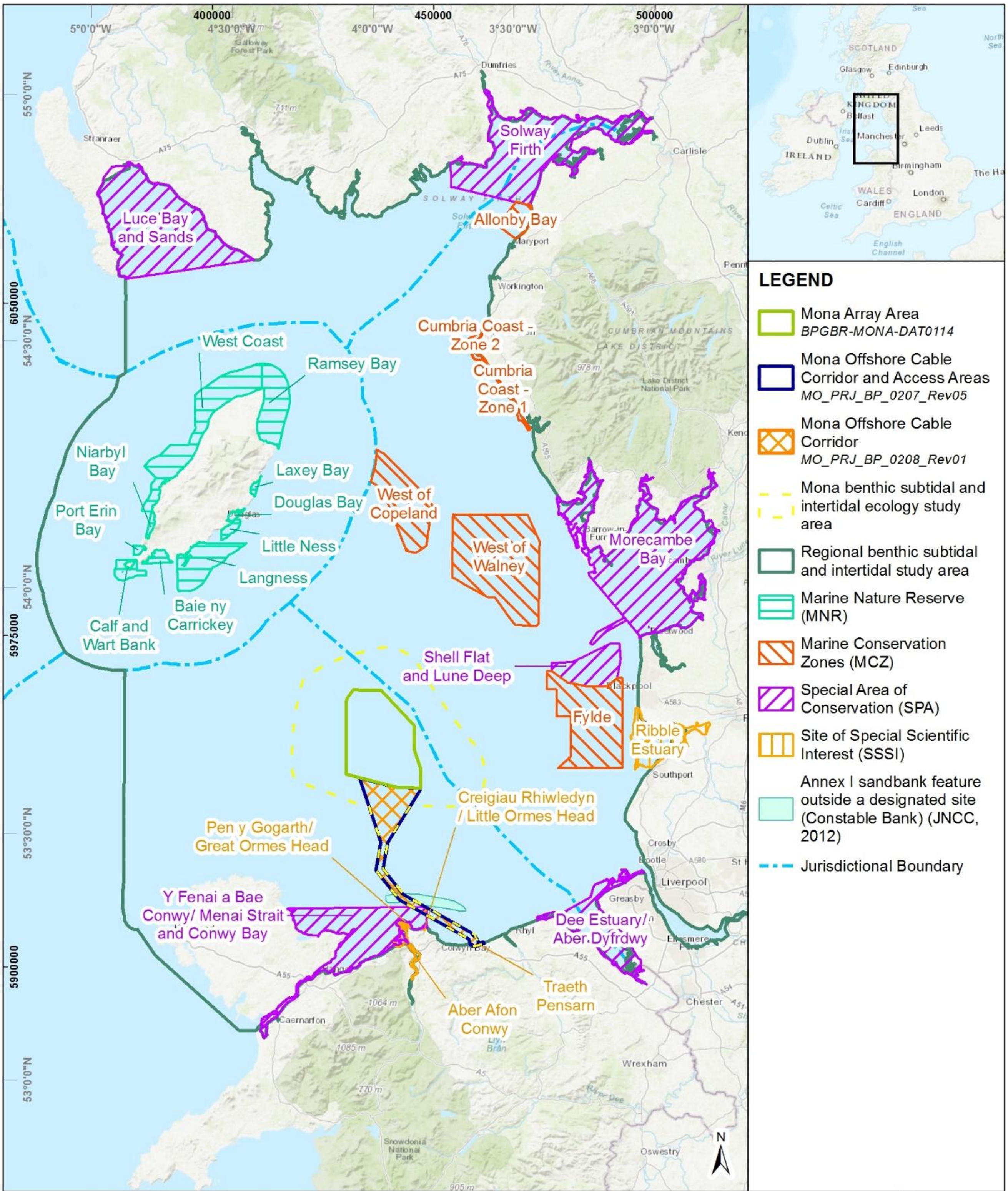
1.6.4.16 The Niarbyl Bay MNR is located to the west of the Isle of Man and northwest of the Mona Offshore Wind Project, 54.71 km from the Mona Array Area at its closest point. First established as a Fisheries Closed Area for scallop reseeding trials in 2009, this MNR is 5.66 km^2 and makes up just over 1% of the reserves network (DEFA, 2022i).

1.6.4.17 The Niarbyl Bay MNR encompasses habitats such as rocky reefs, kelp forest and sea caves as well as intertidal blue mussel beds (DEFA, 2022i). The Ocean quahog is also an important feature of this MNR due to the coarse gravel habitats found in the south of the site (DEFA, 2022i).

West Coast MNR

1.6.4.18 The West Coast MNR is located to the west of the Isle of Man and northwest of the Mona Offshore Wind Project, 57.53 km from the Mona Array Area at its closest point. The West Coast MNR is the largest of the MNR around the Isle of Man at approximately 185 km^2, which equates to 43% of the protected area network (DEFA, 2022j).

1.6.4.19 The West Coast MNR has a distinctive physical environment as a result of the strong tidal currents around the Point of Ayre (DEFA, 2022j). The seabed is composed of sand deposits as well as rock fragments as a result of the glacial history of this area. These sediments have enabled the creation of rocky reefs, intertidal mussel beds and kelp beds (DEFA, 2022j). The main habitat within this MNR is mixed soft sediment which are inhabited by scallops and whelks as well as the burrowing sea anemone *Edwardsia timida* (DEFA, 2022j).



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Project Name: MONA OFFSHORE WIND PROJECT	0 2.5 5 10 15 20 nm / 0 5 10 20 30 40 km	**Drawing Number:** RPSE-MN-ES-BEN-001-04
Drawing Title: DESIGNATED SITES WITH RELEVANT BENTHIC ECOLOGY FEATURES IN THE REGIONAL BENTHIC SUBTIDAL AND INTERTIDAL ECOLOGY STUDY AREA.	**Geodetic Information:** Datum: ETRS 1989 Projection: ETRS 1989 UTM Zone 30N Scale@160mmx220mm: 1:1,450,000	

VER	DATE	DETAILS	BY	CHECK
00	26/04/23	First Issue	NA	TH
04	27/09/23	Revision	NA	TH

Figure 1.5: Designated sites with relevant benthic ecology features in the regional benthic subtidal and intertidal ecology study area.

1.7 Site-specific subtidal survey baseline characterisation

1.7.1 Overview

1.7.1.1 A benthic subtidal survey and a benthic intertidal survey were undertaken in 2021 to characterise the Mona Array Area and landfall for the Mona Offshore Cable Corridor within the Mona benthic subtidal and intertidal ecology study area. Further benthic subtidal surveys and a benthic intertidal survey were undertaken in 2022 to characterise the Mona Array Area ZoI and the Mona Offshore Cable Corridor and Access Areas. A summary of these surveys is outlined in Table 1.4 with full detailed results of the benthic subtidal surveys and benthic intertidal surveys presented in sections 1.7 and 1.8.

1.7.1.2 As outlined in section 1.2, the surveys within the Mona Array Area were undertaken in conjunction with the site-specific benthic surveys for the neighbouring Morgan Generation Assets. The statistical analysis, presented in this technical report, has been undertaken on the combined dataset collected within both the Mona and Morgan Array Areas with the data collected for the Morgan Generation Assets used to provide additional context for the data within the Mona Array Area.

1.7.1.3 Further surveys were undertaken in summer 2022 to characterise the Mona Offshore Cable Corridor and the ZoI. Samples from the Mona Array Area ZoI have been included in the analysis for the Morgan and Mona Array Areas and analysis of the Mona Offshore Cable Corridor has been conducted and presented separately. The full data is available on request.

Table 1.4: Summary of surveys undertaken to inform benthic subtidal and intertidal ecology.

Title	Survey Extent	Overview of Survey	Survey Contractor	Date	Reference to Further Information
Pre-construction site investigation surveys	Mona Array Area	Geophysical surveys to establish bathymetry, seabed sediment and identify seabed features.	xOcean Ltd.	June 2021 to March 2022	Volume 6, Annex 6.1: Physical processes technical report of the Environmental Statement. Summary provided in paragraphs 1.7.3.1 to 1.7.3.6.
	Mona Offshore Cable Corridor	Multibeam echo sounder (MBES) and backscatter	xOcean Ltd.	April to July 2022	
Pre-construction site investigation surveys	Mona Array Area	High resolution side scan sonar multibeam bathymetry	Gardline Ltd.	June to September 2021	
	Mona Array Area and Mona Offshore Cable Corridor (water depths >15 m)	MBES and SSS	Gardline Ltd.	April to July 2022	

Title	Survey Extent	Overview of Survey	Survey Contractor	Date	Reference to Further Information
	Mona Offshore Cable Corridor (water depths <15 m)	MBES and SSS	Titan Surveys	April to July 2022	
Benthic subtidal surveys	Mona Array Area	Grab and DDV sampling.	Gardline Ltd.	8 August 2021-20 September 2021	Section 1.7.2
	Mona Array Area, Mona Array Area ZoI and Mona Offshore Cable Corridor	Grab and DDV sampling.	Gardline Ltd.	1 April 2022 – 14 August 2022	Section 1.7.2
Benthic Intertidal Survey	Across the proposed landfall location	Phase 1 intertidal walkover surveys with on-site dig over macrofauna sampling.	RPS Ltd.	16 May 2022 – 20 May 2022	Section 1.8.2
	Mona Offshore Cable Corridor and Access Areas	Phase 1 intertidal walkover surveys with on-site dig over macrofauna sampling. Re-mapping of *S. alveolata* reef extent	RPS Ltd.	8 May 2023 – 9 May 2023	Section 1.8.2

1.7.2 Methodology

Sample collection

1.7.2.1 The 2021 site-specific subtidal survey was undertaken across the Mona Array Area (and the Morgan Array Area) within the Mona benthic subtidal and intertidal ecology study area. Site-specific surveys were also undertaken in 2022 to characterise the Mona Array Area ZoI and Mona Offshore Cable Corridor. The sampling strategy was designed to adequately sample the area to provide data for baseline characterisation. The survey design was discussed and agreed with Natural England, JNCC and NRW (Table 1.1). The benthic subtidal survey for the Mona Array Area was undertaken by Gardline Limited (Gardline) in June to September 2021. The survey was conducted onboard the vessel *Ocean Resolution.* The benthic subtidal surveys for the Mona Array Area ZoI and Mona Offshore Cable Corridor were undertaken by Gardline in April to July 2022. The survey was conducted onboard the vessels *MV Ocean Observer* and *MV Titan Endeavour.*

1.7.2.2 The 2021 subtidal survey was composed of 60 stations within the Mona Array Area (nine of which were DDV only stations, the rest were combined grab and DDV). An additional 37 sample locations (two of which were DDV only) were sampled within the neighbouring Morgan Array Area during the same survey. The intention behind the initial sampling strategy was to characterise the benthic communities associated with all broadscale habitats and identify any potentially sensitive features. Upon acquisition of the geophysical data, the provisional targets were adjusted to target representative habitats and to provide coverage to assess the current condition of any potentially sensitive features evident in the geophysical data. Upon receipt of third party initial dataset acquired by xOcean, three proposed stations (ENV07, ENV13 and ENV27) were adjusted and a further 15 additional stations (ENV65 to ENV79) were added prior to survey commencement.

1.7.2.3 Upon completion of the 2021 survey, 51 stations were successfully sampled within the Mona Array Area and an additional nine DDV only stations (Figure 1.6). An additional 35 sample locations, with an additional two DDV only stations, were successfully sampled within the neighbouring Morgan Array Area during the same survey.

1.7.2.4 The 2022 subtidal surveys were composed of 35 combined grab and DDV sample stations within the Mona Offshore Cable Corridor, 12 sample stations in the Mona Array Area (seven of which were stations previously sampled in the 2021 survey campaign) and 12 sample stations in the Mona Array Area ZoI (two DDV only and 10 combined grab and DDV) (Figure 1.7). The Mona Array Area ZoI and Mona Offshore Cable Corridor sample locations were proposed based upon publicly available data prior to any survey acquisition. A total of 21 sampling locations (Stations OCC133 to OCC153) were pre-selected along the Mona Offshore Cable Corridor, assuming sampling at 1 km intervals. Detailed geophysical data was reviewed during the field acquisition to refine the final sampling station locations and to determine sampling intensity. During the survey an additional 14 stations were selected based on the geophysical data acquired onboard.

Grab sampling

1.7.2.5 A total of 248 single grab samples were retained from 273 deployments of a 0.1 m^2 mini-Hamon grab during the 2021 survey, of which 144 were within the Mona Array Area from 51 sample stations (Figure 1.6), to ensure adequate data coverage for both infaunal and epifaunal communities at each location. Across the Mona Array Area ZoI and Mona Offshore Cable Corridor, there were a total of 196 sampling attempts using a 0.1 m^2 mini-Hamon grab during the 2022 survey of which 169 were successfully retained.

1.7.2.6 Macrofaunal, particle size and eDNA samples were collected from all stations. Samples for chemical analysis were collected at eight stations within the Mona Array Area and seven stations in the Mona Array Area ZoI during the 2021 survey. Samples for chemical analysis were collected at two sample stations in the Mona Array Area, five sample stations in the Mona Array Area ZoI and 18 sample stations within the Mona Offshore Cable Corridor during the 2022 survey (Figure 1.7). Additionally one sample in the Mona Array Area and one sample in the Mona Array Area ZoI were resampled in the 2022 site specific surveys.

1.7.2.7 Initial processing of all mini Hamon grab samples was undertaken aboard the survey vessel in line with the following methodology:

- Assessment of sample size and acceptability made.
- Photograph of sample with station details, scale bar taken and described prior to sub-sampling.

- Surficial (<2 cm depth) sediments were taken directly from the mini-Hamon grab for chemical and biological analysis.
- One sediment grab was obtained which was divided into six sub-samples; two approximately 1 l samples for chemical analysis, and a spare, particle size analysis (PSA) with a spare taken using a plastic scoop and placed into plastic zip-lock bags.
- Two separate grab samples from each station were collected for infaunal macroinvertebrate identification. Each faunal sample was washed with seawater and transferred to a 0.5 mm sieve, finer sediment fractions were washed from the sample using an auto-sieve.
- The sieve residue was transferred to a uniquely labelled sample jar using scoops and/or funnels and fixed with formaldehyde solution (less than 20% formalin).
- eDNA samples were taken from two grabs at each sampling location. If the sediment was undisturbed, two 50 ml cores were taken to a depth of 5 cm. If this sediment was homogenised, a sample of approximately >40 g was taken as a small scoop from various points in the decanted sample. These samples were then stored in an airtight bag shielded from ultraviolet light and stored at less then -18 ^{o}C prior to analysis.

Drop down video

1.7.2.8 All 51 sample stations sampled in the Mona Array Area in the 2021 survey were surveyed with DDV with a minimum of 70 seabed photographs and 27 minutes of footage collected at each station at appropriate intervals including stations which had two attempts. In the 2022 surveys all 60 sample stations in the Mona Array Area, ZoI and Mona Offshore Cable Corridor were surveyed with DDV with a total of 3,104 photographs taken. Environmental seabed images were taken by means of a digital stills shallow water camera system with a dedicated strobe and video lamp, mounted within a stainless-steel frame. Video footage was also acquired throughout all stations using a high definition (HD) video camera. Initially the 2021 survey was conducted with the C-Tecnics CT3022 camera system though this encountered a timing issue with its flash gun so was swapped to the back-up Kongsberg OE14- 208 system after completion of the first sample station (ENV01). In the 2022 survey campaign a combination of the 1Cam Alpha Mk5, C-Tecnics CT3022 and Kongsberg OE14-208 systems were used. In the 2021 survey of the Mona Array Area a total of 9,216 photos were taken using the stills camera system across 97 stations. All of the photographs were taken less than 64 m from the target location and, on average, photographs were taken 29 m (±14 SD) from their target locations. During the 2022 survey campaign photographs collected from *MV Ocean Observer* were taken, on average, 51.4 m (±30.5 SD) from their target locations while photographs collected from *MV Titan Endeavour* were taken, on average, 7.3 m (±13.4 SD) from their target locations.

1.7.2.9 In the 2021 survey campaign a further 26 sample stations were added to the 25 original locations in the Mona Array Area comprising nine camera-only stations to target boulder areas and 17 co-located camera and grab stations to target additional features of interest in the newly reviewed data. No additional stations were added in the 2022 survey campaign.

1.7.2.10 The camera investigations were in line with the epibiota monitoring operational and interpretation guidelines (Hitchin *et al*., 2015; Turner *et al*., 2016).The images were captured remotely using the surface control unit and stored on the camera's internal memory card. Video footage was overlaid with time, position and depth, and recorded directly onto the PC hard drive. On completion, photographs were downloaded onto a computer. All hard disk drives were labelled with the relevant job details, write-protected and stored.

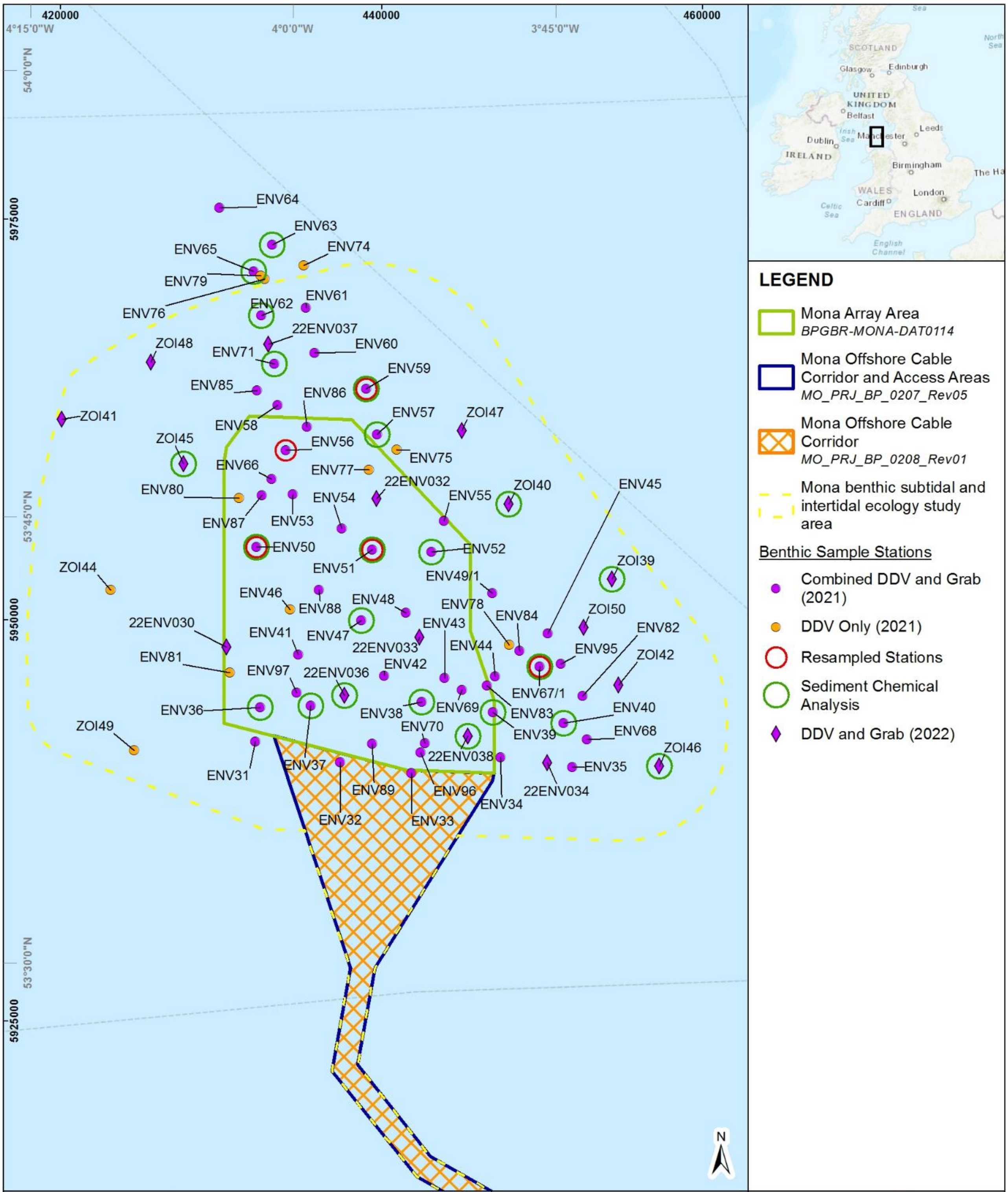
Survey limitations

1.7.2.11 During the initial phases of the 2021 survey of the Mona Array Area, a request was made by the on-board client representative to move some of the targeted environmental stations to coincide with the proposed cone penetrometer test locations. These were reviewed against the original reason for selection and as a consequence sample stations ENV31, ENV37 and ENV42 were relocated as they still covered the original broadscale feature.

1.7.2.12 In the 2021 survey campaign, eight sample stations within the Mona Array Area were also relocated during the survey due to lying within, or in close proximity to, exclusion zones for cables (ENV35, ENV44, ENV49, ENV52, ENV54, ENV55, ENV74 and ENV77). Only sample station ENV54 was adjusted significantly from its original location in order to capture the channel feature originally intended.

1.7.2.13 In the 2021 survey campaign, a number of stations were added to ensure adequate coverage of the survey area and its features. Further, from reviews of this additional data such as the geophysical data which was used to inform the micro siting of sample locations, additional stations were selected to cover features not already targeted. As a consequence, a further 26 sample stations (ENV65 to ENV97) were proposed to be added to the 25 original locations comprising nine camera-only stations to target boulder areas and 17 co-located camera and grab stations to target additional features of interest in the newly reviewed data such as the geophysical data.

1.7.2.14 In the 2022 survey campaign grab samples could not be collected from two sample stations in the Mona Array Area ZoI, therefore these stations were sampled using DDV only. The failed samples were generally due to rocks or cobbles in the jaws of the grab, low retention and sample wash out. Additionally failed attempts were reported due to delays in grab deployment, the grab triggering in the water column and the vessel being outside of the target range.



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Data Sources: Client

Project Name: MONA OFFSHORE WIND PROJECT

0 1 2 4 6 nm
0 2.5 5 10 km

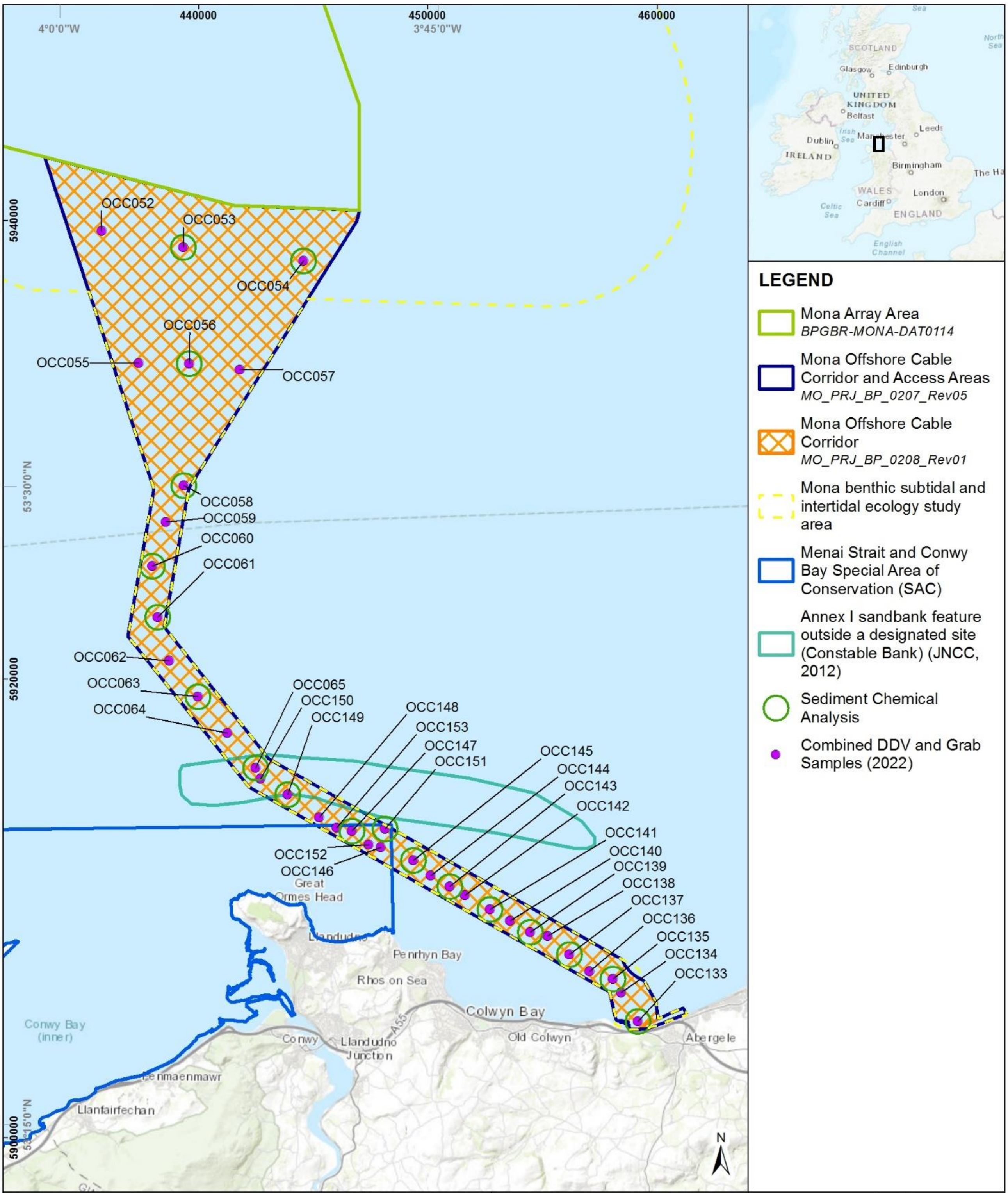
Drawing Number: RPSE-MN-ES-BEN-006-04

Drawing Title: COMPLETED SITE-SPECIFIC SAMPLE LOCATIONS WITHIN THE MONA ARRAY AREA AND ZOI WITHIN THE MONA BENTHIC SUBTIDAL AND INTERTIDAL ECOLOGY STUDY AREA (FROM 2021 AND 2022 SUBTIDAL SURVEY).

Geodetic Information:
Datum: ETRS 1989
Projection: ETRS 1989 UTM Zone 30N
Scale@160mmx220mm: 1:400,000

VER	DATE	DETAILS	BY	CHECK
00	13/07/23	First Issue	MJ	TH
04	27/09/23	Revision	NA	TH

Figure 1.6: Completed site-specific sample locations within the Mona Array Area and ZoI within the Mona benthic subtidal and intertidal ecology study area (from 2021 and 2022 subtidal survey).



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Data Sources: Client, Natural Resource Wales, JNCC

Project Name:
MONA OFFSHORE WIND PROJECT

0 1 2 4 nm
0 1 2 4 6 8 km

Drawing Number:
RPSE-MN-ES-BEN-007-04

Drawing Title:
COMPLETED SITE-SPECIFIC SAMPLE LOCATIONS WITHIN THE MONA OFFSHORE CABLE CORRIDOR WITHIN THE MONA BENTHIC SUBTIDAL AND INTERTIDAL ECOLOGY STUDY AREA (FROM THE 2022 SUBTIDAL SURVEY).

Geodetic Information:
Datum: ETRS 1989
Projection: ETRS 1989 UTM Zone 30N
Scale@160mmx220mm: 1:280,000

VER	DATE	DETAILS	BY	CHECK
00	13/07/23	First Issue	MJ	TH
04	27/09/23	Revision	NA	TH

Figure 1.7: Completed site-specific sample locations within the Mona Offshore Cable Corridor within the Mona benthic subtidal and intertidal ecology study area (from the 2022 benthic subtidal survey).

Sample analysis

Benthic infaunal analysis

1.7.2.15 Two separate grab samples from each station were collected for infaunal macroinvertebrate identification. For each faunal sample the entire contents of a single grab were washed into a clean plastic tray using seawater and then transferred to a 0.5 mm sieve. Finer sediment fractions were washed from the sample using an auto-sieve, which sprayed a low-powered seawater jet onto the underside of the sieve. The sieve residue was transferred to uniquely labelled sample jars using a scoop and/or funnel, making sure that none of the sample was lost or trapped in the sieve mesh. Sieved samples were immediately fixed with a known concentration of formaldehyde solution ('formalin', less than 20%). The formalin in the sample pots was subsequently diluted to a concentration of approximately 4%. One of the faunal samples (normally those identified as A) were worked up as a matter of course and a second retained as a spare (sample B). The benthic macrofaunal identification was undertaken by Thomson Ecology to NMBAQC processing guidelines (Worsfold and Hall, 2010).

1.7.2.16 Additionally, eDNA samples were taken from two grabs at each sampling location where possible (see Appendix I). If the sediment was undisturbed, two 50 ml cores were taken to a depth of 5 cm. If this sediment was homogenised, a sample of approximately 40 g was taken as small scoops from various points in the decanted sample. These were then combined in and stored in an airtight bag shielded from UV light and stored at less than -18 °C prior to analysis. DNA analysis was undertaken by NatureMetrics.

Sediment characteristic analysis

1.7.2.17 PSA was carried out by Kenneth Pye Associates Ltd. and Ocean Ecology (both MMO validated laboratories) in accordance with NMBAQC methods for diamictons (Mason, 2016). No dispersants were used, and the sediment was not treated to remove carbonates or organic matter prior to analysis. The sieve sizes ranged from 63 mm to <1 µm and were all assigned to a Wentworth classification (Wentworth, 1922). The results present particle size distributions in terms of mean phi, fraction percentages (i.e. gravel, sand and fines), sorting (mixture of sediment sizes) and skewness (weighting of sediment fractions above and below the mean sediment size) and kurtosis (degree of peakedness) (Folk and Ward, 1957). The sediment samples were additionally classified using the modified Folk triangle classification and the EUNIS classification. These classifications use the sand : mud ratio and the percentage of gravel (Folk, 1954; Parry, 2019).

Sediment chemistry analysis

1.7.2.18 As part of the subtidal survey, sediment samples were taken for the purpose of sediment chemistry analysis (Figure 1.12). Sediment hydrocarbon, metals, total organic carbon, organotins and PCB analyses were carried out by SOCOTEC. Samples were transferred to an appropriate sample container, labelled and sent to a suitable qualified laboratory for analysis. Samples were analysed for the following contaminants:

- Metals
- PCB
- Total organic carbon

- Organotins
- PAH.

Data analysis

Sediment characterisation analysis

1.7.2.19 The PSA data were categorised using the Folk classification which groups particles into mud, sand and gravel (mud 2 mm) and the relative proportion of each used to ascribe the sediment to one of 15 classes (e.g. slightly gravelly sand, muddy sand etc.) (Folk, 1954; Long, 2006). These classifications were then used to describe the data in the analysis. Proportions of mud, sand and gravel, as well as the Folk and Ward sorting coefficient, were also used to describe the sediment data. The Folk and Ward sorting coefficient describes the extent of deviation from lognormality of the particle size distribution (i.e. the variation in particle size with a sample).

Sediment chemistry analysis

1.7.2.20 The results of the sediment chemistry analysis were compared to the Cefas Action Levels (ALs) (Cefas, 1994). Cefas Action Level 1 (AL1) and Action Level 2 (AL2) are thresholds which give an indication of how suitable the sediments are for disposal at sea. Contaminant levels which are below AL1 are of no concern and are unlikely to influence the marine licensing decision while those above AL2 are considered unsuitable for disposal at sea. Those between AL1 and AL2 would require further consideration before a licensing decision can be made.

1.7.2.21 Sediment chemistry data were also compared to the Canadian Sediment Quality Guidelines (CSQG; CCME, 2001). These thresholds give an indication on the degree of contamination and the likely impact on marine ecology. For each contaminant, the guidelines provide Canadian TEL, which is the minimal effect range at which adverse effects rarely occur and a Canadian PEL, which is the probable effect range within which adverse effects frequently occur. For PAHs the best estimates of the potential toxicity of in marine sediments are Effect Range Low (ERL) and Effect Range Median (ERM) concentrations for total low molecular weight, total high molecular weight and total PAHs (Neff, 2004).

Macrofaunal analysis

1.7.2.22 Destructive sampling techniques and sieving may damage delicate benthic organisms. It is, therefore, commonplace for fragmented organisms to be found in faunal samples. The following conditions were applied to the recording of damaged specimens and fragments:

- Fragments that constituted a major component of an individual, that unequivocally represented the presence of an entire organism, and that could be identified to species level, were recorded and included with other counts of that species
- Fragments that constituted a significant component of an individual, that unequivocally represented the presence of an entire organism, but that could not be identified to species by virtue of their incompleteness, were recorded to the lowest possible taxonomic level

- Fragments that did not unequivocally represent the presence of an entire organism were ignored (e.g. *Ophiura* arms, *Echinocardium* shell fragments, etc).

1.7.2.23 Recorded fragments, therefore, represent discrete observations of individuals that were present at the time of sampling and were included in the analysed data set.

1.7.2.24 Macrofauna was defined as organisms that are normally larger that the mesh size of the sieve used to separate them from the sediment (Gardline, 2018). Meiofaunal organisms, such as the *Ostracoda* and *Copepoda*, which would not be consistently sampled, were not recorded. Due to their generally small size (in fully marine environments), species from the *Oligochaeta*, *Tardigrada* and *Gnathostomulida* were only enumerated when a sieve with a mesh size of 0.5 mm or less was used to separate organisms from sediments; otherwise, these organisms were noted to be present, but not enumerated.

1.7.2.25 Planktonic organisms, such as *Mysidacea* were not recorded. The presence of nektonic species, such as fish, was recorded, but were not enumerated. Colonial, stoloniferous and encrusting epibenthic species were identified but not enumerated. With the exception of discrete sea pen *Pennatulacea* colonies, only solitary tunicates and cnidarians were enumerated and included in statistical analyses. Colonial tunicates and cnidarians were identified but not enumerated. The testate amoeba *Astrorhiza* sp. was the only foram (amoeba-like, single-celled organisms) routinely enumerated. When found, the presence of Porifera sponges was recorded, but not identified to lower taxonomic levels, enumerated, or included in statistical analyses. Where *Gnathiidae* were recorded, those individuals not identified to species level were grouped as a single indeterminate *Gnathiidae* entry. The following organisms were not identified to species, but were enumerated and included in the data set for analyses at a higher taxonomic level:

- *Nemertea* – identified to phylum
- *Platyhelminthes* – identified to phylum
- *Oligochaeta* – identified to genus
- *Phoronida* – identified to genus
- *Cephalochordata* – identified to subphylum
- *Hemichordata* – identified to phylum.

Data rationalisation

1.7.2.26 The benthic infaunal and epifaunal datasets were initially transformed to down-weight the species with the highest abundances for multivariate community analysis. The analysis of the infaunal community was made using the enumerated taxa only dataset to avoid skewing the results with the encrusting/colonial taxa recorded as 'present'; these taxa were combined with the DDV data and analysed separately.

1.7.2.27 Juveniles of some species were recorded in the raw infaunal data including species such as *Aphroditidae*, *Arenicolidae*, *Liocarcinus*, *Solecurtidae* and *Mytilidae*. Juveniles were however excluded from the multivariate analysis as they represented a very minor fraction of the infaunal taxon and abundance.

1.7.2.28 All fish species were removed prior to analysis and are discussed separately and within Volume 6, Annex 6.4: Fish and shellfish technical report of the Environmental Statement.

1.7.2.29 Colonial/encrusting taxa within the grab samples, which were recorded only as present, were combined with the DDV data and given an abundance of 1 or 0 respectively to enable them to be included in a separate multivariate analysis. The combined DDV and grab epifaunal dataset was square root transformed.

1.7.2.30 The epifaunal data that were recorded as present/absent, and therefore removed from the infaunal grab data analysis, were combined with the epifaunal data from the DDV. The full data is available on request.

Univariate analysis

1.7.2.31 The untransformed benthic infaunal data, and combined DDV and grab epifaunal data were summarised to highlight the number of individuals and number of taxa recorded. Analysis was also undertaken to identify the percentage composition of the major taxonomic groups within each sample station, the percentage contribution of each taxonomic group to the total number of taxa and to the total number of individuals.

1.7.2.32 A number of univariate indices were calculated to further describe the untransformed infaunal and epifaunal data, including: S = number of species; N = abundance; B = Biomass (wet mass); d = Margalef's index of Richness; J' = Pielou's Evenness index; H' = Shannon-Wiener Diversity index; λ = Simpson's index of Dominance for each identified biotope.

Multivariate community analysis

1.7.2.33 The benthic infaunal grab data and combined DDV and grab epifaunal data were analysed using the PRIMER v6 software (Clarke and Gorley, 2006). As outlined in section 1.2, the multivariate community analysis, presented in this technical report, has been undertaken on the combined dataset collected within both the Mona and Morgan Array Areas with the data collected for the Morgan Generation Assets used to provide additional context for the data within the Mona Array Area. The Mona Array Area ZoI data has been incorporated and analysed together with the Mona Array Area and Morgan Array Area datasets to provide a comprehensive characterisation (and updated characterisation since the PEIR) of the Mona benthic subtidal and intertidal ecology study area. The analysis on the Mona Offshore Cable Corridor was undertaken separately due to the increased heterogeneity of communities anticipated with the Mona Offshore Cable Corridor and to enable patterns in the data to be more easily distinguished from the offshore data. Following the allocation of biotopes across the Mona benthic subtidal and intertidal ecology study area the area where the Mona Offshore Cable Corridor meets the Mona Array Area and ZoI was considered to determine if there was continuity of habitats.

1.7.2.34 To determine the relative similarities between stations, the benthic infaunal and epifaunal community structure were investigated using CLUSTER analysis (hierarchical agglomerative clustering). Separate multivariate analyses were undertaken on the infaunal and epifaunal datasets however the same methodology was used. This used the Bray Curtis similarity coefficient to assess the similarity of sites based on the faunal components. The procedure produces a dendrogram indicating the relationships between sites based on the similarity matrix and uses a Similarity Profile (SIMPROF) test (at a 5% significance level) to test whether the differences between the clusters are significant.

1.7.2.35 Similarity Percentages (SIMPER) analyses were subsequently undertaken on the infaunal and two epifaunal datasets to identify which species best explained the similarity within groups and the dissimilarity between groups identified in the CLUSTER analysis. The similarity matrix was also used to produce a Multi-dimensional Scaling (MDS) ordination plot to show, on a two or three-dimensional representation, the relatedness of the communities (at each site) to one another. Full methods for the application of both the hierarchical clustering and the MDS analysis are given in Clarke and Warwick (2001).

1.7.2.36 A CLUSTER analysis and ANOSIM test were conducted on a merged dataset of the 2021 and 2022 Mona Array Area data including the resampled station to determine how similar the two datasets were and if there had been any change in community between the survey dates.

Biotope allocation

1.7.2.37 The results of the CLUSTER analyses and associated SIMPER outputs were reviewed alongside the raw, untransformed data to assign preliminary biotopes (Connor *et al*., 2004). Using the clusters identified, several sites within a cluster and, where appropriate several clusters, were assigned to a single biotope, where possible, based on relatedness and presence/absence of key indicator species for a particular biotope. The preliminary infaunal and epifaunal biotopes were plotted over the results of the geophysical surveys (see section 1.7.3) for the Mona subtidal and intertidal ecology study area. The geophysical data (i.e. the sediment classifications and seabed features) were then used to map the distribution, extent and boundaries of each biotope resulting in the generation of preliminary infaunal and epifaunal biotope maps. The infaunal and epifaunal biotope allocations were combined to provide a final combined biotope map.

Habitat analyses

Seapens and burrowing megafauna communities' assessment

1.7.2.38 The seapens and burrowing megafauna habitat is described by OSPAR as 'Plains of fine mud, at water depths ranging from 15 to 200 m or more, which are heavily bioturbated by burrowing megafauna with burrows and mounds typically forming a prominent feature of the sediment surface. The habitat may include conspicuous populations of seapens, typically *Virgularia mirabilis* and *Pennatula phosphorea*'.

1.7.2.39 Guidance by the JNCC (2014) clarifies how to identify this habitat and suggests that burrowed areas of mud should be deemed to be a 'sea pen and burrowing megafauna communities' habitat regardless of the presence of sea pens if multiple sightings of burrows and/or mounds attributable to the relevant species are observed. Habitats can be classed as 'sea pen and burrowing megafauna communities' regardless of the grain size composition of the sediment (JNCC, 2014).

1.7.2.40 The clarifications (JNCC, 2014) advocate utilising seabed video imagery and/or photographs to confirm the presence of burrows or mounds and sea pens, where present. The density classifications as laid out by the Marine Nature Conservation Review SACFOR (Super abundant, Abundant, Common, Frequent, Occasional, Rare) scale (JNCC, 2013) were used to quantify these defining features. The overall density of burrows was assessed in order to consider whether their density was a 'prominent' feature of the sediment surface and potentially indicative of a sub-surface complex gallery burrow system.

1.7.2.41 The JNCC (2014) guidance also states that the habitat occurs predominantly in fine mud sediments. However some examples of this habitat have been identified in areas of sandy muds. As such, where there is clear evidence of the relevant biological assemblages (burrowing megafauna and in some examples, sea-pens), such habitats can be classified as 'Sea-pen and burrowing megafauna communities' regardless of the grain size composition of the sediment (JNCC, 2004).

1.7.2.42 The overall or average burrow densities were calculated for each target using the total area covered by the seabed imagery (average image swathe width x camera transect length). In total, analysis was conducted of 9,320 fixes. It should be noted that there was no attempt to ascertain species due to the inherent complexities of detail needed (ICES, 2011) which is not available with the data acquired. As such and in line with the JNCC report (JNCC, 2013) recommendations, a degree of caution should be applied to these density results as they aren't necessarily definitive of the habitats condition.

Annex I reef assessment

1.7.2.43 A multi-criteria scoring system was used to assess the characteristics of areas of potential stony reef. Each characteristic was scored as low, medium or high; with spatial extent (m^2), substratum composition (% cover) and elevation (m) as the primary characteristics, as defined by Irving (2009); see Table 1.5.

Table 1.5: Stony/Bedrock reef criteria.

Characteristics	Resemblance to 'Stony Reef'			
	NOT a 'Stony Reef'	**Low**	**Medium**	**High**
Composition	<10% cobbles/boulders	10 - <40% cobbles/boulders	40-<95% cobbles/boulders	≥95% cobbles/boulders
		Matrix supported: dominated by sediment	Clast supported: dominated by cobbles/boulders	Clast supported: dominated by cobbles/boulders
Elevation	Flat seabed	<0.064 mm	0.064-<5 m	≥5 m
Extent	≤25 m^2	>25 m^2	>25 m^2	>25 m^2
Biota	Dominated by infaunal species			>80% of species present composed of epifaunal species

1.7.2.44 The patchiness of potential reef sites was also considers including aspects such as average percentage cover; and the presence or absence of key biota. This approach is similar to that developed by Jenkins *et al*. (2015), which is considered in line with Golding *et al.* (2020) recommendations as part of assessing the composition stony reefs in Table 1.5.

1.7.2.45 The more recent guidance by Golding *et al*. (2020) on refining the criteria for defining areas with a 'low resemblance' to Annex I stony reef were also considered in the analysis.

Fragile sponge and anthozoan communities on rocky habitats assessment

1.7.2.46 Recent attempts to formally quantify a threshold as to what density of sponges define a deep-sea sponge habitat have been made by the DNV (2013) and the JNCC (Henry and Roberts, 2014). The DNV approach is based upon assessment of the percentage cover of sponges in each image. Only images with >10% sponge cover (High) are thought to constitute an OSPAR deep-sea sponge aggregation (DNV, 2013). This approach is useful as a field guide as to whether an aggregation may occur though is subject to a lot of variation due to differences in camera height above and angle to the seabed.

1.7.2.47 Imagery acquired during the site-specific survey was acquired using a DDV system, therefore it was subjected to wave effects which varied the camera height above the seabed which may have altered the still imagery field of view. Consequently, any determination of habitats by this approach should be considered as a coarse indication of the habitat's presence.

1.7.2.48 Further, evidence of the species communities being present that are listed in biotopes that constitute 'fragile sponge and anthozoan communities on rocky habitats' (MarLIN, 2015) were also assessed to define the habitat.

1.7.3 Results – sediment analysis

Results – sediment characteristics (geophysical survey)

Mona Array Area and ZoI

1.7.3.1 The site specific 2021 Gardline geophysical survey showed seabed sediments within the Mona Array Area were generally composed of gravelly shelly sand, cobbles and fine sands. This is in keeping with the predominantly sand and gravel based sediments identified across the Mona Array Area and ZoI through grab sampling (see paragraph 1.7.3.7 *et seq*.).

1.7.3.2 Seabed features included sandwaves and megaripples in the southeast and north of the Mona Array Area where fine sands were more extensive including sediments defined as gravelly muddy sand. Whilst geophysical surveys were not specifically targeted at the ZoI, some surveys did overlap as a result of boundary refinements to the Mona Array Area. In the part of the Mona Array Area ZoI north of the Mona Array Area seabed sediments were similar to the rest of the Mona Array Area (i.e. predominantly gravelly sand). This north part of the Mona Array Area ZoI also had some, poorly defined, sandwaves and megaripples which reached up to 6.5 m in height. At 99 locations of seabed contact there were boulders, measuring up to 1 m, in the north of the Mona Array Area ZoI. The remaining 28 seabed contact locations were interpreted to represent debris. A total of nine items of linear debris were also interpreted within the north of the Mona Array Area ZoI.

Mona Offshore Cable Corridor

1.7.3.3 The site specific 2022 Gardline geophysical survey showed seabed sediments within the north of the Mona Offshore Cable Corridor were generally composed of coarse gravelly sediment. This is in keeping with the predominantly gravelly muddy sand classification determined through grab sampling (see paragraph 1.7.3.7 *et seq*.). This area was also characterised by relatively flat seabed with two local seabed depressions and area of sand dunes.

1.7.3.4 The central and south areas of the Mona Offshore Cable Corridor gradually rise towards the coastal zone. Sand dunes were present in the south of the Mona Offshore Cable Corridor. The seabed was predominantly flat in the central section of the Mona Offshore Cable Corridor, while the sandwaves and megaripples were observed in the south. The geophysical data also identified a transition between coarse gravelly seabed and finer sand which was also reflected in the grab sample data which recorded fine sediment such as muddy sand and sand approaching the coast (see paragraph 1.7.3.7 *et seq*.).

Constable Bank

1.7.3.5 The 2022 geophysical survey also identified an area of ripples and mega ripples in the vicinity of Constable Bank. Multiple boulders were also identified in this area, particularly in the south of the overlapping area. The sediment was also determined to be slightly gravelly sand with areas of gravelly sand.

Menai Strait and Conwy Bay SAC

1.7.3.6 The 2022 geophysical survey identified an area of ripples in the north and east of the area of the Menai Strait and Conwy Bay SAC which overlaps with the Mona Offshore Cable Corridor. Multiple boulders were also identified in the north of this area. The majority of the overlap area was determined to be slightly gravelly sand with areas of gravelly sand with no features.

Results – physical sediment characteristics (PSA)

Mona Array Area and ZoI

1.7.3.7 The subtidal benthic sediments across the Mona Array Area and ZoI and the Mona Offshore Cable Corridor within the Mona benthic subtidal and intertidal ecology study area were classified into sediment types according to the Folk classification and are presented in Figure 1.8 and Figure 1.9.

1.7.3.8 Sediments in the Mona Array Area and ZoI ranged from sandy gravel to slightly gravelly muddy sand, with 47% of the samples classified as gravelly muddy sand (Figure 1.8). A total of 24% of samples were classified as gravelly sand and 17% were classified as muddy sandy gravel, representing the three most common sediment types through-out the Mona Array Area and ZoI. Only one sample station was classified as slightly gravelly muddy sand, (ENV95) which was located in the southeast section of the Mona Array Area. One station in the Mona Array Area ZoI (ZOI50) was classified as muddy sand, which was located to the east of the Mona Array Area. All sediment samples classified as slightly gravelly sand were from the southeast section of the Mona Array Area and ZoI, where sandwaves and ripples were identified in the geophysical survey. The sediments within the south and east of the Mona Array Area were dominated by gravelly muddy sand with areas of gravelly sand. Gravelly sand was identified across the north and south of the Mona Array Area and ZoI. The sediments within the west of the Mona Array Area were characterised by gravelly muddy sand sediments in addition to muddy sandy gravel and gravelly muddy sand.

1.7.3.9 The sediments within the Mona Array Area ZoI were largely an extension of what was observed in the Mona Array Area including mixed sands but with coarser sediments such as muddy sandy gravel and gravelly muddy sand more common in the north. According to the simplified Folk Classification (Long, 2006), most stations in the Mona Array Area and ZoI were classified as mixed or coarse sediments, mirroring what was observed in the geophysical surveys.

1.7.3.10 The percentage sediment composition (i.e. mud ≤0.63 mm; sand <2 mm; gravel ≥2 mm) at each grab sample station in the Mona Array Area and ZoI is presented in Figure 1.10 and Appendix A. Across all sample stations in the Mona Array Area, the average percentage sediment composition was 17% gravel, 75% sand and 8% mud. Across the Mona Array Area and ZoI sand made up the highest proportion of the sediment composition (on average 76% and 73% of samples respectively). The sediment composition also showed a higher percentage of gravels within the west and north sections of the Mona Array Area in comparison to the east. The percentage of gravel was greatest at ZOI41 in the far west of the Mona Array Area ZoI where it represented 52% of the sediment composition. There were also two sample stations in the east of the Mona Array Area ZoI which were high in gravel content (ZOI40 and ZOI49). The sample stations with the highest percentage composition of mud were generally found in the southeast of the Mona Array Area and ZoI (Figure 1.10).

1.7.3.11 Sediments across the Mona benthic subtidal and intertidal ecology study area within the Mona Array Area and ZoI were typically very poorly sorted (71% of samples). Of the samples in the Mona Array Area and ZoI, 17% were classified as poorly sorted and 10% were classified as moderately sorted. One sample station in the Mona Array Area (ENV66) was moderately well sorted, this station was classified as gravelly sand with 5.59% gravel, 93.74% sand and 0.67% mud (Figure 1.7 and Appendix A).

Comparison of Mona Array Area and ZoI 2021 and 2022 data

1.7.3.12 As discussed in paragraph 1.7.2.4, seven sample stations which were sampled in the 2021 survey campaign were revisited in the 2022 survey. These revisited sites were largely located in the north of the Mona Array Area and can be identified by a red ring on Figure 1.6. The folk sediment classifications assigned to these stations on the basis of the 2022 survey data were very similar to what was assigned from the 2021 survey data. There was no change in the folk sediment classifications assigned to two stations (ENV67 and ENV51). Other sample locations had become slightly more mixed with either a more pronounced mud or gravel element (e.g. ENV31 changed from gravelly sand to gravelly muddy sand).

1.7.3.13 Only small changes in the composition were identified for example the percentage of gravel at ENV59 decreased from 29% to 17% between 2021 and 2022. Most sample stations however experienced changes in sediment composition per fraction (i.e. fines, sand and gravels) of <5%.

1.7.3.14 The resampled stations almost all had the same sorting classification as in 2021, with all being very poorly sorted, except ENV67 which changed from being moderately sorted to moderately well sorted.

Mona Offshore Cable Corridor

1.7.3.15 The subtidal benthic sediments across the Mona Offshore Cable Corridor are presented in Figure 1.9 and Appendix A. In the Mona Offshore Cable Corridor the majority of sediment samples were classified as either gravelly muddy sand or sand (both 26% of all samples). Gravelly muddy sands dominated the north of the Mona Offshore Cable Corridor in the area adjoining the Mona Array Area, which was largely characterised as featureless by the geophysical surveys with some depressions and sand dunes. Sands were more prevalent in the centre and south of the Mona Offshore Cable Corridor. Sample stations in the centre of the Mona Offshore Cable Corridor (between OCC149 and OCC141) were typically coarser with areas of sandy gravel, gravelly sand and slightly gravelly sand. One station was classified for each of the following sediment types; gravel, muddy sand and muddy sandy gravel. The stations closest to the landfall were mostly sand with the shallowest station being slightly gravelly sand.

1.7.3.16 The percentage sediment composition at each grab sample station in the Mona Offshore Cable Corridor is presented in Figure 1.11 and Appendix A. Across all sample stations in the in the Mona Offshore Cable Corridor, the average percentage sediment composition was 80% sand, 15% gravel and 5% fine sediment. The sample stations closest to the Mona Array Area were dominated by sand but also with gravel and fine sediment components. This aligns with the sediments in the south of the Mona Array

Area and ZoI which were muddy sandy gravel, gravelly sand and gravelly muddy sand. The sample stations in the centre of the Mona Offshore Cable Corridor were predominantly sandy becoming more gravelly in the central south section with one station (ZOI148) being composed of 90% gravel; this section was found to be largely flat by the geophysical surveys. Further inshore the sediments become sand dominated with a smaller fine sediment component; a change also noted in the geophysical surveys.

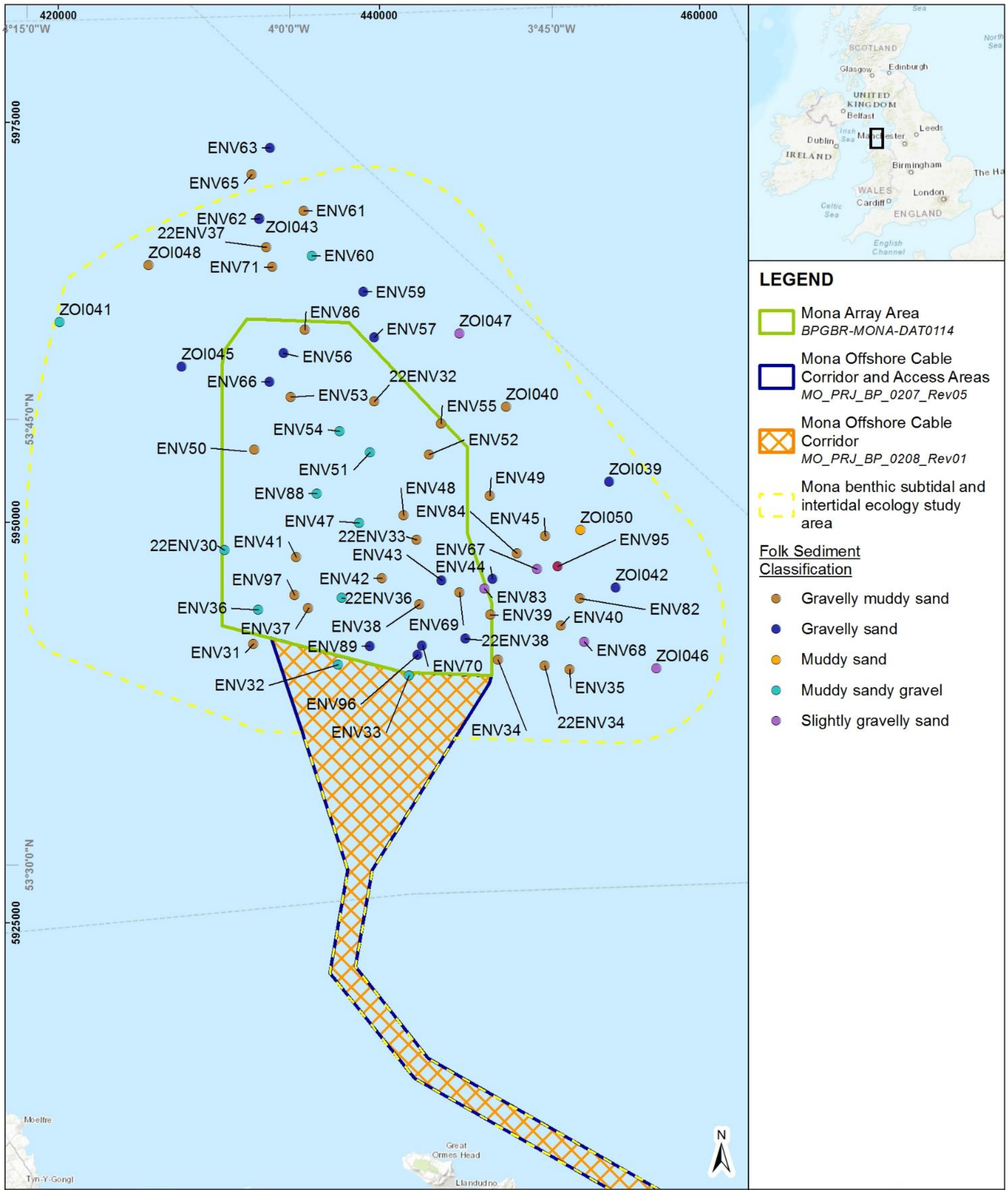
1.7.3.17 Sediments across the Mona benthic subtidal and intertidal ecology study area within the Mona Offshore Cable Corridor were typically very poorly sorted (40% of samples). Of the samples, 23% were classified as poorly sorted and 20% were classified as moderately well sorted. In the centre of the Mona Offshore Cable Corridor four sample stations were well sorted, these sites were almost entirely composed of sand.

Constable Bank

1.7.3.18 The three samples were collected in the area of the Mona Offshore Cable Corridor which overlaps with Constable Bank (OCC065, OCC149 and OCC150). These stations were classified as gravelly muddy sand, sand and slightly gravelly sand. The sediment composition was therefore dominated by sand; for example the sediment recorded at station OCC150 comprised 98% sand (Figure 1.11).

Menai Strait and Conwy Bay SAC

1.7.3.19 Five grab samples were collected in the area of the Mona Offshore Cable Corridor which overlaps with the Menai Strait and Conwy Bay SAC (OCC146, OCC147, OCC151, OCC152 and OCC153). All stations were classified as either sandy gravel or gravelly sand. As such their sediment composition was dominated by sand with a notable quantity of gravel (up to 33% of each sample was gravel; Figure 1.11).



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Data Sources: Client

Project Name:
MONA OFFSHORE WIND PROJECT

0 1 2 4 6 nm
0 2.5 5 10 km

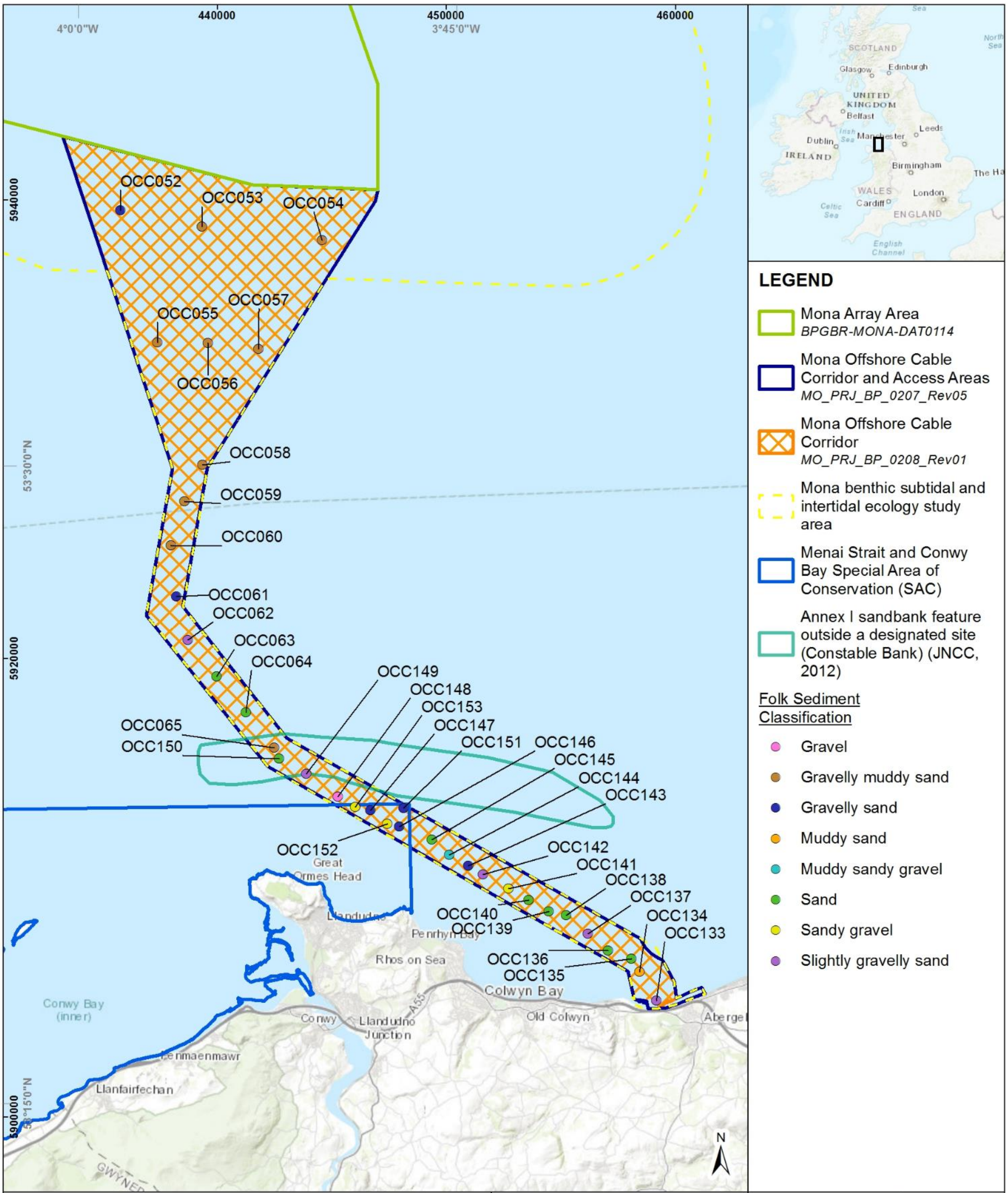
Drawing Number:
RPSE-MN-ES-BEN-008-03

Drawing Title:
FOLK SEDIMENT CLASSIFICATIONS FOR EACH BENTHIC GRAB SAMPLE IN THE MONA ARRAY AREA AND ZOI.

Geodetic Information:
Datum: ETRS 1989
Projection: ETRS 1989 UTM Zone 30N
Scale@160mmx220mm: 1:400,000

VER	DATE	DETAILS	BY	CHECK
00	13/07/23	First Issue	MJ	TH
03	27/09/23	Revision	NA	TH

Figure 1.8: Folk sediment classifications for each benthic grab sample in the Mona Array Area and ZoI.



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Data Sources: Client, Natural Resource Wales, JNCC

Project Name:
MONA OFFSHORE WIND PROJECT

0 1 2 4 nm
0 1 2 4 6 8 km

Drawing Number:
RPSE-MN-ES-BEN-009-04

Drawing Title:
FOLK SEDIMENT CLASSIFICATIONS FOR EACH BENTHIC GRAB SAMPLE IN THE MONA OFFSHORE CABLE CORRIDOR.

Geodetic Information:
Datum: ETRS 1989
Projection: ETRS 1989 UTM Zone 30N
Scale@160mmx220mm: 1:280,000

VER	DATE	DETAILS	BY	CHECK
00	13/07/23	First Issue	MJ	TH
04	27/09/23	Revision	NA	TH

Figure 1.9: Folk sediment classifications for each benthic grab sample in the Mona Offshore Cable Corridor.

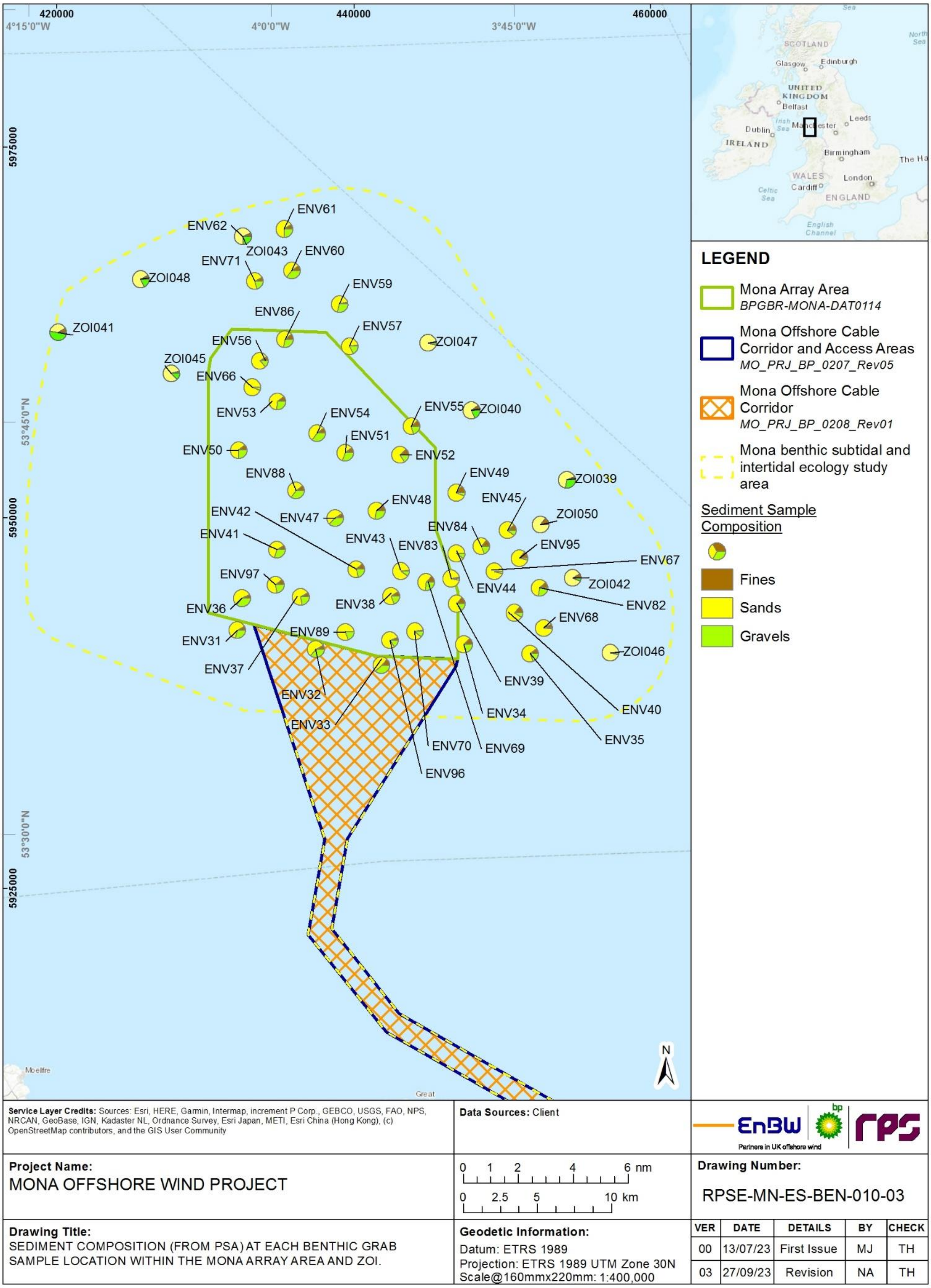
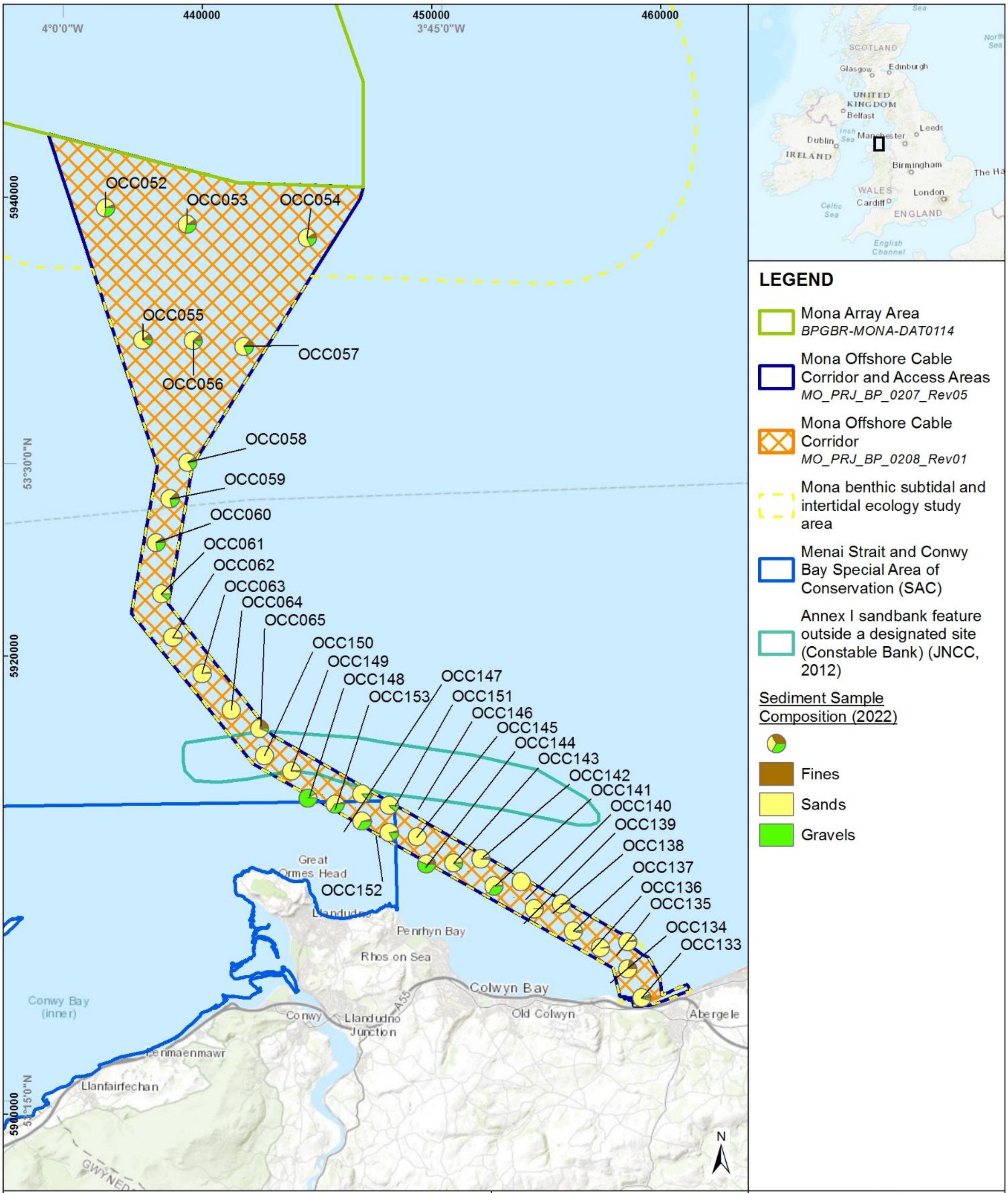


Figure 1.10: Sediment composition (from PSA) at each benthic grab sample location within the Mona Array Area and ZoI.



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community	**Data Sources:** Client, Natural Resource Wales, JNCC	
Project Name: MONA OFFSHORE WIND PROJECT	0 1 2 4 nm; 0 1 2 4 6 8 km	**Drawing Number:** RPSE-MN-ES-BEN-011-04
Drawing Title: SEDIMENT COMPOSITION (FROM PSA) AT EACH BENTHIC GRAB SAMPLE LOCATION WITHIN THE MONA OFFSHORE CABLE CORRIDOR.	**Geodetic Information:** Datum: ETRS 1989; Projection: ETRS 1989 UTM Zone 30N; Scale@160mmx220mm: 1:280,000	

VER	DATE	DETAILS	BY	CHECK
00	13/07/23	First Issue	MJ	TH
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Figure 1.11: Sediment composition (from PSA) at each benthic grab sample location within the Mona Offshore Cable Corridor.

Results - sediment contamination

Metals

1.7.3.20 Heavy metals are readily adsorbed by sediments which can lead to metals accumulating to concentrations far higher than the surrounding environment. These sediments can become re-suspended through bioturbation or through physical processes/disturbances. Metals will tend to accumulate in these fine-grained sediments and can become bioavailable to marine organisms through ingestion. The uptake of heavy metals by marine organisms can lead to bioaccumulation through trophic levels leading to apex organisms accumulating metals to adverse and toxic levels. This could result in significant adverse effects including mortality, impaired reproduction, reduced growth, alterations in metabolism as a result of oxidative stress and disruption to the food chain.

1.7.3.21 Table 1.6 presents the levels of metals that were recorded in the sediment samples collected from the 22 stations within the Mona Array Area and ZoI and the 18 stations within the Mona Offshore Cable Corridor. The results show that, on the whole, levels of contaminants were very low across the Mona benthic subtidal and intertidal ecology study area and, with a few exceptions which are discussed below, were below the relevant Cefas ALs and Canadian thresholds.

Mona Array Area and ZoI

1.7.3.22 The sediment chemistry results for the Mona Array Area and ZoI, presented in Table 1.6, show that levels of chromium, copper, nickel, lead, mercury and zinc did not exceed the relevant Cefas AL1 or the Canadian TEL in any of the samples.

1.7.3.23 Concentrations of arsenic marginally exceeded the Cefas AL1 (20 mg/kg) at two stations in the Mona Array Area and ZoI (ENV36 and ENV65; see Figure 1.12) but were below the Cefas AL2. All 22 stations sampled in the Mona Array Area and ZoI exceeded the Canadian TEL for arsenic but were below the Canadian PEL (see Figure 1.12).

1.7.3.24 The concentration of cadmium marginally exceeded the Cefas AL1 (0.4 mg/kg) at a single station in the Mona Array Area (22ENV36; 0.65 mg/kg; see Figure 1.12) but was below the Canadian TEL and Cefas AL2.

Comparison of Mona Array Area and ZoI 2021 and 2022 data

1.7.3.25 Two sample stations sampled in 2021 (ENV50 and ENV59) were resampled in 2022 (ENV50 and ENV59; see Figure 1.12 and Table 1.6). The results of the sediment chemistry analysis show that only minor changes have taken place between the surveys. For ENV50 the concentration of metals has either marginally increased (e.g. arsenic) or remained constant (i.e. lead) and for ENV59 the changes resulted in increases (e.g. arsenic and lead) and decreases (e.g. nickel). For both stations the largest increase was in zinc where both sample stations increased by >10 mg/kg. Overall, however despite these changes, the concentrations of all metals remained below the relevant Cefas AL1 or the Canadian TEL with the exception of arsenic which exceeded Canadian TEL (see Figure 1.12).

Mona Offshore Cable Corridor

1.7.3.26 The sediment chemistry results for the Mona Offshore Cable Corridor showed that levels of cadmium, chromium, copper, nickel, lead, mercury and zinc were below the relevant Cefas AL1/AL2 and Canadian TEL and PEL in all samples.

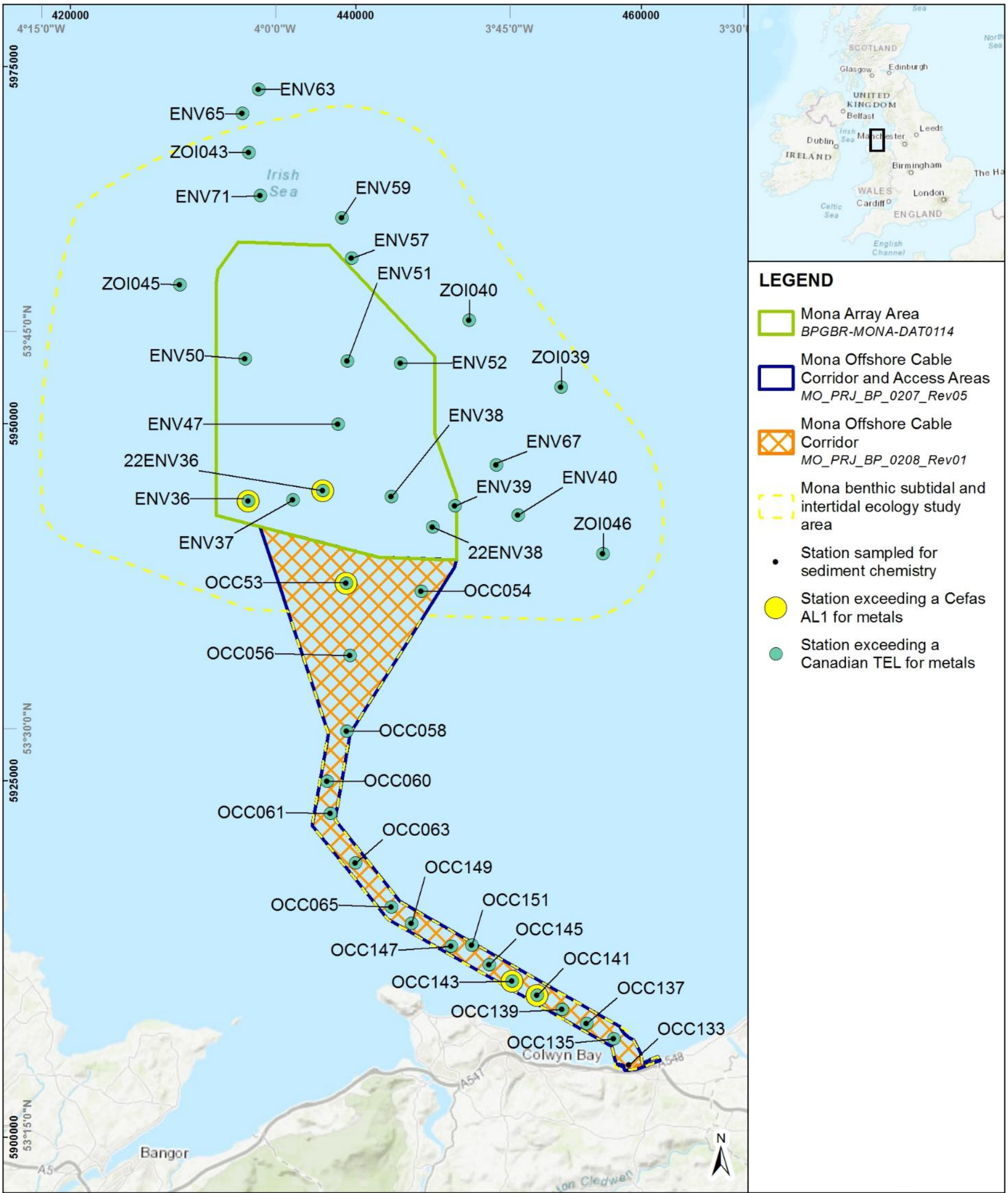
1.7.3.27 Concentrations of arsenic exceeded the Cefas AL1 (20 mg/kg) at three stations in the Mona Offshore Cable Corridor (ENV053, ENV141 and ENV143; see Figure 1.12), but were below the Cefas AL2. All but one of the 18 stations sampled in the Mona Offshore Cable Corridor exceeded the Canadian TEL for arsenic (see Figure 1.12) but were below the Canadian PEL.

Constable Bank

1.7.3.28 Two samples in the area of the Mona Offshore Cable Corridor overlapping with Constable Bank were analysed for sediment chemistry. The levels for both stations were below all the relevant thresholds (Cefas AL1 and AL2 and Canadian PEL and TEL) for all metals with the exception of arsenic which was over Canadian TEL for both stations (see Figure 1.12).

Menai Strait and Conwy Bay SAC

1.7.3.29 Two samples in the area of the Mona Offshore Cable Corridor overlapping with the Menai Strait and Conwy Bay SAC were analysed for sediment chemistry. The levels for both stations were below all the relevant thresholds (Cefas AL1 and AL2 and Canadian PEL and TEL) for all metals with the exception of arsenic which was over Canadian TEL for both stations (see Figure 1.12).



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Data Sources: Client

Project Name: MONA OFFSHORE WIND PROJECT

Drawing Number: RPSE-MN-ES-BEN-022-05

Drawing Title: LOCATION OF ALL SAMPLE STATIONS WIHTIN THE MONA BENTHIC SUBTIDAL AND INTERTIDAL ECOLOGY STUDY AREA WERE ANALYSED FOR SEDIMENT CHEMISTRY

Geodetic Information: Datum: ETRS 1989 Projection: ETRS 1989 UTM Zone 30N Scale@160mmx220mm: 1:450,000

VER	DATE	DETAILS	BY	CHECK
00	17/08/23	First Issue	NA	TH
05	09/11/23	Revision	NA	TH

Figure 1.12: Stations sampled for sediment chemistry within the Mona benthic subtidal and intertidal ecology study area and stations at which a contaminant exceeded the Cefas AL1 and/or Canadian TEL.

Table 1.6: Concentrations of metals recorded in sediments within the Mona benthic subtidal and intertidal ecology study area[1].

Description (metals)	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc
Units	µg/g	µg/g	µg/g	µg/g	µg/g	µg/g	µg/g	µg/g
Detection Limit	1	0.1	0.5	2	2	0.01	0.5	3
Threshold: Cefas AL1 (mg/kg)	20	0.4	40	40	50	0.3	20	130
Threshold: Cefas AL2 (mg/kg)	100	5	400	400	500	3	200	800
Threshold: Canadian TEL (mg/kg)	7.24	0.7	52.3	18.7	30.2	0.13	-N/A	124
Threshold: Canadian PEL (mg/kg)	41.6	4.2	160	108	112	0.7	-	271
Mona Array Area								
2021 stations and resampled stations								
ENV36	22.8	0.11	15.2	8.2	10.0	0.05	15.4	31.7
ENV37	14.4	0.08	12.1	6.3	11.8	0.05	12.1	32.7
ENV38	15.2	0.06	10.3	5.9	14.2	0.05	9.2	29.6
ENV39	16.0	0.07	9.1	6.2	12.9	0.05	9.2	25.5
ENV47	14.8	0.04	14.1	7.0	10.6	0.05	13.5	30.3
ENV50	17.1 (2021) 19.6 (2022)	0.04 (2021) 0.13 (2022)	13.6 (2021) 15.4 (2022)	6.9 (2021) 8.5 (2022)	14.3 (2021) 14.3 (2022)	0.05 (2021) 0.06 (2022)	13.5 (2021) 14.9 (2022)	30.3 (2021) 44.0 (2022)
ENV51	12.5	0.07	14.0	6.7	12.2	0.05	12.9	32.9
ENV52	13.7	0.07	15.6	6.7	14.7	0.05	11.9	29.8
2022 stations								
22ENV36	19	0.65	18.8	10.9	0.06	15.8	18.7	62.8
22ENV38	18.6	0.18	7.4	8.4	0.04	8.2	11.1	31.9
Mona Array Area ZoI								
ENV40	13.6	0.06	11.1	6.2	13.2	0.09	9.2	28.1
ENV57	12.5	<0.04	7.1	5.1	8.0	0.06	12.7	35.4

[1] Where contaminant levels exceed the relevant thresholds, the cells are shaded with the relevant colours (i.e. samples that exceed Cefas AL1 are coloured yellow, samples that exceed Cefas AL2 are coloured red, samples that exceed Canadian TEL are coloured turquoise and samples that exceed Canadian PEL are coloured purple. Where a sample exceeds two thresholds the higher threshold has been used to determine the colour).

Description (metals)	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc
ENV59	18.8 (2021) 15.4 (2022)	0.06 (2021) 0.13 (2022)	13.1 (2021) 14.2 (2022)	7.9 (2021) 7.8 (2022)	15.6 (2021) 14.6 (2022)	0.04 (2021) 0.05 (2022)	7.0 (2021) 12.9 (2022)	18.5 (2021) 44.4 (2022)
ENV63	9.9	0.05	9.4	6.3	10.0	0.04	11.4	25.2
ENV65	20.2	0.08	11.4	5.6	10.6	0.07	8.3	27.2
ENV67	10.7	<0.04	6.7	5.9	0.03	6.6	8.1	27.7
ENV71	9.0	0.04	10.1	5.4	8.4	0.05	10.3	31.4
ZOI39	13.3	0.10	19.8	8.8	12.2	0.06	17.8	47.8
ZOI40	13	<0.04	13.4	7.6	14.7	0.07	10.4	45.4
ZOI43	11.6	<0.04	24.1	10.5	10.9	0.03	15.7	41.9
ZOI45	12.9	0.10	9.8	7.6	9.2	0.04	9.9	30.3
ZOI46	11.8	0.15	6.9	5.6	8.4	0.04	6.2	25.8
Mona Offshore Cable Corridor								
OCC53	20.7	0.15	14.6	7.2	14.7	0.04	12.9	43.6
OCC54	18	0.10	11.5	7.7	15.0	0.05	9.9	38.2
OCC56	11.8	0.17	8.6	7.2	11.2	0.04	8.5	39.5
OCC58	17.9	0.11	10.8	7.4	15.0	0.04	10.8	60.2
OCC60	14.7	0.10	10.6	7.1	11.4	0.05	9.5	41.7
OCC61	17.9	0.19	5.6	6.3	14.2	0.04	6.8	33.4
OCC63	10.8	0.05	5.4	5.8	5.4	0.04	5.0	33.5
OCC65	16.9	0.13	10.6	7.0	5.7	0.03	9.7	34.0
OCC133	4.6	0.09	8.4	6.8	6.8	0.01	7.5	31.2
OCC135	7.4	0.04	6.8	5.3	6.4	<0.01	6.3	30.4
OCC137	9.3	0.06	8.3	5.6	6.1	<0.01	6.6	30.4
OCC139	17.1	0.05	6.6	5.8	10.5	<0.01	6.6	41.1
OCC141	38.9	0.12	17.3	8.8	12.5	<0.01	18.4	58.7
OCC143	21.3	0.07	10.5	7.3	10.4	0.02	11.4	45.0
OCC145	10.3	<0.04	5.3	5.6	8.6	<0.01	5.3	28.5
OCC147	13.8	0.05	10.2	6.3	6.8	<0.01	10.3	29.6
OCC149	14.7	<0.04	6.6	6.5	21.7	0.01	6.4	23.3
OCC151	14	0.08	10.6	7.7	6.7	0.03	10.9	33.4

Organotins

Mona Array Area and ZoI

1.7.3.30 Concentrations of organotins across the Mona Array Area and ZoI were all below the LOD for both the 2021 and 2022 surveys.

Mona Offshore Cable Corridor

1.7.3.31 Concentrations organotins across the Mona Offshore Cable Corridor were all below the LOD.

Polychlorinated biphenyls (PCBs)

1.7.3.32 PCBs are toxic to fish and other aquatic organisms. Reproductive and developmental problems have been observed in fish at low PCB concentrations, with the early life stages being most susceptible. There is growing evidence linking PCBs and similar compounds with reproductive and immuno-toxic effects in wildlife, including effects on seals and other marine mammals. Due to their persistence and lipophilic nature, PCBs have the potential to bioaccumulate, particularly in lipid rich tissue such as fish liver. Bioaccumulation of PCBs is recorded in fish, birds and marine mammals with known sublethal toxicological effects. Accumulation of PCBs in sediments poses a potential hazard to sediment-dwelling organisms.

1.7.3.33 Table 1.7 presents the levels of PCBs that were recorded in the sediment samples collected from the 22 stations within the Mona Array Area, the five stations within the Mona Array Area ZoI and the 18 stations within the Mona Offshore Cable Corridor. The results show that levels of PCBs were typically recorded below the LOD across the Mona benthic subtidal and intertidal ecology study area with the exception of five stations (ENV40, ZOI39, ZOI40, OCC56 and OCC143). The levels of total PCBs and the total ICES-7 PCBs were however below the relevant Cefas AL1 and AL2 at these stations as well as the Canadian TEL and PEL for total PCBs. The full results for the individual PCBs are presented in Appendix F.

Table 1.7: Total concentrations of PCBs and ICES-7 PCBs in sediments within the Mona benthic subtidal and intertidal ecology study area[2].

Station	Total PCBs	Total ICES-7 PCBs
Threshold: Cefas AL1 (mg/kg)	0.02	0.01
Threshold: Cefas AL2 (mg/kg)	0.2	N/A
Threshold: Canadian TEL (mg/kg)	21.5	N/A
Canadian PEL (mg/kg)	189	N/A
Units	mg/kg	mg/kg
Mona Array Area		
2021 stations and resampled stations		

[2] Where contaminant levels exceed the relevant thresholds, the cells are shaded with the relevant colours (i.e. samples that exceed Cefas AL1 are coloured yellow, samples that exceed Cefas AL2 are coloured red, samples that exceed Canadian TEL are coloured turquoise and samples that exceed Canadian PEL are coloured purple. Where a sample exceeds two thresholds the higher threshold has been used to determine the colour).

Station	Total PCBs	Total ICES-7 PCBs
ENV36	Not Quantifiable (NQ)	NQ
ENV37	NQ	NQ
ENV38	NQ	NQ
ENV39	NQ	NQ
ENV47	NQ	NQ
ENV50	NQ (2021) NQ (2022)	NQ (2021) NQ (2022)
ENV51	NQ	NQ
ENV52	NQ	NQ
New 2022 stations		
22ENV036	NQ	NQ
22ENV038	NQ	NQ
Mona Array Area ZoI		
ENV40	0.00196	0.00068
ENV57	NQ	NQ
ENV59	NQ (2021) NQ (2022)	NQ (2021) NQ (2022)
ENV63	NQ	NQ
ENV65	NQ	NQ
ENV67	NQ	NQ
ENV71	NQ	NQ
ZOI39	0.00039	NQ
ZOI40	0.0041	0.00115
ZOI43	NQ	NQ
ZOI45	NQ	NQ
ZOI46	NQ	NQ
Mona Offshore Cable Corridor		
OCC53	NQ	NQ

Station	Total PCBs	Total ICES-7 PCBs
OCC54	NQ	NQ
OCC56	0.00062	0.00062
OCC58	NQ	NQ
OCC60	NQ	NQ
OCC61	NQ	NQ
OCC62	NQ	NQ
OCC65	NQ	NQ
OCC133	NQ	NQ
OCC135	NQ	NQ
OCC137	NQ	NQ
OCC139	NQ	NQ
OCC141	NQ	NQ
OCC143	0.00435	0.00132
OCC145	NQ	NQ
OCC147	NQ	NQ
OCC149	NQ	NQ
OCC151	NQ	NQ

Mona Array Area and ZoI

1.7.3.34 Levels of PCBs were typically recorded below the LOD across the Mona Array Area and ZoI with the exception of three stations (ENV40, ZOI39 and ZOI40). The levels of the ICES-7 PCBs were however below the Cefas AL1 (0.01 mg/kg) at these stations and levels of total PCBs were also below the Cefas AL1 (0.02 mg/kg) and AL2 (0.2 mg/kg) as shown in Table 1.7.

Comparison of Mona Array Area and ZoI 2021 and 2022 data

1.7.3.35 Two sample stations sampled in 2021 (ENV50 and ENV59) were resampled in 2022 (ENV50 and ENV59). Both samples continued to have concentration below the LOD in 2022 as they did in 2021, therefore they were all below the Cefas ALs and Canadian TEL and PEL for PCBs.

Mona Offshore Cable Corridor

1.7.3.36 Levels of PCBs were typically recorded below the LOD across the Mona Offshore Cable Corridor with the exception of two stations (OCC56 and OCC143). The levels of the ICES-7 PCBs were however below the Cefas AL1 (0.01 mg/kg) at these stations and levels of total PCBs were also below the Cefas AL1 (0.02 mg/kg) and AL2 (0.2 mg/kg) as shown in Table 1.7.

Constable Bank

1.7.3.37 The concentrations of PCBs in the two samples in the area of the Mona Offshore Cable Corridor which overlaps with Constable Bank (OCC065, OCC149 and OCC150) were below all the relevant thresholds for PCBs.

Menai Strait and Conwy Bay SAC

1.7.3.38 The concentrations of PCBs in the two samples in the area of the Mona Offshore Cable Corridor which overlaps with the Menai Strait and Conwy Bay SAC (OCC146, OCC147, OCC151, OCC152 and OCC153) were below all the relevant thresholds for PCBs.

Polycyclic aromatic hydrocarbons (PAHs)

1.7.3.39 PAHs enter the environment through a number of sources, these include road run-off, sewage, atmospheric circulation and from historical industrial discharge. Once in the environment, PAHs exert a strong affinity for organic carbon and as such organic sediment in rivers can act as a substantial sink. Due to the high affinity for organic carbon, once ingested by fauna the PAHs cause oxidative stress and lead to adverse effects in the organism. Most species have a limited ability to metabolise PAHs and as a result can bioaccumulate to toxic levels.

1.7.3.40 Table 1.8 presents the concentrations of PAHs that were recorded in the sediment samples collected from the 22 stations within the Mona Array Area, the five stations within the Mona Array Area ZoI and the 18 stations within the Mona Offshore Cable Corridor. Table 1.8 presents those for which a threshold is available with the full results for the individual PAHs, including those without Canadian thresholds, are presented in Appendix F.

Table 1.8: Concentrations of PAHs (µg/kg) in sediments within the Mona benthic subtidal and intertidal ecology study area[3].

Station	Acenaphthene (µg/kg)	Acenaphthylene (µg/kg)	Anthracene (µg/kg)	Benzo[a]anthracene (µg/kg)	Benzo[a]pyrene (µg/kg)	Chrysene (µg/kg)	Dibenzo[ah]anthracene (µg/kg)	Fluoranthene (µg/kg)	Fluorene (µg/kg)	Naphthalene (µg/kg)	Phenanthrene (µg/kg)	Pyrene (µg/kg)
Threshold: Canadian TEL (µg/kg)	6.71	5.87	46.9	74.8	88.8	108	6.22	113	21.2	34.6	86.7	153
Threshold: Canadian PEL (µg/kg)	88.9	128	245	693	763	846	135	1494	144	391	544	1398
Threshold: ERL (µg/kg)	16	44	85.3	261	430	384	63.4	600	19	160	240	665
Threshold: ERM (µg/kg)	500	640	110	1600	1600	2800	260	5100	540	2100	1500	2600
Mona Array Area												
2021 stations and resampled stations												
ENV36	<1	<1	<1	3	4	5	1	5	1	3	6	5
ENV37	<1	<1	<1	3	4	4	1	5	1	3	5	4
ENV38	<1	<1	<1	4	5	5	2	7	1	3	6	6
ENV39	<1	<1	<1	4	6	6	2	7	1	3	6	6

[3] Where contaminant levels exceed the relevant thresholds, the cells are shaded with the relevant colours (i.e. samples that exceed Canadian TEL are coloured turquoise, samples that exceed Canadian PEL are coloured purple, samples that exceed ERL are coloured orange and samples that exceed ERM are coloured pink. Where a sample exceeds two thresholds the higher threshold has been used to determine the colour).

Station	Acenaphthene (µg/kg)	Acenaphthylene (µg/kg)	Anthracene (µg/kg)	Benzo[a]anthracene (µg/kg)	Benzo[a]pyrene (µg/kg)	Chrysene (µg/kg)	Dibenzo[ah]anthracene (µg/kg)	Fluoranthene (µg/kg)	Fluorene (µg/kg)	Naphthalene (µg/kg)	Phenanthrene (µg/kg)	Pyrene (µg/kg)
ENV47	<1	<1	<1	2	2	3	<1	3	<1	2	3	3
ENV50	<1 (2021) <1 (2022)	<1 (2021) <1 (2022)	<1 (2021) <1 (2022)	3 (2021) 3 (2022)	4 (2021) 5.05 (2022)	6 (2021) 4.47 (2022)	2 (2021) 1.8 (2022)	6 (2021) 4.73 (2022)	2 (2021) 1.44 (2022)	3 (2021) 3.42 (2022)	7 (2021) 6.66 (2022)	5 (2021) 4.05 (2022)
ENV51	<1	<1	<1	4	5	5	2	7	1	3	6	6
ENV52	<1	<1	<1	4	5	5	2	6	1	3	5	6
New 2022 stations												
22ENV036	<1	<1	1.04	3.51	4.41	5.7	1.71	5.55	1.51	4.5	7.18	4.9
22ENV038	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Mona Array Area ZoI												
ENV40	<1	<1	1	6	8	8	3	10	2	5	9	10
ENV57	<1	<1	<1	2	1	3	<1	3	<1	1	8	3
ENV59	<1 (2021) <1 (2022)	<1 (2021) <1 (2022)	<1 (2021) <1 (2022)	2 (2021) 3.2 (2022)	2 (2021) 4.36 (2022)	3 (2021) 4.62 (2022)	<1 (2021) 1.5 (2022)	3 (2021) 5.2 (2022)	<1 (2021) 1.18 (2022)	1 (2021) 2.93 (2022)	3 (2021) 6.07 (2022)	3 (2021) 4.69 (2022)
ENV63	<1	<1	<1	2	3	3	<1	3	<1	3	4	3

Station	Acenaphthene (µg/kg)	Acenaphthylene (µg/kg)	Anthracene (µg/kg)	Benzo[a]anthracene (µg/kg)	Benzo[a]pyrene (µg/kg)	Chrysene (µg/kg)	Dibenzo[ah]anthracene (µg/kg)	Fluoranthene (µg/kg)	Fluorene (µg/kg)	Naphthalene (µg/kg)	Phenanthrene (µg/kg)	Pyrene (µg/kg)
ENV65	<1	<1	<1	2	3	3	<1	4	<1	2	4	3
ENV67	<1	<1	<1	<1	<1	<1	<1	1.05	<1	<1	1.09	1.02
ENV71	<1	<1	<1	2	2	3	<1	3	<1	2	3	3
ZOI39	<1	<1	1.04	3.65	5.33	4.73	1.58	6.05	1.23	3.19	6.24	5.62
ZOI40	<1	<1	1.43	5.41	7.85	6.96	2.48	8.57	1.91	4.45	9.17	7.93
ZOI43	<1	<1	<1	3.01	3.95	4.38	1.38	5.1	1.26	3.86	6.15	4.39
ZOI45	<1	<1	<1	1.47	1.7	2.46	<1	2.35	<1	1.9	3.81	2.03
ZOI46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.09	<1
Mona Offshore Cable Corridor												
OCC53	<1	<1	<1	3.48	4.12	4.67	1.18	5.45	1.36	3.6	8.39	4.89
OCC54	<1	<1	1.05	3.64	4.87	5.03	1.6	6.07	1.5	3.67	6.68	5.39
OCC56	<1	<1	<1	2.04	2.57	3.01	<1	3.39	<1	2.43	4.38	2.9

Station	Acenaphthene (µg/kg)	Acenaphthylene (µg/kg)	Anthracene (µg/kg)	Benzo[a]anthracene (µg/kg)	Benzo[a]pyrene (µg/kg)	Chrysene (µg/kg)	Dibenzo[ah]anthracene (µg/kg)	Fluoranthene (µg/kg)	Fluorene (µg/kg)	Naphthalene (µg/kg)	Phenanthrene (µg/kg)	Pyrene (µg/kg)
OCC58	<1	<1	<1	2.61	3.22	3.47	<1	4.18	1.04	2.54	4.95	3.77
OCC60	<1	<1	<1	2.06	2.68	2.96	<1	3.28	<1	2.25	3.87	2.92
OCC61	<1	<1	<1	1.16	1.27	1.77	<1	1.92	<1	1.43	2.65	1.78
OCC62	<1	<1	<1	<1	1.03	<1	<1	1.6	<1	<1	2	1.41
OCC65	<1	<1	<1	1.32	1.37	3.21	<1	2.23	1.34	2.06	8.13	2.7
OCC133	<1	<1	1.05	3.3	3.6	4.37	<1	7.68	<1	<1	6.47	7
OCC135	<1	<1	<1	<1	1.31	1.57	<1	1.84	<1	<1	1.68	1.74
OCC137	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
OCC139	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
OCC141	<1	<1	<1	<1	<1	1.12	<1	1.44	<1	<1	1.33	1.59
OCC143	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
OCC145	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

Station	Acenaphthene (µg/kg)	Acenaphthylene (µg/kg)	Anthracene (µg/kg)	Benzo[a]anthracene (µg/kg)	Benzo[a]pyrene (µg/kg)	Chrysene (µg/kg)	Dibenzo[ah]anthracene (µg/kg)	Fluoranthene (µg/kg)	Fluorene (µg/kg)	Naphthalene (µg/kg)	Phenanthrene (µg/kg)	Pyrene (µg/kg)
OCC147	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
OCC149	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
OCC151	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

Mona Array Area and ZoI

1.7.3.41 Total PAH concentrations ranged from 8.36 µg/kg to 163 µg/kg across the Mona Array Area and ZoI (see Appendix F). Concentrations of all PAHs in samples in the Mona Array Area and ZoI were below the relevant Canadian TEL (where one is specified; see Table 1.8). Total PAH concentrations were well below their respective ERL values, indicating toxic effects to fauna from PAHs is unlikely.

Comparison of Mona Array Area and ZoI 2021 and 2022 data

1.7.3.42 Total PAH concentrations ranged from 1.07 µg/kg to 112.69 µg/kg across the Mona Offshore Cable Corridor (see Appendix F). Two sample sites which were analysed for sediment chemistry in the 2021 survey were resampled in the 2022 survey (ENV50 and ENV59). Across both resampled stations, levels of PAHs were consistently very low (but mostly above the limit of detection). The concentration of most PAHs increased slightly between years except for dibenzo[ah]anthracene which decreased slightly at both stations and fluoranthene and fluorene which increased at ENV50). Concentrations of PAHs in all samples were found to be under AL1, AL2 and ERM and ERL (Table 1.8).

Mona Offshore Cable Corridor

1.7.3.43 Total PAH concentrations ranged from <1 µg/kg to 7.68 µg/kg across the Mona Offshore Cable Corridor. Concentrations of all PAHs in samples in the Mona Offshore Cable Corridor were below the relevant Canadian TEL (where one is specified; see Table 1.8) as well as ERM and ERLs. Total PAH concentrations were well below their respective ERL values, indicating toxic effects to fauna from PAHs is unlikely.

Constable Bank

1.7.3.44 The concentrations of PAHs in the two samples in the area of the Mona Offshore Cable Corridor which overlaps with Constable Bank were under all the relevant thresholds for PAHs.

Menai Strait and Conwy Bay SAC

1.7.3.45 The concentrations of PAHs in the two samples in the area of the Mona Offshore Cable Corridor which overlaps with the Menai Strait and Conwy Bay SAC were under all the relevant thresholds for PAHs.

1.7.4 Results – infaunal analysis

Summary statistics

Mona Array Area and ZoI

1.7.4.1 A total of 395 enumerated taxa were recorded within the 2021 site-specific survey of the Mona Array Area. Of these, 155 taxa were colonial or taxa whose abundance could not be enumerated, and therefore were recorded as present. These taxa were removed from the infaunal numerical and statistical analysis but were included in the epifaunal numerical analysis (section 1.7.5). A total of 13,256 individuals representing 395 enumerated taxa were recorded within the Mona Array Area. Of these, juveniles accounted for 200 individuals from 12 taxa representing 1.51% of the total number of individuals and 3.04% of the total number of taxa recorded. One of the recorded taxa were bony fish species (true gobies *Gobiidae*) and represented three individuals. As fish are highly mobile species, they were removed from the statistical analysis but are discussed in Volume 6, Annex 6.1: Fish and shellfish ecology technical report of the Environmental Statement.

1.7.4.2 Of the 395 total taxa enumerated from the Mona Array Area, none were observed at all stations. A total of 63 taxa (15.94%) were recorded as single individuals; these rarely recorded taxa were distributed across the Mona benthic subtidal and intertidal ecology study area. A total of 162 taxa (41.01%) were represented by <10 individuals. It is generally accepted that ecological communities which are frequently subjected to local disturbance or contamination events will be dominated by a limited number of tolerant taxa, which will be represented in high individual abundances (Clarke and Warwick, 2001). The relatively high numbers of single and low abundance species recorded in this survey could suggest a reasonably diverse community that has been subjected to relatively limited disturbance or contamination.

1.7.4.3 A total of 273 taxa were enumerated within the Mona Array Area ZoI. Additionally, 94 taxa were recorded which were colonial or taxa whose abundance could not be enumerated, and therefore were recorded as present. These taxa were removed from the infaunal numerical and statistical analysis but were included in the epifaunal numerical analysis (section 1.7.5). A total of 2,463 individuals representing 273 enumerated taxa were recorded within the Mona Array Area ZoI site-specific survey. Of these, juveniles accounted for 33 individuals from nine taxa representing 1.34% of the total number of enumerated individuals in the Mona Array Area ZoI and 3.30% of the total number of enumerated taxa recorded.

1.7.4.4 Of the 273 total taxa enumerated from the samples within the Mona Array Area ZoI, none were observed at all stations. A total of 92 taxa (33.70%) were recorded as single individuals; these rarely recorded taxa were distributed across the Mona Array Area ZoI. A total of 66 taxa (24.18%) were represented by <10 individuals. The effect of regular disturbance on these communities and the impact on the abundance of individuals and taxa is discussed in paragraph 1.7.4.2.

1.7.4.5 Juveniles were recorded from stations across the Mona Array Area from taxa including Mollusca, Echinodermata, Crustacea and Annelida. The five most abundant juvenile taxa were within the Mollusca (*Lutraria oblonga* juveniles and *Mytilidae* juveniles) and Echinodermata (Echinidea juveniles, *Ophiuroidea* juveniles and *Dendrochirotida* juveniles). Juveniles of these five taxa made up 85% of the total number of juvenile individuals in the Mona Array Area. In the Mona Array Area ZoI Mytilidae juveniles and *Dendrochirotida* juveniles were the most abundant however they were still represented by less than 10 individuals.

1.7.4.6 Sample station ENV84 (in the southeast of the Mona Array Area; Figure 1.6) was the only sample station that recorded all five of the highest abundance juvenile taxa. Sample station ENV54 recorded the highest numbers of juvenile individuals (16; mainly Ophiuroidea and Echinidea) as well as the highest number of juvenile taxa (7). In addition to juvenile taxa, Decapoda megalopa and zoea were recorded. Decapoda megalopa was recorded at the majority of sample stations and zoea were recorded at sample station ENV64, however all juveniles were excluded from further analysis as they represented a very small proportion of the overall enumerated taxa.

1.7.4.7 As discussed in paragraph 1.7.4.1, 155 taxa were recorded only as present within the Mona Array Area; these taxa were dominated by Annelida, Crustacea and Bryozoa. Of these taxa, Nematoda were present across the greatest number of sample stations. ENV38 (in the central south of the Mona Array Area) recorded the highest number of colonial/encrusting taxa. In the Mona Array Area ZoI there were 94 taxa recorded as present only with Nematoda and Cnidaria being the most abundant. Stations ZOI40 and ZOI50 recorded the highest number of colonial/encrusting taxa.

1.7.4.8 The datasets for the Mona Array Area and ZoI was initially divided into the five major taxonomic groups: Annelida (Polychaeta), Crustacea, Mollusca, Echinodermata and 'Other'. The 'Other' group comprised of:

- Seven taxa of Cnidaria (Cnidaria, Actiniaria, *Edwardsiidae, Edwardsiaclaparedii, Adamsia palliata, Pennatula phosphorea* and *Cerianthus lloydii*)
- Three taxa of Chordata (*Ascidiacea, Dendrodoa grossularia* and *Polycarpa fibrosa*)
- Three taxa of Sipuncula (Sipuncula, *Golfingiidae, Golfingia (Golfingia) elongata* and *Phascolion (Phascolion) strombus strombus*)
- One taxa of Foraminifera (*Astrorhiza*)
- One taxa of Hemichordata (*Enteropneusta*)
- One taxa of Phronida (*Phoronis*)
- One taxa of Platyhelminthes (*Platyhelminthes*)
- One taxa of Nemertea (*Nemertea*).

1.7.4.9 The absolute and proportional contributions of these five taxonomic groups to the overall community structure is summarised in Table 1.9 whilst biomass values by gross taxonomic groups are presented in Appendix E. The full data is available on request.

Table 1.9: Contribution of gross taxonomic groups recorded in the infaunal grab samples for the Mona Array Area and ZoI.

Group	Individual Abundance	Proportional Contribution	Taxa Abundance	Proportional Contribution
Annelida	9,732	61.88	222	47.33
Crustacea	2,645	16.82	109	23.24
Mollusca	1,288	8.19	85	18.12
Echinodermata	470	2.99	31	6.61
Other	1,593	10.13	22	4.69
Total	**15,728**	**100.00**	**469**	**100.00**

1.7.4.10 In the Mona Array Area and ZoI surveys the faunal communities were generally dominated by Annelida (n=9,732) and Crustacea (n=2,645) which contributed 61.88% and 16.82% of the total number of individuals respectively. Number of taxa were also dominated by Annelida which contributed 47.33% of the total number of taxa. At individual sample stations, gross taxonomic group proportions reflected these results, with Annelida making up the highest proportion of the taxa at all sample stations. Annelida made up the highest proportion of individuals at all but two sample stations (ZOI50 and ENV67) with proportion ranging from 36.96 to 86.76% of the total individuals. At sample stations ZOI50 and ENV67 Crustacea made up the highest proportion of individuals, accounting for 34.94% and 48.67% of the total individuals respectively.

1.7.4.11 In the Mona Array Area and ZoI the biomass data reflected the dominance of Annelida with respect to the number of individuals and number of taxa, with Annelida providing the highest proportion of the biomass at 34.92% of sample stations. Mollusca contributed the second highest proportion of biomass at the greatest number of sample stations (31.75%). Echinodermata contributed the highest proportion of the biomass at the sample station with the highest total biomass (ENV59). This is due to Echinodermata being able to grow to a larger body size than most Annelida therefore are likely to have a higher weight per individual. At the highest biomass station purple heart urchins (e.g. *S. purpureus*) made up the highest proportion of the biomass. The next three highest biomass sample stations (ENV14, ENV03 and ENV82) were all dominated by Mollusca which are also able to grow to large body sizes, these stations were dominated by a variety of bivalves (e.g. *Laevicardium crissum*, *Ensis magnus* and *Dosinia lupinus*).

1.7.4.12 In the Mona Array Area and ZoI surveys the most abundant individuals generally belonged to Annelida with the polychaete *Scalibregma inflatum* being overall the most abundant species with a total of 1,023 individuals recorded. These individuals were spread throughout the Morgan and Mona benthic subtidal and intertidal ecology study area with no one sample station skewing the abundance. The highest abundance of *S. inflatum* occurred at sample station ZOI39 in the southeast of the Mona Array Area ZoI.

1.7.4.13 In the Mona Array Area and ZoI surveys the species with the second highest abundance was the polychaete *Ampharete lindstroemi* with 711 individuals. These individuals were distributed throughout the Mona Array Area and ZoI with no one sample station skewing the abundance. The highest abundance of *A. lindstroemi* occurred at sample station ENV34 in the southeast of the Mona Array Area. Sample station ENV34 recorded the highest total number of individuals (479) across only 85 taxa. Sample station ENV56 recorded the highest number of taxa (123) with the next highest being sample stations ENV86 (113 taxa) and ENV54 (107 taxa), all of which were in the Mona Array Area.

Mona Offshore Cable Corridor

1.7.4.14 A total of 318 taxa were enumerated within the 2022 site-specific survey in the Mona Offshore Cable Corridor. Additionally, 130 taxa were recorded that were colonial or taxa whose abundance could not be enumerated, and therefore were recorded as present. These taxa were removed from the infaunal numerical and statistical analysis but were included in the epifaunal numerical analysis (section 1.7.5). A total of 6,973 individuals representing 318 enumerated taxa were recorded within the Mona Offshore Cable Corridor. Of these, juveniles accounted for 161 individuals from 10 taxa representing 2.31% of the total number of enumerated individuals and 3.14% of the total number of enumerated taxa recorded.

1.7.4.15 Of the 318 total taxa enumerated from the samples within the Mona Offshore Cable Corridor, none were observed at all stations. A total of 81 taxa (25.47%) were recorded as single individuals; these rarely recorded taxa were distributed across the Mona Offshore Cable Corridor. A total of 35 taxa (11.02%) were represented by <10 individuals. The effect of regular disturbance on these communities and the impact on the abundance of individuals and taxa is discussed in paragraph 1.7.4.2.

1.7.4.16 Juveniles were recorded from stations across the Mona Offshore Cable Corridor from taxa including Mollusca, Echinodermata, Crustacea and Annelida. The four most abundant juvenile taxa were within the Mollusca (*Mytilidae and Mytilus edulis* juveniles), Echinodermata (*Dendrochirotida* and *Ophiuroidea* juveniles) and Crustacea (*Liocarcinus* juveniles). Juveniles of these five taxa made up 88% of the total number of juvenile individuals.

1.7.4.17 No station in the Mona Offshore Cable Corridor recorded all four of the highest abundance juvenile taxa. Sample station OCC153 recorded the highest numbers of juvenile individuals (46; mainly *Mytilidae*). No station in the Mona Offshore Cable Corridor recorded more than three juvenile taxa.

1.7.4.18 As discussed in paragraph 1.7.4.14, in the 2022 survey campaign 130 taxa were recorded only as present; these taxa were dominated by Annelida, Arthropoda, Cnidaria and Bryozoa. Of these taxa, Nematoda were present across the greatest number of sample stations. Station OCC52 (in the north of the Mona Offshore Cable Corridor) recorded the highest number of colonial/encrusting taxa.

1.7.4.19 The Mona Offshore Cable Corridor dataset was initially divided into the five major taxonomic groups: Annelida (Polychaeta), Arthropoda, Mollusca, Echinodermata and 'Other'. The 'Other' group comprised of:

- Seven taxa of Cnidaria (Actiniaria, *Edwardsiidae, Edwardsia claparedii, Adamsia palliata, Epizoanthus couchii* and *Cerianthus lloydii*)
- Three taxa of Chordata (*Polycarpa fibrosa, Pyura tessellate, Dendrodoa grossularia* and *Polycarpa fibrosa*)
- One taxa of Hemichordata (*Enteropneusta*)
- One taxa of Phoronida (*Phoronis*)
- One taxa of Platyhelminthes (*Platyhelminthes*)
- One taxa of Nemertea (*Nemertea*).

1.7.4.20 The absolute and proportional contributions of these five taxonomic groups to the overall community structure of samples in the Mona Offshore Cable Corridor is summarised in Table 1.10 whilst biomass values by gross taxonomic groups are presented in Appendix D.

Table 1.10: Contribution of gross taxonomic groups recorded in the infaunal grab samples for the 2022 surveys in the Mona Offshore Cable Corridor.

Group	Individual Abundance	Proportional Contribution	Taxa Abundance	Proportional Contribution
Annelida	3,539	50.75	161	50.47
Arthropoda	1,526	21.88	79	24.76
Mollusca	1,248	17.90	51	15.99
Echinodermata	193	2.77	17	5.33
Other	467	6.70	11	3.45
Total	**6,973**	**100.00**	**319**	**100.00**

1.7.4.21 In the Mona Offshore Cable Corridor, the faunal communities were generally dominated by Annelida (n=3,539) and Arthropoda (n=1,526) which contributed 50.75% and 21.88% of the total number of individuals respectively. Sample station OCC60 recorded the highest total number of individuals (377) across only 78 taxa. Sample station OCC59 recorded the highest number of taxa (94) with the next highest being sample stations OCC52 (93). Number of taxa were also dominated by Annelida which contributed 50.47% of the total number of taxa. At individual sample stations, gross taxonomic group proportions reflected these results, with Annelida making up the highest proportion of the taxa at all sample stations. Annelida made up the highest proportion of individuals at 22 of the 35 sample stations, in the Mona Offshore Cable Corridor, with proportion ranging from 43 to 89% of the total individuals. At five sample stations the most abundant group was Mollusca and at eight sample stations the most abundance group was Arthropoda.

1.7.4.22 In the Mona Offshore Cable Corridor, the biomass data also reflected the dominance of Annelida with respect to the number of individuals and number of taxa. Annelida providing the highest proportion of the biomass at 42.86% of sample stations alongside Mollusca which also has the highest proportion of the biomass at 42.86% of sample stations. Echinodermata contributed the third highest proportion of biomass at the greatest number of sample stations (n=5, 14.29%). This is due to echinoderms being able to grow to a larger body size than most Annelida therefore are likely to have a higher weight per individual despite representing fewer individuals overall. At the highest biomass station (OCC136) common heart urchins (e.g. *Echinocardium cordatum*) made up the highest proportion of the biomass. The next three highest biomass sample stations (OCC137, OCC138 and OCC139) were all dominated by molluscs or echinoderms these stations were dominated by a variety of bivalves (e.g. *Echinocardium cordatum*, *Mactra stultorum* and *Ensis*).

1.7.4.23 In the Mona Offshore Cable Corridor, the most abundant individuals generally belonged to Mollusca with the bivalve *Ensis* being overall the most abundant species with a total of 380 individuals recorded. These individuals were distributed throughout the Mona Offshore Cable Corridor with no single sample station skewing the abundance.

1.7.4.24 In the Mona Offshore Cable Corridor, the taxa with the second highest abundance was *Nemertea* with 357 individuals. These individuals were distributed throughout the Mona Offshore Cable Corridor with no single sample station skewing the abundance. The highest abundance of *Nemertea* occurred at sample station ENV53 in the north of the Mona Offshore Cable Corridor.

Multivariate community analysis

1.7.4.25 The results of the CLUSTER analyses, SIMPROF tests and SIMPER analyses were used, together with the raw untransformed infaunal data, to assign preliminary infaunal biotopes to each sample station. In several instances, clusters that were identified as significantly different from each other in the SIMPROF tests were assigned the same biotope code. This was based on a review of the SIMPER results which indicated that the differences between the groups could be explained by differences in abundances of characterising species rather than the presence/absence of key species.

Mona Array Area and ZoI

1.7.4.26 The results of the hierarchical CLUSTER analysis of the fourth root transformed infaunal dataset (excluding juveniles), from the Mona Array Area and ZoI data from the 2021 and 2022 site surveys, together with the SIMPROF test identified 36 faunal groups that were statistically dissimilar (Figure 1.13), based on the SIMPROF test. Of these faunal groups, eight were represented by a single sample station. The 2D MDS plot is presented in Figure 1.14 and the low stress value (0.18) indicates that this is a good representation of the data. The 3D MDS plot has not been presented as the 2D MDS plot presents a clearer representation of the data. Faunal group AD exhibited the greatest distance between itself and all the other Faunal groups with too few samples to generate a Bray-Curtis similarity value. Faunal group B (SIMPROF B) showed the lowest Bray-Curtis similarity of 23.52%, while Faunal group H (SIMPROF H) showed the highest Bray-Curtis similarity (58.04%) of all Faunal groups. Faunal groups I and H showed the lowest Bray-Curtis dissimilarity (50.16%). Faunal groups H and P (SIMPROF m and o) also showed a higher similarity with each other than with the other Faunal groups with Bray-Curtis dissimilarity of 50.64%.

1.7.4.27 The sediments and infaunal communities within the Mona Array Area and ZoI within the Mona benthic subtidal and intertidal ecology study area were largely homogenous. The samples from the north, central and the boundary in the south of the Mona Array Area, and the northwest and east of the ZoI, were associated with the Faunal groups D, H, J, K, L, M, N, O, P, Q, R, V, and W as well as a sample station in Faunal groups B. All of these Faunal groups and sample stations were characterised predominantly as mixed sediment (Table 1.11). These faunal groups were characterised of a variety of taxa, but all were dominated by polychaetes such as *Glycera lapidum*, *Aonides paucibranchiata* and *Laonice bahusiensis*. All samples within these groups were allocated the SS.SMx.OMx.PoVen biotope which covers the majority of the Mona Array Area and north of the ZoI (Figure 1.17).

1.7.4.28 Sediments in the south of the Mona Array Area and east of the ZoI clustered in Faunal groups A, F, G, AC, AD, AF and AH, as well as some sample stations in Faunal groups S and AB, and were characterised by coarse sediments and taxa such as polychaetes and bivalves. Samples in this area were allocated the SS.SCS.CCS biotope, which was mapped as a band extending from east to west across the Mona Array Area, broadening in the east in to the ZoI (Figure 1.17).

1.7.4.29 In the southeast of the Mona Array Area, a few Faunal groups were associated with specific, localised, geophysical features with distinct sediment types and faunal communities. The sample stations in Faunal group I were associated with sediment waveforms and mega ripples, and predominantly mixed sediments in the southeast of the Mona Array Area ZoI. The faunal communities at two of the sample stations in Faunal group I (ENV40 and ENV45) were characterised by the bivalve *K. bidentata* as well as polychaetes such as *S. inflatum*, *L. koreni* and *Polycirrus*. This combination of factors led to the allocation of the *K. bidentata* and *Thyasira* spp. in circalittoral muddy mixed sediment (SS.SMx.CMx.KurThyMx) biotope to a small section in the southeast of the Mona Array Area. Whilst some other key species which characterise this biotope were missing (e.g. *Thyasira* sp.), this biotope was considered to be the best fit and possibly representing a transition community.

1.7.4.30 Samples clustered within Faunal groups E and U as well as a few sample stations in Faunal group S, Y and AD were associated with sediments in the southeast boundary of the Mona Array Area as well as the far northeast of the ZoI. These stations were characterised by mixed sediments and diverse communities with no distinguishable characteristic species associated with any other biotopes identified. The infaunal community was dominated by polychaetes, bivalves and echinoderm such as *L. koreni* and *E. pusillus*. As a result Faunal group E and U as well as a few sample stations in Faunal group S, Y and AD were allocated the SS.SMx.CMx biotope. This aligns with the surveys conducted for the Rhiannon Wind Farm which identified SS.SMx.CMx in the same area (Figure 1.3).

1.7.4.31 Samples collected in the wider regional benthic subtidal and intertidal ecology study area to the north of the Mona Array Area (i.e. within the Morgan Array Area) clustered together in Faunal groups J, O, Q and R. The mixed sediments associated with these groups were characterised by a variety of polychaetes as well as a small number of bivalves. Samples within Faunal groups J, O, Q and R were assigned the polychaete-rich deep *Venus* community in offshore mixed sediments (SS.SMx.OMx.PoVen) biotope (Figure 1.17). There was also a station characterised by SS.SMx.OMx (Faunal group AB), however this station was located in the Morgan Array Area.

1.7.4.32 Three biotopes were present only in the Mona Array Area ZoI. In the southeast of the Mona Array Area ZoI the Faunal Group AE and AG contained samples with similar communities however with different sediment compositions. As the biological communities were not characterised by any distinct species and were instead composed of a general community of polychaetes and bivalves, the sediment type has primarily been used to determine these biotopes. One of these samples (ZOI50) was predominantly composed of sand (85%) with a notable fine sediment component (14%) therefore this sample site was allocated the SS.SSa.CMuSa biotope. The other station in this Faunal Group AG (ZOI46) had a greater proportion of sand (97%) with a very small gravel component (3%) therefore this sample site was allocated the SS.SSa.CFiSa biotope.

1.7.4.33 Sediments in located to the north and northeast of the Mona Array Area, in the wider regional benthic subtidal and intertidal ecology study area were characterised by samples in Faunal groups C, X, Z and AA as well as a sample station in Faunal group Y and were associated with sand and muddy sand sediments. The communities in these Faunal groups were also composed of polychaetes and bivalves but included species which are adapted to sandy habitats such as SS.SMu.CSaMu.LkorPpel. Based on the distinct nature of the faunal community and the sediment type these Faunal groups were allocated the SS.SMu.CSaMu.LkorPpel biotope.

1.7.4.34 The Faunal groups identified in the SIMPER analysis were used together with the raw data (PSA and macrofaunal analysis) to assign six preliminary biotopes (Figure 1.17) Although *S. spinulosa* was recorded in samples in Faunal groups I and B (not in the top 50% of abundant species), no aggregations qualifying as a reef forming structure were recorded within the Mona Array Area. The full SIMPER analysis results are presented in Appendix C and the full data is available on request.

Comparison between 2021 and 2022 Mona Array Area and ZoI data

1.7.4.35 To determine if there had been any measurable shift in the communities in the Mona Array Area and ZoI between the 2021 and 2022 surveys, seven stations were resampled in 2022 (DDV and grab sampling data) so that the abiotic and biotic conditions could be compared. Analysis of the infaunal grab sample data from these stations suggested some dissimilarity in the infaunal communities. A CLUSTER analysis, including a SIMPROF test, did not group the 2021 and 2022 sample stations of the same location together. The 2021 and 2022 sample points were largely clustered apart however two 2022 stations (22ENV51 and 22ENV59) and two 2021 stations (ENV56 and ENV63) did group together, indicating some similarity between the communities associated with the same biotope recorded in 2021 and 2022, albeit differences at individual stations. ENV56 and ENV63 were allocated the SS.SMx.OMx.PoVen biotope from the 2021 analysis as were ENV51 and ENV59, suggesting 22ENV51 and 22ENV59 could contain similar communities. An ANOSIM test was undertaken which determines if the difference between SIMPROF groups is greater than the difference within SIMPROF groups. The results of this analysis provided an R statistic of 0.98 which suggested that were was a greater difference between Faunal groups than within them. Overall, the conditions within the Mona Array Area and ZoI are highly changeable as a result of ocean current and tidal influences which can result in the movement of sediment and geophysical features. The sampled data does however suggest some continuity between the 2021 and 2022 surveys.

Table 1.11: Simprof groups and biotope classifications for the Mona Array Area and ZoI infaunal dataset.

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising infaunal taxa according to SIMPER analysis	Biotope	Comments
A	ENV22	36-38	Sand and muddy sand	*Abra, Scoloplos armiger, Bivalvia*	SS.SCS.CCS	Faunal group A showed relatively high Bray-Curtis dissimilarity with Faunal group T (94.55%). Faunal group T recorded no *Abra* and *Scoloplos armiger,* which were present in Faunal group A. Faunal group A showed lower Bray-Curtis dissimilarity with Faunal group I (83.36%). Faunal group A and I both recorded higher abundances *Kurtiella bidentata*.
	ENV28		Coarse sediment			
B	ZOI40	38–- 41	Mixed sediment	*Syllis armillaris agg., Lysidice unicornis, Lumbrineris aniara agg.*	SS.SMx.OMx.PoVen	Faunal group B showed relatively high Bray-Curtis dissimilarity with Faunal group AD (96.32%). Faunal group AD recorded no *Echinocyamus pusillus,* which were present in Faunal group B. Faunal group B showed lower Bray-Curtis dissimilarity with Faunal group G (79.27%). Faunal group B and G both recorded higher abundances *Kurtiella bidentata*.
	ENV50		Mixed sediment			
C	ENV92	38-41	Mixed sediment	*Polynoidae, Scalibregma inflatum, Caulleriella alata, Spirobranchus triqueter, Ophiothrix fragilis, Lumbrineris aniara agg., Dipolydora coeca agg.*	SS.SMu.CSaMu.LkorPpel	N/A
D	ENV69	41–- 42	Mixed sediment	*Scalibregma inflatum, Pholoe baltica, Urothoe marina, Paradoneis lyra, Notomastus, Aonides paucibranchiata, Goniadella gracilis, Leptocheirus hirsutimanus, Kurtiella bidentata, Nemertea, Glycera lapidum, Lysilla nivea, Owenia, Ericthonius punctatus*	SS.SMx.OMx.PoVen	Faunal group D showed relatively high Bray-Curtis dissimilarity with Faunal group AD (94.72%). Faunal group AD recorded no *Scalibregma inflatum,* which were present in Faunal group D. Faunal group D showed lower Bray-Curtis dissimilarity with Faunal group P (57.89%). Faunal group D and P both recorded high abundances *Scalibregma inflatum*.
	ENV84		Mixed sediment			

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising infaunal taxa according to SIMPER analysis	Biotope	Comments
E	ENV82	36–- 38	Mixed sediment	*Pholoe, Scalibregma inflatum, Ampharete lindstroemi agg., Photis longicaudata, Kurtiella bidentata, Cerianthus lloydii, Mediomastus fragilis, Leiochone, Spiophanes bombyx, Chaetozone zetlandica, Sabellaria spinulosa, Grania*	SS.SMx.CMx	N/A
F	ENV68	43	Sand and muddy sand	*Pholoe baltica, Eteone cf. longa, Scalibregma inflatum, Ampharete lindstroemi agg., Lagis koreni, Urothoe elegans, Abra, Nemertea*	SS.SCS.CCS	N/A
G	ENV12	38-43	Sand and muddy sand	*Lagis koreni, Scalibregma inflatum, Ampharete lindstroemi agg., Owenia, Abra, Echinocyamus pusillus, Nemertea, Spio symphyta, Aoridae, Phoronis, Pholoe baltica, Goniadella gracilis*	SS.SCS.CCS	Faunal group G showed relatively high Bray-Curtis dissimilarity with Faunal group AD (90.02%). Faunal group AD recorded no *Lagis koreni*, which were present in Faunal group G. Faunal group G showed lower Bray-Curtis dissimilarity with Faunal group I (51.56%). Faunal group G and I both recorded high abundances *Poecilochaetus serpens*.
	ENV13		Coarse sediment			
H	ENV33	40–- 46	Mixed sediment	*Ampharete lindstroemi agg.,Poecilochaetus serpens, Ampelisca provincialis, Phoronis, Nemertea, Pholoe baltica, Owenia, Scalibregma inflatum, Cerianthus lloydii, Spiophanes bombyx, Chaetozone zetlandica, Photis longicaudata, Cirrophorus branchiatus, Leiochone*	SS.SMx.OMx.PoVen	Faunal group H showed relatively high Bray-Curtis dissimilarity with Faunal group AD (94.85%). Faunal group AD recorded no *Ampharete lindstroemi*, which were present in Faunal group H. Faunal group H showed lower Bray-Curtis dissimilarity with Faunal group P (50.65%). Faunal group H and P both recorded high abundances *Ampharete lindstroemi*.
	ENV34		Mixed sediment			
	ENV35		Mixed sediment			
I	ENV40	35-40	Mixed sediment	*Ampharete lindstroemi agg., Nemertea, Scalibregma inflatum, Kurtiella bidentata, Lagis koreni, Pholoe baltica, Polycirrus, Eteone cf. Longa, Paradoneis lyra, Owenia, Urothoe, Photis longicaudata, Tanaopsis graciloides*	SS.SMx.CMx.KurThyMx	Faunal group I showed relatively high Bray-Curtis dissimilarity with Faunal group AD (92.53%). Faunal group AD recorded no *Scalibregma inflatum*, which were present in Faunal group I. Faunal group I showed lower Bray-Curtis dissimilarity with Faunal group H (50.16%). Faunal group I and H both recorded high abundances *Ampharete lindstroemi*.
	ENV45		Mixed sediment			

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising infaunal taxa according to SIMPER analysis	Biotope	Comments
J	ENV01	39-45	Mixed sediment	*Poecilochaetus serpens, Nemertea, Urothoe elegans, Scalibregma inflatum, Lysidice unicornis, Lagis koreni, Pholoe baltica, Pholoe inornata, Ampharete lindstroemi agg., Phoronis, Spiophanes bombyx, Chaetozone zetlandica, Ampelisca, Ophelina acuminata, Pista lornensis, Cirrophorus branchiatus, Ampelisca spinipes, Pseudopolydora pulchra, Urothoe*	SS.SMx.OMx.PoVen	Faunal group J showed relatively high Bray-Curtis dissimilarity with Faunal group AD (93.14%). Faunal group AD recorded no *Poecilochaetus serpens*, which were present in Faunal group J. Faunal group J showed lower Bray-Curtis dissimilarity with Faunal group O (56.10%). Faunal group J and O both recorded high abundances *Leptochiton asellus*.
	ENV04		Mixed sediment			
	ENV05		Mixed sediment			
	ENV10		Mixed sediment			
	ENV14		Coarse sediment			
	ENV15		Mixed sediment			
	ENV19		Mixed sediment			
	ENV27		Mixed sediment			
	ENV59		Coarse sediment			
	ENV63		Coarse sediment			
	ENV64		Mixed sediment			
K	ENV32	41	Mixed sediment	*Ophelina acuminata, Scalibregma inflatum, Urothoe marina*	SS.SMx.OMx.PoVen	N/A
L	ENV39	39–- 46	Mixed sediment	*Scalibregma inflatum, Golfingia (Golfingia) elongata, Unciola planipes, Owenia, Echinocyamus pusillus, Syllis garciai/mauretanica, Phoronis, Nereididae, Ampharete lindstroemi agg., Nemertea, Golfingiidae, Lagis koreni, Syllis, Eteone cf. Longa, Mediomastus fragilis, Paradoneis ilvana, Poecilochaetus serpens*	SS.SMx.OMx.PoVen	Faunal group L showed relatively high Bray-Curtis dissimilarity with Faunal group AD (95.80%). Faunal group AD recorded no *Scalibregma inflatum*, which were present in Faunal group L. Faunal group L showed lower Bray-Curtis dissimilarity with Faunal group P (54.75%). Faunal group L and P both recorded high abundances *Pholoe baltica*.
	ENV42		Mixed sediment			

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising infaunal taxa according to SIMPER analysis	Biotope	Comments
M	ENV53	43–- 44	Mixed sediment	*Terebelliformia, Leptocheirus hirsutimanus, Ampharete lindstroemi agg., Aonides paucibranchiata, Glycera lapidum, Mediomastus fragilis, Laonice bahusiensis agg., Unciola planipes, Leptochiton asellus, Nemertea*	SS.SMx.OMx.PoVen	N/A
N	ENV36	40–- 48	Mixed sediment	*Nemertea, Scalibregma inflatum, Aonides paucibranchiata, Ampharete lindstroemi agg., Leptochiton asellus, Dialychone, Pholoe inornata, Golfingiidae, Pholoe baltica, Leiochone, Glycera lapidum, Laonice bahusiensis agg., Goniadella gracilis, Serpulidae, Lysidice unicornis, Eulalia mustela, Notomastus, Jasmineira caudata, Owenia, Paraonidae, Syllis garciai/mauretanica*	SS.SMx.OMx.PoVen	Faunal group N showed relatively high Bray-Curtis dissimilarity with Faunal group AD (94.71%). Faunal group AD recorded no *Scalibregma inflatum*, which were present in Faunal group N. Faunal group N showed lower Bray-Curtis dissimilarity with Faunal group P (51.28%). Faunal group N and P both recorded high abundances *Phoronis*.
	ENV37		Mixed sediment			
	ENV41		Mixed sediment			
	ENV47		Mixed sediment			
	ENV97		Mixed sediment			
O	ENV60	38–- 43	Mixed sediment	*Ampharete lindstroemi agg., Nemertea, Leptochiton asellus, Aonides paucibranchiata, Pholoe inornata, Cirrophorus branchiatus, Lysidice unicornis, Phoronis, Ophelina acuminata, Praxillella affinis, Chaetozone zetlandica, Golfingiidae, Pholoe baltica, Euchone pararosea, Eteone cf. Longa, Scoloplos armiger, Parexogone hebes, Dipolydora caulleryi agg.*	SS.SMx.OMx.PoVen	Faunal group O showed relatively high Bray-Curtis dissimilarity with Faunal group AD (94.01%). Faunal group AD recorded no *Ampharete lindstroemi*, which were present in Faunal group O. Faunal group O showed lower Bray-Curtis dissimilarity with Faunal group P (50.34%). Faunal group O and P both recorded high abundances *Scalibregma inflatum*.
	ENV61		Mixed sediment			
	ENV65		Mixed sediment			
P	ENV38	39–- 47	Mixed sediment	*Scalibregma inflatum, Nemertea, Ampharete lindstroemi agg., Pholoe baltica, Aonides paucibranchiata, Phoronis, Cirrophorus branchiatus, Lysidice unicornis, Leptochiton asellus, Ophelina acuminata, Polycirrus,*	SS.SMx.OMx.PoVen	Faunal group P showed relatively high Bray-Curtis dissimilarity with Faunal group AD (94.69%). Faunal group AD recorded no *Scalibregma inflatum*, which were present in Faunal group P. Faunal group P showed lower Bray-Curtis dissimilarity with Faunal
	ENV48		Mixed sediment			
	ENV49		Mixed sediment			
	ENV51		Mixed sediment			

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising infaunal taxa according to SIMPER analysis	Biotope	Comments
	ENV52		Mixed sediment	*Ampelisca, Poecilochaetus serpens, Paradoneis ilvana, Chaetozone zetlandica, Urothoe marina, Urothoe, Laonice bahusiensis agg., Dialychone, Lagis koreni, Nototropis vedlomensis, Aricidea (Acmira) cerrutii*		group O (50.34%). Faunal group P and O both recorded high abundances *Scalibregma inflatum*.
	ENV54		Mixed sediment			
	ENV55		Mixed sediment			
	ENV56		Mixed sediment			
	ENV71		Coarse sediment			
	ENV86		Mixed sediment			
	ENV88		Mixed sediment			
Q	ENV29	39–- 42	Mixed sediment	*Nemertea, Ampharete lindstroemi agg., Phascolion (Phascolion) strombus strombus, Parexogone hebes, Syllis, Golfingiidae, Poecilochaetus serpens, Cirrophorus branchiatus, Podarkeopsis*	SS.SMx.OMx.PoVen	Faunal group Q showed relatively high Bray-Curtis dissimilarity with Faunal group AD (94.72%). Faunal group AD recorded no *Ampharete lindstroemi*, which were present in Faunal group Q. Faunal group Q showed lower Bray-Curtis dissimilarity with Faunal group O (58.98%). Faunal group Q and O both recorded high abundances *Leptochiton asellus*.
	ENV62		Mixed sediment			
	ENV95		Sand and muddy sand			
R	ENV02	36–- 43	Coarse sediment	*Nemertea, Echinocyamus pusillus, Goniadella gracilis, Poecilochaetus serpens, Scalibregma inflatum, Owenia, Pholoe baltica, Polynoidae, Golfingiidae, Kurtiella bidentata, Bivalvia, Pholoe inornata, Aonides paucibranchiata, Nereididae*	SS.SMx.OMx.PoVen	Faunal group R showed relatively high Bray-Curtis dissimilarity with Faunal group AC (86.48%). Faunal group AC recorded no *Kurtiella bidentata*, which were present in Faunal group R. Faunal group R showed lower Bray-Curtis dissimilarity with Faunal group G (62.81%). Faunal group R and G both recorded high abundances *Lagis koreni.*
	ENV03		Mixed sediment			
	ENV06		Mixed sediment			
	ENV08		Coarse sediment			
	ENV17		Coarse sediment			
	ENV20		Coarse sediment			
	ENV24		Coarse sediment			
	ENV90		Mixed sediment			
S	ZOI39	41–- 44	Coarse sediment		SS.SMx.CMx	

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising infaunal taxa according to SIMPER analysis	Biotope	Comments
	ZOI42		Coarse sediment	*Scalibregma inflatum, Nemertea, Lagis koreni, Grania, Spiophanes bombyx, Ophelina acuminata, Pholoe baltica, Parexogone hebes*	SS.SCS.CCS	Faunal group S showed relatively high Bray-Curtis dissimilarity with Faunal group AC (91.06%). Faunal group AC recorded no *Scalibregma inflatum*, which were present in Faunal group S. Faunal group S showed lower Bray-Curtis dissimilarity with Faunal group G (60.81%). Faunal group S and G both recorded high abundances *Scalibregma inflatum.*
T	ZOI44	44–- 45	Sandy gravel with cobble and shell fragments	*Leptochiton, Syllis garciai, Aonides paucibranchiata, Ophiothrix fragilis, Sipuncula, Hydroides norvegica, Lysidice unicornis, Eulalia mustela agg., Syllis garciai, Pholoe inornata*	SS.SMx.CMx.OphMx	Faunal group T showed relatively high Bray-Curtis dissimilarity with Faunal group AD (95.24%). Faunal group AD recorded no *Leptochiton*, which were present in Faunal group T. Faunal group T showed lower Bray-Curtis dissimilarity with Faunal group V (63.18%). Faunal group T and V both recorded high abundances *Nemertea.*
U	ZOI41	57-58	Mixed sediments	*Pholoe baltica, Harmothoe, Subadyte pellucida, Mediomastus fragilis, Scalibregma inflatum, Hydroides norvegica, Serpulidae, Spirobranchus triqueter, Sabellaria spinulosa, Stenothoe marina, Parapleustes assimilis, Ericthonius, Leptochiton, Ophiothrix fragilis, Anomiidae, Nudibranchia, Alcyonium digitatum*	SS.SMx.CMx	N/A
V	22ENV30	40–- 55	Coarse sediments	*Nemertea, Aonides paucibranchiata, Grania, Leptochiton, Dialychone dunerificta, Nudibranchia, Laonice bahusiensis agg., Pholoe inornata, Syllis armillaris agg., Glycera, Echinocyamus pusillus, Goniadella gracilis, Glycera lapidum,*	SS.SMx.OMx.PoVen	Faunal group V showed relatively high Bray-Curtis dissimilarity with Faunal group AD (94.89%). Faunal group AD recorded no *Leptochiton*, which were present in Faunal group V. Faunal group V showed lower Bray-Curtis dissimilarity with Faunal group W (57.34%). Faunal group V and W both recorded *Scalibregma inflatum.*
	22ENV36		Coarse sediments			
	ZOI45		Coarse sediments			

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising infaunal taxa according to SIMPER analysis	Biotope	Comments
	ZOI48		Mixed sediments	*Spirobranchus triqueter, Lysidice unicornis, Sphaerosyllis hystrix, Polycirrus, Mediomastus fragilis, Spio armata, Timoclea ovata, Sphaerosyllis cf. Taylori, Praxillella affinis, Serpulidae, Nototropis vedlomensis*		
W	22ENV32	36–- 49	Mixed sediments	*Nemertea, Scalibregma inflatum, Cirrophorus branchiatus, Paradoneis lyra, Phoronis, Pholoe baltica, Lysidice unicornis, Aonides paucibranchiata, Leiochone, Spirobranchus triqueter, Sphaerosyllis cf. Taylori, Poecilochaetus serpens, Pholoe inornata, Praxillella affinis, Grania, Caulleriella alata, Gattyana cirrhosa, Serpulidae, Tanaopsis graciloides, Nototropis vedlomensis, Spisula, Echinocyamus pusillus*	SS.SMx.OMx.PoVen	Faunal group W showed relatively high Bray-Curtis dissimilarity with Faunal group AD (95.71%). Faunal group AD recorded no *Scalibregma inflatum*, which were present in Faunal group W. Faunal group W showed lower Bray-Curtis dissimilarity with Faunal group H (57.87%). Faunal group W and H both recorded *Pholoe baltica.*
	22ENV33		Mixed sediments			
	22ENV34		Mixed sediments			
	22ENV37		Mixed sediments			
X	ENV16	34–- 41	Sand and muddy sand	*Spiophanes bombyx, Scoloplos armiger, Lagis koreni, Poecilochaetus serpens, Sthenelais limicola, Amphiuridae*	SS.SMu.CSaMu.LkorPpel	Faunal group X showed relatively high Bray-Curtis dissimilarity with Faunal group V (92.74%). Faunal group V recorded no *Lagis koreni*, which were present in Faunal group X. Faunal group X showed lower Bray-Curtis dissimilarity with Faunal group AA (64.04%). Faunal group X and AA both recorded *Lagis koreni.*
	ENV21		Sand and muddy sand			
	ENV25		Sand and muddy sand			
	ENV26		Sand and muddy sand			
Y	ENV18	35–- 38	Mixed sediment		SS.SMx.CMx	

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising infaunal taxa according to SIMPER analysis	Biotope	Comments
	ENV23		Sand and muddy sand	*Lagis koreni, Echinocyamus pusillus, Scalibregma inflatum, Poecilochaetus serpens, Sthenelais limicola, Bivalvia, Pseudopolydora pulchra, Owenia*	SS.SMu.CSaMu.LkorPpel	Faunal group Y showed relatively high Bray-Curtis dissimilarity with Faunal group AC (87.58%). Faunal group AC recorded no *Lagis koreni*, which were present in Faunal group Y. Faunal group Y showed lower Bray-Curtis dissimilarity with Faunal group G (60.02%). Faunal group Y and G both recorded *Poecilochaetus serpens.*
Z	ENV91	42–- 51	Mixed sediment	*Poecilochaetus serpens, Scalibregma inflatum, Spiophanes bombyx, Aoridae, Nemertea, Owenia, Scoloplos armiger, Sthenelais limicola*	SS.SMu.CSaMu.LkorPpel	Faunal group Z showed relatively high Bray-Curtis dissimilarity with Faunal group AD (92.72%). Faunal group AD recorded no *Poecilochaetus serpens*, which were present in Faunal group Z. Faunal group Z showed lower Bray-Curtis dissimilarity with Faunal group I (56.78%). Faunal group Z and I both recorded *Poecilochaetus serpens.*
	ENV94		Mixed sediment			
AA	ENV11	40- 47	Sand and muddy sand	*Lagis koreni, Poecilochaetus serpens, Spiophanes bombyx, Pholoe baltica, Scalibregma inflatum*	SS.SMu.CSaMu.LkorPpel	Faunal group AA showed relatively high Bray-Curtis dissimilarity with Faunal group AD (94.65%). Faunal group AD recorded no *Lagis koreni*, which were present in Faunal group AA. Faunal group AA showed lower Bray-Curtis dissimilarity with Faunal group F (60.07%). Faunal group AA and F both recorded *Lagis koreni.*
	ENV30		Sand and muddy sand			
AB	ZOI47	35-42	Sand and muddy sand	*Lagis koreni, Gnathiidae, Pholoe baltica, Aglaophamus agilis, Cirrophorus branchiatus, Scalibregma inflatum, Poecilochaetus serpens*	SS.SCS.CCS	Faunal group AB showed relatively high Bray-Curtis dissimilarity with Faunal group AD (91.80%). Faunal group AD recorded no *Lagis koreni*, which were present in Faunal group AB. Faunal group AB showed lower Bray-Curtis dissimilarity with Faunal group G (66.91%). Faunal group AB and G both recorded *Poecilochaetus serpens.*
	ENV09		Mixed sediment		SS.SMx.OMx	
AC	ENV07	42	Coarse sediment	*Grania, Goniadidae, Syllis*	SS.SCS.CCS	N/A
AD	ENV93	34–- 38	Coarse sediment	*Pisione remota, Protodorvillea kefersteini, Schistomeringos neglecta, Protodrilus, Dosinia*	SS.SCS.CCS	N/A

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising infaunal taxa according to SIMPER analysis	Biotope	Comments
AE	ZOI50	46	Sand and muddy sand	*Grania, Polygordius, Nemertea, Hesionura elongata, Asbjornsenia pygmaea, Sphaerosyllis cf. taylori, Pisione remota, Aonides paucibranchiata*	SS.SSa.CMuSa	N/A
AF	ENV66	37–- 39	Coarse sediment	*Pisione remota, Polygordius, Glycera lapidum, Hesionura elongata, Grania, Nemertea*	SS.SCS.CCS	N/A
AG	22ENV38	33-39	Coarse sediment	*Polygordius, Nemertea, Pisione remota, Hesionura elongata, Grania, Aonides paucibranchiata*	SS.SMx.CMx	Faunal group AG showed relatively high Bray-Curtis dissimilarity with Faunal group X (91.94%). Faunal group X recorded no *Polygordius*, which were present in Faunal group AG. Faunal group AG showed lower Bray-Curtis dissimilarity with Faunal group AF (55.81%). Faunal group AG and AF both recorded *Nemertea.*
	ZOI46		Sand and muddy sand		SS.SSa.CFiSa	
AH	ENV43	38–- 48	Coarse sediment	*Pisione remota, Aonides paucibranchiata, Goniadella gracilis, Grania, Hesionura elongata, Polygordius, Unciola planipes*	SS.SCS.CCS	Faunal group AH showed relatively high Bray-Curtis dissimilarity with Faunal group X (89.91%). Faunal group X recorded no *Pisione remota,* which were present in Faunal group AH. Faunal group AH showed lower Bray-Curtis dissimilarity with Faunal group AF (64.93%). Faunal group AH and AF both recorded *Polygordius.*
	ENV44		Coarse sediment			
	ENV57		Coarse sediment			
	ENV67A		Coarse sediment			
	ENV70		Coarse sediment			
	ENV83		Sand and muddy sand			
	ENV89		Coarse sediment			
	ENV96		Sand and muddy sand			

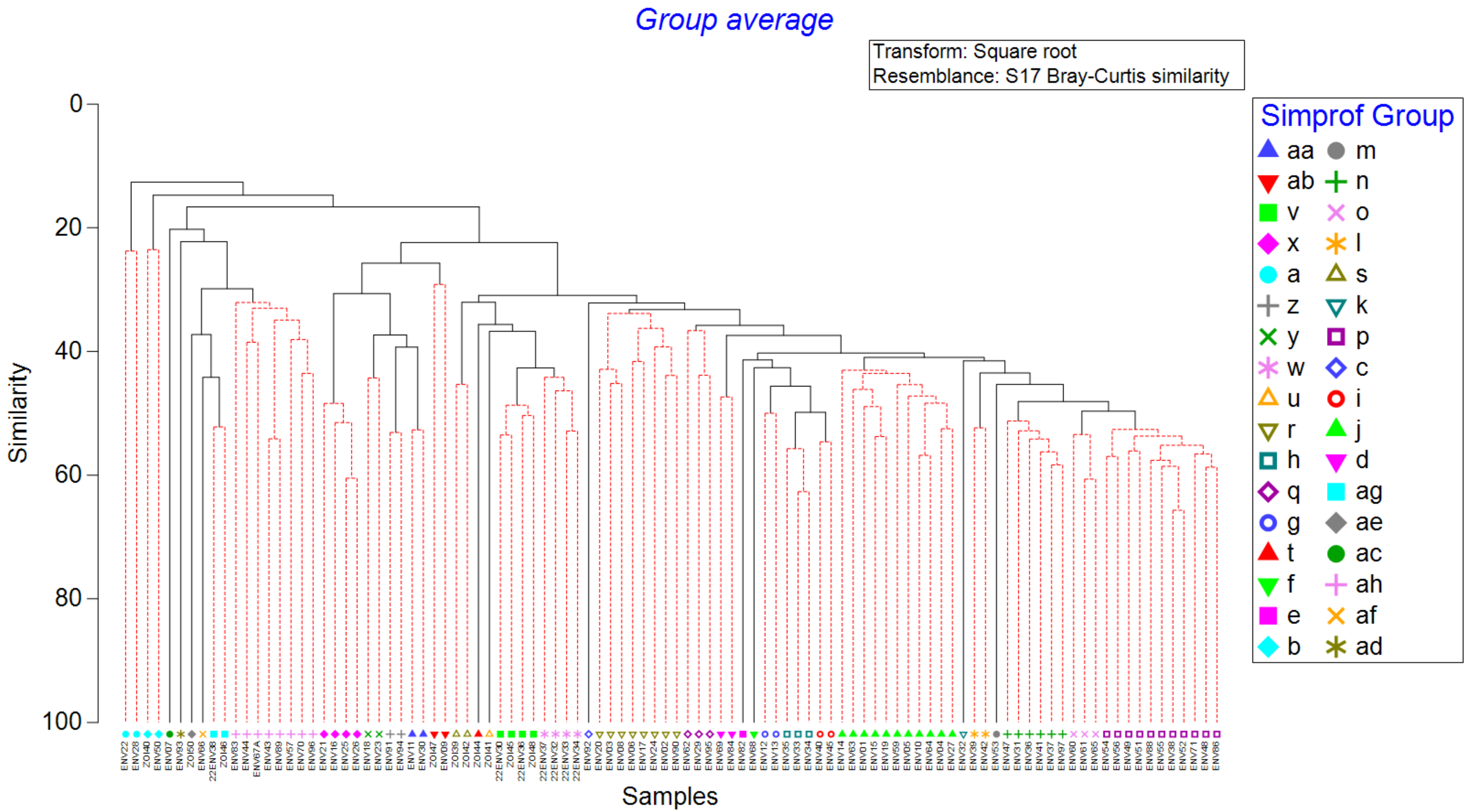


Figure 1.13: Dendrogram of infaunal communities in the Mona Array Area and ZoI from benthic grab samples.

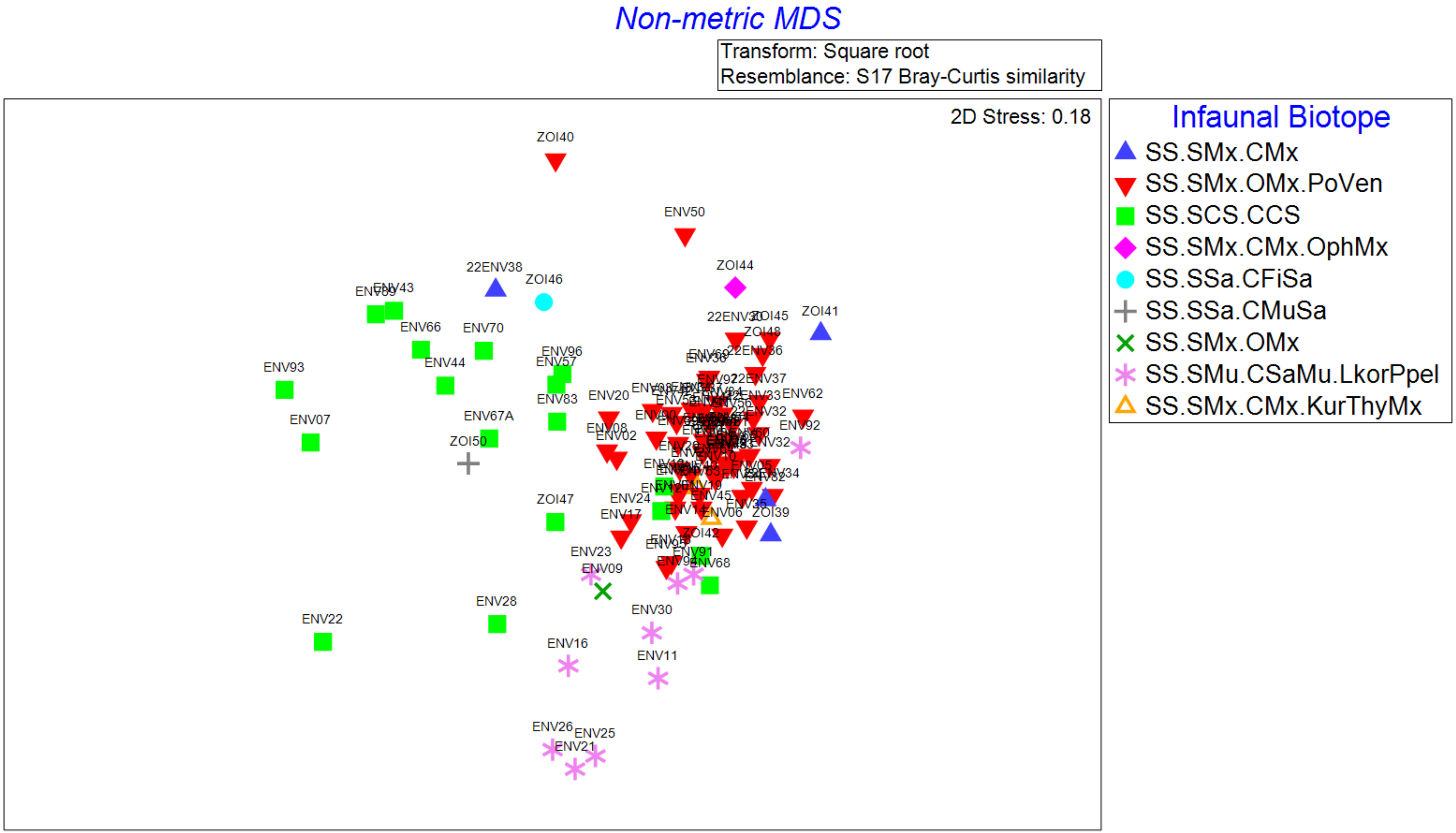


Figure 1.14: 2D MDS plot of infaunal communities in the Mona Array Area and ZoI from grab samples.

Mona Offshore Cable Corridor

1.7.4.36 The results of the hierarchical CLUSTER analysis of the fourth root transformed infaunal dataset from the Mona Offshore Cable Corridor collected in the 2022 site-specific survey, together with the SIMPROF test, identified 10 Faunal groups that were statistically dissimilar (Figure 1.15), based on the SIMPROF test. Of these faunal groups, two were represented by a single sample station (Faunal group D (ENV149) and Faunal group G (ENV54)) (Figure 1.18). Unlike for the Mona Array and ZoI data juveniles were included in this analysis as a RELATE test was run and found no statistical difference in the structure of the data with or without juveniles.

1.7.4.37 The 2D MDS plot is presented in Figure 1.18 and the low stress value (0.12) indicates that this is a good representation of the data. The 3D MDS plot has not been presented as the 2D MDS plot presents a clearer representation of the data. Faunal group J exhibited the greatest distance between itself and the other Faunal groups and on average had a dissimilarity of 83% from the other groups. Faunal group E (SIMPROF e) showed the highest Bray-Curtis similarity of 54.48%, while Faunal group J (SIMPROF j) showed the lowest Bray-Curtis similarity (33.36%) of all Faunal groups that contained more than one sample station. Faunal groups E and D showed the lowest Bray-Curtis dissimilarity (52.67%).

1.7.4.38 The samples from the north of the Mona Offshore Cable Corridor were associated with the Faunal groups H and I which were characterised predominantly by mixed sediments (Figure 1.18). The communities associated with these faunal groups were characterised of a variety of taxa, but all were dominated by polychaetes such as *Aonides paucibranchiata* and *Paradoneis lyra,* both of which were also frequently identified in the Mona Array Area. All samples within these groups were allocated the SS.SMx.OMx.PoVen biotope which covered the majority of the north of the Mona Offshore Cable Corridor (Figure 1.18).

1.7.4.39 Sediments in the centre of the Mona Offshore Cable Corridor, in the area to the north of Constable Bank were characterised as sand and muddy sand. This area included Faunal group J. The communities associated with this faunal group was dominated by polychaetes and bivalves such as, *Spio armata* and *Glycera oxycephala*. The samples in Faunal group J were assigned the biotope SS.SSa.CFiSa, largely due to physical conditions of the stations.

1.7.4.40 Sediments in the centre and south of the Mona Offshore Cable Corridor exhibited three separate clusters, all of which were characterised by sand-based communities. In Faunal groups C, D and E the sediment was characterised as a mix of sand, muddy sand and coarse sediment and taxa were dominated by polychaetes such as *Nephtys cirrosa* as well as some key crustacea such as *Bathyporeia guilliamsoniana*. As a result these samples were allocated the SS.SSa.IFiSa.NcirBat biotope, which Figure 1.17 shows extending down through the south half of the Mona Offshore Cable Corridor where ripples were identified (section 1.7.3).

1.7.4.41 Sediments in the centre and south of the Mona Offshore Cable Corridor, including area which overlap with Constable Bank and the Menai Strait and Conwy Bay SAC, clustered in Faunal group B, F and G, and were also characterised by mixed sediments and taxa such as polychaetes and bivalves. The communities associated with these faunal groups were characterised of a variety of taxa, but all were dominated by polychaetes and bivalves such as, *M. fragilis, L. koreni* and *S. bombyx*. The samples in Faunal group B were assigned the biotope SS.SMx.CMx.KurThyMx due to the presence of the characterising species *K. bidentata*. The Faunal groups F and G instead displayed a broader community and were therefore assigned the biotope SS.SMx.CMx as it was not possible to refine this further based on the species present. It was these broad communities that spanned across Constable Bank and the Menai Strait and Conwy Bay SAC, with SS.SMx.CMx.KurThyMx also representing the majority of the east of the overlap with the Menai Strait and Conwy Bay SAC.

1.7.4.42 Samples clustered within Faunal group F were also associated with sediments in the middle of the Mona Offshore Cable Corridor, including the north of the Menai Strait and Conwy Bay SAC, and were characterised by coarse sediments and diverse communities with no distinguishable characteristic species associated with any other biotopes identified. The infaunal community was dominated by polychaetes, bivalves and echinoderms such as *Scoloplos armiger* and *Asterias rubens*. As a result faunal group F was allocated the SS.SCS.CCS biotope.

1.7.4.43 Sediments in located to the south of the Mona Offshore Cable Corridor closest to the landfall were characterised by samples in Faunal group A and were associated with sand and muddy sand sediments. The communities in these faunal groups were also characterised by polychaetes and bivalves but included species which are adapted to sandy habitats such as *S. bombyx* as well as *F. fabula* and the *M. johnstoni*. Based on the distinct nature of the faunal community and the sediment type stations within this Faunal group were allocated the SS.SSa.IMuSa.FfabMag biotope.

1.7.4.44 The Faunal groups identified in the SIMPER analysis were used together with the raw data (PSA and macrofaunal analysis) to assign seven preliminary biotopes (Table 1.12). The full SIMPER analysis results are presented in Appendix C and the full data is available on request.

Menai Strait and Conwy Bay SAC

1.7.4.45 The majority of the sample stations within the Menai Strait and Conwy Bay SAC (OCC146, OCC147, OCC151, OCC152 and OCC153) were in Faunal group E and were characterised by coarse sediments. The communities at these stations was characterised by *B. guilliamsoniana and B. elegans* and *N. cirrosa*. As a result of these conditions this Faunal group was allocated the SS.SSa.IFiSa.NcirBat biotope. The sample station OCC153, in the east of the overlap, was determined to be in Faunal group B which was characterised by coarse and mixed sediment as well as *M. fragilis* and *K. bidentata*. This Faunal group was therefore allocated the SS.SMx.CMx.KurThyMx.

Table 1.12: Simprof groups and biotope classifications for the Mona Offshore Cable Corridor infaunal dataset.

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising infaunal taxa according to SIMPER analysis	Biotope	Comments
A	OCC133	1–- 10	Sand and muddy sand	*Ensis, Fabulina fabula, Magelona johnstoni, Spiophanes bombyx, Glycera tridactyla, Nephtys, Naididae*	SS.SSa.IMuSa.FfabMag	It was distinct from the other Faunal groups due to the presence and abundance of these characterising species as well as the absence of *Actiniaria* and *Myidae* which distinguish it from Faunal group B. Faunal group A showed the lowest Bray-Curtis dissimilarity with Faunal group B (71.70%). Faunal group A was allocated a preliminary biotope based on the infaunal data of SS.SSa.IMuSa.FfabMag. This allocation is also based on the prevalence of *F. fabula* and *M. johnstoni* as well as other characteristic species as well as its proximity to other faunal groups with similar infaunal communities which resemble SS.SSa.IMuSa.FfabMag.
	OCC134		Mud and sandy mud			
	OCC135		Sand and muddy sand			
	OCC136		Sand and muddy sand			
	OCC137		Sand and muddy sand			
	OCC138		Sand and muddy sand			
B	OCC141	13–- 19	Coarse sediment	*Mytilidae, Nemertea, Actiniaria, Scoloplos armiger, Owenia, Gastropoda, Mediomastus fragilis, Eteone cf. longa, Kurtiella bidentata, Spiophanes bombyx*	SS.SMx.CMx.KurThyMx	It was distinct from the other Faunal groups due to the presence and abundance of these characterising species as well as the absence of *Polydora ciliata* agg. and *N. cirrosa* which distinguish it from Faunal group D. Faunal group B showed the lowest Bray-Curtis dissimilarity with Faunal group D (64.27%). Faunal group B was allocated a preliminary biotope based on the infaunal data of SS.SMx.CMx.KurThyMx. This allocation is also based on the prevalence of *K. bidentata* as well as other characteristic species as well as its proximity to other faunal groups with
	OCC144		Mixed sediment			
	OCC153		Coarse sediment			

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising infaunal taxa according to SIMPER analysis	Biotope	Comments
						similar infaunal communities which resemble SS.SMx.CMx.KurThyMx.
C	OCC139	9–- 18	Sand and muddy sand	*Spiophanes bombyx, Scoloplos armiger, Thracia, Ensis, Bathyporeia guilliamsoniana, Acrocnida brachiata, Nephtys cirrosa, Lagis koreni*	SS.SSa.iFiSa.NcirBat	It was distinct from the other Faunal groups due to the presence and abundance of these characterising species as well as the absence of *B. elegans* and *Monopseudocuma gilsoni* which distinguish it from Faunal group E. Faunal group C showed the lowest Bray-Curtis dissimilarity with Faunal group E (64.01%). Faunal group C was allocated a preliminary biotope based on the infaunal data of SS.SSa.IFiSa.NcirBat. This allocation is also based on the prevalence of *N. cirrosa* and *B. guilliamsoniana* as well as other characteristic species as well as its proximity to other faunal groups with similar infaunal communities which resemble SS.SSa.IFiSa.NcirBat.
	OCC140		Sand and muddy sand			
	OCC142		Sand and muddy sand			
	OCC143		Coarse sediment			
D	OCC149	16	Sand and muddy sand	*Nephtys cirrosa, Polydora ciliata agg., Spiophanes bombyx, Bathyporeia guilliamsoniana, Bathyporeia, Nemertea, Scoloplos armiger, Lanice conchilega, Sabellaria spinulosa, Urothoe elegans, Euspira nitida, Actiniaria, Nemertea*	SS.SSa.IFiSa.NcirBat	N/A
E	OCC145	17–- 20	Sand and muddy sand	*Bathyporeia guilliamsoniana, Nemertea, Spiophanes bombyx, Monopseudocuma gilsoni, Bathyporeia elegans, Megaluropus agilis, Nephtys cirrosa*	SS.SSa.IFiSa.NcirBat	It was distinct from the other Faunal groups due to the presence and abundance of these characterising species as well as the absence of *P. ciliata* agg. and *Actiniaria* which
	OCC146		Coarse sediment			
	OCC147		Coarse sediment			

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising infaunal taxa according to SIMPER analysis	Biotope	Comments
	OCC150		Sand and muddy sand			distinguish it from Faunal group D. Faunal group E showed the lowest Bray-Curtis dissimilarity with Faunal group D (52.67%). Faunal group D was allocated a preliminary biotope based on the infaunal data of SS.SSa.IFiSa.NcirBat. This allocation is also based on the prevalence of *N. cirrosa* and *B. guilliamsoniana* as well as other characteristic species as well as its proximity to other faunal groups with similar infaunal communities which resemble SS.SSa.IFiSa.NcirBat.
	OCC151		Coarse sediment			
	OCC152		Coarse sediment			
F	OCC65	16–- 21	Mixed sediment	*Spio symphyta, Spiophanes bombyx, Lagis koreni, Lanice conchilega, Bathyporeia elegans, Pharidae, Nemertea*	SS.SMx.CMx	It was distinct from the other Faunal groups due to the presence and abundance of these characterising species as well as the absence of *A. provincialis* and *Owenia* which distinguish it from Faunal group E. Faunal group F showed the lowest Bray-Curtis dissimilarity with Faunal group E (61.84%). The sample stations in faunal group F however exhibit very different sediment characteristics as such they have been assigned different biotopes. OCC65 resembles SS.SMx.CMx and OCC148 resembles SS.SCS.CCS.
	OCC148		Coarse sediment	*Scoloplos armiger, Eteone cf. longa, Poecilochaetus serpens, Spiophanes bombyx, Lagis koreni, Kurtiella bidentata, Mytilidae, Nemertea, Metridium stet., Asterias rubens*	SS.SCS.CCS	
G	OCC54	43	Mixed sediment	*Sphaerosyllis cf. taylori, Lysidice unicornis, Cirrophorus branchiatus, Paradoneis lyra, Spiophanes bombyx, Phascolion (Phascolion) strombus strombus, Ampelisca provincialis, Urothoe marina, Nemertea*	SS.SMx.CMx	N/A
H	OCC57	45–- 46	Mixed sediment		SS.SMx.OMx.PoVen	

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising infaunal taxa according to SIMPER analysis	Biotope	Comments
	OCC58		Mixed sediment	*Aonides paucibranchiata, Paradoneis lyra, Urothoe marina, Nephasoma (Nephasoma) minutum, Syllis garciai, Lysidice unicornis, Spisula, Glycera, Syllis armillaris agg., Grania, Sipuncula, Golfingia (Golfingia) elongata, Glycera lapidum, Caulleriella alata, Gammaropsis maculata*		It was distinct from the other Faunal groups due to the presence and abundance of these characterising species as well as the absence of *Leptochiton* and *S. bombyx* which distinguish it from Faunal group I. Faunal group H showed the lowest Bray-Curtis dissimilarity with Faunal group I (56.19%). Faunal group H was allocated a preliminary biotope based on the infaunal data of SS.SMx.OMx.PoVen. This allocation is also based on the prevalence of polychaetes as well as other characteristic species as well as its proximity to other faunal groups with similar infaunal communities which resemble SS.SMx.OMx.PoVen.
I	OCC52	36–- 53	Coarse sediment	*Aonides paucibranchiata, Urothoe marina, nemertea, Syllis armillaris agg., Nephasoma (Nephasoma) minutum, Pholoe inornata, Lagis koreni, Leptochiton, Ampelisca, Mytilidae, Paradoneis lyra, Lysidice unicornis, Sphaerosyllis cf. taylori, Spiophanes bombyx, Sphaerosyllis hystrix, Polycirrus*	SS.SMx.OMx.PoVen	It was distinct from the other Faunal groups due to the presence and abundance of these characterising species as well as the absence of *Phyllodoce groenlandica* and *Golfingia (Golfingia) vulgaris vulgaris* which distinguish it from Faunal group H. Faunal group I showed the lowest Bray-Curtis dissimilarity with Faunal group H (56.19%). Faunal group H was allocated a preliminary biotope based on the infaunal data of SS.SMx.OMx.PoVen. This allocation is also based on the prevalence of polychaetes as well as other characteristic species as well as its proximity to other faunal groups with similar infaunal communities which resemble SS.SMx.OMx.PoVen.
	OCC53		Mixed sediment			
	OCC55		Mixed sediment			
	OCC56		Mixed sediment			
	OCC59		Mixed sediments			
	OCC60		Mixed sediments			
	OCC61		Coarse sediment			

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising infaunal taxa according to SIMPER analysis	Biotope	Comments
J	OCC62	23–- 31	Sand and muddy sand	*Spio armata, Nemertea, Glycera oxycephala, Spisula, Hesionura elongata, Polygordius, Nephtys cirrosa, Spiophanes bombyx, Grania*	SS.SSa.CFiSa	It was distinct from the other Faunal groups due to the presence and abundance of these characterising species as well as the absence of *Nephasoma (Nephasoma) minutum* and *L. unicornis* which distinguish it from Faunal group H. Faunal group J showed the lowest Bray-Curtis dissimilarity with Faunal group H (76.15%). Faunal group J was allocated a preliminary biotope based on the infaunal data of SS.SSa.CFiSa. This allocation is also based on the prevalence of bivalves and polychaetes as well as other characteristic species as well as its proximity to other faunal groups with similar infaunal communities which resemble SS.SSa.CFiSa.

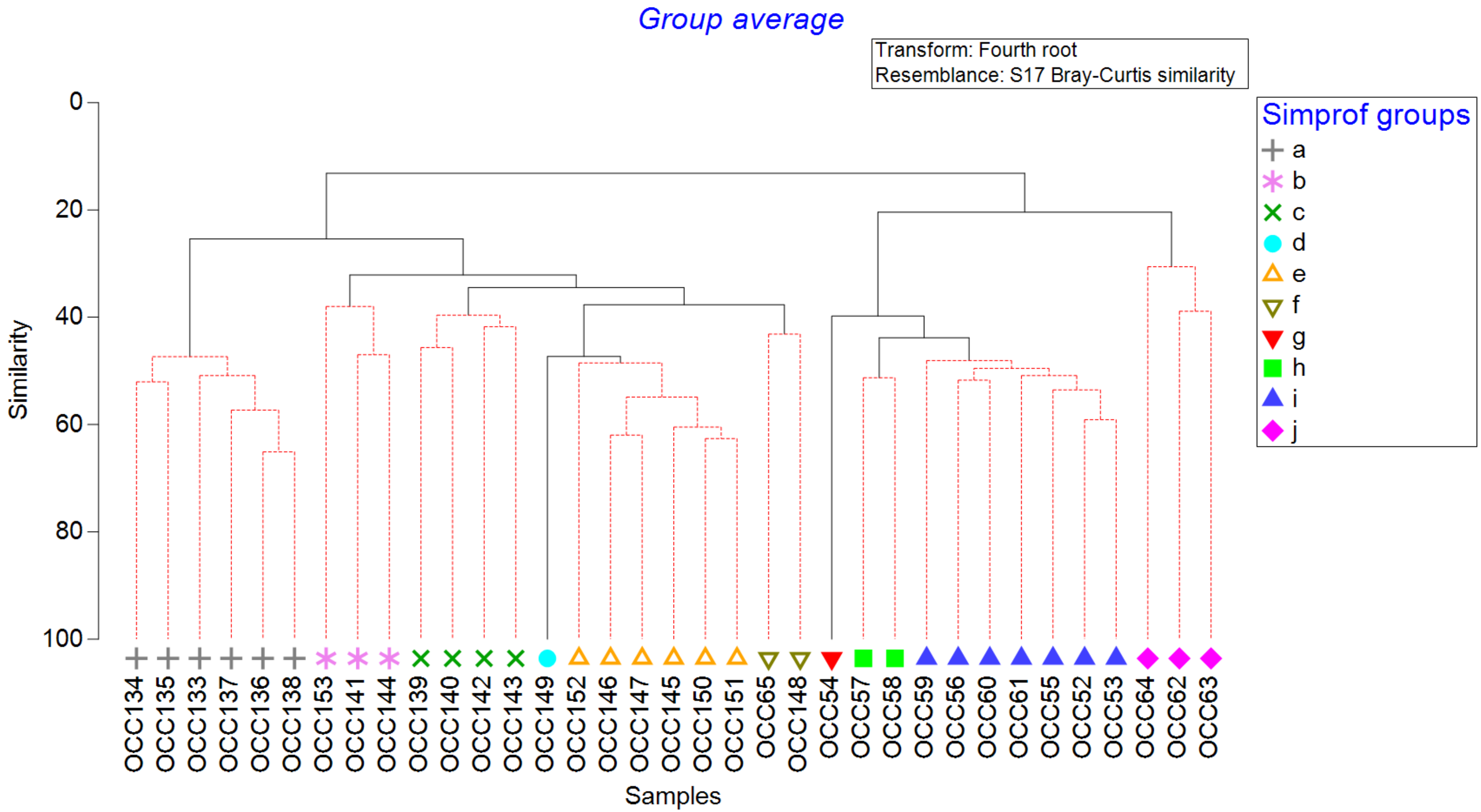


Figure 1.15: Dendrogram of infaunal communities in the Mona Offshore Cable Corridor from benthic grab samples.

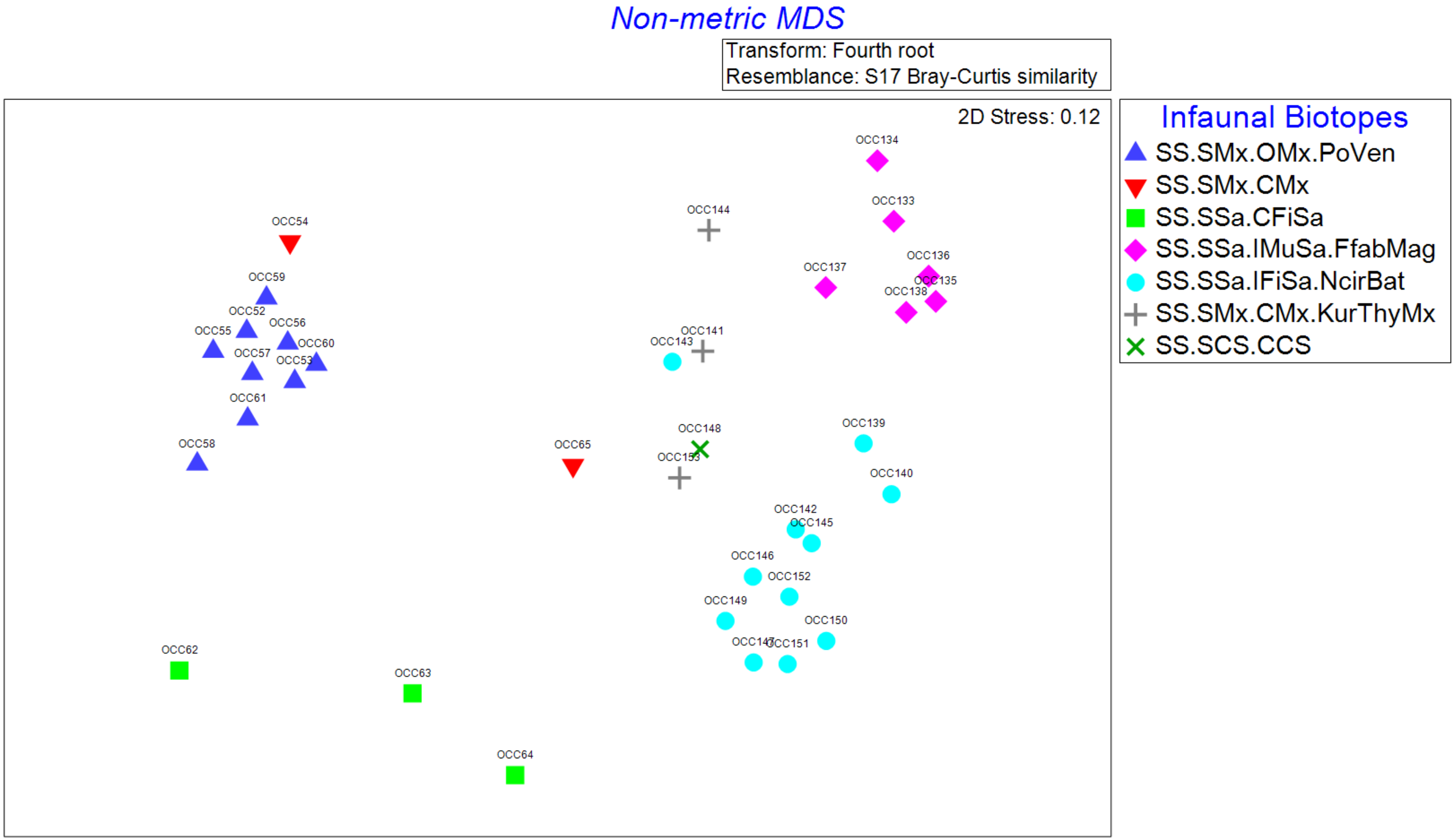


Figure 1.16: 2D MDS plot of infaunal communities in the Mona Offshore Cable Corridor from grab samples.

1.7.4.46 Following the allocation of biotopes based on physical environment and ecological communities these biotopes were then grouped (Table 1.13) and mapped on the Mona benthic subtidal and intertidal ecology study area (Figure 1.17 and Figure 1.18).

Table 1.13: Summary of infaunal biotopes identified within the Mona subtidal and intertidal benthic ecology study area from grab samples.

Preliminary infaunal biotope	Grab sample stations	Water depth range	Sediment classification	Characterising species	Geographic location
SS.SCS.CCS	ENV22, ENV28, ENV07, ENV43, ENV44, ENV57, ENV66, ENV67, ENV70, ENV83, ENV89, ENV93, ENV96, ENV68, ENV12, ENV13, ZOI45, ZOI47, OCC148	16–- 48	Sand and muddy sand/Coarse sediment	*Scoloplos armiger, Abra, Echinocyamus pusillus, Hesionura elongata, Nemertea, Owenia, Pholoe, Spiophanes bombyx, Asterias rubens*	South and north Mona Array Area Northeast Mona Array Area ZoI Central area of the Mona Offshore Cable Corridor North Menai Strait and Conwy Bay SAC
SS.SMx.OMx	ENV09	42–- 43	Mixed sediment	*Nemertea, Glycera lapidum, Leptochiton asellus, Syllis,*	Wider regional benthic subtidal and intertidal ecology study area to the north of the Mona Array Area (Morgan Array Area)
SS.SMx.CMx	ENV82, ZOI41, ZOI39, OCC65, OCC54	16–- 58	Mixed sediment/Sand and muddy sand/Coarse sediment	*Scalibregma inflatum, Kurtiella bidentata, Mediomastus fragilis, Spiophanes bombyx, Chaetozone, Lanice conchilega*	Northeast and southeast Mona Array Area ZoI Central area of the Mona Offshore Cable Corridor North Constable bank
SS.SSa.CFiSa	ZOI46, OCC62, OCC63, OCC64	23–- 39	Sand and muddy sand	*Spiophanes bombyx, Nephtys*	Southeast Mona Array Area ZoI North Constable Bank Central Menai Strait and Conwy Bay SAC
SS.SSa.CMuSa	ZOI50	46	Sand and muddy sand	-	Southeast Mona Array Area ZoI

Preliminary infaunal biotope	Grab sample stations	Water depth range	Sediment classification	Characterising species	Geographic location
SS.SMu.CSaMu.LkorPpel	ENV92, ENV16, ENV21, ENV25, ENV26, ENV91, ENV94, ENV11, ENV30, ENV23	34–- 51	Mixed sediment/Sand and muddy sand/Coarse sediment	*Spiophanes bombyx, Scalibregma inflatum, Lagis koreni, Abra, Nemertea, Owenia, Pholoe baltica, Pholoe inornata*	Wider regional benthic subtidal and intertidal ecology study area to the north and northwest of the Mona Array Area (Morgan Array Area)
SS.SSa.IMuSa.FfabMag	OCC133, OCC134, OCC135, OCC136, OCC137, OCC138	1–- 10	Sand and muddy sand/Mud and sandy mud	*Fabulina fabula, Magelona johnstoni, Ensis, Spiophanes bombyx*	South nearshore area of the Mona Offshore Cable Corridor
SS.SMx.OMx.PoVen	ENV69, ENV84, ENV33, ENV34, ENV35, ENV01, ENV04, ENV05, ENV10, ENV14, ENV15, ENV18, ENV19, ENV27, ENV59, ENV63, ENV64, ENV32, ENV39, ENV42, ENV53, ENV31, ENV36, ENV37, ENV41, ENV47, ENV97, ENV60, ENV61, ENV65, ENV38, ENV48, ENV49, ENV50, ENV51, ENV52, ENV54, ENV55, ENV56, ENV71, ENV86,	36–- 55	Mixed sediment/Coarse sediment/Sand and muddy sand	*Scalibregma inflatum, Aonides paucibranchiata, Glycera lapidum, Mediomastus fragilis, Laonice bahusiensis, Ampharete lindstroemi, Pholoe, Ampelisca, Nemertea, Unciola planipes, Echinocyamus pusillus, Pholoe inornate, Leptochiton, Spirobranchus triqueter, Syllis, Lysidice unicornis*	Mona Array Area (widespread) Wider regional benthic subtidal and intertidal ecology study area to the north of the Mona Array Area (Morgan Array Area Northwest and northeast Mona Array Area ZoI North Mona Offshore Cable Corridor

Preliminary infaunal biotope	Grab sample stations	Water depth range	Sediment classification	Characterising species	Geographic location
	ENV88, ENV29, ENV62, ENV95, ENV02, ENV03, ENV06, ENV08, ENV17, ENV20, ENV24, ENV90, ZOI40, ZOI45, ZOI48, OCC52, OCC53, OCC55, OCC56, OCC57, OCC58, OCC59, OCC60, OCC61				
SS.SMx.CMx.KurThyMx	ENV40, ENV45, OCC141, OCC144, OCC153	13–- 55	Mixed sediment/Coarse sediment	*Kurtiella bidentata, Mediomastus fragilis, Nemertea, Scalibregma inflatum, Spiophanes bombyx, Eteone longa, Pholoe, Owenia*	Southeast Mona Array Area ZoI South central area of the Mona Offshore Cable Corridor East Menai Strait and Conwy Bay SAC
SS.SMx.CMx.OphMx	ZOI44	44–- 45	Coarse sediment	*Ophiothrix fragilis, Alcyonium digitatum*	Southeast Mona Array Area ZoI
SS.SSa.iFiSa.NcirBat	OCC139, OCC140, OCC142, OCC143, OCC145, OCC146, OCC147, OCC149, OCC150, OCC151, OCC152	9–- 20	Sand and muddy sand/Coarse sediment	*Nephtys cirrosa, Bathyporeia guilliamsoniana, Bathyporeia elegans, Spiophanes bombyx, Nemertea*	South central area of the Mona Offshore Cable Corridor South Constable Bank

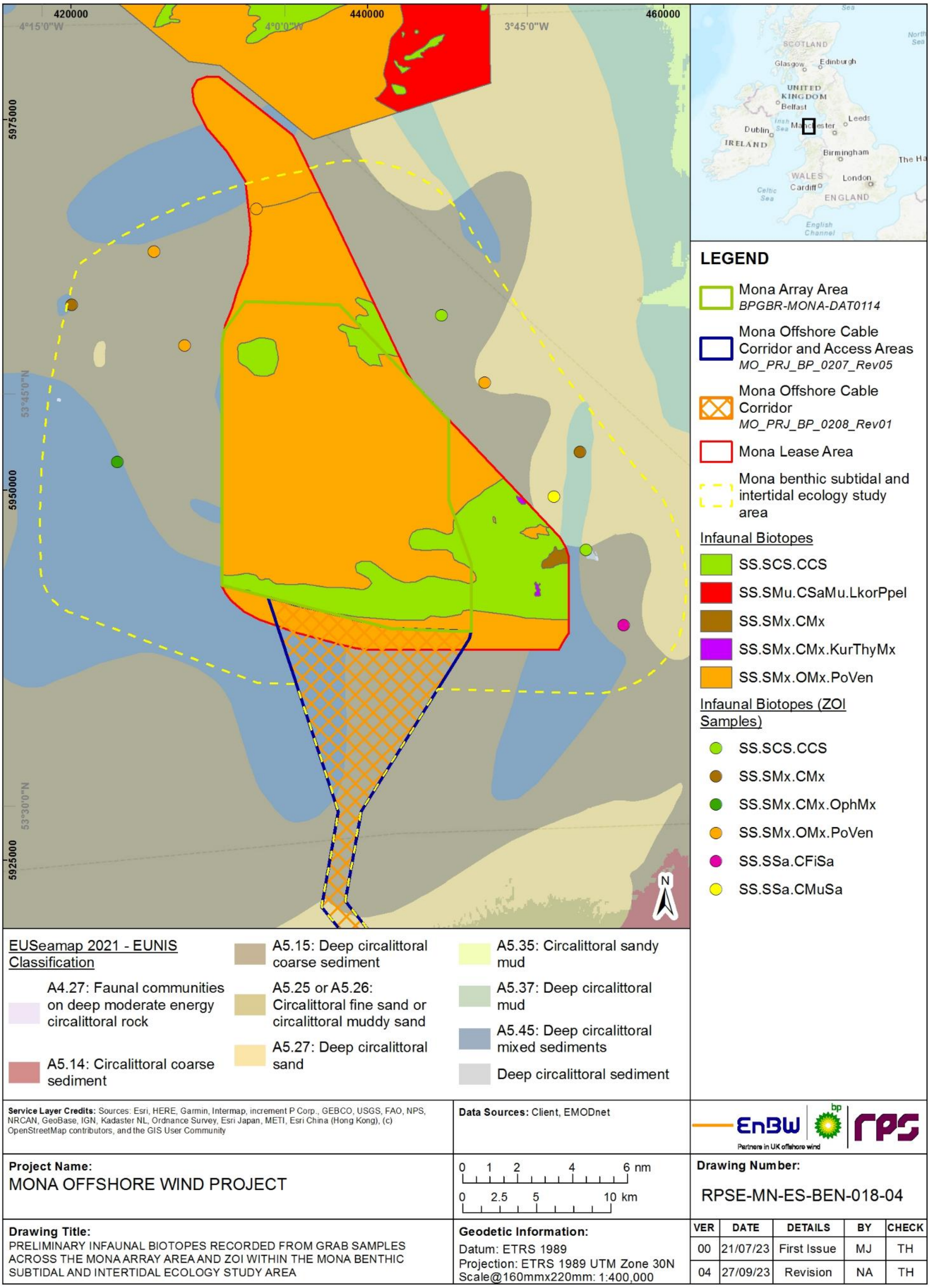
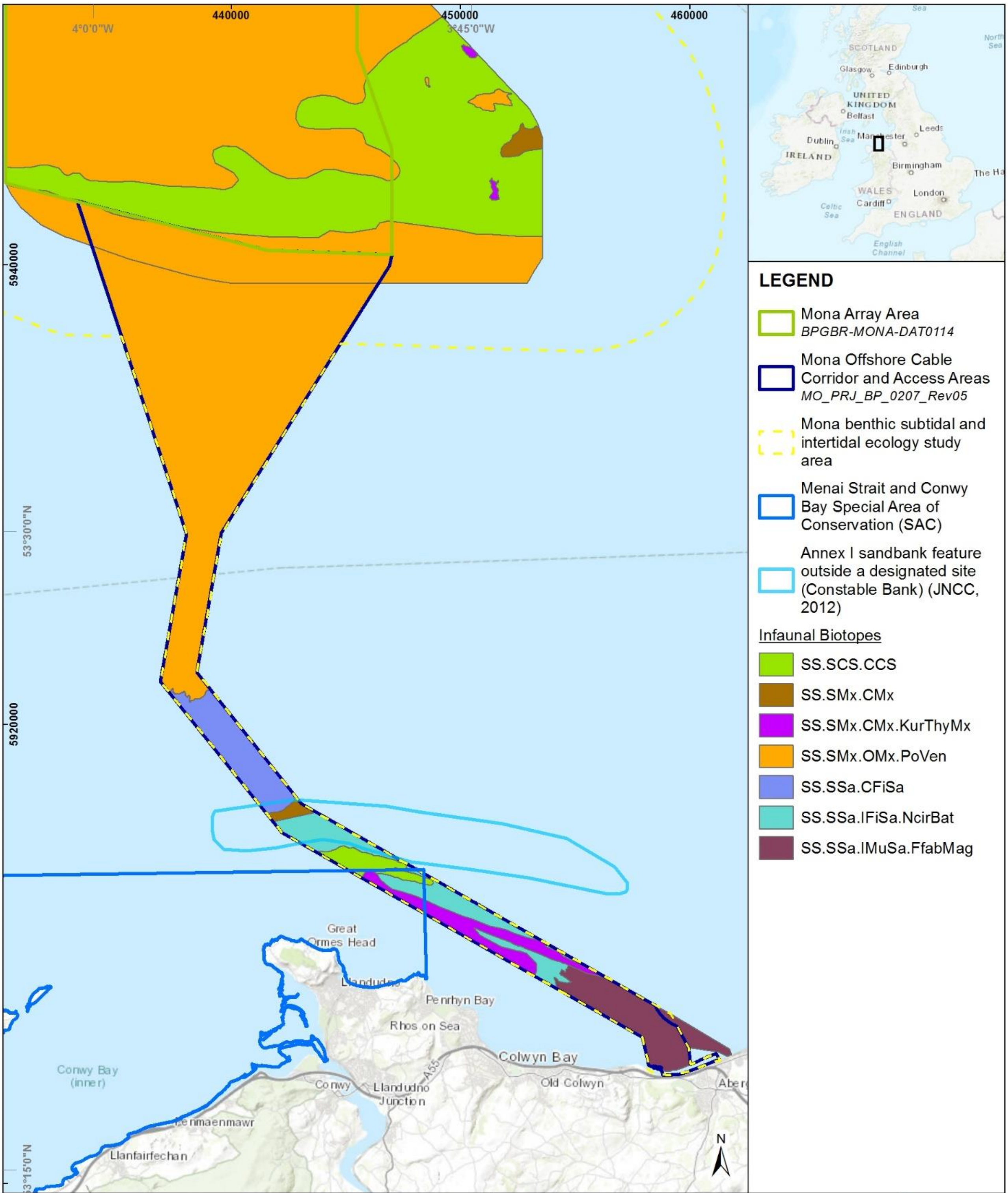


Figure 1.17: Preliminary infaunal biotopes recorded from grab samples across the Mona Array Area and ZoI within the Mona benthic subtidal and intertidal ecology study area (all biotope codes are defined in Appendix H).



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Data Sources: Client, Natural Resource Wales, JNCC

Project Name: MONA OFFSHORE WIND PROJECT

Scale: 0 1 2 4 nm; 0 1 2 4 6 8 km

Drawing Number: RPSE-MN-ES-BEN-013-03

Drawing Title: INFAUNAL BIOTOPES RECORDED FROM GRAB SAMPLES ACROSS THE MONA OFFSHORE CABLE CORRIDOR WITHIN THE MONA BENTHIC SUBTIDAL AND INTERTIDAL ECOLOGY STUDY AREA (ALL BIOTOPE CODES ARE DEFINED IN APPENDIX H).

Geodetic Information:
Datum: ETRS 1989
Projection: ETRS 1989 UTM Zone 30N
Scale@160mmx220mm: 1:280,000

VER	DATE	DETAILS	BY	CHECK
00	14/07/23	First Issue	MJ	TH
03	27/09/23	Revision	NA	TH

Figure 1.18: Preliminary infaunal biotopes recorded from grab samples across the Mona Offshore Cable Corridor within the Mona benthic subtidal and intertidal ecology study area (all biotope codes are defined in Appendix H).

Univariate analysis

Mona Array Area and ZoI

1.7.4.47 The following univariate statistics were calculated for each benthic infaunal grab sample station: number of species (S), abundance (N), ash free dry mass in grams (g), Margalef's index of Richness (d), Pielou's Evenness index (J'), Shannon-Wiener Diversity index (H') and Simpson's index of Dominance (λ). The mean of each of these indices was then calculated for each of the preliminary infaunal biotopes identified from the infaunal data and these are summarised in Table 1.14 with univariate statistics for individual sites presented in Appendix E.

1.7.4.48 The univariate statistics indicate that the SS.SMx.OMx.PoVen biotope, had the highest number of taxa (77.97±19.38). The SS.SMx.OMx biotope had the lowest number of taxa (36). The highest mean number of individuals was associated with SS.SMx.CMx (269.67 ± 46.48, Table 1.14). Both muddy sand biotopes, SS.SMu.CSaMu.LkorPpel and SS.SSa.CMuSa, had a low number of taxa (39.80 ± 13.74 and 38 respectively). The lowest mean number of individuals (53) was recorded in the SS.SMx.OMx biotope, although it should be noted that this biotope was associated with only a single sample.

1.7.4.49 The highest mean diversity score of all the identified communities was associated with the biotope SS.SMx.OMx.PoVen (d=13.99 ±2.93 and H'=3.85 ± 0.36) which was expected as this biotope had the highest number of taxa. The lowest diversity recorded was associated with the SS.SSa.CMuSa biotope (d=7.24 and H'=2.89). This was expected as this biotope has among the lowest number of taxa and individuals. This is unusual as this circalittoral habitat is associated with a low energy environment and tends to be more stable enabling it to support a richer infaunal community (JNCC, 2022f). Overall, the mixed sediment habitats had higher biodiversity than the coarse or sandy mud-based habitats; this was expected due to the greater habitat diversity provided by the mixed sediment environment compared to the other sediment types therefore supporting a higher number of species. For example, the SS.SMu.CSaMu.LkorPpel biotope which was associated with sand and mud based sediments had one of the lowest mean diversity scores (d=7.63 ± 2.27 and H'=3.03 ± 0.28).

1.7.4.50 Pielou's evenness scores (J') and the Simpson's index of Dominance (λ) scores were similar across all the biotopes. Values of J' were between 0.790 and 0.96 for all of the biotopes with the highest value of J' for SS.SMx.OMx (J'=0.96). This indicated an even distribution of abundances among taxa and that this biotope was not dominated by a high number of individuals within a small number of species. Values of J' were lowest for the SS.SSa.CFiSa and SS.SSa.CMuSa biotopes (J'=0.80 for both) which shows that although this value is slightly lower it shows a very small range which indicates the same even distribution of abundances among taxa and that these biotopes were not dominated by a high number of individuals within a small number of species. Values for λ also showed a small range (0.90 to 0.98) which indicates that all of the biotopes are represented by a wide diversity of species.

Table 1.14: Mean (± standard deviation) univariate statistics for the preliminary infaunal benthic biotopes.

Biotope	S	N	Biomass (g)	d	J'	H'	λ
SS.SCS.CCS	37.13 ±16.81	135.11 ±106.88	0.44 ±0.65	7.51 ± 2.84	0.83 ± 0.11	2.90 ± 0.59	0.90 ±0.09

Biotope	S	N	Biomass (g)	d	J'	H'	λ
SS.SMx.OMx	36	53	7.88 ± 14.28	8.82	0.96	3.43	0.98
SS.SMx.CMx	63.75 ±19.74	284.75 ±48.98	4.01 ± 4.41	11.14 ±3.49	0.79 ±0.10	3.30 ±0.64	0.92 ±0.06
SS.SMu.CSaMu.LkorPpel	39.80 ±13.74	160.40 ±58.91	0.86 ± 0.95	7.63 ±2.27	0.84 ± 0.06	3.03 ± 0.28	0.92 ±0.03
SS.SMx.OMx.PoVen	77.97±19.38	254.34 ±113.05	2.55 ± 2.40	13.99 ±2.93	0.89 ± 0.05	3.85 ± 0.36	0.97 ±0.93
SS.SMx.CMx.KurThyMx	67 ±2.83	249.50 ±79.90	2.71 ± 3.77	12.02 ± 0.20	0.90 ± 0.02	3.65 ± 0.05	0.96 ±0.002
SS.SSa.CFiSa	44	238	1.06	7.86	0.80	3.03	0.93
SS.SSa.CMuSa	38	166	0.07	7.24	0.80	2.89	0.92

1.7.4.51 Figure 1.19 to Figure 1.21 show the mean number of taxa, individuals, abundance, and biomass for each of the major faunal groups (i.e. Annelida, Crustacea, Mollusca, Echinodermata and Other) in each of the biotopes identified, within the Mona benthic subtidal and intertidal ecology study area, from the benthic infaunal grabs.

1.7.4.52 All biotopes were dominated by Annelida, also with large numbers of Crustacea, Mollusca and Other taxa (this group includes taxa such as Cnidaria, Chordata, Foraminifera and Hemichordata). Overall the mixed sediment biotopes (SS.SMx.OMx.PoVen, SS.SMx.CMx.KurThyMx and SS.SMx.CMx) had high abundances of taxa, with the exception of SS.SMx.OMx which was represented by a single sample station and therefore may not be representative of its biotope as a whole. The biotope SS.SSa.CFiSa also exhibited a high mean number of individuals. Figure 1.20 shows the distribution of the taxonomic groups within each biotopes. This shows that for all the biotopes Annelida made up the highest proportion of individuals when controlled for the number of sample station in each biotope. Crustacea and Other taxa make up the second largest proportion of individuals for the majority of biotopes except for SS.SSa.CMuSa which has a significant proportion of Mollusca.

1.7.4.53 As shown in Figure 1.19, the proportions of the number of taxa in each major taxonomic groups are similar across the biotopes and mirrored the patterns observed in the mean abundance, as described in paragraph 1.7.4.52, with Annelida and Crustacea making up the highest proportion of the taxa associated with each biotope. All major taxonomic groups were represented in all biotopes. The proportion of Crustacea and Mollusca in the number of taxa in each biotope is greater than their proportion in the number of individuals for all biotopes, highlighting that each of the Crustacea and Mollusca taxa are represented by a small number of individuals.

1.7.4.54 Biomass was considerably higher in association with the SS.SMx.OMx and SS.SMx.CMx biotopes, although noting that these were represented by a low number of sample stations (one and four sample stations respectively). Biomass for the SS.SMx.CMx.KurThyMx biotope and the SS.SMx.OMx.PoVen biotope was dominated by Mollusca. The muddy sand communities associated with the SS.SMu.CSaMu.LkorPpel biotope had an overall lower mean biomass and were dominated by Echinodermata. Annelida made up a smaller proportion of the total biomass in each biotope, which is expected due to the small size of Annelida (Figure

1.21). Both the coarse sediment SS.SCS.CCS biotope and the muddy sand SS.SSa.CMuSa biotope had very low overall biomass as they were represented by few sample stations and were generally classified based on their sediment type due to sparce infaunal data. Biomass per taxonomic group for each sample station is presented in Appendix E.

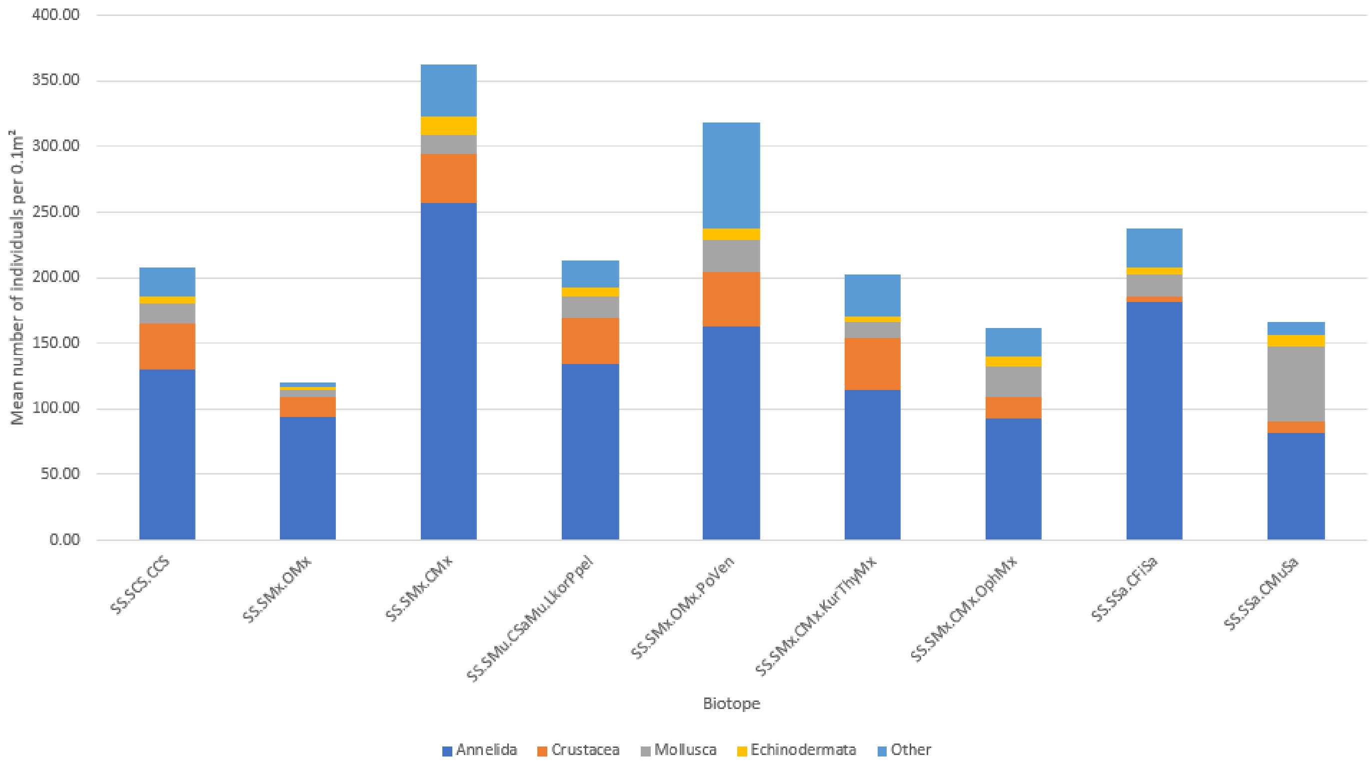


Figure 1.19: Mean abundance of individuals (per 0.1 m2) per taxonomic group for each infaunal biotope.

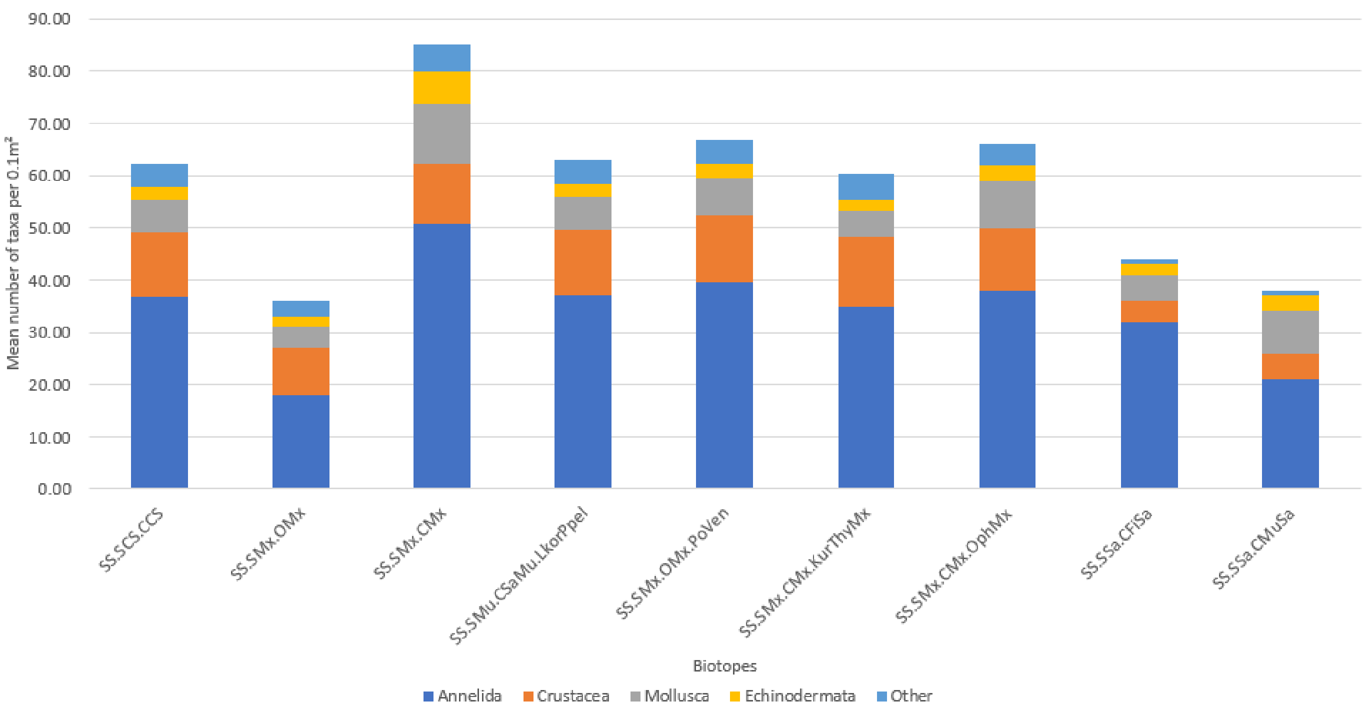


Figure 1.20: Mean number of taxa (per 0.1 m2) per taxonomic group identified for each infaunal biotope.

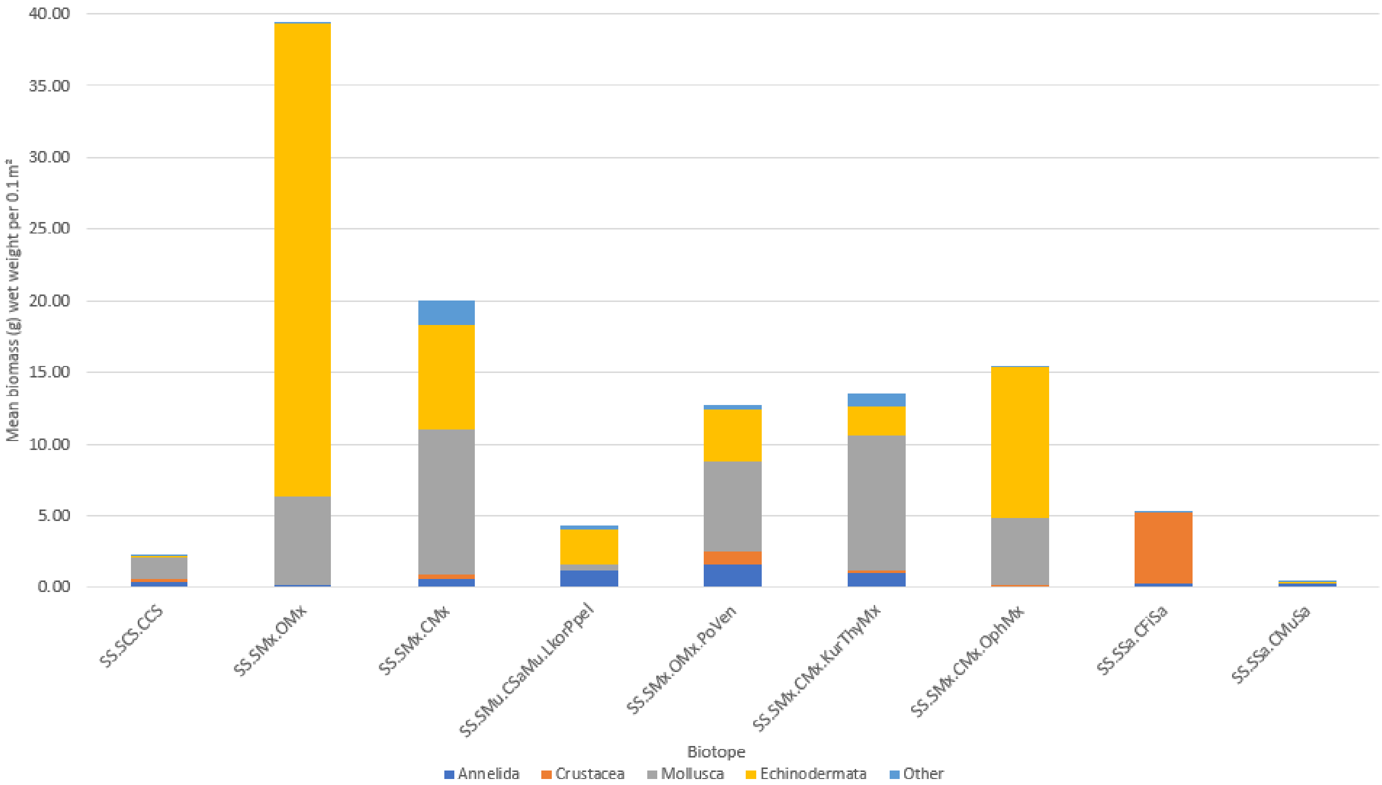


Figure 1.21: Mean biomass (per 0.1 m2) per taxonomic group for each infaunal biotope.

Mona Offshore Cable Corridor

1.7.4.55 The univariate statistics (Table 1.15) indicate that the SS.SMx.OMx.PoVen biotope, had the highest number of taxa (80.67 ± 13.17). The SS.SSa.CFiSa biotope had the lowest number of taxa (24). The highest mean number of individuals was associated with SS.SMx.OMx.PoVen (102.33 ± 16.69). All of the mud and sand based biotopes, SS.SSa.CFiSa, SS.SSa.IMuSa.FfabMag and SS.SSa.IFiSa.NcirBat, had a low number of taxa. The lowest mean number of individuals (31) was recorded in the SS.SSa.CFiSa biotope.

1.7.4.56 The highest mean diversity score of all the identified communities was associated with the biotope SS.SMx.OMx.PoVen (d=17.19 ± 2.27 and H'=4.35 ± 0.18) which was expected as this biotope had the highest number of taxa. The SS.SMx.CMx biotope had the second highest mean diversity score (d=12.59 ± 2.43 and H'=3.94 ± 0.24). The lowest diversity recorded was associated with the SS.SSa.CFiSa biotope (d=6.80 ± 0.87 and H'=3.14 ± 0.18). This was expected as this biotope has among the lowest number of taxa and individuals. Overall, the mixed sediment habitats had higher biodiversity than the coarse or sandy mud-based habitats; this was expected due to the greater habitat diversity provided by the mixed sediment environment compared to the other sediment types therefore supporting a higher number of species.

1.7.4.57 Pielou's evenness scores (J') and the Simpson's index of Dominance (λ) scores were similar across all the biotopes. Values of J' were all 0.99 which indicates an even distribution of abundances among taxa and that no biotope was dominated by a high number of individuals within a small number of species. Values for λ also showed a small range (0.99 to 1) which indicates that all of the biotopes are represented by a wide diversity of species.

Table 1.15: Mean (± standard deviation) univariate statistics for the preliminary infaunal benthic biotopes in the Mona Offshore Cable Corridor.

Biotope	S	N	Biomass (g)	d	J'	H'	λ
SS.SMx.OMx.PoVen	80.67 ±13.17	102.33 ± 16.69	52.57 ± 10.97	17.19 ± 2.27	0.99 ± 0.001	4.35 ± 0.18	1.00 ± 0.001
SS.SMx.CMx	53.50 ± 12.02	64.00 ± 9.90	1.75 ± 1.75	12.59 ± 2.43	0.99 ± 0.004	3.94 ± 0.24	1.00 ± 0.003
SS.SSa.CFiSa	24.33 ± 7.55	31.33 ± 9.71	2.92 ± 4.34	6.80 ± 0.87	0.99 ± 0.006	3.14 ± 0.18	0.99 ± 0.003
SS.SSa.IMuSa.FfabMag	26.33 ±13.74	35.00 ± 9.57	12.18 ± 7.44	7.09 ± 1.59	0.99 ± 0.005	3.19 ± 0.29	0.99 ±0.005
SS.SSa.IFiSa.NcirBat	32.08 ±5.63	41.17 ±7.33	4.73 ± 8.24	8.34 ±1.12	0.99 ± 0.003	3.42 ± 0.17	0.99 ±0.002
SS.SMx.CMx.KurThyMx	41.67 ±5.13	55.33 ±6.51	1.06 ± 0.66	10.13 ± 0.99	0.99 ± 0.003	3.69 ± 0.13	0.99 ±0.002
SS.SCS.CCS	36.00	47.00	1	9.09	0.99	3.54	0.99

1.7.4.58 Figure 1.19 to Figure 1.21 show the mean number of taxa, individuals, abundance, and biomass for each of the major faunal groups (i.e. Annelida, Crustacea, Mollusca, Echinodermata and Other) in each of the biotopes identified, within the Mona benthic subtidal and intertidal ecology study area, from the benthic infaunal grabs in the Mona Offshore Cable Corridor.

1.7.4.59 Figure 1.20 shows the distribution of the taxonomic groups within each biotopes. This shows that for all the biotopes Annelida made up the highest proportion of individuals when controlled for the number of sample station in each biotope. Mollusca and Crustacea make up the second largest proportion of individuals.

1.7.4.60 As shown in Figure 1.19, the proportions of the number of taxa in each major taxonomic groups are similar across the biotopes and mirror the patterns observed in the mean abundance, as described in paragraph 1.7.4.59, with Annelida making up the highest proportion of the taxa associated with each biotope. All major taxonomic groups were represented in all biotopes. The proportion of Crustacea and Mollusca in the number of taxa in each biotope is greater than their proportion in the number of individuals for all biotopes, highlighting that each of the Crustacea and Mollusca taxa are represented by a small number of individuals.

1.7.4.61 Biomass was considerably higher in association with the SS.SSa.IMuSa.FfabMag, SS.SMx.OMx.PoVen and SS.SSa.IFiSa.NcirBat biotopes. Biomass for all of these biotopes was dominated by significantly by Mollusca. The SSa.IMuSa.FfabMag and SS.SMx.OMx.PoVen biotopes also exhibited a large mass of Echinoderms. Annelida made up a smaller proportion of the total biomass in each biotope, which is expected due to the relatively small size of Annelida (Figure 1.21). For the sand based biotope SS.SSa.CFiSa the largest biomass was Mollusca followed by Annelida which represent the burrowing infauna which characterise these habitats. The SS.SMx.CMx, and SS.SCS.CCS biotopes had the lowest overall biomasses which is reflected in the overall low number of individuals reported for the sample stations which represent these biotopes. Biomass per taxonomic group for each sample station is presented in Appendix E.

1.7.5 Results – epifaunal analysis

Seabed imagery

Mona Array Area and ZoI

1.7.5.1 The sediments recorded in the seabed imagery largely comprised of an amalgamation of subtidal mixed sediments and coarse sediments within the Mona Array Area and ZoI. In general, high numbers of epifaunal species were recorded in association with the coarser sediments (coarse and mixed sediments). Epifaunal species recorded were dominated by Annelida and Cnidarians with low numbers of Molluscs and Chordata. *Ophiura* sp. was the most abundant taxa and was associated with every sediment type (Figure 1.22).

Figure 1.22: *Ophiura* sp. on mixed sediment and rock at sample station ENV87.

1.7.5.2 Across the Mona Array Area, the community composition observed from the DDV footage was similar between the coarse and mixed sediment. Some of the most prominent species across the Mona Array Area included *Serpulidae*, *Psolusphantapus*, *Alcyonium digitatum*, *Asterias rubens*, *Pagurus bernhardus* and *Buccinidae*.

Mona Offshore Cable Corridor

1.7.5.3 The sediments recorded in the seabed imagery largely comprised of sandy sediments within the Mona Offshore Cable Corridor with smaller areas of coarse and mixed sediment. In general, high numbers of epifaunal species were recorded in association with the coarse and mixed sediments. Epifaunal species recorded were dominated by Annelids, Cnidarians and Echinoderms with low numbers of molluscs. *Serpulidae* sp. was the most abundant taxa which was particularly associated with the sample stations closest to the Mona Array Area.

1.7.5.4 Across the Mona Offshore Cable Corridor, the community composition observed from the DDV footage was different between the sand based sample stations inshore and the coarse and mixed stations located further offshore. The offshore coarse and mixed sample stations had a much greater diversity of species as well as much higher abundance. The sand-based sample stations were much more sparsely populated with many stations with no epifauna visible from the DDV.

1.7.5.5 Some of the most prominent species across the Mona Offshore Cable Corridor include *Serpulidae*, *A. digitatum*, *A. rubens*, *Ophiura albida, Corymorpha nutans, Pectinidae* and *Metridium*.

Summary statistics

1.7.5.6 The epifaunal data that were recorded as present/absent, and therefore removed from the infaunal grab data analysis, were combined with the epifaunal data from the DDV.

Mona Array Area and ZoI

1.7.5.7 In the Mona Array Area and ZoI a total of 319 taxa and two categories of burrows and waste casts were recorded from the 110 infaunal grabs and DDV stations sampled during the site-specific benthic surveys. Of all the taxa recorded, only faunal turf was recorded across all sample stations. *A digitatum* were also highly common, with 108 sample stations recording them. Sample station ENV90 in the wider regional benthic subtidal and intertidal ecology study area, north of the Mona Array Area, recorded the highest number of epifaunal taxa, with sample station ENV06 (also in the wider regional benthic subtidal and intertidal ecology study area, north of the Mona Array Area (i.e. the Morgan Array Area)) recording the highest number of burrows.

Mona Offshore Cable Corridor

1.7.5.8 In the Mona Offshore Cable Corridor, a total of 179 taxa in the grab samples and 82 taxa in the DDV dataset were recorded from the 32 stations sampled during the site-specific benthic survey. No taxa were recorded across all sample stations. Sample station ENV59 in the north of the Mona Offshore Cable Corridor, recorded the highest number of epifaunal taxa as well as highest abundance of epifaunal individuals, followed by sample station ENV55. As previously noted in paragraph 1.7.5.4, there was variation in the epifaunal abundance and diversity between the inshore and offshore sample stations. The average number of epifaunal individuals recorded at sample stations OCC52 to OCC61 in the north of the Mona Offshore Cable Corridor was 116 individuals and the average for sample stations OCC62 to OCC153, in the central and south section of the Mona Offshore Cable Corridor was 11 individuals.

Multivariate community analysis

Mona Array Area and ZoI

1.7.5.9 The results of the CLUSTER analysis, SIMPROF test and SIMPER analysis were used, together with the raw untransformed data, to assign preliminary epifaunal biotopes to sample stations based on the dataset which combined the DDV data and the epibenthic component of the grab samples (Table 1.16). In several instances, clusters that were identified as significantly different from each other in the SIMPROF tests were assigned the same biotope code. This was based on a review of the SIMPER results which indicated that the differences between the groups could be explained by differences in abundances of characterising species rather than the presence/absence of key species. Full results of the multivariate analysis are presented in Appendix C.

Mona Array Area and ZOI

1.7.5.10 For the Mona Array Area and ZoI the results of the hierarchical CLUSTER analysis of the square root transformed epifaunal dataset (Figure 1.25) together with the SIMPROF test identified 17 Faunal groups that were statistically dissimilar, based on the SIMPROF test (Table 1.16). The 2D MDS plot is presented in Figure 1.24 and the low stress value (0.05) indicates that this is a good representation of the data. This plot also shows a strong distinction between the 2022 ZoI sites and the 2021 Mona Array Area ZoI and Mona Array Area data, this is potentially due to the limited number of epifauna found at some ZoI sites, or due to them being represented by a very different array of organisms but still characterised by similar physical environments that fall within the same biotope. The 3D MDS plot has not been presented as the 2D MDS plot presents a clearer representation of the data.

1.7.5.11 The 2D MDS plot is presented in Figure 1.27 shows a very strong distinction between the 2021 sample stations in the Mona Array Area and ZoI and the 2022 sample station in the Mona Array Area and ZoI. Table 1.16 however identifies that there is often overlap in the habitats identified in these datasets, this may be due to differences in species abundance and species present. Despite these differences the combination of the abiotic conditions such as sediment type and the biotic community may lead to the allocation of the same biotope despite the large distance displayed by the 2D MDS plot.

1.7.5.12 Some sample stations in faunal groups associated with the Mona Array Area and ZoI (A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P and Q) showed distinct clustering away from each other, indicating distinct communities. Faunal groups H and E, representing communities in the north of the Mona Array Area, showed tight clustering with Bray-Curtis similarity of 78.17% and 66.45% respectively. Faunal group L was the largest Simprof group identified (42 sample stations) with a Bray-Curtis similarity of 51.85%. The difference in Faunal groups is discussed in the following paragraphs.

1.7.5.13 All Faunal groups, except D, J and P, had sample stations which were distributed throughout the Mona Array Area, and in the west of the ZoI, that were largely characterised by mixed sediments. The faunal communities in these sample stations were characterised by taxa such as polychaetes, echinoderms and crustaceans which included *Serpulidae, Ophiura* spp., and *A. digitatum*. The majority of sample stations in these faunal groups were allocated the SS.SMx.CMx biotope. The wide distribution of the sample stations in Faunal groups L resulted in the majority of the Mona Array Area being allocated the SS.SMx.CMx biotope (Figure 1.28).

1.7.5.14 Some stations in Faunal groups D, J and P, as well as some stations in Faunal groups B and C, located in a few areas distributed throughout the Mona Array Area as well as within the Morgan Array Area and in the east of the Mona Array Area ZoI were all characterised by coarse sediments and communities of polychaetes (e.g. *Serpulidae*), echinoderms and crustaceans (e.g. *Pagurus prideaux*) with some bryozoans (e.g. Penetrantia) and soft corals (e.g. *A. digitatum*). The habitats represented in this faunal group were varied and did not contain the characteristic species which would lead to a more specific biotope allocation. Therefore, on the basis of the epifaunal data and sediment type, Faunal groups D, J and P, as well as some stations in Faunal groups B and C, were allocated the SS.SCS.CCS biotope.

1.7.5.15 Faunal group L had sample stations distributed through the regional benthic subtidal and intertidal ecology study area, north of the Mona Array Area (i.e. within the Morgan Array Area). Sample stations in Faunal group L were characterised by sand and muddy sand sediments. The associated communities recorded from the epifaunal data were largely characterised by echinoderms such as *Ophiura* and crustaceans such as *Pagurus bernhardus*. Similar to the infaunal multivariate analysis, the biotopes recorded in the regional benthic subtidal and intertidal ecology study area, to the north of the Mona Array Area, demonstrated a transition to increasing fines content with increased proximity to the coast and the communities shifted to accommodate this change.

1.7.5.16 In the analysis of samples from the ZoI, two sample stations in Faunal group A (ZOI44 and ZOI49) were characterised by coarse sediments including gravelly sediments scattered with shell fragments and cobbles. The communities at the two sample stations in this Faunal group (ZOI44 and ZOI49) were dominated by the brittlestar O. fragilis, with >40 individuals recorded at each station, as well as A. digitatum and Serpulidae. Therefore, on the basis of the epifaunal data, two sample stations within Faunal group A were allocated the SS.SMx.CMx.OphMx biotope. These sample stations were located in the west of the Mona Array Area ZoI (Figure 1.6). This aligns well with the results of the surveys conducted for the Rhiannon Wind Farm which also identified the SS.SMx.CMx.OphMx biotope in this region of the Mona Array Area ZoI (Figure 1.3).

1.7.5.17 Stations in Faunal group Q were characterised by the SS.SSa.CMuSa biotope. This biotope was, however, only recorded in the wider regional benthic subtidal and intertidal ecology study area in the area overlapping with the Morgan Array Area. This is outside the ZoI of the Mona Offshore Wind Project and so is not discussed further in this report.

1.7.5.18 The SS.SSa.CMuSa biotope was also identified in Faunal group Q however this was only found within the Morgan Array Area and so outside the ZoI for the Mona Offshore Wind Project, and so is not discussed further in this report.

1.7.5.19 The Faunal groups presented in the SIMPER analysis, and the raw data, were used to assign three preliminary epifaunal biotopes to the site-specific survey data within the Mona Array Area and ZoI (Table 1.18). presents the preliminary epifaunal biotopes assigned across the Mona Array Area and ZoI from the analyses of the epifaunal component of the grab data and DDV. The full SIMPER analysis results are presented in Appendix C and the full data is available on request.

Comparison between 2021 and 2022 Mona Array Area and ZoI data

1.7.5.20 Analysis of the epifaunal DDV and grab data from the stations sampled in 2021 and resampled in 2022 suggested some dissimilarity in the epifaunal communities. A CLUSTER analysis including a SIMPROF test did not group samples from the same station together. An ANOSIM test which determines if the difference between simprof groups is greater than the difference within simprof groups was also conducted. The results of this analysis provided an R statistic of 0.99 which suggests that were is a greater difference between Faunal groups than within them. Overall, the conditions within the Mona Array Area and ZoI are highly changeable, this is particularly notable for epifauna which includes mobile species that could be distributed over a wider area as well as being more likely to be affected by strong currents.

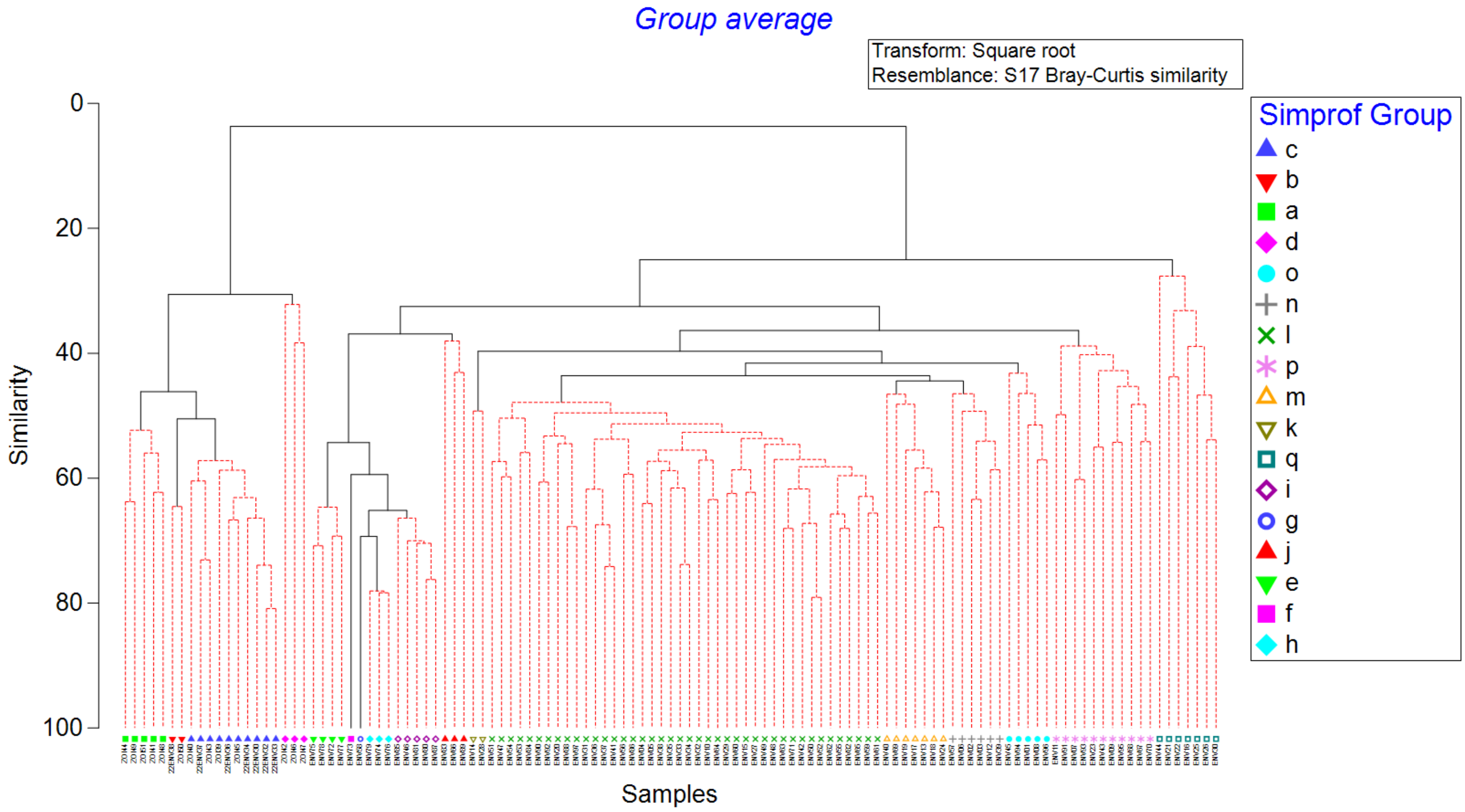


Figure 1.23: Dendrogram of epifaunal communities in the Mona Array Area and ZoI (from DDV and epifaunal component of grab data).

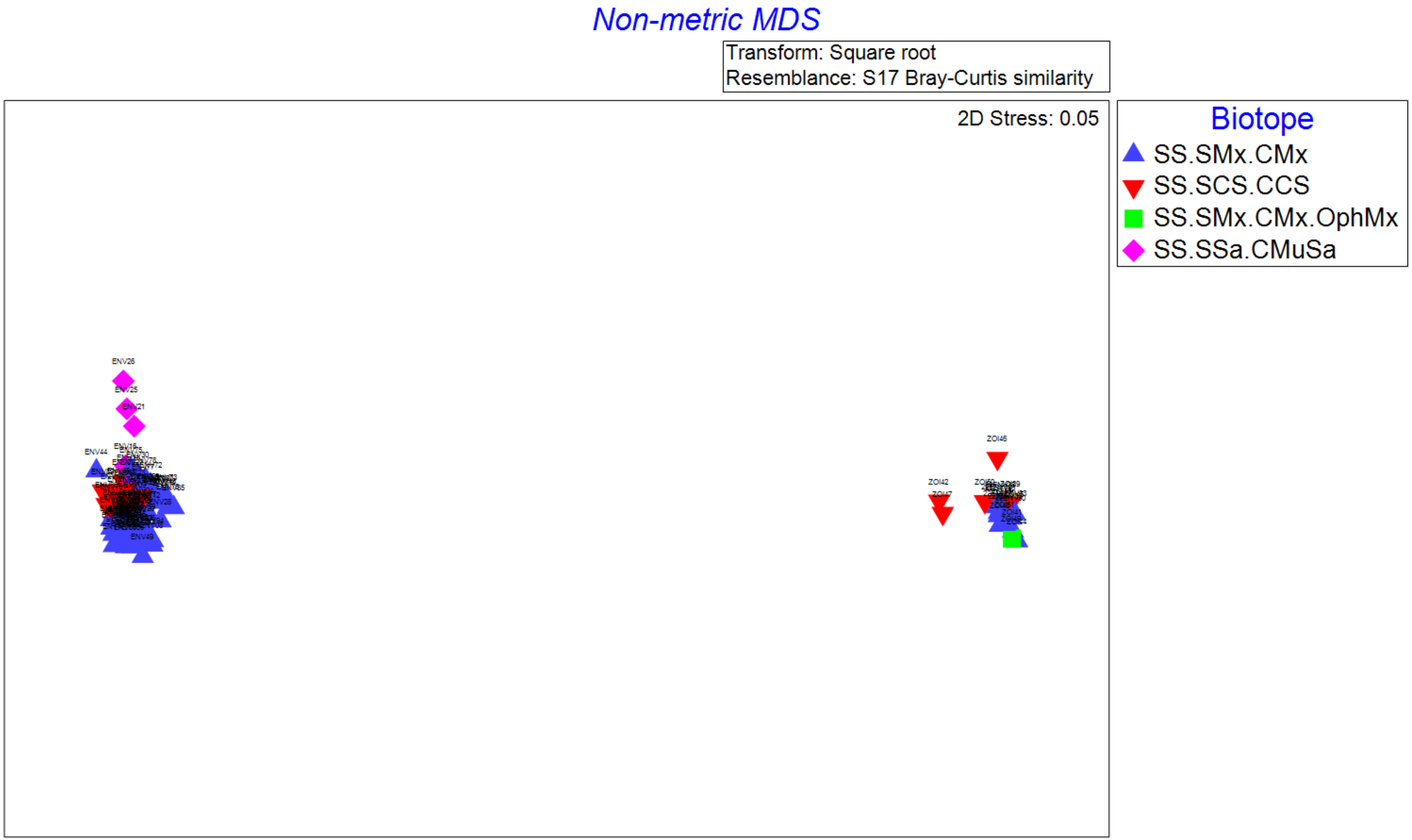


Figure 1.24: 2D MDS plot of epifaunal communities in the Mona Array Area and ZoI (from DDV and epifaunal component of grab data.

Table 1.16: Simprof groups and biotope classifications for the Mona Array Area and ZoI epifaunal dataset (from DDV and epifaunal component of grab data).

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising epifaunal taxa according to SIMPER analysis	Biotope	Comments
A	ZOI41	44–- 58	Mixed sediments	*Serpulidae, Faunal turf, Alcyonium digitatum, Ophiura albida, Ophiothrix fragilis*	SS.SMx.CMx	Faunal group A showed relatively high Bray-Curtis dissimilarity with Faunal group J (97.88%). Faunal group J did not have any *Serpulidae* which were in high abundance at Faunal Group A. Faunal group A showed low Bray-Curtis dissimilarity with Faunal group C (52.45%). Faunal group C recorded similar abundances of *O. albida* as in Faunal group A.
	ZOI44		Coarse sediment		SS.SMx.CMx.OphMx	
	ZOI48		Mixed sediments		SS.SMx.CMx	
	ZOI49		Gravelly sediment with scattered shell fragments and cobbles		SS.SMx.CMx.OphMx	
	ZOI51		Coarse sediment		SS.SMx.CMx	
B	22ENV38	39–- 46	Coarse sediment	*Faunal turf, Ceriantharia, Actiniaria, Ophiura ophiura, Animalia tubes, Serpulidae*	SS.SMx.CMx	Faunal group B showed relatively high Bray-Curtis dissimilarity with Faunal group J (96.95%). Faunal group J did not have any *Ceriantharia* which were in high abundance at Faunal Group B. Faunal group B showed low Bray-Curtis dissimilarity with Faunal group C (49.49%). Faunal group C recorded similar abundances of faunal turf as in Faunal group B.
	ZOI50		Sand and muddy sand		SS.SCS.CCS	
C	22ENV30	36–- 49	Mixed sediments	*Serpulidae, Faunal turf, Alcyonium digitatum, Ophiura albida*	SS.SMx.CMx	Faunal group B showed relatively high Bray-Curtis dissimilarity with Faunal group J (97.63%). Faunal group J did not have any *Serpulidae* which were in high abundance at Faunal Group C. Faunal group C showed low Bray-Curtis dissimilarity with Faunal group B (49.49%). Faunal group C recorded similar abundances of faunal turf as in Faunal group B.
	22ENV32		Mixed sediments		SS.SMx.CMx	
	22ENV33		Mixed sediments		SS.SMx.CMx	
	22ENV34		Mixed sediments		SS.SMx.CMx	
	22ENV36		Mixed sediments		SS.SMx.CMx	
	22ENV37		Mixed sediments		SS.SMx.CMx	
	ZOI39		Coarse sediment		SS.SCS.CCS	

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising epifaunal taxa according to SIMPER analysis	Biotope	Comments
	ZOI40		Mixed sediments		SS.SMx.CMx	
	ZOI43		Coarse sediment		SS.SMx.CMx	
	ZOI45		Coarse sediment		SS.SMx.CMx	
D	ZOI42	33–- 46	Coarse sediment	*Paguroidea, Faunal turf, Scaphopoda*	SS.SCS.CCS	Faunal group D showed relatively high Bray-Curtis dissimilarity with most faunal groups (>90%). Faunal group D showed low Bray-Curtis dissimilarity with Faunal group B (76.48%). Faunal group B recorded an absence of *Scaphopoda* and *O. ophiura* in comparison with Faunal group D.
	ZOI46		Sand and muddy sand			
	ZOI47		Sand and muddy sand			
E	ENV72	39-41	Mixed sediment	*Serpulidaem, Tubulariam, Alcyonium digitatum, Pectinidae, Echinoidea, Pagurus bernhardus, Faunal turf*	SS.SMx.CMx	Faunal group E showed relatively high Bray-Curtis dissimilarity with Faunal group B (97.57%). This was due to the lack of species identified in Faunal group E. Faunal group E showed low Bray-Curtis dissimilarity with Faunal group H (39.20%). Faunal group D recorded an absence of *A. digitatum* and *Serpulidae* in comparison with Faunal group E.
	ENV75		Coarse sediment			
	ENV77		Mixed sediment			
	ENV78		Coarse sediment			
F	ENV73	43–- 45	Mixed sediment	*Serpulidae, Alcyonium digitatum, Ophiura, Pectinidae,* Faunal Turf, *Ophiothrix fragilis, Pagurus bernhardus, Tubularia, Buccinidae, Actinaria, Asteria rubens, Cirripedia*	SS.SMx.CMx	N/A
G	ENV58	43–- 45	Mixed sediment	*Serpulidae, Alcyonium digitatum, Ophiura, Pectinidae,* Faunal Turf, *Ophiothrix fragilis, Pagurus bernhardus,*	SS.SMx.CMx	N/A

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising epifaunal taxa according to SIMPER analysis	Biotope	Comments
				Tubularia, Buccinidae, Actinaria, Asteria rubens, Cirripedia		
H	ENV74	43–- 45	Mixed sediment	*Serpulidae, Alcyonium digitatum, Ophiura, Echinoidea, Pectinidae, Faunal turf, Tubularia*	SS.SMx.CMx	Faunal group H showed relatively high Bray-Curtis dissimilarity with Faunal group D (92.71%). This was due to the lack of species identified in Faunal group H. Faunal group H showed low Bray-Curtis dissimilarity with Faunal group G (30.66%). Faunal group G has a greater number of *Buccinidae* and *Asteroidea* in comparison with Faunal group H.
	ENV76		Mixed sediment			
	ENV79		Mixed sediment			
I	ENV46	43–- 45	Mixed sediment	*Serpulidae, Alcyonium digitatum, Ophiothrix fragilis, Ophiura, Faunal turf, Pectinidae, Actiniaria, Pagurus bernhardus*	SS.SMx.CMx	Faunal group I showed relatively high Bray-Curtis dissimilarity with Faunal group A (96.07%). This was due to the lack of species identified in Faunal group I. Faunal group I showed low Bray-Curtis dissimilarity with Faunal group G (34.33%). Faunal group G has a greater number of *Pectinidae* and *Asteria rubens* in comparison with Faunal group I.
	ENV80		Mixed sediment			
	ENV81		Mixed sediment			
	ENV85		Mixed sediment			
	ENV87		Mixed sediment			
J	ENV66	37-41	Coarse sediment	*Nematoda, Serpulidae, Faunal turf, Animalia tubes*	SS.SCS.CCS	Faunal group J showed relatively high Bray-Curtis dissimilarity with Faunal group A (98.09%). This was due to the lack of species identified in Faunal group J. Faunal group J showed low Bray-Curtis dissimilarity with Faunal group E (59.29%). Faunal group E has a greater number of *Tubularia* and *A. digitatum* in comparison with Faunal group J.
	ENV83		Mixed sediment			
	ENV89		Mixed sediment			
K	ENV14	36-45	Coarse sediment	*Euclymeninae, Scoloplos armiger, Decapoda, Penetrantia, Nematoda, Alcyonium digitatum*	SS.SMx.CMx	Faunal group K showed relatively high Bray-Curtis dissimilarity with Faunal group B (96.54%). This was due to the lack of species identified in Faunal group K. Faunal group K showed low Bray-Curtis dissimilarity with Faunal group M (56.36%). Faunal group M has a greater number of
	ENV28		Coarse sediment			

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising epifaunal taxa according to SIMPER analysis	Biotope	Comments
						Amphipoda and *Euclymeninae* in comparison with Faunal group K.
L	ENV04	40–- 49	Mixed sediment	*Nematoda, Serpulidae, Sertulariidae, Hydrallmania falcata, Copepoda, Ophiura, Alcyonium digitatum, Pectinidae, Porella concinna*	SS.SMx.CMx	Faunal group L showed relatively high Bray-Curtis dissimilarity with Faunal group B (97.23%). This was due to the lack of species identified in Faunal group L. Faunal group L showed low Bray-Curtis dissimilarity with Faunal group N (56.22%). Faunal group N had a greater number of *Porifera* and *Penetrantia* in comparison with Faunal group L.
	ENV05		Mixed sediment			
	ENV10		Mixed sediment			
	ENV15		Mixed sediment			
	ENV20		Coarse sediment			
	ENV27		Mixed sediment			
	ENV29		Mixed sediment			
	ENV31		Mixed sediment			
	ENV32		Mixed sediment			
	ENV33		Mixed sediment			
	ENV34		Mixed sediment			
	ENV35		Mixed sediments			
	ENV36		Mixed sediments			
	ENV37		Mixed sediments			
	ENV38		Mixed sediments			
	ENV41		Mixed sediment			
	ENV42		Mixed sediment			
	ENV47		Mixed sediments			
	ENV48		Mixed sediments			

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising epifaunal taxa according to SIMPER analysis	Biotope	Comments
	ENV49		Mixed sediments			
	ENV50		Mixed sediments			
	ENV51		Mixed sediments			
	ENV52		Mixed sediments			
	ENV53		Mixed sediments			
	ENV54		Mixed sediments			
	ENV55		Mixed sediments			
	ENV56		Coarse sediments			
	ENV59		Coarse sediment			
	ENV60		Mixed sediments			
	ENV61		Mixed sediments			
	ENV62		Mixed sediments			
	ENV63		Coarse sediments			
	ENV64		Mixed sediments			
	ENV65		Mixed sediment			
	ENV71		Mixed sediment			
	ENV82		Mixed sediment			
	ENV84		Mixed sediment			
	ENV86		Mixed sediment			
	ENV88		Mixed sediment			
	ENV90		Mixed sediment			

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising epifaunal taxa according to SIMPER analysis	Biotope	Comments
	ENV92		Mixed sediment			
	ENV97		Mixed sediments			
M	ENV13	37–- 51	Coarse sediment	*Nematoda, Euclymeninae, Copepoda, Amphipoda, Faunal turf, Decapoda, Alcyonium digitatum, Serpulidae*	SS.SMx.CMx	Faunal group M showed relatively high Bray-Curtis dissimilarity with Faunal group B (96.94%). This was due to the lack of species identified in Faunal group M. Faunal group M showed low Bray-Curtis dissimilarity with Faunal group N (55.55%). Faunal group N has a greater number of *Decapoda* and *A. digitatum* in comparison with Faunal group M.
	ENV17		Coarse sediment			
	ENV18		Coarse sediment			
	ENV19		Mixed sediment			
	ENV24		Mixed sediment			
	ENV40		Mixed sediment			
	ENV69		Mixed sediment			
N	ENV02	37–- 51	Coarse sediment	*Nematoda, Copepoda, Penetrantia, Decapoda, Folliculinidae, Alcyonium digitatum, Serpulidae, Cliona*	SS.SMx.CMx	Faunal group N showed relatively high Bray-Curtis dissimilarity with Faunal group B (96.91%). This was due to the lack of species identified in Faunal group N. Faunal group N showed low Bray-Curtis dissimilarity with Faunal group M (55.55%). Faunal group M has a greater number of *Euclymeninae* and *A. filiformis* in comparison with Faunal group N.
	ENV03		Mixed sediment			
	ENV06		Mixed sediment			
	ENV12		Mixed sediment			
	ENV39		Mixed sediment			
	ENV57		Coarse sediment			
O	ENV01	34-45	Mixed sediment	*Hydrallmania falcata, Copepoda, Sertulariidae, Nematoda, Faunal turf, Burrows, Schizomavella*	SS.SMx.CMx	Faunal group O showed relatively high Bray-Curtis dissimilarity with Faunal group B (97.00%). This was due to the lack of species identified in Faunal group O. Faunal group O showed low Bray-Curtis dissimilarity with Faunal group L (57.92%). Faunal group L has a greater number of *Nematoda* and *Serpulidae* in comparison with Faunal group O.
	ENV08		Coarse sediment			
	ENV45		Mixed sediment			
	ENV94		Coarse sediment			
	ENV96		Coarse sediment			
P	ENV07	34-47	Coarse sediment		SS.SCS.CCS	

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising epifaunal taxa according to SIMPER analysis	Biotope	Comments
	ENV09		Mixed sediment	*Nematoda, Faunal turf, Serpulidae, Ophiura, Copepoda, Tubulariam, Paguroidea, Alcyonium digitatum, Decapoda*		Faunal group P showed relatively high Bray-Curtis dissimilarity with Faunal group B (97.61%). This was due to the lack of species identified in Faunal group P. Faunal group P showed low Bray-Curtis dissimilarity with Faunal group M (58.24%). Faunal group M has a greater number of *Amphipoda* and *Decapoda* in comparison with Faunal group P.
	ENV11		Sand and muddy sand			
	ENV23		Sand and muddy sand			
	ENV43		Coarse sediment			
	ENV67		Sand and muddy sand			
	ENV68		Sand and muddy sand			
	ENV70		Coarse sediment			
	ENV91		Mixed sediment			
	ENV93		Coarse sediment			
	ENV95		Sand and muddy sand			
Q	ENV16	32-43	Sand and muddy sand	*Faunal turf, Ophiura, Phoronis, Paguroidea, Amphipoda, Astropecten irregularis*	SS.SSa.CMuSa	Faunal group Q showed relatively high Bray-Curtis dissimilarity with Faunal group B (97.91%). This was due to the lack of species identified in Faunal group Q. Faunal group Q showed low Bray-Curtis dissimilarity with Faunal group P (68.53%). Faunal group L has a greater number of *Nematoda* and *Copepoda* in comparison with Faunal group Q.
	ENV21		Sand and muddy sand		SS.SSa.CMuSa	
	ENV22		Sand and muddy sand		SS.SSa.CMuSa	
	ENV25		Sand and muddy sand		SS.SSa.CMuSa	
	ENV26		Sand and muddy sand		SS.SSa.CMuSa	

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising epifaunal taxa according to SIMPER analysis	Biotope	Comments
	ENV30		Sand and muddy sand		SS.SMx.CMx	
	ENV44		Coarse sediment		SS.SMx.CMx	

Mona Offshore Cable Corridor

1.7.5.21 For the Mona Offshore Cable Corridor the results of the hierarchical CLUSTER analysis of the square root transformed epifaunal dataset (Figure 1.25) together with the SIMPROF test identified 14 Faunal groups that were statistically dissimilar, based on the SIMPROF test. The 2D MDS plot presented in Figure 1.27 presents a subset MDS plot with outliers removed) and the low stress values (0.01 and 0.13, respectively) indicate that this is a good representation of the data. The 3D MDS plot has not been presented as the 2D MDS plot presents a clearer representation of the data.

1.7.5.22 The SIMPROF test identified 14 Faunal groups that were statistically dissimilar (see Figure 1.25 and Table 1.17). Faunal groups A (OCC133), C (OCC64), E (OCC63), F (OCC137), G (OCC062), H (OCC058), I (OCC61), J (OCC60) and L (OCC152) were outliers comprised of single samples. The majority of samples were clustered in three main groups; Faunal group K, Fauna group M and Faunal group N. Faunal group K showed tight clustering within its Faunal Group with a Bray-Curtis similarity of 61.62%. Faunal group N was the largest Simprof group identified (9 sample stations) and was highly distinct from other Faunal groups with a lowest dissimilarity of 79.44%. The difference in Faunal groups is discussed in the following paragraphs.

1.7.5.23 The single station outliers in Faunal groups H, I, J and L included sample stations which were distributed throughout the centre and north section of the Mona Offshore Cable Corridor, including one station in the Menai Strait and Conwy Bay SAC, and were largely characterised by mixed sediments. The faunal communities in these sample stations were characterised by echinoderms such as *Ophiura* sp., sponges such as *A. digitatum* and faunal turf. These faunal groups were allocated the SS.SMx.CMx biotope.

1.7.5.24 Faunal groups K, M and N represented sample stations in the north of the Mona Offshore Cable Corridor, where it meets the Mona Array Area as well as the central section. Sample stations in these Faunal groups were characterised by mixed sediments. The associated communities recorded from the epifaunal data were largely characterised by echinoderms (e.g. *A. rubens* and *O. albida*) and crustaceans (e.g. *Liocarcinus depurator*). These faunal groups matched up well with those in the south of the Mona Array Area and based on the physical environment and ecological communities they were allocated the SS.SMx.CMx.

1.7.5.25 The single station outliers in Faunal groups C, E and G as well as sample stations in Faunal groups B and D included sample stations in the centre of the Mona Offshore Cable Corridor (just to the north of Constable Bank). All of these sample stations were characterised by sand and muddy sand. These stations recorded species such as *Paguroidea, A. digitatum* and *Astropecten irregularis*. Therefore sample stations in these faunal groups were largely characterised by their sediment type resulting in the allocation of the circalittoral fine sand (SS.SSa.CFiSa) biotope.

1.7.5.26 The single station outliers in Faunal group D as well as sample stations in Faunal groups B and D included sample stations in the south of the Mona Offshore Cable Corridor near to the Mona landfall. All of these sample stations were characterised by sand and muddy sand or mud and sandy mud. These stations were relatively species poor, with very few epifaunal taxa recorded; species identified included *O. albida*, *Acrocnida brachiata, Sertulariidae* and *Electra* sp. Therefore these faunal groups were largely characterised by their sediment type resulting in the allocation of the infralittoral muddy sand (SS.SSa.IMuSa) biotope.

1.7.5.27 The single station outlier in Faunal group A (OCC133) was characterised by sand and muddy sand and no epifauna was recorded at this station. The biotope for this Faunal group was therefore determined by the physical characteristics leading to an allocation of the infralittoral mixed sediment (SS.SMx.IMx) biotope. Furthermore one station in Faunal Group N (OCC146), which lies within the overlap with the Menai Strait and Conwy Bay SAC was more associated with coarse sediment than mixed sediment like the other stations in the Faunal group and two species were recorded (*Liocarcinus depurator* and *Actiniaria*). Primarily based on the physical characteristics of the sample station this Faunal group has been allocated the biotope SS.SCS.CCS.

1.7.5.28 The Faunal groups presented in the SIMPER analysis, and the raw data, were used to assign five preliminary epifaunal biotopes to the site-specific survey data (Table 1.17). Figure 1.29 presents the preliminary epifaunal biotopes assigned across the Mona Offshore Cable Corridor from the analyses of the epifaunal component of the grab data and DDV. The full SIMPER analysis results are presented in Appendix C and the full data is available on request.

Menai Strait and Conwy Bay SAC

1.7.5.29 The five sample stations which overlap with the Menai Strait and Conwy Bay SAC were allocated to three separate Faunal groups. The sample stations OCC153 and OCC147 were in Faunal groups M, and were characterised by mixed sediments and assigned the SS.SMx.CMx biotope. The sample stations OCC151 and OCC152 were also allocated the SS.SMx.CMx biotope however were in Faunal groups N and L, respectively. The sample station OCC146 was in Faunal group N in the centre of the overlap with the SAC and was characterised by coarse sediment and assigned the SS.SCS.CCS biotope. Finally the biotope SS.SSa.CFiSa was also mapped in the area of overlap with the Menai Strait and Conwy Bay SAC based on the geophysical data and the prevailing geophysical feature of the surrounding environment which was an area of sand ripples in the south of the overlap area.

Table 1.17: Simprof groups and biotope classifications for the Mona Offshore Cable Corridor epifaunal dataset (DDV only).

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising epifaunal taxa according to SIMPER analysis	Biotope	Comments
A	OCC133	7	Sand and muddy sand	None	SS.SMx.IMx	None
B	OCC134	10	Mud and sandy mud	*Acrocnida brachiata*	SS.SSa.IMuSa	Faunal group B showed 100% Bray-Curtis dissimilarity to all Faunal groups except for Faunal group M (97.71%) and Faunal group N (98.11%). This was due to the lack of species identified in Faunal group B. All of these Faunal groups however contain *Acrocnida brachiata*.
	OCC142	16–- 17	Sand and muddy sand		SS.SSa.CFiSa	
C	OCC64	20–- 23	Sand and muddy sand	*Astropecten irregularis, Sertulariidae, Tubularia indivisa, Edwardsiidae, Nemertea, Nematoda*	SS.SSa.CFiSa	N/A
D	OCC138	9	Sand and muddy sand	*Sertulariidae*	SS.SSa.IMuSa	Faunal group D showed 100% Bray-Curtis dissimilarity with five Faunal groups(A, B, E, G and L). Faunal group D showed low Bray-Curtis dissimilarity with Faunal group F (77.99%) with Hydrallmania falcata contributing most to their dissimilarity.
	OCC145	20	Sand and muddy sand		SS.SSa.CFiSa	
E	OCC63	30–- 31	Sand and muddy sand	*Paguroidea, Pagurus prideaux, Adamsia palliata, Ensis ensis, Nematoda*	SS.SSa.CFiSa	N/A
F	OCC137	1 - 6	Sand and muddy sand	*Ophiura albida, Electra monostachys, Electra pilosa, Sertulariidae, Hydrallmania falcata*	SS.SSa.IMuSa	N/A

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising epifaunal taxa according to SIMPER analysis	Biotope	Comments
G	OCC62	30 - 31	Sand and muddy sand	*Nematoda, Actiniaria, Nemertesia antennina, Ophiura albida, Ophiura ophiura, Faunal turf, Pecten maximus*	SS.SSa.CFiSa	N/A
H	OCC58	46	Mixed sediments	*Hydrozoa,* Faunal turf, *Ophiura ophiura, Buccinium undatum, Naticidae, Pectinidae, Scaphapoda*	SS.SMx.CMx	N/A
I	OCC61	41-42	Coarse sediments	*Alcyonidium digitatum, Nematoda,* Animalia tubes, *Serpulidae, Paguroidea, Actinaria*, Faunal Turf, *Ophiura albida, Tubularia indivisa, Sertulariidae*	SS.SMx.CMx	N/A
J	OCC60	36	Mixed sediments	Faunal turf, *Hydrozoa, Serpulidae, Alcyonidium digitatum, Ophiura albida, Sertulariidae*	SS.SMx.CMx	N/A
K	OCC52	43 – 53	Coarse sediments	*Serpulidae*, Faunal turf, *Alcyonium digitatum, Pectinidae, Ophiura albida, Hydrozoa, Buccinium undatum*	SS.SMx.CMx	Faunal group K showed 100% Bray-Curtis dissimilarity with Faunal groups A and B. Faunal group K showed low Bray-Curtis dissimilarity with Faunal group J (43.71%). Faunal group J and K both contained Serpulidae, Alcyonium digitatum and Hydrozoa in similar numbers.
	OCC53		Mixed sediments			
	OCC54		Mixed sediments			

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising epifaunal taxa according to SIMPER analysis	Biotope	Comments
	OCC55		Mixed sediments			
	OCC56		Mixed sediments			
	OCC57		Mixed sediments			
L	OCC152	19	Coarse sediments	Faunal turf, *Nemertesia, antenna, Phoronis, Hydrallmania falcata, Conopeum recticulum, Asteria rubens*	SS.SMx.CMx	N/A
M	OCC141	13 - 19	Coarse sediments	*Metridium, Asterias rubens*	SS.SMx.CMx	Faunal group M showed 100% Bray-Curtis dissimilarity with Faunal group A with dissimilarity primarily due to a lack of shared species. Faunal group M showed low Bray-Curtis dissimilarity with Faunal group L (75.75%). Faunal group L has a greater number of *Asterias rubens* in comparison with Faunal group M.
	OCC144		Mixed sediments			
	OCC147		Coarse sediments			
	OCC148		Coarse sediments			

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising epifaunal taxa according to SIMPER analysis	Biotope	Comments
	OCC149		Sand and muddy sand			
	OCC153		Coarse sediments			
N	OCC146	20	Coarse sediments	*Asterias rubens, Liocarcinus depurator*	SS.SCS.CCS	Faunal group N showed 100% Bray-Curtis dissimilarity with Faunal group A and C. Faunal group N showed low Bray-Curtis dissimilarity with Faunal group L (79.44%). Faunal group L and N both contain Faunal turf and *Conopeum reticulum*.
	OCC65	5 - 21	Mixed sediments		SS.SMx.CMx	
	OCC135		Sand and muddy sand			
	OCC136		Sand and muddy sand			
	OCC139		Sand and muddy sand			
	OCC140		Sand and muddy sand			
	OCC143		Coarse sediments			

Simprof group	Station	Depth range (m)	EUNIS Folk classification	Characterising epifaunal taxa according to SIMPER analysis	Biotope	Comments
	OCC150		Sand and muddy sand			
	OCC151		Coarse sediments			

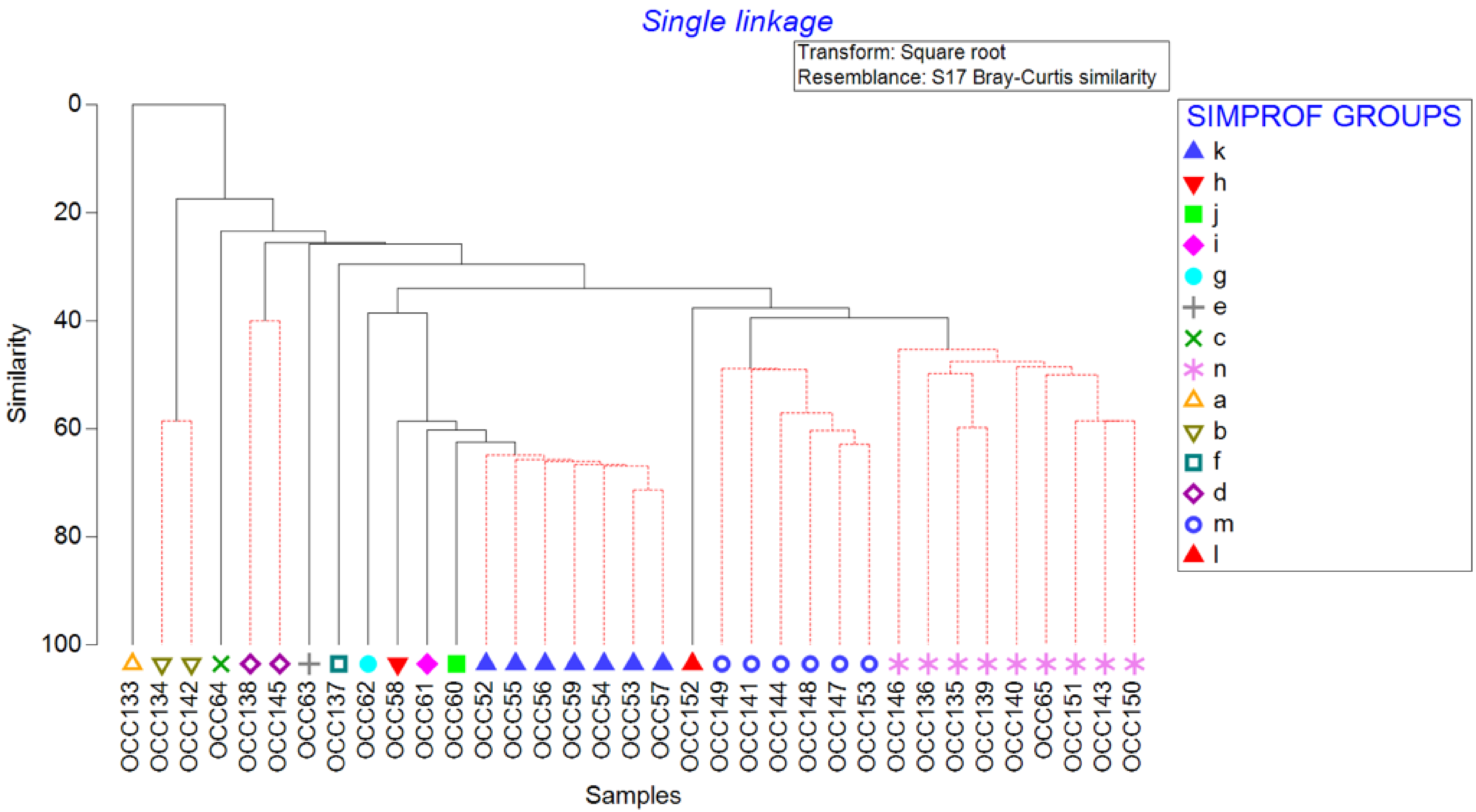


Figure 1.25: Dendrogram of epifaunal communities in the Mona Offshore Cable Corridor (from grab sampling and DDV).

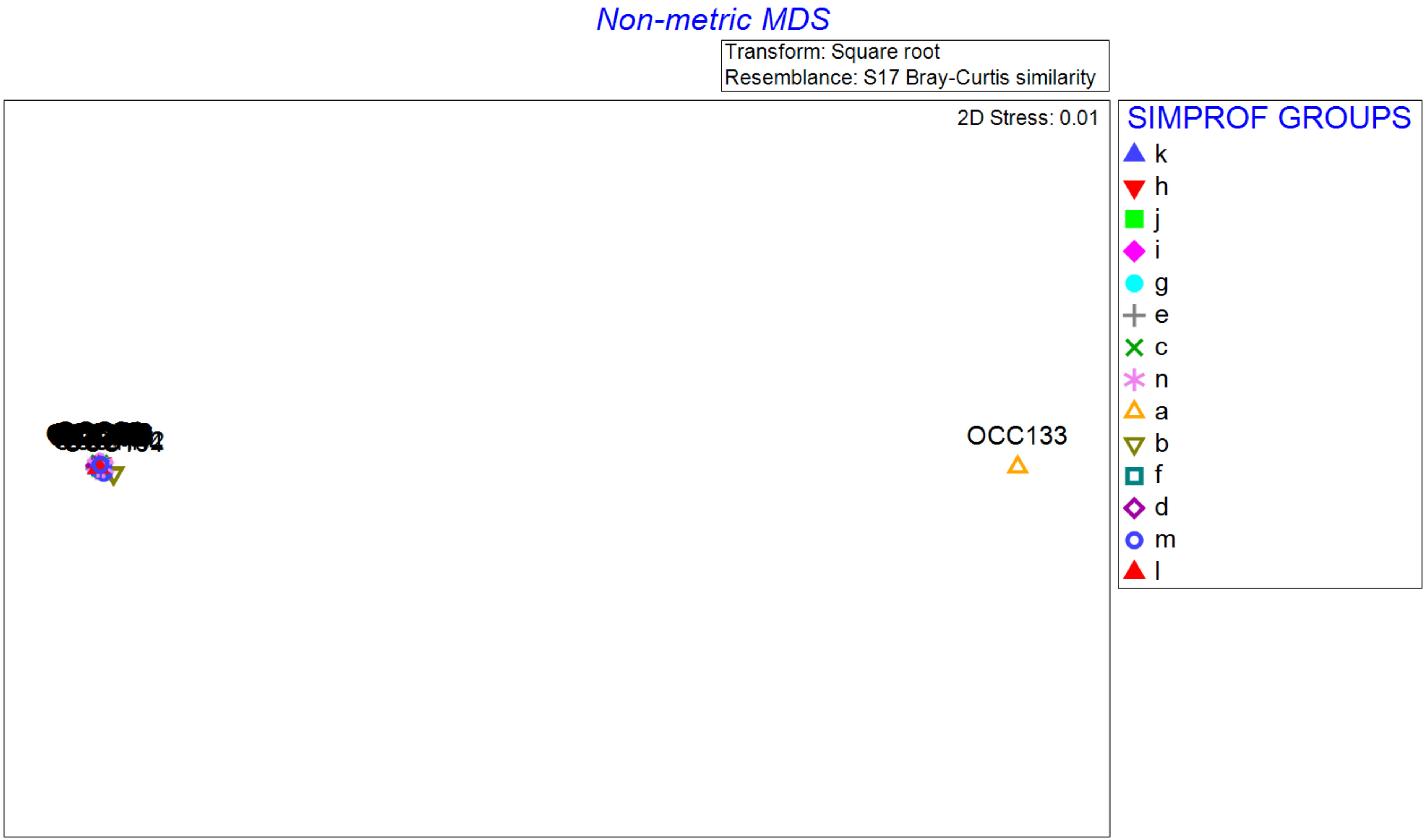


Figure 1.26: 2D MDS plot of epifaunal communities in the Mona Offshore Cable Corridor (from DDV).

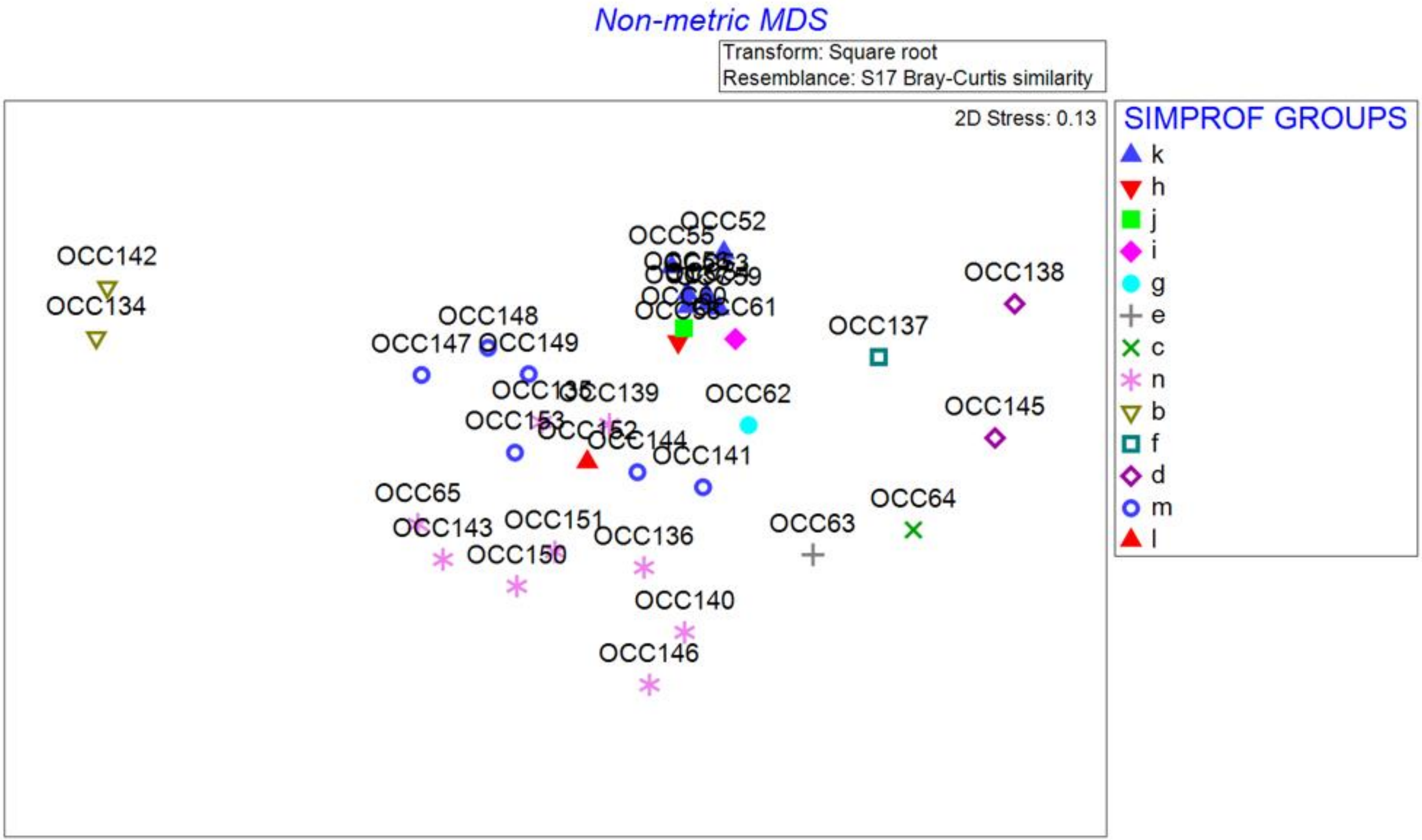


Figure 1.27: 2D MDS plot (subset) of epifaunal communities in the Mona Offshore Cable Corridor (from grab sampling and DDV with outlier OCC133 removed.

Table 1.18: Summary of preliminary epifaunal biotopes identified from the site-specific surveys (from DDV and epifaunal component of grab data).

Preliminary epifaunal biotopes	Sample station	Water depth range (m)	Sediment classification	Characterising taxa accounting for up to 50% of cumulative similarity (SIMPER)	Geographic location
SS.SMx.CMx	ENV01, ENV02, ENV03, ENV04, ENV05, ENV06, ENV08, ENV09, ENV10, ENV15, ENV18, ENV19, ENV20, ENV23, ENV24, ENV27, ENV29, ENV31, ENV32, ENV33, ENV34, ENV35, ENV36, ENV27, ENV38, ENV39, ENV40, ENV41, ENV42, ENV43, ENV44, ENV45, ENV46, ENV47, ENV48, ENV49, ENV50, ENV51, ENV52, ENV53, ENV54, ENV55, ENV56, ENV57, ENV58, ENV59, ENV60, ENV61, ENV62, ENV63, ENV64, ENV65, ENV67, ENV68, ENV69, ENV70, ENV71, ENV72, ENV73, ENV74, ENV75, ENV76. ENV77, ENV79, ENV80, ENV81, ENV82, ENV83, ENV84, ENV85, ENV86, ENV87, ENV88, ENV90, ENV90, ENV92, ENV95, ENV96, ENV97, ZOI40, ZOI41, ZOI43, ZOI45, ZOI48, ZOI51, OCC52, OCC53, OCC54, OCC55, OCC56, OCC57, OCC58, OCC59, OCC60, OCC61,	5 - 58	Sand and muddy sand, mixed sediment, coarse sediment	*Nematoda*, faunal turf, *Amphipoda, Paguroidea, Scaphopoda, Ophiura ophiura, Ophiura, Ophiura albida, Terebellidae*, Animalia Tubes, *Alcyonium digitatum, Tubulariam, Tubularia indivisa, Pectinidae, Copepoda, Pagurus bernhardus, Serpulidae, Echinoidea, Buccinidae, Spatangus purpureus, Ophiothrix fragilis, Actinaria, Asteria rubens, Cirripedia, Paguroidea, Eucratea loricata, Adamsia palliata, Penetrantia, Euclymeninae, Sertulariidae, Hydrallmania falcata, Schizomavella, Metridium, Liocarcinus depurator, Alcyonium digitatum, Buccinum undatum, Nemertesia, antenna, Phoronis, Conopeum recticulum, Hydrozoa, Nematoda, Naticidae*	Mona Array Area (widespread) Mona Array Area ZoI (northeast, northwest and southeast) Mona Offshore Cable Corridor (throughout including Menai Strait and Conwy Bay SAC)

Preliminary epifaunal biotopes	Sample station	Water depth range (m)	Sediment classification	Characterising taxa accounting for up to 50% of cumulative similarity (SIMPER)	Geographic location
	OCC144, OCC147, OCC148, OCC149, OCC153, OCC65, OCC135, OCC136, OCC139, OCC140, OCC141, OCC143, OCC150, OCC151, OCC152				
SS.SCS.CCS	ENV07, ENV13, ENV14, ENV17, ENV28, ENV66, ENV78, ENV89, ENV91, ENV93, ENV94, ZOI39, ZOI42, ZOI46, ZOI47, ZOI50, OCC146	33 - 51	Coarse sediment, mixed sediment, sand and muddy sand	Animalia Tubes, *Serpulidae, Pagurus prideaux, Bryozoan,* Burrows, *Actiniaria, Adamsia palliata, Alyconium digitatum, Ophiura, Pectinidae, Scaphapoda*, Nematoda, faunal turf, *Tubularium, Ceriantharia, Actinopterygii, Decapoda, Ophiuroidea, Terebellidae, Ascidiacea, Liocarcinus depurator, Myxicola, Cirripedia, Pecten maximus, Paguroidea, Asterias rubens*	Mona Array Area (small sections in the north and south) Mona Array Area ZoI (east) Mona Offshore Cable Corridor (central section)
SS.SSa.CMuSa	ENV11, ENV12, ENV16, ENV21, ENV22, ENV25, ENV26, ENV30	34 – 41	Sand and muddy sand.	Faunal turf, *Ophiura, Paguroidea, Astropecten irregularis, Ceriantharia, Alcyonium digitatum, Pagurus bernhardus, Phoronis*	In the wider regional benthic subtidal and intertidal ecology study area located to the north of the Mona Array Area (i.e. within the Morgan Array Area).
SS.SSa.CFiSa	OCC142, OCC64, OCC145, OCC62, OCC63	16 - 42	Sand and muddy sand	*Astropecten irregularis*, Animalia tubes, *Serpulidae, Paguroidea, Alcyonium digitatum, Sertulariidae, Tubularia indivisa, Ophiura albida, Pagurus prideaux, Adamsia palliata, Ensis ensis, Acrocnida brachiata, Edwardsiidae, Nemertea, Nematoda, Pecten maximus* and Faunal Turf.	Mona Offshore Cable Corridor (central and south)
SS.SMx.IMx	OCC133	7	Sand and muddy sand	None	Mona Offshore Cable Corridor (south, adjacent to landfall)

Preliminary epifaunal biotopes	Sample station	Water depth range (m)	Sediment classification	Characterising taxa accounting for up to 50% of cumulative similarity (SIMPER)	Geographic location
SS.SSa.IMuSa	OCC138, OCC134, OCC137	1 - 10	Sand and muddy sand, mud and sandy mud	*Ophiura albida*, *Acrocnida brachiata, Sertulariidae, Electra monostachys, Electra pilosa, Hydrallmania falcata*	Mona Offshore Cable Corridor (south, adjacent to landfall)
SS.SMx.CMx.OphMx	ZOI44, ZOI49	44 - 49	Coarse sediment	*Ophiothrix fragilis, Serpulidae, Alcyonium digitatum, Sertulariidae*, Faunal turf, *Flustridae, Vesicularia spinulosa, Nemertesia antennina.*	Mona Array Area ZoI (southwest)

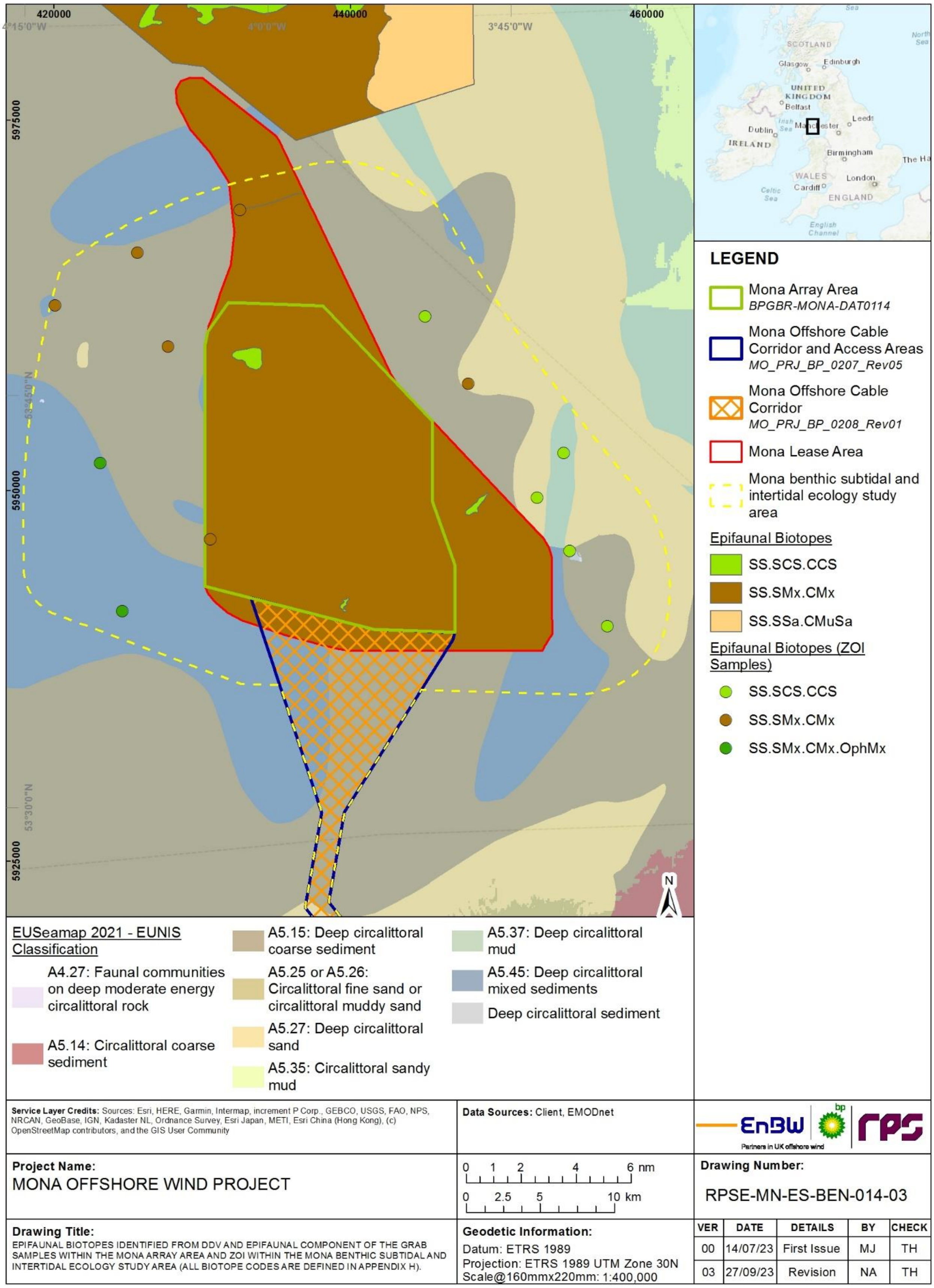


Figure 1.28: Preliminary epifaunal biotopes identified from DDV and epifaunal component of the grab samples within the Mona Array Area and ZoI within the Mona benthic subtidal and intertidal ecology study area (all biotope codes are defined in Appendix H).

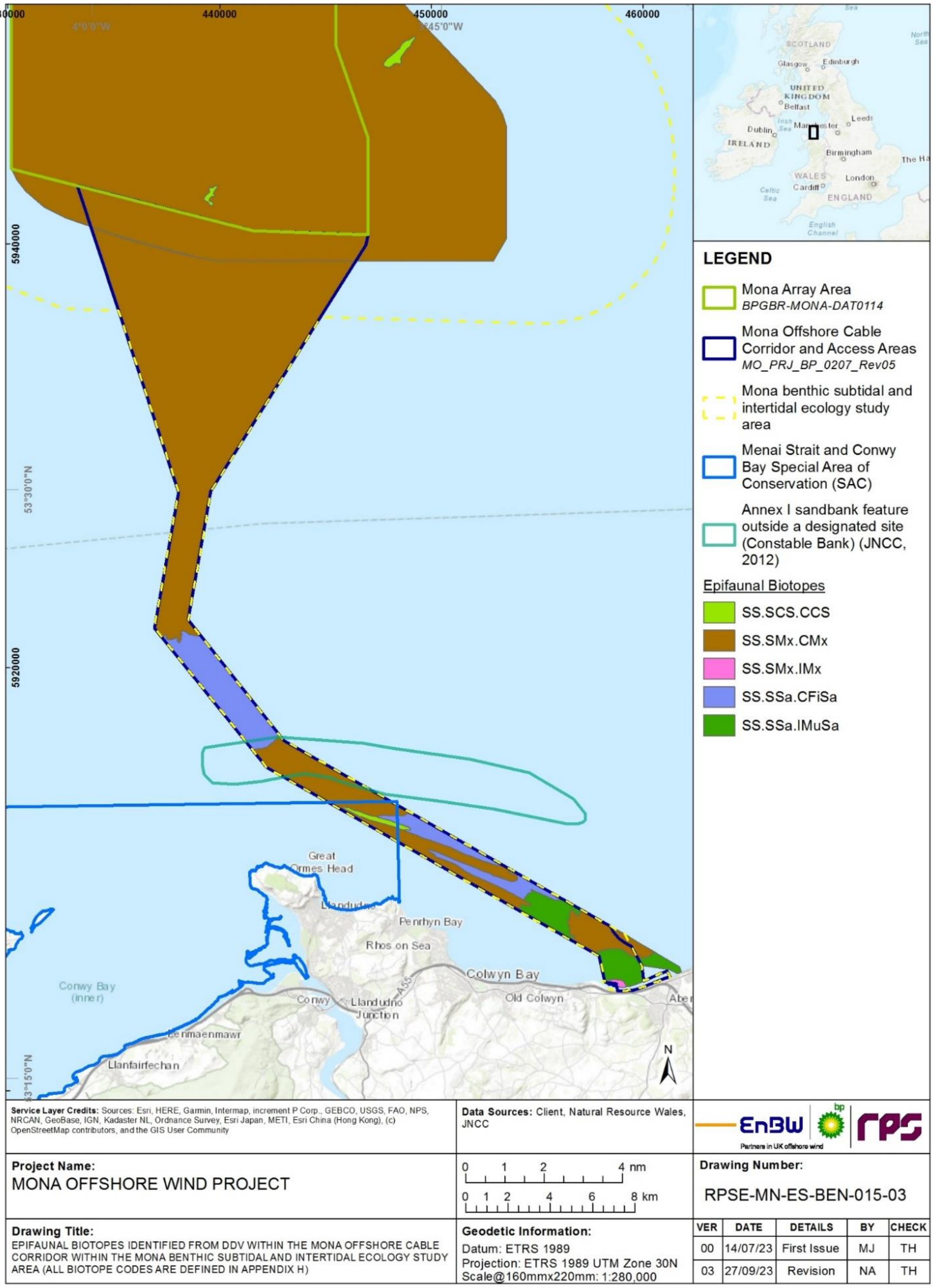


Figure 1.29: Preliminary epifaunal biotopes identified from DDV within the Mona Offshore Cable Corridor within the Mona benthic subtidal and intertidal ecology study area (all biotope codes are defined in Appendix H).

Univariate analysis

Mona Array Area and ZoI

1.7.5.30 The following univariate statistics were calculated for the combined epibenthic dataset (i.e. epibenthic components of the grabs and DDV data) for each sample station: number of species (S), abundance (N), Margalef's index of Richness (d), Pielou's Evenness index (J'), Shannon-Wiener Diversity index (H') and Simpson's index of Dominance (λ). The mean of each of these indices was then calculated for each of the biotopes identified from the epifaunal data and these are summarised in Table 1.19, with univariate statistics for individual sites presented in Appendix E.

1.7.5.31 The biotope SS.SMx.CMx had the highest number of taxa (43.52 ± 11.72). The highest mean number of individuals was recorded in association with SS.SMx.CMx.OphMx (220 ± 21.21;Table 1.19); this was expected as this biotope is composed of mixed sediments which provide substrate for epifauna to attach to. The highest mean number of individuals was recorded in association with SS.SMx.CMx.OphMx (220 ± 21.21; Table 1.19); this was expected as this biotope is composed of mixed sediments which provide substrate for epifauna to attach to and brittlestar beds are typically associated with rich communities. The high number of individuals associated with these mixed biotopes were due to high abundances of echinoderms, annelids and crustaceans as well as faunal turf. The lowest mean number of individuals was recorded in biotope circalittoral muddy sand (SS.SSa.CMuSa). Overall, the highest number of individuals and taxa were recorded at biotopes with greater proportions of coarse substrate and the lowest numbers were recorded in sand sediment habitats.

1.7.5.32 The highest mean diversity scores were associated with the SS.SMx.CMx biotope (d=17.37 ± 11.70 and H'=2.85 ± 0.232). This was expected, as the mixed biotope had the highest number of taxa and was characterised by coarser substrate. The biotope SS.SSa.CMuSa had one of the lowest mean diversity scores (d=16.71 ± 4.60, H'=2.32 ± 0.38) however this was only found in the Morgan Array Area. Overall, the highest diversity was recorded at biotopes with coarser substrate and the lowest was recorded in sand sediment habitats.

1.7.5.33 Pielou's evenness (J') scores showed limited variation across the epifaunal biotopes. Mean J' was 0.76, 0.76, 0.68 and 0.76 at SS.SMx.CMx, SS.SCS.CCS, SS.SSa.CMuSa and SS.SMx.CMx.OphMx respectively, indicating a relatively even distribution of abundance among taxa in these biotopes. This was expected, as all of these biotopes show a relatively similar level of abundance. The Simpson's index of Dominance (λ) was also similar for all the biotopes, ranging from 0.89 to 1.03, indicating that these biotopes have a similar number of species as well as there being a similar abundance of each species. Simpson's index of Dominance was lowest at SS.SMx.CMx.OphMx indicating that this biotope had the most even distribution of taxa.

Table 1.19: Mean (± standard deviation) univariate statistics for epifaunal biotopes recorded in the Mona Array Area and ZoI (from DDV).

Biotope	S	N	d	J'	H'	λ
SS.SMx.CMx	43.52 ± 11.72	38.31 ± 55.91	17.37 ± 11.70	0.76 ± 0.05	2.85 ± 0.32	1.03 ± 0.32
SS.SCS.CCS	34.56 ± 16.18	33.88 ± 60.48	14.71 ± 10.79	0.76 ± 0.12	2.54 ± 0.40	1.01 ± 0.25

Biotope	S	N	d	J'	H'	λ
SS.SSa.CMuSa	31.25 ± 10.57	6.79 ± 2.79	16.71 ± 4.60	0.68 ± 0.05	2.32 ± 0.38	1.04 ± 0.06
SS.SMx.CMx.OphMx	29.5 ± 0.71	220 ± 21.21	5.29 ± 0.04	0.76 ± 0.02	2.58 ± 0.09	0.89 ± 0.01

Mona Offshore Cable Corridor

1.7.5.34 The biotope SS.SMx.CMx had the highest number of taxa (18.52 ± 15.48). The highest mean number of individuals was also recorded in association with SS.SMx.CMx (69.32 ± 70.42; Table 1.20); this was expected as this biotope is characterised by mixed sediments which provide substrate for epifauna to attach to. The high number of individuals associated with these mixed biotopes were due to high abundances of echinoderms and crustaceans. No epifauna was recorded at the single station (OCC133) assigned to the SS.SMx.IMx biotope. Overall, the highest number of individuals were recorded in association with biotopes with greater proportions of coarse substrate and the lowest numbers were recorded in the muddy sand sediment habitats.

1.7.5.35 The highest mean diversity scores were associated with the SS.SMx.CMx biotope (d=4.30 ± 2.54and H'=2.01 ± 0.83). This was expected, as the mixed biotope had the highest number of taxa, had the highest number of sample stations allocated to it and was characterised by coarser substrate. Diversity scopes could not be calculated for the SS.SCS.CCS and SS.SMx.IMx biotope due to the few or no species which were recorded for these biotopes. Overall, the highest diversity was recorded at biotopes with coarser substrate and the lowest was recorded in sand sediment habitats.

1.7.5.36 Pielou's evenness (J') scores showed limited variation across the epifaunal biotopes. Mean J' was 0.83, 0.97 and 0.97 at SS.SMx.CMx, SS.SSa.IMuSa and SS.SSa.CFiSa, respectively, indicating a relatively even distribution of abundance among taxa in these biotopes. The Simpson's index of Dominance (λ) was also similar for the SS.SMx.CMx and SS.SSa.CFiSa biotopes, ranging from 0.86 to 0.95, indicating that these biotopes have a similar number of species as well as there being a similar abundance of each species. The biotope SS.SSa.IMuSa had a low Simpson's index of Dominance value of 0.46 indicating this biotope was dominated by a few species.

Table 1.20: Mean (± standard deviation) univariate statistics for epifaunal biotopes of the Mona Offshore Cable Corridor (from DDV and grab data).

Biotope	S	N	d	J'	H'	λ
SS.SMx.CMx	18.52 ± 15.48	69.32 ± 70.42	4.30 ± 2.54	0.83 ± 0.11	2.01 ± 0.83	0.86 ± 0.11
SS.SSa.CFiSa	5.20 ± 2.59	7.40 ± 5.46	2.20 ± 0.51	0.97 ± 0.03	1.48 ± 0.51	0.95 ± 0.05
SS.SSa.IMuSa	2.67 ± 2.89	3.67 ± 3.79	1.20 ± 1.70	0.97 ± N/A	0.58 ± 1.00	0.46 ± 0.66
SS.SMx.IMx	0	0	N/A	N/A	N/A	N/A
SS.SCS.CCS	2	2	N/A	N/A	N/A	N/A

1.7.6 Results – habitat assessments

Seapens and burrowing megafauna communities' assessment

Mona Array Area and ZoI

1.7.6.1 Across the Mona Array Area and ZoI within the Mona benthic subtidal and intertidal ecology study area small pencil burrows were observed in the site-specific surveys. Although no seapens were observed the JNCC (2013) guidance stipulates that 'sea pen and burrowing megafauna communities' habitat can occur without seapens. As a result an analysis of this habitat was undertaken for the stations across the Mona Array Area and ZoI.

1.7.6.2 The assessment was undertaken by determining the density of burrows and their abundance which was then categorised using the SACFOR classification. This assessed whether the density of the burrows makes them a prominent feature of the sediment surface and therefore an indication of the sub-surface complex burrowing communities. The burrowing fauna which formed the burrows were rarely sighted during the survey to confirm the burrow inhabitants; therefore, burrows could not confidently be attributed to any of the classified 'megafauna' species within the 'seapen and burrowing megafauna community' habitat classification. As such, and in keeping with the JNCC report (JNCC, 2013) recommendations, caution should be applied when interpreting theses density results as they aren't necessarily definitive of the habitats condition.

1.7.6.3 The maximum burrow density varied from 0.02 burrows per m^2 at ENV97 in the Mona Array Area to 5.15 burrows per m^2 at ENV40 within the Mona Array Area ZoI. It should be noted that the maximum burrow density is considered to be highly precautionary. This is because total burrows per image were not recorded, rather burrows were assigned a range (i.e. 1-5, 6-10 etc.) and, to determine the maximum burrow density, the top end of the range bracket was used to obtain the maximum total number of burrows and from that the density then calculated.

1.7.6.4 The majority of burrows were very small and in the 0 to 1 cm size range category with 49% of images from the Mona Array Area falling within this range (see Figure 1.30 for example images). Burrow abundance was not identified as greater than 'frequent' on the SACFOR scale at any station across the Mona Array Area and ZoI. Within the Mona Array Area 63% of stations subject to an analysis of this habitat had an average SACFOR abundance of 'frequent', increasing to 66% in the Mona Array Area ZoI. The average burrow SACFOR per station is presented in Table 1.21.

1.7.6.5 Very few burrows were observed at stations where soft sediment was dominant. In combination with an absence of associated fauna and gravelly sediment, it was concluded that these areas have only a negligible resemblance to the 'seapens and burrowing megafauna communities' habitat. However, in order to adopt a precautionary approach and on the basis that burrows were observed at an average SACFOR of 'frequent' at 37 stations (see Figure 1.31), these stations have, for the purposes of the assessment, been assumed to represent the 'seapens and burrowing megafauna communities' habitat. It should be noted however, that no seapens were recorded in the Mona benthic subtidal and intertidal ecology study area and, as shown in Table 1.21, the sediment is considered unlikely to be consistent with this habitat (i.e. sediments were predominantly gravelly muddy sand). This approach is therefore deemed to be highly precautionary.

1.7.6.6 The full results of the seapens and burrowing megafauna assessment can be found in Table 1.21 with some DDV images of stations assigned an average SACFOR abundance of ‘frequent’ presented in Figure 1.31.

1.7.6.7 During imagery analysis burrowing fauna not associated with the ‘seapens and burrowing megafauna communities’ habitat locations were observed across the Mona Array Area and ZoI including *Ceriantharia* and *Ensis* (an abundance of 979 and 159 respectively across the Mona benthic subtidal and intertidal ecology study area). There was also no evidence of any species associated with ‘seapens and burrowing megafauna communities’ habitat supporting the conclusions the determination that it is highly unlikely that any habitat across the Mona benthic subtidal and intertidal ecology survey area constitutes anything other than a negligible resemblance to the ‘seapens and burrowing megafauna communities’ habitat. However, as stated above, for the purposes of the assessment a precautionary approach has been adopted which assumes that this habitat could be present (with the absence of seapens) at all stations shown in Figure 1.31 where the average burrow SACFOR was frequent or greater.

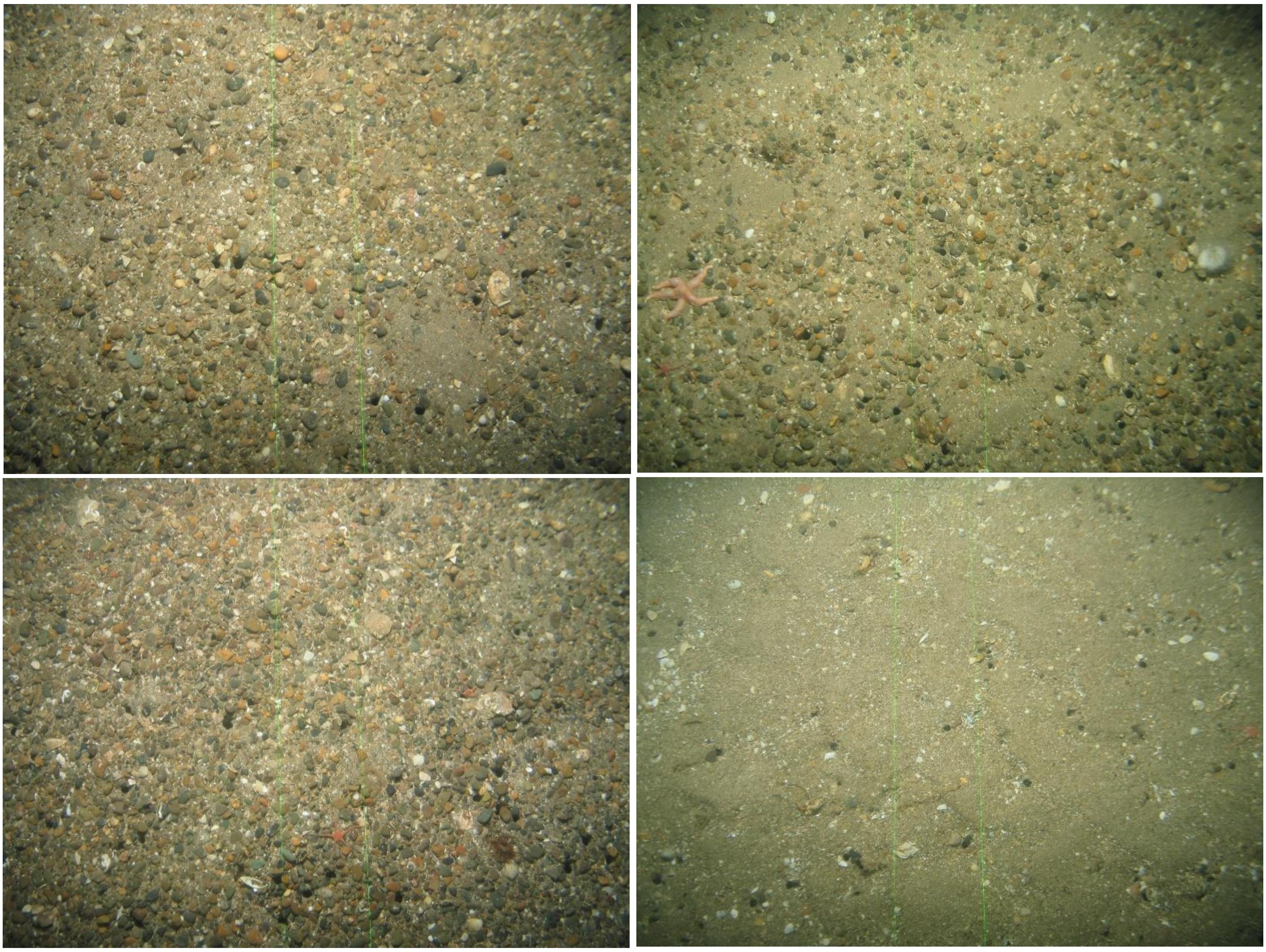


Figure 1.30: DDV images of stations with an average SACFOR abundance of ‘frequent’ (top left: ENV38, top right: ENV48, bottom left: ENV50 and bottom right: ENV84).

Table 1.21: Seapens and burrowing megafauna assessment within the Mona Array Area and ZoI.

Station	Total Images	Camera Transect Length (m)	Estimated area investigated (m^2)	Folk Sediment Classification	Number of Burrows				Maximum density m^2	Size of Burrows			Average Size (cm)	Average SACFOR
					1 to 5	6 to 10	11+	Max Total		0 - 1	1.1 - 3	3 +		
Mona Array Area														
ENV36	82	285.4	235.84	Muddy sandy gravel	5	0	0	25	0.11	5	0	0	0.9	R
ENV37	78	273.9	483.07	Gravelly muddy sand	12	44	21	731	1.51	1	77	0	2.9	F
ENV38	78	272.9	195.31	Gravelly muddy sand	6	27	44	784	4.01	0	78	0	2.9	F
ENV39	102	272	268.38	Gravelly muddy sand	5	32	65	1060	3.95	0	102	0	2.9	F
ENV41	93	276.4	242.15	Gravelly muddy sand	43	31	19	734	3.03	1	92	0	2.9	F
ENV42	83	287.2	193.36	Gravelly muddy sand	49	15	5	450	2.33	1	67	0	2.9	F
ENV43	90	290.3	201.36	Gravelly sand	0	9	24	354	1.76	4	29	0	2.7	F
ENV46	104	280.3	244.98	No PSA data	0	0	0	0	0	0	0	0	N/A	-
ENV47	100	308.3	240.07	Muddy sandy gravel	52	41	5	725	3.02	74	24	0	1.4	F
ENV48	95	281.4	220.8	Gravelly muddy sand	18	55	22	882	3.99	86	9	0	1.1	F
ENV50	98	280.9	213.25	Gravelly muddy sand	20	59	19	899	4.22	78	20	0	1.1	F
ENV51	99	268.9	201.33	Muddy sandy gravel	84	9	0	510	2.53	84	9	0	1.4	F
ENV52	109	274.1	205.82	Gravelly muddy sand	29	73	7	952	4.63	84	25	0	1.1	F
ENV53	99	275.5	205.73	Gravelly muddy sand	61	22	2	547	2.66	78	7	0	1.6	F
ENV54	92	272.7	206.98	Muddy sandy gravel	30	60	2	772	3.73	60	32	0	1.6	F
ENV55	99	269.7	193.27	Gravelly muddy sand	14	73	12	932	4.82	66	33	0	1.4	F
ENV56	95	325.2	256.53	Gravelly sand	87	2	0	455	1.77	68	22	0	1.1	F
ENV66	93	278.8	239.23	Gravelly sand	26	1	0	140	0.59	27	0	0	0.9	R

Station	Total Images	Camera Transect Length (m)	Estimated area investigated (m^2)	Folk Sediment Classification	Number of Burrows				Maximum density m^2	Size of Burrows			Average Size (cm)	Average SACFOR
					1 to 5	6 to 10	11+	Max Total		0 - 1	1.1 - 3	3 +		
ENV69	91	290.2	183.72	Gravelly muddy sand	21	50	17	792	4.31	56	32	0	1.6	F
ENV70	107	301.1	250.83	Gravelly sand	45	39	20	835	3.33	104	0	0	0.9	O
ENV77	104	271.5	232.5	No PSA data	0	4	16	216	0.93	10	10	0	1.9	O
ENV80	102	279.5	235.32	No PSA data	54	22	0	490	2.08	76	0	0	0.9	O
ENV81	114	272.5	212.07	No PSA data	28	1	0	150	0.71	29	0	0	0.9	R
ENV83	96	279.7	224.06	Slightly gravelly sand	35	25	16	601	2.68	74	2	0	1.0	O
ENV86	100	288.4	181.6	Gravelly muddy sand	67	22	0	555	3.06	44	45	0	1.9	F
ENV87	100	275.5	297.43	No PSA data	55	24	1	526	1.77	66	14	0	1.3	F
ENV88	90	305.9	357.54	Muddy sandy gravel	42	33	7	617	1.73	46	36	0	1.8	F
ENV89	88	287.5	246.5	Gravelly sand	22	22	25	605	2.45	69	0	0	0.9	O
ENV96	100	327.9	266.64	Gravelly sand	13	5	5	170	0.64	23	0	0	0.9	R
ENV97	91	273.1	231.36	Gravelly muddy sand	1	0	0	5	0.02	0	0	0	0.9	R
Mona Array Area ZoI														
ENV31	87	281.7	186.01	Gravelly muddy sand	19	0	0	95	0.51	0	19	0	2.9	O
ENV32	82	273.1	218.73	Muddy sandy gravel	46	34	2	592	2.71	75	7	0	1.1	F
ENV33	91	267.3	223.07	Muddy sandy gravel	64	24	0	560	2.51	84	4	0	1.0	O
ENV34	98	278	232.18	Gravelly muddy sand	83	1	0	425	1.83	82	0	0	0.9	O
ENV35	97	268.2	221.46	Gravelly muddy sand	3	53	41	996	4.5	92	5	0	1.0	F
ENV40	102	269.8	180.37	Gravelly muddy sand	25	33	43	928	5.15	4	97	0	2.8	F
ENV44	96	292.1	192.86	Gravelly sand	3	0	3	48	0.25	2	4	0	2.2	O

Station	Total Images	Camera Transect Length (m)	Estimated area investigated (m^2)	Folk Sediment Classification	Number of Burrows				Maximum density m^2	Size of Burrows			Average Size (cm)	Average SACFOR
					1 to 5	6 to 10	11+	Max Total		0 - 1	1.1 - 3	3 +		
ENV45	99	277.6	200.19	Gravelly muddy sand	55	2	0	295	1.47	12	45	0	2.5	F
ENV49	85	289.2	223.23	Gravelly muddy sand	72	11	0	470	2.11	68	15	0	1.3	F
ENV57	104	274.8	245.11	Gravelly sand	11	1	0	65	0.27	10	2	0	1.2	O
ENV58	104	269.6	235.45	No PSA data	67	29	0	625	2.65	72	24	0	1.4	F
ENV59	104	281	175.19	Gravelly sand	75	10	0	475	2.71	48	37	0	1.8	F
ENV60	92	279.7	215.37	Muddy sandy gravel	25	58	8	793	3.68	56	35	0	1.7	F
ENV61	95	273.2	194.68	Gravelly muddy sand	57	24	0	525	2.7	58	25	0	1.5	F
ENV65	75	273.1	211.05	Gravelly muddy sand	41	32	2	547	2.59	54	19	0	1.4	F
ENV67	98	67.4	54.37	Slightly gravelly sand	50	0	0	250	4.6	51	0	0	0.9	R
ENV68	105	272.6	197.95	Slightly gravelly sand	47	18	7	492	2.49	73	0	0	0.9	O
ENV71	112	300.2	533.41	Gravelly muddy sand	55	51	3	818	1.53	100	9	0	1.1	F
ENV74	97	268.7	222.46	No PSA data	20	52	22	862	3.87	73	21	0	1.3	F
ENV75	91	271.8	243.55	No PSA data	0	0	0	0	0	0	0	0	N/A	-
ENV76	105	274.2	245.9	No PSA data	8	12	10	270	1.1	21	9	0	1.5	F
ENV78	105	274	206.28	No PSA data	4	8	37	507	2.46	33	15	0	1.9	F
ENV79	77	273.5	205.22	No PSA data	23	39	14	659	3.21	64	12	0	1.5	F
ENV82	92	273.7	189.66	Gravelly muddy sand	22	39	23	753	3.97	23	61	0	2.4	F
ENV84	101	292.4	223.46	Gravelly muddy sand	19	21	54	899	4.02	58	36	0	1.7	F
ENV85	100	292.2	255.76	No PSA data	72	6	0	420	1.64	67	10	0	1.2	F

Station	Total Images	Camera Transect Length (m)	Estimated area investigated (m^2)	Folk Sediment Classification	Number of Burrows				Maximum density m^2	Size of Burrows			Average Size (cm)	Average SACFOR
					1 to 5	6 to 10	11+	Max Total		0 - 1	1.1 - 3	3 +		
ENV95	97	272.9	180.9	Slightly gravelly muddy sand	0	0	0	0	0	0	0	0	N/A	-

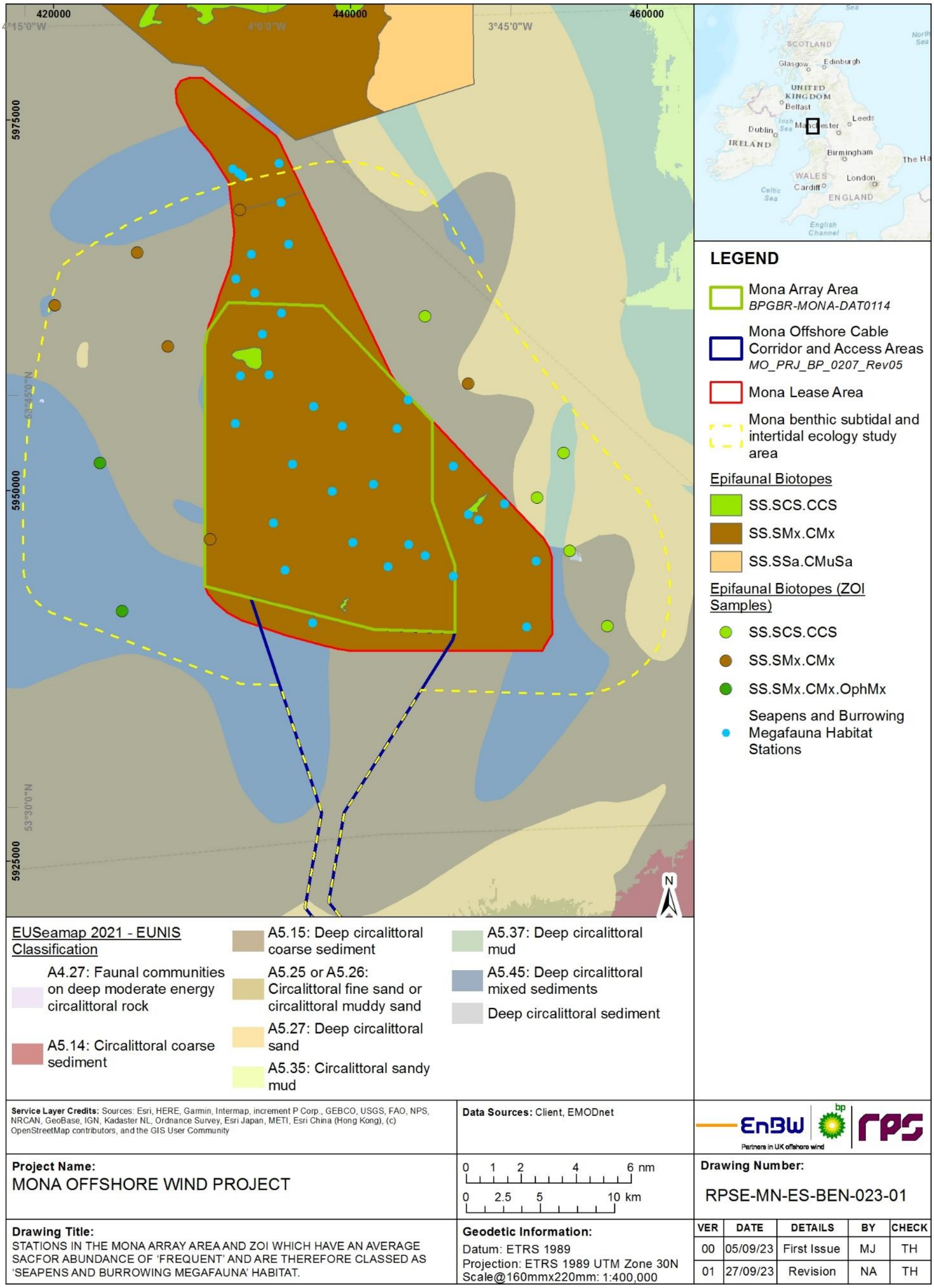


Figure 1.31: Stations in the Mona Array Area and ZoI where burrows were recorded at at average SACFOR adundance of 'Frequent' and are therefore considered to represent the'seapens and burrowing megafauna' habitat.

Mona Offshore Cable Corridor

1.7.6.8 No sample stations were identified with burrows or seapens in the Mona Offshore Cable Corridor, therefore no assessment of this habitat was undertaken.

Stony reef assessment

1.7.6.9 Seabed imagery indicated potential stony reef at 19 stations across the Mona Array Area, Mona Array Area, ZoI and Mona Offshore Cable Corridor (Figure 1.39). As a result, an Annex I stoney reef assessment was undertaken was undertaken for these 19 stations to determine if there was a resemblance to the protected habitat based on criteria set out by Irving (2009).

1.7.6.10 Table 1.22 presents the criteria considered during the stony reef assessment in accordance with Table 1.5.

Mona Array Area and ZoI

1.7.6.11 Five stations in the Mona Array Area and eight stations in the Mona Array Area ZoI were subject to a full stony reef assessment. At most stations the resemblance was determined to be low where cobbles and boulders were found (Table 1.22; Figure 1.39). All stations were clearly matrix supported, showed little change in relief, and were often composed of patchy areas within larger areas of gravel. When images meeting one or more reef criteria were encountered in a few images or with large areas separating the image station they were overall determined to have no resemblance (Figure 1.32).

1.7.6.12 Four stations within the Mona Array Area (ENV46, ENV80, ENV81 and ENV97) were classified as low resemblance to Annex I stony reef, and this was often a reflection of a wider geophysical feature nearby as the quality observed was low as discussed in paragraphs 1.7.6.14 to 1.7.6.17 below.

1.7.6.13 Low resemblance stony reef was recorded in 48 of the 104 images analysed at station ENV46 in the west of the Mona Array Area (see Figure 1.39 The elevation of the reef, in images where cobbles were observed and low resemblance reef was identified, ranged from 1.7 cm to 13.2 cm with an average elevation of 4.91 cm. Whilst one out of 104 images assessed was classified as medium resemblance stony reef, the site was predominantly sedimentary with gravelly sand with shell fragments and the occasional boulder (Figure 1.33). This was demonstrated by the remaining 55 images at this station, which were classified as having no resemblance to stony reef. Overall percentage cover of stony reef for this sample station ranged from 1.69% to 81.44% with an average of 12.01% cover in images where cobbles were observed and low resemblance reef was identified. Epifaunal species were also present at this station with the most abundant groups being Serpulidae, Pachymatisma johnstonia, Tubularia, Nemertesia and Metridium dianthus, as well as faunal turf. On the basis of the above, and in accordance with the Irving (2009) and Golding et al. (2020) guidance, the stony reef at ENV46 was overall considered to represent Annex I low resemblance stony reef (outside a designated site).

1.7.6.14 Low resemblance stony reef was recorded in 50 of the 102 images analysed at station ENV80 in the north west of the Mona Array Area (see Figure 1.39. The elevation of the reef, in images where cobbles were observed and low resemblance reef was identified, ranged from 1.4 cm to 12.8 cm with an average elevation of 4.77 cm. Whilst two out of 102 images assessed were classified as medium resemblance stony reef, the site was predominantly sedimentary and composed of cobbles and scattered boulders observed on a gravelly sandy sediment (Figure 1.33). This was demonstrated by the remaining 50 images at this station, which were classified as having no resemblance to stony reef. Overall percentage cover of stony reef for this sample station ranged from 0.43% to 51.15% with an average of 11% cover. Epifaunal species were also present at this station with the most abundant groups being *Serpulidae, Nemertesia* and *M. dianthus,* as well as faunal turf. On the basis of the above, and in accordance with the Irving (2009) and Golding *et al*. (2020) guidance, the stony reef at ENV80 was overall considered to represent Annex I low resemblance stony reef (outside a designated site).

1.7.6.15 Low resemblance stony reef was recorded in 60 of the 114 images analysed at station ENV81 in the south west of the Mona Array Area (see Figure 1.39). Station ENV81 was assessed to have a low resemblance to stony reef in the 2021 survey due to the area of irregular seabed, with a maximum height of 13.2 cm. Whilst four out of 114 images assessed were classified as medium resemblance stony reef, the site was predominantly characterised as scattered cobbles and boulders (Figure 1.34). In images where cobbles were observed and low resemblance reef was identified, the minimum reef height at this station was 1.4 cm with an average height of 4.35 cm. The average percentage cover of low resemblance reef in images from ENV81 was 13% however overall percentage cover ranged from 0.85% to 73.18%. Epifauna were also visible in images such as Figure 1.34 including *Serpulidae, Tubularia* and *Nemertesia*, as well as faunal turf. On the basis of the above, and in accordance with the Irving (2009) and Golding *et al*. (2020) guidance, the stony reef at ENV81 during the 2021 survey was overall considered to represent Annex I low resemblance stony reef (outside a designated site).

1.7.6.16 Station ENV81 was resurveyed as part of the 2022 survey campaign and no evidence of a stony reef habitat was recorded, rather occasional isolated patches of cobbles (see Figure 1.34). Approximately 100 m of the 2022 transects were conducted in a comparable area, although it should be noted that there was a slight offset between the two transects which may have led to the reduction of evidence of stony reef compared to the previous 2021. On this basis, and to ensure a precautionary approach, the findings of both surveys are presented in Figure 1.39, and the occurrence of Annex I low resemblance stony reef has been assumed at this station.

1.7.6.17 Low resemblance stony reef was identified in 34 out of the total 91 images analysed at station ENV97 in the south west of the Mona Array Area (see Figure 1.39). Whilst one out of 91 images was classified as medium resemblance stony reef the site was predominantly characterised by aggregated clusters of cobbles with some boulders however overall the matrix was dominated by soft sediment (Figure 1.35). The reef height ranged from 1.4 cm to 9.1 cm with the average reef height being 3.84 cm in images where cobbles were observed and low resemblance reef was identified. The stony reef coverage ranged from 0.69% to 45.95% with an average coverage of 11% in images where cobbles were observed and low resemblance reef was identified. Stony reef associated epifauna at this site included *Serpulidae* and *Tubularia* as well as faunal turf. On the basis of the above, and in accordance with the Irving (2009) and Golding *et al*. (2020) guidance, the stony reef at ENV97 was overall considered to represent Annex I low resemblance stony reef (outside a designated site).

1.7.6.18 A total of eight stations were subject to a full stony reef assessment within the Mona Array Area ZoI (see Figure 1.39). Neither of the stations surveyed during the 2022 survey (ZOI41 and ZOI44) were determined to have any resemblance to the Annex I stony reef habitat. One station (ENV58) sampled during the 2021 survey was deemed to have low resemblance to stony reef, as were two stations just outside the Mona Array Area ZoI (ENV76 and ENV79) sampled in the wider regional benthic subtidal and intertidal ecology study area as discussed in paragraphs 1.7.6.19 to 1.7.6.21 below. The remaining three stations (ENV59, ENV60 and ENV61) were deemed to have no resemblance to stony reef (Table 1.22).

1.7.6.19 Low resemblance stony reef was recorded in 31 of the 91 images analysed at station ENV58 in the north of the Mona Array Area ZoI (see Figure 1.39). Whilst two out of 91 images were classified as medium resemblance stony reef, station ENV58 was predominantly characterised by an area of irregular seabed showing contacts with a mound east of the station target location which appeared as a mound of cobbles/boulders in the imagery but was predominantly sedimentary (Figure 1.35). The reef height ranged from 1.2 cm to 8.6 cm with the average reef height being 3.47 cm in images where cobbles were observed and low resemblance reef was identified. The stony reef coverage ranged from 0.3% to 74.35% in images with an average coverage of 13% in images where cobbles were observed and low resemblance reef was identified. Stony reef associated epifauna at this site was dominated by *Serpulidae*. On the basis of the above, and in accordance with the Irving (2009) and Golding *et al*. (2020) guidance, the stony reef at ENV58 was overall considered to represent Annex I low resemblance stony reef (outside a designated site).

1.7.6.20 Low resemblance stony reef was recorded in 38 of the 105 images analysed at station ENV76 located just outside the north boundary of the Mona benthic subtidal and intertidal ecology study area (see Figure 1.39). Station ENV76 occurred along ridge features targeted by investigation which appeared to be aggregated clusters of cobbles but was predominantly composed of a sediment dominated matrix (Figure 1.36). The reef height ranged from 0.1 cm to 8.6 cm with the average reef height being 3.93 cm in images where cobbles were observed and low resemblance reef was identified. The stony reef coverage ranged from 0.33% to 31.86% in images with an average coverage of 9.59%. Stony reef associated epifauna at this site was dominated by *Serpulidae* with low abundances of *Tubularia* and faunal turf. On the basis of the above, and in accordance with the Irving (2009) and Golding *et al*. (2020) guidance, the stony reef at ENV76 was considered to represent Annex I low resemblance stony reef (outside a designated site).

1.7.6.21 Low resemblance stony reef was recorded in 14 of the 77 images analysed at station ENV79 located just outside the north boundary of the Mona benthic subtidal and intertidal ecology study area (see Figure 1.39). Whilst one out of 77 images was classified as medium resemblance stony reef station ENV79 was characterised by small, raised relief features in the bathymetry which corresponded with the increased density of cobbles and boulders but was predominantly composed of a sediment dominated matrix (Figure 1.36). The reef height ranged from 2.1 cm to 9.3 cm with the average reef height being 4.1 cm in images where cobbles were observed and low resemblance reef was identified. The stony reef coverage ranged from 0.34% to 41.27% with an average coverage of 10.96% in images where cobbles were observed and low resemblance reef was identified. Stony reef associated epifauna at this site was dominated by *Serpulidae* with low abundances of *Tubularia* and faunal turf. On the basis of the above, and in accordance with the Irving (2009) and Golding *et al*. (2020) guidance, the stony reef at ENV76 was overall considered to represent Annex I low resemblance stony reef (outside a designated site).

1.7.6.22 In conclusion the stony reef assessments which have been undertaken within the Mona benthic subtidal and intertidal ecology study area have been undertaken in accordance with the criteria as set out by Irving (2009) and Golding *et al*. (2020). These assessments have concluded that Annex I low resemblance stony reef was present at four stations within the Mona Array Area and one station within the Mona Array Area ZoI. Two stations just outside the Mona Array Area ZoI were also identified as Annex I low resemblance stony reef and have been reported here for completeness (see Figure 1.39).

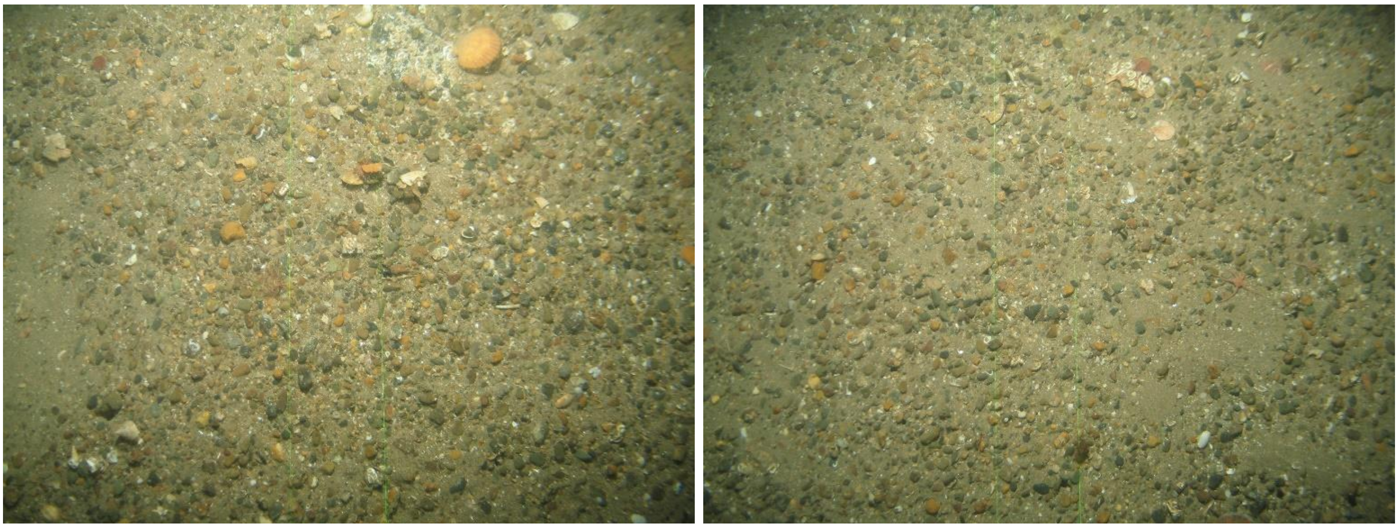


Figure 1.32: Examples of lone cobbles at sample station ENV51 within the Mona Array Area from the 2021 site-specific survey (no resemblance to stony reef).

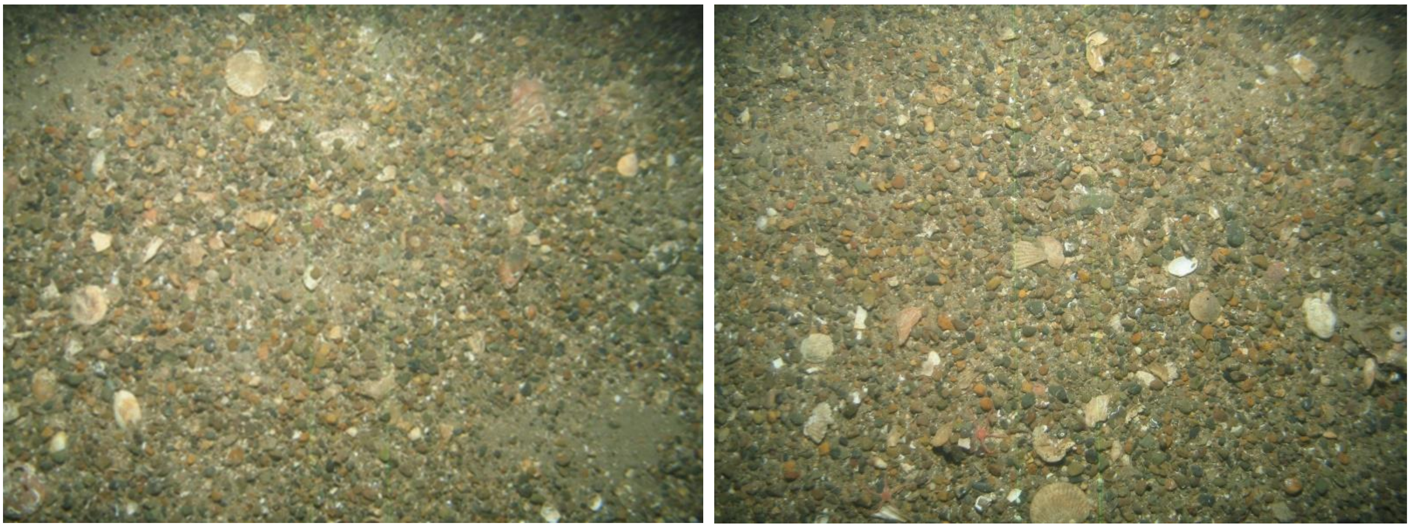


Figure 1.33: Example Annex I low resemblance reef at sample stations within the Mona Array Area from the 2021 site-specific survey (left: ENV46, right: ENV80).

Figure 1.34: Example of Annex I low resemblance reef at sample station ENV81 within the Mona Array Area (left: 2021 site-specific survey, right: 2022 site-specific survey).

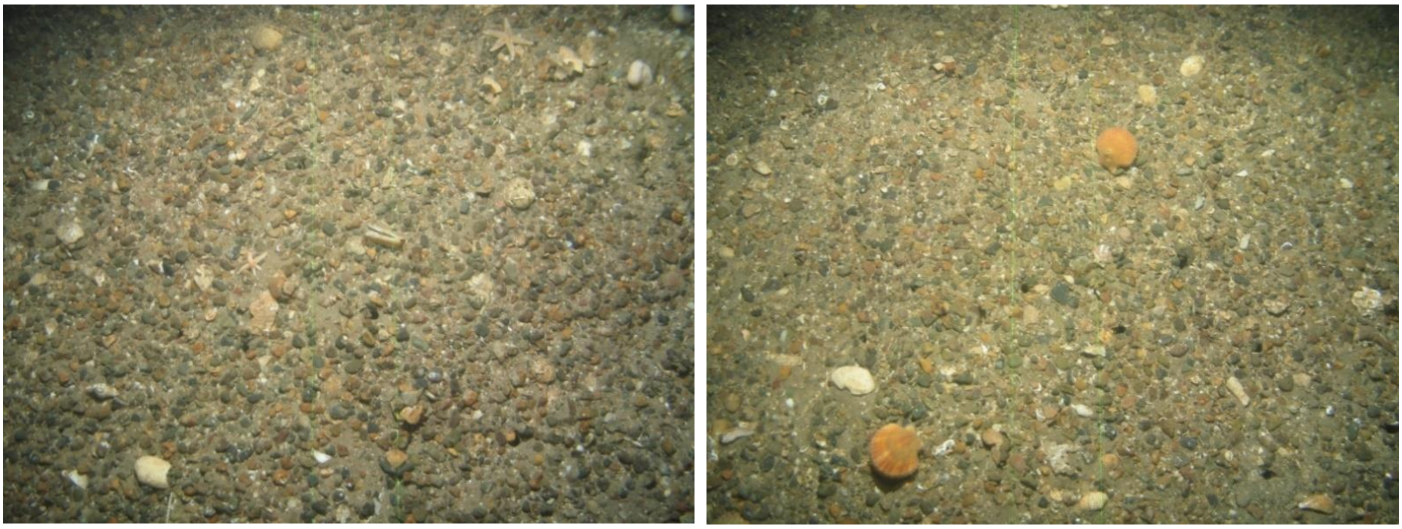


Figure 1.35: Example Annex I low resemblance reef at sample stations within the Mona Array Area from the 2021 site-specific survey (left: ENV97, right: ENV58).

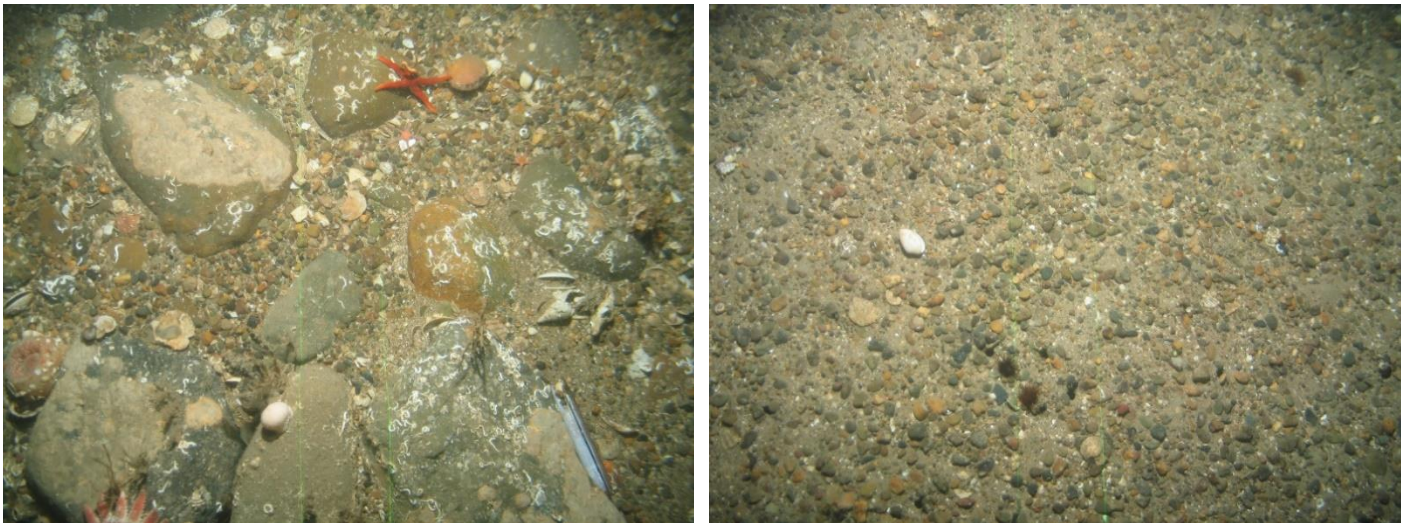


Figure 1.36: Example Annex I low resemblance reef at sample stations within the Mona Array Area ZoI from the 2021 site-specific survey (left: ENV76, right: ENV79).

Mona Offshore Cable Corridor

1.7.6.23 Seabed imagery indicated potential stony reef across the Mona Offshore Cable Corridor at six stations (OCC138, OCC147, OCC147A, OCC148, OCC149 and OCC153; see Figure 1.39. As a result, an Annex I stony reef assessment was undertaken to determine if there was a resemblance to the protected habitat based on criteria set out by Irving (2009) and Golding *et al*. (2020).

1.7.6.24 All stations that were subject to assessment in the Mona Offshore Cable Corridor were found to have no resemblance to Annex I stony reef habitat (Table 1.22. As in the Mona Array Area and ZoI all stations were clearly matrix supported, showed little change in relief, and were often composed of patchy areas within larger areas of gravel. At all stations where cobbles and boulders were observed (e.g. Figure 1.37), occurrences of images meeting one or more reef criteria were solely in a few images or with wide separation between images therefore stations were classified overall as having no resemblance to stony reef (Figure 1.37 and Figure 1.38). Paragraphs 1.7.6.25 to 1.7.6.27 below provide further detail on stations OCC138, OCC148 and OCC149 within the Mona Offshore Cable Corridor that were subject to a stony reef assessment, however those stations within the overlap with the Menai Strait and Conwy Bay SAC are discussed in paragraphs 1.7.6.28 to 1.7.6.30.

1.7.6.25 A total of 32 images were analysed at station OCC138 (see Figure 1.39 for location) and low resemblance stony reef was recorded in 14 images). Whilst one out of 32 images was classified as medium resemblance stony reef this station was characterised by as sand using the Folk classification methodology (Figure 1.9). At sample station OCC138 the average reef height was very low at 0.29 cm with the maximum height being 0.5 cm in images where cobbles were observed and low resemblance reef was identified. The average stony reef coverage was very low at 0.23% with a maximum stony reef coverage of 0.53% in images where cobbles were observed and low resemblance reef was identified (Table 1.22). Very little stony reef associated epifauna were found at this station with *Serpulidae* observed in four images and faunal turf observed in one. On the basis of the above, and in accordance with the Irving (2009) and Golding *et al*. (2020) guidance, station OCC138 was overall deemed to have overall no resemblance to stony reef.

1.7.6.26 A total of 120 images were analysed at station OCC148 (see Figure 1.39 for location) and low resemblance stony reef was recorded in only one of the images). At sample station OCC148 the average reef height (from analysis of seven images with the potential for reef) was 7 cm with the maximum height being 12.68 cm. The average stony reef coverage was very low at 0.65% with a maximum stony reef coverage of 12.68% in images where cobbles were observed (Table 1.22). The sediments were predominantly gravel and stony reef associated species were identified in only three images. On the basis of the above, and in accordance with the Irving (2009) and Golding *et al*. (2020) guidance, station OCC138 was overall deemed to have no resemblance to stony reef.

1.7.6.27 A total of 128 images were analysed at station OCC149 (see Figure 1.42) and low resemblance stony reef was recorded in only four images. At sample station OCC149 the average reef height was 10.1 cm with the maximum height being 19.1 cm (from analysis of nine images with the potential for reef). The average stony reef coverage was very low at 0.61% with a maximum stony reef coverage of 10.83% (from analysis of nine images with the potential for reef). The sediments were predominantly soft and stony reef associated species were identified in only six images, five of which had faunal turf and one with *Serpulidae*. On the basis of the above, and in accordance with the Irving (2009) and Golding *et al*. (2020) guidance, station OCC138 was overall deemed to have no resemblance to stony reef.

Menai Strait and Conwy Bay SAC

1.7.6.28 Stations OCC147, OCC147A and OCC153 were within the Menai Strait and Conwy Bay SAC and were assessed for the presence of stony reef. Sample station OCC147A refers to a resurveyed transect at the target station OCC147 as the transect was abandoned on the previous day due to string tides and poor image quality.

1.7.6.29 Station OCC147 and OCC147A were in the north of the overlap between the SAC and the Mona Offshore Cable Corridor. Both stations however had very few images with stony reef features. Across the transects at both OCC147 and OCC147A a total of 84 images were analysed and only five had features which warranted a reef assessment.). Station OCC147 was composed of clustered aggregations of cobbles with some boulders (Figure 1.37) and the subsequent transect at OCC147A was composed scattered isolated cobbles. Both stations had very low average stony reef coverage (0.62% and 0.1% respectively from the analysis of the five images with the potential for reef; Table 1.22). The average reef height was lower at ENV147A compared to ENV147 (9.26 cm and 5.2 cm respectively from the analysis of the five images with the potential for reef; Table 1.22). No stony reef associated species identified in the images from either transect. On the basis of the above, and in accordance with the Irving (2009) and Golding *et al*. (2020) guidance, station OCC147/148A was overall deemed to have no resemblance to stony reef.

1.7.6.30 Station OCC153 is in the north of the overlap between the SAC and Mona Offshore Cable Corridor (see Figure 1.39). A total of 53 images were analysed at station OCC153 and only two had features which warranted a reef assessment stony reef, but reef was not recorded in either of these images. The maximum height of reef in the two images assessed was 7.3 cm and the stony reef coverage ranged from 1.77% to 2.29% across the two images. Based on the sparse nature of these features and small extent this station was not allocated as low resemblance stony reef. This station was composed of clustered aggregations of cobbles with some boulders with most of the images showing soft sediment (Figure 1.38). The only stony reef associated epifauna observed in these images was faunal turf. On the basis of the above, and in accordance with the Irving (2009) and Golding *et al*. (2020) guidance, station OCC1153 was overall deemed to have no resemblance to stony reef.

Figure 1.37: Example scattered cobbles and areas of soft sediments at sample station OCC147/147A within the overlap of the Mona Offshore Cable Corridor and the Menai Strait and Conwy Bay SAC (no resemblance to stony reef).

Figure 1.38: Example scattered cobbles at sample station OCC153 within the overlap of the Mona Offshore Cable Corridor and the Menai Strait and Conwy Bay SAC (no resemblance to stony reef).

Table 1.22: Annex I stony reef assessment summary for Mona Array Area, ZoI and Offshore Cable Corridor.

Station	Total Images	Camera Transect Length (m)	Area Investigated (m^2)	Number of Photos with Stony Features	Mean Stony Reef Cover (%)	Range of tony Reef Cover (%)	Range of Reef Height (cm)	Average Reef Height (cm)	Resemblance to Stony Reef’	Associated Epifaunal Species	Comments
Mona Array Area											
ENV46	104	280.3	244.98	49	12	1.69 – 81.44	1.7 - 13.2	4.91	Low	*Serpulidae*, Faunal turf, *Pachymatisma johnstonia*, *Nemertesia* and *Tubularia*	Irregular seabed identified as potential area of boulders that form the low resemblance reef features.
ENV51	99	268.9	201.33	1	16	N/A	1.7	N/A	None	*Serpulidae* and Faunal turf	Lone cobble observed in imagery.
ENV80	102	279.5	235.32	52	11	0.43 - 51.15	1.4 - 12.8	4.77	Low	Faunal turf, *Metridium dianthus*, *Nemertesia* and *Tubularia*	Broad irregular relief area visible in the bathymetry data and a ridge apparent in the side scan sonar. Cobbles and scattered boulders observed on a gravelly sandy sediment.
ENV81 (2021) ENV81 (2022)	114	272.5	212.07	65	13	0.85 - 73.18	1.4 - 13.2	4.35	Low	*Serpulidae*, Faunal turf, *Polymastia*, *Nemertesia* and *Tubularia*	Area of irregular seabed showing contacts though scattered cobbles and boulders observed across the area.
	51	210	163.3	10	3.9	5.13 – 42.33	4.3 - 32.8	14.18	None	*Serpulidae*, Faunal turf, and *Nemertesia*	Occasional isolated cobbles observed in imagery.

Station	Total Images	Camera Transect Length (m)	Area Investigated (m^2)	Number of Photos with Stony Features	Mean Stony Reef Cover (%)	Range of tony Reef Cover (%)	Range of Reef Height (cm)	Average Reef Height (cm)	Resemblance to Stony Reef’	Associated Epifaunal Species	Comments
ENV97	91	273.1	231.36	35	11	0.69 – 45.95	1.4 - 9.1	3.84	Low	*Serpulidae*, Faunal turf, *Nemertesia* and *Tubularia*	Observations occur along ridge features targeted by investigation which appear to be aggregated clusters of cobbles with some boulders.
Mona Array Area ZoI											
ENV58	104	269.6	235.45	33	13	0.3 – 74.35	1.2 - 8.6	3.47	Low	*Serpulidae*, Faunal turf, *Nemertesia* and *Tubularia*	Area of irregular seabed showing contacts with a mound east of the station target location which appears as a mound of cobbles/boulders in the imagery.
ENV59	104	281	175.19	2	11	7.67 – 14.89	3.2 - 3.5	3.35	None	*Serpulidae* and Faunal turf	Occasional isolated cobbles observed on mound to south of target location only just covered by transect.
ENV60	92	279.7	215.37	1	3	N/A	3.7	N/A	None	*Serpulidae*, Faunal turf and *Raspailia ramosa*	Lone boulder observed in imagery.

Station	Total Images	Camera Transect Length (m)	Area Investigated (m^2)	Number of Photos with Stony Features	Mean Stony Reef Cover (%)	Range of tony Reef Cover (%)	Range of Reef Height (cm)	Average Reef Height (cm)	Resemblance to Stony Reef'	Associated Epifaunal Species	Comments
ENV61	95	273.2	194.68	7	4	1.48 – 11.54	1.3 - 3.8	2.8	None	*Serpulidae*, Faunal turf, *Raspailia ramose*, and *Tubularia*	Observed features are occasional cobbles/boulders occurring more frequently towards larger bathymetric feature southeast of the target only partially covered by investigations.
ENV76	105	274.2	245.90	41	10	0.52 – 31.86	1.7 - 8.6	3.93	Low	*Serpulidae*, Faunal turf, *Pachymatisma johnstonia*, *Nemertesia* and *Tubularia*	Observations occur along ridge features targeted by investigation which appear to be aggregated clusters of cobbles.
ENV79	77	273.5	205.22	21	11	0.34 – 41.27	2.1 - 9.3	4.1	Low	*Serpulidae*, Faunal turf, *Suberites*, *Metridium dianthus*, *Nemertesia* and *Tubularia*	Small, raised relief features in the bathymetry correspond with the increased density of cobbles and boulders.
ZOI041	49	215	131.5	23	0.09	0.007 – 0.3	2.22 - 26.7	9.23	None	*Serpulidae*, Faunal turf, and *Nemertesia*	Occasional isolated cobbles observed in imagery.
ZOI044	47	249	162.8	14	0.07	0.02 – 0.21	4 - 12.9	7.03	None	*Serpulidae*, *Polymastia*, Faunal turf, and *Nemertesia*	Occasional isolated cobbles observed in imagery.

Station	Total Images	Camera Transect Length (m)	Area Investigated (m^2)	Number of Photos with Stony Features	Mean Stony Reef Cover (%)	Range of tony Reef Cover (%)	Range of Reef Height (cm)	Average Reef Height (cm)	Resemblance to Stony Reef'	Associated Epifaunal Species	Comments
Mona Offshore Cable Corridor											
OCC138	49	796	233.3	8	0.23	0.07 – 0.53	0.2 - 0.5	0.29	None	*Serpulidae* and Faunal turf	Scattered cobbles in isolated patches.
OCC147	33	365	255.4	5	0.62	2.18 – 7.41	5.6 - 12.6	9.26	None	None	Clustered aggregations of cobbles with some boulders. This station was within the Menai Strait and Conwy Bay SAC.
OCC147A	51	737	73.2	1	0.10	N/A	5.2	N/A	None	None	Scattered isolated cobbles. This station was within the Menai Strait and Conwy Bay SAC.
OCC148	60	410	263.3	7	0.65	2.38 – 12.68	0.9 – 12.8	7	None	*Serpulidae* and Faunal turf	Clustered aggregations of cobbles with some boulders.
OCC149	128	480	306.1	9	0.61	1.99 – 10.83	5 - 19.1	10.1	None	*Serpulidae* and Faunal turf	Scattered cobbles in isolated patches.
OCC153	53	413	269.8	2	0.08	1.77 – 2.29	6.2 - 7.3	6.75	None	Faunal turf	Clustered aggregations of cobbles with some boulders. This station was within the Menai Strait and Conwy Bay SAC.

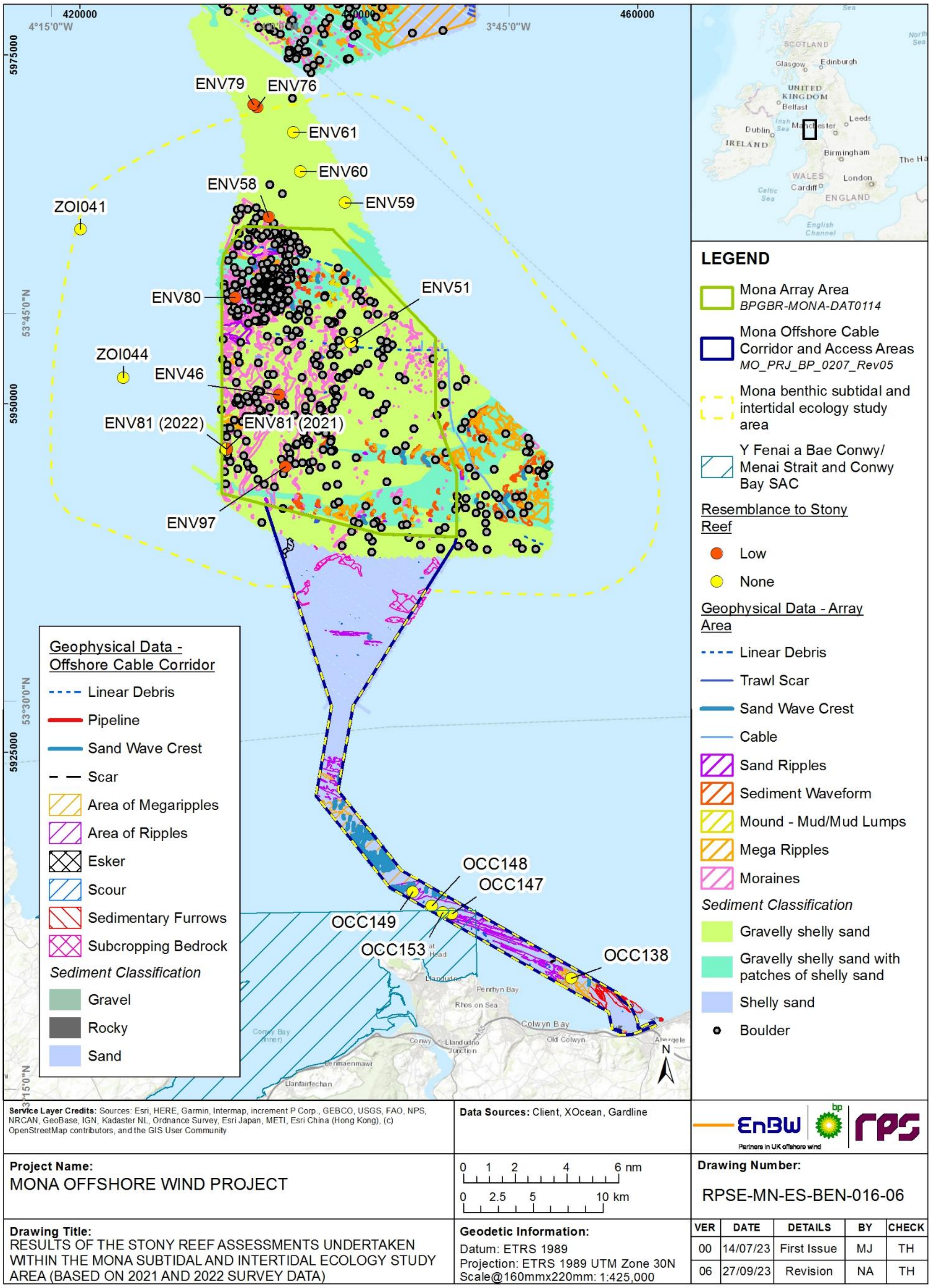


Figure 1.39: Results of the stony reef assessments undertaken within the Mona subtidal and intertidal ecology study area.

Annex I sandbanks which are slightly covered by sea water all the time

Mona Offshore Cable Corridor

Menai Strait and Conwy Bay SAC

1.7.6.31 The Menai Strait and Conwy Bay SAC is designated for Annex I sandbanks which are slightly covered by sea water all the time. The geophysical interpretation associated with the five stations sampled within the SAC, however, showed that as the water depths reduced to <15 m LAT, the seabed became increasingly featureless, with current related striations as well as small megaripples sporadically present. This interpretation of the seabed does not align with the description of Annex I sandbank habitats. Therefore no Annex I sandbanks which are slightly covered by sea water all the time were recorded within the overlap of the Mona Offshore Cable Corridor and the Menai Strait and Conwy Bay SAC.

Fragile sponge and anthozoan communities on subtidal rocky habitats

Mona Array Area and ZoI

1.7.6.32 Hard substrate Porifera were observed across both the Mona Array Area and ZoI within the Mona benthic subtidal and intertidal ecology study area with 26 stations across the Mona survey area showing evidence of Porifera (see Table 1.23). This evidence comprised single/isolated images showing less than 1% of the image occupied by lone sponges such as cf. *Polymastia* sp., cf. *Suberites* sp. and cf. *Tethya* sp. (Figure 1.40). Typical densities observed within the images was a sole individual most often found in coarser substrates.

1.7.6.33 At sample station ENV46 (Figure 1.40) 104 still images were analysed and sponge (*Pachymatisma johnstonia*) was only recorded in a single image at a percentage cover of 3% in that one image (Table 1.23). This was the greatest percentage of any image occupied by Porifera across all images analysed across the Mona Array Area and ZoI in a single image. The next highest percentage cover was identified in a single image from ENV78 where 105 still images were analysed and sponge (*Suberites*) was only recorded in a single image at a percentage cover of 1.28%.

1.7.6.34 All of the other stations where sponge was recorded in the Mona Array Area and ZoI only captured a limited number of images (i.e. less than seven but typically only one or two) with sponges in them. Sample station ENV41 recorded seven images out of a total 92 images where a hard substrate Porifera was identified, the most images of any station but the percentage cover of Porifera in each of these images was very low at <0.1%. This was followed by ENV33 where five images out of 91 images recorded hard substrate Porifera but at percentage covers of <0.18% in every image.

1.7.6.35 Although several of the sponge taxa present (including *P. johnstonia*, *Polymastia* sp., *Suberites* sp., *Raspailia ramosa* and *Tethya* sp.) and non-sponge species (e.g. *Nemertesia* sp. and *A. digitatum*) are listed within the fragile sponge and anthozoan communities on rocky habitats (JNCC, 2008; JNCC, 2014) they were only recorded at very low abundances and were therefore not considered to represent this habitat. On the basis of the above, the 'fragile sponge and anthozoan communities on rocky habitat' community was not considered to be present anywhere within the Mona Array Area or ZoI. The full results of the sponge habitat assessment (i.e. the per image assessment for stations subject to a fragile sponge and anthozoan communities on subtidal rocky habitats assessment) can be found in Appendix B.

Table 1.23: Summary of hard substrate Porifera coverage at stations within the Mona benthic subtidal and intertidal ecoloy study area.

Station	Number of Images Assessed with Visibility	Number of Images with Hard Substrate Porifera	Average % coverage of Hard Substrate Porifera	Max % of Hard Substrate Porifera
Mona Array Area 2021				
ENV36	82	1	0.13	0.13
ENV37	78	0	NA	NA
ENV38	78	2	0.10	0.10
ENV39	102	0	NA	NA
ENV41	92	7	0.08	0.10
ENV42	83	1	0.13	0.13
ENV46	104	1	3.06	3.06
ENV47	100	0	NA	NA
ENV48	95	1	0.16	0.16
ENV50	98	1	0.35	0.35
ENV51	99	0	NA	NA
ENV52	109	0	NA	NA
ENV53	99	0	NA	NA
ENV54	92	0	NA	NA
ENV56	95	0	NA	NA
ENV66	91	1	0.16	0.16
ENV69	91	0	NA	NA
ENV70	107	0	NA	NA
ENV77	98	0	NA	NA
ENV80	100	1	0.25	0.25
ENV81	114	3	0.11	0.14
ENV86	100	1	0.27	0.27
ENV87	100	0	NA	NA
ENV88	90	0	NA	NA
ENV89	88	0	NA	NA
ENV96	97	0	NA	NA
ENV97	90	0	NA	NA
Mona Array Area ZoI 2021				
ENV31	87	1	0.05	0.05
ENV32	82	0	NA	NA
ENV33	91	5	0.12	0.18

Station	Number of Images Assessed with Visibility	Number of Images with Hard Substrate Porifera	Average % coverage of Hard Substrate Porifera	Max % of Hard Substrate Porifera
ENV34	98	0	NA	NA
ENV35	97	0	NA	NA
ENV40	94	0	NA	NA
ENV43	90	0	NA	NA
ENV44	96	0	NA	NA
ENV45	99	0	NA	NA
ENV49	85	1	0.58	0.58
ENV55	99	0	NA	NA
ENV57	104	0	NA	NA
ENV58	104	3	0.16	0.29
ENV59	104	0	NA	NA
ENV60	92	2	0.20	0.26
ENV61	95	3	0.33	0.38
ENV62	98	0	NA	NA
ENV63	84	0	NA	NA
ENV64	70	0	NA	NA
ENV65	75	0	NA	NA
ENV67	98	0	NA	NA
ENV68	105	0	NA	NA
ENV71	112	0	NA	NA
ENV74	97	0	NA	NA
ENV75	91	0	NA	NA
ENV76	105	0	NA	NA
ENV78	105	1	1.28	1.28
ENV79	77	1	0.09	0.09
ENV82	92	0	NA	NA
ENV83	96	0	NA	NA
ENV84	101	1	0.16	0.16
ENV85	100	2	0.22	0.22
ENV95	95	0	NA	NA
Mona Array Area 2022				
ENV67A	49	0	NA	NA
ENV50	48	0	NA	NA

Station	Number of Images Assessed with Visibility	Number of Images with Hard Substrate Porifera	Average % coverage of Hard Substrate Porifera	Max % of Hard Substrate Porifera
ENV59	51	0	NA	NA
22ENV30	50	5	0.13	0.43
ENV56	57	0	NA	NA
22ENV32	39	0	NA	NA
22ENV33	48	0	NA	NA
22ENV34	53	0	NA	NA
ENV51	39	0	NA	NA
22ENV036	48	0	NA	NA
22ENV037	41	0	NA	NA
22ENV038	57	0	NA	NA
22ENV051	51	0	NA	NA
Mona Array Area ZoI 2022				
ZOI39	55	0	NA	NA
ZOI40	61	0	NA	NA
ZOI41	49	0	NA	NA
ZOI42	37	0	NA	NA
ZOI43	40	1	0.52	0.52
ZOI44	46	2	0.25	0.25
ZOI45	60	0	NA	NA
ZOI46	53	0	NA	NA
ZOI47	51	0	NA	NA
ZOI48	40	0	NA	NA
ZOI49	44	1	0.98	0.98
ZOI50	43	0	NA	NA
Mona Offshore Cable Corridor 2022				
OCC52	47	1	1.03	1.03
OCC53	33	4	0.67	1.06
OCC54	40	2	0.81	1.56
OCC55	29	2	0.61	0.67
OCC56	31	1	0.76	0.76
OCC57	44	0	NA	NA
OCC58	35	1	1.46	1.46
OCC59	36	1	0.85	0.85

Station	Number of Images Assessed with Visibility	Number of Images with Hard Substrate Porifera	Average % coverage of Hard Substrate Porifera	Max % of Hard Substrate Porifera
OCC60	58	0	NA	NA
OCC61	46	0	NA	NA
OCC62	38	0	NA	NA
OCC63	43	0	NA	NA
OCC64	45	0	NA	NA
OCC65	40	0	NA	NA
OCC133	53	0	NA	NA
OCC134	43	0	NA	NA
OCC135	38	0	NA	NA
OCC136	37	0	NA	NA
OCC137	30	0	NA	NA
OCC138	34	0	NA	NA
OCC139	64	0	NA	NA
OCC140	53	0	NA	NA
OCC141	52	0	NA	NA
OCC142	55	0	NA	NA
OCC143	57	0	NA	NA
OCC144	65	0	NA	NA
OCC145	42	0	NA	NA
OCC146	43	0	NA	NA
OCC147	81	0	NA	NA
OCC148	58	0	NA	NA
OCC149	124	0	NA	NA
OCC150	70	0	NA	NA
OCC151	47	0	NA	NA
OCC152	51	0	NA	NA
OCC153	100	0	NA	NA


Figure 1.40: Example sponge occurrence at sample station ENV58 (left) and ENV46 (right) within the Mona Array Area and ZoI.

Mona Offshore Cable Corridor

1.7.6.36 Hard substrate Porifera were also observed in the Mona Offshore Cable Corridor with seven stations in the north of the surveyed area showing evidence of Porifera. This evidence was entirely comprised of images showing less than 1.6% of the image occupied by lone sponges such as cf. *Polymastia* sp., cf. *Suberites* sp. and cf. *Tethya* sp. (Table 1.23).

1.7.6.37 At sample station OCC54 (Figure 1.45) 40 still images were analysed and sponge (*A. digitatum*) was only recorded in a single image at a percentage cover of 1.56% (Table 1.23). This was the greatest percentage occupied by Porifera in a single image across the Mona Offshore Cable Corridor. The next highest percentage cover was identified at OCC58 where 35 still images were analysed and sponge (*Suberites*) was only recorded in a single image at a percentage cover of 1.46%.

1.7.6.38 All other stations where sponge was recorded only captured a very small number of images with sponges in them (i.e. less than five but typically only one or two). Sample station OCC53 recorded four images out of a total 33 images where hard substrate Porifera was identified, the most images of any station, but at percentage covers of <1.1% in each of the four images.

1.7.6.39 A few species of sponges (*Polymastia* and *Suberites* sp.) and other non-sponge species (*A. digitatum*) were present that are listed within the 'fragile sponge and anthozoan communities on rocky habitats' (JNCC, 2008). They were, however, at very low abundances.

1.7.6.40 On the basis of the above, the 'fragile sponge and anthozoan communities on rocky habitat' community was not considered to be present anywhere within the Mona Offshore Cable Corridor. The full results of the sponge habitat assessment (i.e. the per image assessment for stations subject to a fragile sponge and anthozoan communities on subtidal rocky habitats assessment) can be found in Appendix B.

1.7.7 Results - combined infaunal and epifaunal subtidal biotopes

Mona Array Area and ZoI

1.7.7.1 Figure 1.41 presents the combined infaunal and epifaunal biotopes identified across the Mona Array Area and ZoI within the Mona benthic subtidal and intertidal ecology study area. The method of classifying combined, holistic biotope codes was informed by the preliminary infaunal and epifaunal biotopes, the characterising species for these biotopes (as highlighted by the SIMPER analysis) and environmental variables (e.g. sediment type and water depth) at each site. The quantitative benthic infaunal grab dataset was prioritised when combined the datasets, due to this being the most standardised dataset. The DDV footage, the results of the analysis of the epifaunal component of the grab data were then used to identify any subtle differences in epifaunal communities.

1.7.7.2 The infaunal and epifaunal biotopes have been combined to assign single biotopes across the Mona Array Area and ZoI (i.e. no biotope mosaics were mapped), due to the typically sparse epifaunal communities characterising these areas as well as due to the epifaunal biotopes corroborating what was found in the infaunal biotope analysis. Where DDV data only was taken, these infaunal biotopes have been taken as the final biotopes. To create the biotope maps for the Mona Array Area and ZoI the sample points were mapped over the geophysical data to ensure that the boundaries between biotopes were aligned with the natural transitions in sediment identified in the geophysical data as well as being mindful of features such as sandbanks and ripples.

1.7.7.3 The epifaunal data identified SS.SMx.CMx across the whole of the Mona Array Area. This provides support to the dominant infaunal biotopes recorded in the Mona Array Area which were SS.SMx.OMx.PoVen across the north, central and south sections of the Mona Array Area, with additional small areas of SS.SMx.CMx.KurThyMx and SS.SMx.CMx in the east. In addition to the sediment type and general community identified by the epifaunal analysis, the infaunal analysis yielded a more specific community allowing a more detailed level of classification. The epifaunal data in the Mona Array Area also identified areas of SS.SCS.CCS in the central and south sections. These were mirrored and expanded upon in the infaunal biotopes, with SS.SCS.CCS forming a band from east to west in the south section of the Mona Array Area as well as sections in the centre of the Mona Array Area.

1.7.7.4 The epifaunal data identified SS.SMx.CMx across the majority of the north part of the Mona Array Area ZoI. This provides support to the dominant infaunal biotopes recorded in this area. The epifaunal data in the Mona Array Area ZoI also identified areas of SS.SCS.CCS in the east sections. These were not typically expanded upon in the infaunal biotopes, with SS.SCS.CCS being the final designation for two stations in the east of the Mona Array Area ZoI. The infauna however revealed one of these stations had sediment with a larger fines component and a community more characteristic of a fine sand community leading to the allocation of the SS.SSa.CFiSa biotope in the southeast of the Mona Array Area ZoI. Additionally both the grab samples and DDV identified clear beds of O. fragilis which led to two stations in the southwest of the main Array Area ZoI being assigned the SS.SMx.CMx.OphMx biotope.

1.7.7.5 Based on the habitats assessment presented in section 1.7.6, the potential for the seapens and burrowing fauna habitat to be present across the Mona Array Area was also identified (Figure 1.41). This assessment was primarily based on the abundance of burrows identifies in DDV imagery and is considered to be precautionary. The seapens and burrowing fauna habitat has, however, been mapped as an overlay over the Mona Array Area.

Mona Offshore Cable Corridor

1.7.7.6 The Mona Offshore Cable Corridor is also best described from the infaunal data which provided greater resolution on the communities present. To create the biotope maps for the Mona Offshore Cable Corridor the sample points were mapped over the geophysical data to ensure that the boundaries between biotopes were aligned with the natural transitions in sediment identified in the geophysical data as well as being mindful of features such as sandbanks and ripples. The north of the Mona Offshore Cable Corridor was characterised by mixed sediment in the epifaunal analysis which was reflected in the infaunal analysis which identified a large area of SS.SMx.OMx.PoVen where the Mona Offshore Cable Corridor meets the Mona Array Area.

1.7.7.7 The central section of the Mona Offshore Cable Corridor was characterised by a mix of fine sands and mixed sediments. This led to the allocation of a number of broad biotopes including SS.SCS.CCS, SS.SMx.CMx and SS.SSa.CFiSa, as well as more community specific ones such as SS.SMx.CMx.KurThyMx and SS.SSa.IFiSa.NcirBat. These biotopes followed the geophysical features of the seabed such as ripples and sand banks which become part of the seabed topography as it approaches the coast.

1.7.7.8 The section of the coast approaching the coast was defined by muddy sand and mixed sediment which resulted in the allocation of the SS.SSa.IMuSa.FfabMag biotope. This biotope encompasses the change in sediment type from coarser sands to more fine grains as the Mona Offshore Cable Corridor reaches the landfall.

1.7.7.9 The combined biotope map shown in Figure 1.42 confirms many of the patterns described previously for the subtidal communities present in the Mona benthic subtidal and intertidal ecology study area. The results of the epifaunal analyses overall supported the more refined classifications resulting from the infaunal analysis.

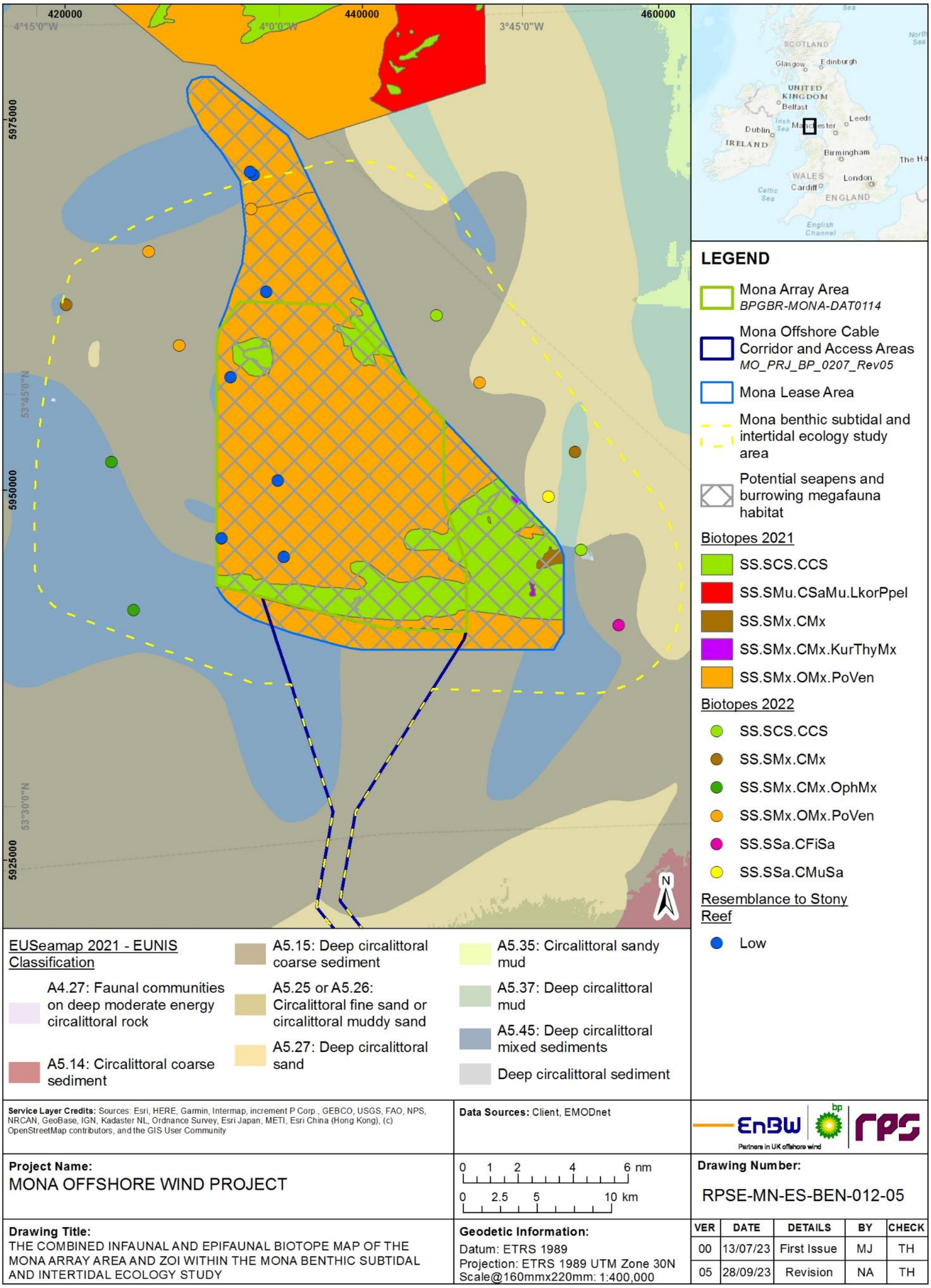


Figure 1.41: The combined infaunal and epifaunal biotope map of the Mona Array Area and ZoI within the Mona benthic subtidal and intertidal ecology study (all biotope codes are defined in Appendix H).

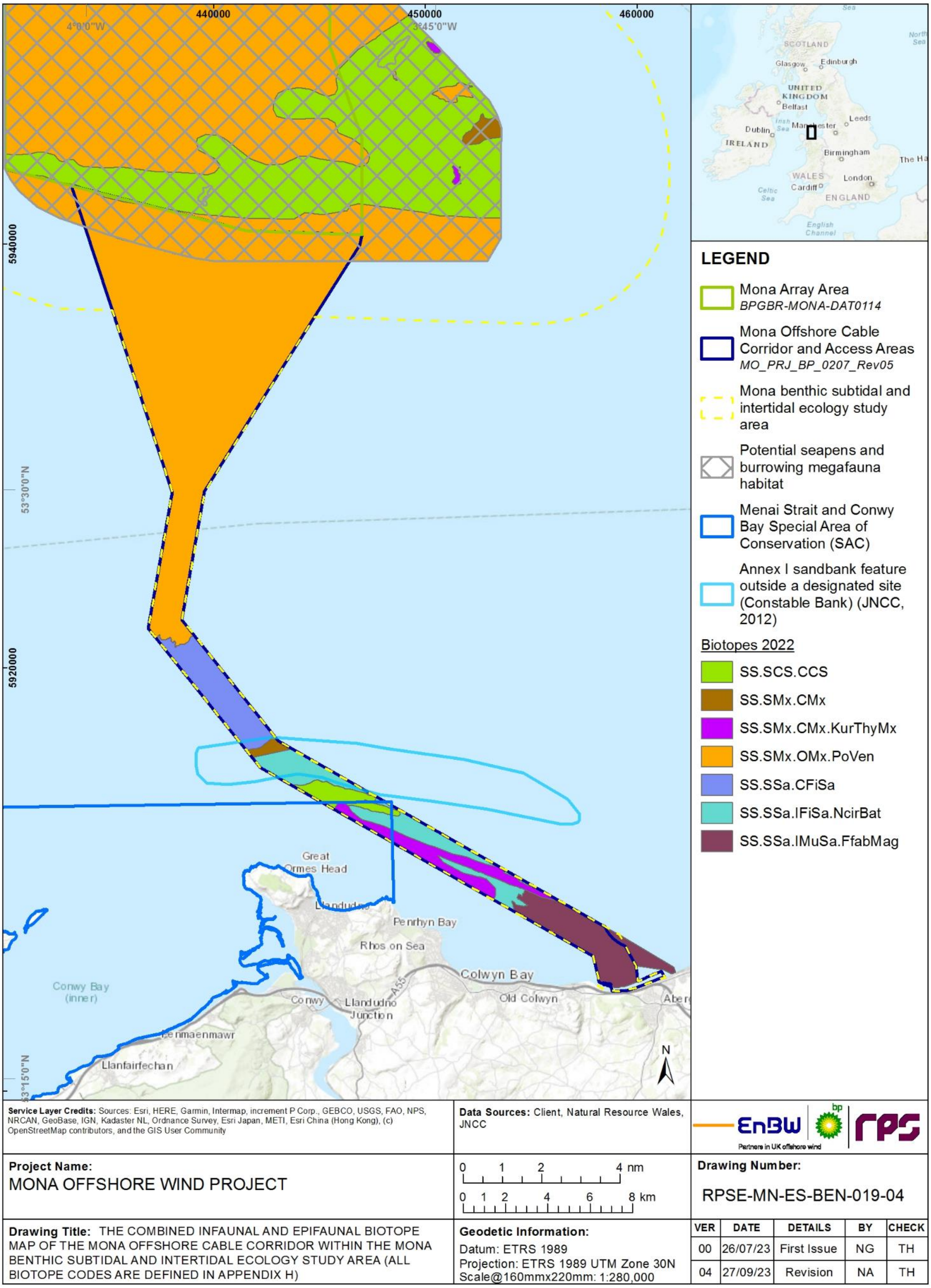


Figure 1.42: The combined infaunal and epifaunal biotope map of the Mona Offshore Cable Corridor within the Mona benthic subtidal and intertidal ecology study area (all biotope codes are defined in Appendix H).

1.8 Site-specific intertidal survey baseline characterisation

1.8.1.1 A Phase 1 intertidal walkover survey of the Mona Offshore Cable Corridor landfall was undertaken in May 2022 during the optimal period for intertidal biotope survey mapping (namely April to October) (Wynn *et al*., 2006). A second Phase 1 intertidal walkover survey was subsequently undertaken in May 2023 to provide baseline characterisation for an additional un-surveyed area resulting from a boundary refinement to the landfall, which extended the landfall to the east to encompass an access area. As part of the 2023 intertidal survey the S. alveolata reef recorded in 2022 was also revisited and remapped to determine if the extent of the *S. alveolata* reef in the west of the landfall had changed since 2022.

1.8.1.2 The Mona landfall is located at Abergele. The Mona landfall is located between Pensarn beach to the east and Llanddulas beach to the west, to the north/northwest of Abergele town. The Mona landfall covers a linear distance of approximately 2.5 km extending east from Llanddulas beach.

1.8.2 Methodology

1.8.2.1 Phase 1 intertidal walkover surveys were undertaken on 18, 19 and 20 May 2022 and 8 and 9 May 2023 at the Mona landfall. The surveys were carried out on a spring tide cycle and focussed on intertidal biotopes from MHWS to approximately MLWS.

1.8.2.2 The surveys were carried out by experienced marine biotope and coastal habitat surveyors and were undertaken with reference to standard intertidal survey methodologies as outlined in the JNCC Marine Monitoring Handbook (Davies *et al*., 2001), Procedural Guidance No 3-1 In situ intertidal biotope recording (Wyn and Brazier, 2001 and Wyn *et al*., 2000), and The Handbook for Marine Intertidal Phase 1 Biotope Mapping Survey (Wyn *et al*., 2006).

1.8.2.3 During the walkover surveys, notes were made on the shore type, wave exposure, sediments/substrates present and descriptions of species/biotopes present (JNCC, 2015). The spatial relationships between these features were observed and waypoints were recorded by a hand-held Global Positioning System (GPS) device, in conjunction with hand-written descriptions and photographs. Biotopes present were identified, and their extents mapped with the aid of aerial photographs and a hand-held GPS recorder. Biotope mosaics have been mapped where biotopes occurred intricately together. Any other features within the intertidal zone were also noted including any habitats/species of conservation importance. Where present, these features were target noted in the intertidal biotope map for the Mona landfall.

1.8.2.4 On-site exploratory digging for sub-surface fauna occurred at various locations across the beach. In addition, sieving of sediments was undertaken in different biotopes at eight sieving stations. The locations of the stations were determined in the field. The procedure involved the collection of four spade-loads (approximately 0.02 m^2) of sediment dug to a depth of 20 to 25 cm, which were then sieved through a series of stacked sieves, the finest of which was 0.5 mm mesh. All macrofauna species present were identified to the highest taxonomic level possible in the field and also enumerated on site. Field notes were also taken on the physical characteristics including sediment type (Wentworth, 1922) and presence of anoxic layers in the sediment.

GPS unit calibration tests

1.8.2.5 GPS readings were taken in the survey area using Garmin eTrex 10 and eTrex 20 handheld units. Both units were tested against fixed reference points prior to the survey and had an accuracy of within 5 m.

Constraints

1.8.2.6 During the early stages of the survey at the 2021 Mona landfall it became apparent that extensive amounts of fine particulate organic matter derived from sewage of unknown treatment status occurred extensively across the Mona survey area. Digging, sieving and general handling of beach material was subsequently restricted though this is not considered to have significantly impinged on the quality of the survey or the findings presented in this report.

Bacterial sampling

1.8.2.7 The infill Phase 1 intertidal walkover survey conducted in May 2023 at the Mona also collected sediment samples for bacterial analysis (*Escherichia coli* and Solids (total at 105°C, sludge)) at the request of NRW.

1.8.2.8 The sampling was undertaken along two transects in the west of the site capturing samples in the upper, mid and lower shore (total of 12 samples from six locations). These transects aimed to capture a variety of sediment types, but particularly areas of fine sediments. The sample analysis was conducted by ALS laboratories.

1.8.3 Results - Mona landfall

Overview

1.8.3.1 The beach at the Mona landfall was moderately exposed with both dissipative and reflective wave energy characteristics. Most of the shore had a moderate slope with a narrow steep reflective foreshore at the top of the beach.

1.8.3.2 In the far east of the landfall site the sediment around the MHWS line is barren shingle. Further towards the MLWS mark the sediment grades into muddy sands, this sediment extends down to the MLWS line.

1.8.3.3 The upper shore contained a seawall at the east end. This led down to a wide band of shingle dominated by cobbles and pebbles with occasional patches of coarse sand over pebbles. The upper mid shore contained occasional strips of mixed sediments dominated by cobbles. A large expanse of gently sloping fine to medium grained sand was present across most of the mid and lower shore. Sandbar development within this zone was restricted to a small number of relatively low undulations which remained wet during low tide. An anoxic layer within the sediment was patchily distributed across sandy habitats with more prominence at the lower shore.

1.8.3.4 At the west of the site the upper shore was reinforced with cut-boulders (riprap) beneath which was a band of shingle dominated by cobbles. Mixed mobile sediments dominated by cobbles extended down to MLWS and the proportion of boulders increased significantly from the mid shore seawards where they comprised as much as 35% of the substratum.

Biotopes

Upper shore

1.8.3.5 The upper shore contained a seawall at the east end leading down to a wide band of LS.LCS.Sh.BarSh (Figure 1.43 and Figure 1.38). At the west of the site the upper shore was reinforced with cut-boulders (riprap) with a thin band of Verrucaria maura on littoral fringe rock (LR.FLR.Lic.Ver).

Figure 1.43: Mona seawall and barren shingle leading down to LR.HLR.MusB.Sem and LS.LSa.MuSa.MacAre.

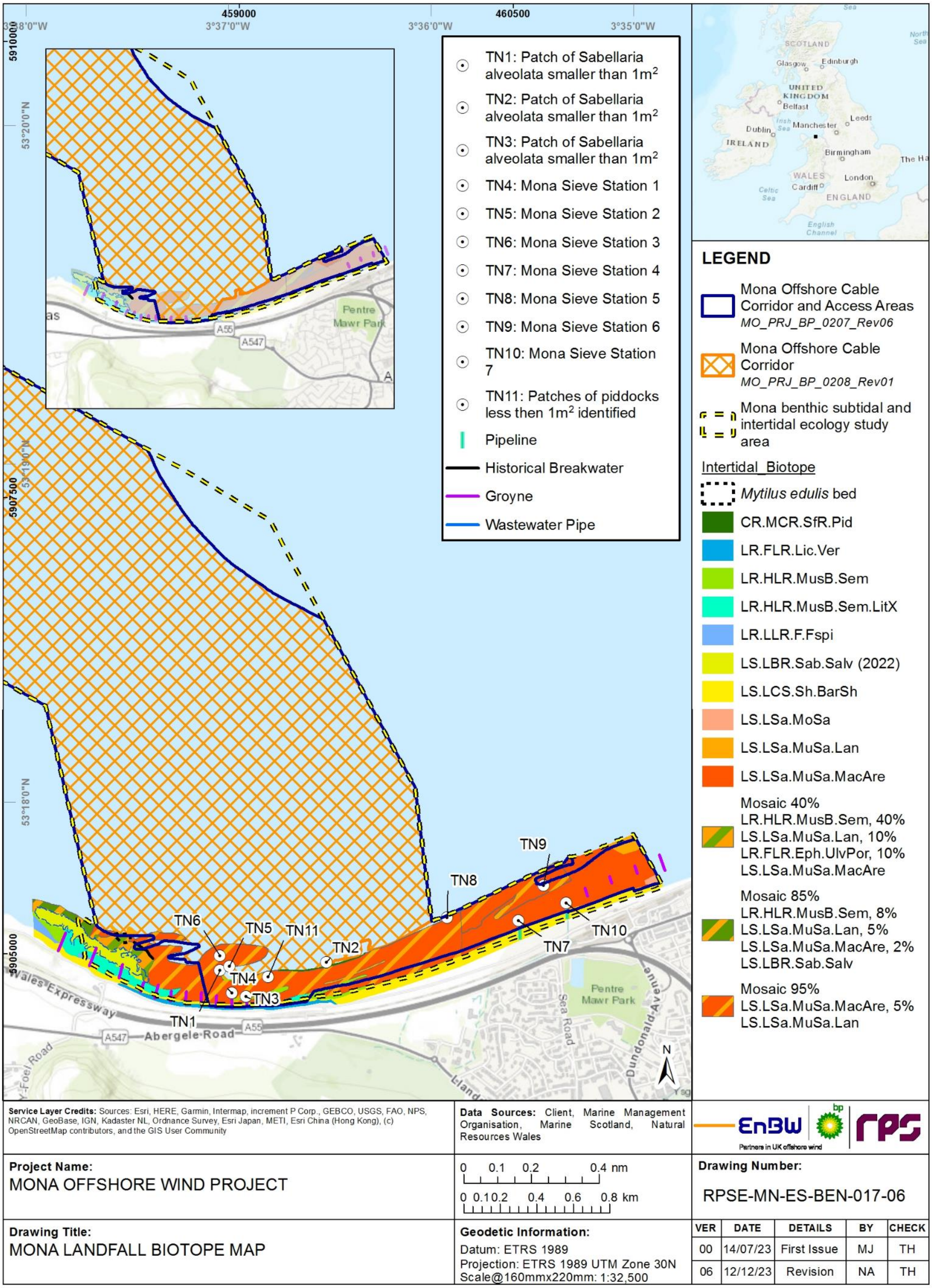


Figure 1.44: Mona landfall biotope map.

1.8.3.6 The biotope *F. spiralis* on sheltered upper eulittoral rock (LR.LLR.F.Fspi) (Figure 1.45) was confined to the west of the survey area (Figure 1.46). It contained the brown seaweed *F. spiralis* which occurred frequently together with an abundance of the barnacle *S. balanoides*. The gastropod mollusc *L. littorea* occurred frequently while *Patella vulgata* and *Phorcus lineatus* were occasional. The green seaweed *Ulva intestinalis* occurred occasionally as did the barnacle *Austrominius modestus.*

Figure 1.45: LR.LLR.F.Fspi on upper sheltered upper eulittoral rock.

Middle shore

1.8.3.7 The biotope *Semibalanus balanoides* and *Littorina sp.* on exposed to moderately exposed eulittoral boulders and cobbles (LR.HLR.MusB.Sem.LitX*)* occurred on the middle shore in the west of the survey area (Figure 1.44). This biotope was characterised by a low species diversity with a superabundance of the barnacle *S. balanoides*. The gastropod *L. littorea* was super-abundant in places with *Steromphala cineraria* and *Steromphala umbilicalis* occasional. The barnacle *A. modestus* and the green seaweed *Ulva intestinalis* occurred occasionally. Mixed sediments, predominately cobbles and pebbles, occurred in this zone.

1.8.3.8 Variants of this biotope extended over numerous sea defence groynes in the west of the survey area. These were made variously of wood and cut-boulder sometimes with both materials present. Wooden structures contained a limited fauna restricted to dense aggregations of the barnacle *S. balanoides* both in typical and columnar growth forms with occasional *L. littorea* (Figure 1.46). Aggregations of cut-boulders contained the same biotope on the outside with at least one small patch of *S. alveolata* (Figure 1.47 and TN3 in Figure 1.44).

1.8.3.9 The biotope *Semibalanus balanoides* on exposed to moderately exposed or vertical sheltered eulittoral rock (LR.HLR.MusB.Sem) occurred within the interstitial spaces between the boulders and between boulders and wood. Dense coverings of *S. balanoides* were occasionally accompanied by additional species including the sea anemone *Actinia equina* and the gastropod molluscs *N. lapillus* and *P. vulgata*. The bivalve mollusc *M. edulis* was rare.

Figure 1.46: LR.HLR.MusB.Sem.LitX on a wooden groyne.

Figure 1.47: Small patch of *S. alveolata* occurring between sea defences constructed of boulder and wood (Figure 1.44, TN3).

1.8.3.10 The biotope *Porphyra purpurea* and *Ulva* sp. on sand-scoured mid or lower eulittoral rock (LR.FLR.Eph.UlvPor) occurred usually in small, scattered patches (<25 m^2) within larger areas of LR.HLR.MusB.Sem and was mapped with these as a mosaic in Figure 1.44.

1.8.3.11 An extensive *S. alveolata* reef, *Sabellaria alveolata* reefs on sand-abraded eulittoral rock (LS.LBR.Sab.Salv), occurred at the west of the site (outside the Mona Offshore Cable Corridor and Access Area) covering 47,473 m^2 of the mid and lower shore (Figure 1.48 and Figure 1.49). In terms of structure the reef was approximately 30 cm high and hummock-shaped, particularly at the outer edges and at the edges of intersecting water channels and pools. The middle and west of the reef were more uniform in profile though still retained a noticeable undulating hummocky surface.

Figure 1.48: East edge of *S. alveolata* reef (2021).

1.8.3.12 The underlying substrate at the edge of the reef was mixed sediments dominated by boulders and cobbles with lesser amounts of pebbles, gravel and coarse sand. Bedrock was not observed but may have been present under the main body of the reef. The substrate here could not have been investigated without removing reef material and causing unnecessary damage. Furthermore, the hummocky profile indicated that the reef was built, at least predominantly, over boulders and cobbles.

1.8.3.13 The reef was dense with over 80% coverage and occurred in a mosaic with a pool and channel system which accounted for the residual 20%. Tidal drainage water, potentially mixed with groundwater seepage, accumulated in pools within the reef with drainage occurring from the upper surface waters of the pools down narrow cobbled channels with a moderate rate of flow. A small number of channels around the edge of the reef contained little flow with their cobble floors partially exposed. Reef pools were deep, typically up to 25 cm with some over 40 cm and retained water throughout the tidal cycle. They contained floors composed predominantly of sand (occasionally with overlying mud) and scattered cobbles.

Figure 1.49: ***S. alveolata*** **reef showing network of pools.**

1.8.3.14 Reef pools contained the gastropod mollusc *L. littorea* which was superabundant in places where the water was relatively shallow and cobbles were abundant. Other gastropods included *P. vulgata*, *N.lapillus*, *S.umbilicalis*, *S. cineraria* and *P. lineatus*. The barnacle *S. balanoides* occurred occasionally together with *A. modestus* in the upper pools and *Balanus crenatus* lower down the shore. The red seaweeds *Dumontia contorta* and *Chondrus crispus* occurred frequently in places while both frondose and crustose forms of *C. officinalis* were rare. The sea anemone *A. equina* was occasionally present on rock while *Sagartia troglodytes* was recorded partially buried in patches of mud. Small patches of *S. alveolata* occurred occasionally on submerged rock and spionid worms were visible in muddy tubes where suitable sediments occurred.

1.8.3.15 In the east of the landfall site, within the part of the landfall to be used for access only, the sedimentary habitat was predominantly characterised by the *Lanice conchilega* in littoral sand (LS.LSa.MuSa.Lan) and *Macoma balthica* and *Arenicola marina* in littoral muddy sand (LS.LSa.MuSa.MacAre) biotopes or a mosaic of the two. The sediment in this area was dominated by *A. marina* in the mid shore with *L. conchilega* becoming more prominent approaching the lower shore as well as near ephemeral streams on the sand. Near the east boundary of the landfall there was a small pocket of the barren or amphipod-dominated mobile sand shores (LS.LSa.MoSa) biotope on a moderately high sandbar composed of fine to medium grained sand. The sandbar was relatively free-draining and consequently supported a low density of life with only one amphipod recorded during sieve sampling.

Lower shore

1.8.3.16 The LS.LSa.MuSa.Lan biotope also occurred in strips and patches in sandy habitats across the mid and lower shore. *L. conchilega* was the dominant species and occurred in typical densities (~50 per m^2) on sand in the east of the survey area. Other species in this band included occasional *A. marina* and *Arenicola defodiens*.

1.8.3.17 LS.LSa.MuSa.Lan was also present in muddy sand between and on mixed stony sediments dominated by cobbles. An abundance of the barnacle *S. balanoides* occurred on a bed of cobbles below the *S. alveolata* reef with superabundant *L. conchilega* in small muddy spaces between the stones. Few associates were recorded other than occasional *N. lapillus*. This area is mapped as a mosaic (85% *LR.HLR.MusB.Sem*, 8% *LS.LSa.MuSa.Lan,* 5% *LS.LSa.MuSa.MacAre,* 2% *LS.LBR.Sab.Salv)* in Figure 1.44.

1.8.3.18 *Lanice conchilega* was dominant at MLWS on mixed mobile sediments ranging from boulders to fine mud. The polychaete worm was present in very dense aggregations (>1,000 per m^2) in mud and over sediment-covered stones (Figure 1.50) in the west of the survey area. These aggregations occurred in the biotope *LS.LSa.MuSa.Lan* and in the mosaics 85% *LR.HLR.MusB.Sem,* 8% *LS.LSa.MuSa.Lan,* 5% *LS.LSa.MuSa.MacAre,* 2% *LS.LBR.Sab.Salv*. and 40% *LR.HLR.MusB.Sem,* 40% *LS.LSa.MuSa.Lan,* 10% *LR.FLR.Eph.UlvPor,* 10% *LS.LSa.MuSa.MacAre* as mapped in Figure 1.44.

1.8.3.19 Small patches of *S. alveolata* (<1 m^2) occurred and *S. spinulosa* may also have been present in this location with candidate tubes observed. Sample collection and microscopic analysis would be required to establish presence or likely absence of this species.

Figure 1.50: Dense *L. conchilega* over mixed sediments. Under-boulder fauna present.

1.8.3.20 *S. balanoides* was occasionally present and an under-boulder fauna also occurred including the crustaceans *Cancer pagurus* and *Porcellana platycheles*, the sponge *Hymeniacidon perleve* and the fish *Lipophrys pholis*.

1.8.3.21 The under-boulder fauna observed is typically associated with biotopes dominated by seaweeds. However, seaweeds don't appear to be able to establish here possibly due to the presence of fine sediments both in the water column and settled on the substratum. Most of the fine sediments are thought to originate from wastewater. Some areas were settled by *M. edulis* in small discontinuous beds, the largest of which is shown in Figure 1.44 and Figure 1.51.

Figure 1.51: A small, discontinuous *M. edulis* bed.

1.8.3.22 The biotope *Macoma balthica* and *Arenicola marina* in littoral muddy sand (LS.LSa.MuSa.MacAre) was present across large expanses of sand in the central and east of the site. Sandbars occurred albeit at very low elevations and remained wet during the entire tidal cycle allowing this biotope to extend over large areas (Figure 1.52). An anoxic layer was occasionally visible in surface sediments and lugworm casts though it was absent at sieving stations (Figure 1.53).

1.8.3.23 *A. marina* was abundant with *A. defodiens* becoming occasionally present at the lower shore. The large spionid polychaete worm *Scolelepis foliosa* was recorded along with smaller species of spionid worm including *Pygospio elegans*. *L. conchilega* occurred occasionally as did the molluscs *M. balthica* and *Cerastoderma edule*.

Figure 1.52: LS.LSa.MuSa.Lan and LS.LSa.MuSa.MacAre at the lower shore in typical densities.

Figure 1.53: Sieve station 2 in LS.LSa.MuSa.MacAre.

1.8.3.24 LS.LSa.MuSa.Lan was often present at MLWS though was otherwise intermingled within LS.LSa.MuSa.MacAre (Figure 1.54) and therefore the two habitats are mapped as a mosaic in Figure 1.44.

Figure 1.54: A dense patch of LS.LSa.MuSa.Lan within LS.LSa.MuSa.MacAre.

1.8.3.25 An extensive outcrop of clay covering 3,634 m^2 occurred at the lower shore. This feature was colonised by the piddock *Barnea candida* in densities of up to 80 per m^2 (Figure 1.55 and Figure 1.56) This biotope (Piddocks with a sparse associated fauna in sublittoral very soft chalk or clay (CR.MCR.SfR.Pid)) lacked any associated species.

Figure 1.55: CR.MCR.SfR.Pid at the lower shore.

Figure 1.56: *Barnea candida* in *CR.MCR.SfR.Pid*.

Mona landfall habitats of conservation importance

Biotopes of high conservation value

1.8.3.26 Six of the biotopes/habitats recorded on the site are listed by one or more of the following schemes because they are of conservation importance (Table 1.24):

- EU Habitats Directive Annex 1
- The Convention for the Protection of the Marine Environment of the North-East Atlantic (aka the ‘OSPAR Convention')
- Environment (Wales) Act 2016 Section 7
- WFD
- UK BAP.

Table 1.24: Biotopes/habitats of conservation importance at the Mona landfall.

*where connected to reefs

Habitat/Biotope	Annex 1	OSPAR	Section 7	WFD	UK BAP
LS.LSa.MuSa.MacAre	√	√	√	√	Priority
LS.LSa.MuSa.Lan	√	√	√	√	Priority
LS.LBR.Sab.Salv	√	-	√	√	Priority
M. edulis beds	√	√	√	√	Priority
CR.MCR.SfR.Pid	x	x	√	√	Priority
Under-boulder fauna	*	x	√	√	Priority

1.8.3.27 Several of the habitats and biotopes recorded at the Mona landfall are listed in Annex 1 of the EU Habitats Directive. As the Mona benthic subtidal and intertidal ecology study area lies out with a SAC, these biotopes are not directly protected by this piece of legislation though are nevertheless taken into consideration within the planning process.

1.8.3.28 The following biotopes are part of the Annex I Habitats Directive habitat *1140 Mudflats and sandflats not covered by seawater at low tide*:

- LS.LSa.MuSa.MacAre
- LS.LSa.MuSa.Lan.

1.8.3.29 The following biotopes are part of the Annex I Habitats Directive habitat 1170 Reefs:

- LS.LBR.Sab.Salv
- *M. edulis* beds.

1.8.3.30 Definitions of reefs in relation to these biotopes are discussed below.

Sabellaria alveolata reef

1.8.3.31 *S. alveolata* is protected by a variety of policies and legislation in its ‘reef’ form.

1.8.3.32 *Sabellaria* reef is listed on Habitats Directive Annex I although the survey area is not a designated SAC. *Sabellaria* is also listed in Section 7 of the Environment Act (Wales) 2016 as a habitat of principal importance for the purpose of maintaining and enhancing biodiversity in Wales.

1.8.3.33 The WFD identifies ‘Polychaete reef’ as one of several higher sensitivity habitats that specifically need to be considered if a proposed development needs to be subject to a WFD assessment and there may be some groundwater input to the main *S. alveolata* reef in the survey area.

1.8.3.34 Despite these conservation designations there isn’t a standard definition of what constitutes a *S. alveolata* reef. Reefs were originally defined under the Habitats Directive as being ‘*submarine or exposed at low tide, rocky substrates and biogenic concretions, which arise from the sea floor in the sublittoral zone where there is an interrupted zonation of plant and animal communities’* (CEC, 1999). The meaning of ‘biogenic concretions’ was later clarified as *‘concretions, encrustations, corallogenic concretions and bivalve mussel beds originating from dead or living animals (i.e. biogenic hard bottoms which supply habitats for epibiotic species)’* (CEC, 2007). Holt *et al*. (1998) added that an Annex 1 reef should be substantial in size generally in the order of a metre or two across as a minimum.

1.8.3.35 NRW (2019) relate that at a UK level, definitions are similar to the Habitats Directive and there is no indication of the lower limits of size to be considered a reef other than the stipulation that the reef *'must be large enough to maintain its structure and functions'.*

1.8.3.36 A classification system for *S. alveolata* reef was developed as part of the Tidal Lagoon Swansea Bay Adaptive Environmental Management Plan (TLSB, 2017). Building on earlier work by Holt *et al*. (1998) and the 'reefiness' classification proposed by Gubbay (2007) for *S. spinulosa,* the following criteria were proposed for defining *S. alveolata* reefs:

- Colony: An aggregation of *S. alveolata* tubes (dead or alive)
- Reef: A colony of *S. alveolata* elevated by at least 2 cm from the underlying substrate and covering at least 10% of an area of 25 m^2 or more.

1.8.3.37 All of these documents provide a valuable contribution to the discussion on 'reefiness' and TLSB (2017) provide a useful working definition. They have been taken into account in the assessment of conservation value of *S. alveolata* observed in the survey area. Additional consideration is given to the structural quality and diversity of both the large reef and the depauperate patches of *S. alveolata* present further east. Furthermore, the nature of the shore including sediment distribution and ecological processes are considered with reference to potential reef expansion.

1.8.3.38 The large reef at the west edge of site easily surpasses all physical criteria that have been used in *S. alveolata* reef definitions and is of high conservation value with excellent structural diversity both in terms of the surface hummocks and associated pool and channel features. These features are creations of the reef and are therefore part of the reef complex. They enhance biodiversity together with the main body of the reef, by way of providing habitats that are otherwise absent along this stretch of coastline and form an integral part of the natural landscape.

1.8.3.39 In contrast, isolated patches of *S. alveolata* located east of the main reef would not be classified as reef using the TLSB (2017) biometric cut-off values. However, these areas could be considered limited or embryonic self-sustaining reefs, though in any case have a much lower conservation value than more extensive aggregations which occur over natural sediments.

1.8.3.40 The UK BAP states that '*S. alveolata has a very variable recruitment and the cover in any one area may vary greatly over a number of years, although in the long-term reefs tend mainly to be found on the same shores'*.

1.8.3.41 There is some potential for expansion of the main reef to the east although natural rocky mobile sediments, particularly boulders, progressively diminish in this direction as the beach transitions to a predominantly sandy environment. Rocky sediments are also distributed towards the upper shore which is less favourable for colonisation. The anthropogenic sea defence boulders which contained small patches of *S. alveolata* have very large interstitial spaces detrimental to the normal formation of a *Sabellaria* reef.

2023 survey update

1.8.3.42 During the 2023 intertidal survey, the *S. alveolata* reef at the landfall was revisited and remapped although noting that the reef now falls outside the Mona Offshore Cable Corridor and Access Area. During the 2023 survey, the east section of the reef showed some noticeable signs of degradation (Figure 1.57). This may have been the result of the cold winter conditions of winter 2022/2023. Firth *et al*. (2015) reported previous declines in the Llanddulas reef at the Mona landfall location during the cold winters of 2009/2010 and 2010/2011. There is therefore the potential that cold weather in the winter of 2022/2023 may have led to degradation of weaker parts of the reef. The winter of 2022/2023 started with one of the most significant spells of low temperatures to affect the UK since the exceptional December of 2010 (Met Office 2023). Average mean temperature for the UK from December 1st to the 27th was just 2.4 ^{o}C, which is 1.8 ^{o}C below the average for the month (Met Office, 2022).

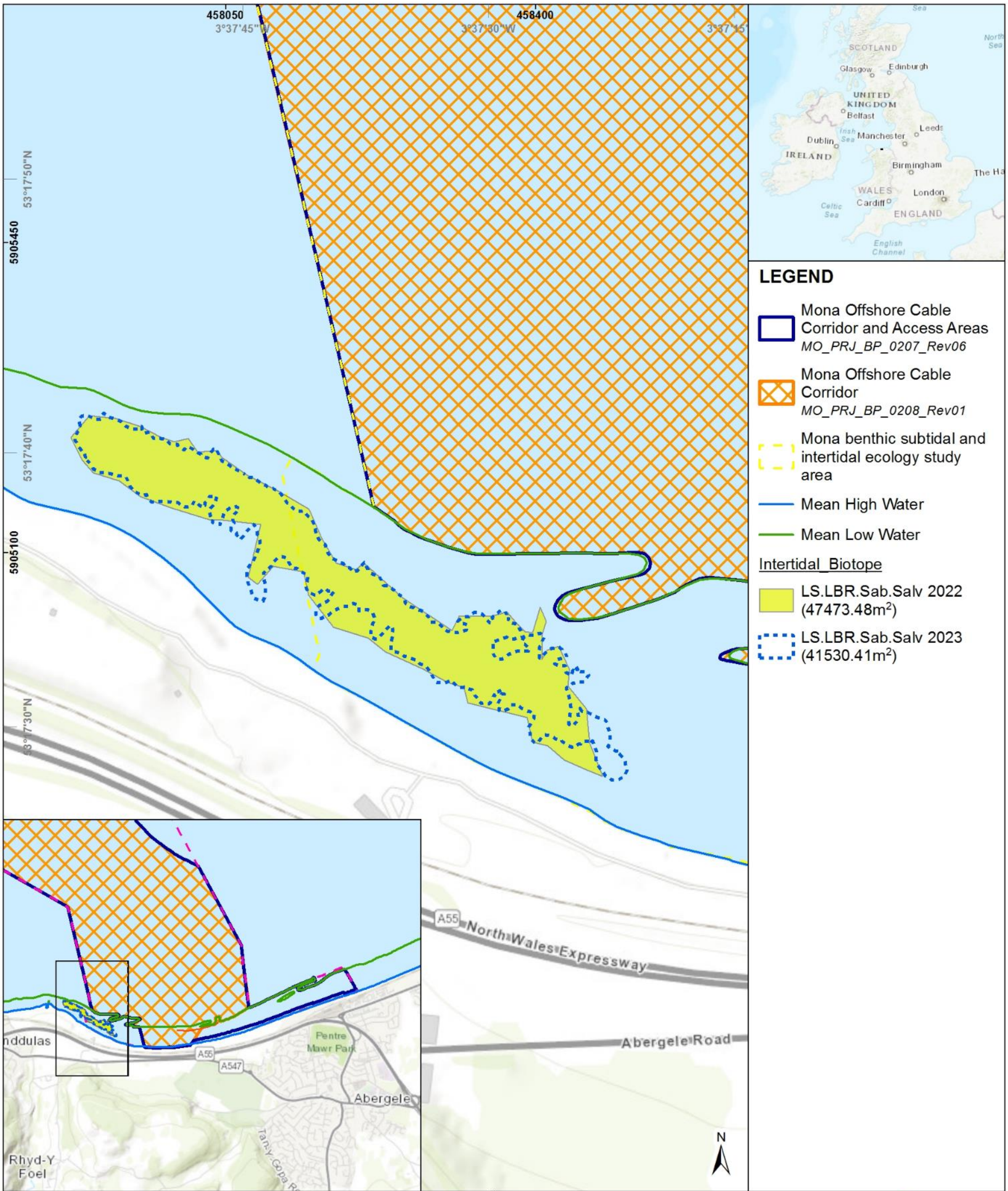
Figure 1.57: Examples of damaged *S. alveolata* in the east section of the *S. alveolata* reef during the 2023 intertidal survey.

1.8.3.43 During the 2023 intertidal survey *the S. alveolata* reef was also re-mapped to determine if there had been a change in extent associated with the reef since the 2022 survey. The results found a small decrease (47,473 m^2 in 2022 and 41,530 m^2 in 2023) in total extent however this is likely to be due to natural fluctuation (Figure 1.60). Figure 1.60 suggests that the 2023 outline of the reef extended further east than the 2022 outline. This was, however, the result of efforts to capture the furthest east extent of the presence of *S. alveolata* rather than the main reef. This east part is, however, quite patchy and is not part of the main reef structure (Figure 1.58 and Figure 1.59). Overall, the May 2023 survey confirmed that the extent of the *S. alveolata* reef had not changed significantly since the 2022 survey and had been relatively stable between years.

1.8.3.44 In summary, none of the *S. alveolata* east of the main reef is considered to be of high conservation value (Figure 1.59) and the beach east of the main reef likely to be unsuitable for the development of an extensive, structurally diverse reef.

Figure 1.58: East edge of the *S. alveolata* reef looking west from the west edge of the reef over to the main reef.

Figure 1.59: East edge of the *S. alveolata* reef looking east.



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Project Name: MONA OFFSHORE WIND PROJECT	0 0.05 0.1 nm / 0 0.1 0.2 km	Drawing Number: RPSE-MN-ES-BEN-021-03
Drawing Title: MAPPED EXTENT OF THE SABELLARIA ALVEOLATA REEF AT THE MONA LANDFALL (2022 AND 2023 SURVEYS).	Geodetic Information: Datum: ETRS 1989 Projection: ETRS 1989 UTM Zone 30N Scale@160mmx220mm: 1:7,250	

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00	14/08/23	First Issue	MJ	TH
03	11/12/23	Revision	MJ	TH

Figure 1.60: Mapped extent of the *Sabellaria alveolata* reef at the Mona landfall (2022 and 2023 surveys).

Mytilus edulis bed

1.8.3.45 *Mytilus edulis* beds are biogenic reefs (Holt *et al*., 1998) and are protected by various conventions, legislative directives and acts (Table 1.24).

1.8.3.46 Defining *M. edulis* beds presents the same challenges as described above for *S*. *alveolata* reefs, though a similar approach to assessing 'reefiness' and conservation value is adopted here.

1.8.3.47 The mussel bed at the west end of the site is small and patchy with approximately 5% ground cover over an area of 3,116 m^2. One square metre of continuous mussel bed was observed in at least one area meeting the criteria given for biogenic reef in Holt *et al*. (1998), however, the mussel bed was discontinuous. The beds add a limited amount of small-scale structural diversity to the beach and are a source of food for predatory invertebrates and oystercatchers. They occur in close proximity to the *S. alveolata* reef which could potentially spread to this area. Indeed, a previous survey by NRW indicates that the main area of *S. alveolata* on site was formerly a *M. edulis* bed.

1.8.3.48 During the 2023 intertidal survey the small *M. edulis* bed was revisited and found to still be present in the west of the Mona landfall site. Few mussels were identified at this location, however they were identified with characteristic barnacles as well as the sand mason worm (*L. conchilega*).

Lanice conchilega 'potential reefs'

1.8.3.49 Holt *et al*. (1998) tentatively excluded high density *L. conchilega* aggregations as reefs on the grounds that it is *'unlikely that they are sufficiently solid or altered to qualify as biogenic reefs'* and because it is *'not known how seasonal/stable these features are'*. This approach remains the standard working practice within the planning and legislative framework.

1.8.3.50 However, Rabaut, (2009) contests that "the application of the EU Habitats Directive definition of 'reefs'" (habitat 1170 of Annex I) - using the guidelines provided by Hendrick and Foster-Smith (2006) - provided clear evidence that all characteristics needed to classify biogenic structures as reefs are present in the case of high-density aggregations of *L. conchilega*.

1.8.3.51 Other studies highlight that dense *L. conchilega* aggregations can potentially alter currents and sediment dynamics and provide a sufficiently stable substrate to allow colonisation by fauna that would otherwise be unable to flourish (Callaway, 2006). Indeed, dense *L. conchilega* aggregations could potentially facilitate settlement by the biogenic reef forming species *M. edulis* (Callaway, 2003) *S. spinulosa* (JNCC, 2015) and *S. alveolata* (Larsonneur, 1994; cited in Holt *et al*., 1998).

1.8.3.52 Extremely dense aggregations of *L. conchilega* occur at the west end of the Mona landfall site often with numerous small patches of *M. edulis* and *S. alveolata*. These areas have the potential to develop into large biogenic reefs.

Bacterial Sampling

1.8.3.53 For the 12 samples collected at the Mona landfall, the levels of *E. coli* recorded were below the limit of detection of <10 cfu/g.

1.8.3.54 These results indicate very low (undetectable by the analysis used) bacterial contamination in the Mona landfall sediments, at the time of sampling in May 2023.

1.9 Summary

1.9.1 Mona Array Area and ZoI

1.9.1.1 The subtidal site-specific surveys consisted of infaunal grab samples and DDV surveys. Subtidal sediments recorded across the Mona Array Area and ZoI within the Mona benthic subtidal and intertidal ecology study area ranged from sandy gravel to slightly gravelly muddy sand with most samples classified as gravelly muddy sand. The sediments in the Mona Array Area and ZoI graded from gravelly muddy sand in the west, to gravelly sand in the central region and predominantly gravelly sand and gravelly muddy sand in the east. This aligned with the desktop data which indicated sand and mixed sediments across the Mona benthic subtidal and intertidal ecology study area (EMODnet, 2019).

1.9.1.2 A total of 22 sediment samples from across the Mona Array Area and ZoI within the Mona benthic subtidal and intertidal ecology study area were analysed for sediment chemistry. Regarding metals, levels of chromium, copper, nickel, lead, mercury and zinc did not exceed the relevant Cefas AL1 or the Canadian TEL in any of the samples. Concentrations of arsenic did however exceed Cefas AL1 at two sample stations in the Mona Array Area (see Figure 1.12) but were below the Cefas AL2. Additionally, the concentration of cadmium marginally exceeded the Cefas AL1 at a single station in the Mona Array Area (see Figure 1.12). No samples exceeded Cefas ALs or the Canadian TEL or PEL for PCBs. Levels of PAHs did not exceed the relevant Canadian TEL or PEL or ERM and ERL thresholds. Concentrations of organotins where below the LOD at all stations.

1.9.1.3 The benthic communities in the Mona Array Area were characterised by the polychaete-rich deep Venus community in offshore mixed sediments (SS.SMx.OMx.PoVen) biotope with areas of circalittoral coarse sediment (SS.SCS.CCS). These biotopes also extended in to the north and east parts of the Mona Array Area ZoI. Additionally there were small areas characterised by the circalittoral mixed sediment (SS.SMx.CMx) and *Kurtiella bidentata* and *Thyasira* spp. in circalittoral muddy mixed sediment (SS.SMx.CMx.KurThyMx) biotopes in the southeast of the Mona Array Area ZoI within the Mona benthic subtidal and intertidal ecology study area. The SS.SMx.CMx biotope and the circalittoral fine sand (SS.SSa.CFiSa) biotope were also identified in the south east of the Mona Array Area ZoI. In the southwest of the Mona Array Area ZoI, brittlestar beds were recorded at two stations and the communities were characterised by the SS.SMx.CMx.OphMx biotope.

1.9.1.4 The habitat assessment concluded that 37 stations distributed across the Mona Array Area and in the east of the Mona Array Area ZoI had a negligible resemblance to the ‘seapens and burrowing megafauna communities’ habitat on the basis of the presence of ‘frequent’ burrows on the SACFOR scale. Whilst seapens were not recorded during the site-specific surveys, and whilst the sediment types at these stations was predominantly gravelly muddy sand (and so unlikely to be consistent with this habitat), it was not possible to determine the species which had formed the burrows. Therefore, in order to adopt a precautionary approach the ‘seapens and burrowing megafauna communities’ habitat has been assumed to be potentially present across the Mona Array Area and the east of the Mona Array Area ZoI.

1.9.1.5 Annex I stony reef assessments identified four stations which were classified as Annex I low resemblance stony reef located in the west of the Mona Array Area. In the Mona Array Area and ZoI only one station in the north was classified as Annex I low resemblance stony reef (Figure 1.39). Two further stations were identified as Annex I low resemblance stony reef but these were outwith the Mona Array Area ZoI. An assessment for sponge dominated habitat was also undertaken for the Mona Array Area and ZoI but no stations were found to represent the fragile sponge and anthozoan communities on subtidal rocky habitat.

1.9.2 Mona Offshore Cable Corridor

1.9.2.1 The subtidal site-specific surveys within the Mona Offshore Cable Corridor consisted of infaunal grab samples and DDV surveys. Subtidal sediments recorded across the Mona Offshore Cable Corridor were predominantly classified as either gravelly muddy sand or sand. Gravelly muddy sands dominated the northern part of the Mona Offshore Cable Corridor, changing to sandy gravel, gravelly sand and slightly gravelly sand in the central section. The sediment was finer at stations approaching the coast with the shallowest station being slightly gravelly sand. This aligned with the desktop data which indicated coarse and fine sand across the Mona Offshore Cable Corridor (EMODnet, 2019) as well as the site-specific geophysical data.

1.9.2.2 A total of 18 sediment samples from across the Mona Offshore Cable Corridor within the Mona benthic subtidal and intertidal ecology study area were analysed for sediment chemistry. Regarding metals, levels of cadmium, chromium, copper, nickel, lead, mercury and zinc did not exceed the relevant Cefas AL1 or the Canadian TEL in any of the samples. Concentrations of arsenic did however exceed Cefas AL1 at three sample stations in the Mona Offshore Cable Corridor and 17 stations were above the Canadian TEL. Levels at all stations were, however, below Cefas AL2 and the Canadian PEL. No samples exceeded the relevant Cefas ALs or the Canadian TEL or PEL for PCBs. Levels of PAHs were below the relevant Canadian TEL and PEL levels, or ERM and ERL thresholds. Concentrations of organotins where below the LOD at all stations.

1.9.2.3 The benthic communities in the Mona Offshore Cable Corridor were characterised by the SS.SMx.OMx.PoVen biotope in the north, in the area adjacent to the Mona Array Area. The central section, to the north of Constable Bank, was dominated by the SS.SSa.CFiSa biotope. In the area of overlap with Constable Bank, the sediments and communities were characterised by the SS.SMx.CMx and SS.SSa.IFiSa.NcirBat biotopes. In the area of overlap with the Menai Strait and Conwy Bay SAC, and also the part of the Mona Offshore Cable Corridor to the south of the SAC, the communities were characterised by the SS.SMx.CMx.KurThyMx, SS.SSa.IFiSa.NcirBat and SS.SCS.CCS biotopes. The section of the Mona Offshore Cable Corridor approaching the coast was defined by muddy sand and mixed sediments which were characterised by communities typical of the SS.SSa.IMuSa.FfabMag biotope.

1.9.2.4 No ‘seapens and burrowing megafauna communities’ habitat was identified in the Mona Offshore Cable Corridor. All the stations which were assessed for stony reef were found to have no resemblance to Annex I stony reef habitat. An assessment for sponge dominated habitat was also undertaken for the Mona Offshore Cable Corridor but no stations were found to represent this habitat.

1.9.2.5 No Annex I stony reef or Annex I sandbanks were recorded in the area of overlap with the Menai Strait and Conwy Bay SAC.

1.9.2.6 Site-specific Phase 1 intertidal surveys were undertaken at the proposed landfall location for the Mona Offshore Cable Corridor in 2022 and in the landfall access area in 2023. At the Mona landfall, the upper shore contained a seawall at the east end. This led down to a wide band of shingle dominated by cobbles and pebbles with occasional patches of coarse sand over pebbles. The upper mid shore contained occasional strips of mixed sediments dominated by cobbles. A large expanse of gently sloping fine to medium grained sand was present across most of the mid and lower shore. Sandbar development within this zone was restricted to a small number of relatively low undulations which remained wet during low tide. An anoxic layer within the sediment was patchily distributed across sandy habitats with more prominence at the lower shore.

1.9.2.7 An Annex I *S. alveolata* reef was recorded in the west of the landfall which, in 2022, covered an area of 47,473 m^2. The reef was re-mapped in the 2023 survey in 2022 and found to cover an area of 41,530 m^2. Whilst some degradation was observed at the east edge, the extent of the S. alveolata reef was not considered to have changed significantly since the 2022 survey. A *Mytilus edulis* bed was also identified in the west of the Mona landfall in close proximity to the *S. alveolata* reef. An outcrop of clay covering 3,634 m^2 was recorded in the lower shore which was colonised by piddocks and assigned the CR.MCR.SfR.Pid biotope.

1.9.3 Important ecological features

1.9.3.1 In accordance with the best practice guidelines (CIEEM, 2019), for the purposes of the benthic subtidal and intertidal ecology EIA, IEFs have been identified and all potential impacts of the Mona Offshore Wind Project will be assessed against the IEFs to determine whether or not they are significant. The IEFs of an area are those that are considered to be important and potentially affected by the Mona Offshore Wind Project. Importance may be assigned due to quality or extent of habitats, habitat or species rarity or the extent to which they are threatened (CIEEM, 2019). Species and habitats are considered IEFs if they have a specific biodiversity importance recognised through international or national legislation or through local, regional or national conservation plans (e.g. Annex I habitats under the Habitats Directive, OSPAR, National Biodiversity Plan or the Marine Strategy Framework Directive).

1.9.3.2 The biotopes present across the Mona benthic subtidal and intertidal ecology study area have been grouped into broad habitat/community types. Other IEFs have been identified, using desktop data, which will be within the Mona physical processes study area. The identified IEFs will be taken forward for assessment within the benthic subtidal and intertidal ecology EIA Report (Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the Environmental Statement) and used to assess impacts associated with the construction, operation and decommissioning of the Mona Offshore Wind Project on benthic subtidal and intertidal ecology.

Table 1.25: IEFs within the regional benthic subtidal and intertidal ecology study area.

IEF	Description and representative biotopes	Location	Protection status/ Conservation interest	Importance within the regional benthic subtidal and intertidal ecology study area
Subtidal habitats				
Subtidal coarse and mixed sediments with	Subtidal coarse and mixed sediments characterised by polychaetes, bivalves	Mona Array Area (whole area) and ZoI (north section)	UK Biodiversity Action Plan (BAP) priority habitat	National

IEF	Description and representative biotopes	Location	Protection status/ Conservation interest	Importance within the regional benthic subtidal and intertidal ecology study area
diverse benthic communities	and mobile crustacean. Identified within the Mona Array Area. • SS.SCS.CCS • SS.SMx.CMx • SS.SMx.CMx.KurThyMx • SS.SMx.OMx.PoVen.		Habitat of Principal Importance in England (NERC Act 2006) Habitat of Principal Importance in Wales (Environment (Wales) Act 2016: Section 7)	
Mixed sediments dominated by brittlestars	Circalittoral sediment dominated by brittlestars (*Ophiothrix fragilis*) forming dense beds, living epifaunally on boulder, gravel or sedimentary substrata. SS.SMx.CMx.OphMx	Mona Array Area ZoI (southeast and southwest)	UK BAP priority habitat Habitat of Principal Importance in Wales (Environment (Wales) Act 2016: Section 7)	National
Sand and muddy sand communities with polychaetes and bivalves	Circalittoral and infralittoral sand and muddy sand characterised by bivalves and polychaetes. • SS.SSa.CFiSa • SS.SSa.CMuSa • SS.SSa.IMuSa.FfabMag • SS.SSa.IFiSa.NcirBat	Mona Offshore Cable Corridor (central and south sections) and Mona Array Area ZoI (southeast)	UK BAP priority habitat Non-designated habitat present in the Menai Strait and Conwy Bay SAC Habitat of Principal Importance in England (NERC Act 2006) Habitat of Principal Importance in Wales (Environment (Wales) Act 2016: Section 7)	National
Annex I low resemblance stony reef (outside an SAC)	Cobbles and boulders with indicator species such as *A. digitatum*, *Nemertesia* sp. and *Tubularia* sp. Identified within the Mona Array Area.	Mona Array Area (west) and ZoI (north)	Annex I habitat outside an SAC	National

IEF	Description and representative biotopes	Location	Protection status/ Conservation interest	Importance within the regional benthic subtidal and intertidal ecology study area
	• CR.HCR.XFa.SpNemAdia.			
Constable Bank (Annex I sandbank outside an SAC)	Sandbank off the north coast of Wales, and north of the Mona landfall. • SS.SSa.IFiSa.NcirBat • SS.SSa.CFiSa.ApriBatPo.	Mona Offshore Cable Corridor (central section)	Annex I habitat outside an SAC UK BAP priority habitat Habitat of Principal Importance in England (NERC Act 2006) Habitat of Principal Importance in Wales (Environment (Wales) Act 2016: Section 7)	National
Seapens and burrowing megafauna communities	Plains of fine mud at depths greater than about 15 m may be heavily bioturbated by burrowing megafauna. • SS.SMu.CFiMu.SpnMeg	Mona Array Area and ZoI (east)	UK BAP priority habitat OSPAR habitat Habitat of Principal Importance in England (NERC Act 2006) Habitat of Principal Importance in Wales (Environment (Wales) Act 2016: Section 7)	National
Intertidal habitats				
Littoral shingle with *Verrucaria maura*	Shingle or gravel shore in the littoral fringe which is covered by the black lichen *Verrucaria maura*. Identified within the Mona landfall. • LS.LCS.Sh.BarSh.	Landfall - upper shore	None	Local
Littoral sand and muddy sand supporting infaunal communities	Littoral sand and muddy sand supporting infaunal communities including *Lanice*	Landfall - mid and lower shore	OSPAR habitat Habitat of Principal Importance in	National

IEF	Description and representative biotopes	Location	Protection status/ Conservation interest	Importance within the regional benthic subtidal and intertidal ecology study area
	conchilega, Macoma balthica and *Arenicola marina*. Identified within the Mona landfall. • LS.LSa.MoSa • LS.LSa.MuSa.Lan • LS.LSa.MuSa.MacAre		Wales (Environment (Wales) Act 2016: Section 7) Water Framework Directive (WFD)	
Clay with piddocks	Circalittoral soft rocks such as chalks and clays with the faunal community dominated by bivalves such as *Pholas dactylus*. Identified within the Mona landfall. • CR.MCR.SfR.Pid.	Landfall - central lower shore	UK BAP priority habitat Habitat of Principal Importance in Wales (Environment (Wales) Act 2016: Section 7) WFD	National
Littoral and eulittoral rock dominated by epifaunal communities	Littoral and eulittoral rock is typically characterised by a band of the spiral wrack *Fucus spiralis,* black lichen *Verrucaria maura* and the common barnacle *Semibalanus balanoides*. Identified within the Mona landfall. • LR.LLR.F.Fspi • LR.FLR.Lic.Ver • LR.FLR.Eph.UlvP or • LR.HLR.MusB.Sem.LitX • LR.HLR.MusB.Sem.	Landfall - mid and lower shore	None	Local
S. alveolata reef	Exposed bedrock and boulders characterised by reefs of the polychaete *S. alveolata* which form	Landfall - west mid shore (outside the Mona Offshore Cable Corridor and Access Area)	UK BAP priority habitat Annex I habitat outside an SAC Habitat of Principal	National

IEF	Description and representative biotopes	Location	Protection status/ Conservation interest	Importance within the regional benthic subtidal and intertidal ecology study area
	large reef-like hummocks. Identified within the Mona landfall. • LS.LBR.Sab.Salv.		Importance in Wales (Environment (Wales) Act 2016: Section 7)	
Mytilus edulis bed	• *Mytilus edulis* bed. Identified within the Mona landfall.	Landfall - west lower shore	UK BAP priority habitat Annex I habitat outside an SAC Habitat of Principal Importance in Wales (Environment (Wales) Act 2016: Section 7) WFD	National
Y Fenai a Bae Conwy/ Menai Strait and Conwy Bay SAC				
Annex I Sandbanks	Consist of sandy sediments that are permanently covered by shallow sea water, typically at depths of less than 20 m below chart datum. The habitat comprises distinct banks. • SS.SSa.IFiSa.NcirBat • SS.SSa.CFiSa.ApriBatPo	In the regional benthic subtidal and intertidal ecology study area but outwith the Mona Array Area and Mona Offshore Cable Corridor	Annex I Habitats Directive Annex I Feature of an SAC Habitat of Principal Importance in Wales (Environment (Wales) Act 2016: Section 7)	International
Annex I subtidal reefs[4]	Rocky marine habitats or biological concretions that rise from the seabed. They are generally subtidal but may extend as an unbroken transition into the intertidal zone, where they are exposed to the air at low tide.	In the regional benthic subtidal and intertidal ecology study area but outwith the Mona Array Area and Mona Offshore Cable Corridor	Annex I Habitats Directive Annex I Feature in an SAC Representative of the soft piddock bored substrata feature of the Great Orme's Head SSSI and Little Ormes Head SSSI	International

IEF	Description and representative biotopes	Location	Protection status/ Conservation interest	Importance within the regional benthic subtidal and intertidal ecology study area
	• CR.MCR.SfR.Hia • CR.MCR.CFaVS.CuSpH.		Habitat of Principal Importance in Wales (Environment (Wales) Act 2016: Section 7)	
Annex I intertidal reefs	Open rocky surface with dense red seaweed and encrusting coralline algae including *Palmaria palmata, Mastocarpus stellatus* and *Chondrus crispus.* • LR.HLR.FR.Mas • IR.MIR.KT.XKT.	In the regional benthic subtidal and intertidal ecology study area but outwith the Mona Array Area and Mona Offshore Cable Corridor	Annex I Habitats Directive Annex I Feature of an SAC Representative of the moderately exposed rock, rockpools and under boulder features of the Great Orme's Head SSSI and Little Ormes Head SSSI Habitat of Principal Importance in Wales (Environment (Wales) Act 2016: Section 7)	International

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Contents

Appendix A Seabed sediments

A.1. Summary of particle size analysis within the Mona Array Area, ZoI and Mona Offshore Cable Corridor (NC - Not calculated

Station Number	Folk Classification	BGS Sediment Classification (Based on Folk)	Sorting	Major Sediment Fractions % Fines	% Sand	% Gravel	THC from GC-FID	THC from Ultra-violet fluorescence spectroscopy	Total Organic Carbon
2021 Survey									
ENV31	Gravelly muddy sand	Gravelly muddy sand	Very poor	7.56	63.56	28.88	NC	NC	NC
ENV32	Muddy sandy gravel	Gravelly muddy sand	Very poor	7.57	56.45	35.97	NC	NC	NC
ENV33	Muddy sandy gravel	Gravelly Sand	Very poor	12.87	49.58	37.55	NC	NC	NC
ENV34	Gravelly muddy sand	Gravelly Sand	Very poor	12.12	68.25	19.63	NC	NC	NC
ENV35	Gravelly muddy sand	Gravelly muddy sand	Very poor	10.55	70.24	19.21	NC	NC	NC
ENV36	Muddy sandy gravel	Sandy gravel	Very poor	7.20	57.68	35.11	4.7	2.0	0.22
ENV37	Gravelly muddy sand	Sandy gravel	Very poor	7.92	70.06	22.02	3.3	2.4	0.25
ENV38	Gravelly muddy sand	Gravelly sand	Very poor	9.22	71.80	18.98	4.7	2.7	0.24
ENV39	Gravelly muddy sand	Gravelly sand	Very poor	13.86	72.55	13.60	5.3	3.6	0.24

Station Number	Folk Classification	BGS Sediment Classification (Based on Folk)	Sorting	Major Sediment Fractions % Fines	% Sand	% Gravel	THC from GC-FID	THC from Ultra-violet fluorescence spectroscopy	Total Organic Carbon
ENV40	Gravelly muddy sand	Gravelly sand	Very poor	13.67	77.24	9.08	9.3	3.9	0.26
ENV41	Gravelly muddy sand	Sandy gravel	Very poor	8.29	61.98	29.73	NC	NC	NC
ENV42	Gravelly muddy sand	Gravelly muddy sand	Very poor	11.38	67.35	21.27	NC	NC	NC
ENV43	Gravelly sand	Gravelly sand	Moderate	1.42	87.95	10.63	NC	NC	NC
ENV44	Gravelly sand	Gravelly sand	Moderate	1.29	89.10	9.61	NC	NC	NC
ENV45	Gravelly muddy sand	Gravelly sand	Poor	10.94	78.91	10.15	NC	NC	NC
ENV47	Muddy sandy gravel	Muddy sand	Very poor	9.03	52.94	38.03	3.4	<1	0.2
ENV48	Gravelly muddy sand	Sandy gravel	Very poor	10.71	61.86	27.43	NC	NC	NC
ENV49	Gravelly muddy sand	Gravelly sand	Very poor	14.10	79.40	6.49	NC	NC	NC
ENV50	Gravelly muddy sand	Gravely mud	Very poor	10.68	64.00	25.32	4.7	3.0	0.24
ENV51	Muddy sandy gravel	Sandy gravel	Very poor	10.62	58.51	30.87	5.2	2.4	0.3
ENV52	Gravelly muddy sand	Sandy gravel	Very poor	12.28	71.25	16.47	5.6	3.0	0.2
ENV53	Gravelly muddy sand	Gravelly muddy sand	Very poor	10.46	63.49	26.05	NC	NC	NC

Station Number	Folk Classification	BGS Sediment Classification (Based on Folk)	Sorting	Major Sediment Fractions % Fines	% Sand	% Gravel	THC from GC-FID	THC from Ultra-violet fluorescence spectroscopy	Total Organic Carbon
ENV54	Muddy sandy gravel	Gravelly muddy sand	Very poor	10.42	54.55	35.03	NC	NC	NC
ENV55	Gravelly muddy sand	Gravelly sand	Very poor	11.82	67.34	20.84	NC	NC	NC
ENV56	Gravelly sand	Gravelly sand	Very poor	8.30	79.12	12.58	NC	NC	NC
ENV57	Gravelly sand	Sandy gravel	Poor	2.54	80.07	17.40	3.7	<1	0.19
ENV59	Gravelly sand	Gravelly sand	Very poor	4.67	66.28	29.05	3.4	1.5	0.2
ENV60	Muddy sandy gravel	Sandy gravel	Very poor	10.12	53.92	35.96	NC	NC	NC
ENV61	Gravelly muddy sand	Sandy gravel	Very poor	9.21	65.86	24.93	NC	NC	NC
ENV63	Gravelly sand	Muddy sand	Very poor	7.52	73.36	19.12	3.6	2.3	0.11
ENV64	Muddy sandy gravel	Sandy gravel	Very poor	9.81	55.94	34.26	NC	NC	NC
ENV65	Gravelly muddy sand	Gravelly muddy sand	Very poor	9.65	65.17	25.18	3.7	<1	NC
ENV65	Gravelly muddy sand	Gravelly muddy sand	Very poor	9.65	65.17	25.18	NC	NC	NC
ENV66	Gravelly sand	Gravelly muddy sand	Moderately well	0.67	93.74	5.59	NC	NC	NC
ENV67	Slightly gravelly sand	Gravelly sand	Moderate	0.00	95.88	4.12	NC	NC	NC
ENV68	Slightly gravelly sand	Gravelly muddy sand	Poor	6.91	91.37	1.72	NC	NC	NC

Station Number	Folk Classification	BGS Sediment Classification (Based on Folk)	Sorting	Major Sediment Fractions % Fines	% Sand	% Gravel	THC from GC-FID	THC from Ultra-violet fluorescence spectroscopy	Total Organic Carbon
ENV69	Gravelly muddy sand	Gravelly sand	Very poor	12.64	60.48	26.89	NC	NC	NC
ENV70	Gravelly sand	Gravelly sand	Poor	2.74	85.65	11.61	NC	NC	NC
ENV71	Gravelly muddy sand	Gravelly sand	Very poor	7.91	71.09	21.00	3.8	2.6	0.15
ENV82	Gravelly muddy sand	Gravelly sand	Very poor	11.70	60.99	27.31	NC	NC	NC
ENV83	Slightly gravelly sand	Gravelly sand	Moderate	3.29	93.97	2.74	NC	NC	NC
ENV84	Gravelly muddy sand	Gravelly sand	Very poor	14.37	67.07	18.57	NC	NC	NC
ENV86	Gravelly muddy sand	Gravelly sand	Very poor	10.79	61.57	27.64	NC	NC	NC
ENV88	Muddy sandy gravel	Gravelly sand	Very poor	9.96	54.79	35.25	NC	NC	NC
ENV89	Gravelly sand	Gravelly sand	Poor	1.01	80.02	18.97	NC	NC	NC
ENV90	Gravelly muddy sand	Gravelly sand	Very poor	11.07	66.13	11.07	NC	NC	NC
ENV95	Slightly gravelly muddy sand	Gravelly sand	Poor	14.57	81.86	3.57	NC	NC	NC
ENV96	Gravelly sand	Gravelly sand	Poor	5.90	78.66	15.44	NC	NC	NC
ENV97	Gravelly muddy sand	Sandy gravel	Very poor	10.29	67.54	22.18	NC	NC	NC

Station Number	Folk Classification	BGS Sediment Classification (Based on Folk)	Sorting	Major Sediment Fractions % Fines	% Sand	% Gravel	THC from GC-FID	THC from Ultra-violet fluorescence spectroscopy	Total Organic Carbon
2022 Survey									
ENV67A	Slightly gravelly sand	Gravelly sand	Moderately well	0.00	98.79	1.21	1.4	<1	0.11
ENV50	Muddy sandy gravel	Gravelly muddy sand	Very poor	9.48	60.32	30.21	5.6	3.7	0.20
ENV59	Gravelly sand	Gravelly sand	Very poor	8.23	74.15	17.63	4.5	6.0	0.19
22ENV30	Muddy sandy gravel	Diamicton	Very poor	8.96	57.40	33.64	NC	NC	NC
ENV56	Gravelly muddy sand	Gravelly sand	Very poor	9.24	79.80	10.97	NC	NC	NC
22ENV32	Gravelly muddy sand	Muddy sandy gravel	Very poor	8.84	75.09	16.07	NC	NC	NC
22ENV33	Gravelly muddy sand	Gravelly sand	Very poor	10.44	68.94	20.62	NC	NC	NC
22ENV34	Gravelly muddy sand	Gravelly sand	Very poor	10.72	69.13	20.15	NC	NC	NC
ENV51	Muddy sandy gravel	Muddy sandy gravel	Very poor	6.52	57.50	35.98	NC	NC	NC
22ENV36	Muddy sandy gravel	Gravelly muddy sand	Very poor	9.81	57.99	32.19	6.5	3.1	0.23
22ENV37	Gravelly muddy sand	Gravelly sand	Very poor	9.46	75.27	15.27	NC	NC	NC
22ENV38	Gravelly sand	Gravelly sand	Moderate	2.37	87.66	9.98	0.7	<1	0.16
ZOI39	Gravelly sand	Slightly gravelly muddy sand	Very poor	6.73	65.18	28.09	6.1	5.8	0.16

Station Number	Folk Classification	BGS Sediment Classification (Based on Folk)	Sorting	Major Sediment Fractions % Fines	% Sand	% Gravel	THC from GC-FID	THC from Ultra-violet fluorescence spectroscopy	Total Organic Carbon
ZOI40	Gravelly muddy sand	Slightly gravelly sand	Very poor	10.30	71.17	18.53	7.7	7.3	0.20
ZOI41	Muddy sandy gravel	Diamicton	Very poor	8.72	38.86	52.43	NC	NC	NC
ZOI42	Gravelly sand	Gravelly sand	Poor	8.83	85.10	6.07	NC	NC	NC
ZOI43	Gravelly sand	Gravelly sand	Very poor	7.12	68.05	24.84	5.1	3.1	0.16
ZOI45	Gravelly sand	Gravelly sand	Poor	4.65	83.01	12.35	2.7	2.0	0.14
ZOI46	Slightly gravelly sand	Gravelly sand	Moderate	0.00	97.06	2.94	1.2	1.2	0.13
ZOI47	Slightly gravelly sand	Gravelly sand	Moderate	0.00	95.84	4.16	NC	NC	NC
ZOI48	Gravelly muddy sand	Gravelly sand	Very poor	8.37	73.74	17.89	NC	NC	NC
ZOI50	Muddy sand	Slightly gravelly sand	Poor	14.37	85.45	0.18	NC	NC	NC
OCC52	Gravelly sand	Gravelly muddy sand	Very poor	6.50	66.56	26.93	NC	NC	NC
OCC53	Gravelly muddy sand	Gravelly muddy sand	Very poor	8.45	62.81	28.73	5.8	2.9	0.20
OCC54	Gravelly muddy sand	Diamicton	Very poor	9.46	72.33	18.21	5.0	3.7	0.17
OCC55	Gravelly muddy sand	Gravelly muddy sand	Very poor	11.50	78.51	9.99	NC	NC	NC
OCC56	Gravelly muddy sand	Gravelly sand	Very poor	11.97	76.00	12.02	3.5	3.3	0.18

Station Number	Folk Classification	BGS Sediment Classification (Based on Folk)	Sorting	Major Sediment Fractions % Fines	% Sand	% Gravel	THC from GC-FID	THC from Ultra-violet fluorescence spectroscopy	Total Organic Carbon
OCC57	Gravelly muddy sand	Gravelly sand	Very poor	13.41	68.35	18.24	NC	NC	NC
OCC58	Gravelly muddy sand	Gravelly sand	Very poor	9.63	74.90	15.47	4.5	2.7	0.21
OCC59	Gravelly muddy sand	Gravelly sand	Very poor	12.58	66.55	20.88	NC	NC	NC
OCC60	Gravelly muddy sand	Gravelly sand	Very poor	10.49	67.52	21.98	3.8	3.5	0.34
OCC61	Gravelly sand	Gravelly sand	Poor	0.00	87.99	12.01	3.5	<1	0.60
OCC62	Slightly gravelly sand	Slightly gravelly sand	Moderately well	0.00	98.12	1.88	NC	NC	NC
OCC63	Sand	Slightly gravelly sand	Moderately well	3.24	96.01	0.75	2.5	67.1	0.12
OCC64	Sand	Slightly gravelly sand	Well	0.00	99.71	0.29	NC	NC	NC
OCC65	Gravelly muddy sand	Slightly gravelly sand	Very poor	21.00	72.99	6.02	3.9	1.5	0.26
OCC133	Slightly gravelly sand	no data	Poor	6.71	88.70	4.60	4.5	3.1	0.23
OCC134	Muddy sand	no data	Very poor	21.43	78.51	0.06	NC	NC	NC
OCC135	Sand	no data	Moderately well	4.44	95.55	0.02	3.7	1.5	0.11
OCC136	Sand	no data	Moderately well	2.36	97.42	0.21	NC	NC	NC

Station Number	Folk Classification	BGS Sediment Classification (Based on Folk)	Sorting	Major Sediment Fractions % Fines	% Sand	% Gravel	THC from GC-FID	THC from Ultra-violet fluorescence spectroscopy	Total Organic Carbon
OCC137	Slightly gravelly sand	no data	Moderate	1.90	94.83	3.28	2.3	<1	0.12
OCC138	Sand	no data	Moderately well	4.11	95.74	0.15	NC	NC	NC
OCC139	Sand	no data	Moderately well	1.50	98.20	0.30	2.4	<1	0.11
OCC140	Sand	no data	Well	0.00	99.96	0.04	NC	NC	NC
OCC141	Sandy gravel	no data	Poor	2.20	62.80	35.01	2.3	1.3	0.16
OCC142	Slightly gravelly sand	Slightly gravelly sand	Moderate	3.52	95.06	1.42	NC	NC	NC
OCC143	Gravelly sand	Slightly gravelly sand	Poor	1.48	88.49	10.03	1.3	1.1	0.15
OCC144	Muddy sandy gravel	Slightly gravelly sand	Very poor	8.92	34.46	56.62	NC	NC	NC
OCC145	Sand	Slightly gravelly sand	Well	0.00	99.72	0.28	2.4	1.1	0.11
OCC146	Gravelly sand	Slightly gravelly sand	Poor	3.15	79.86	16.99	NC	NC	NC
OCC147	Gravelly sand	Gravelly sand	Poor	0.00	87.38	12.62	2.9	1.0	0.13
OCC148	Gravel	Gravelly sand	Poor	0.56	8.83	90.61	NC	NC	NC
OCC149	Slightly gravelly sand	Slightly gravelly sand	Moderately well	0.00	98.04	1.96	1.2	<1	0.09
OCC150	Sand	Slightly gravelly sand	Well	0.00	99.22	0.78	NC	NC	NC
OCC151	Gravelly sand	Gravelly sand	Poor	0.00	87.74	12.26	1.4	<1	0.14

Station Number	Folk Classification	BGS Sediment Classification (Based on Folk)	Sorting	Major Sediment Fractions			THC from GC-FID	THC from Ultra-violet fluorescence spectroscopy	Total Organic Carbon
				% Fines	% Sand	% Gravel			
OCC152	Sandy gravel	Gravelly sand	Very poor	3.56	63.30	33.14	NC	NC	NC
OCC153	Sandy gravel	Gravelly sand	Very poor	2.92	62.86	34.23	NC	NC	NC

A.2. Full PSA analysis results for 2021 survey in Mona benthic subtidal and intertidal ecology study area (part 1)

Sample	Easting	Northing	Percentile									Folk and Ward Graphic									
			Phi5	Phi 10	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 90	Phi 95	Mean µm	Mean Phi	Wentworth	Sorting Value	Sorting Description	Skewness Value	Skewness Description	Kurtosis Value	Kurtosis Description
ENV31	432131	5942407	-2.89	-2.56	-2.19	-1.54	0.51	1.49	1.91	2.47	6.38	948.77	0.08	Coarse sand	2.4	Very poor	-0.03	Symmetrical	1.26	Leptokurtic
ENV32	437433	5941121	-3.51	-3.12	-2.65	-1.92	0.46	1.63	2.00	2.50	6.48	1045.85	-0.06	Very coarse sand	2.7	Very poor	-0.07	Symmetrical	1.15	Leptokurtic
ENV33	441856	5940467	-3.17	-2.76	-2.30	-1.76	0.04	1.76	2.42	6.06	7.73	961.21	0.06	Coarse sand	2.8	Very poor	0.21	Fine	1.27	Leptokurtic
ENV34	447427	5941450	-3.04	-2.12	-1.38	-0.52	1.13	2.02	2.51	5.59	7.43	593.79	0.75	Coarse sand	2.6	Very poor	-0.05	Symmetrical	1.69	Very leptokurtic
ENV35	451892	5940832	-2.07	-1.62	-1.21	-0.69	0.91	2.09	2.51	4.51	7.10	600.31	0.74	Coarse sand	2.3	Very poor	0.11	Fine	1.36	Leptokurtic
ENV36	432446	5944567	-3.09	-2.75	-2.37	-1.80	0.11	0.89	1.49	2.40	6.20	1195.23	-0.26	Very coarse sand	2.4	Very poor	0.01	Symmetrical	1.42	Leptokurtic
ENV37	435580	5944655	-3.07	-2.27	-1.60	-0.77	0.42	1.26	1.87	2.75	6.50	854.13	0.23	Coarse sand	2.3	Very poor	0.05	Symmetrical	1.93	Very leptokurtic
ENV38	442513	5944899	-2.85	-1.97	-1.33	-0.38	0.65	1.56	2.04	3.28	6.90	730.13	0.45	Coarse sand	2.3	Very poor	0.06	Symmetrical	2.06	Very leptokurtic
ENV39	446940	5944242	-1.70	-1.26	-0.89	-0.46	0.38	1.50	2.82	6.10	7.49	585.56	0.77	Coarse sand	2.3	Very poor	0.43	Very fine	1.93	Very leptokurtic
ENV40	451364	5943584	-1.63	-0.91	-0.33	0.14	0.78	1.74	2.50	6.05	7.55	506.33	0.98	Coarse sand	2.1	Very poor	0.34	Very fine	2.35	Very leptokurtic
ENV41	434811	5947843	-3.25	-2.87	-2.43	-1.57	0.35	1.30	1.81	2.48	6.76	1061.03	-0.09	Very coarse sand	2.6	Very poor	-0.02	Symmetrical	1.43	Leptokurtic

Sample	Easting	Northing	Percentile									Folk and Ward Graphic								
			Phi5	Phi 10	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 90	Phi 95	Mean µm	Mean Phi	Wentworth	Sorting Value	Sorting Description	Skewness Value	Skewness Description	Kurtosis Value	Kurtosis Description
ENV42	440166	5946520	-3.11	-2.38	-1.56	-0.68	0.57	1.46	2.22	5.19	7.39	751.99	0.41	Coarse sand	2.5	Very poor	0.09	Symmetrical	2.01	Very leptokurtic
ENV43	443920	5946400	-1.46	-1.05	-0.79	-0.44	0.22	0.71	0.95	1.24	1.56	915.44	0.13	Coarse sand	0.9	Moderate	-0.13	Coarse	1.07	Mesokurtic
ENV44	447092	5946499	-1.48	-0.98	-0.65	-0.18	0.46	0.97	1.25	1.44	1.81	784.07	0.35	Coarse sand	1.0	Moderate	-0.17	Coarse	1.17	Leptokurtic
ENV45	450377	5949153	-2.01	-1.03	0.03	0.35	1.05	1.80	2.24	5.07	7.29	464.13	1.11	Medium sand	2.0	Poor	0.21	Fine	2.64	Very leptokurtic
ENV47	438746	5949977	-3.29	-3.05	-2.73	-2.12	0.18	1.47	1.94	3.00	6.81	1150.01	-0.20	Very coarse sand	2.7	Very poor	0.03	Symmetrical	1.16	Leptokurtic
ENV48	441529	5950466	-3.26	-2.80	-2.08	-1.24	0.76	1.70	2.16	4.79	7.22	825.02	0.28	Coarse sand	2.6	Very poor	-0.05	Symmetrical	1.46	Leptokurtic
ENV49	446920	5951690	-1.32	-0.52	0.12	0.57	1.46	2.15	2.91	6.22	7.61	354.04	1.50	Medium sand	2.1	Very poor	0.21	Fine	2.31	Very leptokurtic
ENV50	432217	5954551	-2.87	-2.49	-2.02	-1.05	0.56	1.56	2.08	4.71	7.10	866.85	0.21	Coarse sand	2.5	Very poor	0.03	Symmetrical	1.57	Very leptokurtic
ENV51	439422	5954388	-3.47	-3.10	-2.53	-1.60	0.64	1.70	2.16	4.68	7.25	937.76	0.09	Coarse sand	2.8	Very poor	-0.06	Symmetrical	1.33	Leptokurtic
ENV52	443125	5954238	-2.92	-1.89	-1.06	0.05	1.21	1.95	2.42	5.85	7.59	552.59	0.86	Coarse sand	2.5	Very poor	-0.05	Symmetrical	2.27	Very leptokurtic
ENV53	434485	5957840	-3.31	-2.83	-2.27	-1.16	0.59	1.58	2.07	4.45	6.93	913.00	0.13	Coarse sand	2.6	Very poor	-0.04	Symmetrical	1.53	Very leptokurtic
ENV54	437516	5955709	-3.34	-2.97	-2.38	-1.72	0.33	1.63	2.10	4.50	7.18	989.69	0.01	Coarse sand	2.7	Very poor	0.05	Symmetrical	1.29	Leptokurtic
ENV55	443886	5956171	-2.95	-2.38	-1.56	-0.58	1.00	1.84	2.33	5.49	7.45	663.56	0.59	Coarse sand	2.6	Very poor	-0.04	Symmetrical	1.76	Very leptokurtic

Sample	Easting	Northing	Percentile									Folk and Ward Graphic								
			Phi5	Phi 10	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 90	Phi 95	Mean µm	Mean Phi	Wentworth	Sorting Value	Sorting Description	Skewness Value	Skewness Description	Kurtosis Value	Kurtosis Description
ENV56	434032	5960595	-2.11	-1.33	-0.56	0.14	0.98	1.78	2.18	2.92	6.70	548.79	0.87	Coarse sand	2.0	Very poor	0.09	Symmetrical	2.21	Very leptokurtic
ENV57	439716	5961575	-1.92	-1.50	-1.09	-0.49	0.87	1.50	1.77	1.96	2.38	699.73	0.52	Coarse sand	1.4	Poor	-0.33	Very coarse	0.89	Platykurtic
ENV59	439035	5964419	-3.38	-3.01	-2.30	-1.33	0.85	1.83	2.17	2.46	3.65	847.36	0.24	Coarse sand	2.2	Very poor	-0.30	Very coarse	0.91	Mesokurtic
ENV60	435816	5966674	-3.35	-2.99	-2.55	-1.89	0.51	1.86	2.39	4.12	7.19	921.80	0.12	Coarse sand	2.8	Very poor	0.01	Symmetrical	1.15	Leptokurtic
ENV61	435300	5969477	-3.29	-2.92	-1.97	-0.99	1.11	1.96	2.37	3.42	6.97	704.62	0.51	Coarse sand	2.6	Very poor	-0.14	Coarse	1.43	Leptokurtic
ENV62	432516	5968982	-3.10	-2.28	-1.32	0.12	1.29	1.94	2.34	3.20	6.72	586.14	0.77	Coarse sand	2.4	Very poor	-0.16	Coarse	2.22	Very leptokurtic
ENV63	433183	5973412	-3.13	-2.45	-1.50	-0.05	1.52	2.10	2.39	2.87	6.31	573.03	0.80	Coarse sand	2.4	Very poor	-0.27	Coarse	1.79	Very leptokurtic
ENV64	429880	5975699	-3.35	-3.09	-2.67	-1.82	0.56	2.01	2.44	3.82	6.92	927.55	0.11	Coarse sand	2.8	Very poor	-0.01	Symmetrical	1.10	Mesokurtic
ENV65	432045	5971748	-3.28	-2.73	-1.90	-1.02	1.25	2.13	2.47	3.72	6.95	656.99	0.61	Coarse sand	2.6	Very poor	-0.16	Coarse	1.33	Leptokurtic
ENV66	433146	5958808	-1.13	-0.61	-0.29	0.02	0.31	0.66	0.84	0.96	1.26	821.18	0.28	Coarse sand	0.6	Moderately well	-0.13	Coarse	1.54	Very leptokurtic
ENV67	449859	5947111	-0.80	-0.01	0.10	0.24	0.64	1.06	1.33	1.53	1.86	619.41	0.69	Coarse sand	0.7	Moderate	0.01	Symmetrical	1.33	Leptokurtic
ENV68	452816	5942556	0.06	0.33	0.62	1.01	1.59	1.99	2.31	2.67	6.04	351.82	1.51	Medium sand	1.3	Poor	0.17	Fine	2.50	Very leptokurtic
ENV69	445014	5945647	-3.21	-2.53	-2.05	-1.23	0.53	1.27	1.98	5.57	7.28	898.07	0.16	Coarse sand	2.6	Very poor	0.00	Symmetrical	1.72	Very leptokurtic
ENV70	442695	5942325	-1.76	-1.16	-0.71	-0.14	0.42	1.01	1.39	1.73	2.19	774.93	0.37	Coarse sand	1.1	Poor	-0.09	Symmetrical	1.41	Leptokurtic

Sample	Easting	Northing	Percentile									Folk and Ward Graphic									
			Phi5	Phi 10	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 90	Phi 95	Mean µm	Mean Phi	Wentworth	Sorting Value	Sorting Description	Skewness Value	Skewness Description	Kurtosis Value	Kurtosis Description
ENV71	433317	5965969	-3.33	-2.77	-1.75	-0.32	1.17	1.91	2.31	2.99	6.53	669.97	0.58	Coarse sand	2.5	Very poor	-0.17	Coarse	1.82	Very leptokurtic
ENV82	452538	5945267	-3.54	-2.95	-2.21	-1.28	0.59	1.37	2.02	5.25	7.18	912.37	0.13	Coarse sand	2.7	Very poor	-0.05	Symmetrical	1.66	Very leptokurtic
ENV83	446574	5945886	-0.67	-0.22	0.06	0.23	0.70	1.24	1.49	1.82	2.35	595.50	0.75	Coarse sand	0.8	Moderate	0.09	Symmetrical	1.23	Leptokurtic
ENV84	448611	5948067	-3.39	-2.59	-1.54	0.03	0.73	1.48	2.72	6.19	7.58	642.99	0.64	Coarse sand	2.7	Very poor	0.09	Symmetrical	3.08	Extremely leptokurtic
ENV86	435352	5962033	-3.23	-2.77	-2.03	-1.23	1.03	1.86	2.36	4.72	7.23	732.07	0.45	Coarse sand	2.7	Very poor	-0.10	Coarse	1.39	Leptokurtic
ENV88	436096	5951828	-3.47	-3.25	-2.97	-1.93	0.43	1.57	1.99	3.96	7.12	1134.41	-0.18	Very coarse sand	2.8	Very poor	-0.05	Symmetrical	1.24	Leptokurtic
ENV89	439429	5942282	-2.13	-1.60	-1.19	-0.75	0.13	0.67	0.93	1.22	1.59	1029.36	-0.04	Very coarse sand	1.1	Poor	-0.23	Coarse	1.07	Mesokurtic
ENV90	429245	5985927	-3.07	-2.44	-1.84	-0.61	0.80	1.58	2.18	5.06	7.24	768.45	0.38	Coarse sand	2.6	Very poor	-0.03	Symmetrical	1.93	Very leptokurtic
ENV91	436564	5987302	-1.06	0.05	0.36	0.81	1.55	2.09	2.44	4.18	7.05	366.15	1.45	Medium sand	1.7	Poor	0.11	Fine	2.58	Very leptokurtic
ENV92	432717	5984307	-4.29	-4.07	-3.41	-1.53	1.02	1.91	2.44	4.25	7.15	987.06	0.02	Coarse sand	3.2	Very poor	-0.22	Coarse	1.36	Leptokurtic
ENV93	430337	5991128	-1.51	-1.20	-0.91	-0.62	0.09	0.60	0.86	1.06	1.38	992.51	0.01	Coarse sand	0.9	Moderate	-0.12	Coarse	0.97	Mesokurtic
ENV94	439711	5986142	-3.19	-2.64	-1.94	-0.83	1.18	1.90	2.25	2.69	6.40	706.62	0.50	Coarse sand	2.5	Very poor	-0.20	Coarse	1.44	Leptokurtic
ENV95	451176	5947270	-0.65	0.05	0.22	0.48	1.22	2.06	2.98	6.30	7.97	359.97	1.47	Medium sand	2.0	Poor	0.42	Very fine	2.23	Very leptokurtic

Sample	Easting	Northing	Percentile									Folk and Ward Graphic								
			Phi5	Phi 10	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 90	Phi 95	Mean µm	Mean Phi	Wentworth	Sorting Value	Sorting Description	Skewness Value	Skewness Description	Kurtosis Value	Kurtosis Description
ENV96	442430	5941730	-2.68	-1.72	-0.94	0.01	0.68	1.46	1.84	2.27	5.32	694.32	0.53	Coarse sand	1.9	Poor	0.00	Symmetrical	2.26	Very leptokurtic
ENV97	434722	5945474	-3.01	-2.22	-1.60	-0.66	0.47	1.43	2.10	4.27	7.21	800.09	0.32	Coarse sand	2.5	Very poor	0.10	Symmetrical	2.00	Very leptokurtic

A.3. Full PSA analysis results for 2021 survey in Mona benthic subtidal and intertidal ecology study area (part 2)

Sample	Method of Moment									Composition		
	Mean µm	Mean Phi	Wentworth	Sorting Value	Sorting Description	Skewness Value	Skewness Description	Kurtosis Value	Kurtosis Description	Fines	Sands	Gravels
ENV31	705.89	0.50	Coarse sand	2.58	Very poor	1.35	Very fine	6.16	Leptokurtic	7.56	63.56	28.88
ENV32	819.74	0.29	Coarse sand	2.82	Very poor	1.11	Fine	5.18	Leptokurtic	7.57	56.45	35.97
ENV33	663.39	0.59	Coarse sand	3.22	Very poor	1.33	Very fine	4.61	Leptokurtic	12.87	49.58	37.55
ENV34	422.49	1.24	Medium sand	2.85	Very poor	1.12	Fine	4.96	Leptokurtic	12.12	68.25	19.63
ENV35	446.10	1.16	Medium sand	2.63	Very poor	1.40	Very fine	5.66	Leptokurtic	10.55	70.24	19.21
ENV36	942.93	0.08	Coarse sand	2.59	Very poor	1.59	Very fine	6.74	Leptokurtic	7.20	57.68	35.11
ENV37	667.63	0.58	Coarse sand	2.52	Very poor	1.52	Very fine	6.95	Leptokurtic	7.92	70.06	22.02
ENV38	547.16	0.87	Coarse sand	2.60	Very poor	1.43	Very fine	6.46	Leptokurtic	9.22	71.80	18.98
ENV39	446.78	1.16	Medium sand	2.76	Very poor	1.73	Very fine	5.74	Leptokurtic	13.86	72.55	13.60
ENV40	367.44	1.44	Medium sand	2.66	Very poor	1.68	Very fine	6.05	Leptokurtic	13.67	77.24	9.08
ENV41	771.93	0.37	Coarse sand	2.74	Very poor	1.39	Very fine	6.07	Leptokurtic	8.29	61.98	29.73
ENV42	545.50	0.87	Coarse sand	2.85	Very poor	1.40	Very fine	5.61	Leptokurtic	11.38	67.35	21.27

Sample	Method of Moment									Composition		
	Mean µm	Mean Phi	Wentworth	Sorting Value	Sorting Description	Skewness Value	Skewness Description	Kurtosis Value	Kurtosis Description	Fines	Sands	Gravels
ENV43	861.10	0.22	Coarse sand	1.25	Poor	3.24	Very fine	26.71	Very leptokurtic	1.42	87.95	10.63
ENV44	748.78	0.42	Coarse sand	1.29	Poor	2.71	Very fine	23.73	Very leptokurtic	1.29	89.10	9.61
ENV45	369.96	1.43	Medium sand	2.48	Very poor	1.69	Very fine	6.95	Leptokurtic	10.94	78.91	10.15
ENV47	863.38	0.21	Coarse sand	2.91	Very poor	1.28	Fine	5.17	Leptokurtic	9.03	52.94	38.03
ENV48	587.46	0.77	Coarse sand	2.91	Very poor	1.17	Fine	5.05	Leptokurtic	10.71	61.86	27.43
ENV49	271.40	1.88	Medium sand	2.56	Very poor	1.50	Very fine	5.86	Leptokurtic	14.10	79.40	6.49
ENV50	597.81	0.74	Coarse sand	2.82	Very poor	1.33	Very fine	5.43	Leptokurtic	10.68	64.00	25.32
ENV51	654.42	0.61	Coarse sand	3.02	Very poor	1.12	Fine	4.80	Leptokurtic	10.62	58.51	30.87
ENV52	387.82	1.37	Medium sand	2.83	Very poor	1.19	Fine	5.27	Leptokurtic	12.28	71.25	16.47
ENV53	624.28	0.68	Coarse sand	2.84	Very poor	1.14	Fine	5.14	Leptokurtic	10.46	63.49	26.05
ENV54	722.26	0.47	Coarse sand	2.99	Very poor	1.25	Fine	4.99	Leptokurtic	10.42	54.55	35.03
ENV55	464.68	1.11	Medium sand	2.87	Very poor	1.21	Fine	5.19	Leptokurtic	11.82	67.34	20.84
ENV56	442.75	1.18	Medium sand	2.34	Very poor	1.60	Very fine	7.53	Very leptokurtic	8.30	79.12	12.58
ENV57	636.69	0.65	Coarse sand	1.71	Poor	1.58	Very fine	11.38	Very leptokurtic	2.54	80.07	17.40

Sample	Method of Moment									Composition		
	Mean µm	Mean Phi	Wentworth	Sorting Value	Sorting Description	Skewness Value	Skewness Description	Kurtosis Value	Kurtosis Description	Fines	Sands	Gravels
ENV59	728.57	0.46	Coarse sand	2.48	Very poor	0.80	Fine	5.44	Leptokurtic	4.67	66.28	29.05
ENV60	695.05	0.52	Coarse sand	3.07	Very poor	1.08	Fine	4.57	Leptokurtic	10.12	53.92	35.96
ENV61	533.28	0.91	Coarse sand	2.81	Very poor	0.98	Fine	5.03	Leptokurtic	9.21	65.86	24.93
ENV62	444.24	1.17	Medium sand	2.58	Very poor	1.02	Fine	5.98	Leptokurtic	8.67	73.45	17.88
ENV63	453.30	1.14	Medium sand	2.52	Very poor	0.75	Fine	5.46	Leptokurtic	7.52	73.36	19.12
ENV64	678.44	0.56	Coarse sand	2.99	Very poor	0.98	Fine	4.38	Leptokurtic	9.81	55.94	34.26
ENV65	502.91	0.99	Coarse sand	2.83	Very poor	0.88	Fine	4.71	Leptokurtic	9.65	65.17	25.18
ENV66	828.05	0.27	Coarse sand	1.03	Poor	3.13	Very fine	43.13	Very leptokurtic	0.67	93.74	5.59
ENV67	654.54	0.61	Coarse sand	0.85	Moderately	-1.53	Very coarse	9.32	Very leptokurtic	0.00	95.88	4.12
ENV68	290.95	1.78	Medium sand	1.75	Poor	2.55	Very fine	12.26	Very leptokurtic	6.91	91.37	1.72
ENV69	610.51	0.71	Coarse sand	2.95	Very poor	1.28	Fine	5.08	Leptokurtic	12.64	60.48	26.89
ENV70	711.74	0.49	Coarse sand	1.57	Poor	2.33	Very fine	15.43	Very leptokurtic	2.74	85.65	11.61
ENV71	511.74	0.97	Coarse sand	2.63	Very poor	0.88	Fine	5.50	Leptokurtic	7.91	71.09	21.00
ENV82	638.18	0.65	Coarse sand	2.99	Very poor	1.08	Fine	4.90	Leptokurtic	11.70	60.99	27.31

Sample	Method of Moment									Composition		
	Mean µm	Mean Phi	Wentworth	Sorting Value	Sorting Description	Skewness Value	Skewness Description	Kurtosis Value	Kurtosis Description	Fines	Sands	Gravels
ENV83	538.77	0.89	Coarse sand	1.47	Poor	3.44	Very fine	20.64	Very leptokurtic	3.29	93.97	2.74
ENV84	462.84	1.11	Medium sand	3.01	Very poor	1.15	Fine	4.76	Leptokurtic	14.37	67.07	18.57
ENV86	544.58	0.88	Coarse sand	2.91	Very poor	1.08	Fine	4.80	Leptokurtic	10.79	61.57	27.64
ENV88	774.65	0.37	Coarse sand	3.05	Very poor	1.15	Fine	4.83	Leptokurtic	9.96	54.79	35.25
ENV89	1001.86	0.00	Very coarse sand	1.34	Poor	1.90	Very fine	18.33	Very leptokurtic	1.01	80.02	18.97
ENV90	524.07	0.93	Coarse sand	2.83	Very poor	1.23	Fine	5.36	Leptokurtic	11.07	66.13	22.80
ENV91	288.15	1.80	Medium sand	2.23	Very poor	1.63	Very fine	7.71	Very leptokurtic	10.19	84.65	5.16
ENV92	645.24	0.63	Coarse sand	3.23	Very poor	0.60	Fine	3.97	Leptokurtic	10.30	62.14	27.56
ENV93	962.18	0.06	Coarse sand	1.15	Poor	3.35	Very fine	31.46	Very leptokurtic	0.90	85.86	13.24
ENV94	541.83	0.88	Coarse sand	2.63	Very poor	0.97	Fine	5.74	Leptokurtic	7.25	68.73	24.01
ENV95	264.06	1.92	Medium sand	2.61	Very poor	1.87	Very fine	6.53	Leptokurtic	14.57	81.86	3.57
ENV96	586.56	0.77	Coarse sand	2.16	Very poor	1.61	Very fine	8.75	Very leptokurtic	5.90	78.66	15.44
ENV97	571.02	0.81	Coarse sand	2.74	Very poor	1.51	Very fine	6.16	Leptokurtic	10.29	67.54	22.18

A.4. Full PSA analysis results for 2021 survey in Mona benthic subtidal and intertidal ecology study area (part 3)

Sample	Method of Moment										Description
	Mean µm	Modified	Eunis	Median	Description	1st Local Maxima (Mode)	Description	2nd Local Maxima	Description	3rd Local Maxima	
ENV31	705.89	Gravelly muddy sand	Mixed sediments	0.51	Coarse sand	0.50	Coarse sand	-2.00	Pebble		
ENV32	819.74	Muddy sandy gravel	Mixed sediments	0.46	Coarse sand	2.00	Medium sand	-1.50	Granule	-3.00	Pebble
ENV33	663.39	Muddy sandy gravel	Mixed sediments	0.04	Coarse sand	2.00	Medium sand	-1.50	Granule	-3.00	Pebble
ENV34	422.49	Gravelly muddy sand	Mixed sediments	1.13	Medium sand	2.00	Medium sand	-0.50	Very coarse sand	-3.00	Pebble
ENV35	446.10	Gravelly muddy sand	Mixed sediments	0.91	Coarse sand	2.00	Medium sand	0.50	Coarse sand	-0.50	Very coarse sand
ENV36	942.93	Muddy sandy gravel	Mixed sediments	0.11	Coarse sand	0.50	Coarse sand	-1.50	Granule	-2.50	Pebble
ENV37	667.63	Gravelly muddy sand	Mixed sediments	0.42	Coarse sand	0.50	Coarse sand	-0.50	Very coarse sand	-2.00	Pebble
ENV38	547.16	Gravelly muddy sand	Mixed sediments	0.65	Coarse sand	0.50	Coarse sand	-0.50	Very coarse sand	-1.50	Granule
ENV39	446.78	Gravelly muddy sand	Mixed sediments	0.38	Coarse sand	0.50	Coarse sand	7.00	Fine silt		
ENV40	367.44	Gravelly muddy sand	Mixed sediments	0.78	Coarse sand	1.00	Coarse sand	-0.50	Very coarse sand	7.00	Fine silt
ENV41	771.93	Gravelly muddy sand	Mixed sediments	0.35	Coarse sand	0.50	Coarse sand	-2.50	Pebble	7.00	Fine silt

Sample	Method of Moment										Description
	Mean µm	Modified	Eunis	Median	Description	1st Local Maxima (Mode)	Description	2nd Local Maxima	Description	3rd Local Maxima	
ENV42	545.50	Gravelly muddy sand	Mixed sediments	0.57	Coarse sand	1.00	Coarse sand	-0.50	Very coarse sand	-3.00	Pebble
ENV43	861.10	Gravelly sand	Coarse sediments	0.22	Coarse sand	0.50	Coarse sand				
ENV44	748.78	Gravelly sand	Coarse sediments	0.46	Coarse sand	1.00	Coarse sand				
ENV45	369.96	Gravelly muddy sand	Mixed sediments	1.05	Medium sand	1.00	Coarse sand	-0.50	Very coarse sand	-2.00	Pebble
ENV47	863.38	Muddy sandy gravel	Mixed sediments	0.18	Coarse sand	-3.00	Pebble	1.50	Medium sand	0.50	Coarse sand
ENV48	587.46	Gravelly muddy sand	Mixed sediments	0.76	Coarse sand	1.50	Medium sand	-1.50	Granule	-3.00	Pebble
ENV49	271.40	Gravelly muddy sand	Mixed sediments	1.46	Medium sand	2.00	Medium sand	-0.50	Very coarse sand	7.00	Fine silt
ENV50	597.81	Gravelly muddy sand	Mixed sediments	0.56	Coarse sand	1.50	Medium sand	0.50	Coarse sand	-2.50	Pebble
ENV51	654.42	Muddy sandy gravel	Mixed sediments	0.64	Coarse sand	1.50	Medium sand	-3.00	Pebble	-1.50	Granule
ENV52	387.82	Gravelly muddy sand	Mixed sediments	1.21	Medium sand	2.00	Medium sand	-0.50	Very coarse sand	-3.00	Pebble
ENV53	624.28	Gravelly muddy sand	Mixed sediments	0.59	Coarse sand	0.50	Coarse sand	-2.50	Pebble	7.00	Fine silt
ENV54	722.26	Muddy sandy gravel	Mixed sediments	0.33	Coarse sand	1.50	Medium sand	-1.50	Granule	-3.00	Pebble
ENV55	464.68	Gravelly muddy sand	Mixed sediments	1.00	Medium sand	2.00	Medium sand	-0.50	Very coarse sand	-2.50	Pebble

Sample	Method of Moment										Description
	Mean µm	Modified	Eunis	Median	Description	1st Local Maxima (Mode)	Description	2nd Local Maxima	Description	3rd Local Maxima	
ENV56	442.75	Gravelly sand	Coarse sediments	0.98	Coarse sand	1.50	Medium sand	-1.00	Granule	-3.00	Pebble
ENV57	636.69	Gravelly sand	Coarse sediments	0.87	Coarse sand	1.50	Medium sand	-0.50	Very coarse sand		
ENV59	728.57	Gravelly sand	Coarse sediments	0.85	Coarse sand	2.00	Medium sand	-3.00	Pebble	-1.00	Granule
ENV60	695.05	Muddy sandy gravel	Mixed sediments	0.51	Coarse sand	2.00	Medium sand	-1.50	Granule	-3.00	Pebble
ENV61	533.28	Gravelly muddy sand	Mixed sediments	1.11	Medium sand	2.00	Medium sand	-3.00	Pebble	0.50	Coarse sand
ENV62	444.24	Gravelly muddy sand	Mixed sediments	1.29	Medium sand	2.00	Medium sand	-3.00	Pebble	-1.50	Granule
ENV63	453.30	Gravelly sand	Coarse sediments	1.52	Medium sand	2.00	Medium sand	-3.00	Pebble		
ENV64	678.44	Muddy sandy gravel	Mixed sediments	0.56	Coarse sand	2.00	Medium sand	-3.00	Pebble	0.50	Coarse sand
ENV65	502.91	Gravelly muddy sand	Mixed sediments	1.25	Medium sand	2.00	Medium sand	0.50	Coarse sand	-3.00	Pebble
ENV66	828.05	Gravelly sand	Coarse sediments	0.31	Coarse sand	0.50	Coarse sand				
ENV67	654.54	Slightly gravelly sand	Sand and muddy sand	0.64	Coarse sand	1.00	Coarse sand				
ENV68	290.95	Slightly gravelly sand	Sand and muddy sand	1.59	Medium sand	2.00	Medium sand	-0.50	Very coarse sand		

Sample	Method of Moment										Description
	Mean µm	Modified	Eunis	Median	Description	1st Local Maxima (Mode)	Description	2nd Local Maxima	Description	3rd Local Maxima	
ENV69	610.51	Gravelly muddy sand	Mixed sediments	0.53	Coarse sand	1.00	Coarse sand	-2.00	Pebble	7.00	Fine silt
ENV70	711.74	Gravelly sand	Coarse sediments	0.42	Coarse sand	0.50	Coarse sand				
ENV71	511.74	Gravelly muddy sand	Mixed sediments	1.17	Medium sand	2.00	Medium sand	-3.00	Pebble	-1.50	Granule
ENV82	638.18	Gravelly muddy sand	Mixed sediments	0.59	Coarse sand	1.00	Coarse sand	-1.50	Granule	-3.00	Pebble
ENV83	538.77	Slightly gravelly sand	Sand and muddy sand	0.70	Coarse sand	1.00	Coarse sand				
ENV84	462.84	Gravelly muddy sand	Mixed sediments	0.73	Coarse sand	1.00	Coarse sand	-3.50	Pebble	-2.00	Pebble
ENV86	544.58	Gravelly muddy sand	Mixed sediments	1.03	Medium sand	2.00	Medium sand	-3.00	Pebble	-1.00	Granule
ENV88	774.65	Muddy sandy gravel	Mixed sediments	0.43	Coarse sand	1.50	Medium sand	-3.00	Pebble	-1.50	Granule
ENV89	1001.86	Gravelly sand	Coarse sediments	0.13	Coarse sand	0.50	Coarse sand				
ENV90	524.07	Gravelly muddy sand	Mixed sediments	0.80	Coarse sand	1.50	Medium sand	-1.50	Granule	7.00	Fine silt
ENV91	288.15	Gravelly muddy sand	Mixed sediments	1.55	Medium sand	2.00	Medium sand	-0.50	Very coarse sand	7.00	Fine silt
ENV92	645.24	Gravelly muddy sand	Mixed sediments	1.02	Medium sand	2.00	Medium sand	-4.00	Pebble	0.50	Coarse sand
ENV93	962.18	Gravelly sand	Coarse sediments	0.09	Coarse sand	0.50	Coarse sand				

Sample	Method of Moment										Description
	Mean µm	Modified	Eunis	Median	Description	1st Local Maxima (Mode)	Description	2nd Local Maxima	Description	3rd Local Maxima	
ENV94	541.83	Gravelly sand	Coarse sediments	1.18	Medium sand	2.00	Medium sand	-2.50	Pebble		
ENV95	264.06	Slightly gravelly muddy sand	Sand and muddy sand	1.22	Medium sand	1.00	Coarse sand	7.50	Very fine silt		
ENV96	586.56	Gravelly sand	Coarse sediments	0.68	Coarse sand	0.50	Coarse sand	-0.50	Very coarse sand	-3.00	Pebble
ENV97	571.02	Gravelly muddy sand	Mixed sediments	0.47	Coarse sand	0.50	Coarse sand	-1.50	Granule	-3.00	Pebble

A.5. Full PSA analysis results for 2022 survey in Mona benthic subtidal and intertidal ecology study area (part 1)

Sample station	Easting	Northing	Phi5	Phi10	Phi16	Phi25	Phi50	Phi75	Phi84	Phi90	Phi95
ENV67	449860	5947112	-0.04	0.08	0.18	0.34	0.70	1.03	1.27	1.43	1.74
ENV50	432215	5954552	-2.99	-2.62	-2.21	-1.58	0.53	1.55	1.95	3.00	7.14
ENV59	439035	5964418	-2.86	-1.89	-1.19	-0.18	1.39	2.07	2.41	2.91	6.62
22ENV30	430332	5948303	-3.31	-2.97	-2.62	-1.95	0.11	1.28	1.83	2.70	6.83
ENV56	434033	5960596	-2.09	-1.18	-0.21	0.48	1.28	1.90	2.29	3.11	7.22
22ENV32	439700	5957560	-2.78	-1.85	-1.01	0.06	1.06	1.78	2.11	2.80	6.99
22ENV33	442358	5948938	-3.02	-2.15	-1.44	-0.62	1.07	1.80	2.13	4.32	7.40
22ENV34	450352	5941083	-2.38	-1.82	-1.31	-0.69	1.15	2.00	2.41	4.58	7.54
ENV51	439422	5954389	-3.73	-3.36	-3.02	-2.11	0.47	1.58	1.90	2.29	5.95
22ENV36	437680	5945297	-3.25	-2.83	-2.36	-1.63	0.40	1.56	2.00	3.34	7.36
22ENV37	432952	5967194	-2.31	-1.65	-0.92	0.22	1.41	1.96	2.34	3.30	7.31
22ENV38	445383	5942761	-1.47	-1.00	-0.64	-0.23	0.38	0.89	1.21	1.53	2.07
ZOI39	454383	5952550	-3.16	-2.75	-2.15	-1.29	1.16	1.97	2.27	2.48	6.16
ZOI40	447940	5957240	-3.12	-2.18	-1.30	-0.31	1.08	1.87	2.26	4.31	7.46
ZOI41	420053	5962511	-4.87	-4.73	-4.57	-4.31	-1.68	1.41	1.88	2.72	7.06
ZOI42	454780	5945938	-1.40	-0.40	0.07	0.33	0.88	1.66	2.02	2.60	7.02
ZOI43	432516	5968981	-3.21	-2.87	-2.40	-0.97	1.28	1.92	2.28	2.71	6.26
ZOI44	427673	5959739	-2.31	-1.40	-0.34	0.33	1.14	1.77	2.00	2.36	3.30
ZOI45	457320	5940881	-0.68	-0.19	0.11	0.37	0.91	1.40	1.63	1.85	2.10
ZOI46	445017	5961797	-0.79	0.19	0.58	0.83	1.25	1.64	1.82	1.94	2.16
ZOI47	425610	5966088	-2.79	-2.15	-1.30	0.15	1.39	1.95	2.31	2.91	6.83

Sample station	Easting	Northing	Phi5	Phi10	Phi16	Phi25	Phi50	Phi75	Phi84	Phi90	Phi95
ZOI48	452597	5949533	0.16	0.34	0.53	0.67	1.10	1.78	2.38	6.70	7.98
OCC52	435780	5939557	-3.24	-2.80	-2.16	-1.21	1.06	1.82	2.13	2.49	5.71
OCC53	439333	5938837	-3.25	-2.66	-2.07	-1.35	1.00	1.82	2.15	2.57	6.71
OCC54	444576	5938239	-2.46	-1.83	-1.23	-0.22	1.29	1.96	2.33	3.17	7.13
OCC55	437400	5933792	-1.71	-1.00	-0.45	0.13	1.04	1.86	2.41	5.10	7.56
OCC56	439603	5933760	-1.83	-1.25	-0.61	0.12	1.24	1.95	2.45	5.43	7.65
OCC57	441812	5933503	-2.29	-1.66	-1.17	-0.61	0.84	1.95	2.74	6.11	7.79
OCC58	439364	5928453	-2.48	-1.70	-0.94	-0.03	1.18	1.87	2.24	3.13	7.19
OCC59	438585	5926849	-2.52	-2.02	-1.46	-0.53	1.17	1.90	2.41	5.85	7.75
OCC60	437977	5924941	-2.78	-2.20	-1.63	-0.67	1.08	1.86	2.27	4.47	7.29
OCC61	438216	5922700	-2.35	-1.38	-0.43	0.17	0.82	1.34	1.53	1.78	1.98
OCC62	438710	5920803	-0.24	0.09	0.25	0.48	0.92	1.37	1.56	1.77	1.95
OCC63	439988	5919225	0.24	0.66	1.00	1.16	1.58	1.92	2.11	2.32	2.50
OCC64	441265	5917640	0.97	1.08	1.18	1.33	1.66	1.95	2.11	2.26	2.39
OCC65	442496	5916118	-1.25	0.60	1.09	1.36	1.80	2.38	6.24	7.50	8.80
OCC133	459167	5905070	-0.78	1.16	1.65	2.01	2.49	2.98	3.32	3.66	4.47
OCC134	458449	5906335	1.20	1.51	1.61	1.76	2.19	2.97	6.26	7.51	8.62
OCC135	458077	5906908	1.17	1.49	1.58	1.71	2.07	2.38	2.50	2.80	3.48
OCC136	457061	5907251	1.02	1.37	1.57	1.73	2.13	2.45	2.66	2.85	3.08
OCC137	456188	5907981	-0.14	0.72	1.16	1.51	1.86	2.25	2.40	2.50	2.86
OCC138	455248	5908792	1.21	1.48	1.58	1.70	2.05	2.39	2.54	2.83	3.42
OCC139	454474	5908956	0.08	0.30	0.54	0.76	1.24	1.67	1.85	1.98	2.34
OCC140	453604	5909457	0.69	1.01	1.10	1.24	1.60	1.90	2.01	2.22	2.38

Sample station	Easting	Northing	Phi5	Phi10	Phi16	Phi25	Phi50	Phi75	Phi84	Phi90	Phi95
OCC141	452717	5909952	-2.90	-2.05	-1.72	-1.35	-0.52	0.71	1.41	1.81	2.30
OCC142	451618	5910585	0.09	0.54	0.96	1.18	1.64	1.98	2.22	2.39	2.84
OCC143	450967	5910951	-1.46	-1.00	-0.60	0.04	0.80	1.41	1.69	1.92	2.34
OCC144	450132	5911424	-5.41	-5.31	-5.20	-5.03	-2.44	2.12	2.49	3.40	7.07
OCC145	449370	5912095	1.00	1.09	1.20	1.37	1.69	1.96	2.14	2.29	2.42
OCC146	447962	5912661	-3.03	-2.46	-1.40	0.93	1.61	2.01	2.24	2.40	2.77
OCC147	446692	5913379	-3.95	-2.00	0.15	0.99	1.48	1.85	1.97	2.15	2.33
OCC148	445262	5913962	-5.96	-5.92	-5.87	-5.79	-5.58	-4.20	-3.17	-1.40	1.61
OCC149	443889	5914972	0.03	0.70	1.05	1.22	1.62	1.92	2.07	2.24	2.38
OCC150	442718	5915642	0.75	1.05	1.16	1.31	1.66	1.95	2.11	2.27	2.39
OCC151	448153	5913471	-2.99	-1.72	0.09	0.96	1.55	1.92	2.10	2.27	2.41
OCC152	447432	5912779	-3.47	-3.19	-2.80	-2.02	1.24	1.90	2.15	2.36	2.80
OCC153	446036	5913523	-4.31	-4.13	-3.76	-2.77	1.27	1.84	2.03	2.28	2.50

A.6. Full PSA analysis results for 2022 survey in Mona benthic subtidal and intertidal ecology study area (part 2)

Sample station	Mean µm (FolkAndWard)	MeanPhi (FolkAndWard)	Wentworth (FolkAndWard)	SortingValue (FolkAndWard)	SortingDescription (FolkAndWard)
ENV67	608.01	0.72	Coarse sand	0.54	Moderately well
ENV50	940.97	0.09	Coarse sand	2.57	Very poor
ENV59	547.87	0.87	Coarse sand	2.34	Very poor
22ENV30	1169.22	-0.23	Very coarse sand	2.65	Very poor
ENV56	460.94	1.12	Medium sand	2.04	Very poor
22ENV32	606.67	0.72	Coarse sand	2.26	Very poor
22ENV33	665.57	0.59	Coarse sand	2.47	Very poor
22ENV34	595.01	0.75	Coarse sand	2.43	Very poor
ENV51	1162.77	-0.22	Very coarse sand	2.70	Very poor
22ENV36	991.32	0.01	Coarse sand	2.70	Very poor
22ENV37	519.56	0.94	Coarse sand	2.27	Very poor
22ENV38	805.09	0.31	Coarse sand	1.00	Moderate
ZOI39	744.23	0.43	Coarse sand	2.52	Very poor
ZOI40	624.45	0.68	Coarse sand	2.50	Very poor
ZOI41	2745.17	-1.46	Granule	3.42	Very poor
ZOI42	503.41	0.99	Coarse sand	1.76	Poor
ZOI43	766.07	0.38	Coarse sand	2.60	Very poor
ZOI44	523.98	0.93	Coarse sand	1.44	Poor
ZOI45	542.72	0.88	Coarse sand	0.80	Moderate
ZOI46	429.62	1.22	Medium sand	0.76	Moderate

Sample station	Mean µm (FolkAndWard)	MeanPhi (FolkAndWard)	Wentworth (FolkAndWard)	SortingValue (FolkAndWard)	SortingDescription (FolkAndWard)
ZOI47	573.93	0.80	Coarse sand	2.36	Very poor
ZOI48	396.57	1.33	Medium sand	1.65	Poor
OCC52	788.78	0.34	Coarse sand	2.43	Very poor
OCC53	778.98	0.36	Coarse sand	2.56	Very poor
OCC54	576.19	0.80	Coarse sand	2.34	Very poor
OCC55	499.56	1.00	Medium sand	2.12	Very poor
OCC56	489.85	1.03	Medium sand	2.20	Very poor
OCC57	573.47	0.80	Coarse sand	2.50	Very poor
OCC58	563.56	0.83	Coarse sand	2.26	Very poor
OCC59	612.25	0.71	Coarse sand	2.52	Very poor
OCC60	672.12	0.57	Coarse sand	2.50	Very poor
OCC61	640.18	0.64	Coarse sand	1.15	Poor
OCC62	532.63	0.91	Coarse sand	0.66	Moderately well
OCC63	337.67	1.57	Medium sand	0.62	Moderately well
OCC64	318.69	1.65	Medium sand	0.45	Well
OCC65	121.49	3.04	Very fine sand	2.81	Very poor
OCC133	178.44	2.49	Fine sand	1.21	Poor
OCC134	97.98	3.35	Very fine sand	2.29	Very poor
OCC135	241.63	2.05	Fine sand	0.58	Moderately well
OCC136	230.17	2.12	Fine sand	0.58	Moderately well
OCC137	286.08	1.81	Medium sand	0.76	Moderate
OCC138	240.42	2.06	Fine sand	0.58	Moderately well
OCC139	432.11	1.21	Medium sand	0.67	Moderately well

Sample station	Mean µm (FolkAndWard)	MeanPhi (FolkAndWard)	Wentworth (FolkAndWard)	SortingValue (FolkAndWard)	SortingDescription (FolkAndWard)
OCC140	336.19	1.57	Medium sand	0.48	Well
OCC141	1214.42	-0.28	Very coarse sand	1.57	Poor
OCC142	329.13	1.60	Medium sand	0.73	Moderate
OCC143	644.46	0.63	Coarse sand	1.15	Poor
OCC144	3285.86	-1.72	Granule	3.81	Very poor
OCC145	312.45	1.68	Medium sand	0.45	Well
OCC146	567.22	0.82	Coarse sand	1.79	Poor
OCC147	434.17	1.20	Medium sand	1.41	Poor
OCC148	29318.42	-4.87	Pebble	1.82	Poor
OCC149	334.70	1.58	Medium sand	0.61	Moderately well
OCC150	320.12	1.64	Medium sand	0.49	Well
OCC151	421.26	1.25	Medium sand	1.32	Poor
OCC152	872.90	0.20	Coarse sand	2.19	Very poor
OCC153	1113.39	-0.15	Very coarse sand	2.48	Very poor

A.7. Full PSA analysis results for 2022 survey in Mona benthic subtidal and intertidal ecology study area (part 3)

Sample station	Skewness Value (FolkAndWard)	Skewness Description (FolkAndWard)	Kurtosis Value (FolkAndWard)	Kurtosis Description (FolkAndWard)
ENV67	0.12	Fine	1.05	Mesokurtic
ENV50	-0.01	Symmetrical	1.32	Leptokurtic
ENV59	-0.17	Coarse	1.72	Very leptokurtic
22ENV30	0.05	Symmetrical	1.29	Leptokurtic
ENV56	0.04	Symmetrical	2.69	Very leptokurtic
22ENV32	-0.05	Symmetrical	2.32	Very leptokurtic
22ENV33	-0.10	Symmetrical	1.76	Very leptokurtic
22ENV34	-0.02	Symmetrical	1.51	Very leptokurtic
ENV51	-0.14	Coarse	1.08	Mesokurtic
22ENV36	0.02	Symmetrical	1.36	Leptokurtic
22ENV37	-0.10	Coarse	2.27	Very leptokurtic
22ENV38	-0.07	Symmetrical	1.29	Leptokurtic
ZOI39	-0.21	Coarse	1.17	Leptokurtic
ZOI40	-0.06	Symmetrical	1.99	Very leptokurtic
ZOI41	0.28	Fine	0.86	Platykurtic
ZOI42	0.31	Very fine	2.60	Very leptokurtic
ZOI43	-0.26	Coarse	1.34	Leptokurtic
ZOI44	-0.25	Coarse	1.60	Very leptokurtic
ZOI45	-0.10	Symmetrical	1.11	Leptokurtic
ZOI46	-0.24	Coarse	1.49	Leptokurtic

Sample station	Skewness Value (FolkAndWard)	Skewness Description (FolkAndWard)	Kurtosis Value (FolkAndWard)	Kurtosis Description (FolkAndWard)
ZOI47	-0.18	Coarse	2.20	Very leptokurtic
ZOI48	0.57	Very fine	2.89	Very leptokurtic
OCC52	-0.23	Coarse	1.21	Leptokurtic
OCC53	-0.15	Coarse	1.29	Leptokurtic
OCC54	-0.10	Symmetrical	1.80	Very leptokurtic
OCC55	0.18	Fine	2.19	Very leptokurtic
OCC56	0.07	Symmetrical	2.13	Very leptokurtic
OCC57	0.18	Fine	1.61	Very leptokurtic
OCC58	-0.05	Symmetrical	2.08	Very leptokurtic
OCC59	-0.04	Symmetrical	1.72	Very leptokurtic
OCC60	-0.08	Symmetrical	1.63	Very leptokurtic
OCC61	-0.37	Very coarse	1.53	Very leptokurtic
OCC62	-0.04	Symmetrical	1.02	Mesokurtic
OCC63	-0.12	Coarse	1.22	Leptokurtic
OCC64	-0.01	Symmetrical	0.94	Mesokurtic
OCC65	0.56	Very fine	4.06	Extremely leptokurtic
OCC133	-0.12	Coarse	2.22	Very leptokurtic
OCC134	0.74	Very fine	2.51	Very leptokurtic
OCC135	0.08	Symmetrical	1.42	Leptokurtic
OCC136	-0.05	Symmetrical	1.17	Leptokurtic
OCC137	-0.23	Coarse	1.66	Very leptokurtic
OCC138	0.14	Fine	1.32	Leptokurtic

Sample station	Skewness Value (FolkAndWard)	Skewness Description (FolkAndWard)	Kurtosis Value (FolkAndWard)	Kurtosis Description (FolkAndWard)
OCC139	-0.05	Symmetrical	1.02	Mesokurtic
OCC140	-0.09	Symmetrical	1.06	Mesokurtic
OCC141	0.16	Fine	1.04	Mesokurtic
OCC142	-0.11	Coarse	1.41	Leptokurtic
OCC143	-0.21	Coarse	1.14	Leptokurtic
OCC144	0.40	Very fine	0.72	Platykurtic
OCC145	-0.01	Symmetrical	0.97	Mesokurtic
OCC146	-0.63	Very coarse	2.22	Very leptokurtic
OCC147	-0.60	Very coarse	2.99	Very leptokurtic
OCC148	0.84	Very fine	1.95	Very leptokurtic
OCC149	-0.24	Coarse	1.37	Leptokurtic
OCC150	-0.09	Symmetrical	1.07	Mesokurtic
OCC151	-0.57	Very coarse	2.30	Very leptokurtic
OCC152	-0.57	Very coarse	0.66	Very platykurtic
OCC153	-0.69	Very coarse	0.60	Very platykurtic

A.8. Full PSA analysis results for 2022 survey in Mona benthic subtidal and intertidal ecology study area (part 4)

Sample station	Mean µm (Method Of Moments)	Mean Phi (Method Of Moments)	Wentworth (Method Of Moments)	Sorting Value (Method Of Moments)
ENV67	610.72	0.71	Coarse sand	0.60
ENV50	681.37	0.55	Coarse sand	2.81
ENV59	434.04	1.20	Medium sand	2.45
22ENV30	864.23	0.21	Coarse sand	2.84
ENV56	369.46	1.44	Medium sand	2.39
22ENV32	463.56	1.11	Medium sand	2.50
22ENV33	482.99	1.05	Medium sand	2.74
22ENV34	437.43	1.19	Medium sand	2.75
ENV51	927.00	0.11	Coarse sand	2.78
22ENV36	707.37	0.50	Coarse sand	2.94
22ENV37	378.03	1.40	Medium sand	2.53
22ENV38	742.01	0.43	Coarse sand	1.40
ZOI39	604.35	0.73	Coarse sand	2.63
ZOI40	459.17	1.12	Medium sand	2.76
ZOI41	1909.77	-0.93	Very coarse sand	3.73
ZOI42	409.64	1.29	Medium sand	2.23
ZOI43	553.14	0.85	Coarse sand	2.65
ZOI44	482.15	1.05	Medium sand	1.93
ZOI45	558.23	0.84	Coarse sand	0.86
ZOI46	463.20	1.11	Medium sand	0.88

Sample station	Mean µm (Method Of Moments)	Mean Phi (Method Of Moments)	Wentworth (Method Of Moments)	Sorting Value (Method Of Moments)
ZOI47	428.32	1.22	Medium sand	2.50
ZOI48	253.75	1.98	Medium sand	2.48
OCC52	640.24	0.64	Coarse sand	2.54
OCC53	628.89	0.67	Coarse sand	2.74
OCC54	426.21	1.23	Medium sand	2.55
OCC55	365.66	1.45	Medium sand	2.56
OCC56	346.10	1.53	Medium sand	2.62
OCC57	418.02	1.26	Medium sand	2.91
OCC58	424.84	1.24	Medium sand	2.53
OCC59	406.29	1.30	Medium sand	2.87
OCC60	479.45	1.06	Medium sand	2.75
OCC61	683.78	0.55	Coarse sand	1.25
OCC62	540.28	0.89	Coarse sand	0.72
OCC63	316.57	1.66	Medium sand	1.29
OCC64	320.51	1.64	Medium sand	0.47
OCC65	160.11	2.64	Fine sand	2.89
OCC133	180.68	2.47	Fine sand	1.74
OCC134	108.98	3.20	Very fine sand	2.47
OCC135	208.32	2.26	Fine sand	1.33
OCC136	219.66	2.19	Fine sand	1.14
OCC137	289.68	1.79	Medium sand	1.32
OCC138	210.25	2.25	Fine sand	1.28

Sample station	Mean µm (Method Of Moments)	Mean Phi (Method Of Moments)	Wentworth (Method Of Moments)	Sorting Value (Method Of Moments)
OCC139	409.13	1.29	Medium sand	1.09
OCC140	335.66	1.57	Medium sand	0.49
OCC141	1181.37	-0.24	Very coarse sand	1.82
OCC142	309.52	1.69	Medium sand	1.36
OCC143	605.59	0.72	Coarse sand	1.40
OCC144	2036.30	-1.03	Granule	4.10
OCC145	315.06	1.67	Medium sand	0.49
OCC146	459.01	1.12	Medium sand	2.10
OCC147	534.60	0.90	Coarse sand	1.68
OCC148	22147.64	-4.47	Pebble	2.30
OCC149	358.07	1.48	Medium sand	0.73
OCC150	328.73	1.61	Medium sand	0.57
OCC151	489.72	1.03	Medium sand	1.51
OCC152	778.82	0.36	Coarse sand	2.52
OCC153	964.58	0.05	Coarse sand	2.78

A.9. Full PSA analysis results for 2022 survey in Mona benthic subtidal and intertidal ecology study area (part 5)

Sample station	Sorting Description (Method Of Moments)	Skewness Value (Method Of Moments)	Skewness Description (Method Of Moments)
ENV67	Moderately well	-0.30	Symmetrical
ENV50	Very poor	1.35	Very fine
ENV59	Very poor	0.95	Fine
22ENV30	Very poor	1.39	Very fine
ENV56	Very poor	1.61	Very fine
22ENV32	Very poor	1.39	Very fine
22ENV33	Very poor	1.28	Fine
22ENV34	Very poor	1.41	Very fine
ENV51	Very poor	0.98	Fine
22ENV36	Very poor	1.36	Very fine
22ENV37	Very poor	1.40	Very fine
22ENV38	Poor	2.72	Very fine
ZOI39	Very poor	0.93	Fine
ZOI40	Very poor	1.26	Fine
ZOI41	Very poor	1.01	Fine
ZOI42	Very poor	1.95	Very fine
ZOI43	Very poor	0.83	Fine
ZOI44	Poor	1.25	Fine
ZOI45	Moderately	-0.95	Coarse
ZOI46	Moderately	-1.91	Very coarse

Sample station	Sorting Description (Method Of Moments)	Skewness Value (Method Of Moments)	Skewness Description (Method Of Moments)
ZOI47	Very poor	1.07	Fine
ZOI48	Very poor	2.19	Very fine
OCC52	Very poor	0.86	Fine
OCC53	Very poor	1.00	Fine
OCC54	Very poor	1.25	Fine
OCC55	Very poor	1.77	Very fine
OCC56	Very poor	1.60	Very fine
OCC57	Very poor	1.41	Very fine
OCC58	Very poor	1.39	Very fine
OCC59	Very poor	1.30	Very fine
OCC60	Very poor	1.25	Fine
OCC61	Poor	-1.33	Very coarse
OCC62	Moderately	-0.94	Coarse
OCC63	Poor	3.92	Very fine
OCC64	Well	-1.74	Very coarse
OCC65	Very poor	1.21	Fine
OCC133	Poor	0.73	Fine
OCC134	Very poor	1.74	Very fine
OCC135	Poor	4.37	Very fine
OCC136	Poor	4.46	Very fine
OCC137	Poor	1.84	Very fine
OCC138	Poor	4.45	Very fine

Sample station	Sorting Description (Method Of Moments)	Skewness Value (Method Of Moments)	Skewness Description (Method Of Moments)
OCC139	Poor	4.70	Very fine
OCC140	Well	-0.34	Symmetrical
OCC141	Poor	1.52	Very fine
OCC142	Poor	3.35	Very fine
OCC143	Poor	2.07	Very fine
OCC144	Extremely poor	0.76	Fine
OCC145	Well	-1.15	Coarse
OCC146	Very poor	0.22	Symmetrical
OCC147	Poor	-2.03	Very coarse
OCC148	Very poor	2.35	Very fine
OCC149	Moderately	-2.02	Very coarse
OCC150	Moderately well	-2.43	Very coarse
OCC151	Poor	-1.79	Very coarse
OCC152	Very poor	0.42	Symmetrical
OCC153	Very poor	0.01	Symmetrical

A.10. Full PSA analysis results for 2022 survey in Mona benthic subtidal and intertidal ecology study area (part 6)

Sample station	Folk Modified	Folk Eunis	Median	Description	1st Local Maxima (Mode)
ENV67	Slightly gravelly sand	Sand and muddy sand	0.70	Coarse sand	1.00
ENV50	Muddy sandy gravel	Mixed sediments	0.53	Coarse sand	1.50
ENV59	Gravelly sand	Coarse sediments	1.39	Medium sand	2.00
22ENV30	Muddy sandy gravel	Mixed sediments	0.11	Coarse sand	1.00
ENV56	Gravelly muddy sand	Mixed sediments	1.28	Medium sand	2.00
22ENV32	Gravelly muddy sand	Mixed sediments	1.06	Medium sand	2.00
22ENV33	Gravelly muddy sand	Mixed sediments	1.07	Medium sand	2.00
22ENV34	Gravelly muddy sand	Mixed sediments	1.15	Medium sand	2.00
ENV51	Muddy sandy gravel	Mixed sediments	0.47	Coarse sand	2.00
22ENV36	Muddy sandy gravel	Mixed sediments	0.40	Coarse sand	1.00
22ENV37	Gravelly muddy sand	Mixed sediments	1.41	Medium sand	2.00
22ENV38	Gravelly sand	Coarse sediments	0.38	Coarse sand	0.50
ZOI39	Gravelly sand	Coarse sediments	1.16	Medium sand	2.00
ZOI40	Gravelly muddy sand	Mixed sediments	1.08	Medium sand	2.00
ZOI41	Muddy sandy gravel	Mixed sediments	-1.68	Granule	-4.50
ZOI42	Gravelly sand	Coarse sediments	0.88	Coarse sand	1.00
ZOI43	Gravelly sand	Coarse sediments	1.28	Medium sand	2.00
ZOI44	Gravelly sand	Coarse sediments	1.14	Medium sand	2.00
ZOI45	Slightly gravelly sand	Sand and muddy sand	0.91	Coarse sand	1.50
ZOI46	Slightly gravelly sand	Sand and muddy sand	1.25	Medium sand	1.50
ZOI47	Gravelly muddy sand	Mixed sediments	1.39	Medium sand	2.00

Sample station	Folk Modified	Folk Eunis	Median	Description	1st Local Maxima (Mode)
ZOI48	Muddy sand	Sand and muddy sand	1.10	Medium sand	1.00
OCC52	Gravelly sand	Coarse sediments	1.06	Medium sand	2.00
OCC53	Gravelly muddy sand	Mixed sediments	1.00	Coarse sand	2.00
OCC54	Gravelly muddy sand	Mixed sediments	1.29	Medium sand	2.00
OCC55	Gravelly muddy sand	Mixed sediments	1.04	Medium sand	1.50
OCC56	Gravelly muddy sand	Mixed sediments	1.24	Medium sand	2.00
OCC57	Gravelly muddy sand	Mixed sediments	0.84	Coarse sand	2.00
OCC58	Gravelly muddy sand	Mixed sediments	1.18	Medium sand	2.00
OCC59	Gravelly muddy sand	Mixed sediments	1.17	Medium sand	2.00
OCC60	Gravelly muddy sand	Mixed sediments	1.08	Medium sand	2.00
OCC61	Gravelly sand	Coarse sediments	0.82	Coarse sand	1.50
OCC62	Slightly gravelly sand	Sand and muddy sand	0.92	Coarse sand	1.00
OCC63	Sand	Sand and muddy sand	1.58	Medium sand	2.00
OCC64	Sand	Sand and muddy sand	1.66	Medium sand	2.00
OCC65	Gravelly muddy sand	Mixed sediments	1.80	Medium sand	2.00
OCC133	Slightly gravelly sand	Sand and muddy sand	2.49	Fine sand	2.50
OCC134	Muddy sand	Mud and sandy mud	2.19	Fine sand	2.00
OCC135	Sand	Sand and muddy sand	2.07	Fine sand	2.50
OCC136	Sand	Sand and muddy sand	2.13	Fine sand	2.50
OCC137	Slightly gravelly sand	Sand and muddy sand	1.86	Medium sand	2.00
OCC138	Sand	Sand and muddy sand	2.05	Fine sand	2.50
OCC139	Sand	Sand and muddy sand	1.24	Medium sand	1.50
OCC140	Sand	Sand and muddy sand	1.60	Medium sand	2.00

Sample station	Folk Modified	Folk Eunis	Median	Description	1st Local Maxima (Mode)
OCC141	Sandy gravel	Coarse sediments	-0.52	Very coarse sand	-0.50
OCC142	Slightly gravelly sand	Sand and muddy sand	1.64	Medium sand	2.00
OCC143	Gravelly sand	Coarse sediments	0.80	Coarse sand	1.50
OCC144	Muddy sandy gravel	Mixed sediments	-2.44	Pebble	-5.00
OCC145	Sand	Sand and muddy sand	1.69	Medium sand	2.00
OCC146	Gravelly sand	Coarse sediments	1.61	Medium sand	2.00
OCC147	Gravelly sand	Coarse sediments	1.48	Medium sand	2.00
OCC148	Gravel	Coarse sediments	-5.58	Pebble	-5.50
OCC149	Slightly gravelly sand	Sand and muddy sand	1.62	Medium sand	2.00
OCC150	Sand	Sand and muddy sand	1.66	Medium sand	2.00
OCC151	Gravelly sand	Coarse sediments	1.55	Medium sand	2.00
OCC152	Sandy gravel	Coarse sediments	1.24	Medium sand	2.00
OCC153	Sandy gravel	Coarse sediments	1.27	Medium sand	2.00

A.11. Full PSA analysis results for 2022 survey in Mona benthic subtidal and intertidal ecology study area (part 7)

Sample station	Description	2ndLocalMaxima	Description	3rdLocalMaxima	Description
ENV67	Coarse sand				
ENV50	Medium sand	-2.00	Pebble	7.50	Very fine silt
ENV59	Medium sand	-0.50	Very coarse sand	-1.50	Granule
22ENV30	Coarse sand	-2.50	Pebble	7.50	Very fine silt
ENV56	Medium sand	-1.50	Granule	8.00	Very fine silt
22ENV32	Medium sand	-1.00	Granule	-3.00	Pebble
22ENV33	Medium sand	-0.50	Very coarse sand	-3.00	Pebble
22ENV34	Medium sand	-0.50	Very coarse sand	7.50	Very fine silt
ENV51	Medium sand	-3.00	Pebble	-0.50	Very coarse sand
22ENV36	Coarse sand	-1.50	Granule	-2.50	Pebble
22ENV37	Medium sand	-0.50	Very coarse sand	7.50	Very fine silt
22ENV38	Coarse sand				
ZOI39	Medium sand	-3.00	Pebble		
ZOI40	Medium sand	-0.50	Very coarse sand	-3.00	Pebble
ZOI41	Pebble	1.50	Medium sand		
ZOI42	Coarse sand	7.50	Very fine silt	-2.00	Pebble
ZOI43	Medium sand	-2.50	Pebble		
ZOI44	Medium sand	-1.50	Granule	-2.50	Pebble
ZOI45	Medium sand				
ZOI46	Medium sand	-0.50	Very coarse sand		
ZOI47	Medium sand	-2.50	Pebble	7.50	Very fine silt

Sample station	Description	2ndLocalMaxima	Description	3rdLocalMaxima	Description
ZOI48	Coarse sand	7.50	Very fine silt	6.00	Medium silt
OCC52	Medium sand	-3.00	Pebble		
OCC53	Medium sand	-1.50	Granule	-3.00	Pebble
OCC54	Medium sand	-1.50	Granule	7.50	Very fine silt
OCC55	Medium sand	7.50	Very fine silt		
OCC56	Medium sand	-1.50	Granule	7.50	Very fine silt
OCC57	Medium sand	0.00	Very coarse sand	7.50	Very fine silt
OCC58	Medium sand	-1.50	Granule	-3.00	Pebble
OCC59	Medium sand	-1.00	Granule	7.50	Very fine silt
OCC60	Medium sand	-1.50	Granule	7.50	Very fine silt
OCC61	Medium sand	-1.50	Granule		
OCC62	Coarse sand				
OCC63	Medium sand				
OCC64	Medium sand				
OCC65	Medium sand	8.00	Very fine silt	-1.00	Granule
OCC133	Fine sand	-2.00	Pebble	-3.00	Pebble
OCC134	Medium sand	8.00	Very fine silt		
OCC135	Fine sand				
OCC136	Fine sand				
OCC137	Medium sand				
OCC138	Fine sand				
OCC139	Medium sand				
OCC140	Medium sand				

Sample station	Description	2ndLocalMaxima	Description	3rdLocalMaxima	Description
OCC141	Very coarse sand	2.00	Medium sand	-3.50	Pebble
OCC142	Medium sand	-0.50	Very coarse sand		
OCC143	Medium sand	-0.50	Very coarse sand		
OCC144	Pebble	2.50	Fine sand	7.50	Very fine silt
OCC145	Medium sand				
OCC146	Medium sand	-3.00	Pebble		
OCC147	Medium sand	-4.00	Pebble	-2.00	Pebble
OCC148	Pebble	2.00	Medium sand		
OCC149	Medium sand	-0.50	Very coarse sand		
OCC150	Medium sand				
OCC151	Medium sand	-3.00	Pebble		
OCC152	Medium sand	-3.00	Pebble		
OCC153	Medium sand	-4.00	Pebble		

A.12. Full PSA analysis results for 2022 survey in Mona benthic subtidal and intertidal ecology study area (part 8)

Sample station	Kurtosis Value (Method Of Moments)	Kurtosis Description (Method Of Moments)	Fines%	Sands%	Gravels%
ENV67	6.34	Leptokurtic	0.00	98.79	1.21
ENV50	5.57	Leptokurtic	9.48	60.32	30.21
ENV59	5.64	Leptokurtic	8.23	74.15	17.63
22ENV30	5.75	Leptokurtic	8.96	57.40	33.64
ENV56	7.53	Very leptokurtic	9.24	79.80	10.97
22ENV32	6.74	Leptokurtic	8.84	75.09	16.07
22ENV33	5.74	Leptokurtic	10.44	68.94	20.62
22ENV34	5.74	Leptokurtic	10.72	69.13	20.15
ENV51	5.04	Leptokurtic	6.52	57.50	35.98
22ENV36	5.48	Leptokurtic	9.81	57.99	32.19
22ENV37	6.62	Leptokurtic	9.46	75.27	15.27
22ENV38	18.66	Very leptokurtic	2.37	87.66	9.98
ZOI39	5.29	Leptokurtic	6.73	65.18	28.09
ZOI40	5.80	Leptokurtic	10.30	71.17	18.53
ZOI41	3.83	Leptokurtic	8.72	38.86	52.43
ZOI42	8.76	Very leptokurtic	8.83	85.10	6.07
ZOI43	5.24	Leptokurtic	7.12	68.05	24.84
ZOI44	8.92	Very leptokurtic	4.65	83.01	12.35
ZOI45	5.95	Leptokurtic	0.00	97.06	2.94
ZOI46	8.43	Very leptokurtic	0.00	95.84	4.16
ZOI47	6.10	Leptokurtic	8.37	73.74	17.89

Sample station	Kurtosis Value (Method Of Moments)	Kurtosis Description (Method Of Moments)	Fines%	Sands%	Gravels%
ZOI48	6.97	Leptokurtic	14.37	85.45	0.18
OCC52	5.19	Leptokurtic	6.50	66.56	26.93
OCC53	5.25	Leptokurtic	8.45	62.81	28.73
OCC54	6.00	Leptokurtic	9.46	72.33	18.21
OCC55	6.79	Leptokurtic	11.50	78.51	9.99
OCC56	6.25	Leptokurtic	11.97	76.00	12.02
OCC57	5.17	Leptokurtic	13.41	68.35	18.24
OCC58	6.39	Leptokurtic	9.63	74.90	15.47
OCC59	5.21	Leptokurtic	12.58	66.55	20.88
OCC60	5.55	Leptokurtic	10.49	67.52	21.98
OCC61	4.72	Leptokurtic	0.00	87.99	12.01
OCC62	6.38	Leptokurtic	0.00	98.12	1.88
OCC63	27.71	Very leptokurtic	3.24	96.01	0.75
OCC64	16.90	Very leptokurtic	0.00	99.71	0.29
OCC65	4.32	Leptokurtic	21.00	72.99	6.02
OCC133	10.82	Very leptokurtic	6.71	88.70	4.60
OCC134	5.08	Leptokurtic	21.43	78.51	0.06
OCC135	26.42	Very leptokurtic	4.44	95.55	0.02
OCC136	36.58	Very leptokurtic	2.36	97.42	0.21
OCC137	22.52	Very leptokurtic	1.90	94.83	3.28
OCC138	28.75	Very leptokurtic	4.11	95.74	0.15
OCC139	41.08	Very leptokurtic	1.50	98.20	0.30
OCC140	4.69	Leptokurtic	0.00	99.96	0.04

Sample station	Kurtosis Value (Method Of Moments)	Kurtosis Description (Method Of Moments)	Fines%	Sands%	Gravels%
OCC141	9.22	Very leptokurtic	2.20	62.80	35.01
OCC142	22.71	Very leptokurtic	3.52	95.06	1.42
OCC143	17.25	Very leptokurtic	1.48	88.49	10.03
OCC144	2.85	Mesokurtic	8.92	34.46	56.62
OCC145	9.76	Very leptokurtic	0.00	99.72	0.28
OCC146	6.96	Leptokurtic	3.15	79.86	16.99
OCC147	6.09	Leptokurtic	0.00	87.38	12.62
OCC148	8.86	Very leptokurtic	0.56	8.83	90.61
OCC149	8.79	Very leptokurtic	0.00	98.04	1.96
OCC150	16.53	Very leptokurtic	0.00	99.22	0.78
OCC151	5.27	Leptokurtic	0.00	87.74	12.26
OCC152	4.37	Leptokurtic	3.56	63.30	33.14
OCC153	3.30	Mesokurtic	2.92	62.86	34.23

Appendix B Habitat Assessment

B.1. Seapens and burrowing megafauna assessment data within the Mona Array Area and ZoI

Station	Number of Images Assessed with Visibility	Camera Transect Length (m)	Mean Swathe Width (m)	Estimated Area Investigated (m^2)	Number of Burrows	Density (m^2)	Average Size (cm)	SACFOR Average
2021 Survey Data								
ENV31	87	282	0.66	186.01	95	0.51	2.9	O
ENV32	82	273	0.80	218.73	592	2.71	1.1	F
ENV33	91	267	0.83	223.07	560	2.51	1.0	O
ENV34	98	278	0.84	232.18	425	1.83	0.9	O
ENV35	97	268	0.83	221.46	996	4.50	1.0	F
ENV36	82	285	0.83	235.84	25	0.11	0.9	R
ENV37	78	274	1.76	483.07	731	1.51	2.9	F
ENV38	78	273	0.72	195.31	784	4.01	2.9	F
ENV39	102	272	0.99	268.38	1060	3.95	2.9	F
ENV40	94	270	0.67	180.37	928	5.15	2.8	F
ENV41	92	276	0.88	242.15	734	3.03	2.9	F
ENV42	83	287	0.67	193.36	450	2.33	2.9	F
ENV43	90	290	0.69	201.36	354	1.76	2.7	F
ENV44	96	292	0.66	192.86	48	0.25	2.2	O
ENV45	99	278	0.72	200.19	295	1.47	2.5	F
ENV46	104	280	0.87	244.98	0	NA	NA	NA
ENV47	100	308	0.78	240.07	725	3.02	1.4	F

Station	Number of Images Assessed with Visibility	Camera Transect Length (m)	Mean Swathe Width (m)	Estimated Area Investigated (m^2)	Number of Burrows	Density (m^2)	Average Size (cm)	SACFOR Average
ENV48	95	281	0.78	220.80	882	3.99	1.1	F
ENV49	85	289	0.77	223.23	470	2.11	1.3	F
ENV50	98	281	0.76	213.25	899	4.22	1.3	F
ENV51	99	269	0.75	201.33	510	2.53	1.1	F
ENV52	109	274	0.75	205.82	952	4.63	1.4	F
ENV53	99	275	0.75	205.73	547	2.66	1.1	F
ENV54	92	273	0.76	206.98	772	3.73	1.6	F
ENV55	99	270	0.72	193.27	932	4.82	1.6	F
ENV56	95	325	0.79	256.53	455	1.77	1.4	F
ENV57	104	275	0.89	245.11	65	0.27	1.2	O
ENV58	104	270	0.87	235.45	625	2.65	1.4	F
ENV59	104	281	0.62	175.19	475	2.71	1.8	F
ENV60	92	280	0.77	215.37	793	3.68	1.7	F
ENV61	95	273	0.71	194.68	525	2.70	1.5	F
ENV62	98	271	0.70	191.09	365	1.91	0.9	O
ENV63	84	276	0.67	186.02	445	2.39	1.1	F
ENV64	70	260	0.64	164.85	330	2.00	1.0	O
ENV65	75	273	0.77	211.05	547	2.59	1.4	F
ENV66	91	279	0.86	239.23	140	0.59	0.9	R
ENV67	98	67	0.81	54.37	250	4.60	0.9	O
ENV68	105	273	0.73	197.95	492	2.49	0.9	O

Station	Number of Images Assessed with Visibility	Camera Transect Length (m)	Mean Swathe Width (m)	Estimated Area Investigated (m^2)	Number of Burrows	Density (m^2)	Average Size (cm)	SACFOR Average
ENV69	91	290	0.63	183.72	792	4.31	1.6	F
ENV70	107	301	0.83	250.83	835	3.33	0.9	O
ENV71	112	300	1.78	533.41	818	1.53	1.1	F
ENV74	97	269	0.83	222.46	862	3.87	1.3	F
ENV75	91	272	0.90	243.55	0	NA	NA	NA
ENV76	105	274	0.90	245.90	270	1.10	1.5	F
ENV77	98	271	0.86	232.50	216	0.93	1.9	O
ENV78	105	274	0.75	206.28	507	2.46	1.5	F
ENV79	77	273	0.75	205.22	659	3.21	1.2	F
ENV80	100	279	0.84	235.32	490	2.08	0.9	O
ENV81	114	273	0.78	212.07	150	0.71	0.9	R
ENV82	92	274	0.69	189.66	753	3.97	2.4	F
ENV83	96	280	0.80	224.06	601	2.68	1.0	O
ENV84	101	292	0.76	223.46	899	4.02	1.7	F
ENV85	100	292	0.88	255.76	420	1.64	1.2	F
ENV86	100	288	0.63	181.60	555	3.06	1.9	F
ENV87	100	276	1.08	297.43	526	1.77	1.3	F
ENV88	90	306	1.17	357.54	617	1.73	1.8	F
ENV89	88	288	0.86	246.50	605	2.45	0.9	O
ENV95	95	273	0.66	180.90	0	NA	NA	NA
ENV96	97	328	0.81	266.64	170	0.64	0.9	R

Station	Number of Images Assessed with Visibility	Camera Transect Length (m)	Mean Swathe Width (m)	Estimated Area Investigated (m^2)	Number of Burrows	Density (m^2)	Average Size (cm)	SACFOR Average
ENV97	90	273	0.85	231.36	5	0.02	0.9	R

B.2. Annex I stony reef assessment within the Mona Array Area, ZoI and Mona Offshore Cable Corridor summary results

Station	Project	Total Images	Camera Transect Length (m)	Mean swathe width per image (m^3)	Area Investigated	Number of Images with Stony Features	Total Reef Area	Mean Stony Reef Cover (%)	Max Reef Height (cm)	Resemblance to 'Stony Reef'
2021 Survey										
ENV31	Mona	87	281.7	0.66	186.01	0	0	0	0	None
ENV32	Mona	82	273.1	0.80	218.73	0	0	0	0	None
ENV33	Mona	91	267.3	0.83	223.07	0	0	0	0	None
ENV34	Mona	98	278.0	0.84	232.18	0	0	0	0	None
ENV35	Mona	97	268.2	0.83	221.46	0	0	0	0	None
ENV36	Mona	82	285.4	0.83	235.84	0	0	0	0	None
ENV37	Mona	78	273.9	1.76	483.07	0	0	0	0	None
ENV38	Mona	78	272.9	0.72	195.31	0	0	0	0	None
ENV39	Mona	102	272.0	0.99	268.38	0	0	0	0	None
ENV40	Mona	102	269.8	0.67	180.37	0	0	0	0	None
ENV41	Mona	93	276.4	0.88	242.15	0	0	0	0	None
ENV42	Mona	83	287.2	0.67	193.36	0	0	0	0	None
ENV43	Mona	90	290.3	0.69	201.36	0	0	0	0	None
ENV44	Mona	96	292.1	0.66	192.86	0	0	0	0	None
ENV45	Mona	99	277.6	0.72	200.19	0	0	0	0	None
ENV46	Mona	104	280.3	0.87	244.98	49	4	12.01	13.2	Low
ENV47	Mona	100	308.3	0.78	240.07	0	0	0	0	None

Station	Project	Total Images	Camera Transect Length (m)	Mean swathe width per image (m^3)	Area Investigated	Number of Images with Stony Features	Total Reef Area	Mean Stony Reef Cover (%)	Max Reef Height (cm)	Resemblance to 'Stony Reef'
ENV48	Mona	95	281.4	0.78	220.80	0	0	0	0	None
ENV49	Mona	85	289.2	0.77	223.23	0	0	0	0	None
ENV50	Mona	98	280.9	0.76	213.25	0	0	0	0	None
ENV51	Mona	99	268.9	0.75	201.33	1	0	15.73	1.7	None
ENV52	Mona	109	274.1	0.75	205.82	0	0	0	0	None
ENV53	Mona	99	275.5	0.75	205.73	0	0	0	0	None
ENV54	Mona	92	272.7	0.76	206.98	0	0	0	0	None
ENV55	Mona	99	269.7	0.72	193.27	0	0	0	0	None
ENV56	Mona	95	325.2	0.79	256.53	0	0	0	0	None
ENV57	Mona	104	274.8	0.89	245.11	0	0	0	0	None
ENV58	Mona	104	269.6	0.87	235.45	33	2	12.75	8.6	Low
ENV59	Mona	104	281.0	0.62	175.19	2	0	11.28	3.5	None
ENV60	Mona	92	279.7	0.77	215.37	1	0	3.15	3.7	None
ENV61	Mona	95	273.2	0.71	194.68	7	0	4.46	3.8	None
ENV62	Mona	98	271.3	0.70	191.09	0	0	0	0	None
ENV63	Mona	84	275.9	0.67	186.02	0	0	0	0	None
ENV64	Mona	70	259.5	0.64	164.85	0	0	0	0	None
ENV65	Mona	75	273.1	0.77	211.05	0	0	0	0	None
ENV66	Mona	93	278.8	0.86	239.23	0	0	0	0	None
ENV67	Mona	98	67.4	0.81	54.37	0	0	0	0	None

Station	Project	Total Images	Camera Transect Length (m)	Mean swathe width per image (m^3)	Area Investigated	Number of Images with Stony Features	Total Reef Area	Mean Stony Reef Cover (%)	Max Reef Height (cm)	Resemblance to 'Stony Reef'
ENV68	Mona	105	272.6	0.73	197.95	0	0	0	0	None
ENV69	Mona	91	290.2	0.63	183.72	0	0	0	0	None
ENV70	Mona	107	301.1	0.83	250.83	0	0	0	0	None
ENV71	Mona	112	300.2	1.78	533.41	0	0	0	0	None
ENV74	Mona	97	268.7	0.83	222.46	0	0	0	0	None
ENV75	Mona	91	271.8	0.90	243.55	0	0	0	0	None
ENV76	Mona	105	274.2	0.90	245.90	41	2	9.59	8.6	Low
ENV77	Mona	104	271.5	0.86	232.50	0	0	0	0	None
ENV78	Mona	105	274.0	0.75	206.28	0	0	0	0	None
ENV79	Mona	77	273.5	0.75	205.22	21	1	10.96	9.3	Low
ENV80	Mona	102	279.5	0.84	235.32	52	3	11.17	12.8	Low
ENV81	Mona	114	272.5	0.78	212.07	65	4	12.72	13.2	Low
ENV82	Mona	92	273.7	0.69	189.66	0	0	0	0	None
ENV83	Mona	96	279.7	0.80	224.06	0	0	0	0	None
ENV84	Mona	101	292.4	0.76	223.46	0	0	0	0	None
ENV85	Mona	100	292.2	0.88	255.76	0	0	0	0	None
ENV86	Mona	100	288.4	0.63	181.60	0	0	0	0	None
ENV87	Mona	100	275.5	1.08	297.43	0	0	0	0	None
ENV88	Mona	90	305.9	1.17	357.54	0	0	0	0	None
ENV89	Mona	88	287.5	0.86	246.50	0	0	0	0	None

Station	Project	Total Images	Camera Transect Length (m)	Mean swathe width per image (m^3)	Area Investigated	Number of Images with Stony Features	Total Reef Area	Mean Stony Reef Cover (%)	Max Reef Height (cm)	Resemblance to 'Stony Reef'
ENV95	Mona	97	272.9	0.66	180.90	0	0	0	0	None
ENV96	Mona	100	327.9	0.81	266.64	0	0	0	0	None
ENV97	Mona	91	273.1	0.85	231.36	35	2	11.47	9.1	Low
2022 Survey										
ENV59	Mona	51	183	0.69	126.3	N/A	N/A	N/A	N/A	None
ENV51	Mona	40	216	0.57	122.5	N/A	N/A	N/A	N/A	None
22ENV41	Mona	49	215	0.61	131.5	23	0.02	0.09	26.7	None
ZOI44	Mona	47	249	0.65	162.8	14	0.01	0.07	12.9	None
ZOI51	Mona	51	210	0.78	163.3	10	2.19	3.90	32.8	None
OCC138	Mona	49	796	0.29	233.3	8	0.00	0.23	0.5	None
OCC147	Mona	33	365	0.70	255.4	5	0.24	0.62	12.6	None
OCC147A	Mona	1	737	0.10	73.2	1	0.01	0.10	5.2	None
OCC148	Mona	60	410	0.64	263.3	7	0.34	0.65	12.8	None
OCC149	Mona	128	480	0.64	306.1	9	1.32	0.61	19.1	None
OCC153	Mona	53	413	0.65	269.8	2	0.05	0.08	7.3	None

B.3. Full stony reef assessment data 2021

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence											
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV46	7930	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7931	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7932	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7933	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7934	None	B2 Scattered Cobbles	2.95	5.7	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7935	None	B2 Scattered Cobbles	8.59	4.8	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7936	None	B2 Scattered Cobbles	4.9	2.9	Low	1	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7937	None	B2 Scattered Cobbles	1.99	5.4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7938	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV46	7939	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7940	None	B3 Cobble and Boulder Area	25.88	6.3	Low	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7941	None	B2 Scattered Cobbles	7.23	2.3	Low	1	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7942	None	B3 Cobble and Boulder Area	19.44	2.2	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7943	None	B2 Scattered Cobbles	17.37	4.8	Low	1	NA	NA	1	1	1	NA	NA	NA	NA	NA	NA	NA
ENV46	7944	None	B2 Scattered Cobbles	4.86	3.2	Low	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7945	None	B2 Scattered Cobbles	8.01	4.5	Low	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7946	None	B2 Scattered Cobbles	3.96	3.2	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	7947	None	B3 Cobble and Boulder Area	20.23	13.2	Low	NA	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence											
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV46	7948	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7949	None	B2 Scattered Cobbles	5.65	5.2	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7950	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7951	None	B1 Gravel Area	2.23	2.2	Low	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7952	None	B2 Scattered Cobbles	1.93	3.5	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	7953	None	B2 Scattered Cobbles	1.69	3.3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7954	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7955	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7956	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7957	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7958	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV46	7958	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7959	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7960	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7961	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7962	None	B2 Scattered Cobbles	9.22	4.3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7963	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7964	None	B2 Scattered Cobbles	5.18	4.1	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7965	None	B3 Cobble and Boulder Area	20.34	5	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	7966	None	B3 Cobble and Boulder Area	81.44	7.3	Medium	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7967	None	B2 Scattered Cobbles	7.14	3.3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV46	7968	None	B3 Cobble and Boulder Area	11.31	5.5	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	7969	None	B3 Cobble and Boulder Area	11.12	3.8	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7970	None	B2 Scattered Cobbles	3	1.7	Low	1	NA	NA	1	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	7971	None	B3 Cobble and Boulder Area	31.1	5.2	Low	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV46	7972	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7973	None	B3 Cobble and Boulder Area	13.57	4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7974	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7975	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7976	None	B2 Scattered Cobbles	5.68	2.3	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV46	7977	None	B2 Scattered Cobbles	9.77	8.3	Low	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7978	None	B2 Scattered Cobbles	11.1	3.2	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7979	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	7980	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	7981	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	7982	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	1	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	7983	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7984	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	7985	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7986	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV46	7987	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7988	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7989	None	B2 Scattered Cobbles	9.68	2.6	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7990	None	B2 Scattered Cobbles	6.7	5	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	7991	None	B2 Scattered Cobbles	11.63	11.7	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7992	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7993	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7994	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7995	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7996	None	B1 Gravel Area	10.35	6.3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV46	7997	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7998	None	B3 Cobble and Boulder Area	20.59	6.7	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	7999	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8000	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8001	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8002	None	B1 Gravel Area	17.13	4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8003	None	B1 Gravel Area	8.98	4.9	Low	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	8004	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8005	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8006	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8007	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV46	8008	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8009	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8010	None	B2 Scattered Cobbles	3.2	4.1	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8011	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	8012	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8013	None	B2 Scattered Cobbles	7.23	4.3	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8014	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	8015	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8016	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	8017	None	B1 Gravel Area	32.7	5.1	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8018	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV46	8019	None	B2 Scattered Cobbles	8.62	4.3	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	8020	None	B2 Scattered Cobbles	9.21	3	Low	1	NA	NA	1	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	8021	None	B2 Scattered Cobbles	16.25	4	Low	1	NA	1	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV46	8022	None	B3 Cobble and Boulder Area	28.38	6.1	Low	1	NA	NA	1	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	8023	None	B2 Scattered Cobbles	16.38	8.8	Low	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8024	None	B3 Cobble and Boulder Area	9.8	7.7	Low	1	NA	NA	1	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV46	8025	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8026	None	B2 Scattered Cobbles	5.88	7.1	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8027	None	B2 Scattered Cobbles	4.66	5.3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV46	8028	None	B2 Scattered Cobbles	1.96	4.8	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8029	None	B2 Scattered Cobbles	2.17	4.4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8030	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8031	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV46	8032	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5862	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5863	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5864	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV51	5865	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5866	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5867	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV51	5868	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5869	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5870	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5871	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV51	5872	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5873	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5874	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5875	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV51	5876	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5877	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5878	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5879	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV51	5880	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5881	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5882	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5883	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5884	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5885	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5886	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5887	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5888	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5889	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5890	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV51	5891	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV51	5892	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV51	5893	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5894	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5895	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5896	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5897	None	B4 Boulder Area	15.73	1.7	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5898	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5899	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV51	5900	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5901	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV51	5902	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5903	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5904	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5905	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV51	5906	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5907	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5908	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5909	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5910	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5911	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5912	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV51	5913	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5914	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5915	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5916	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5917	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5918	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5919	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5920	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5921	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5922	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5923	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV51	5924	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5925	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV51	5926	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5927	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5928	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5929	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5930	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5931	None	B4 Boulder Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV51	5932	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5933	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5934	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV51	5935	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5936	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5937	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV51	5938	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5939	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5940	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5941	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5942	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5943	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV51	5944	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5945	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV51	5946	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5947	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5948	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5949	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5950	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5951	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5952	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5953	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5954	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5955	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5956	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV51	5957	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5958	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV51	5959	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV51	5960	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7828	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7829	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7830	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7831	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7832	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7833	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7834	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7835	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV80	7836	None	B3 Cobble and Boulder Area	4.93	2.4	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	1	NA
ENV80	7837	None	B1 Gravel Area	0.8	1.8	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7838	None	B2 Scattered Cobbles	2.07	1.9	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7839	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7840	None	B1 Gravel Area	1.61	3.1	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7841	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7842	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7843	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7844	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7845	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7846	None	B1 Gravel Area	1.61	3.6	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV80	7847	None	B2 Scattered Cobbles	2.65	2.6	Low	1	1	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7848	None	B2 Scattered Cobbles	20.01	3.8	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7849	None	B3 Cobble and Boulder Area	24.75	5.1	Low	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7850	None	B3 Cobble and Boulder Area	15.56	5.5	Low	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7851	None	B2 Scattered Cobbles	11.65	8.3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7852	None	B2 Scattered Cobbles	3.72	6.7	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7853	None	B3 Cobble and Boulder Area	33.63	8.2	Low	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7854	None	B2 Scattered Cobbles	6.46	4.1	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV80	7855	None	B2 Scattered Cobbles	16.98	2.8	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7856	None	B2 Scattered Cobbles	21.54	4.9	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7857	None	B2 Scattered Cobbles	8.06	7.3	Low	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7858	None	B2 Scattered Cobbles	6.78	5.3	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7859	None	B2 Scattered Cobbles	4.76	2.9	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7860	None	B1 Gravel Area	0.52	2	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7861	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7862	None	B2 Scattered Cobbles	8.2	5.5	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7863	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	1	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7864	None	B1 Gravel Area	1.31	3.6	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV80	7865	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7866	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7867	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7868	None	B2 Scattered Cobbles	0.95	2.6	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7869	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7870	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7871	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7872	None	B2 Scattered Cobbles	2.87	3.3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7873	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7874	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7875	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV80	7876	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7877	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7878	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7879	None	B2 Scattered Cobbles	8.39	4.6	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7880	None	B3 Cobble and Boulder Area	26.49	7.5	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7881	None	B2 Scattered Cobbles	3.94	3	Low	NA	1	NA	1	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7882	None	B2 Scattered Cobbles	4.85	3.6	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7883	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7884	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7885	None	B3 Cobble and Boulder Area	23.73	10	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV80	7886	None	B2 Scattered Cobbles	4.62	5.7	Low	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7887	None	B2 Scattered Cobbles	23.22	4.6	Low	NA	1	NA	1	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7888	None	B3 Cobble and Boulder Area	46.58	6.6	Medium	NA	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7889	None	B3 Cobble and Boulder Area	23.18	9.7	Low	NA	1	NA	1	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7890	None	B2 Scattered Cobbles	3.15	2.8	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7891	None	B2 Scattered Cobbles	2.7	1.4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7892	None	B2 Scattered Cobbles	2.18	2.1	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7893	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7894	None	B1 Gravel Area	0.87	3.6	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV80	7895	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7896	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7897	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7898	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7899	None	B1 Gravel Area	0.43	3.6	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7900	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7901	None	B1 Gravel Area	1.13	1.8	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7902	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7903	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7904	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7905	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7906	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV80	7907	None	B3 Cobble and Boulder Area	21.12	3	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7908	None	B2 Scattered Cobbles	15.56	4.1	Low	NA	1	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7909	None	B2 Scattered Cobbles	27.85	6.7	Low	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7910	None	B2 Scattered Cobbles	14.7	7.1	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7911	None	B3 Cobble and Boulder Area	35.33	7.4	Low	1	1	NA	1	1	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7912	None	B2 Scattered Cobbles	16.29	9	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7913	None	B1 Gravel Area	0.68	2.5	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV80	7914	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7915	None	B2 Scattered Cobbles	6.33	3.8	Low	1	1	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma iohnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV80	7916	None	B3 Cobble and Boulder Area	51.15	12.8	Medium	1	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7917	None	B2 Scattered Cobbles	3.53	3.9	Low	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7918	None	B1 Gravel Area	1.02	3.5	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7919	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7920	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7921	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7922	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7923	None	B1 Gravel Area	4.08	4.3	Low	1	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7924	None	B1 Gravel Area	3.05	6.8	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7925	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7926	None	B2 Scattered Cobbles	3.51	5.4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV80	7927	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7928	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV80	7929	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9005	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9006	None	B2 Scattered Cobbles	7.13	2.5	Low	1	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9007	None	B3 Cobble and Boulder Area	29.76	4.4	Low	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9008	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9009	None	B4 Boulder Area	20.75	5.2	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9010	None	B2 Scattered Cobbles	6.95	4.2	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9011	None	B4 Boulder Area	40.54	13.2	Medium	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV81 (2021)	9012	None	B2 Scattered Cobbles	2.23	4.4	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9013	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9013	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9014	None	B2 Scattered Cobbles	3.76	3.4	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9015	None	B2 Scattered Cobbles	1.89	3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9016	None	B2 Scattered Cobbles	10.65	3.8	Low	1	NA	NA	1	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9017	None	B2 Scattered Cobbles	4.2	2.3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9018	None	B2 Scattered Cobbles	8.4	4	Low	1	NA	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	NA
ENV81 (2021)	9019	None	B3 Cobble and Boulder Area	28.38	4.2	Low	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV81 (2021)	9020	None	B4 Boulder Area	40.68	5.1	Medium	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9021	None	B2 Scattered Cobbles	3.06	2	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9022	None	B3 Cobble and Boulder Area	24.02	3	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9023	None	B3 Cobble and Boulder Area	25.81	5.7	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9024	None	B4 Boulder Area	22.42	3.8	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9025	None	B2 Scattered Cobbles	1.12	1.7	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9026	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9027	None	B3 Cobble and Boulder Area	6.71	4.7	Low	1	NA	NA	1	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9028	None	B2 Scattered Cobbles	2.1	2.4	Low	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9029	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV81 (2021)	9030	None	B2 Scattered Cobbles	0.94	2.3	Low	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9031	None	B4 Boulder Area	6.9	9.2	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9032	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9033	None	B4 Boulder Area	26.93	5.1	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9034	None	B4 Boulder Area	11.96	7.2	Low	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9035	None	B4 Boulder Area	9.93	1.9	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9036	None	B1 Gravel Area	1.6	1.8	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9037	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9038	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9039	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9040	None	B4 Boulder Area	17.4	9.6	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV81 (2021)	9041	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9042	None	B2 Scattered Cobbles	11.17	1.4	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9043	None	B2 Scattered Cobbles	4.28	2.2	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9044	None	B3 Cobble and Boulder Area	3.87	1.7	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9045	None	B4 Boulder Area	37.28	5.2	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9046	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9047	None	B2 Scattered Cobbles	3.27	3.7	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9048	None	B2 Scattered Cobbles	2.05	3.9	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9049	None	B2 Scattered Cobbles	4.89	3.1	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence											
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV81 (2021)	9050	None	B2 Scattered Cobbles	4.77	2.6	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9051	None	B2 Scattered Cobbles	1.19	2.1	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9052	None	B3 Cobble and Boulder Area	21.24	2.2	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9053	None	B3 Cobble and Boulder Area	34.96	8	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9054	None	B2 Scattered Cobbles	6.33	3.5	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9055	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9056	None	B2 Scattered Cobbles	5.34	5.4	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9057	None	B4 Boulder Area	73.18	7.5	Medium	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9058	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9059	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV81 (2021)	9060	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9061	None	B2 Scattered Cobbles	7.23	2.5	Low	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9062	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9063	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9064	None	B4 Boulder Area	6.88	3.5	Low	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9065	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9066	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9067	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9068	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9069	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9070	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV81 (2021)	9071	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9072	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9073	None	B4 Boulder Area	5.48	5	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9074	None	B4 Boulder Area	25.17	7.6	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9075	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9076	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9077	None	B2 Scattered Cobbles	10.34	4.7	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9078	None	B1 Gravel Area	5.11	4.7	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9079	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9080	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9081	None	B4 Boulder Area	22.76	11.4	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV81 (2021)	9082	None	B3 Cobble and Boulder Area	46.37	10.8	Medium	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9083	None	B2 Scattered Cobbles	2.05	2.5	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9084	None	B4 Boulder Area	12.91	6.5	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9085	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9086	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9087	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9088	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9089	None	B1 Gravel Area	0.85	2.4	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9090	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9091	None	B2 Scattered Cobbles	2.86	2.3	Low	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9092	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV81 (2021)	9093	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9094	None	B1 Gravel Area	1.31	2.2	Low	1	NA	NA	NA	NA	1	NA	NA	1	NA	NA	NA	NA
ENV81 (2021)	9095	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9096	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9097	None	B2 Scattered Cobbles	2.53	3.2	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9098	None	B3 Cobble and Boulder Area	39.11	5.6	Low	1	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9099	None	B3 Cobble and Boulder Area	7.06	3.1	Low	1	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9100	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9101	None	B2 Scattered Cobbles	4.07	4.5	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9102	None	B4 Boulder Area	16.15	6.8	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV81 (2021)	9103	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9104	None	B2 Scattered Cobbles	4.96	1.5	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9105	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9106	None	B2 Scattered Cobbles	2.45	4.3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9107	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9108	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9109	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9110	None	B2 Scattered Cobbles	3.36	2.8	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9111	None	B2 Scattered Cobbles	1.53	3.2	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9112	None	B3 Cobble and Boulder Area	4.86	4.7	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV81 (2021)	9113	None	B4 Boulder Area	11.26	4.3	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9114	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9115	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9116	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2021)	9117	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8754	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8755	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8756	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8757	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV97	8758	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8759	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8760	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV97	8761	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8762	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8763	None	B1 Gravel Area	1.8	4.3	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV97	8764	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8765	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8766	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8767	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8768	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8769	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8770	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8771	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8772	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV97	8773	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8774	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8775	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8776	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8777	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8778	None	B1 Gravel Area	0.83	1.7	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8779	None	B1 Gravel Area	16.37	2.4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8780	None	B1 Gravel Area	1.09	1.4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8781	None	B1 Gravel Area	0.69	2.6	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8782	None	B1 Gravel Area	3.02	4.8	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8783	None	B1 Gravel Area	0.47	3.6	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8784	None	B1 Gravel Area	4.71	2	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV97	8785	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8786	None	B1 Gravel Area	7.38	3.7	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8787	None	B2 Scattered Cobbles	12.09	5	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8788	None	B1 Gravel Area	10.13	2.1	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8789	None	B1 Gravel Area	7.95	2.7	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8790	None	B1 Gravel Area	16.27	3.3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8791	None	B1 Gravel Area	10.01	2.5	Low	3	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV97	8792	None	B2 Scattered Cobbles	16.77	4.6	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8793	None	B2 Scattered Cobbles	37.26	4.7	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8794	None	B2 Scattered Cobbles	24.02	4.5	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV97	8795	None	B2 Scattered Cobbles	45.95	5.2	Medium	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8796	None	B2 Scattered Cobbles	17.14	4	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV97	8797	None	B2 Scattered Cobbles	20	3	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV97	8798	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8799	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8800	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8801	None	B1 Gravel Area	1.24	3.1	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8802	None	B1 Gravel Area	2.5	2.5	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8803	None	B1 Gravel Area	2.89	2.2	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8804	None	B1 Gravel Area	2.2	3.9	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8805	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV97	8806	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8807	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8808	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8809	None	B1 Gravel Area	4.09	5	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8810	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8811	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8812	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV97	8813	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8814	None	B1 Gravel Area	11.64	2.5	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8815	None	B2 Scattered Cobbles	23.39	6.6	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8816	None	B1 Gravel Area	9.36	2.8	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV97	8817	None	B2 Scattered Cobbles	24.05	3.4	Low	1	NA	NA	1	1	1	NA	NA	NA	NA	NA	NA	NA
ENV97	8818	None	B1 Gravel Area	18.8	4.9	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV97	8819	None	B1 Gravel Area	21.33	7.8	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV97	8820	None	B2 Scattered Cobbles	14.3	9.1	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV97	8821	None	B1 Gravel Area	8.07	5.9	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV97	8822	None	B1 Gravel Area	2.05	1.7	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8823	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8824	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8825	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8826	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8827	None	B1 Gravel Area	1.53	5	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV97	8828	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8829	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8830	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8831	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8832	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8833	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8834	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8835	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8836	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8837	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8838	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8839	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	cf. Pachymatisma johnstonia Faunal turf	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV97	8840	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8841	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8842	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8843	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV97	8844	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7233	None	B2 Scattered Cobbles	2.85	3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7234	None	B2 Scattered Cobbles	1.35	1.8	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7235	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7236	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7237	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7238	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV58	7239	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7240	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7241	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7242	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7243	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7244	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7245	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7246	None	B2 Scattered Cobbles	1.66	2.4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7247	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7248	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7249	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV58	7250	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7251	None	B2 Scattered Cobbles	0.76	1.2	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7252	None	B2 Scattered Cobbles	2.22	1.2	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	NA	NA
ENV58	7253	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7254	None	B2 Scattered Cobbles	1.98	1.4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7255	None	B2 Scattered Cobbles	0.87	4.1	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7256	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7257	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7258	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7259	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV58	7260	None	B2 Scattered Cobbles	0.59	2.9	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7261	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7262	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7263	None	B1 Gravel Area	0.3	1.8	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7264	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7265	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7266	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7267	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7268	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7269	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7270	None	B2 Scattered Cobbles	1.88	2.3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV58	7271	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7272	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7273	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7274	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7275	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7276	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7277	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7278	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7279	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7280	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7281	None	B2 Scattered Cobbles	1	2.7	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence											
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV58	7282	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7283	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7284	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7285	None	B2 Scattered Cobbles	2.84	2.4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	NA	NA
ENV58	7286	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7287	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7288	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7289	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7290	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7291	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7292	None	B2 Scattered Cobbles	1.79	3.9	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV58	7293	None	B2 Scattered Cobbles	29.98	4.9	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7294	None	B2 Scattered Cobbles	34.18	6.2	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7295	None	B2 Scattered Cobbles	39.36	5.1	Low	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7296	None	B3 Cobble and Boulder Area	74.35	8.6	Medium	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV58	7297	None	B3 Cobble and Boulder Area	47.88	1.8	Medium	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV58	7298	None	B2 Scattered Cobbles	34.47	6.8	Low	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV58	7299	None	B2 Scattered Cobbles	32.45	5.1	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7300	None	B2 Scattered Cobbles	18.84	3.6	Low	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV58	7301	None	B3 Cobble and Boulder Area	33.42	3.5	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV58	7302	None	B2 Scattered Cobbles	27.13	3.7	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV58	7303	None	B2 Scattered Cobbles	2.36	1.7	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7304	None	B1 Gravel Area	2.54	2.5	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7305	None	B2 Scattered Cobbles	3.81	4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7306	None	B2 Scattered Cobbles	7.78	4.4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7307	None	B2 Scattered Cobbles	2.63	2.4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7308	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7309	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7310	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV58	7311	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7312	None	B2 Scattered Cobbles	3.6	4.6	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7313	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7314	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7315	None	B2 Scattered Cobbles	0.92	3.8	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7316	None	B2 Scattered Cobbles	0.45	2.4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7317	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7318	None	B2 Scattered Cobbles	1.52	3.1	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7319	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7320	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence											
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV58	7321	None	B1 Gravel Area	2.86	5.2	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7322	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7323	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7324	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7325	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7326	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7327	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7328	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7329	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7330	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7331	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7332	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV58	7333	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7334	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7335	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV58	7336	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	NA	NA
ENV59	6151	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV59	6152	None	B2 Scattered Cobbles	14.89	3.2	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6153	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV59	6154	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6155	None	B2 Scattered Cobbles	7.67	3.5	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6156	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6157	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV59	6158	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6159	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6160	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6161	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6162	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6163	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6164	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6165	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6166	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6167	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6168	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6169	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV59	6170	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6171	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6172	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6173	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6174	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6175	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6176	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6177	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6178	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6179	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6180	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6181	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence											
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV59	6182	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6183	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6184	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV59	6185	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6186	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6187	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6188	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6189	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6190	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6191	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6192	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6193	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV59	6194	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV59	6195	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6196	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6197	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6198	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6199	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6200	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6201	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6202	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6203	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6204	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6205	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence											
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV59	6206	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6207	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6208	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6209	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6210	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6211	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6212	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6213	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6214	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6215	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6216	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6217	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV59	6218	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6219	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6220	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6221	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6222	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6223	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV59	6224	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6225	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6226	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6227	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6228	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6229	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma iohnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV59	6230	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6231	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6232	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6233	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6234	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6235	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6236	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6237	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6238	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6239	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6240	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV59	6241	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6242	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6243	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6244	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6245	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6246	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6247	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6248	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6249	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6250	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6251	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence											
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV59	6252	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6253	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV59	6254	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4200	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4201	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4202	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4203	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4204	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4205	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4206	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4207	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	1	NA	NA	NA
ENV60	4208	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV60	4209	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4210	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4211	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4212	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4213	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4214	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4215	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4216	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4217	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4218	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4219	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4220	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence											
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV60	4221	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4222	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4223	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4224	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4225	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4226	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4227	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4228	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4229	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4230	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4231	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4232	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV60	4233	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4234	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4235	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4236	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4237	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4238	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4239	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4240	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4241	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4242	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4243	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4244	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV60	4245	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4246	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4247	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4248	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4249	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4250	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4251	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4252	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4253	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV60	4254	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4255	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4256	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV60	4257	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4258	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4259	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4260	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4261	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV60	4262	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4263	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4264	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4265	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4266	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4267	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4268	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV60	4269	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4270	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4271	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4272	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4273	None	B1 Gravel Area	3.15	3.7	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4274	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60	4275	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4276	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4277	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4278	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4279	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4280	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV60	4281	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4282	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4283	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4284	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4285	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4286	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4287	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4288	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4289	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4290	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV60	4291	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4106	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV61	4107	None	B2 Scattered Cobbles	4.82	3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4108	None	B2 Scattered Cobbles	11.54	3.8	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4109	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4109	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4110	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4111	None	B2 Scattered Cobbles	5.12	1.3	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV61	4112	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV61	4113	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4114	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4115	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV61	4116	None	B2 Scattered Cobbles	3.07	3.3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4117	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4118	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4119	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4120	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4121	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4122	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4123	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4124	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4125	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4126	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV61	4127	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4128	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4129	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4130	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4131	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4132	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4133	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4134	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4135	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4136	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4137	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4138	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV61	4139	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4140	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4141	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4142	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4143	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4144	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4145	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4146	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4147	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4148	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4149	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4150	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV61	4151	None	B2 Scattered Cobbles	2.4	3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4152	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4153	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4154	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4155	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4156	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4157	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4158	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4159	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4160	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4161	None	B2 Scattered Cobbles	1.48	2.4	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV61	4162	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4163	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4164	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4165	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4166	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4167	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4168	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4169	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4170	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4171	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4172	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4173	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	1	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV61	4174	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	NA	NA	NA
ENV61	4175	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	1	NA	NA	NA
ENV61	4176	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4177	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4178	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4179	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4180	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4181	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4182	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4183	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4184	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4185	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV61	4186	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4187	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4188	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4189	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4190	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4191	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4192	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4193	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4194	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4195	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4196	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV61	4197	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4198	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV61	4199	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3751	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3752	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3753	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3754	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3755	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3756	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3757	None	B1 Gravel Area	1.19	2.5	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3758	None	B3 Cobble and Boulder Area	13.41	8.6	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV76	3759	None	B2 Scattered Cobbles	6.44	3.3	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3760	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3761	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3762	None	B1 Gravel Area	3.95	1.9	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3763	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3764	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3765	None	B1 Gravel Area	0.52	2.4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3766	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3767	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3768	None	B2 Scattered Cobbles	1.91	1.9	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3769	None	B1 Gravel Area	0.33	1.7	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV76	3770	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3771	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3772	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3773	None	B1 Gravel Area	0.76	4.1	Low	NA	NA	NA	1	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3774	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3775	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3776	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3777	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3778	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3779	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3780	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3781	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV76	3782	None	B1 Gravel Area	1.48	4.3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3783	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3784	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3785	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3786	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3787	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3788	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3789	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3790	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3791	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3792	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3793	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV76	3794	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3795	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3796	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3797	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3798	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3799	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3800	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3801	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3802	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3803	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3804	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3805	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV76	3806	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3807	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3808	None	B1 Gravel Area	5.81	3.2	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3809	None	B1 Gravel Area	0.64	2.1	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3810	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3811	None	B1 Gravel Area	0.67	1.7	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3812	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3813	None	B4 Boulder Area	6.95	6.1	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3814	None	B2 Scattered Cobbles	2.05	3.2	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3815	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3816	None	B2 Scattered Cobbles	4.59	3.2	Low	1	NA	NA	1	NA	1	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV76	3817	None	B2 Scattered Cobbles	1.53	2.6	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3818	None	B3 Cobble and Boulder Area	23.93	5.6	Low	NA	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3819	None	B3 Cobble and Boulder Area	24.69	4.5	Low	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3820	None	B2 Scattered Cobbles	10.88	4	Low	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3821	None	B2 Scattered Cobbles	13.75	4.9	Low	1	NA	1	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3822	None	B2 Scattered Cobbles	4.39	4.5	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3823	None	B2 Scattered Cobbles	30.18	8.6	Low	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3824	None	B2 Scattered Cobbles	7.82	3.5	Low	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV76	3825	None	B2 Scattered Cobbles	30.74	6.9	Low	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3826	None	B2 Scattered Cobbles	18.32	3.8	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3827	None	B2 Scattered Cobbles	18.34	5.4	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3828	None	B3 Cobble and Boulder Area	15.99	6.4	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3829	None	B2 Scattered Cobbles	6.57	1.7	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3830	None	B2 Scattered Cobbles	24.61	4	Low	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3831	None	B2 Scattered Cobbles	31.86	5.5	Low	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3832	None	B2 Scattered Cobbles	6.13	2.8	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV76	3833	None	B2 Scattered Cobbles	16.77	6.2	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3834	None	B2 Scattered Cobbles	8.78	3.4	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3835	None	B2 Scattered Cobbles	19.44	5.1	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3836	None	B2 Scattered Cobbles	4.93	3.9	NA	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3837	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3838	None	B2 Scattered Cobbles	6.62	4.9	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3839	None	B2 Scattered Cobbles	7.77	0.1	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3840	None	B2 Scattered Cobbles	0.85	3.1	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3841	None	B2 Scattered Cobbles	6.42	4.7	Low	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV76	3842	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3843	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3844	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV76	3845	None	B1 Gravel Area	0.72	2.7	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3846	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3847	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3848	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3849	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3850	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3851	None	B1 Gravel Area	0.61	2.2	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3852	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3853	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV76	3854	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV76	3855	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3856	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3857	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3858	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3859	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3860	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3861	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3862	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3863	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3864	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3865	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma ihnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV79	3866	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3867	None	None	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3868	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3869	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3870	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3871	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3872	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3873	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3874	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3875	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3876	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3877	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV79	3878	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3879	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3880	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3881	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3882	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3883	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3884	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3885	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3886	None	B1 Gravel Area	2.65	3.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	NA	NA	NA	NA
ENV79	3887	None	B1 Gravel Area	0.34	2.4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3888	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3889	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV79	3890	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3891	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3892	None	B3 Cobble and Boulder Area	14.19	4.5	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3893	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3894	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3895	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3896	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3897	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3898	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3899	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3900	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence												
							Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV79	3901	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3902	None	B3 Cobble and Boulder Area	7.64	8.5	Low	1	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3903	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3904	None	B2 Scattered Cobbles	8.37	4.9	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV79	3905	None	B2 Scattered Cobbles	4.56	3.1	NA	1	NA	NA	1	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV79	3906	None	B2 Scattered Cobbles	6.99	5.2	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV79	3907	None	B2 Scattered Cobbles	5.52	4.2	NA	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV79	3908	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3909	None	B1 Gravel Area	1.9	2.4	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3910	None	B2 Scattered Cobbles	1.71	3.3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV79	3911	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3912	None	B2 Scattered Cobbles	7.91	4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3913	None	B2 Scattered Cobbles	4.71	2.5	Low	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV79	3914	None	B2 Scattered Cobbles	13.52	2.8	Low	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV79	3915	None	B3 Cobble and Boulder Area	28.67	3.4	Low	1	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
ENV79	3916	None	B2 Scattered Cobbles	27.31	4.8	Low	1	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	NA
ENV79	3917	None	B2 Scattered Cobbles	16.66	3.5	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3918	None	B3 Cobble and Boulder Area	25.22	6.4	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3919	None	B3 Cobble and Boulder Area	41.27	9.3	Medium	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Sediment Classification	Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Resemblance of Stony Reef	Epifaunal presence Serpulidae msp0001	cf. Metridium dianthus	Nemertesia 01	Nemertesia 02	Tubularia msp0001	Faunal turf	cf. Pachymatisma johnstonia	Polymastia sp.	cf. Suberites sp.	Raspailia ramosa	Tethya sp.	Porifera 01	Porifera 02
ENV79	3920	None	B2 Scattered Cobbles	7.96	2.3	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3921	None	B2 Scattered Cobbles	2.42	2.1	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3922	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3923	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3924	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3925	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3926	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3927	None	B1 Gravel Area	0.55	3.2	Low	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3928	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV79	3929	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

B.4. Full stony reef assessment data 2022

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina inc*	Faunal turf	Anomiidae *indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
ENV81 (2022)	2728	None	B1 Gravel Area	5.13	7.4	Low	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2729	None	B1 Gravel Area	8.38	5.5	None	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2730	None	B1 Gravel Area	13.31	22.4	Low	NA	1	NA	NA	NA	NA	NA
ENV81 (2022)	2731	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2732	None	None	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2733	None	B1 Gravel Area	21.78	8.1	Low	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2734	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2735	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2736	None	B1 Gravel Area	NA	NA	NA	1	1	1	NA	NA	NA	NA
ENV81 (2022)	2737	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2738	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2739	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2740	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ENV81 (2022)	2741	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2742	None	B1 Gravel Area	NA	NA	NA	1	1	NA	NA	NA	NA	NA
ENV81 (2022)	2743	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae *stet.*	Nemertesia antennina inc	Faunal turf	Anomiidae *indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
ENV81 (2022)	2744	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ENV81 (2022)	2745	None	B1 Gravel Area	NA	NA	NA	1	1	1	NA	NA	NA	NA
ENV81 (2022)	2746	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2747	None	B1 Gravel Area	NA	NA	NA	1	1	1	NA	NA	NA	NA
ENV81 (2022)	2748	None	B1 Gravel Area	NA	NA	NA	1	1	1	NA	NA	NA	NA
ENV81 (2022)	2749	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2750	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ENV81 (2022)	2751	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ENV81 (2022)	2752	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2753	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ENV81 (2022)	2754	None	B1 Gravel Area	NA	NA	NA	1	1	NA	NA	NA	NA	NA
ENV81 (2022)	2755	None	B1 Gravel Area	NA	NA	NA	1	1	NA	NA	NA	NA	NA
ENV81 (2022)	2756	None	B1 Gravel Area	NA	NA	NA	1	1	1	NA	NA	NA	NA
ENV81 (2022)	2757	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ENV81 (2022)	2758	None	B2 Scattered Cobbles	3.54	4.3	None	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2759	None	B3 Cobble and Boulder Area	71.14	25.8	Medium	NA	1	1	NA	NA	NA	NA
ENV81 (2022)	2760	None	B3 Cobble and Boulder Area	42.33	32.8	Medium	1	NA	1	NA	NA	NA	NA
ENV81 (2022)	2761	None	B1 Gravel Area	NA	NA	NA	1	1	1	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina inc*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
ENV81 (2022)	2762	None	B1 Gravel Area	NA	NA	NA	1	1	NA	NA	NA	NA	NA
ENV81 (2022)	2763	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ENV81 (2022)	2764	None	B1 Gravel Area	NA	NA	NA	1	1	NA	NA	NA	NA	NA
ENV81 (2022)	2765	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2766	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2767	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2768	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2769	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2770	None	B2 Scattered Cobbles	5.17	5.4	None	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2771	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ENV81 (2022)	2772	None	B2 Scattered Cobbles	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2773	None	B2 Scattered Cobbles	16.87	12.7	Low	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2774	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2775	None	B2 Scattered Cobbles	3.57	10.7	None	1	NA	1	NA	NA	NA	NA
ENV81 (2022)	2776	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2777	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ENV81 (2022)	2778	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI41	2590	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
ZOI41	2591	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI41	2592	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI41	2593	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI41	2594	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI41	2595	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI41	2596	None	B1 Gravel Area	0.0241	3.2	None	1	NA	NA	NA	NA	NA	NA
ZOI41	2597	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI41	2598	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI41	2599	None	B1 Gravel Area	0.0068	2.2	None	1	NA	NA	NA	NA	NA	NA
ZOI41	2600	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI41	2601	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI41	2602	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI41	2603	None	B1 Gravel Area	0.0287	3.8	None	1	NA	NA	NA	NA	NA	NA
ZOI41	2604	None	B1 Gravel Area	0.0615	5.3	None	1	NA	1	NA	NA	NA	NA
ZOI41	2605	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI41	2606	None	B1 Gravel Area	0.0543	5.3	Low	1	1	NA	NA	NA	NA	NA
ZOI41	2607	None	B1 Gravel Area	0.1097	10.4	Low	1	NA	1	NA	NA	NA	NA
ZOI41	2608	None	B1 Gravel Area	0.0153	2.8	None	1	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
ZOI41	2609	None	B1 Gravel Area	0.218	14.6	Low	1	NA	1	NA	NA	NA	NA
ZOI41	2610	None	B1 Gravel Area	0.0714	8.4	None	1	NA	NA	NA	NA	NA	NA
ZOI41	2611	None	B1 Gravel Area	0.1109	6.7	Low	1	NA	1	NA	NA	NA	NA
ZOI41	2612	None	B1 Gravel Area	0.2622	17.2	Low	1	NA	1	NA	NA	NA	NA
ZOI41	2613	None	B1 Gravel Area	0.0774	5.8	None	1	NA	1	NA	NA	NA	NA
ZOI41	2614	None	B1 Gravel Area	0.0887	4.2	None	1	NA	1	NA	NA	NA	NA
ZOI41	2615	None	B1 Gravel Area	0.1074	8.8	Low	1	NA	1	NA	NA	NA	NA
ZOI41	2616	None	B1 Gravel Area	0.0714	5.4	None	1	NA	1	NA	NA	NA	NA
ZOI41	2617	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI41	2618	None	B1 Gravel Area	0.0178	7.9	None	1	NA	1	NA	NA	NA	NA
ZOI41	2619	None	B1 Gravel Area	0.1078	7.2	Low	1	NA	1	NA	NA	NA	NA
ZOI41	2620	None	B1 Gravel Area	0.1389	13.2	Low	1	NA	1	NA	NA	NA	NA
ZOI41	2621	None	B1 Gravel Area	0.155	19.2	Low	NA	NA	1	NA	NA	NA	NA
ZOI41	2622	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI41	2623	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI41	2624	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI41	2625	None	B1 Gravel Area	NA	NA	NA	1	1	1	NA	NA	NA	NA
ZOI41	2626	None	B1 Gravel Area	NA	NA	NA	1	1	1	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina inc*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
ZOI41	2627	None	B2 Scattered Cobbles	0.0154	4.4	None	1	NA	1	NA	NA	NA	NA
ZOI41	2628	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI41	2629	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI41	2630	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ZOI41	2631	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI41	2632	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ZOI41	2633	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI41	2634	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ZOI41	2635	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI41	2636	None	B3 Cobble and Boulder Area	0.1567	17.8	Low	1	NA	1	NA	NA	NA	NA
ZOI41	2637	None	B1 Gravel Area	0.0969	11.7	None	1	NA	NA	NA	NA	NA	NA
ZOI41	2638b	None	B2 Scattered Cobbles	0.1019	26.7	None	NA	NA	NA	NA	NA	NA	NA
ZOI44	2639	None	B1 Gravel Area	0.0276	11.4	None	NA	NA	1	NA	NA	NA	NA
ZOI44	2640	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI44	2641	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI44	2642	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI44	2643	None	B1 Gravel Area	0.0473	5	None	1	NA	1	NA	NA	NA	NA
ZOI44	2644	None	B1 Gravel Area	0.0199	8	None	1	NA	1	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
ZOI44	2645	None	B1 Gravel Area	NA	NA	NA	1	1	1	NA	NA	NA	NA
ZOI44	2646	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI44	2647	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI44	2648	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	1	NA	NA
ZOI44	2649	None	B1 Gravel Area	NA	NA	NA	2	1	1	NA	NA	NA	NA
ZOI44	2650	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI44	2651	None	B1 Gravel Area	0.0294	4	None	1	NA	1	NA	NA	NA	NA
ZOI44	2652	None	B1 Gravel Area	0.1088	4.1	Low	1	NA	1	NA	NA	NA	NA
ZOI44	2653	None	B2 Scattered Cobbles	0.1448	6.3	Low	1	NA	1	NA	NA	NA	NA
ZOI44	2654	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI44	2655	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI44	2656	None	B2 Scattered Cobbles	0.2127	12.9	Low	1	NA	NA	NA	NA	NA	NA
ZOI44	2657	None	B2 Scattered Cobbles	0.0912	9.1	None	1	1	1	NA	NA	NA	NA
ZOI44	2658	None	B1 Gravel Area	NA	NA	NA	NA	NA	1	NA	NA	NA	NA
ZOI44	2659	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI44	2660	None	B1 Gravel Area	NA	NA	NA	1	1	1	NA	1	NA	NA
ZOI44	2661	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI44	2662	None	B1 Gravel Area	NA	NA	NA	1	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae *stet.*	Nemertesia antennina	Faunal turf	Anomiidae *indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
ZOI44	2663	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI44	2664	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ZOI44	2665	None	B1 Gravel Area	NA	NA	NA	1	1	1	NA	NA	NA	NA
ZOI44	2666	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI44	2667	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI44	2668	None	B1 Gravel Area	NA	NA	NA	1	1	NA	NA	NA	NA	NA
ZOI44	2669	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI44	2670	None	B2 Scattered Cobbles	NA	NA	NA	1	1	NA	NA	NA	NA	NA
ZOI44	2671	None	B1 Gravel Area	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI44	2672	None	B1 Gravel Area	NA	NA	NA	NA	NA	1	NA	NA	NA	NA
ZOI44	2673	None	B1 Gravel Area	0.1046	5.1	Low	1	NA	1	NA	NA	NA	NA
ZOI44	2674	A1 Soft Sediments	B2 Scattered Cobbles	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI44	2675	A1 Soft Sediments	B2 Scattered Cobbles	0.0588	8.8	None	1	NA	NA	NA	NA	NA	NA
ZOI44	2676	A1 Soft Sediments	None	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI44	2677	A1 Soft Sediments	None	NA	NA	NA	1	NA	1	NA	NA	NA	NA
ZOI44	2678	A1 Soft Sediments	None	0.0985	7.5	None	1	NA	NA	NA	NA	NA	NA
ZOI44	2679	A1 Soft Sediments	None	0.0146	4	None	NA	1	NA	NA	NA	NA	NA
ZOI44	2680	A1 Soft Sediments	None	NA	NA	NA	NA	NA	1	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae *stet.*	*Nemertesia antennina* inc	Faunal turf	Anomiidae *indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
ZOI44	2681	A1 Soft Sediments	None	0.0458	5.2	None	1	NA	NA	NA	NA	NA	NA
ZOI44	2682	A1 Soft Sediments	None	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI44	2683	A1 Soft Sediments	None	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
ZOI44	2590	A1 Soft Sediments	None	NA	NA	NA	1	NA	1	NA	NA	NA	NA
OCC138	405	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	406	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	407	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	408	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	409	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	410	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	411	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	412	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	413	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	414	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	415	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	416	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	417	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	418	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC138	419	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	420	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	421	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	422	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	469	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	470	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	471	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	472	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	473	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	474	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	475	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	476	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	477	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	478	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	479	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	480	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	481	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	482	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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							Serpulidae stet.	*Nemertesia antennina*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC138	483	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	484	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	485	None	B2 Scattered Cobbles	0.5331	0.2	Medium	1	NA	1	NA	NA	NA	NA
OCC138	486	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	487	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	488	None	B2 Scattered Cobbles	0.111	0.2	Low	NA	NA	NA	NA	NA	NA	NA
OCC138	489	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	490	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	491	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	492	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	493	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC138	494	None	B2 Scattered Cobbles	0.1738	0.2	Low	NA	NA	NA	NA	NA	NA	NA
OCC138	495	None	B2 Scattered Cobbles	0.1347	0.2	Low	1	NA	NA	NA	NA	NA	NA
OCC138	496	None	B2 Scattered Cobbles	0.2724	0.4	Low	NA	NA	NA	NA	NA	NA	NA
OCC138	497	None	B1 Gravel Area	0.2985	0.5	Low	NA	NA	NA	NA	NA	NA	NA
OCC138	498	None	B2 Scattered Cobbles	0.0708	0.4	None	1	NA	NA	NA	NA	NA	NA
OCC138	499	None	B2 Scattered Cobbles	0.2715	0.2	Low	1	NA	NA	NA	NA	NA	NA
OCC147	318	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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							Serpulidae stet.	*Nemertesia antennina*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC147	319	None	B2 Scattered Cobbles	3.08	7	None	NA	NA	NA	NA	NA	NA	NA
OCC147	320	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	321	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	322	None	B2 Scattered Cobbles	3.46	12.6	None	NA	NA	NA	NA	NA	NA	NA
OCC147	323	None	B2 Scattered Cobbles	7.41	5.6	None	NA	NA	NA	NA	NA	NA	NA
OCC147	324	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	325	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	326	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	327	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	328	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	329	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	330	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	331	None	B1 Gravel Area	4.25	10.4	None	NA	NA	NA	NA	NA	NA	NA
OCC147	332	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	333	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	334	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	335	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	336	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina inc*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC147	337	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	338	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	339	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	340	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	341	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	342	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	343	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	344	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	345	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	346	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	347	None	B1 Gravel Area	2.18	10.7	None	NA	NA	NA	NA	NA	NA	NA
OCC147	348	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	349	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147	350	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1214	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1215	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1216	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1217	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae *stet.*	*Nemertesia antennina*	Faunal turf	Anomiidae *indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC147A	1218	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1219	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1220	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1221	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1222	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1223	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1224	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1225	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1226	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1227	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1228	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1229	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1230	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1231	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1232	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1233	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1234	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1235	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC147A	1236	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1237	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1238	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1239	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1240	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1241	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1242	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1243	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1244	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1245	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1246	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1247	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1248	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1249	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1250	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1251	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1252	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1253	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence							
							Serpulidae stet.	*Nemertesia antennina*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC147A	1254	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1255	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1256	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1257	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1258	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1259	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1260	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1261	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1262	None	B1 Gravel Area	4.94	5.2	None	NA	NA	NA	NA	NA	NA	NA
OCC147A	1263	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC147A	1264	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	77	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	78	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	79	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	80	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	81	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	82	A1 Soft Sediments	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	83	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC149	84	A1 Soft Sediments	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	85	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	86	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	87	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	88	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	89	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	90	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	91	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	92	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	93	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	94	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	95	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	96	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	97	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	98	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	99	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	100	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	101	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC149	102	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	103	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	104	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	105	A1 Soft Sediments	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	106	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	107	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	108	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	109	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	110	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	111	A1 Soft Sediments	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	112	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	113	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	114	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	115	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	116	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	117	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	118	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	119	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina inc*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC149	120	A1 Soft Sediments	B2 Scattered Cobbles	10.3	7.4	Low	NA	NA	NA	NA	NA	NA	NA
OCC149	121	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	122	None	B2 Scattered Cobbles	8.62	9.7	Low	NA	NA	NA	NA	NA	NA	NA
OCC149	123	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	124	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	125	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	126	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	127	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	128	A1 Soft Sediments	B2 Scattered Cobbles	10.83	9.6	Low	NA	NA	1	NA	NA	NA	NA
OCC149	129	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	130	A1 Soft Sediments	B2 Scattered Cobbles	1.99	4.8	None	NA	NA	NA	NA	NA	NA	NA
OCC149	131	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	132	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	133	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	134	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	135	A1 Soft Sediments	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	136	None	B2 Scattered Cobbles	4.84	10.6	None	1	NA	NA	NA	NA	NA	NA
OCC149	137	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC149	138	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	139	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	140	A1 Soft Sediments	B2 Scattered Cobbles	6.9	12.9	None	NA	NA	NA	NA	NA	NA	NA
OCC149	141	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	142	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	143	A1 Soft Sediments	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	144	A1 Soft Sediments	B2 Scattered Cobbles	4.09	5	None	NA	NA	NA	NA	NA	NA	NA
OCC149	145	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	146	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	147	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	148	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	149	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	150	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	151	A1 Soft Sediments	B2 Scattered Cobbles	NA	NA	NA	NA	NA	1	NA	NA	NA	NA
OCC149	152	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	153	None	B2 Scattered Cobbles	21.57	11.8	Low	NA	NA	1	NA	NA	NA	NA
OCC149	154	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	155	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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							Serpulidae *stet.*	Nemertesia antennina inc	Faunal turf	Anomiidae *indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*	
OCC149	156	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
OCC149	157	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
OCC149	158	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
OCC149	159	A1 Soft Sediments	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
OCC149	160	A1 Soft Sediments	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
OCC149	161	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	
OCC149	162	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
OCC149	163	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
OCC149	164	A1 Soft Sediments	None	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	
OCC149	165	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
OCC149	166	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
OCC149	167	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
OCC149	168	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
OCC149	169	None	B1 Gravel Area	9.03	19.1	None	NA	NA	NA	NA	NA	NA	NA	
OCC149	170	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
OCC149	171	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
OCC149	172	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
OCC149	173	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

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							Serpulidae stet.	Nemertesia antennina inc	Faunal turf	Anomiidae *indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC149	174	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	175	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	176	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	177	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	178	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	179	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	180	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	181	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	182	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	183	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	184	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	185	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	186	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	187	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	188	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	189	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	190	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	191	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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							Serpulidae stet.	*Nemertesia antennina*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC149	192	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	193	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	194	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	195	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	196	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	197	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	198	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	199	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	200	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	201	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	202	A1 Soft Sediments	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	203	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC149	204	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	205	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	206	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	207	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	208	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	209	None	B1 Gravel Area	4.09	12.8	None	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC148	210	None	B1 Gravel Area	4.14	4.8	None	NA	NA	NA	NA	NA	NA	NA
OCC148	211	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	212	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	213	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	214	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	215	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	216	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	217	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	218	None	B1 Gravel Area	4.28	7.6	None	NA	NA	NA	NA	NA	NA	NA
OCC148	219	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	220	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	221	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	222	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	223	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	224	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	225	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	226	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	227	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC148	228	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	229	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	230	None	B1 Gravel Area	4.27	7.9	None	NA	NA	NA	NA	NA	NA	NA
OCC148	231	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	232	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	233	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	234	None	B2 Scattered Cobbles	2.38	0.9	None	NA	NA	NA	NA	NA	NA	NA
OCC148	235	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	236	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	237	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	238	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	239	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	240	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	241	None	B1 Gravel Area	12.68	8	Low	NA	NA	NA	NA	NA	NA	NA
OCC148	242	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	243	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	244	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	245	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae *stet.*	Nemertesia antennina	Faunal turf	Anomiidae *indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC148	246	None	B1 Gravel Area	NA	NA	NA	NA	NA	1	NA	NA	NA	NA
OCC148	247	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	248	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	249	None	B2 Scattered Cobbles	7.25	NA	None	1	NA	NA	NA	NA	NA	NA
OCC148	250	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	251	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	252	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	253	A1 Soft Sediments	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	254	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	255	A1 Soft Sediments	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	256	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	257	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	258	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	259	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	260	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	261	None	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC148	262	None	B1 Gravel Area	NA	NA	NA	NA	NA	1	NA	NA	NA	NA
OCC148	263	A1 Soft Sediments	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina inc*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC148	264	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	265	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	266	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	267	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	268	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	269	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	270	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	271	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	272	A1 Soft Sediments	None	2.29	6.2	None	NA	NA	NA	NA	NA	NA	NA
OCC153	273	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	274	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	275	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	276	A1 Soft Sediments	None	NA	NA	NA	NA	NA	1	NA	NA	NA	NA
OCC153	277	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	278	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	279	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	280	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	281	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC153	282	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	283	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	284	A1 Soft Sediments	None	1.77	7.3	None	NA	NA	NA	NA	NA	NA	NA
OCC153	285	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	286	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	287	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	288	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	289	A1 Soft Sediments	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	290	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	291	A1 Soft Sediments	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	292	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	293	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	294	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	295	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	296	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	297	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	298	A1 Soft Sediments	B1 Gravel Area	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	299	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Fix Number	Gardline Sediment Classification	Gardline Sediment Classification	% Coverage of Stony Reef	Height of Reef (cm)	Initial Resemblance of Stony Reef	Epifaunal presence						
							Serpulidae stet.	*Nemertesia antennina*	Faunal turf	*Anomiidae indet. 01*	*Polymastia indet. 01*	*Suberites indet. 02*	*Suberites indet. 03*
OCC153	300	A1 Soft Sediments	None	NA	NA	NA	NA	NA	1	NA	NA	NA	NA
OCC153	301	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	302	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	303	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	304	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	305	None	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	306	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	307	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	308	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	309	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	310	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	311	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	312	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	313	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	314	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	315	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	316	None	B2 Scattered Cobbles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OCC153	317	A1 Soft Sediments	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

B.5. Hard substrate porifera summary results

Station	Average% of hard substrate Porifera	Max% of hard substrate Porifera
2021 Survey		
ENV31	0.05	0.05
ENV33	0.12	0.18
ENV36	0.13	0.13
ENV38	0.1	0.1
ENV41	0.08	0.1
ENV42	0.13	0.13
ENV46	3.06	3.06
ENV48	0.16	0.16
ENV49	0.58	0.58
ENV50	0.35	0.35
ENV58	0.16	0.29
ENV60	0.2	0.26
ENV61	0.33	0.38
ENV66	0.16	0.16
ENV78	1.28	1.28
ENV79	0.09	0.09
ENV80	0.25	0.25
ENV81	0.11	0.14
ENV84	0.16	0.16

Station	Average% of hard substrate Porifera	Max% of hard substrate Porifera
ENV85	0.22	0.22
ENV86	0.27	0.27
2022 Survey		
ENV50	NA	NA
22ENV30	0.13	0.43
ENV62	0.52	0.52
ZOI44	0.25	0.25
ZOI49	0.98	0.98
ZOI51	NA	NA
OCC52	1.03	1.03
OCC53	0.67	1.06
OCC54	0.81	1.56
OCC55	0.61	0.67
OCC56	0.76	0.76
OCC58	1.46	1.46
OCC59	0.85	0.85

B.6. Full hard substrate porifera assessment data 2021

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV31	77	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV31		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV31		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV31		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV31		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV31		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV31		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV31		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV31		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV31		0.05	NA	NA	NA	NA	NA	1	NA	NA
ENV31		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV33		0.17	NA	NA	NA	1	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		0.08	NA	NA	NA	1	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		0.18	NA	NA	NA	NA	1	NA	NA	1
ENV33		0.06	NA	NA	NA	1	NA	NA	NA	NA
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		0.1	NA	NA	NA	NA	1	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	NA
ENV33		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV36	79	NA	NA	NA	NA	NA	NA	NA	NA	NA

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV36		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV36		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV36		0.13	NA	1	NA	NA	NA	NA	NA	NA
ENV38	7	NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		0.09	NA	NA	NA	1	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		0.1	NA	NA	NA	NA	NA	NA	1	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV38		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41	61	0.07	NA	NA	NA	NA	NA	NA	NA	NA
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV41		0.1	NA	NA	NA	NA	NA	NA	NA	NA
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		0.09	NA	NA	NA	NA	NA	NA	NA	NA
ENV41		0.08	NA	NA	NA	NA	NA	NA	NA	NA
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		0.08	NA	NA	NA	NA	NA	NA	NA	NA
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		0.1	NA	NA	NA	NA	NA	NA	NA	NA

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		0.07	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV41		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV42	66	NA	NA	NA	NA	NA	NA	NA	NA	1
ENV42		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV42		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV42		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV42		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV42		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV42		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV42		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV42		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV42		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV42		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV42		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV42		0.13	NA	NA	NA	NA	NA	NA	NA	1
ENV42		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV42		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV42		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV42		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46	19	NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		3.06	1	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV46		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48	22	NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	1	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV48		0.16	NA	NA	NA	1	NA	NA	NA	1
ENV49	17	NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		0.58	NA	NA	NA	1	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	2
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV49		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50	71	NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		0.35	NA	NA	NA	NA	NA	NA	1	NA
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV50		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58	44	NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		0.29	NA	NA	NA	NA	1	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		0.12	NA	NA	NA	NA	1	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV58		0.08	NA	NA	NA	NA	1	NA	NA	NA
ENV60	12	NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		0.14	NA	NA	NA	1	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	2
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	2
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	9
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		0.26	NA	NA	NA	NA	NA	NA	1	NA
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV60		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61	28	NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		0.37	NA	NA	NA	1	NA	NA	NA	1
ENV61		0.38	NA	NA	NA	1	NA	NA	NA	1
ENV61		0.24	NA	NA	NA	1	NA	NA	NA	NA
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV61		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66	69	NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV66		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV66		0.16	NA	NA	NA	1	NA	NA	NA	NA
ENV78	88	NA	NA	NA	NA	NA	NA	NA	NA	1
ENV78		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV78		1.28	NA	NA	1	NA	NA	NA	NA	NA
ENV78		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV78		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV78		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV78		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV78		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV78		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV78		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV78		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV78		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV78		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV78		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV78		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV78		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79	24	NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		0.09	NA	NA	1	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV79		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80	40	NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		0.25	NA	NA	NA	NA	NA	1	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV80		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81	65	NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		0.1	NA	1	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		0.14	NA	NA	NA	NA	1	NA	NA	NA
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		0.08	NA	NA	1	NA	NA	NA	NA	NA
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV81		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84	81	0.16	NA	NA	1	NA	NA	NA	NA	NA
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV84		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85	2	NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		0.22	NA	NA	NA	NA	1	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	2
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		0.22	NA	NA	NA	NA	1	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV85		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86	34	NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substate porifera (or any associated epifaunal species) were recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats							
			cf. Pachymatisma johnstonia	*Polymastia sp.*	*cf. Suberites sp.*	*Raspailia ramosa*	*Tethya sp.*	Porifera 01	Porifera 02	*Alcyonium digitatum*
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		0.27	NA	NA	1	NA	NA	NA	NA	NA
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1
ENV86		NA	NA	NA	NA	NA	NA	NA	NA	1

B.7. Full hard substrate porifera assessment data 2022

Station	Number of images (per station) where no hard substrate Porifera (or any associated epifaunal species) was recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats			
			Polymastia indet. 01	*Suberites indet.* 02	*Suberites indet.* 03	*Alcyonium digitatum*
22ENV30	18	0.43	1	NA	NA	1
22ENV30		0.08	1	NA	NA	NA
22ENV30		NA	NA	NA	1	NA
22ENV30		NA	NA	NA	NA	1
22ENV30		0.02	1	NA	NA	NA
22ENV30		NA	NA	NA	1	NA
22ENV30		0.07	1	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		0.06	1	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substrate Porifera (or any associated epifaunal species) was recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats			
			Polymastia indet. 01	*Suberites indet.* 02	*Suberites indet.* 03	*Alcyonium digitatum*
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	2
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1
22ENV30		NA	NA	NA	NA	1
ZOI49	29	NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substrate Porifera (or any associated epifaunal species) was recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats			
			Polymastia indet. 01	*Suberites indet.* 02	*Suberites indet.* 03	*Alcyonium digitatum*
ZOI49		NA	NA	NA	NA	1
ZOI49		NA	NA	NA	NA	1
ZOI49		NA	NA	NA	NA	1
ZOI49		NA	NA	NA	NA	1
ZOI49		NA	NA	NA	NA	1
ZOI49		NA	NA	NA	NA	1
ZOI49		NA	NA	NA	NA	1
ZOI49		NA	NA	NA	NA	1
ZOI49		NA	NA	NA	NA	1
ZOI49		NA	NA	NA	NA	1
ZOI49		NA	NA	NA	NA	1
ZOI49		0.98	NA	NA	1	1
ZOI49		NA	NA	NA	NA	1
ZOI49		NA	NA	NA	NA	1
OCC52	41	NA	NA	NA	NA	1
OCC52		NA	NA	NA	NA	1
OCC52		NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substrate Porifera (or any associated epifaunal species) was recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats			
			Polymastia indet. 01	*Suberites indet.* 02	*Suberites indet.* 03	*Alcyonium digitatum*
OCC52		NA	NA	NA	NA	1
OCC52		NA	NA	NA	NA	1
OCC52		1.03	NA	NA	1	1
OCC53	26	0.7	NA	NA	1	NA
OCC53		1.06	NA	NA	1	1
OCC53		NA	NA	NA	NA	1
OCC53		0.08	NA	1	NA	NA
OCC53		0.82	NA	NA	1	NA
OCC53		NA	NA	NA	NA	1
OCC53		NA	NA	NA	NA	1
OCC54	7	NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substrate Porifera (or any associated epifaunal species) was recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats			
			Polymastia indet. 01	*Suberites indet.* 02	*Suberites indet.* 03	*Alcyonium digitatum*
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substrate Porifera (or any associated epifaunal species) was recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats			
			Polymastia indet. 01	*Suberites indet.* 02	*Suberites indet.* 03	*Alcyonium digitatum*
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		1.56	NA	NA	1	1
OCC54		0.05	NA	1	NA	1
OCC54		NA	NA	NA	NA	1
OCC54		NA	NA	NA	NA	1
OCC55	8	NA	NA	NA	NA	1
OCC55		NA	NA	NA	NA	1
OCC55		NA	NA	NA	NA	1
OCC55		NA	NA	NA	NA	1
OCC55		0.55	NA	NA	1	1
OCC55		NA	NA	NA	NA	1
OCC55		NA	NA	NA	NA	1
OCC55		NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substrate Porifera (or any associated epifaunal species) was recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats			
			Polymastia indet. 01	*Suberites indet.* 02	*Suberites indet.* 03	*Alcyonium digitatum*
OCC55		NA	NA	NA	NA	1
OCC55		NA	NA	NA	NA	1
OCC55		NA	NA	NA	NA	1
OCC55		NA	NA	NA	NA	1
OCC55		NA	NA	NA	NA	1
OCC55		NA	NA	NA	NA	1
OCC55		0.67	NA	NA	1	1
OCC55		NA	NA	NA	NA	1
OCC55		NA	NA	NA	NA	1
OCC55		NA	NA	NA	NA	1
OCC55		NA	NA	NA	NA	1
OCC55		NA	NA	NA	NA	1
OCC55		NA	NA	NA	NA	1
OCC56	10	NA	NA	NA	NA	1
OCC56		NA	NA	NA	NA	1
OCC56		NA	NA	NA	NA	1
OCC56		NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substrate Porifera (or any associated epifaunal species) was recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats			
			Polymastia indet. 01	*Suberites indet.* 02	*Suberites indet.* 03	*Alcyonium digitatum*
OCC56		NA	NA	NA	NA	1
OCC56		NA	NA	NA	NA	1
OCC56		NA	NA	NA	NA	1
OCC56		0.76	NA	NA	1	1
OCC56		NA	NA	NA	NA	1
OCC56		NA	NA	NA	NA	1
OCC56		NA	NA	NA	NA	1
OCC56		NA	NA	NA	NA	1
OCC56		NA	NA	NA	NA	1
OCC56		NA	NA	NA	NA	1
OCC56		NA	NA	NA	NA	1
OCC56		NA	NA	NA	NA	1
OCC56		NA	NA	NA	NA	1
OCC56		NA	NA	NA	NA	1
OCC56		NA	NA	NA	NA	1
OCC56		NA	NA	NA	NA	1
OCC56		NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substrate Porifera (or any associated epifaunal species) was recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats			
			Polymastia indet. 01	*Suberites indet.* 02	*Suberites indet.* 03	*Alcyonium digitatum*
OCC58	19	NA	NA	NA	NA	1
OCC58		NA	NA	NA	NA	1
OCC58		NA	NA	NA	NA	1
OCC58		NA	NA	NA	NA	1
OCC58		NA	NA	NA	NA	1
OCC58		1.46	NA	NA	1	NA
OCC58		NA	NA	NA	NA	1
OCC58		NA	NA	NA	NA	1
OCC59	13	NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1
OCC59		0.85	NA	NA	1	1
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1

Station	Number of images (per station) where no hard substrate Porifera (or any associated epifaunal species) was recorded	% Coverage of Hard Substrate Porifera	Presence of epifaunal taxa associated with fragile sponge and anthozoan communities on subtidal rocky habitats			
			Polymastia indet. 01	*Suberites indet.* 02	*Suberites indet.* 03	*Alcyonium digitatum*
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1
OCC59		NA	NA	NA	NA	1

Appendix C Benthic multivariate analysis results

C.1. Infaunal multivariate analysis results (Mona Array Area and ZoI)

Primer simper analysis output

SIMPER

Similarity Percentages - species contributions

One-Way Analysis

Data worksheet

Name: Data2

Data type: Abundance

Sample selection: All

Variable selection: All

Parameters

Resemblance: S17 Bray-Curtis similarity

Cut off for low contributions: 70.00%

Factor Groups

Sample	Simprof Group
22ENV30	v
22ENV36	v
ZOI45	v
ZOI48	v
22ENV32	w
22ENV33	w
22ENV34	w
22ENV37	w
22ENV38	ag
ZOI46	ag
ZOI39	s

ZOI42	s
ZOI40	b
ENV50	b
ZOI41	u
ZOI44	t
ZOI47	ab
ENV09	ab
ZOI50	ae
ENV01	j
ENV04	j
ENV05	j
ENV10	j
ENV14	j
ENV15	j
ENV19	j
ENV27	j
ENV59	j
ENV63	j
ENV64	j
ENV02	r
ENV03	r
ENV06	r
ENV08	r
ENV17	r
ENV20	r
ENV24	r
ENV90	r
ENV07	ac
ENV11	aa
ENV30	aa
ENV12	g
ENV13	g
ENV16	x

ENV21	x
ENV25	x
ENV26	x
ENV18	y
ENV23	y
ENV22	a
ENV28	a
ENV29	q
ENV62	q
ENV95	q
ENV31	n
ENV36	n
ENV37	n
ENV41	n
ENV47	n
ENV97	n
ENV32	k
ENV33	h
ENV34	h
ENV35	h
ENV38	p
ENV48	p
ENV49	p
ENV51	p
ENV52	p
ENV54	p
ENV55	p
ENV56	p
ENV71	p
ENV86	p
ENV88	p
ENV39	l
ENV42	l

ENV40	i
ENV45	i
ENV43	ah
ENV44	ah
ENV57	ah
ENV67A	ah
ENV70	ah
ENV83	ah
ENV89	ah
ENV96	ah
ENV53	m
ENV60	o
ENV61	o
ENV65	o
ENV66	af
ENV68	f
ENV69	d
ENV84	d
ENV82	e
ENV91	z
ENV94	z
ENV92	c
ENV93	ad

Group v
Average similarity: 49.77

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
NEMERTEA	4.71	2.19	5.93	4.4	4.4
Aonides paucibranchiata	3.84	1.81	8.59	3.63	8.03
Grania	4.03	1.76	7.37	3.54	11.57
Leptochiton	4.18	1.73	9.78	3.47	15.04
Dialychone dunerificta	3.19	1.39	6.6	2.79	17.83

NUDIBRANCHIA	2.8	1.23	10.15	2.46	20.29
Laonice bahusiensis agg.	2.56	1.18	5.62	2.38	22.67
Pholoe inornata	2.49	1.09	5.44	2.18	24.85
Syllis armillaris agg.	2.7	1.06	14.4	2.13	26.99
Glycera	2.21	1.04	5.31	2.09	29.08
Echinocyamus pusillus	2.42	1.03	9.57	2.07	31.14
Goniadella gracilis	2.34	1.03	5.39	2.07	33.21
Glycera lapidum	2.19	0.97	3.96	1.94	35.15
Spirobranchus triqueter	2.17	0.93	3.97	1.87	37.02
Lysidice unicornis	1.93	0.92	20.55	1.86	38.87
Sphaerosyllis hystrix	2.68	0.92	3.43	1.85	40.72
Polycirrus	2.14	0.9	2.13	1.81	42.53
Mediomastus fragilis	2.04	0.78	2.79	1.56	44.09
Spio armata	1.7	0.77	8	1.54	45.63
Timoclea ovata	2.23	0.74	2.15	1.49	47.12
Sphaerosyllis cf. taylori	2.43	0.71	0.84	1.44	48.56
Praxillella affinis	1.76	0.69	2.88	1.38	49.94
Serpulidae	1.72	0.68	3.25	1.37	51.3
Nototropis vedlomensis	1.85	0.67	3.77	1.35	52.66
Syllis garciai	1.94	0.65	4.54	1.31	53.97
Golfingia (Golfingia) elongata	1.79	0.63	4.91	1.27	55.23
Paradoneis lyra	1.92	0.59	0.91	1.2	56.43
Eteone cf. longa	1.55	0.59	3.12	1.18	57.61
SIPUNCULA	1.64	0.58	3.65	1.18	58.79
DENDROCHIROTIDA	1.47	0.56	4.78	1.12	59.91
Lumbrineris aniara agg.	1.29	0.56	5.19	1.12	61.04
Urothoe marina	1.82	0.56	6.21	1.12	62.15
Aricidea (Acmira) cerrutii	1.98	0.56	0.89	1.12	63.27
Scalibregma inflatum	2.25	0.55	0.9	1.11	64.39
Leptochiton asellus	2.3	0.53	0.77	1.06	65.45
Obtusella intersecta	1.65	0.52	17.66	1.05	66.49
Abra	1.1	0.52	17.66	1.05	67.54
Mytilidae	1.1	0.52	17.66	1.05	68.59

Cirrophorus branchiatus	1.97	0.51	0.77	1.02	69.6
Pholoe baltica	1.95	0.5	0.88	1	70.6

Group w
Average similarity: 46.35

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
NEMERTEA	5.24	2.49	11.82	5.37	5.37
Scalibregma inflatum	4.34	1.7	3	3.67	9.04
Cirrophorus branchiatus	3.13	1.66	5.29	3.59	12.63
Paradoneis lyra	2.92	1.4	7.51	3.03	15.66
Phoronis	3.14	1.28	2.73	2.76	18.42
Pholoe baltica	2.27	1.15	5.2	2.48	20.89
Lysidice unicornis	2.22	1.12	3.21	2.41	23.31
Aonides paucibranchiata	2.17	1.12	3.21	2.41	25.72
Leiochone	1.96	1.08	7.58	2.32	28.04
Spirobranchus triqueter	1.72	0.98	4.58	2.12	30.16
Sphaerosyllis cf. taylori	2.03	0.93	2.04	2	32.17
Poecilochaetus serpens	1.87	0.93	9.45	2	34.17
Pholoe inornata	1.74	0.86	3.8	1.85	36.02
Praxillella affinis	1.87	0.84	2.6	1.81	37.83
Grania	1.82	0.83	4.24	1.79	39.62
Caulleriella alata	1.72	0.8	3.34	1.73	41.35
Gattyana cirrhosa	1.77	0.77	2.1	1.66	43.01
Serpulidae	1.39	0.76	3.55	1.63	44.65
Tanaopsis graciloides	1.52	0.76	3.55	1.63	46.28
Nototropis vedlomensis	1.94	0.74	2.91	1.61	47.89
Spisula	1.55	0.7	3.4	1.5	49.39
Echinocyamus pusillus	1.43	0.7	3.56	1.5	50.89
Polycirrus	1.29	0.67	3.3	1.45	52.34
Syllis armillaris agg.	1.6	0.64	0.86	1.37	53.72
Ophelina acuminata	1.41	0.62	7.58	1.34	55.06
Pseudopolydora pulchra	1.31	0.62	7.58	1.34	56.4

Leptochiton	2.16	0.6	0.9	1.29	57.69
SIPUNCULA	1.3	0.58	0.9	1.25	58.94
Kurtiella bidentata	2.25	0.54	0.74	1.17	60.1
Ampharete lindstroemi agg.	1.41	0.53	0.9	1.15	61.25
Urothoe marina	1.94	0.53	0.75	1.14	62.39
ASTEROIDEA	1.59	0.52	0.91	1.12	63.51
Dialychone dunerificta	1.49	0.5	0.9	1.08	64.59
Lagis koreni	1.8	0.5	0.91	1.07	65.67
DENDROCHIROTIDA	1.47	0.48	0.9	1.03	66.69
Exogone naidina	1.14	0.47	0.9	1.01	67.7
Spiophanes bombyx	1.75	0.46	0.76	0.99	68.69
Tharyx killariensis	1.22	0.45	0.89	0.96	69.65
Owenia	1.35	0.43	0.91	0.93	70.58

Group ag

Average similarity: 52.20

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Polygordius	8.29	7.23	SD=0!	13.85	13.85
NEMERTEA	5.78	6.6	SD=0!	12.64	26.48
Pisione remota	5.32	5.39	SD=0!	10.32	36.8
Hesionura elongata	5.48	4.51	SD=0!	8.63	45.44
Grania	4.35	4.34	SD=0!	8.32	53.76
Aonides paucibranchiata	3.76	3.41	SD=0!	6.53	60.29
Echinocyamus pusillus	2.24	2.69	SD=0!	5.16	65.44
Syllis garciai	1.98	2.09	SD=0!	4	69.44
Goniadella gracilis	1.71	1.7	SD=0!	3.26	72.71

Group s

Average similarity: 45.31

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Scalibregma inflatum	6.58	5.03	SD=0!	11.1	11.1

NEMERTEA	4.3	4.03	SD=0!	8.9	20
Lagis koreni	4	3.68	SD=0!	8.12	28.13
Grania	3.24	3.01	SD=0!	6.63	34.76
Spiophanes bombyx	2.72	2.33	SD=0!	5.14	39.9
Ophelina acuminata	2.62	2.13	SD=0!	4.69	44.59
Pholoe baltica	2.22	1.9	SD=0!	4.2	48.78
Parexogone hebes	2.99	1.65	SD=0!	3.63	52.42
Paradoneis lyra	2.28	1.65	SD=0!	3.63	56.05
Poecilochaetus serpens	1.87	1.65	SD=0!	3.63	59.69
Ampelisca spinipes	2.8	1.65	SD=0!	3.63	63.32
Phyllodoce groenlandica	1.57	1.34	SD=0!	2.97	66.29
Praxillella affinis	1.57	1.34	SD=0!	2.97	69.25
Dipolydora coeca agg.	1.41	1.34	SD=0!	2.97	72.22

Group b
Average similarity: 23.52

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Syllis armillaris agg.	1.21	4.7	SD=0!	20	20
Lysidice unicornis	1.21	4.7	SD=0!	20	40
Lumbrineris aniara agg.	1.21	4.7	SD=0!	20	60
Echinocyamus pusillus	1.37	4.7	SD=0!	20	80

Group u
Less than 2 samples in group

Group t
Less than 2 samples in group

Group ab
Average similarity: 29.15

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%

Lagis koreni	2.92	4.16	SD=0!	14.29	14.29
Gnathiidae	1.57	2.63	SD=0!	9.04	23.32
Pholoe baltica	1.21	1.86	SD=0!	6.39	29.71
Aglaophamus agilis	1	1.86	SD=0!	6.39	36.1
Cirrophorus branchiatus	1	1.86	SD=0!	6.39	42.49
Scalibregma inflatum	2.16	1.86	SD=0!	6.39	48.88
Poecilochaetus serpens	1.21	1.86	SD=0!	6.39	55.27
Spiophanes bombyx	1	1.86	SD=0!	6.39	61.66
Caulleriella alata	1.21	1.86	SD=0!	6.39	68.05
Nototropis vedlomensis	1	1.86	SD=0!	6.39	74.44

Group ae
Less than 2 samples in group

Group j
Average similarity: 45.15

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Poecilochaetus serpens	2.51	2.19	4.54	4.84	4.84
NEMERTEA	2.57	2.09	2.02	4.63	9.47
Urothoe elegans	2.1	1.82	3.16	4.04	13.51
Scalibregma inflatum	2.17	1.56	2.33	3.45	16.96
Lysidice unicornis	1.79	1.45	1.94	3.21	20.18
Lagis koreni	1.87	1.33	1.55	2.94	23.12
Pholoe baltica	1.61	1.24	1.94	2.75	25.87
Pholoe inornata	1.57	1.17	1.7	2.6	28.47
Ampharete lindstroemi agg.	1.82	1.16	1.53	2.58	31.05
Phoronis	1.71	1.14	1.31	2.53	33.57
Spiophanes bombyx	1.57	1.14	1.73	2.52	36.09
Chaetozone zetlandica	1.67	1.12	1.25	2.47	38.56
Ampelisca	1.38	0.99	1.25	2.19	40.75
Ophelina acuminata	1.23	0.92	1.29	2.05	42.79
Pista lornensis	1.21	0.85	1.24	1.88	44.67

Cirrophorus branchiatus	1.28	0.78	0.95	1.72	46.39
Ampelisca spinipes	1.32	0.77	0.96	1.71	48.1
Pseudopolydora pulchra	1.06	0.77	1.27	1.7	49.8
Urothoe	1.52	0.76	0.94	1.68	51.48
Golfingiidae	1.19	0.71	1.29	1.56	53.05
Ampelisca typica	1.14	0.7	0.97	1.56	54.6
Sabellidae	0.96	0.69	1.32	1.52	56.12
Aonides paucibranchiata	1.08	0.68	0.97	1.5	57.62
Leptochiton asellus	1.14	0.63	0.94	1.4	59.02
Spirobranchus triqueter	1.09	0.62	0.93	1.37	60.39
Lumbrineris aniara agg.	1.16	0.61	0.93	1.34	61.73
Echinocyamus pusillus	1.33	0.61	0.72	1.34	63.07
Paradoneis lyra	1.21	0.58	0.77	1.29	64.37
Owenia	0.96	0.58	0.96	1.29	65.66
Glycera lapidum	0.94	0.58	0.96	1.29	66.94
Kurtiella bidentata	1.28	0.57	0.73	1.26	68.2
Syllis armillaris agg.	0.99	0.54	0.75	1.19	69.4
Caulleriella alata	0.84	0.53	0.98	1.18	70.58

Group r

Average similarity: 36.44

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
NEMERTEA	2.02	1.92	4.59	5.27	5.27
Echinocyamus pusillus	2.28	1.88	1.6	5.15	10.42
Goniadella gracilis	1.86	1.58	1.66	4.33	14.75
Poecilochaetus serpens	1.94	1.49	2.92	4.1	18.84
Scalibregma inflatum	2.01	1.44	1.44	3.95	22.79
Owenia	1.62	1.43	3.13	3.92	26.71
Pholoe baltica	2.01	1.34	1.26	3.69	30.39
Polynoidae	1.5	1.28	4.51	3.51	33.91
Golfingiidae	1.97	1.2	0.93	3.29	37.19
Kurtiella bidentata	2.43	1.2	0.85	3.28	40.47

BIVALVIA	1.69	1.19	1.5	3.26	43.73
Pholoe inornata	1.54	1.01	1.54	2.78	46.51
Aonides paucibranchiata	1.26	0.74	0.99	2.03	48.54
Nereididae	1.11	0.69	0.99	1.89	50.44
Glycera lapidum	1.18	0.68	1	1.87	52.31
Phoronis	1.1	0.67	1.01	1.84	54.14
THRACIOIDEA	1.11	0.64	1.01	1.76	55.9
Phascolion (Phascolion) strombus strombus	1.2	0.64	0.72	1.75	57.66
Syllis	1.16	0.62	1.02	1.71	59.37
Asclerocheilus	0.84	0.56	1.04	1.53	60.9
Abra	1.13	0.52	0.68	1.44	62.33
Lagis koreni	1.52	0.5	0.62	1.37	63.71
AMPHIPODA	0.87	0.45	0.71	1.24	64.95
Ampelisca spinipes	0.78	0.43	0.7	1.19	66.14
Lysidice unicornis	0.82	0.43	0.72	1.17	67.31
Timoclea ovata	1.05	0.43	0.66	1.17	68.47
Moerella donacina	0.84	0.4	0.71	1.1	69.57
Ampelisca	0.75	0.4	0.73	1.09	70.67

Group ac
Less than 2 samples in group

Group aa
Average similarity: 52.67

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Lagis koreni	6.03	8.78	SD=0!	16.66	16.66
Poecilochaetus serpens	5.43	8.08	SD=0!	15.35	32.01
Spiophanes bombyx	3.05	4.04	SD=0!	7.67	39.69
Pholoe baltica	2.81	3.74	SD=0!	7.11	46.79
Scalibregma inflatum	2.81	3.74	SD=0!	7.11	53.9
Scoloplos armiger	3.52	3.42	SD=0!	6.49	60.38

Owenia	2.73	3.06	SD=0!	5.8	66.19
Sthenelais limicola	1.71	2.16	SD=0!	4.1	70.29

Group g
Average similarity: 49.97

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Lagis koreni	3.87	3.41	SD=0!	6.82	6.82
Scalibregma inflatum	3.37	3.23	SD=0!	6.47	13.29
Ampharete lindstroemi agg.	2.72	2.64	SD=0!	5.28	18.58
Owenia	2.34	2.41	SD=0!	4.82	23.4
Abra	2.12	2.16	SD=0!	4.31	27.71
Echinocyamus pusillus	2.58	2.16	SD=0!	4.31	32.03
NEMERTEA	2.73	2.16	SD=0!	4.31	36.34
Spio symphyta	2.09	1.87	SD=0!	3.74	40.08
Aoridae	2.74	1.87	SD=0!	3.74	43.82
Phoronis	1.98	1.87	SD=0!	3.74	47.55
Pholoe baltica	1.71	1.52	SD=0!	3.05	50.6
Goniadella gracilis	1.41	1.52	SD=0!	3.05	53.65
Lysidice unicornis	1.41	1.52	SD=0!	3.05	56.7
Paradoneis lyra	1.57	1.52	SD=0!	3.05	59.75
Aonides paucibranchiata	1.41	1.52	SD=0!	3.05	62.81
Spiophanes bombyx	1.93	1.52	SD=0!	3.05	65.86
Lysilla nivea	1.41	1.52	SD=0!	3.05	68.91
Ampelisca typica	1.83	1.52	SD=0!	3.05	71.96

Group x
Average similarity: 51.44

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Spiophanes bombyx	2.99	5.17	12.7	10.05	10.05
Scoloplos armiger	2.93	5.12	8.07	9.96	20.01
Lagis koreni	3.26	5.06	10.84	9.84	29.85

Poecilochaetus serpens	2.98	4.32	2.23	8.39	38.24
Sthenelais limicola	2.21	3.8	7.26	7.39	45.63
Amphiuridae	2.44	3.46	2.18	6.72	52.35
Nephtys cirrosa	1.8	2.88	2.48	5.6	57.95
Scolelepis bonnieri	1.46	2.38	4.3	4.63	62.58
Gari fervensis	1.79	2.36	6.18	4.58	67.16
NEMERTEA	1.21	2.09	6.55	4.07	71.23

Group y
Average similarity: 44.27

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Lagis koreni	3.76	4.73	SD=0!	10.68	10.68
Echinocyamus pusillus	2.88	3.66	SD=0!	8.27	18.95
Scalibregma inflatum	2.53	3.34	SD=0!	7.55	26.5
Poecilochaetus serpens	2.85	3.34	SD=0!	7.55	34.05
Sthenelais limicola	1.73	2.59	SD=0!	5.85	39.89
BIVALVIA	1.73	2.59	SD=0!	5.85	45.74
Pseudopolydora pulchra	1.41	2.11	SD=0!	4.77	50.52
Owenia	2.51	2.11	SD=0!	4.77	55.29
Urothoe elegans	1.57	2.11	SD=0!	4.77	60.06
Kurtiella bidentata	1.57	2.11	SD=0!	4.77	64.84
Paraonidae	1.57	2.11	SD=0!	4.77	69.61
Pholoe baltica	1.21	1.49	SD=0!	3.38	72.99

Group a
Average similarity: 23.75

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Abra	1.73	7.18	SD=0!	30.22	30.22
Scoloplos armiger	1.62	4.14	SD=0!	17.45	47.66
BIVALVIA	1	4.14	SD=0!	17.45	65.11
Echinocyamus pusillus	1	4.14	SD=0!	17.45	82.55

Group q
Average similarity: 39.03

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
NEMERTEA	2.82	3.75	9.36	9.62	9.62
Ampharete lindstroemi agg.	2.82	3.35	3.01	8.58	18.2
Phascolion (Phascolion) strombus strombus	1.79	2.14	44.95	5.48	23.69
Parexogone hebes	1.61	2.01	9.36	5.14	28.83
Syllis	1.41	2.01	9.36	5.14	33.97
Golfingiidae	2.49	1.93	2.6	4.95	38.92
Poecilochaetus serpens	1.94	1.93	1.94	4.95	43.87
Cirrophorus branchiatus	1.66	1.72	4.53	4.42	48.29
Podarkeopsis	1.28	1.63	3.39	4.18	52.47
Cheirocratus	1.28	1.62	3.82	4.16	56.62
Lumbrineris aniara agg.	1.62	1.59	10.39	4.08	60.7
Pholoe baltica	1.14	1.42	9.36	3.64	64.34
Pholoe inornata	1.14	1.42	9.36	3.64	67.98
Scoloplos armiger	1.14	1.42	9.36	3.64	71.61

Group n
Average similarity: 53.39

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
NEMERTEA	3.73	2.42	15.23	4.53	4.53
Scalibregma inflatum	3.53	2.18	6.82	4.08	8.61
Aonides paucibranchiata	3	1.74	3.26	3.27	11.87
Ampharete lindstroemi agg.	2.61	1.65	5.39	3.08	14.96
Leptochiton asellus	3.1	1.6	1.98	3	17.96
Dialychone	2.59	1.52	3.52	2.85	20.81
Pholoe inornata	2.57	1.45	3.36	2.72	23.53
Golfingiidae	2.29	1.41	5.01	2.64	26.17

Pholoe baltica	2.38	1.3	4.99	2.43	28.6
Leiochone	2.2	1.24	4.17	2.32	30.92
Glycera lapidum	1.92	1.2	5.51	2.24	33.17
Laonice bahusiensis agg.	2.39	1.15	2.46	2.15	35.32
Goniadella gracilis	1.97	1.07	2.92	2	37.32
Serpulidae	1.76	1.05	9.43	1.96	39.29
Lysidice unicornis	1.76	0.96	2.7	1.8	41.09
Eulalia mustela	1.69	0.93	3.37	1.75	42.83
Notomastus	1.4	0.91	5.53	1.7	44.53
Jasmineira caudata	1.6	0.89	3.21	1.67	46.2
Owenia	1.48	0.88	3.49	1.64	47.84
Paraonidae	1.84	0.87	1.25	1.63	49.48
Syllis garciai/mauretanica	1.68	0.85	1.35	1.6	51.08
Chaetozone zetlandica	1.38	0.85	3.71	1.59	52.67
Megamphopus cornutus	1.67	0.84	3.15	1.57	54.24
Ampelisca	1.56	0.84	2.8	1.56	55.8
Echinocyamus pusillus	1.81	0.82	1.29	1.54	57.34
Lumbrineris aniara agg.	1.43	0.78	6.01	1.46	58.8
Grania	1.68	0.77	1.25	1.44	60.24
Syllis	1.57	0.75	1.27	1.4	61.63
Poecilochaetus serpens	1.19	0.73	9.71	1.36	63
Cirrophorus branchiatus	1.64	0.7	1.18	1.32	64.32
Phoronis	1.68	0.68	1.12	1.27	65.59
Syllis armillaris agg.	1.48	0.64	1.31	1.2	66.79
Nototropis vedlomensis	1.52	0.62	1.24	1.15	67.94
Ophelina acuminata	1.22	0.61	1.27	1.14	69.08
Spirobranchus triqueter	1.4	0.59	1.23	1.1	70.18

Group k
Less than 2 samples in group

Group h
Average similarity: 58.04

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Ampharete lindstroemi agg.	6.6	3.36	4.57	5.79	5.79
Poecilochaetus serpens	4.15	2.49	13.08	4.29	10.08
Ampelisca provincialis	4.98	2.44	3.31	4.2	14.28
Phoronis	4.45	2.44	8.86	4.2	18.48
NEMERTEA	4.03	2.42	37.69	4.16	22.64
Pholoe baltica	4.92	2.18	1.96	3.75	26.39
Owenia	3.74	2	61.31	3.44	29.83
Scalibregma inflatum	3.79	1.99	14.04	3.43	33.26
Cerianthus lloydii	2.94	1.75	11.18	3.01	36.27
Spiophanes bombyx	3.08	1.73	5.03	2.98	39.26
Chaetozone zetlandica	2.87	1.66	9.38	2.86	42.12
Photis longicaudata	3.01	1.63	9.96	2.8	44.92
Cirrophorus branchiatus	2.91	1.63	11.71	2.8	47.73
Leiochone	2.76	1.63	14.04	2.8	50.53
Lagis koreni	3.6	1.55	1.92	2.67	53.2
Praxillella affinis	2.9	1.46	18.26	2.51	55.71
Aonides paucibranchiata	2.37	1.41	61.31	2.43	58.14
Paradoneis lyra	2.58	1.26	61.31	2.18	60.32
Ampelisca spinipes	2.13	1.15	9.96	1.98	62.3
Kurtiella bidentata	2.41	1.15	2.67	1.98	64.28
Eteone cf. longa	1.9	1.09	61.31	1.88	66.17
Caulleriella alata	1.73	1.09	61.31	1.88	68.05
Parexogone hebes	1.52	0.89	61.31	1.54	69.59
Podarkeopsis	1.67	0.84	2.31	1.45	71.04

Group p
Average similarity: 54.57

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Scalibregma inflatum	4.67	2.45	4.1	4.48	4.48
NEMERTEA	4.12	2.38	5.97	4.37	8.85

Ampharete lindstroemi agg.	4.05	2.13	3	3.9	12.75
Pholoe baltica	3.25	1.66	3.67	3.04	15.79
Aonides paucibranchiata	2.88	1.66	4.55	3.04	18.83
Phoronis	2.97	1.39	3.28	2.55	21.37
Cirrophorus branchiatus	2.39	1.26	3.51	2.32	23.69
Lysidice unicornis	2.19	1.25	5.32	2.29	25.98
Leptochiton asellus	2.61	1.24	1.91	2.27	28.26
Ophelina acuminata	2.18	1.16	3.1	2.12	30.38
Polycirrus	2.22	1.15	3.27	2.1	32.48
Ampelisca	2.46	1.13	2.59	2.07	34.55
Poecilochaetus serpens	2.21	1.06	2.42	1.93	36.48
Paradoneis ilvana	1.99	1.02	3.56	1.86	38.35
Chaetozone zetlandica	1.77	0.94	3.12	1.71	40.06
Urothoe marina	1.79	0.89	2.79	1.62	41.69
Urothoe	1.81	0.88	1.96	1.61	43.3
Laonice bahusiensis agg.	1.92	0.88	1.67	1.61	44.91
Dialychone	2.01	0.84	1.2	1.53	46.44
Lagis koreni	1.66	0.84	3.44	1.53	47.97
Nototropis vedlomensis	1.57	0.83	4.16	1.52	49.49
Aricidea (Acmira) cerrutii	1.78	0.81	1.81	1.49	50.98
Praxillella affinis	1.74	0.81	1.67	1.48	52.46
Glycera lapidum	1.54	0.8	1.71	1.47	53.93
Owenia	1.39	0.74	1.89	1.36	55.29
Terebellides	1.43	0.69	1.91	1.27	56.56
Cerianthus lloydii	1.66	0.69	1.27	1.26	57.83
Pholoe inornata	1.43	0.67	1.88	1.22	59.05
Serpulidae	1.35	0.67	1.76	1.22	60.27
Kurtiella bidentata	1.78	0.62	1.06	1.14	61.41
Dipolydora caulleryi agg.	1.18	0.61	1.9	1.12	62.53
Polynoidae	1.23	0.56	1.27	1.03	63.56
Echinocyamus pusillus	1.4	0.56	1.23	1.02	64.58
Ampelisca typica	1.29	0.53	0.97	0.97	65.55
Paradoneis lyra	1.54	0.53	0.91	0.96	66.51

Goniadella gracilis	1.1	0.51	1.27	0.94	67.45
AMPHIPODA	1.1	0.5	1.29	0.92	68.37
Leiochone	1.16	0.5	1.27	0.91	69.27
Mediomastus fragilis	1.09	0.48	1.31	0.88	70.16

Group l
Average similarity: 52.36

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Scalibregma inflatum	4.85	2.27	SD=0!	4.34	4.34
Golfingia (Golfingia) elongata	3.07	2.14	SD=0!	4.09	8.44
Unciola planipes	2.82	2.01	SD=0!	3.83	12.27
Owenia	2.72	1.86	SD=0!	3.55	15.81
Echinocyamus pusillus	2.64	1.86	SD=0!	3.55	19.36
Syllis garciai/mauretanica	2.64	1.86	SD=0!	3.55	22.91
Phoronis	2.92	1.69	SD=0!	3.24	26.14
Nereididae	2	1.52	SD=0!	2.9	29.04
Ampharete lindstroemi agg.	2.8	1.52	SD=0!	2.9	31.93
NEMERTEA	2.87	1.52	SD=0!	2.9	34.83
Golfingiidae	2.5	1.52	SD=0!	2.9	37.72
Lagis koreni	1.73	1.31	SD=0!	2.51	40.23
Syllis	2.93	1.31	SD=0!	2.51	42.74
Eteone cf. longa	1.41	1.07	SD=0!	2.05	44.78
Mediomastus fragilis	1.83	1.07	SD=0!	2.05	46.83
Paradoneis ilvana	1.83	1.07	SD=0!	2.05	48.88
Poecilochaetus serpens	2.12	1.07	SD=0!	2.05	50.93
Aonides paucibranchiata	2.89	1.07	SD=0!	2.05	52.97
Ampelisca typica	1.57	1.07	SD=0!	2.05	55.02
Urothoe marina	1.57	1.07	SD=0!	2.05	57.07
Nucula hanleyi	1.83	1.07	SD=0!	2.05	59.12
Eulalia mustela	1.57	1.07	SD=0!	2.05	61.16
Paraonidae	1.71	1.07	SD=0!	2.05	63.21
Dialychone	1.71	1.07	SD=0!	2.05	65.26

Pholoe baltica	3.1	0.76	SD=0!	1.45	66.7
Pholoe inornata	1	0.76	SD=0!	1.45	68.15
Malmgrenia thomsonae	1.72	0.76	SD=0!	1.45	69.6
Glycera lapidum	1.62	0.76	SD=0!	1.45	71.05

Group i
Average similarity: 54.61

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Ampharete lindstroemi agg.	3.92	3.22	SD=0!	5.89	5.89
NEMERTEA	3.59	2.96	SD=0!	5.42	11.32
Scalibregma inflatum	4.13	2.82	SD=0!	5.17	16.49
Kurtiella bidentata	3.79	2.68	SD=0!	4.9	21.39
Lagis koreni	3.35	2.53	SD=0!	4.62	26.01
Pholoe baltica	3.19	2.36	SD=0!	4.33	30.34
Polycirrus	2	1.79	SD=0!	3.27	33.61
Eteone cf. longa	1.87	1.55	SD=0!	2.83	36.44
Paradoneis lyra	2.28	1.55	SD=0!	2.83	39.27
Owenia	1.98	1.55	SD=0!	2.83	42.1
Urothoe	3.46	1.55	SD=0!	2.83	44.94
Photis longicaudata	1.87	1.55	SD=0!	2.83	47.77
Tanaopsis graciloides	1.87	1.55	SD=0!	2.83	50.6
PLATYHELMINTHES	2.09	1.55	SD=0!	2.83	53.43
Poecilochaetus serpens	2.83	1.26	SD=0!	2.31	55.74
Urothoe elegans	1.41	1.26	SD=0!	2.31	58.06
Megamphopus cornutus	1.57	1.26	SD=0!	2.31	60.37
Aoridae	3.05	1.26	SD=0!	2.31	62.68
BIVALVIA	1.71	1.26	SD=0!	2.31	64.99
Cerianthus lloydii	1.71	1.26	SD=0!	2.31	67.3
Glycinde nordmanni	1	0.89	SD=0!	1.63	68.94
Schistomeringos rudolphi	1.21	0.89	SD=0!	1.63	70.57

Group ah

Average similarity: 34.87

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Pisione remota	2.83	3.58	1.14	10.25	10.25
Aonides paucibranchiata	2.61	3.11	4.31	8.91	19.17
Goniadella gracilis	2.18	2.79	1.26	7.99	27.16
Grania	2.07	2.72	3.46	7.81	34.96
Hesionura elongata	2.44	2.63	2.29	7.55	42.52
Polygordius	2.33	2.35	1.25	6.73	49.24
Unciola planipes	2.35	2.26	1.47	6.48	55.72
Eurydice truncata	1.34	1.75	0.9	5.03	60.75
NEMERTEA	1.65	1.73	1.51	4.95	65.7
Glycera lapidum	1.36	1.53	1.5	4.39	70.09

Group m
Less than 2 samples in group

Group o
Average similarity: 55.82

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Ampharete lindstroemi agg.	4.07	3.16	19.43	5.67	5.67
NEMERTEA	3.36	2.36	13.84	4.24	9.9
Leptochiton asellus	3.53	2.27	6.28	4.06	13.97
Aonides paucibranchiata	2.55	1.86	5.02	3.33	17.3
Pholoe inornata	2.3	1.76	8.3	3.15	20.45
Cirrophorus branchiatus	2.69	1.76	8.3	3.15	23.6
Lysidice unicornis	2.29	1.44	3.1	2.57	26.18
Phoronis	2.44	1.42	3.53	2.55	28.73
Ophelina acuminata	1.9	1.42	13.36	2.54	31.27
Praxillella affinis	1.95	1.32	5.02	2.36	33.63
Chaetozone zetlandica	1.88	1.31	6.28	2.35	35.97
Golfingiidae	1.72	1.25	5.06	2.25	38.22

Pholoe baltica	1.79	1.24	8.3	2.23	40.45
Euchone pararosea	1.72	1.24	8.3	2.23	42.68
Eteone cf. longa	1.63	1.24	12.29	2.22	44.9
Scoloplos armiger	1.79	1.24	12.29	2.22	47.12
Parexogone hebes	1.52	1.16	13.36	2.08	49.2
Dipolydora caulleryi agg.	1.41	1.16	13.36	2.08	51.28
Terebellides	1.41	1.16	13.36	2.08	53.35
Leiochone	1.75	1.09	2.41	1.95	55.3
Lagis koreni	1.49	1.04	2.38	1.86	57.16
Glycera lapidum	1.58	1.02	3.1	1.82	58.97
Poecilochaetus serpens	1.28	0.94	3.46	1.69	60.66
Laonice bahusiensis agg.	1.47	0.94	3.46	1.69	62.35
Nototropis vedlomensis	1.38	0.94	3.46	1.69	64.04
Schistomeringos rudolphi	1.28	0.93	5.02	1.67	65.7
Scalibregma inflatum	1.55	0.93	5.02	1.67	67.37
Owenia	1.47	0.93	5.02	1.67	69.04
Lumbrineris aniara agg.	1.24	0.82	13.36	1.47	70.51

Group af
Less than 2 samples in group

Group f
Less than 2 samples in group

Group d
Average similarity: 47.36

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Scalibregma inflatum	7.26	4.05	SD=0!	8.55	8.55
Pholoe baltica	3.15	2.16	SD=0!	4.57	13.12
Urothoe marina	2.9	2.02	SD=0!	4.27	17.39
Paradoneis lyra	3.29	1.87	SD=0!	3.96	21.35
Notomastus	2.44	1.71	SD=0!	3.61	24.96

Aonides paucibranchiata	2.44	1.71	SD=0!	3.61	28.57
Goniadella gracilis	2.22	1.53	SD=0!	3.23	31.8
Leptocheirus hirsutimanus	2.12	1.53	SD=0!	3.23	35.03
Kurtiella bidentata	3.6	1.53	SD=0!	3.23	38.26
NEMERTEA	2.66	1.53	SD=0!	3.23	41.5
Glycera lapidum	1.87	1.33	SD=0!	2.8	44.29
Lysilla nivea	2.6	1.33	SD=0!	2.8	47.09
Owenia	1.87	1.33	SD=0!	2.8	49.89
Ericthonius punctatus	2.09	1.33	SD=0!	2.8	52.69
Tanaopsis graciloides	2.09	1.33	SD=0!	2.8	55.49
Polynoidae	1.93	1.08	SD=0!	2.28	57.77
Malmgrenia	1.57	1.08	SD=0!	2.28	60.05
Glycera	1.41	1.08	SD=0!	2.28	62.34
Lumbrineris aniara agg.	2.12	1.08	SD=0!	2.28	64.62
Mediomastus fragilis	1.93	1.08	SD=0!	2.28	66.91
Polycirrus	2.29	1.08	SD=0!	2.28	69.19
Aoridae	1.57	1.08	SD=0!	2.28	71.48

Group e
Less than 2 samples in group

Group z
Average similarity: 53.09

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Poecilochaetus serpens	8.3	7.9	SD=0!	14.89	14.89
Scalibregma inflatum	5.42	4.6	SD=0!	8.67	23.56
Spiophanes bombyx	3.3	3.17	SD=0!	5.97	29.53
Aoridae	2.45	2.59	SD=0!	4.87	34.4
NEMERTEA	2.72	2.59	SD=0!	4.87	39.27
Owenia	2.44	2.36	SD=0!	4.45	43.72
Scoloplos armiger	2.12	2.11	SD=0!	3.98	47.7
Sthenelais limicola	1.98	1.83	SD=0!	3.45	51.14

Lagis koreni	2.37	1.83	SD=0!	3.45	54.59
Lumbrineris aniara agg.	1.93	1.49	SD=0!	2.81	57.4
Ampharete lindstroemi agg.	1.83	1.49	SD=0!	2.81	60.21
Glycera fallax	1.21	1.06	SD=0!	1.99	62.2
Glycinde nordmanni	1.21	1.06	SD=0!	1.99	64.19
Podarkeopsis	1.5	1.06	SD=0!	1.99	66.18
Phyllodoce lineata	1.21	1.06	SD=0!	1.99	68.17
Aricidea (Aricidea) minuta	1.37	1.06	SD=0!	1.99	70.16

Group c
Less than 2 samples in group

Group ad
Less than 2 samples in group

C.2. Epifaunal multivariate analysis results (Mona Array Area and ZoI)

Primer simper analysis output

SIMPER
Similarity Percentages - species contributions

One-Way Analysis

Data worksheet
Name: Data1
Data type: Abundance
Sample selection: All
Variable selection: All

Parameters
Resemblance: S17 Bray-Curtis similarity
Cut off for low contributions: 70.00%

Factor Groups

Sample	Simprof Group
22ENV30	c
22ENV32	c
22ENV33	c
22ENV34	c
22ENV36	c
22ENV37	c
ZOI39	c
ZOI40	c
ZOI43	c
ZOI45	c
22ENV38	b
ZOI50	b
ZOI41	a

ZOI44	a
ZOI48	a
ZOI49	a
ZOI51	a
ZOI42	d
ZOI46	d
ZOI47	d
ENV01	o
ENV08	o
ENV45	o
ENV94	o
ENV96	o
ENV02	n
ENV03	n
ENV06	n
ENV12	n
ENV39	n
ENV57	n
ENV04	l
ENV05	l
ENV10	l
ENV15	l
ENV20	l
ENV27	l
ENV29	l
ENV31	l
ENV32	l
ENV33	l
ENV34	l
ENV35	l
ENV36	l
ENV37	l
ENV38	l
ENV41	l

ENV42	l
ENV47	l
ENV48	l
ENV49	l
ENV50	l
ENV51	l
ENV52	l
ENV53	l
ENV54	l
ENV55	l
ENV56	l
ENV59	l
ENV60	l
ENV61	l
ENV62	l
ENV63	l
ENV64	l
ENV65	l
ENV71	l
ENV82	l
ENV84	l
ENV86	l
ENV88	l
ENV90	l
ENV92	l
ENV97	l
ENV07	p
ENV09	p
ENV11	p
ENV23	p
ENV43	p
ENV67	p
ENV68	p
ENV70	p

ENV91	p
ENV93	p
ENV95	p
ENV13	m
ENV17	m
ENV18	m
ENV19	m
ENV24	m
ENV40	m
ENV69	m
ENV14	k
ENV28	k
ENV16	q
ENV21	q
ENV22	q
ENV25	q
ENV26	q
ENV30	q
ENV44	q
ENV46	i
ENV80	i
ENV81	i
ENV85	i
ENV87	i
ENV58	g
ENV66	j
ENV83	j
ENV89	j
ENV72	e
ENV75	e
ENV77	e
ENV78	e
ENV73	f
ENV74	h

ENV76	h
ENV79	h

Group c
Average similarity: 61.04

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Serpulidae stet.	5.92	10.07	2.8	16.49	16.49
Faunal turf	5.41	8.85	3.07	14.5	30.99
Alcyonium digitatum	4.96	7.93	2.07	12.98	43.97
Ophiura albida inc.	4.3	6.33	2.92	10.37	54.34
Pectinidae stet.	3.04	4.93	5.37	8.08	62.42
Animalia tubes	2.4	2.95	1.18	4.84	67.26
Ceriantharia stet.	2.72	2.88	1.05	4.71	71.98

Group b
Average similarity: 64.55

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Faunal turf	4.05	8.5	SD=0!	13.17	13.17
Ceriantharia stet.	3.07	8.02	SD=0!	12.42	25.59
Actiniaria indet. 01	1.87	4.91	SD=0!	7.6	33.19
Ophiura ophiura inc.	2.6	4.91	SD=0!	7.6	40.8
Animalia tubes	2.29	4.01	SD=0!	6.21	47.01
Serpulidae stet.	1.93	4.01	SD=0!	6.21	53.21
Paguroidea stet.	2.12	4.01	SD=0!	6.21	59.42
Alcyonium digitatum	1.41	4.01	SD=0!	6.21	65.63
Tubularia indivisa inc.	1.93	4.01	SD=0!	6.21	71.84

Group a
Average similarity: 55.20

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Serpulidae stet.	6.37	10.74	6.93	19.46	19.46

Faunal turf	4.38	6.77	4.69	12.26	31.71
Alcyonium digitatum	3.88	6.36	5.98	11.53	43.24
Ophiura albida inc.	2.89	3.72	1.49	6.73	49.97
Ophiothrix fragilis inc.	4.04	3.68	0.94	6.67	56.64
Flustridae indet. 01	2.46	2.36	1.12	4.28	60.92
Asterias rubens	1.51	2.28	3.43	4.13	65.05
Nemertesia antennina inc.	2.08	2.05	1.1	3.71	68.77
Paguroidea stet.	1.63	2.02	4.4	3.67	72.43

Group d
Average similarity: 34.23

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Paguroidea stet.	1.99	11.15	6.87	32.58	32.58
Faunal turf	2.16	10.28	3.7	30.03	62.61
Scaphopoda stet.	1.14	2.83	0.58	8.27	70.88

Group o
Average similarity: 47.22

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Hydrallmania falcata	1.17	4.88	5.59	10.33	10.33
COPEPODA	1	4.7	6.35	9.95	20.28
Sertulariidae	1	4.7	6.35	9.95	30.23
NEMATODA	0.97	3.21	1.13	6.79	37.02
Faunal turf	0.69	2.91	3.1	6.16	43.17
Burrows	1.23	2.82	1.07	5.98	49.15
Schizomavella	0.8	2.68	1.14	5.68	54.83
Serpulidaem sp 0001	0.55	1.73	1.7	3.67	58.5
Pectinidae 01	0.44	1.72	2.34	3.63	62.13
Animaliatubes	0.51	1.71	2.32	3.63	65.76
Ophiura sp	0.34	1.36	2.52	2.88	68.64
Tubulariam sp 0001	0.39	1.32	4.21	2.79	71.43

Group n
Average similarity: 51.21

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
NEMATODA	1.35	5.48	6.85	10.7	10.7
COPEPODA	1	4.33	8.29	8.46	19.16
Penetrantia	1	4.33	8.29	8.46	27.62
DECAPODA	1.04	3.38	1.33	6.59	34.22
Folliculinidae	0.83	2.76	1.35	5.4	39.61
Alcyonium digitatum	0.65	2.51	3.96	4.89	44.51
Serpulidaem sp 0001	0.62	2.08	2.78	4.06	48.57
Cliona	0.67	1.77	0.78	3.46	52.03
Sertulariidae	0.67	1.74	0.78	3.4	55.43
Faunal turf	0.52	1.72	2.9	3.37	58.79
Burrows	1.31	1.72	0.47	3.36	62.16
Sertularella	0.67	1.61	0.78	3.15	65.3
Animaliatubes	0.44	1.54	3.02	3	68.3
Pectinidae 01	0.31	1.11	7.59	2.16	70.46

Group l
Average similarity: 51.85

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
NEMATODA	1.35	5.27	5.6	10.17	10.17
Serpulidaem sp 0001	0.92	3.59	6.39	6.92	17.08
Sertulariidae	1.07	3.41	1.56	6.58	23.66
Hydrallmania falcata	1.04	3.15	1.41	6.08	29.74
COPEPODA	0.85	2.82	1.46	5.44	35.18
Ophiura sp	0.63	2.06	3.05	3.98	39.16
Alcyonium digitatum	0.64	2.05	2.41	3.96	43.13
Pectinidae 01	0.58	2.01	4.14	3.88	47.01
Porella concinna	0.69	1.9	0.93	3.67	50.68
Schizomavella	0.69	1.9	0.93	3.66	54.34
DECAPODA	0.76	1.89	0.93	3.64	57.98

Euclymeninae	0.71	1.55	0.71	2.99	60.97
AMPHIPODA	0.63	1.29	0.68	2.48	63.45
Ceriantharia 01	0.44	1.21	1.32	2.34	65.79
Faunal turf	0.4	1.12	1.83	2.16	67.95
Penetrantia	0.59	1	0.56	1.92	69.87
Asteria srubens	0.24	0.85	4.07	1.65	71.52

Group p
Average similarity: 42.40

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
NEMATODA	1.23	7.63	5.07	17.99	17.99
Faunal turf	0.5	2.69	3.55	6.35	24.33
Serpulidaem sp 0001	0.49	2.22	1.52	5.24	29.57
Ophiura sp	0.34	1.97	6.65	4.65	34.22
COPEPODA	0.55	1.92	0.6	4.52	38.75
Tubulariam sp 0001	0.35	1.69	2.6	3.99	42.73
Paguroidea indet	0.29	1.59	3.02	3.75	46.48
Alcyonium digitatum	0.3	1.46	1.75	3.45	49.94
DECAPODA	0.57	1.35	0.46	3.19	53.12
Pectinidae 01	0.26	1.27	1.94	2.99	56.11
Animaliatubes	0.32	1.18	1.29	2.78	58.89
NEMERTEA	0.45	1.18	0.47	2.78	61.67
Scaphopoda 01	0.23	0.97	1.15	2.29	63.95
cf Pagurus bernhardus	0.18	0.79	1.21	1.87	65.82
Terebellidae01	0.18	0.75	1.06	1.77	67.59
AMPHIPODA	0.36	0.71	0.35	1.67	69.26
Ophiuroidea indet	0.16	0.69	1.25	1.62	70.88

Group m
Average similarity: 52.84

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
NEMATODA	1.41	7.07	12.36	13.38	13.38

Euclymeninae	1.18	5.3	6.18	10.03	23.41
COPEPODA	1	5	12.36	9.46	32.87
AMPHIPODA	1.03	3.72	1.49	7.04	39.91
Faunal turf	0.57	2.66	6.64	5.02	44.94
DECAPODA	0.83	2.48	0.91	4.7	49.63
Alcyonium digitatum	0.57	2.38	3.88	4.5	54.13
Serpulidaem sp 0001	0.54	2.14	2.98	4.06	58.19
Amphiura filiformis	0.69	1.57	0.61	2.97	61.15
Penetrantia	0.69	1.51	0.61	2.85	64.01
Tubulariam sp 0001	0.4	1.45	1.35	2.75	66.76
Animaliatubes	0.33	1.44	3.78	2.73	69.49
Pectinidae 01	0.34	1.44	4.11	2.72	72.21

Group k
Average similarity: 49.25

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Euclymeninae	1.41	6.4	SD=0!	12.99	12.99
Scoloplos armiger	1	4.53	SD=0!	9.19	22.18
DECAPODA	1	4.53	SD=0!	9.19	31.37
Penetrantia	1.21	4.53	SD=0!	9.19	40.56
NEMATODA	1	4.53	SD=0!	9.19	49.74
Alcyonium digitatum	0.8	3.6	SD=0!	7.32	57.06
Ophiura sp	0.45	1.88	SD=0!	3.81	60.87
Serpulidaem sp 0001	0.56	1.82	SD=0!	3.69	64.57
Tubulariam sp 0001	0.44	1.56	SD=0!	3.16	67.73
Pectinidae 01	0.46	1.51	SD=0!	3.06	70.79

Group q
Average similarity: 35.20

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Faunal turf	0.48	4.28	3.21	12.16	12.16
Ophiura sp	0.42	3.7	2.28	10.51	22.67

Phoronis	0.57	3.02	0.61	8.57	31.24
Paguroidea indet	0.33	2.84	2.84	8.07	39.31
AMPHIPODA	0.57	2.6	0.61	7.37	46.69
Astropecten irregularis	0.21	1.72	1.83	4.87	51.56
Alcyonium digitatum	0.15	1.39	3.25	3.93	55.49
NEMERTEA	0.43	1.3	0.39	3.71	59.2
Actiniaria 01	0.18	1.28	1.25	3.63	62.82
Adamsia palliata	0.22	1.27	1.07	3.6	66.42
Pagurus prideaux	0.22	1.27	1.07	3.6	70.02

Group i
Average similarity: 69.28

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Serpulidaem sp 0001	0.97	8.04	41.12	11.61	11.61
Alcyonium digitatum	0.82	6.27	9.1	9.05	20.66
cf Ophiothrix fragilis	0.65	4.61	16.66	6.65	27.31
Ophiura sp	0.62	4.5	3.93	6.5	33.81
Faunal turf	0.53	3.88	6.46	5.6	39.4
Pectinidae 01	0.44	3.35	6.56	4.83	44.23
Actiniaria 01	0.36	2.69	6.47	3.88	48.12
cf Pagurus bernhardus	0.32	2.62	32.52	3.78	51.9
Hydrozoa indet	0.29	2.07	10.35	2.99	54.88
Tubulariam sp 0001	0.26	1.94	4.47	2.79	57.68
Cirripedia	0.29	1.84	3.48	2.66	60.34
Buccinidae 01	0.24	1.77	8	2.56	62.9
Ebalia sp	0.23	1.76	11.76	2.54	65.43
Asteria srubens	0.23	1.64	5.32	2.37	67.81
cf Ophiocomina nigra	0.33	1.5	1.16	2.16	69.96
Ascidiacea 01	0.2	1.4	3.63	2.02	71.98

Group g
Less than 2 samples in group

Group j
Average similarity: 39.72

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
NEMATODA	1.14	10.39	6.43	26.17	26.17
Serpulidaem sp 0001	0.65	6.3	6.64	15.85	42.02
Faunal turf	0.39	3.12	8.16	7.87	49.89
Animaliatubes	0.29	3.02	6.04	7.6	57.49
Ophiura sp	0.24	2.39	6.04	6.01	63.5
Pectinidae 01	0.35	2.36	1.73	5.94	69.44
cf Pagurus bernhardus	0.24	2.13	5.08	5.36	74.8

Group e
Average similarity: 66.45

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Serpulidaem sp 0001	0.62	7.59	5.71	11.42	11.42
Tubulariam sp 0001	0.5	6.72	17.76	10.12	21.53
Alcyonium digitatum	0.47	5.57	13.3	8.38	29.91
Pectinidae 01	0.35	4.5	23.8	6.77	36.68
Echinoidea 01	0.34	4.06	4	6.12	42.8
cf Pagurus bernhardus	0.28	3.7	10.91	5.56	48.36
Faunal turf	0.32	3.53	3.08	5.31	53.68
Animaliatubes	0.27	3.04	3.62	4.57	58.24
Ophiura sp	0.26	2.94	3.28	4.42	62.66
Buccinidae 01	0.19	2.67	13.84	4.02	66.68
cf Spatangus purpureus	0.23	2.63	2.06	3.96	70.64

Group f
Less than 2 samples in group

Group h
Average similarity: 78.17

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Serpulidaem sp 0001	0.93	10.11	41.45	12.93	12.93
Alcyonium digitatum	0.88	9.49	16.28	12.14	25.07
Ophiura sp	0.55	6	22.66	7.67	32.75
Echinoidea 01	0.61	5.81	6.32	7.43	40.18
Pectinidae 01	0.51	5.26	12.65	6.73	46.9
Faunal turf	0.36	3.58	31.73	4.58	51.48
Tubulariam sp 0001	0.35	3.19	2.77	4.08	55.56
Bivalvia indet	0.35	3.1	6.34	3.97	59.53
Buccinidae 01	0.31	3.02	8.53	3.87	63.4
cf Pagurus bernhardus	0.26	2.66	5.7	3.41	66.81
Asteria srubens	0.28	2.64	4.53	3.38	70.18

C.3. Infaunal multivariate analysis results (Mona Offshore Cable Corridor)

Primer simper analysis output

SIMPER

Similarity Percentages - species contributions

One-Way Analysis

Data worksheet

Name: Fourth Root

Data type: Abundance

Sample selection: All

Variable selection: All

Parameters

Resemblance: S17 Bray-Curtis similarity

Cut off for low contributions: 70.00 %

Factor Groups

Sample	Simprof Groups
BP22MON-ENV-GS-052	i
BP22MON-ENV-GS-053	i
BP22MON-ENV-GS-055	i
BP22MON-ENV-GS-056	i
BP22MON-ENV-GS-059	i
BP22MON-ENV-GS-060	i
BP22MON-ENV-GS-061	i
BP22MON-ENV-GS-054	g
BP22MON-ENV-GS-057	h
BP22MON-ENV-GS-058	h
BP22MON-ENV-GS-062	j
BP22MON-ENV-GS-063	j
BP22MON-ENV-GS-064	j
BP22MON-ENV-GS-065	f

BP22MON-ENV-GS-148	f
BP22MON-ENV-GS-133	a
BP22MON-ENV-GS-134	a
BP22MON-ENV-GS-135	a
BP22MON-ENV-GS-136	a
BP22MON-ENV-GS-137	a
BP22MON-ENV-GS-138	a
BP22MON-ENV-GS-139	c
BP22MON-ENV-GS-140	c
BP22MON-ENV-GS-142	c
BP22MON-ENV-GS-143	c
BP22MON-ENV-GS-141	b
BP22MON-ENV-GS-144	b
BP22MON-ENV-GS-153	b
BP22MON-ENV-GS-145	e
BP22MON-ENV-GS-146	e
BP22MON-ENV-GS-147	e
BP22MON-ENV-GS-150	e
BP22MON-ENV-GS-151	e
BP22MON-ENV-GS-152	e
BP22MON-ENV-GS-149	d

Group i
Average similarity: 50.25

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Aonides paucibranchiata	2.08	1.8	8.75	3.59	3.59
Urothoe marina	2.05	1.72	6.41	3.42	7.01
NEMERTEA	2.01	1.7	8.95	3.39	10.4
Syllis armillaris agg.	1.69	1.37	5.69	2.72	13.12
Nephasoma (Nephasoma) minutum	1.72	1.35	5.27	2.69	15.82
Pholoe inornata	1.5	1.24	8.78	2.47	18.28
Lagis koreni	1.37	1.08	7.75	2.14	20.42
Leptochiton	1.37	1.05	5.5	2.09	22.52

Ampelisca	1.23	1.02	8.36	2.03	24.54
Mytilidae	1.26	0.99	6.19	1.97	26.52
Paradoneis lyra	1.47	0.98	1.38	1.95	28.47
Lysidice unicornis	1.32	0.95	1.53	1.89	30.35
Sphaerosyllis cf. taylori	1.43	0.94	1.47	1.87	32.23
Spiophanes bombyx	1.33	0.93	1.5	1.85	34.08
Sphaerosyllis hystrix	1.47	0.93	1.4	1.85	35.92
Polycirrus	1.25	0.89	1.53	1.77	37.69
Megamphopus cornutus	1.23	0.85	1.51	1.7	39.39
SIPUNCULA	1.27	0.84	1.45	1.66	41.05
Praxillella affinis	1.15	0.81	1.52	1.6	42.66
Grania	1.15	0.78	1.51	1.55	44.21
Unciola planipes	1.2	0.76	1.45	1.51	45.71
Chaetozone zetlandica	1.01	0.75	1.53	1.49	47.21
Leiochone	1.17	0.75	1.45	1.49	48.7
Dipolydora coeca agg.	0.99	0.75	1.53	1.49	50.18
Spirobranchus triqueter	1.21	0.72	1.44	1.44	51.62
Eteone cf. longa	1.02	0.72	1.5	1.43	53.06
Aoridae	1.05	0.71	1.49	1.4	54.46
Glycinde nordmanni	0.98	0.7	1.52	1.39	55.85
Hydroides norvegica	0.96	0.69	1.53	1.38	57.22
Ampharete lindstroemi agg.	0.97	0.68	1.53	1.35	58.57
Timoclea ovata	0.94	0.67	1.52	1.34	59.91
Ampelisca spinipes	1.13	0.62	0.91	1.23	61.14
Nototropis vedlomensis	1.09	0.59	0.92	1.18	62.32
Eurydice truncata	0.98	0.57	0.92	1.12	63.45
Goniadella gracilis	1.01	0.55	0.92	1.09	64.53
Cirrophorus branchiatus	0.93	0.52	0.92	1.03	65.57
Poecilochaetus serpens	0.95	0.5	0.91	1	66.56
Glycera lapidum	0.87	0.5	0.91	0.99	67.55
Phoronis	0.88	0.48	0.92	0.96	68.51
Echinocyamus pusillus	0.85	0.48	0.91	0.95	69.46
Eumida	0.85	0.48	0.92	0.95	70.41

Group g
Less than 2 samples in group

Group h
Average similarity: 51.28

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Aonides paucibranchiata	2.13	2.26	SD=0!	4.41	4.41
Paradoneis lyra	1.74	2.07	SD=0!	4.03	8.44
Urothoe marina	1.68	2.07	SD=0!	4.03	12.48
Nephasoma (Nephasoma) minutum	1.84	1.99	SD=0!	3.88	16.36
Syllis garciai	1.59	1.9	SD=0!	3.71	20.06
Lysidice unicornis	1.53	1.9	SD=0!	3.71	23.77
Spisula	1.79	1.9	SD=0!	3.71	27.48
Glycera	1.41	1.8	SD=0!	3.51	30.99
Syllis armillaris agg.	1.55	1.67	SD=0!	3.26	34.25
Grania	1.37	1.67	SD=0!	3.26	37.51
SIPUNCULA	1.37	1.67	SD=0!	3.26	40.78
Golfingia (Golfingia) elongata	1.41	1.67	SD=0!	3.26	44.04
Glycera lapidum	1.25	1.51	SD=0!	2.95	46.99
Caulleriella alata	1.25	1.51	SD=0!	2.95	49.94
Gammaropsis maculata	1.25	1.51	SD=0!	2.95	52.89
Pholoe baltica	1	1.27	SD=0!	2.48	55.37
Eunereis longissima	1	1.27	SD=0!	2.48	57.85
Parexogone hebes	1.09	1.27	SD=0!	2.48	60.33
Syllis parapari	1.25	1.27	SD=0!	2.48	62.81
Eulalia mustela agg.	1	1.27	SD=0!	2.48	65.29
Nothria	1.09	1.27	SD=0!	2.48	67.76
Aricidea (Acmira) cerrutii	1.31	1.27	SD=0!	2.48	70.24

Group j
Average similarity: 33.36

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%

Spio armata	1.53	4.29	5.4	12.86	12.86
NEMERTEA	1.45	3.87	5.09	11.62	24.48
Glycera oxycephala	1.06	3.28	6.01	9.84	34.32
Spisula	1.19	3.28	6.01	9.84	44.15
Hesionura elongata	1.63	2.25	0.58	6.76	50.91
Polygordius	1.58	1.95	0.58	5.85	56.77
Nephtys cirrosa	1	1.55	0.58	4.64	61.41
Nephtys	0.91	1.36	0.58	4.08	65.49
Spiophanes bombyx	1	1.36	0.58	4.08	69.58
Grania	1.35	1.34	0.58	4.02	73.6

Group f
Average similarity: 43.12

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
NEMERTEA	2.18	4.06	SD=0!	9.41	9.41
Spiophanes bombyx	2.06	3.41	SD=0!	7.91	17.33
Lagis koreni	1.75	3.23	SD=0!	7.48	24.81
Poecilochaetus serpens	1.66	2.53	SD=0!	5.86	30.67
Lanice conchilega	1.63	2.53	SD=0!	5.86	36.53
Bathyporeia elegans	1.73	2.53	SD=0!	5.86	42.38
Eteone cf. longa	1.51	2.28	SD=0!	5.29	47.68
Scoloplos armiger	2	2.28	SD=0!	5.29	52.97
Aonides paucibranchiata	1.19	2.28	SD=0!	5.29	58.26
Mytilidae	1.46	2.28	SD=0!	5.29	63.55
Phoronis	1.25	2.28	SD=0!	5.29	68.85
Nephtys	1.21	1.92	SD=0!	4.45	73.3

Group a
Average similarity: 50.87

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Ensis	2.18	4.89	3.51	9.61	9.61
Fabulina fabula	1.84	4.7	8.32	9.24	18.86

Magelona johnstoni	1.87	4.49	4.45	8.83	27.69
Spiophanes bombyx	1.56	3.9	2.75	7.67	35.37
Glycera tridactyla	1.4	3.84	4.82	7.55	42.91
Nephtys	1.3	3.25	4.28	6.38	49.29
Naididae	1.55	3.19	1.28	6.28	55.57
Chaetozone christiei	1.18	2.32	1.28	4.55	60.13
Magelona filiformis	1.09	2.25	1.32	4.42	64.55
Acrocnida brachiata	1.28	2.1	1.32	4.14	68.69
NEMERTEA	1.14	1.98	1.32	3.89	72.58

Group c
Average similarity: 40.98

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Spiophanes bombyx	1.62	3.83	4.83	9.35	9.35
Scoloplos armiger	1.71	3.78	2.98	9.23	18.58
Thracia	1.44	3.45	3.53	8.42	27
Ensis	1.95	3.37	2.25	8.23	35.23
Bathyporeia guilliamsoniana	1.53	3.35	2.97	8.18	43.4
Acrocnida brachiata	1.38	2.93	6.51	7.15	50.56
Myidae	1.09	2.83	10.98	6.91	57.47
NEMERTEA	1.09	1.88	0.9	4.6	62.07
Nephtys cirrosa	1.06	1.84	0.91	4.49	66.56
Lagis koreni	1.34	1.82	0.9	4.45	71.01

Group b
Average similarity: 40.98

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Mytilidae	1.9	2.99	12.54	7.3	7.3
NEMERTEA	1.68	2.88	16.81	7.03	14.33
ACTINIARIA	1.74	2.72	3.88	6.63	20.97
Scoloplos armiger	1.66	2.57	12.59	6.27	27.24
Owenia	1.41	2.3	8.84	5.61	32.85

GASTROPODA	1.43	2.3	8.84	5.61	38.46
Mediomastus fragilis	1.56	2.26	2.96	5.51	43.97
Eteone cf. longa	1.17	1.93	8.84	4.72	48.69
Kurtiella bidentata	1.25	1.93	8.84	4.72	53.4
Spiophanes bombyx	1.27	1.93	16.81	4.7	58.1
Lagis koreni	1.32	1.82	16.29	4.44	62.54
Naididae	1.14	1.82	16.29	4.44	66.98
Acrocnida brachiata	1.18	0.85	0.58	2.08	69.06
Poecilochaetus serpens	0.94	0.81	0.58	1.97	71.03

Group e
Average similarity: 54.48

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Bathyporeia	2.11	4.48	7.61	8.23	8.23
Bathyporeia guilliamsoniana	2.12	4.15	3.75	7.61	15.84
NEMERTEA	1.79	3.86	9.13	7.08	22.92
Spiophanes bombyx	1.76	3.78	10.27	6.94	29.86
Monopseudocuma gilsoni	1.69	3.32	3.93	6.1	35.96
Bathyporeia elegans	1.61	3.12	5.59	5.72	41.68
Megaluropus agilis	1.46	2.75	3.51	5.04	46.72
Nephtys cirrosa	1.3	2.71	5.22	4.97	51.68
Diastylis bradyi	1.3	2.69	6.43	4.93	56.61
Poecilochaetus serpens	1.12	1.96	1.32	3.6	60.22
Scoloplos armiger	1.3	1.86	1.28	3.41	63.63
Spio goniocephala	1.12	1.77	1.33	3.25	66.88
Eteone cf. longa	1.04	1.68	1.34	3.08	69.96
Synchelidium maculatum	0.98	1.67	1.35	3.06	73.02

Group d
Less than 2 samples in group

C.4. Epifaunal multivariate analysis results (Mona Offshore Cable Corridor)

C.4.1.1.1 Primer simper analysis output

SIMPER
Similarity Percentages - species contributions

One-Way Analysis

Data worksheet
Name: Fourth Root
Data type: Abundance
Sample selection: All
Variable selection: All

Parameters
Resemblance: S17 Bray-Curtis similarity
Cut off for low contributions: 70.00 %

Factor Groups

Sample	Simprof groups
BP22MON-ENV-GS-052	j
BP22MON-ENV-GS-053	j
BP22MON-ENV-GS-054	j
BP22MON-ENV-GS-055	j
BP22MON-ENV-GS-056	j
BP22MON-ENV-GS-057	j
BP22MON-ENV-GS-058	j
BP22MON-ENV-GS-059	j
BP22MON-ENV-GS-060	j
BP22MON-ENV-GS-061	j
BP22MON-ENV-GS-062	i
BP22MON-ENV-GS-063	g
BP22MON-ENV-GS-064	e

BP22MON-ENV-GS-145	e
BP22MON-ENV-GS-065	l
BP22MON-ENV-GS-135	l
BP22MON-ENV-GS-136	l
BP22MON-ENV-GS-139	l
BP22MON-ENV-GS-140	l
BP22MON-ENV-GS-141	l
BP22MON-ENV-GS-143	l
BP22MON-ENV-GS-150	l
BP22MON-ENV-GS-151	l
BP22MON-ENV-GS-152	l
BP22MON-ENV-GS-133	d
BP22MON-ENV-GS-134	c
BP22MON-ENV-GS-137	f
BP22MON-ENV-GS-138	b
BP22MON-ENV-GS-142	a
BP22MON-ENV-GS-144	k
BP22MON-ENV-GS-147	k
BP22MON-ENV-GS-148	k
BP22MON-ENV-GS-149	k
BP22MON-ENV-GS-153	k
BP22MON-ENV-GS-146	h

Group j
Average similarity: 60.44

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Serpulidae stet.	2.18	6.95	5.08	11.49	11.49
Faunal turf	2.09	6.76	5.54	11.19	22.68
Alcyonium digitatum	1.92	6.05	3.74	10.01	32.69
Hydrozoa indet. 01	1.44	4.47	3.4	7.39	40.08
Buccinium undatum inc.	1.29	4.07	6.04	6.74	46.82
Pectinidae stet.	1.49	3.99	1.84	6.6	53.42
Ophiura albida inc.	1.44	3.25	1.23	5.37	58.79

Paguroidea stet.	1.1	3.02	1.79	4.99	63.79
Scaphopoda stet.	1.2	2.96	1.86	4.89	68.68
Ophiura ophiura inc.	1.1	2.44	1.19	4.03	72.71

Group i
Less than 2 samples in group

Group g
Less than 2 samples in group

Group e
Average similarity: 47.74

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Astropecten irregularis	1	47.74	SD=0!	100	100

Group l
Average similarity: 37.11

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Asterias rubens	0.84	18.61	0.89	50.16	50.16
Liocarcinus depurator	0.52	5.56	0.51	14.98	65.14
Faunal turf	0.6	4.15	0.51	11.18	76.32

Group d
Less than 2 samples in group

Group c
Less than 2 samples in group

Group f

Less than 2 samples in group

Group b
Less than 2 samples in group

Group a
Less than 2 samples in group

Group k
Average similarity: 60.96

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
Metridium stet.	1.97	16.67	3.34	27.35	27.35
Asterias rubens	1.59	13.93	8.09	22.85	50.2
Urticina stet.	1.04	9.78	9.17	16.05	66.25
Actiniaria stet.	1.28	8.94	1.12	14.67	80.91

Group h
Less than 2 samples in group

Appendix D Benthic infaunal data univariate analysis results

D.1. Infaunal univariate analysis results (Mona Array Area and ZoI)

S = number of species; N = abundance; B = Biomass (ash free dry mass in grams); d = Margalef's index of Richness; J' = Pielou's Evenness index; H' = Shannon-Wiener Diversity index; I = Simpson's index of Dominance.

Station	Preliminary Infaunal Biotope	S	N	Biomass (g)	d	J'	H'	I
ENV01	SS.SMx.OMx.PoVen	67	187	3.56	12.62	0.89	3.76	0.97
ENV02	SS.SMx.OMx.PoVen	70	146	10.39	13.85	0.92	3.91	0.98
ENV03	SS.SMx.OMx.PoVen	66	185	58.97	12.45	0.90	3.77	0.97
ENV04	SS.SMx.OMx.PoVen	49	119	2.56	10.04	0.94	3.65	0.98
ENV05	SS.SMx.OMx.PoVen	71	158	15.70	13.83	0.94	3.99	0.98
ENV06	SS.SMx.OMx.PoVen	77	284	21.97	13.45	0.87	3.77	0.97
ENV07	SS.SCS.CCS	17	23	0.20	5.10	0.95	2.69	0.96
ENV08	SS.SMx.OMx.PoVen	57	133	5.64	11.45	0.93	3.76	0.98
ENV09	SS.SMx.OMx	36	53	39.38	8.82	0.96	3.43	0.98
ENV10	SS.SMx.OMx.PoVen	78	200	5.05	14.53	0.94	4.09	0.98
ENV11	SS.SMu.CSaMu.LkorPpel	32	137	2.13	6.30	0.79	2.72	0.89
ENV12	SS.SCS.CCS	54	196	1.87	10.04	0.88	3.52	0.96
ENV13	SS.SCS.CCS	63	179	2.49	11.95	0.87	3.60	0.96
ENV14	SS.SMx.OMx.PoVen	61	124	62.98	12.45	0.95	3.92	0.98
ENV15	SS.SMx.OMx.PoVen	74	156	4.90	14.46	0.91	3.90	0.97
ENV16	SS.SMu.CSaMu.LkorPpel	26	112	0.98	5.30	0.82	2.67	0.90
ENV17	SS.SMx.OMx.PoVen	52	273	1.41	9.09	0.60	2.36	0.73
ENV18	SS.SMx.OMx.PoVen	53	128	3.43	10.72	0.88	3.49	0.96
ENV19	SS.SMx.OMx.PoVen	74	196	1.92	13.83	0.92	3.96	0.98

Station	Preliminary Infaunal Biotope	S	N	Biomass (g)	d	J’	H’	I
ENV20	SS.SMx.OMx.PoVen	66	151	0.77	12.96	0.94	3.92	0.98
ENV21	SS.SMu.CSaMu.LkorPpel	28	101	0.88	5.85	0.90	3.01	0.95
ENV22	SS.SCS.CCS	18	30	0.22	5.00	0.93	2.68	0.95
ENV23	SS.SMu.CSaMu.LkorPpel	38	115	0.83	7.80	0.89	3.22	0.95
ENV24	SS.SMx.OMx.PoVen	54	135	16.21	10.80	0.90	3.57	0.97
ENV25	SS.SMu.CSaMu.LkorPpel	33	128	0.98	6.60	0.86	3.02	0.94
ENV26	SS.SMu.CSaMu.LkorPpel	29	110	0.56	5.96	0.89	3.00	0.94
ENV27	SS.SMx.OMx.PoVen	73	195	3.30	13.65	0.92	3.97	0.98
ENV28	SS.SCS.CCS	24	30	0.65	6.76	0.96	3.06	0.98
ENV29	SS.SMx.OMx.PoVen	52	136	1.16	10.38	0.92	3.62	0.97
ENV30	SS.SMu.CSaMu.LkorPpel	36	223	2.60	6.47	0.82	2.93	0.92
ENV31	SS.SMx.OMx.PoVen	71	193	14.97	13.30	0.91	3.86	0.97
ENV32	SS.SMx.OMx.PoVen	60	161	5.47	11.61	0.91	3.71	0.97
ENV33	SS.SMx.OMx.PoVen	97	364	4.88	16.28	0.88	4.01	0.97
ENV34	SS.SMx.OMx.PoVen	81	468	5.22	13.01	0.81	3.56	0.95
ENV35	SS.SMx.OMx.PoVen	82	434	4.18	13.34	0.81	3.58	0.95
ENV36	SS.SMx.OMx.PoVen	98	281	4.32	17.20	0.91	4.16	0.98
ENV37	SS.SMx.OMx.PoVen	86	293	5.83	14.96	0.90	4.02	0.98
ENV38	SS.SMx.OMx.PoVen	87	349	4.01	14.69	0.88	3.93	0.97
ENV39	SS.SMx.OMx.PoVen	86	346	7.00	14.54	0.86	3.82	0.96
ENV40	SS.SMx.CMx.KurThyMx	65	193	5.44	12.16	0.88	3.69	0.97
ENV41	SS.SMx.OMx.PoVen	102	291	17.31	17.80	0.92	4.26	0.98
ENV42	SS.SMx.OMx.PoVen	75	213	2.33	13.80	0.92	3.96	0.98

Station	Preliminary Infaunal Biotope	S	N	Biomass (g)	d	J’	H’	I
ENV43	SS.SCS.CCS	22	90	23.14	4.67	0.73	2.25	0.83
ENV44	SS.SCS.CCS	29	65	0.12	6.71	0.95	3.18	0.97
ENV45	SS.SMx.CMx.KurThyMx	69	306	21.70	11.88	0.85	3.61	0.96
ENV47	SS.SMx.OMx.PoVen	98	292	13.03	17.09	0.90	4.14	0.98
ENV48	SS.SMx.OMx.PoVen	92	437	4.15	14.97	0.87	3.91	0.97
ENV49	SS.SMx.OMx.PoVen	91	320	25.10	15.60	0.85	3.85	0.96
ENV50	SS.SMx.OMx.PoVen	23	38	0.48	6.05	0.95	2.99	0.97
ENV51	SS.SMx.OMx.PoVen	87	226	6.75	15.87	0.93	4.16	0.98
ENV52	SS.SMx.OMx.PoVen	91	367	6.01	15.24	0.87	3.91	0.97
ENV53	SS.SMx.OMx.PoVen	80	193	4.11	15.01	0.92	4.04	0.98
ENV54	SS.SMx.OMx.PoVen	98	331	14.96	16.72	0.90	4.15	0.98
ENV55	SS.SMx.OMx.PoVen	95	340	3.37	16.13	0.87	3.97	0.97
ENV56	SS.SMx.OMx.PoVen	115	428	27.96	18.81	0.89	4.24	0.98
ENV57	SS.SCS.CCS	53	129	1.39	10.70	0.90	3.57	0.97
ENV59	SS.SMx.OMx.PoVen	71	145	88.08	14.07	0.94	4.01	0.98
ENV60	SS.SMx.OMx.PoVen	70	194	7.08	13.10	0.92	3.92	0.98
ENV61	SS.SMx.OMx.PoVen	91	277	1.30	16.00	0.90	4.04	0.98
ENV62	SS.SMx.OMx.PoVen	57	144	0.42	11.27	0.90	3.66	0.97
ENV63	SS.SMx.OMx.PoVen	63	158	4.67	12.25	0.93	3.85	0.98
ENV64	SS.SMx.OMx.PoVen	64	181	11.05	12.12	0.90	3.76	0.97
ENV65	SS.SMx.OMx.PoVen	80	209	4.91	14.79	0.91	3.98	0.98
ENV66	SS.SCS.CCS	19	148	0.16	3.60	0.64	1.89	0.72
ENV67	SS.SCS.CCS	42	149	0.42	8.19	0.77	2.88	0.89

Station	Preliminary Infaunal Biotope	S	N	Biomass (g)	d	J'	H'	I
ENV68	SS.SCS.CCS	52	466	2.17	8.30	0.58	2.30	0.75
ENV69	SS.SMx.OMx.PoVen	69	249	7.78	12.32	0.88	3.72	0.96
ENV70	SS.SCS.CCS	42	140	0.51	8.30	0.84	3.14	0.94
ENV71	SS.SMx.OMx.PoVen	78	221	9.31	14.26	0.92	4.00	0.98
ENV82	SS.SMx.CMx	59	216	41.46	10.79	0.83	3.39	0.94
ENV83	SS.SCS.CCS	43	85	3.65	9.45	0.93	3.51	0.97
ENV84	SS.SMx.OMx.PoVen	77	393	29.87	12.72	0.82	3.56	0.94
ENV86	SS.SMx.OMx.PoVen	104	330	2.92	17.76	0.89	4.11	0.98
ENV88	SS.SMx.OMx.PoVen	88	247	7.95	15.79	0.90	4.02	0.98
ENV89	SS.SCS.CCS	15	68	0.13	3.32	0.81	2.19	0.85
ENV90	SS.SMx.OMx.PoVen	65	146	24.66	12.84	0.91	3.78	0.97
ENV91	SS.SMu.CSaMu.LkorPpel	59	258	4.98	10.44	0.79	3.21	0.92
ENV92	SS.SMu.CSaMu.LkorPpel	64	190	26.49	12.01	0.88	3.64	0.96
ENV93	SS.SCS.CCS	15	122	0.13	2.91	0.67	1.82	0.73
ENV94	SS.SMu.CSaMu.LkorPpel	53	230	2.59	9.56	0.73	2.91	0.86
ENV95	SS.SMx.OMx.PoVen	39	83	1.73	8.60	0.91	3.35	0.96
ENV96	SS.SCS.CCS	53	219	1.73	9.65	0.79	3.15	0.92
ENV97	SS.SMx.OMx.PoVen	87	297	10.06	15.10	0.89	3.96	0.97
ZOI39	SS.SMx.CMx	76	296	20.30	13.18	0.81	3.50	0.94
ZOI40	SS.SMx.OMx.PoVen	12	17	0.23	3.88	0.96	2.40	0.96
ZOI41	SS.SMx.CMx	82	297	18.03	14.23	0.89	3.90	0.97
ZOI42	SS.SCS.CCS	52	188	0.65	9.74	0.85	3.38	0.95
ZOI44	SS.SMx.CMx.OphMx	66	148	15.39	13.01	0.93	3.90	0.98

Station	Preliminary Infaunal Biotope	S	N	Biomass (g)	d	J’	H’	I
ZOI45	SS.SMx.OMx.PoVen	99	367	1.50	16.60	0.90	4.15	0.98
ZOI46	SS.SSa.CFiSa	44	238	5.28	7.86	0.80	3.03	0.93
ZOI47	SS.SCS.CCS	51	105	0.13	10.74	0.87	3.40	0.95
ZOI48	SS.SMx.OMx.PoVen	109	459	8.87	17.62	0.89	4.16	0.98
ZOI50	SS.SSa.CMuSa	38	166	0.36	7.24	0.80	2.89	0.92
22ENV30	SS.SMx.OMx.PoVen	127	479	4.84	20	0.90	4.34	0.98
22ENV32	SS.SMx.OMx.PoVen	90	239	1.31	16	0.92	4.12	0.98
22ENV33	SS.SMx.OMx.PoVen	109	515	3.09	17	0.84	3.94	0.96
22ENV34	SS.SMx.OMx.PoVen	112	445	28.15	18	0.88	4.14	0.98
22ENV36	SS.SMx.OMx.PoVen	102	465	10.50	16	0.86	3.98	0.97
22ENV37	SS.SMx.OMx.PoVen	82	238	16.28	15	0.91	4.00	0.98
22ENV38	SS.SMx.CMx	38	330	0.41	6	0.66	2.40	0.83

D.2. Infaunal univariate analysis results (Mona Offshore Cable Corridor)

S = number of species; N = abundance; B = Biomass (ash free dry mass in grams); d = Margalef's index of Richness; J' = Pielou's Evenness index; H' = Shannon-Wiener Diversity index; I = Simpson's index of Dominance.

Station	Preliminary Infaunal Biotope	S	N	Biomass (g)	d	J'	H'	I
OCC52	SS.SMx.OMx.PoVen	93	116	19.36	0.99	4.51	1.00	2.58
OCC53	SS.SMx.OMx.PoVen	82	104	17.44	0.99	4.38	1.00	3.03
OCC54	SS.SMx.CMx	62	71	14.31	1.00	4.11	1.00	3.00
OCC55	SS.SMx.OMx.PoVen	95	119	19.66	0.99	4.53	1.00	3.89
OCC56	SS.SMx.OMx.PoVen	80	101	17.14	0.99	4.35	1.00	4.41
OCC57	SS.SMx.OMx.PoVen	72	93	15.68	0.99	4.25	1.00	4.97
OCC58	SS.SMx.OMx.PoVen	53	65	12.47	0.99	3.95	1.00	12.94
OCC59	SS.SMx.OMx.PoVen	94	119	19.47	0.99	4.51	1.00	7.29
OCC60	SS.SMx.OMx.PoVen	78	102	16.64	0.99	4.32	1.00	4.21
OCC61	SS.SMx.OMx.PoVen	79	102	16.85	0.99	4.33	1.00	9.24
OCC62	SS.SSa.CFiSa	23	29	6.56	0.99	3.09	0.99	0.15
OCC63	SS.SSa.CFiSa	30	42	7.78	0.98	3.34	0.99	7.92
OCC64	SS.SSa.CFiSa	20	23	6.08	0.99	2.98	0.99	0.69
OCC65	SS.SMx.CMx	45	57	10.87	0.99	3.77	0.99	0.49
OCC133	SS.SSa.IMuSa.FfabMag	24	35	6.50	0.98	3.11	0.98	7.83
OCC134	SS.SSa.IMuSa.FfabMag	18	23	5.42	0.99	2.85	0.98	12.23
OCC135	SS.SSa.IMuSa.FfabMag	19	25	5.57	0.99	2.92	0.98	1.23
OCC136	SS.SSa.IMuSa.FfabMag	30	38	7.96	0.99	3.36	0.99	19.07
OCC137	SS.SSa.IMuSa.FfabMag	38	48	9.58	0.99	3.61	0.99	18.18
OCC138	SS.SSa.IMuSa.FfabMag	29	41	7.55	0.98	3.31	0.99	14.55

Station	Preliminary Infaunal Biotope	S	N	Biomass (g)	d	J’	H’	I
OCC139	SS.SSa.IFiSa.NcirBat	29	37	7.74	0.98	3.31	0.99	16.47
OCC140	SS.SSa.IFiSa.NcirBat	29	38	7.69	0.99	3.33	0.99	3.21
OCC141	SS.SMx.CMx.KurThyMx	46	62	10.90	0.99	3.79	0.99	1.71
OCC142	SS.SSa.IFiSa.NcirBat	24	29	6.80	0.99	3.15	0.99	0.80
OCC143	SS.SSa.IFiSa.NcirBat	32	41	8.33	0.98	3.41	0.99	2.85
OCC144	SS.SMx.CMx.KurThyMx	36	49	9.01	0.99	3.55	0.99	0.39
OCC145	SS.SSa.IFiSa.NcirBat	44	54	10.79	0.99	3.75	0.99	0.54
OCC146	SS.SSa.IFiSa.NcirBat	42	54	10.27	0.99	3.70	0.99	0.90
OCC147	SS.SSa.IFiSa.NcirBat	33	47	8.32	0.99	3.46	0.99	1.04
OCC148	SS.SCS.CCS	36	47	9.09	0.99	3.54	0.99	1.00
OCC149	SS.SSa.IFiSa.NcirBat	32	41	8.35	0.99	3.44	0.99	0.44
OCC150	SS.SSa.IFiSa.NcirBat	29	38	7.71	0.98	3.32	0.99	0.51
OCC151	SS.SSa.IFiSa.NcirBat	30	39	7.93	0.99	3.38	0.99	0.39
OCC152	SS.SSa.IFiSa.NcirBat	29	35	7.85	0.99	3.33	0.99	26.71
OCC153	SS.SMx.CMx.KurThyMx	43	55	10.49	0.99	3.73	0.99	1.09

Appendix E Benthic epifaunal data univariate analysis results

E.1. Epifaunal univariate analysis results (Mona Array Area and ZoI)

S = number of species; N = abundance; d = Margalef's index of Richness; J' = Pielou's Evenness index; H' = Shannon-Wiener Diversity index; I = Simpson's index of Dominance.

Station	Preliminary Infaunal Biotope	S	N	d	J'	H'	I
ENV01	SS.SMx.CMx	60	24	18.65	0.6893	2.822	0.9306
ENV02	SS.SMx.CMx	59	26	17.86	0.7722	3.149	0.9807
ENV03	SS.SMx.CMx	42	22	13.36	0.6466	2.417	0.8798
ENV04	SS.SMx.CMx	56	26	16.91	0.7275	2.928	0.9561
ENV05	SS.SMx.CMx	55	32	15.6	0.7897	3.165	0.972
ENV06	SS.SMx.CMx	58	31	16.65	0.6849	2.781	0.8967
ENV07	SS.SCS.CCS	34	12	13.07	0.6463	2.279	0.9356
ENV08	SS.SMx.CMx	46	19	15.36	0.8339	3.193	1.007
ENV09	SS.SMx.CMx	43	11	17.22	0.6938	2.61	0.9822
ENV10	SS.SMx.CMx	58	25	17.8	0.7906	3.21	0.9901
ENV11	SS.SSa.CMuSa	43	7	21.66	0.693	2.606	1.041
ENV12	SS.SSa.CMuSa	49	12	19.01	0.7616	2.964	1.016
ENV13	SS.SCS.CCS	47	19	15.66	0.7338	2.825	0.9764
ENV14	SS.SCS.CCS	41	16	14.47	0.7485	2.78	0.9827
ENV15	SS.SMx.CMx	52	19	17.47	0.7819	3.089	0.9954
ENV16	SS.SSa.CMuSa	26	6	14.13	0.6604	2.152	1.027
ENV17	SS.SCS.CCS	41	12	15.93	0.7142	2.652	0.9844
ENV18	SS.SMx.CMx	35	19	11.65	0.7774	2.764	0.9748
ENV19	SS.SMx.CMx	40	19	13.18	0.7753	2.86	0.9781

Station	Preliminary Infaunal Biotope	S	N	d	J’	H’	I
ENV20	SS.SMx.CMx	46	19	15.29	0.794	3.04	0.9942
ENV21	SS.SSa.CMuSa	25	3	22.61	0.5839	1.88	1.146
ENV22	SS.SSa.CMuSa	28	5	17.38	0.6824	2.274	1.079
ENV23	SS.SMx.CMx	36	13	13.63	0.743	2.662	0.9849
ENV24	SS.SMx.CMx	43	16	15.3	0.7454	2.804	0.9827
ENV25	SS.SSa.CMuSa	23	7	11.15	0.6794	2.13	0.9768
ENV26	SS.SSa.CMuSa	19	6	10.05	0.6543	1.927	0.9617
ENV27	SS.SMx.CMx	42	19	13.89	0.8279	3.094	0.9995
ENV28	SS.SCS.CCS	54	21	17.38	0.7785	3.105	0.9883
ENV29	SS.SMx.CMx	51	13	19.32	0.7285	2.864	0.9993
ENV30	SS.SSa.CMuSa	37	8	17.67	0.729	2.633	1.038
ENV31	SS.SMx.CMx	50	19	16.74	0.7756	3.034	0.9942
ENV32	SS.SMx.CMx	43	20	13.96	0.7798	2.933	0.9838
ENV33	SS.SMx.CMx	53	29	15.39	0.8144	3.234	0.9861
ENV34	SS.SMx.CMx	55	26	16.49	0.802	3.214	0.9887
ENV35	SS.SMx.CMx	61	26	18.34	0.8012	3.294	0.9918
ENV36	SS.SMx.CMx	46	24	14.17	0.8138	3.116	0.9887
ENV37	SS.SMx.CMx	46	20	14.94	0.7948	3.043	0.9896
ENV38	SS.SMx.CMx	60	33	16.87	0.8318	3.405	0.9909
ENV39	SS.SMx.CMx	47	20	15.32	0.8058	3.103	0.995
ENV40	SS.SMx.CMx	38	17	13.17	0.76	2.765	0.977
ENV41	SS.SMx.CMx	49	24	15.05	0.8179	3.183	0.9903
ENV42	SS.SMx.CMx	49	23	15.39	0.8046	3.131	0.9886

Station	Preliminary Infaunal Biotope	S	N	d	J’	H’	I
ENV43	SS.SMx.CMx	48	13	18.4	0.7278	2.817	0.9977
ENV44	SS.SMx.CMx	44	12	17.34	0.6891	2.608	0.9914
ENV45	SS.SMx.CMx	44	14	16.28	0.724	2.74	0.9869
ENV47	SS.SMx.CMx	48	5	28.86	0.755	2.923	1.133
ENV48	SS.SMx.CMx	47	23	14.68	0.787	3.03	0.9837
ENV49	SS.SMx.CMx	55	23	17.11	0.8127	3.257	0.9968
ENV50	SS.SMx.CMx	43	19	14.18	0.7875	2.962	0.988
ENV51	SS.SMx.CMx	48	17	16.57	0.7631	2.954	0.9928
ENV52	SS.SMx.CMx	51	22	16.27	0.7972	3.135	0.9919
ENV53	SS.SMx.CMx	46	21	14.84	0.7868	3.012	0.986
ENV54	SS.SMx.CMx	46	13	17.53	0.7385	2.827	0.9922
ENV55	SS.SMx.CMx	46	19	15.21	0.7783	2.98	0.9887
ENV56	SS.SMx.CMx	41	15	14.75	0.7848	2.914	1
ENV57	SS.SMx.CMx	52	21	16.68	0.7807	3.085	0.9905
ENV59	SS.SMx.CMx	44	16	15.46	0.7627	2.886	0.9908
ENV60	SS.SMx.CMx	49	4	32.33	0.7727	3.007	1.182
ENV61	SS.SMx.CMx	53	21	17.01	0.7981	3.169	0.9986
ENV62	SS.SMx.CMx	49	20	16.14	0.8107	3.155	1
ENV63	SS.SMx.CMx	53	24	16.42	0.8024	3.186	0.9927
ENV64	SS.SMx.CMx	44	19	14.62	0.7967	3.015	0.9936
ENV65	SS.SMx.CMx	46	17	15.88	0.7792	2.983	0.9939
ENV66	SS.SMx.CMx	40	19	13.36	0.7507	2.769	0.9748
ENV67	SS.SMx.CMx	42	18	14.2	0.8161	3.05	1

Station	Preliminary Infaunal Biotope	S	N	d	J’	H’	I
ENV68	SS.SCS.CCS	31	5	18.57	0.5962	2.047	0.9742
ENV69	SS.SMx.CMx	50	8	23.83	0.6846	2.678	1.031
ENV70	SS.SMx.CMx	45	6	25.57	0.5877	2.237	0.9777
ENV71	SS.SMx.CMx	52	21	16.63	0.7702	3.043	0.9863
ENV82	SS.SMx.CMx	40	10	17.01	0.691	2.549	0.9936
ENV83	SS.SMx.CMx	50	17	17.35	0.7508	2.937	0.9922
ENV84	SS.SMx.CMx	29	3	28.84	0.7756	2.612	1.428
ENV86	SS.SMx.CMx	47	3	37.79	0.7428	2.86	1.287
ENV88	SS.SMx.CMx	32	3	24.89	0.7371	2.555	1.22
ENV89	SS.SMx.CMx	30	1	104.8	0.8489	2.887	3.816
ENV90	SS.SMx.CMx	36	4	24.12	0.7332	2.628	1.156
ENV91	SS.SMx.CMx	32	2	33.97	0.7954	2.757	1.501
ENV92	SS.SCS.CCS	31	2	46.56	0.8378	2.877	1.941
ENV93	SS.SMx.CMx	37	4	26.94	0.7273	2.626	1.196
ENV94	SS.SMx.CMx	45	4	29.82	0.7656	2.914	1.177
ENV95	SS.SMx.CMx	48	4	31.92	0.7633	2.955	1.179
ENV96	SS.SMx.CMx	45	16	15.7	0.7455	2.838	0.9846
ENV97	SS.SMx.CMx	34	9	15.03	0.7384	2.604	1.021
ZOI39	SS.SMx.CMx	39	12	15.27	0.7405	2.713	0.9883
ZOI40	SS.SMx.CMx	45	6	24.31	0.7263	2.765	1.077
ZOI41	SS.SMx.CMx	60	20	19.66	0.7872	3.223	1.001
ZOI42	SS.SMx.CMx	48	5	30.04	0.7736	2.995	1.161
ZOI44	SS.SMx.CMx	52	21	16.74	0.8014	3.167	0.9956

Station	Preliminary Infaunal Biotope	S	N	d	J’	H’	I
ZOI45	SS.SCS.CCS	23	5	13.15	0.6209	1.947	0.9607
ZOI46	SS.SMx.CMx	67	25	20.47	0.7736	3.253	0.9888
ZOI47	SS.SCS.CCS	59	14	21.96	0.7013	2.86	0.9836
ZOI48	SS.SMx.CMx	64	23	20.13	0.8017	3.334	0.9986
ZOI50	SS.SCS.CCS	52	10	22.17	0.5321	2.103	0.8507
22ENV30	SS.SMx.CMx	23	209	4.118	0.721	2.261	0.8556
22ENV32	SS.SMx.CMx	25	184	4.602	0.7849	2.526	0.8934
22ENV33	SS.SMx.CMx	21	205	3.757	0.7488	2.28	0.8594
22ENV34	SS.SMx.CMx	16	161	2.952	0.7003	1.942	0.802
22ENV36	SS.SMx.CMx	21	159	3.946	0.6939	2.112	0.8262
22ENV37	SS.SMx.CMx	21	127	4.129	0.7053	2.147	0.8195
22ENV38	SS.SMx.CMx	18	92	3.76	0.8436	2.438	0.8817

E.2. Epifaunal univariate analysis results (Mona Offshore Cable Corridor)

S = number of species; N = abundance; d = Margalef's index of Richness; J' = Pielou's Evenness index; H' = Shannon-Wiener Diversity index; I = Simpson's index of Dominance.

Station	Preliminary Infaunal Biotope	S	N	d	J'	H'	I
OCC52	SS.SMx.CMx	22	179	4.048	0.7295	2.255	0.8544
OCC53	SS.SMx.CMx	31	164	5.883	0.7921	2.72	0.9052
OCC54	SS.SMx.CMx	28	181	5.194	0.7873	2.624	0.8972
OCC55	SS.SMx.CMx	13	86	2.694	0.7432	1.906	0.8161
OCC56	SS.SMx.CMx	16	107	3.21	0.8015	2.222	0.8672
OCC57	SS.SMx.CMx	23	127	4.542	0.7596	2.382	0.8714
OCC58	SS.SMx.CMx	20	58	4.679	0.9042	2.709	0.9316
OCC59	SS.SMx.CMx	31	187	5.735	0.8551	2.936	0.9334
OCC60	SS.SMx.CMx	17	83	3.621	0.822	2.329	0.8801
OCC61	SS.SMx.CMx	17	90	3.556	0.8564	2.426	0.8966
OCC62	SS.SSa.CFiSa	8	14	2.652	0.9358	1.946	0.9011
OCC63	SS.SSa.CFiSa	4	6	1.674	0.8962	1.242	0.8
OCC64	SS.SSa.CFiSa	3	4	1.443	0.9464	1.04	0.8333
OCC65	SS.SMx.CMx	1	1	N/A	N/A	0	N/A
OCC133	SS.SMx.IMx	0	0	N/A	N/A	0	N/A
OCC134	SS.SSa.IMuSa	0	0	N/A	N/A	0	N/A
OCC135	SS.SMx.CMx	7	13	2.339	0.8904	1.733	0.8462
OCC136	SS.SMx.CMx	5	5	2.485	1	1.609	1
OCC137	SS.SSa.IMuSa	1	2	0	N/A	0	0
OCC138	SS.SSa.IMuSa	0	0	N/A	N/A	0	N/A
OCC139	SS.SMx.CMx	8	14	2.652	0.8882	1.847	0.8681

Station	Preliminary Infaunal Biotope	S	N	d	J'	H'	I
OCC140	SS.SMx.CMx	3	5	1.243	0.9602	1.055	0.8
OCC141	SS.SMx.CMx	5	12	1.61	0.912	1.468	0.803
OCC142	SS.SSa.CFiSa	0	0	N/A	N/A	0	N/A
OCC143	SS.SMx.CMx	1	1	N/A	N/A	0	N/A
OCC144	SS.SMx.CMx	10	38	2.474	0.8181	1.884	0.8193
OCC145	SS.SSa.CFiSa	1	1	N/A	N/A	0	N/A
OCC146	SS.SCS.CCS	2	2	1.443	1	0.6931	1
OCC147	SS.SMx.CMx	6	31	1.456	0.7278	1.304	0.6753
OCC148	SS.SMx.CMx	8	56	1.739	0.5505	1.145	0.5357
OCC149	SS.SMx.CMx	9	34	2.269	0.7379	1.621	0.7558
OCC150	SS.SMx.CMx	2	3	0.9102	0.9183	0.6365	0.6667
OCC151	SS.SMx.CMx	4	5	1.864	0.961	1.332	0.9
OCC152	SS.SMx.CMx	4	5	1.864	0.961	1.332	0.9
OCC153	SS.SMx.CMx	6	46	1.306	0.6385	1.144	0.5681

Appendix F Sediment contamination results

F.1. Concentration of PCBs recorded in sediments within the Mona benthic subtidal and intertidal ecology study area (Part 1)

Description (PCBs)	28	52	101	118	138	153	180	Sum of ICES 7
Cefas Action Level 1 (mg/kg)								**0.01**
Cefas Action Level 2 (mg/kg)								**1**
2021 Survey								
ENV36	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV37	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV38	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV39	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV40	<0.00008	<0.00008	0.0001	0.0001	0.00018	0.00018	0.00011	0.00068
ENV47	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV50	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV51	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV52	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV57	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV59	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV63	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV65	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV71	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
2022 Survey								
Mona Array Area								

Description (PCBs)	28	52	101	118	138	153	180	Sum of ICES 7
ENV67	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
22ENV36	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
22ENV38	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
22ENV50	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
22ENV59	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
Mona ZoI								
ZOI39	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	0.00011	<0.00008	NQ
ZOI40	<0.00008	0.00012	0.00021	0.00022	0.00022	0.00023	0.00018	0.00115
ZOI43	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ZOI45	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ZOI46	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
Mona Offshore Cable Corridor								
OCC53	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC54	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC56	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	0.00062
OCC58	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC60	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC61	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC62	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC65	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC133	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC135	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC137	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ

Description (PCBs)	28	52	101	118	138	153	180	Sum of ICES 7
OCC139	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC141	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC143	<0.00008	<0.00008	0.0001	0.00032	0.0002	0.00026	0.00022	0.00132
OCC145	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC147	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC149	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC151	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ

F.2. Concentration of PCBs recorded in sediments within the Mona benthic subtidal and intertidal ecology study area (Part 2)

Description (PCBs)	18	31	44	47	49	66	105	110	128	141	149	151	156
2021 Survey													
ENV36	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
ENV37	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
ENV38	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
ENV39	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
ENV40	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	0.00016	0.00019	0.00012	<0.00008	<0.00008	<0.00008	0.0001	0.00016
ENV47	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
ENV50	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
ENV51	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
ENV52	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
ENV57	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
ENV59	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
ENV63	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
ENV65	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
ENV71	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
2022 Survey													
Mona Array Area													
ENV67	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
22ENV36	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
22ENV38	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

Description (PCBs)	18	31	44	47	49	66	105	110	128	141	149	151	156
22ENV50	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
22ENV59	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
Mona ZoI													
ZOI39	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	0.00012	<0.00008	<0.00008	<0.00008	<0.00008	0.00008	<0.00008	<0.00008
ZOI40	<0.00008	<0.00008	0.00011	0.00011	0.0001	0.00022	0.00026	0.00021	0.00019	0.00028	0.00016	0.00016	0.00023
ZOI43	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
ZOI45	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
ZOI46	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
Mona Offshore Cable Corridor													
OCC53	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
OCC54	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
OCC56	<0.00008	<0.00008	<0.00008	0.00062	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
OCC58	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
OCC60	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
OCC61	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
OCC62	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
OCC65	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
OCC133	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
OCC135	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
OCC137	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
OCC139	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
OCC141	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
OCC143	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	0.00011	0.00033	0.00024	0.00025	0.00023	0.00023	0.00019	0.00037

Description (PCBs)	18	31	44	47	49	66	105	110	128	141	149	151	156
OCC145	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
OCC147	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
OCC149	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
OCC151	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

F.3. Concentration of PCBs recorded in sediments within the Mona benthic subtidal and intertidal ecology study area (Part 3)

Description (PCBs)	158	170	183	187	194	Total PCBs
Cefas Action Level 1 (mg/kg)						**0.02**
Cefas Action Level 2 (mg/kg)						**-**
2021 Survey						
ENV36	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV37	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV38	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV39	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV40	0.00013	0.00012	<0.00008	<0.00008	<0.00008	0.00196
ENV47	<0.00008	<0.00008	<0.00008	0.00019	0.00011	NQ
ENV50	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV51	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV52	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV57	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV59	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV63	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV65	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ENV71	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
2022 Survey						
Mona Array Area						
ENV67	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
22ENV36	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ

Description (PCBs)	158	170	183	187	194	Total PCBs
22ENV38	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
22ENV50	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
22ENV59	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
Mona ZoI						
ZOI39	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	0.00039
ZOI40	0.00017	0.00017	0.00019	0.00015	0.00017	0.00410
ZOI43	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ZOI45	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
ZOI46	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
Mona Offshore Cable Corridor						
OCC53	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC54	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC56	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	0.00062
OCC58	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC60	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC61	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC62	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC65	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC133	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC135	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC137	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC139	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC141	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ

Description (PCBs)	158	170	183	187	194	Total PCBs
OCC143	0.00029	0.00025	0.00023	0.00025	0.00028	0.00435
OCC145	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC147	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC149	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ
OCC151	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	NQ

F.4. Concentration of PAHs recorded in sediments within the Mona benthic subtidal and intertidal ecology study area (Part 1)

Description (PAH)	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[e]pyrene	Benzo[ghi]perylene	Benzo[k]fluoranthene	C1-naphthalenes	C1-phenanthrene	C2-naphthalenes
Canadian TEL (ug/kg)	**6.71**	**5.87**	**46.9**	**74.8**	**88.8**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
Canadian PEL (ug/kg)	**88.9**	**128**	**245**	**693**	**763**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
2021 Survey												
ENV36	<1	<1	<1	3	4	8	6	6	2	8	8	7
ENV37	<1	<1	<1	3	4	7	6	6	3	7	6	5
ENV38	<1	<1	<1	4	5	10	8	8	4	8	8	7
ENV39	<1	<1	<1	4	6	10	8	8	3	8	8	7
ENV40	<1	<1	1	6	8	14	12	12	6	11	12	10
ENV47	<1	<1	<1	2	2	5	4	4	2	4	4	3
ENV50	<1	<1	<1	3	4	10	7	7	3	8	9	7
ENV51	<1	<1	<1	4	5	10	8	8	4	8	9	7
ENV52	<1	<1	<1	4	5	10	8	8	4	7	7	6
ENV57	<1	<1	<1	2	1	3	2	3	<1	5	14	9

Description (PAH)	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[e]pyrene	Benzo[ghi]perylene	Benzo[k]fluoranthene	C1-naphthalenes	C1-phenanthrene	C2-naphthalenes
ENV59	<1	<1	<1	2	2	4	3	3	2	3	4	3
ENV63	<1	<1	<1	2	3	5	4	4	2	10	6	8
ENV65	<1	<1	<1	2	3	6	4	4	3	6	6	5
ENV71	<1	<1	<1	2	2	4	4	4	2	5	5	4
2022 Survey												
Mona Array Area												
ENV67	<1	<1	<1	<1	<1	1.52	1.08	1.27	<1	1.4	1.64	1.65
22ENV36	<1	<1	1.04	3.51	4.41	9.1	7.45	7.36	2.72	10.9	9.83	11.3
22ENV38	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
22ENV50	<1	<1	<1	3	5.05	8.81	8.31	8.02	3.27	8.31	9.17	8.59
22ENV59	<1	<1	<1	3.2	4.36	7.63	6.66	6.53	3.41	7.33	7.92	7.74
Mona ZoI												
ZOI39	<1	<1	1.04	3.65	5.33	8.4	7.74	7.63	4.21	7.93	8.15	8.72
ZOI40	<1	<1	1.43	5.41	7.85	12.7	11.8	11.2	5.35	12.1	12.1	12.6
ZOI43	<1	<1	<1	3.01	3.95	8.25	6.35	6.52	2.83	7.44	7.34	7.76
ZOI45	<1	<1	<1	1.47	1.7	4.21	2.99	3.37	1.65	5.54	5.16	5.44
ZOI46	<1	<1	<1	<1	<1	1.15	<1	1.01	<1	1.24	1.29	1.51

Description (PAH)	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[e]pyrene	Benzo[ghi]perylene	Benzo[k]fluoranthene	C1-naphthalenes	C1-phenanthrene	C2-naphthalenes
Mona Offshore Cable Corridor												
OCC53	<1	<1	<1	3.48	4.12	7.57	6.08	6.35	3.77	10.6	10.7	12.6
OCC54	<1	<1	1.05	3.64	4.87	8.92	7.37	7.83	4.12	9.03	8.96	9.43
OCC56	<1	<1	<1	2.04	2.57	4.74	3.88	4.35	2.21	6.17	5.7	6.26
OCC58	<1	<1	<1	2.61	3.22	6.24	4.81	5.4	2.81	7.2	6.7	7.12
OCC60	<1	<1	<1	2.06	2.68	5.18	3.92	4.47	2.26	5.71	5.26	5.74
OCC61	<1	<1	<1	1.16	1.27	2.05	2.41	2.81	1.14	3.27	3.85	3.55
OCC62	<1	<1	<1	<1	1.03	1.56	1.22	1.59	<1	2.13	2.44	2.98
OCC65	<1	<1	<1	1.32	1.37	3.67	3.13	4.66	1.37	12.4	12.7	17
OCC133	<1	<1	1.05	3.3	3.6	3.63	2.64	2.88	3.56	2.42	6.08	2.86
OCC135	<1	<1	<1	<1	1.31	1.88	1.81	1.68	1.74	2.24	1.99	2.74
OCC137	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.88
OCC139	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
OCC141	<1	<1	<1	<1	<1	1.21	1.02	1.03	<1	1.34	1.77	1.44
OCC143	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
OCC145	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.07	<1
OCC147	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

Description (PAH)	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[e]pyrene	Benzo[ghi]perylene	Benzo[k]fluoranthene	C1-naphthalenes	C1-phenanthrene	C2-naphthalenes
OCC149	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
OCC151	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

F.5. Concentration of PAHs recorded in sediments within the Mona benthic subtidal and intertidal ecology study area (Part 2)

Description (PAH)	C3-naphthalenes	Chrysene	Dibenzo[ah]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Perylene	Phenanthrene	Pyrene
Canadian TEL (ug/kg)	**N/A**	**108**	**6.22**	**113**	**21.2**	**N/A**	**34.6**	**N/A**	**86.7**	**153**
Canadian PEL (ug/kg)	**N/A**	**846**	**135**	**1494**	**144**	**N/A**	**391**	**N/A**	**544**	**1398**
2021 Survey										
ENV36	6	5	1	5	1	7	3	1	6	5
ENV37	4	4	1	5	1	7	3	1	5	4
ENV38	5	5	2	7	1	9	3	2	6	6
ENV39	6	6	2	7	1	10	3	2	6	6
ENV40	9	8	3	10	2	14	5	3	9	10
ENV47	3	3	<1	3	<1	4	2	<1	3	3
ENV50	6	6	2	6	2	8	3	2	7	5
ENV51	6	5	2	7	1	9	3	2	6	6
ENV52	5	5	2	6	1	9	3	1	5	6
ENV57	11	3	<1	3	<1	2	1	<1	8	3

Description (PAH)	C3-naphthalenes	Chrysene	Dibenzo[ah]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Perylene	Phenanthrene	Pyrene
ENV59	3	3	<1	3	<1	3	1	<1	3	3
ENV63	6	3	<1	3	<1	5	3	<1	4	3
ENV65	5	3	<1	4	<1	5	2	<1	4	3
ENV71	4	3	<1	3	<1	4	2	<1	3	3
2022 Survey										
Mona Array Area										
ENV67	1.69	<1	<1	1.05	<1	1.08	<1	<1	1.09	1.02
22ENV036	9.08	5.7	1.71	5.55	1.51	8.35	4.5	1.69	7.18	4.9
22ENV038	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
22ENV50	7.55	4.47	1.8	4.73	1.44	7.64	3.42	1.41	6.66	4.05
22ENV59	6.45	4.62	1.5	5.2	1.18	7.29	2.93	1.62	6.07	4.69
Mona ZoI										
ZOI39	6.63	4.73	1.58	6.05	1.23	8.26	3.19	1.9	6.24	5.62
ZOI40	9.76	6.96	2.48	8.57	1.91	13.7	4.45	2.71	9.17	7.93
ZOI43	5.8	4.38	1.38	5.1	1.26	7.25	3.86	1.62	6.15	4.39
ZOI45	3.54	2.46	<1	2.35	<1	3.22	1.9	<1	3.81	2.03
ZOI46	1.07	<1	<1	<1	<1	<1	<1	<1	1.09	<1

Description (PAH)	C3-naphthalenes	Chrysene	Dibenzo[ah]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Perylene	Phenanthrene	Pyrene
Mona Offshore Cable Corridor										
OCC53	10.1	4.67	1.18	5.45	1.36	6.52	3.6	1.26	8.39	4.89
OCC54	6.99	5.03	1.6	6.07	1.5	7.94	3.67	1.89	6.68	5.39
OCC56	4.28	3.01	<1	3.39	<1	3.94	2.43	1.17	4.38	2.9
OCC58	5.73	3.47	<1	4.18	1.04	4.92	2.54	1.2	4.95	3.77
OCC60	4.09	2.96	<1	3.28	<1	4.17	2.25	1	3.87	2.92
OCC61	2.96	1.77	<1	1.92	<1	1.52	1.43	<1	2.65	1.78
OCC62	2.7	<1	<1	1.6	<1	1.24	<1	<1	2	1.41
OCC65	13.4	3.21	<1	2.23	1.34	1.23	2.06	4.94	8.13	2.7
OCC133	3.04	4.37	<1	7.68	<1	2.71	<1	<1	6.47	7
OCC135	1.76	1.57	<1	1.84	<1	1.77	<1	<1	1.68	1.74
OCC137	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
OCC139	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
OCC141	1.56	1.12	<1	1.44	<1	<1	<1	<1	1.33	1.59
OCC143	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
OCC145	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
OCC147	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

Description (PAH)	C3-naphthalenes	Chrysene	Dibenzo[ah]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Perylene	Phenanthrene	Pyrene
OCC149	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
OCC151	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

Appendix G Intertidal biotopes

G.1. Mona landfall – list of biotopes in the survey area.

Shore Position	Biotope/Phase 1 Code	Biotope Name	JNCC Biotope Description	Biotope Description at the Mona Landfall
Upper shore	LR.FLR.Lic.Ver	*Verrucaria maura* on littoral fringe rock	Bedrock or stable boulders and cobbles in the littoral fringe which is covered by the black lichen *Verrucaria maura*. This lichen typically covers the entire rock surface giving a distinct black band in the upper littoral fringe.	An extensive covering of *Verrucaria maura* present on sea defence boulders at the top of the beach in the central section of the survey area.
Upper shore	LS.LCS.Sh.BarSh	Barren littoral shingle	Shingle or gravel shores, typically with sediment particle size ranging from 4 - 256 mm, sometimes with some coarse sand mixed in. This biotope is normally only found on exposed open coasts in fully marine conditions. Such shores tend to support virtually no macrofauna in their very mobile and freely draining substratum. The few individuals that may be found are those washed into the habitat by the ebbing tide, including the occasional amphipod or small polychaete.	Long narrow shingle bank spanning the upper shore underneath sea defence structures. Dominated by cobbles with no infaunal invertebrates recorded.
Upper shore	LR.LLR.F.Fspi	*Fucus spiralis* on sheltered upper eulittoral rock	Sheltered upper eulittoral bedrock is typically characterised by a band of the spiral wrack *Fucus spiralis* overlying the black lichen *Verrucaria maura*. Underneath the fronds of *F. spiralis* is a community consisting of the limpet *Patella vulgata*, the winkles *Littorina saxatilis* and *Littorina littorea* and the barnacle *Semibalanus balanoides*. During the summer months the ephemeral green seaweed *Ulva intestinalis* can be common.	Two small patches on cobbles in the upper shore at the western end of the site. *Fucus spiralis* occurred frequently with abundant *Semibalanus balanoides* and *Littorina littorea*. Other species present included *Ulva intestinalis*, *Phorcus lineatus* and *Austrominius modestus*.
Mid shore	LR.HLR.MusB.Sem.LitX	*Semibalanus balanoides* and *Littorina spp*. on exposed to moderately exposed eulittoral boulders and cobbles	Large patches of boulders, cobbles and pebbles in the eulittoral zone on exposed to moderately exposed shores colonised by the barnacle *Semibalanus balanoides* and, on larger rocks, the limpet *Patella vulgata*. The winkles *Littorina littorea* and *Littorina saxatilis* and the whelk *Nucella lapillus* are typically found in high numbers on and around cobbles and smaller boulders, Ephemeral green seaweeds such as *Ulva intestinalis* may cover cobbles and boulders. *Steromphala cineraria* and *Steromphala umbilicalis* can, on more sheltered shores, be found among the seaweeds or underneath the boulders. The barnacle *Austrominius modestus* is present on some shores.	This biotope occurred on strips of cobbles along the upper mid shore and was characterised by large populations of *Semibalanus balanoides* and *Littorina littorea.* Associates included the green seaweed *Ulva intestinalis* and gastropod molluscs *Steromphala cineraria* and *Austrominius modestus.* A variant of this biotope with low numbers of *L. littorea* occurred on the outer surfaces of groynes.
Mid shore	LR.HLR.MusB.Sem	*Semibalanus balanoides*	Exposed to moderately exposed mid to upper eulittoral bedrock and large boulders characterised by dense barnacles *Semibalanus balanoides* and	This biotope occurred on the middle shore in the western half of the survey area within

Shore Position	Biotope/Phase 1 Code	Biotope Name	JNCC Biotope Description	Biotope Description at the Mona Landfall
		on exposed to moderately exposed or vertical sheltered eulittoral rock	the limpet *Patella vulgata*. The community has a relatively low diversity of species though occasional cracks and crevices in the rock can provide a refuge for small individuals of the mussel *Mytilus edulis*, the winkle *Littorina saxatilis* and the whelk *Nucella lapillus*	large interstitial spaces between groyne boulders and between groyne boulders and wood. *Semibalanus balanoides* was the dominant species with occasional Actinia equina and the gastropod molluscs *Patella vulgata* and *Nucella lapillus.*
Mid shore	LR.FLR.Eph.UlvPor	*Porphyra purpurea* and *Ulva spp*. on sand-scoured mid or lower eulittoral rock	Exposed and moderately exposed mid-shore bedrock and boulders occurring adjacent to areas of sand which significantly affects the rock. As a consequence of sand-abrasion, wracks such as *Fucus vesiculosus* or *Fucus spiralis* are scarce and the community is typically dominated by ephemeral red or green seaweeds, particularly the foliose red seaweed *Porphyra purpurea* and green seaweeds such as *Ulva spp*.	This biotope occurred at the western end of the site on mixed sediments and was dominated by the red seaweed *Porphyra purpurea* and the green seaweed *Ulva intestinalis.*
Mid shore	LS.LBR.Sab.Salv	*Sabellaria alveolata* reefs on sand-abraded eulittoral rock	Exposed to moderately exposed bedrock and boulders in the eastern basin of the Irish Sea characterised by reefs of the polychaete *Sabellaria alveolata*. The sand based tubes formed by *S. alveolata* form large reef-like hummocks, which serve to stabilise the boulders and cobbles. Other species in this biotope include the barnacles *Semibalanus balanoides* and *Austrominius modestus* and the limpet *Patella vulgata*, the winkle *Littorina littorea*, the mussel *Mytilus edulis* and the whelk *Nucella lapillus*. The anemone *Actinia equina* can be present in cracks and crevices on the reef. Low abundance of seaweeds tend to occur in areas of eroded reef.	An extensive *Sabellaria alveolata* reef occurring to the west of the survey area over boulders and cobbles. Pools created by the reef contained the gastropod molluscs *Patella vulgata*, *Nucella lapillus*, *Steromphala umbilicalis* and *Steromphala cineraria* as well as the sea anemones *Actinia equina* and *Sagartia troglodytes.*
Lower shore	LS.LSa.MuSa.Lan	*Lanice conchilega* in littoral sand	This biotope usually occurs on flats of medium fine sand and muddy sand, most often on the lower shore but sometimes also on waterlogged mid shores. Lan can also occur on the lower part of predominantly rocky or boulder shores, where patches of sand or muddy sand occur between scattered boulders, cobbles and pebbles. Conditions may be tide-swept, and the sediment may be mobile, but the biotope usually occurs in areas sheltered from strong wave action. The sediment supports dense populations of the sand mason *Lanice conchilega*.	Populations of sand mason *Lanice conchilega* occurred across the lower shore in and on a variety of sediments. Moderate populations were accompanied by lower densities of lugworms *Arenicola sp*. while very dense populations crowded out these potential associates.

Shore Position	Biotope/Phase 1 Code	Biotope Name	JNCC Biotope Description	Biotope Description at the Mona Landfall
Lower shore	CR.MCR.SfR.Pid	Piddocks with a sparse associated fauna in sublittoral very soft chalk or clay	This biotope occurs on circalittoral soft rock, such as soft chalk or clay, most often in moderately exposed tide-swept conditions. As soft chalk and firm clay are often too soft for sessile filter-feeding animals to attach and thrive in large numbers, an extremely impoverished epifauna results on upward-facing surfaces, although vertical faces may be somewhat richer. The rock is sufficiently soft to be bored by bivalves. Species vary with location, but *Pholas dactylus* is the most widespread borer and may be abundant.	A bed of the piddock *Barnea candida* occurred in soft clay in the eastern half of the survey area.
Lower shore	LS.LSa.MuSa.MacAre	*Macoma balthica* and *Arenicola marina* in littoral muddy sand	Muddy sand or fine sand, often occurring as extensive intertidal flats both on open coasts and in marine inlets. The sediment is often compacted, with a rippled surface, areas of standing water, and generally remains water-saturated during low water. An anoxic layer is usually present within 5cm of the sediment surface and is often visible in worm casts. The species assemblage is characterised by the lugworm *Arenicola marina* and the Baltic tellin *Macoma balthica*.	Extensive areas of the middle and lower shore supported this biotope. *Arenicola marina* was abundant with *Arenicola defodiens* occasionally present at the lower shore. Associate species included *Scolelepis foliosa*, *Pygospio elegans*, *Lanice conchilega*, *Macoma balthica* and *Cerastoderma edule.* In fine and muddy sand where an anoxic layer was visible in worm casts.

Appendix H Species scientific, common names and biotopes

H.1. Latin and common names

The below table contains all common names for the latin species which have been referred to in the main text of this benthic subtidal and intertidal ecology technical report.

Scientific name	Common name
Abra alba	White furrow shell
Abra nitida	Glossy furrow shell
Acanthocardia aculeata	Spiny cockle
Acanthocardia echinata	European prickly cockle
Acteon tornatilis	lathe acteon
Actinia equina	Beadlet anenome
Adamsia palliata	Cloak anenome
Alcyonidium digitatum	Deadman’s fingers anenome
Ammophila arenaria	Marram grass
Ampharete lindstroemi	No known common name
Amphiura chiajei	Heart urchin
Amphiura filiformis	Bristle worm
Aonides paucibranchiata	No known common name
Arctica islandica	Ocean quahog
Arenicola defodiens	Black lug worm
Arenicola marina	Lug worm
Asarte sulcata	Furrowed asarte
Ascophyllum nodosum	Knotted wrack
Asterias rubens	Common starfish
Asterina gibbosa	Cushion star
Austrominius modestus	Modest barnacle
Astropecten irregularis	Sand star
Balanus crenatus	Wrinkled barnacle
Barnea candida	White piddock
Bathyporeia guilliamsoniana	No known common name
Bathyporeia pelagica	Sand digger shrimp
Bathyporeia pilosa	Sand digger shrimp
Branchiostoma lanceolatum	Common lancet
Brissopsis lyrifera	Heart urchin

Scientific name	Common name
Cancer pagurus	Brown crab
Carcinus maenas	Green shore crab
Cerastoderma edule	Common cockle
Cerianthus lloydii	North Sea tube anenome
Chamelea gallina	Striped venus clam
Chondrus crispus	Irish moss
Corallina officinalis	Coral weed
Corophium arenarium	No known common name
Corymorpha nutans	Nodding sea fir
Dendrodoa grossularia	Baked bean ascidian
Donax vittatus	Banded wedge shell
Dosinia lupinus	Smooth artemis
Dumontia contorta	No known common name
Echinocardium cordatum	Sea potato
Echinocyamus pusillus	Pea urchin
Edwardsia timida	Worm anenome
Elminius modestus	Common rock barnacle
Ennucula tenuis	Smooth nutclam
Ensis magnus	Razor clam
Ensis siliqua	Pod razor
Euspira catena	Large necklace shell
Euspira nitida	Common necklace shell
Eurydice pulchra	Speckled sea louse
Fabulina fabula	Bean-like tellin
Fucus serratus	Toothed wrack
Fucus spiralis	Spiral wrack
Fucus vesiculosus	Bladder wrack
Glauco-Puccinellietalia maritimae	Atlantic salt meadow
Glycera lapidum	No known common name
Glycera oxycephala	Bloodworms
Glycimeris	Bittersweet clam
Golfingia (Golfingia) elongata	No known common name
Halidrys siliquosa	Sea-oak
Hediste diversicolor	Rag worm
Hymeniacidon perleve	Crumb-of-bread sponge
Kurtiella bidentata	Two-toothed Mantagu shell

Scientific name	Common name
Laevicardium crissum	Norwegian egg cockle
Lagis koreni	Trumpet worm
Laminaria digitata	Oar weed
Laminaria hyperborea	Cuvie
Lanice conchilega	Sand mason worm
Laonice bahusiensis	No known common name
Leptochiton asellus	No known common name
Limaria hians	Flame shell
Lipophrys pholis	Common blenny
Littorina littorea	Common periwinkle
Loripes lucinalis	No known common name
Lutraria oblonga	Oblong otter shell
Leymus arenarius	Lyme grass
Macoma balthica	Baltic tellin
Macomangulus tenuis	Thin tellin
Mactra stultorum	Edible salt water clam
Mactrotoma fragilis	No known common name
Magelona johnstoni	Shovelhead worm
Magelona mirabilis	Bristle worm
Mastocarpus stellatus	False irish moss
Metridium	Plumose anemones
Modiolus modiolus	Northern horse mussel
Mytilus edulis	Common blue mussel
Nephtys cirrosa	White catworm
Nucella lapillus	Dog whelk
Nucula nitidosa	Shiny nut clam
Obelia bidentata	Double toothed sea fir
Ophiocomina nigra	Black brittlestar
Ophiothrix fragilis	Common brittlestar
Ophiura albida	Serpent's table brittle star
Ostrea edulis	European flat oyster
Owenia fusiformis	Tube worm
Pagurus prideaux	Prideaux’s hermit crab
Pagurus bernhardus	Common hermit crab
Paradoneis lyra	No known common name
Patella vulgata	Common limpet

Scientific name	Common name
Pectinidae	Scallops
Pennatula phosphorea	Phosphorescent sea pen
Pharus legumen	Razor shell
Phascolion (Phascolion) strombus strombus	Peanut worm
Phaxas pellucidus	Transparent razor shell
Petromyzon marinus	Sea lamprey
Phorcus lineatus	Lined top shell
Pomacea canaliculata	Golden apple snail
Pomatoceros triqueter	Keel worm
Porcellana platycheles	Broad clawed porcelain crab
Porphyra purpurea	Purple laver
Pygospio elegans	No known common name
Sabellaria alveolata	Honeycomb worm
Sabellaria spinulosa	Ross worm
Sagartia troglodytes	Cave-dwelling anenome
Salicornia	Glasswort
Scalibregma inflatum	T-headed worm
Scolelepis foliosa	No known common name
Scolelepis squamata	No known common name
Scoloplos armiger	Armoured bristle worm
Scrobicularia plana	Peppery furrow shell
Semibalanus balanoides	Common rock barnacle
Serpulidae	Tubeworms
Spatangus purpureus	Purple heart urchin
Spio armata	No known common name
Spio martinensis	No known common name
Spirobranchus triqueter	Tube worm
Stauromedusae	Stalked jellyfish
Steromphala cineraria	Grey top shell
Steromphala umbilicalis	Flat top shell
Thia scutellata	Thumbnail crab
Ulva intestinalis	Sea lettuce
Urticina feline	Dahlia anemone
Verrucaria maura	Tar lichen
Zostera marina	Eel grass

H.2. Biotope code

The below table includes all the biotope codes referred to in the main body of the text as well as their full biotope names.

Biotope Code	Biotope full name
CR.MCR	Moderate energy circalittoral rock
CR.MCR.CSab.Sspi	*Sabellaria spinulosa* encrusted circalittoral rock
CR.MCR.EcCr.FaAlCr	Faunal and algal crusts on exposed to moderately wave-exposed circalittoral rock
CR.MCR.SfR.Pid	Piddocks with a sparse associated fauna in sublittoral very soft chalk or clay
CR.HCR.XFa.ByErSp	Bryozoan turf and erect sponges on tide-swept circalittoral rock
CR.HCR.XFa.SpNemAdia	Sparse sponges, *Nemertesia* spp. and *Alcyonidium diaphanum* on circalittoral mixed substrata
ELR.MB.Bpat	Barnacles and *Patella* spp. on exposed or moderately exposed, or vertical sheltered eulittoral rock
ELR.MB.BPat.Sem	*Semibalanus balanoides*, *Patella vulgata* and Littorina spp. on exposed to moderately exposed or vertical sheltered eulittoral rock
ELR.MB.MytB	*Mytilus edulis* and barnacles on very exposed eulittoral rock
LGS.S.AEur	*Eurydice pulchra* in littoral mobile sand
LGS.S.AP.P	Amphipods and *Scolelepis* spp. in littoral medium-fine sand
LGS.S.Lan	*Lanice conchilega* in littoral sand
LGS.Sh.BarSh	Barren littoral shingle
LR.L.YG	Yellow and grey lichens on supralittoral rock
LR.R	Littoral rock
LR.FLR.Eph.BLitX	Barnacles and *Littorina* sp. on unstable eulittoral mixed substrata
LR.FLR.Eph.EphX	Ephemeral green and red seaweeds on variable salinity and/or disturbed eulittoral mixed substrata
LR.FLR.Eph.UlvPor	*Porphyra purpurea* and *Ulva* sp. on sand-scoured mid or lower eulittoral rock
LR.FLR.Lic.Ver	*Verrucaria maura* on littoral fringe rock
LR.HLR.MusB.Sem	*Semibalanus balanoides* on exposed to moderately exposed or vertical sheltered eulittoral rock
LR.HLR.MusB.Sem.LitX	*Semibalanus balanoides* and *Littorina* spp. on exposed to moderately exposed eulittoral boulders and cobbles
LR.LLR.F.Fspi	*Fucus spiralis* on sheltered upper eulittoral rock
LR.Rkp.H	Hydroids, ephemeral seaweeds and *Littorina littorea* in shallow eulittoral mixed substrata pools
LS.LBR.LMus.Myt.Mx	*Mytilus edulis* beds on littoral mixed substrata
LS.LBR.Sab.Salv	*Sabellaria alveolata* reefs on sand-abraded eulittoral rock
LS.LCS.Sh.BarSh	Barren littoral shingle
LS.LSa.FiSa	Polychaete/amphipod-dominated fine sand shores
LS.LSa.MoSa	Barren or amphipod-dominated mobile sand shores
LS.LSa.MuSa	Polychaete/bivalve-dominated muddy sand shores

Biotope Code	Biotope full name
LS.LSa.MuSa.Lan	*Lanice conchilega* in littoral sand
LS.LSa.MuSa.MacAre	*Macoma balthica* and *Arenicola marina* in littoral muddy sand
LS.LSa.St.Tal	Talitrids on the upper shore and strand-line
MLR.Eph.Ent	*Ulva* spp. on freshwater-influenced and/or unstable upper eulittoral rock
MLR.Eph.EntPor	*Porphyra purpurea* and *Ulva* spp. on sand-scoured mid or lower eulittoral rock
SLR.FX.BLlit	Barnacles and *Littorina* spp. on unstable eulittoral mixed substrata
SS.SBR.PoR.SspiMx	*Sabellaria spinulosa* on stable circalittoral mixed sediment
SS.SBR.Smus	Sublittoral mussel beds (on sublittoral sediment)
SS.SCS.CCS	Circalittoral coarse sediment
SS.SCS.CCS.Blan	*Branchiostoma lanceolatum* in circalittoral coarse sand with shell gravel
SS.SCS.ICS.MoeVen	*Moerella* sp. with venerid bivalves in infralittoral gravelly sand
SS.SCS.ICS.SLan	Dense *Lanice conchilega* and other polychaetes in tide-swept infralittoral sand and mixed gravelly sand
SS.SCS.OCS	Offshore circalittoral coarse sediment
SS.SCS.PomB	*Pomatoceros triqueter* with barnacles and bryozoan crusts on unstable circalittoral cobbles and pebbles
SS.SMu.CFiMu.BlyrAchi	*Brissopsis lyrifera* and *Amphiura chiajei* in circalittoral mud
SS.SMu.CSaMu	Circalittoral sandy mud
SS.SMu.CSaMu.AfilKurAnit	*Amphiura filiformis*, *Kurtiella bidentata* and *Abra nitida* in circalittoral sandy mud
SS.SMu.CSaMu.AfilMysAnit	*Amphiura filiformis*, *Mysella bidentata* and *Abra nitida* in circalittoral sandy mud
SS.SMu.CSaMu. LkorPpel	*Lagis koreni* and *Phaxas pellucidus* in circalittoral sandy mud
SS.SMu.CSaMu.ThyEten	*Thyasira sp.* and *Ennucula tenuis* in circalittoral sandy mud
SS.SMu.CSaMu.ThyNten	*Thyasira* spp. and *Ennucula tenuis* in circalittoral sandy mud
SLR.MX.MytX	*Mytilus edulis* beds on littoral mixed substrata
SS.SMx	Sublittoral mixed sediment
SS.SMx.IMx	Infralittoral mixed sediment
SS.SMx.CMx	Circalittoral mixed sediment
SS.SMx.CMx.ClloMx.Nem	*Cerianthus lloydii* with the *Nemertesia* spp. and other hydroids in circalittoral muddy mixed sediment
SS.SMx.CMx.FluHyd	*Flustra foliacea* and *Hydrallmania falcata* on tide-swept circalittoral mixed sediment
SS.SMx.CMx.KurThyMx	*Kurtiella bidentata* and *Thyasira* spp. in circalittoral muddy mixed sediment
SS.SMx.CMx.OphMx	*Ophiothrix fragilis* and/or *Ophiocomina nigra* brittlestar beds on sublittoral mixed sediment
SS.SMx.CMx.MysThyMx	Kurtiella bidentata and Thyasira spp. in circalittoral muddy mixed sediment
SS.SMx.OMx	Offshore circalittoral mixed sediment
SS.SMx.OMx.PoVen	Polychaete-rich deep Venus community in offshore mixed sediments
SS.SSa.CFiSa	Circalittoral fine sand

Biotope Code	Biotope full name
SS.SSa.CMuSa	Circalittoral muddy sand
SS.SSa.CMuSa.AalbNuc	*Abra alba* and *Nucula nitidosa* in circalittoral muddy sand or slightly mixed sediment
SS.SSa.IFiSa.NcirBat	*Nephtys cirrosa* and *Bathyporeia* spp. in infralittoral sand
SS.SSa.IMuSa.Ecor.Ens	*Echinocardium cordatum* and *Ensis* spp. in lower shore and shallow sublittoral slightly muddy fine sand
SS.SSa.IMuSa.FfabMag	*Fabulina fabula* and *Magelona mirabilis* with venerid bivalves and amphipods in infralittoral compacted fine muddy sand
SS.SMu.ISaMu.AmpPlor	*Ampelisca* spp., *Photis longicaudata* and other tube-building amphipods and polychaetes in infralittoral sandy mud

Appendix I Sediment Metabarcoding Results

I.1. Sediment Metabarcoding Results (2021 Survey)

I.1.1 Overview

I.1.1.1.1 Two samples were collected from 48 stations within the Mona Array Area with one being analysed in the laboratory and the second retained as a spare. During the site-specific surveys, samples were also collected from 35 stations within the Morgan Array Area.

I.1.2 Summary Statistics

I.1.2.1.1 A total of 2,211 operational taxonomic units (OTUs) were detected from the site specific surveys as detailed in Table I 1. Of the 2,211 detected OTUs (bacterial and infaunal), a greater percentage of infaunal OTUs were identified to species level (9%) compared to the bacterial OTUs (1%) possibly related to a larger pool of reference material for infaunal OTUs.

Table I 1: OTU Detections per Target and Percentage Successfully Classified

Target	Number of OTUs	Phylum (%)	Class (%)	Order (%)	Family (%)	Genus (%)	Species (%)
Bacteria	1582	72	53	31	21	6	1
Infauna	629	100	82	89	78	33	9

I.1.2.1.2 From the 1,582 bacterial OTUs detected in the sediment samples, 1315 (83%) were detected in the Morgan sample stations whilst 1352 (85%) were detected in the Mona sample stations. Bacteria OTUs were similar between both survey areas with 69% (1085) shared across both the Morgan benthic subtidal ecology study area and Mona benthic subtidal and intertidal ecology study area. In terms of all the bacterial OTUs, 17% (230) were unique to the Morgan benthic subtidal ecology study area while 20% (267) were unique to Mona benthic subtidal and intertidal ecology study area. A total of 35 bacterial OTUs (3%) were present in all Morgan sediment samples compared to 32 (2%) across the Mona samples. Generally, the proportion of bacterial OTUs occurring in a single sample only were similar between both survey areas with 27% of OTUs (n=355) in the Morgan sediment samples and 24% (n=326) in the Mona sediment samples. The relatively high numbers of widespread taxa and lone taxa across both the Morgan benthic subtidal ecology study area and Mona benthic subtidal and intertidal ecology study area suggested that the community has been subjected to relatively little disturbance.

I.1.2.1.3 Overall, 629 infaunal OTUs were detected across both the Morgan benthic subtidal ecology study area and Mona benthic subtidal and intertidal ecology study area with a higher percentage of faunal OTUs detected at the Mona benthic subtidal and intertidal ecology study area (73%; n=461) compared to the Morgan benthic subtidal ecology study area(71%; n=447). A total of 199 (45%) infaunal OTUs were present in a single sample across the Morgan samples, similar to the 198 (43%) infaunal OTUs across the Mona samples. However, in contrast to the bacterial data set no OTUs were detected in every sample. The absence of consistent community as well as the high proportion (>40%) of rare OTUs suggest the community heterogeneity across the survey area may have been under sampled for the infaunal size class. This may be improved by analysis of the second samples acquired at each station though it’s not certain that it will fill all community gaps.

I.1.2.1.4 The bacterial data sets identified 40 taxonomic groups based on class with the proportional contributions of these taxonomic groups to the overall structure of both the Morgan benthic subtidal ecology study area and Mona benthic subtidal and intertidal ecology study area detailed in Table I 2. The 'Other' category comprised OTUs which could not be identified to class.

I.1.2.1.5 The most abundant taxonomic group across both the Morgan benthic subtidal ecology study area and Mona benthic subtidal and intertidal ecology study area (n=599 and n=622) was the 'Other' which accounted for 45.6% and 46.0% of OTUs, respectively. The second most abundant taxonomic group was the Gammaproteobacteria class (n=239 and n=247 OTUs) and accounted for 18.2% and 18.3% of OTUs, respectively. As previously mentioned, Gammaproteobacteria dominance is likely given it is one of the richest classes within the bacterial phyla (Williams *et al.*, 2010). The relative dominance of 'Other' within the proportional contributions was partly due to the inability to determine these OTUs further than phylum.

Table I 2: Contribution of Gross Sediment Bacterial OTU Taxonomic Groups.

Group	Morgan Survey Area		Mona Survey Area	
	Abundance	Proportional Contribution	Abundance	Proportional Contribution
Acidobacteriae	45	3.4%	46	3.4%
Aminicenantia	4	0.3%	4	0.3%
Acidimicrobiia	3	0.2%	2	0.1%
Actinomycetia	28	2.1%	26	1.9%
Bacteroidia	80	6.1%	82	6.1%
Ignavibacteria	1	0.1%	2	0.1%
Rhodothermia	1	0.1%	1	0.1%
Bacteriovoracia	1	0.1%	1	0.1%
Campylobacteria	3	0.2%	3	0.2%
Anaerolineae	16	1.2%	20	1.5%
Dehalococcoidia	1	0.1%	2	0.1%
Cyanobacteriia	1	0.1%	1	0.1%
Vampirovibrionia	1	0.1%	1	0.1%
Deferribacteres	2	0.2%	1	0.1%
Deinococci	1	0.1%	1	0.1%
Babeliae	1	0.1%	0	0.0%
Desulfobacteria	3	0.2%	5	0.4%
Desulfobulbia	1	0.1%	2	0.1%
Desulfovibrionia	0	0.0%	1	0.1%
Desulfuromonadia	2	0.2%	2	0.1%
Syntrophobacteria	1	0.1%	1	0.1%
Chitinivibrionia	0	0.0%	1	0.1%
Clostridia	3	0.2%	2	0.1%

Group	Morgan Survey Area		Mona Survey Area	
	Abundance	Proportional Contribution	Abundance	Proportional Contribution
Fusobacteriia	1	0.1%	1	0.1%
Gemmatimonadetes	4	0.3%	4	0.3%
Moduliflexia	1	0.1%	0	0.0%
Myxococcia	0	0.0%	1	0.1%
Polyangia	4	0.3%	3	0.2%
Nitrospiria	14	1.1%	15	1.1%
Thermodesulfovibrionia	3	0.2%	4	0.3%
Gracilibacteria	1	0.1%	3	0.2%
Phycisphaerae	4	0.3%	5	0.4%
Planctomycetes	92	7.0%	93	6.9%
Alphaproteobacteria	105	8.0%	100	7.4%
Gammaproteobacteria	239	18.2%	247	18.3%
Spirochaetia	6	0.5%	9	0.7%
Sumerlaeia	0	0.0%	1	0.1%
Chlamydiia	1	0.1%	0	0.0%
Kiritimatiellae	9	0.7%	10	0.7%
Verrucomicrobiae	33	2.5%	27	2.0%
Other	599	45.6%	622	46.0%
Total	**1315**	**100%**	**1352**	**100%**

I.1.2.1.6 A total of 26 taxonomic groups based on class were identified from the sediment infaunal data sets with the proportional contributions of these taxonomic groups to the overall structure of both the Morgan benthic subtidal ecology study area and Mona benthic subtidal and intertidal ecology study area detailed in Table I 3. The 'Other' category comprised the OTUs which could not be identified to class.

I.1.2.1.7 *Adenophorea* (n=189 and n=175 OTUs) was the most abundant taxonomic group across both the Morgan benthic subtidal ecology study area and Mona benthic subtidal and intertidal ecology study area and accounted for 51.9% and 44.4% of OTUs, respectively. The second most abundant group across the Morgan benthic subtidal ecology study area was the 'Others group (n=83, 18.6%) while across the Mona benthic subtidal and intertidal ecology study area the second most abundant group was Hexanauplia (n=76, 19.3%). Four taxonomic groups were represented by a single OTU across the Morgan benthic subtidal ecology study area while five represented by a single OTU across the Mona benthic subtidal and intertidal ecology study area. One taxonomic group was unique to the Morgan data set (*Asteroidea*) whilst three were unique to the Mona data set (*Staurozoa*, *Polyplacophora*, *Hoplonemertea*).

Table I 3: Contribution of Gross Sediment Infaunal OTU Taxonomic Groups.

Group	Morgan Survey Area		Mona Survey Area	
	Abundance	Proportional Contribution	Abundance	Proportional Contribution
Clitellata	1	0.3%	2	0.5%
Polychaeta	53	14.6%	65	16.5%
Arachnida	6	1.6%	7	1.8%
Hexanauplia	58	15.9%	76	19.3%
Malacostraca	3	0.8%	4	1.0%
Ostracoda	4	1.1%	3	0.8%
Appendicularia	1	0.3%	1	0.3%
Ascidiacea	7	1.9%	6	1.5%
Anthozoa	4	1.1%	2	0.5%
Hydrozoa	7	1.9%	12	3.0%
Scyphozoa	1	0.3%	1	0.3%
Staurozoa	0	0.0%	1	0.3%
Asteroidea	1	0.3%	0	0.0%
Echinoidea	2	0.5%	2	0.5%
Holothuroidea	2	0.5%	3	0.8%
Ophiuroidea	1	0.3%	3	0.8%
Enteropneusta	2	0.5%	1	0.3%
Bivalvia	6	1.6%	6	1.5%
Gastropoda	6	1.6%	5	1.3%
Polyplacophora	0	0.0%	1	0.3%
Adenophorea	189	51.9%	175	44.4%
Hoplonemertea	0	0.0%	2	0.5%
Pilidiophora	4	1.1%	7	1.8%
Eurotatoria	6	1.6%	5	1.3%
Sipunculidea	0	0.0%	4	1.0%
Other	83	18.6%	67	14.5%
Total	**364**	**100%**	**394**	**100%**

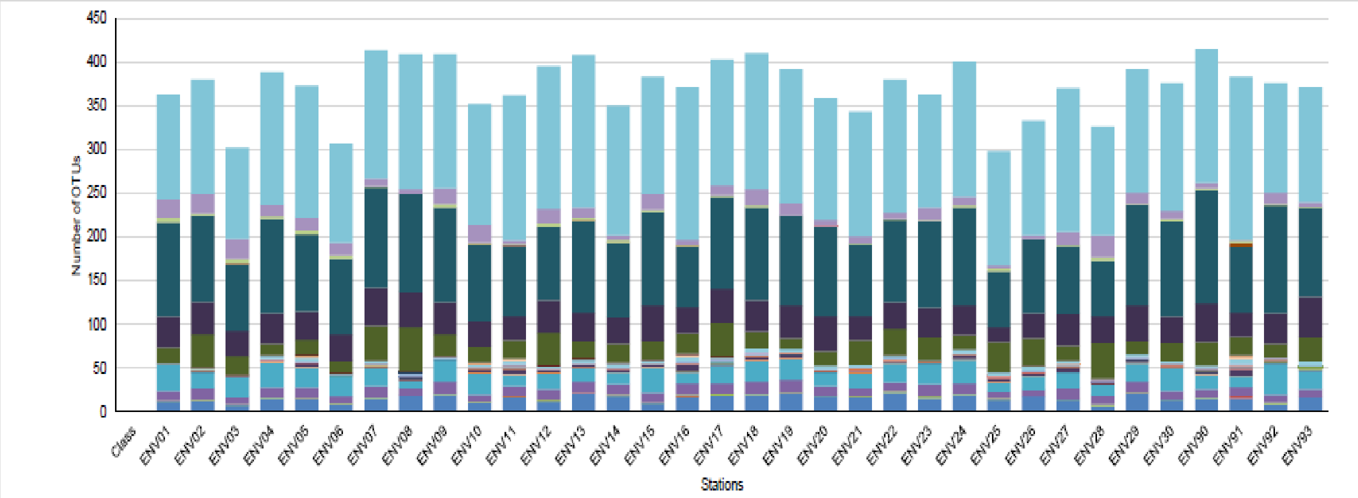

Figure I 1: Contributions of Gross Sediment Bacterial OTU Taxonomic Groups by Samples – Morgan Survey Area.

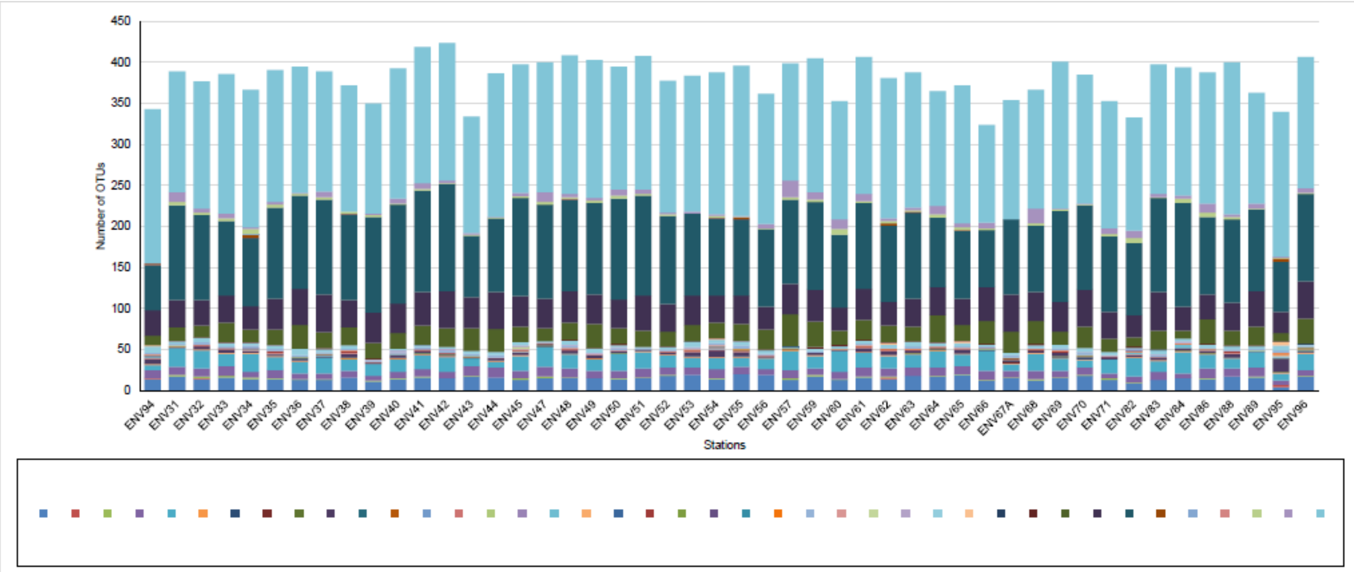

Figure I 2: Contributions of Gross Sediment Bacterial OTU Taxonomic Groups by Samples – Mona Survey Area.

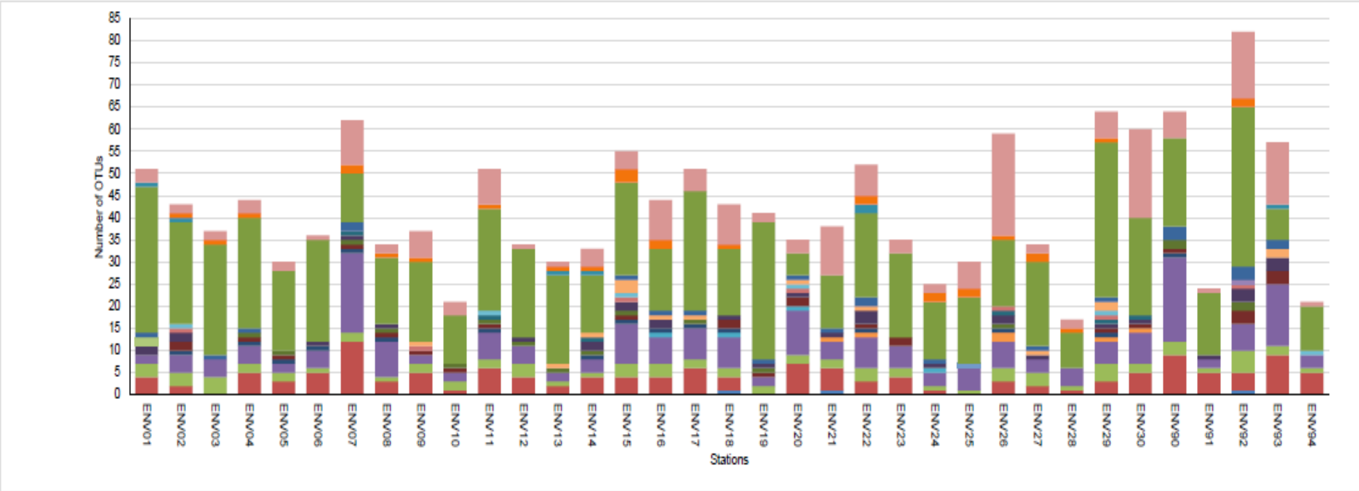

Figure I 3: Contributions of Gross Sediment Infaunal OTU Taxonomic Groups by Samples – Morgan Survey Area

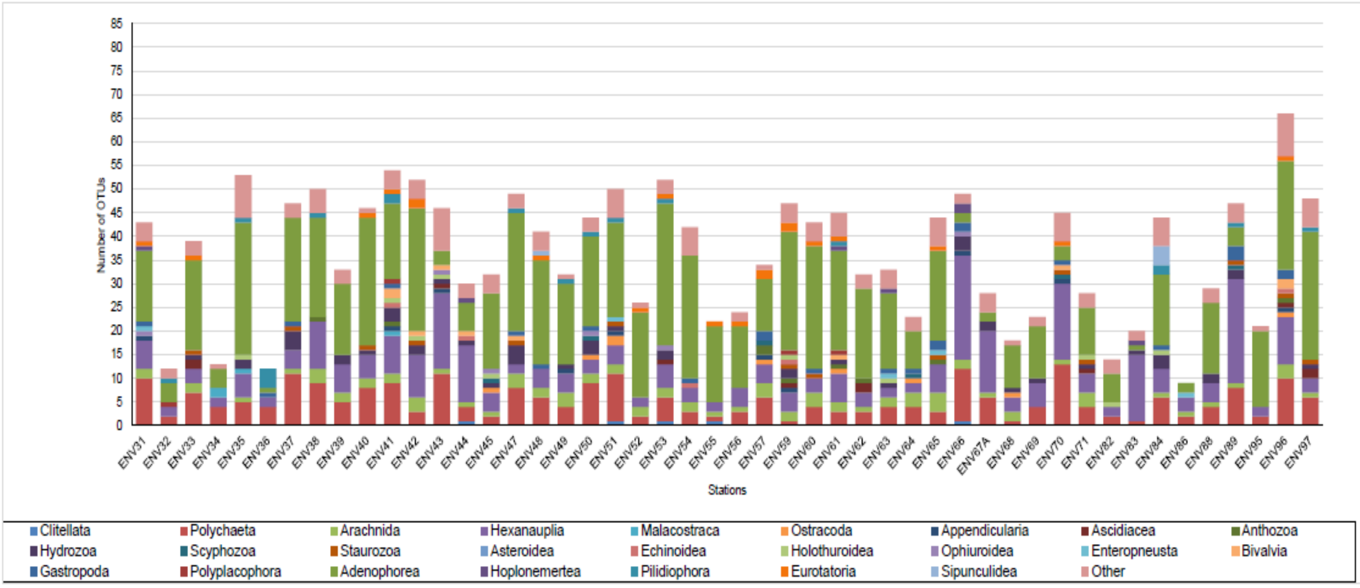

Figure I 4: Contributions of Gross Sediment Infaunal OTU Taxonomic Groups by Samples – Mona Survey Area

I.1.2.1.8 Comparative taxonomic heat trees detailing the number of OTUs across both the Morgan benthic subtidal ecology study area and Mona benthic subtidal and intertidal ecology study area from bacterial taxa down to the order rank are presented Figure I 5 while the taxonomic heat trees detailing the discrete faunal taxa OTUs down to the order rank are presented in Figure I 6. The nodes (circles) represent a taxon whilst the lines detail the hierarchical relationships between taxa. The colour scale and relative width of the nodes represent the number of OTUs for each taxon in the combined dataset for each survey area. Labels without nodes represent missing taxa. Summary statistics for the sediment bacterial and infaunal richness are detailed in Table I 4.

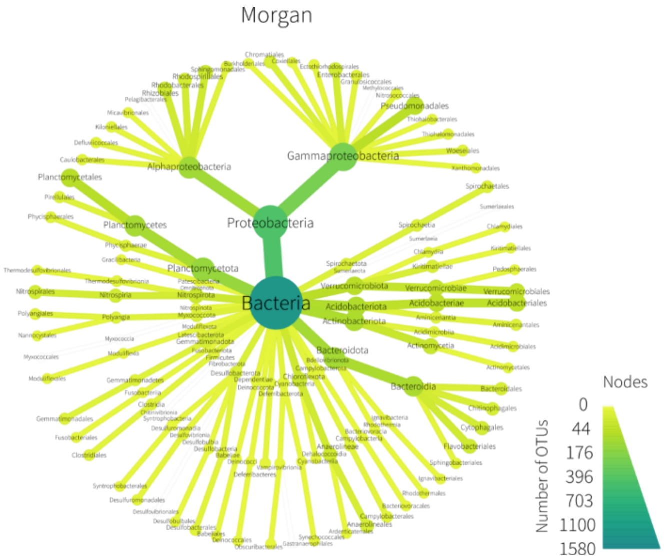

Figure I 5: Sediment Bacterial Taxonomic Heat Tress of the Number of OTUs per Survey Area.

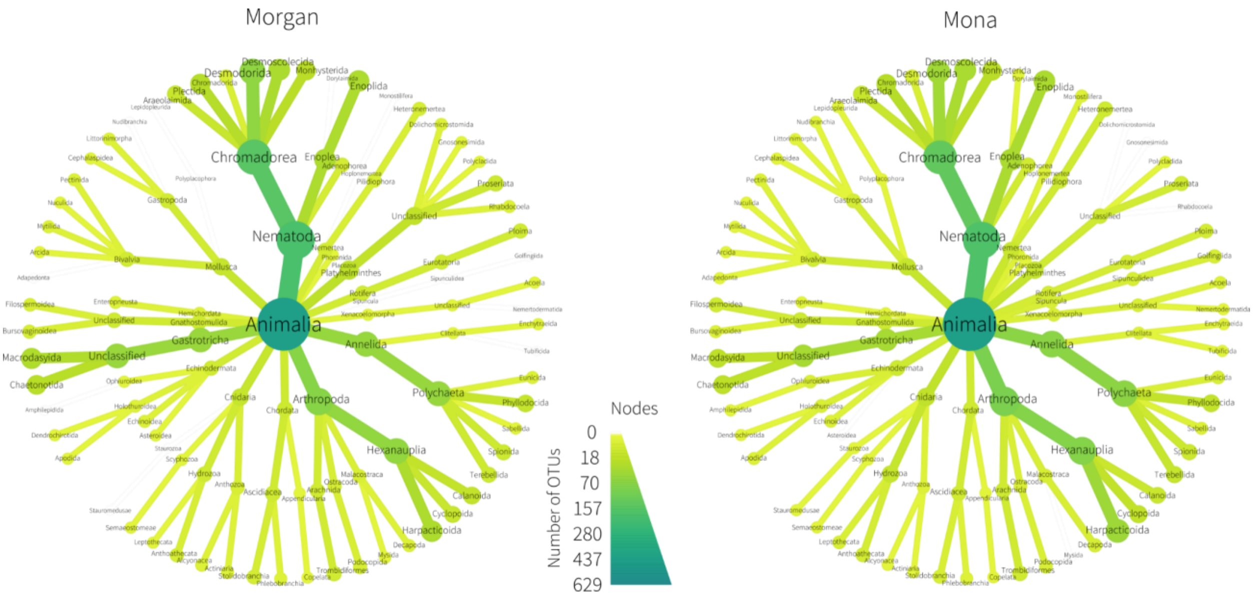

Figure I 6: Sediment Infaunal Taxonomic Heat Tress of the Number of OTUs per Survey Area.

Table I 4: Summary of Sediment Bacterial and Infaunal Richness.

	Bacterial		Faunal	
	Morgan Survey Area	Mona Survey Area	Morgan Survey Area	Mona Survey Area
Minimum	298	324	17	9
Maximum	415	424	82	66
Mean	371.4	382.3	42.1	36.1
±SD	31.6	23.0	14.7	13.6

I.1.2.1.9 Accumulation plots of OTUs for the sediment bacterial and infaunal data sets for both the Morgan benthic subtidal ecology study area and Mona benthic subtidal and intertidal ecology study area are presented in Figure I 7, Figure I 8, Figure I 9 and Figure I 10, respectively. Sharp changes in the slope of the species in order of observation (Sobs) curve reflect notable changes in community between stations. Further, the relation of the Sobs curve to that of the permutated average of samples (such as the UGE curve generated average after 999 random sample combinations) can reflect number of OTUs versus expectations.

I.1.2.1.10 The Sobs curve for the Morgan sediment bacterial data set (Figure I 10) steeply increased with the addition of ENV02. The curve steepened again with the addition of ENV07. Following this the Sobs curve closely matches that of the UGE curve. It also reveals that Stations ENV04 to ENV06 form a similar group with a low quantity of OTUs with comparatively little changes in community between them, though still notably below the expected rate of change in community.

I.1.2.1.11 Considering the Mona bacterial data set (Figure I 8), the Sobs curve steadily increased with addition of samples there where two steep increases with the addition of ENV43 and ENV59. Following this the Sobs curve closely matched that of the UGE curve until the addition of ENV95 when the Sobs curve rose above the UGE curve indicating a greater number of OTUs were present that was expected. There are several plateaus (including ENV44 to ENV53 and ENV57 to ENV61) within the Mona dataset indicating groups of stations with more similar OTUs than the rate of change indicated by the UGE curve.

I.1.2.1.12 The Sobs and UGE curves of the sediment bacterial data OTU accumulation plots for both the Morgan benthic subtidal ecology study area and Mona benthic subtidal and intertidal ecology study area continued to rise with the addition of the last samples. This reflected that further samples across both the Morgan benthic subtidal ecology study area and Mona benthic subtidal and intertidal ecology study area may elicit additional OTUs to those reported during the current sampling campaign though the rate of increases were low (<8 OTUs in Morgan the benthic subtidal ecology study area and <16 OTUS in Mona benthic subtidal and intertidal ecology study area added with the last UGE stations)

I.1.2.1.13 The Sobs curve for the Morgan sediment infaunal data set (Figure I 9) initially began above the UGE which indicated that a greater number of OTUs were present in ENV01 than was to be expected. Following the addition of ENV03 the Sobs curve falls below the UGE and steadily increased with the addition of samples. This suggested that the number of OTUs reported for subsequent samples were in line with the wider area and no shift in the community was present.

I.1.2.1.14 The Sobs curve for the Morgan sediment infaunal data set (Figure I 10) initially began above the UGE which indicated that a greater number of OTUs were present in ENV31 than was to be expected. Following the addition of ENV32 the Sobs curve falls below the UGE and steadily increased with the addition of samples. This suggested that the number of OTUs reported for subsequent samples were in line with the wider area and no shift in the community was present.

I.1.2.1.15 The Sobs and UGE curves of the sediment infaunal data OTU accumulation plots for both the Morgan benthic subtidal ecology study area and Mona benthic subtidal and intertidal ecology study area continued to rise with the addition of the last samples This reflected that further samples across both the Morgan benthic subtidal ecology study area and Mona benthic subtidal and intertidal ecology study area may elicit additional OTUs to those reported during the current sampling campaign. Rates of increase towards the end were low with <6 OTUs added to UGE in the Morgan benthic subtidal ecology study area and <5 in the Mona benthic subtidal and intertidal ecology study area.

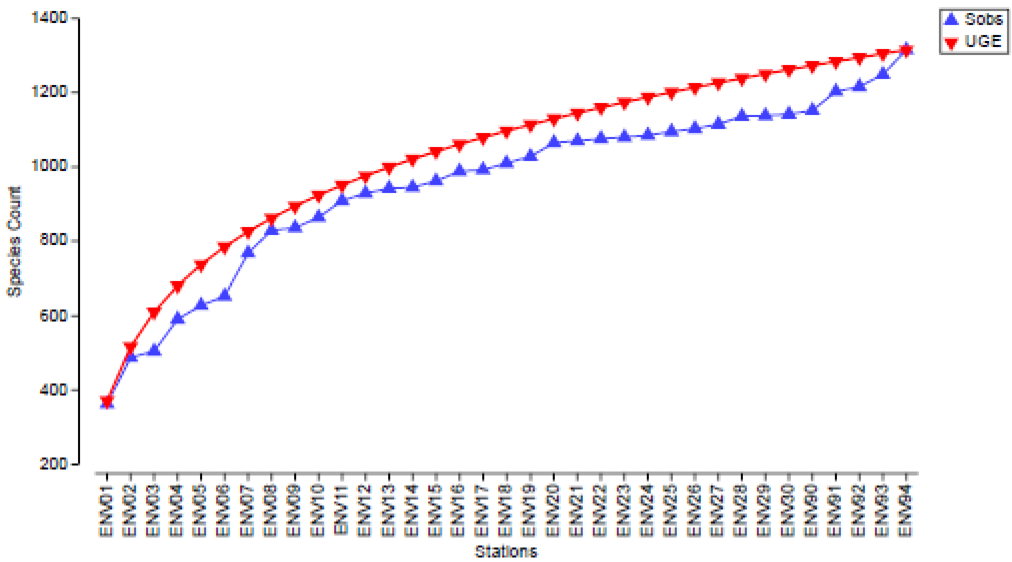

Figure I 7: Sediment Bacterial OTU Accumulation Curve – Morgan Survey Area.

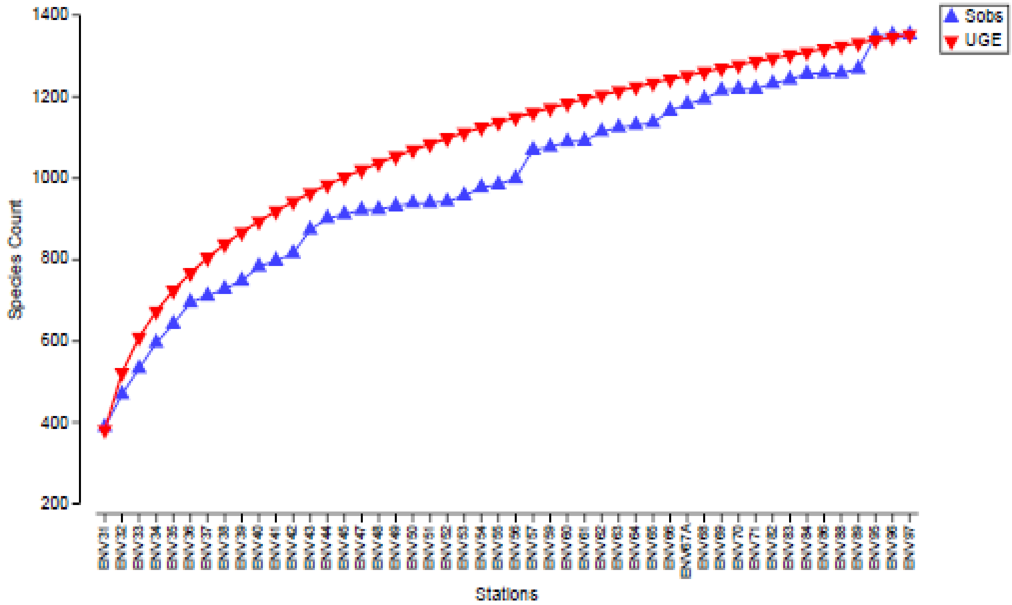

Figure I 8: Sediment Bacterial OTU Accumulation Curve – Mona Survey Area.

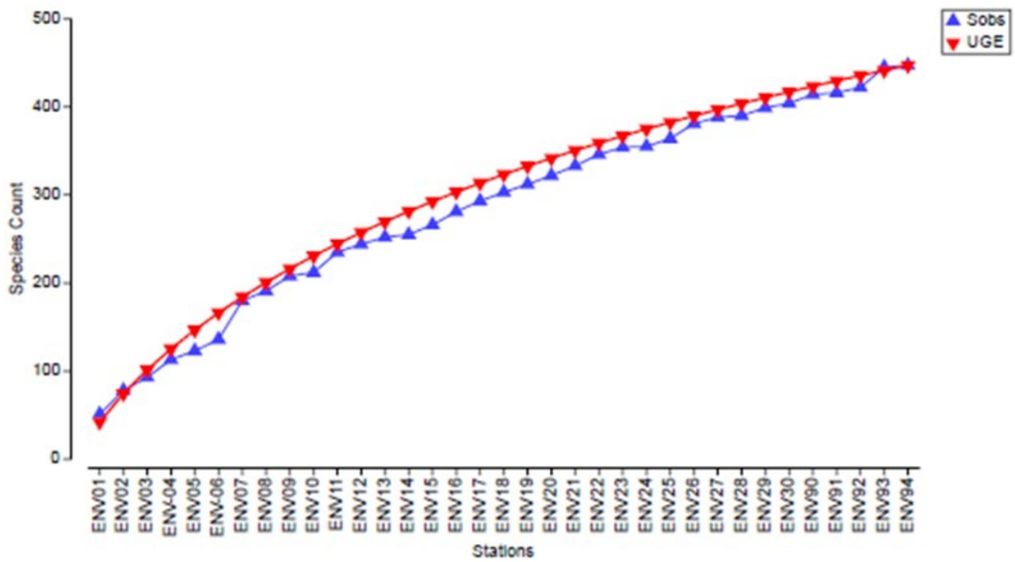

Figure I 9: Sediment Infaunal OTU Accumulation Curve – Morgan Survey Area.

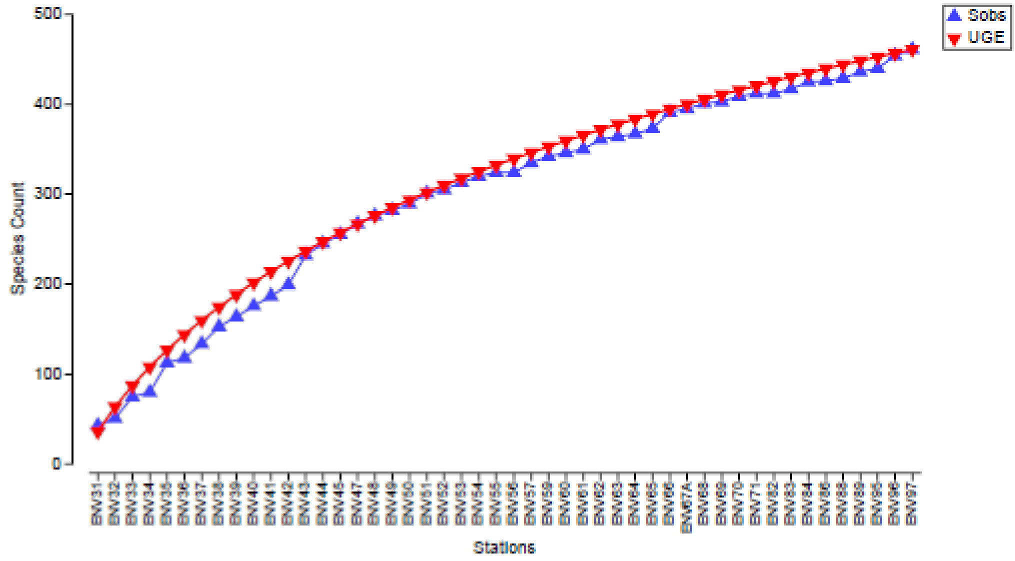

Figure I 10: Sediment Infaunal OTU Accumulation Curve – Mona Survey Area.

I.1.3 OTU Community Structure using Multivariate Analyses

I.1.3.1.1 The results of the CLUSTER analysis including SIMPROF analysis in the form of a Bray-Curtis similarity dendrogram and nMDS plot based upon standardise data for the sediment bacterial samples are displayed in Figure I 11 and Figure I 12 for the Morgan benthic subtidal ecology study area and in Figure I 13 and Figure I 14 for the Mona survey area. Similarly results of the same analyses on the standardised Infauna data are presented in Figure I 15 for the Morgan benthic subtidal ecology study area and in Figure I 16 for the Mona survey area.

I.1.3.1.2 The CLUSTER analysis and resulting dendrogram for the Morgan benthic subtidal ecology study area sediment bacterial OTU data set (Figure I 11) identified 23 groups which comprised 12 outliers (SIMPROF *a, b, g, i, l, m, n, o, q, s, t* and *u*), 10 closely associated pairs (SIMPROF *c, d, e, f, h, j, k, p, r* and *w*) and a single cluster (SIMPROF *v*). All samples were considered more dissimilar than similar to one another and grouped at *c.*21% similarity.

I.1.3.1.3 The Mona benthic subtidal and intertidal ecology study area identified 29 SIMPROF groups (Figure I 13) including 16 outliers (SIMPROF *a, b, c, d, g, j, m, o, p, q, r, t, w, y, z* and *aa*) 7 closely associated groups (SIMPROF *h, i, k, s, u, v* and *ab*) and 6 clusters (SIMPROF *e, f, l, n, x* and *ac*). Like the Morgan benthic subtidal ecology study area, all samples were more dissimilar than similar to one another grouping at *c.*16%. The generally low similarities are potentially relating to the bacterial communities are far richer than equivalent larger metazoan communities and also less discriminately bound to the sediment given their established variation with both overlying water quality along with direct sediment physico-chemistry (Allison & Martiny, 2008; Frühe *et al.*, 2021). However, they still provide a suitable sensitive receptor to environmental pressures for monitoring impacts (Horton *et al.*, 2019).

I.1.3.1.4 The nMDS ordination of the Morgan and Mona sediment bacterial sample data sets (Figure I 12 and Figure I 14) revealed a similar pattern to the cluster analysis, with a stress level of 0.14 and 0.12 respectively, the ordinations can be considered a useful two-dimensional representation of rank dis(similarities) and overall pattern observed in the data sets.

a) Bray-Curtis Similarity Dendrogram

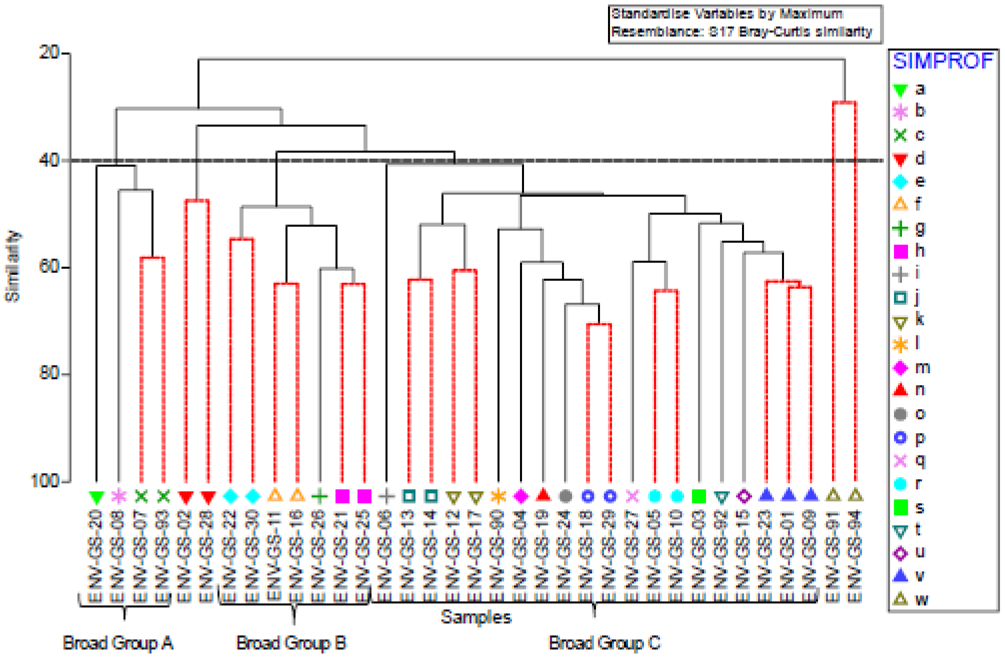

Figure I 11: Multivariate Analysis of Sediment Bacterial OTU Data by Sample – Morgan.

b) MDS Ordination

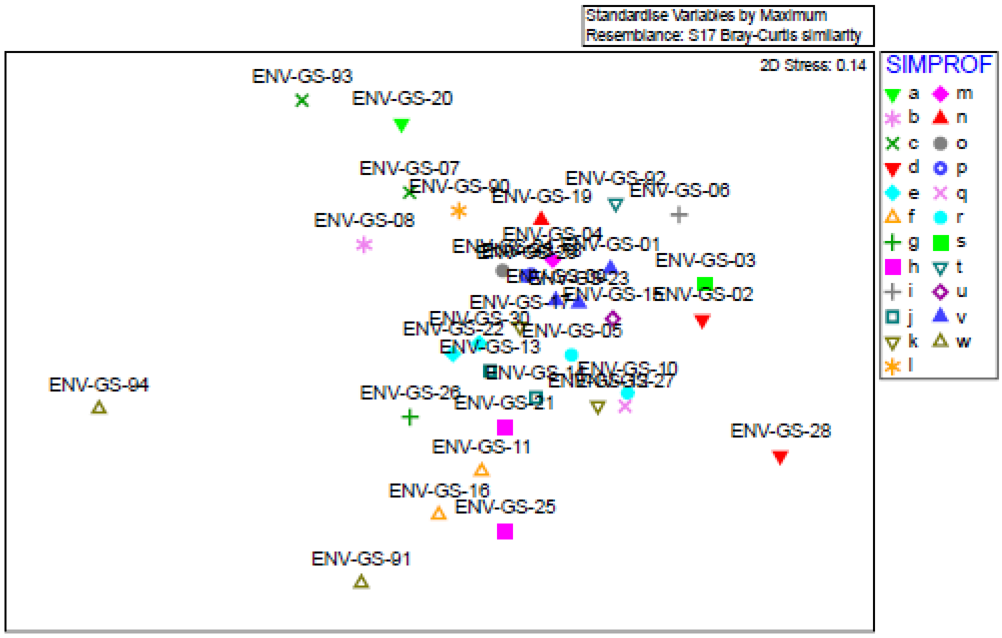

Figure I 12: Multivariate Analysis of Sediment Bacterial OTU Data by Sample – Morgan.

a) Bray-Curtis Similarity Dendrogram

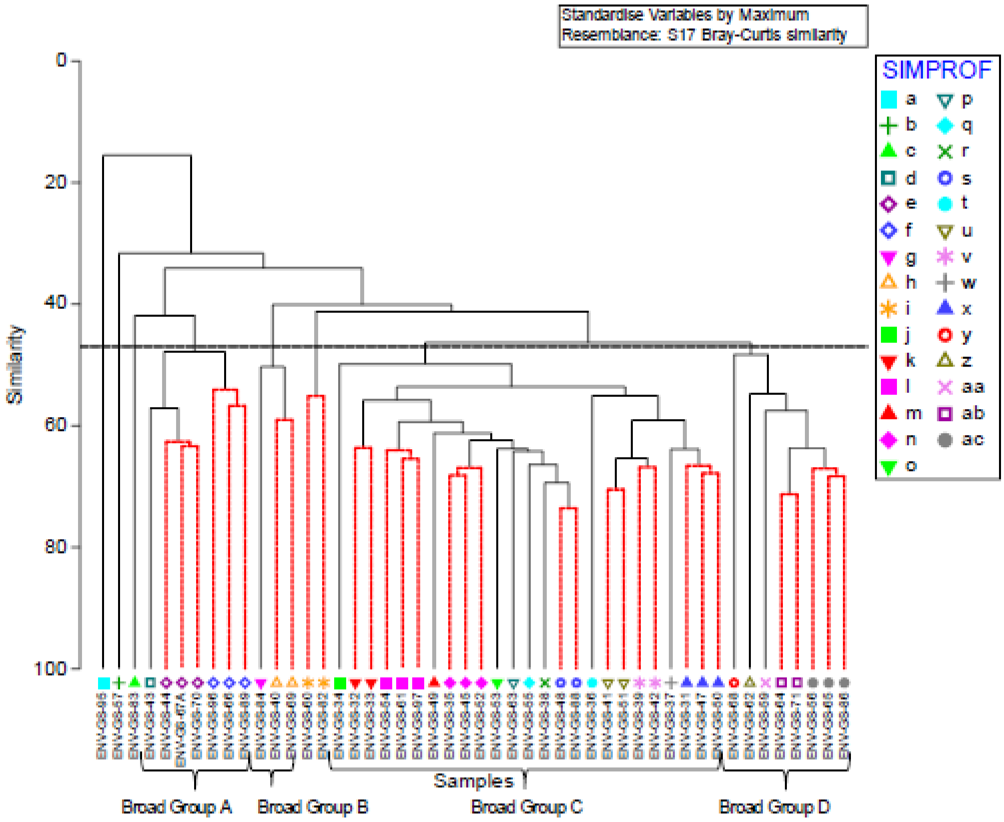

Figure I 13: Multivariate Analysis of Sediment Bacterial OTU Data by Sample – Mona.

b) MDS Ordination

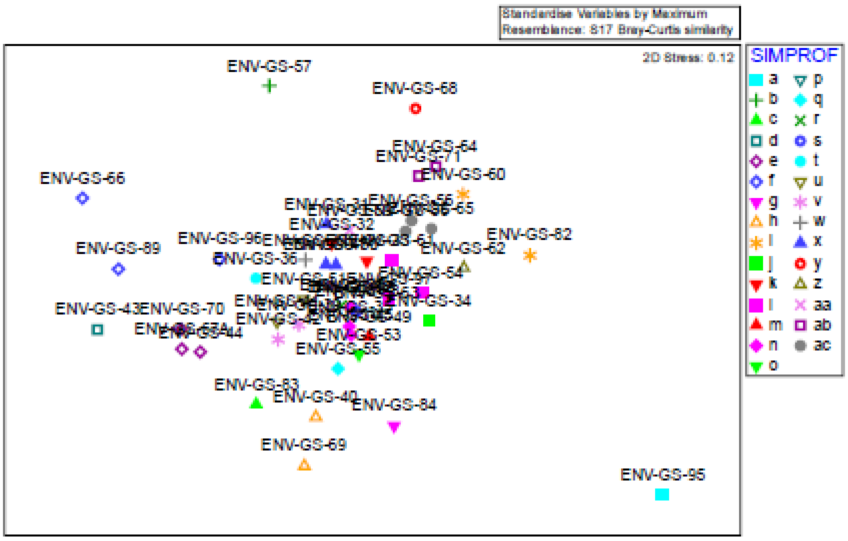

Figure I 14: Multivariate Analysis of Sediment Bacterial OTU Data by Sample – Mona.

I.1.3.1.5 Examination of the Morgan sediment bacterial sample data set together with results of SIMPER analyses at a group level is presented in Table I 5. This was restricted to explaining the separations where similarity was less than 40% for conciseness and includes the principal contributors to the grouping and separation of the samples. The analysis suggested that differences in SIMPROF groups and further the broad groups were largely due to the variations in abundances/absences of the OTUs from the dominant groups particularly from Gammaproteobacteria Alphaproteobacteria and Planctomycetes.

Table I 5: Taxa Influencing Sediment Bacteria OTU SIMPROF Variation- Morgan.

SIMPROF	Dissimilarity (%)	Groups Influencing Sample Separation
SIMPROF w vs a-v	79	• 51 Indeterminate Bacteria OTUs were unique to SIMPROF w (*c.*10.2% of the dissimilarity) whilst 44 were more abundant in SIMPROF *w* (*c.*8.8% of the dissimilarity). • 18 Proteobacteria OTUs were unique to SIMPROF w (*c.*3.4% of the dissimilarity) whilst 13 were more abundant in SIMPROF *w* (*c.*2.6% of the dissimilarity). • 10 Gammaproteobacteria OTUs were unique to SIMPROF w (*c.*1.9% of the dissimilarity) whilst 6 were more abundant in SIMPROF *w* (*c.*1.1% of the dissimilarity) and 10 were more abundant in SIMPROF groups *a-v* (*c.*1.7% of the dissimilarity).
Broad Group A vs SIMPROF groups *d-v*	70	• 12 Indeterminate Bacteria OTUs were unique to Broad Group A (*c.*2.3% of the dissimilarity) whilst 46 were more abundant in Broad Group A (*c.*7.8% of the dissimilarity). • 10 Gammaproteobacteria OTUs were unique to Broad Group A (*c.*1.7% of the dissimilarity) whilst 52 were more abundant in Broad Group A (*c.*9.1% of the dissimilarity) and 12 were more abundant in SIMPROF groups *d-v* (*c.*1.7% of the dissimilarity). • 25 Alphaproteobacteria were more abundant in SIMPROF groups a-c (*c.*4.2% of the dissimilarity).
SIMPROF *d* vs Broad Group B and C	67	• 23 Planctomycetes OTUs were more abundant in SIMPROF *d* (*c.*7.5% of the dissimilarity) • 8 Indeterminate Bacteria OTUs were unique to SIMPROF *d* (*c.*1.8% of the dissimilarity) whilst 27 were more abundant in SIMPROF *d* (*c.*5.9% of the dissimilarity). • 23 Alphaproteobacteria OTUs were more abundant in SIMPROF *d* (*c.*5.6% of the dissimilarity) • 7 Gammaproteobacteria OTUs were unique to SIMPROF *d* (*c.*1.5% of the dissimilarity) whilst 23 were more abundant in SIMPROF *d* (*c.*5.4% of the dissimilarity)
Broad Group B vs Broad Group C	62	• 44 Indeterminate Bacteria OTUs were more abundant in Broad Group B (*c.*9.0% of the dissimilarity) whilst 16 were more abundant in Broad Group C (*c.*3.0% of the dissimilarity). • 22 Indeterminate Bacteria OTUs were more abundant in Broad Group B (*c.*4.3% of the dissimilarity) whilst 31 were more abundant in Broad Group C (*c.*5.6% of the dissimilarity). • 12 Planctomycetes OTUs were more abundant in SIMPROF *d* (*c.*2.8% of the dissimilarity)

I.1.3.1.6 Examination of the Mona bacterial sample data set, together with the results of SIMPER analyses at a group level is presented in Table I 5. This was restricted to explaining separations where similarity was less than 47% for conciseness. SIMPROF groups *a, b and c* were outliers due to the occurrence of several bacterial taxa not present in the other groups. The broad groups identified showed differences due to subtle variations in taxa community structure within particular SIMPROF groups.

Table I 6: Taxa Influencing Sediment Bacteria OTU SIMPROF Variation – Mona.

SIMPROF	Dissimilarity (%)	Taxa Influencing Sample Separation
SIMPROF *a* vs rest	85	• 41 Indeterminate Bacteria OTUs were unique to SIMPROF *a* (*c*.13.1% of the dissimilarity) whilst 31 were more abundant in SIMPROF *a* (*c*.8.6% of the dissimilarity). • 6 Proteobacteria OTUs were unique to SIMPROF *a* (*c*.1.9% of the dissimilarity) whilst 10 were more abundant in SIMPROF *a* (*c*.3.0% of the dissimilarity). • Anaerolineae OTUs were unique to SIMPROF *a* (*c*.2.9% of the dissimilarity) whilst 5 were more abundant in SIMPROF *a* (*c*.1.1% of the dissimilarity).
SIMPROF *b* vs Broad Groups A, B, C, D and SIMPROF *i* and *c*	68	• 12 Gammaproteobacteria OTUs were unique to SIMPROF *b* (*c*.4.3% of the dissimilarity) whilst 29 were more abundant in SIMPROF *b* (*c*.8.4% of the dissimilarity). • 9 Indeterminate Bacteria OTUs were unique to SIMPROF *b* (*c*.3.2% of the dissimilarity) whilst 26 were more abundant in SIMPROF *b* (*c*.7.7% of the dissimilarity). • 4 Planctomycetes OTUs were unique to SIMPROF *b* (*c*.1.4% of the dissimilarity) whilst 11 were more abundant in SIMPROF *b* (*c*.3.2% of the dissimilarity).
SIMPROF *c* and Broad Group A vs Broad Groups B, C, D and SIMPROF *i*	67	• 24 Alphaproteobacteria OTUs were more abundant in Group *c*A (*c*.4.3% of the dissimilarity) and 8 were more abundant in Group BCDi (*c*.1.1% of the dissimilarity) • 34 Gammaproteobacteria were more abundant in Group *c*A (*c*.5.7% of the dissimilarity) and 34 were more abundant in Group BCDi (*c*.5.1% of the dissimilarity) • 44 Indeterminate Bacteria OTUs were more abundant in Group cA (*c*.7.7% of the dissimilarity) and 23 were more abundant in Group BCDi (*c*.3.5% of the dissimilarity) • 16 Planctomycetes OTUs were more abundant in Group cA (*c*.3.1% of the dissimilarity)
SIMPROF *c* vs Broad Group A	58	• 9 Indeterminate Bacteria OTUs were unique to SIMPROF *c* (*c*.3.2% of the dissimilarity) whilst 21 were more abundant in SIMPROF *c* (*c*.5.4% of the dissimilarity). • 5 Alphaproteobacteria OTUs were unique to SIMPROF *c* (*c*.2.2% of the dissimilarity) whilst 8 were more abundant in SIMPROF *c* (*c*.2.2% of the dissimilarity). • 10 Gammaproteobacteria OTUs were unique to SIMPROF *c* (*c*.4.1% of the dissimilarity) whilst 29 were more abundant in SIMPROF *c* (*c*.9.0% of the dissimilarity).
Broad Group B vs SIMPROF *i* and Broad Groups C and D	61	• 6 Gammaproteobacteria OTUs were unique to Group B (*c*.1.0% of the dissimilarity) whilst 54 were more abundant in Group B (*c*.11.4% of the dissimilarity) • 12 Indeterminate Bacteria OTUs were unique to Group B (*c*.2.0% of the dissimilarity) whilst 39 were more abundant in Group B (*c*.8.2% of the dissimilarity). • 13 Verrucomicrobiae were more abundant in Group B (*c*.0.7% of the dissimilarity).

SIMPROF	Dissimilarity (%)	Taxa Influencing Sample Separation
SIMPROF *i* vs Broad Groups C and D	60	• 22 Gammaproteobacteria OTUs were more abundant to SIMPROF *i* (*c*.4.8% of the dissimilarity) whilst 14 were more abundant in Group CD (*c*.2.7% of the dissimilarity) • 4 Indeterminate Bacteria OTUs were unique to SIMPROF *i* (*c*.1.2% of the dissimilarity) whilst 36 were more abundant in SIMPROF *i* (*c*.9.8% of the dissimilarity). • 13 Bacteroidia were more abundant in SIMPROF *i* (*c*.3.3% of the dissimilarity).
Broad Group C vs D	55	• 25 Gammaproteobacteria OTUs were more abundant in Group D (*c*.4.6% of the dissimilarity) whilst 28 were more abundant in Group C (*c*.5.2% of the dissimilarity) • 42 Indeterminate Bacteria OTUs were more abundant in Group D (*c*.8.5% of the dissimilarity) whilst 21 were more abundant in Group C (*c*.3.9% of the dissimilarity) • 15 Alphaproteobacteria were more abundant in SIMPROF *i* (c.2.8% of the dissimilarity). • 13 Planctomycetes were more abundant in SIMPROF *i* (c.2.4% of the dissimilarity).

I.1.3.1.7 CLUSTER analysis and resulting dendrograms for the Morgan sediment infauna OTU data set (Figure I 15) identified seven groups; which comprised two closely associated pairs (SIMPROF *d* and *e*) and five clusters (SIMPROF *a, b, c, f* and *g*). All samples were more dissimilar than similar to one another and grouped at *c*.2.7% similarity.

I.1.3.1.8 The Mona benthic subtidal and intertidal ecology study area (Figure I 16) identified eleven SIMPROF groups comprising three outliers (SIMPROF *a*, *c* and *f*), four closely associated groups (SIMPROF *b, d, e*, and *g*) and four clusters (SIMPROF *h, i, j* and *k*). Similar to the Morgan benthic subtidal ecology study area, all samples were more dissimilar than similar to one another; grouping together at *c*.2% similarity.

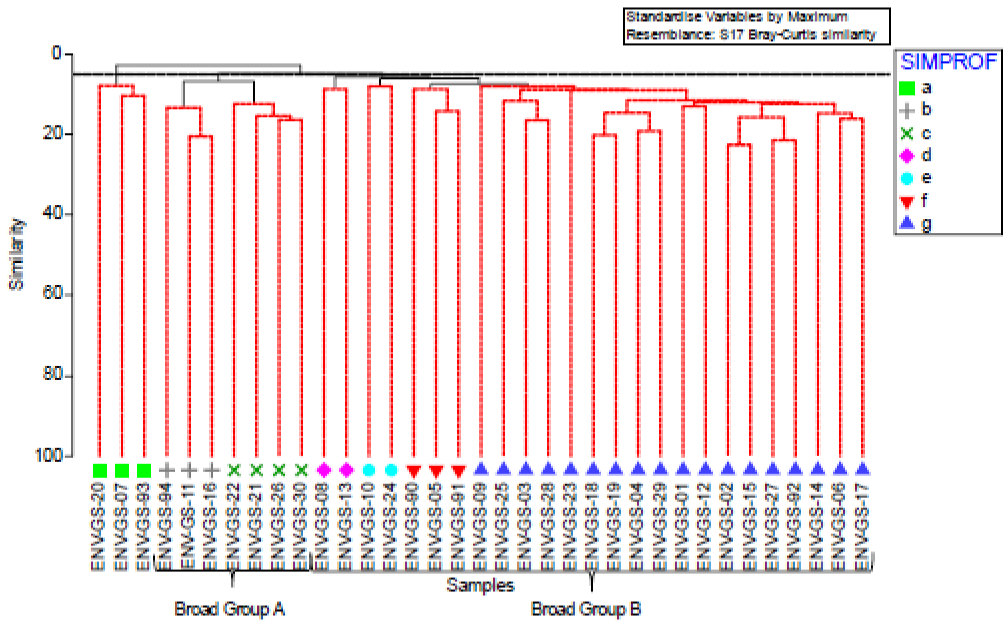

Figure I 15: Bray-Curtis Similarity Dendrogram of Sediment Infaunal OTU Data by Sample – Morgan.

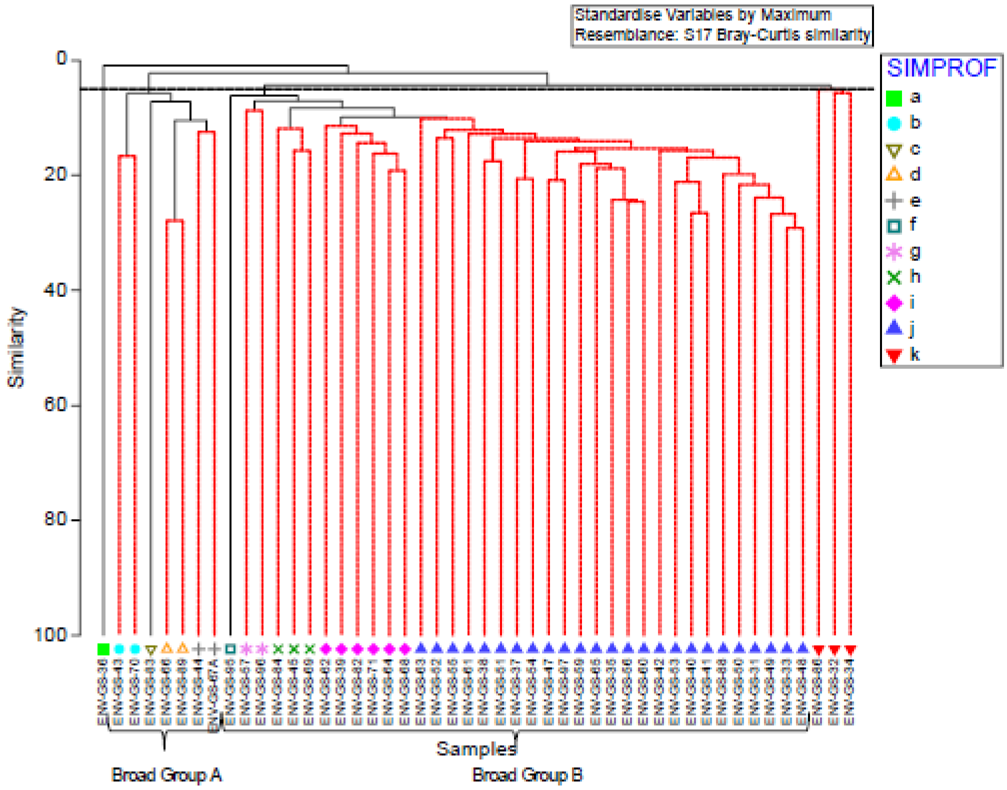

Figure I 16: Bray-Curtis Similarity Dendrogram of Sediment Infaunal OTU Data by Sample – Mona.

I.1.3.1.9 Examinations of the Morgan sediment infaunal sample data set together with results of SIMPER analysis; presented in Table I 7, along with the principal contributors to the grouping and separation of the samples. The analysis suggested that differences in SIMPROF groups and the Broad Groups were largely due to the subtle differences in the infaunal community.

Table I 7: Taxa Influencing Sediment Infauna OTU SIMPROF Variation – Morgan.

SIMPROF	Dissimilarity (%)	Taxa Influencing Sample Separation
SIMPROF a vs Broad Group A and B	98	• *Mesonerilla*_IM-211R6N, Mytilidae_IM-P18O8Y, Cyclopoida_IM- 45PX6J and Harpacticoida_IM-9BK8SI were more abundant in SIMPROF *a* (*c*.4.9% of the dissimilarity) whilst *Nerillidium gracile* and *Spio*_IM-6W06R6 were unique to Groups A and B (*c*.2.0% of the dissimilarity).
Broad Group A vs Broad Group B	95	• *Ixonema*_IM-J3RK8Q, *Spio*_IM-X7S00O, and Lauratonematidae_IM- 8TAQB0 were unique to Group A (*c*.3.0% of the dissimilarity) whilst Harpacticoida_IM-98G22P and *Laxus*_IM-2NM2IQ were more abundant in Group A (*c*.2.1% of the dissimilarity) • *Temora longicornis* was less abundant at Group A (*c*.1.1% of the dissimilarity)

I.1.3.1.10 Results of the SIMPER analysis (Table I 8) for the Mona infaunal sample data set highlighted that SIMPROF *a* were outliers due to the presence of taxa not present in the other SIMPROF groups. Differences between Broad Groups A, B and SIMPROF *k* were similarly due to higher abundances and presence of several taxa. The broad groups identified showed differences due to subtle changes in the infaunal taxa contributions and presences and absences within particular SIMPROF groups.

Table I 8: Taxa Influencing Sediment Infauna OTU SIMPROF Variation – Mona.

SIMPROF	Dissimilarity (%)	Taxa Influencing Sample Separation
SIMPROF *a* vs SIMPROF *b-k*	99	• *Odontosyllis fulgurans*, Lineidae_IM-A93VO3, Lineidae_IM-197QT8 and Lineidae_IM-V6NR6Z were unique to SIMPROF *a* (*c*.21.3% of the dissimilarity) whilst Aricidea_IM-1L75U0 was more abundant in SIMPROF *a* (*c*.3.1% of the dissimilarity) • Calanoida_IM-J7MI8C and *Temora longicornis* were more abundance in SIMPROF *b-k* (*c*.2.4% of the dissimilarity) whilst Desmoscolecidae_IM-04EB95 was unique to SIMPROF *b-k* (*c*.0.8% of the dissimilarity).
Broad Group A vs Broad Group B and SIMPROF *k*	98	• Harpacticoida_IM-9BK8SI, Parameiropsidae_IM-3WL810, Harpacticoida_IM-Q1XWI6 and Argestidae_IM-43AS6P were unique to Group A (*c*.4.4% of the dissimilarity) whilst Ameira_IM-QY3076 was more abundant in Group A (*c*.1.0% of the dissimilarity) • Calanoida_IM-J7MI8C and *Temora longicornis* were more abundant in Group B (*c*.2.7% of the dissimilarity)
Broad Group B vs SIMPROF *k*	96	• Desmodorida_IM-2TWXL3, Dorvilleidae_IM-4BCCG8 and Haplognathiidae_IM-1M0V63 were unique to SIMPROF *k* (*c*.5.5% of the dissimilarity) whilst Terebellidae_IM-2QCW27 was more abundant in SIMPROF *k* (*c*.2.0% of the dissimilarity) • Calanoida_IM-J7MI8C and *Temora longicornis* were more abundant in Group B

I.1.3.1.11 The bacterial and infaunal OTUs detected throughout both Morgan and Mona survey areas were compared to the physico-chemical data to determine if any patterns correlated.

I.1.3.1.12 A RELATE analysis identified a 48.5% significant correlation between the sediment bacterial OTUs and physico-chemical variables. BV STEP analyses further identified nine bacterial taxa groups (Acidobacteriaceae_IM-A38G3N, Actinobacteriota_IM-4S9D5Q, Flavobacteriaceae_IM-W54D7S, Planctomycetales_IM-MM63P0, Spongiibacteraceae_IM-RY386Z, Gammaproteobacteria_IM-496PWF, Gammaproteobacteria_IM-3FM60Y, Bacteria_IM-T842VS, Bacteria_IM-U76S04) which best explained the correlation. Figure I 1 illustrates the distribution patterns of these taxa across the survey areas in relation to the physico-chemical SIMPROF clusters identified. Their geographic distribution in relation to the physico-chemical SIMPROF clusters indicates a potential overlap linking to the environmental driver defining those cluster discussed in Section 2.8.1. Bacteria_IM-T842VS for example, is predominantly distributed within the sandwave areas indicating a possible association with SIMPROF groups I and j.

I.1.3.1.13 A RELATE analysis between the infaunal I data set and the physico-chemical variables identified a 41% significant correlation. Sixteen taxa (Sabellariidae_IM-WO1H6H, Nerillidae_IM-P7281C, Halacaridae_IM-854J7R, Halacaridae_IM-863YQ3, Leptosynapta_IM-471WYT, Chaetonotidae_IM-66HBWK, Microlaimus honestus, Desmodorida_IM-7Z5D37, Oxystominidae_IM-84F6F2, Calyptronema_IM-QS27I8, Terschellingia longicaudata, Xyalidae_IM-JC228M, Lineidae_IM-97F94L, Lumbrineridae_IM-KH2BT9, Capitellidae_IM-0GX3E3 and Argestidae_IM-V085H7) which best explains the correlation were identified with a BV STEP analysis. Of the sixteen taxa, four (Xyalidae_IM-JC228M, Halacaridae_IM-854J7R, Halacaridae_IM-863YQ3 and Chaetonotidae_IM-66HBWK) best illustrate this correlation through their geographic distribution in relation to the physico-chemical SIMPROF clusters identified (Figure I 18). Xyalidae_IM-JC228M and Halacaridae_IM-854J7R both had a broad distribution across the survey area, whilst the distributions of Halacaridae_IM-863YQ3 and Chaetonotidae_IM-66HBWK indicated potential association with the SIMPROF groups I and j in the shallower sandwave areas.

I.1.3.1.14 Further investigation into the relationship between bacterial and infaunal OTUs and physico-chemical variables would require further sampling, however, no further sampling will be undertaken in the Morgan and Mona Array Area. This is because, the results of this analysis, as presented in this report, are considered to be sufficient for the purposes of baseline characterisation.

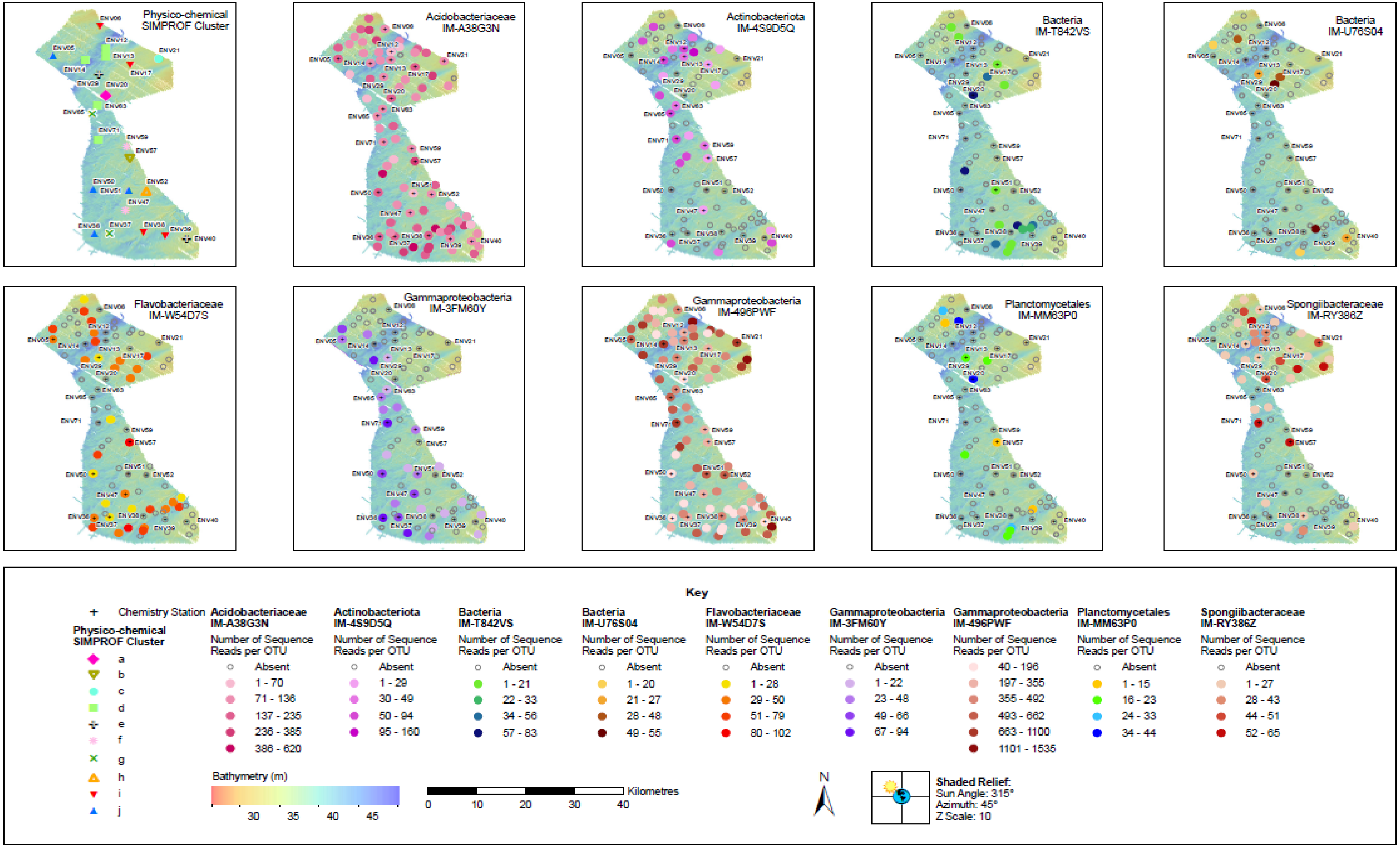

Figure I 17: Geographical Overview of Bacterial Taxa in Relation to Physico-Chemical SIMPROF Groups.

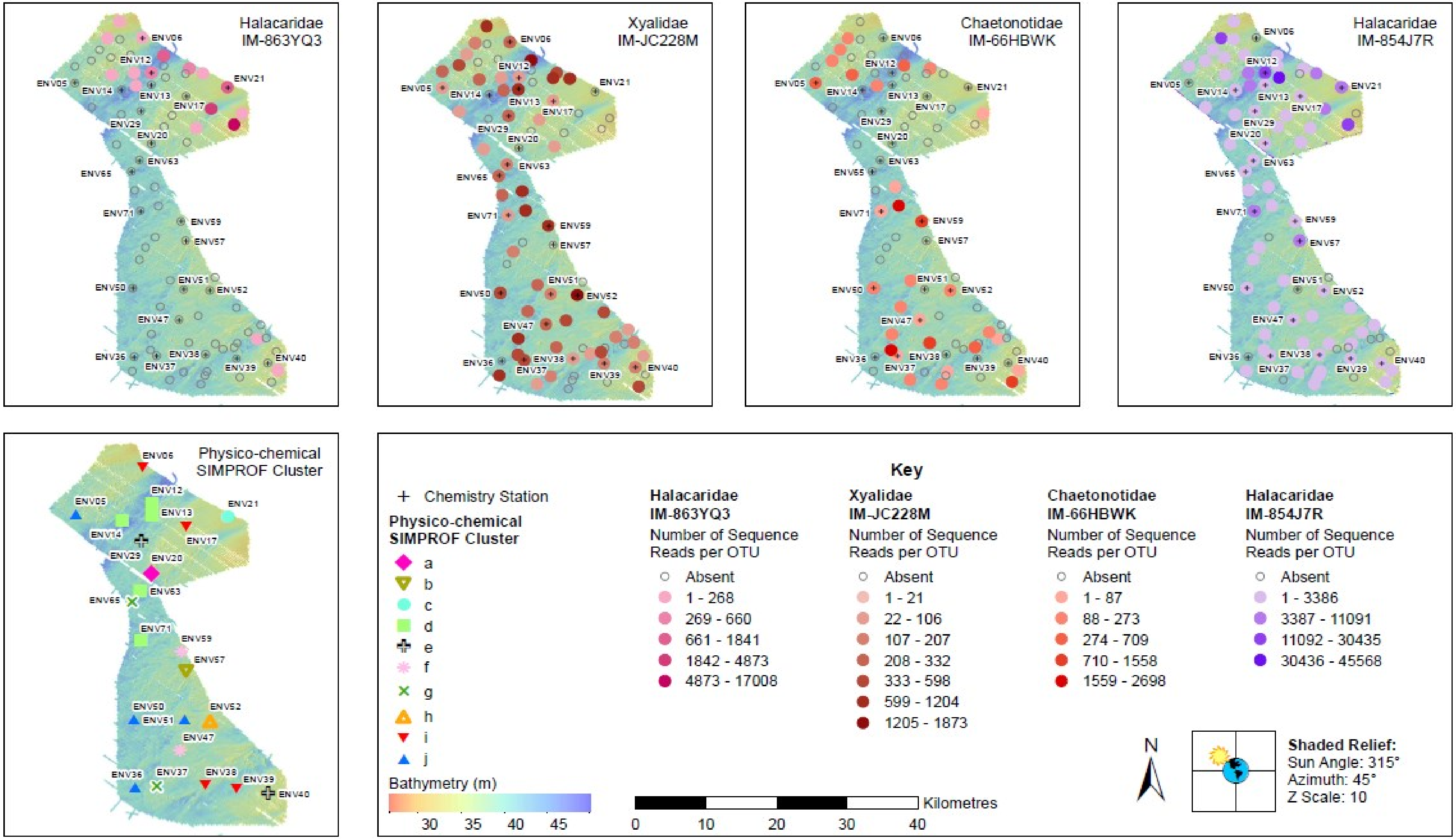

Figure I 18: Geographical Overview of Infaunal Taxa in Relation to Physico-Chemical SIMPROF Groups.

I.1.4 Multivariate Comparison of Macrofaunal and Metabarcoding Data Sets

I.1.4.1.1 The sediment bacterial and infaunal OTU data sets, from the combined survey areas, were compared to the adult macrofaunal abundance and biomass data to determine if there was any correlation. As expected, a RELATE analysis identified a significant correlation of 50% for bacterial OTUs and 52% for infaunal OTUs when comparted to the adult macrofauna abundance data. Similar results were found for biomass data, indicating a 40% significant correlation for bacteria OTUs and 44% for infaunal OTUs.

I.1.4.1.2 It is important to note that despite the significant correlations found, only one macrofauna replicate sample was used for metabarcoding of bacteria and infauna. This is, however, considered to be sufficient for the purposes of baseline characterisation for the Morgan and Mona Array Areas.

I.2. Sediment Metabarcoding Results (2022 Survey)

I.2.1 Overview

I.2.1.1.1 Two samples were collected from 37 stations within the Mona Array Area, ZoI and Offshore Cable Corridor; of these a subset of 29 stations were sent to the laboratory for analysis. The remaining samples were retained as spares.

I.2.2 Summary Statistics

I.2.2.1.1 A total of 1520 operational taxonomic units (OTUs) were detected across the Mona stations as detailed in Table I 1Of the 1520 detected OTUs (bacterial and infaunal), a greater percentage of infaunal OTUs were identified to species level (14 %) compared to the bacterial OTUs (1 %) possibly related to a larger pool of reference material for infaunal OTUs.

Table I 9: OTU Detections per Target and Percentage Successfully Classified.

Target	Number of OTU	Phylum (%)	Class (%)	Order (%)	Family (%)	Genus (%)	Species (%)
Bacteria	1094	78	60	35	26	8	1
Infauna	425	100	82	90	75	58	14

I.2.2.1.2 A total of 34 bacterial OTUs (3%) were present in all sediment samples, while 23% (n=250) occurred in a single sediment sample. The relatively high numbers of widespread taxa and lone taxa across the survey area suggested that the community has been subjected to relatively little disturbance.

I.2.2.1.3 Overall, 215 (50%) infaunal OTUs were detected in a single sample across the Mona Array Area, ZoI and Offshore Cable Corridor. However, in contrast to the bacterial data set, a single OTU was detected across every sample. The absence of consistence community as well as the high proportion (>40%) of rare OTUs suggest the community heterogeneity across the survey area may have been under sampled for the infaunal size class. This may be improved by analysis of additional samples or analysis of the second samples acquired at each of the stations, though it is not certain that this would fill all community gaps.

I.2.2.1.4 The bacterial data sets identified 31 taxonomic groups based on class with the proportional contributions of these taxonomic groups to the overall structure of the survey area detailed in Table I 2.The ‘Other’ category comprised OTUs which could not be identified to class.

I.2.2.1.5 The most abundant taxonomic group across the survey area (n=436) was the 'Other' which accounted for 39.9% of OTUs. The second most abundant taxonomic group was the Gammaproteobacteria (n= 234 OTU's) accounting for 21.4% of OTUs. Gammaproteobacteria dominance is likely given it is one of the richest classes within the bacterial phyla (Williams *et al.*, 2010). The relative dominance of 'Other' within the proportional contributions was partly due to the inability to determine these OTUs further than phylum.

Table I 10: Contribution of Gross Sediment Bacterial OTU Taxonomic Groups.

Group	Current Survey Abundance	Proportional Contribution
Acidobacteriae	40	3.7%
Acidimicrobiia	1	0.1%
Actinomycetia	29	2.7%
Alphaproteobacteria	83	7.6%
Aminicenantia	3	0.3%
Anaerolineae	12	1.1%
Bacilli	3	0.3%
Bacteriovoracia	2	0.2%
Bacteroidia	97	8.9%
Campylobacteria	3	0.3%
Clostridia	4	0.4%
Cyanobacteriia	1	0.1%
Dehalococcoidia	1	0.1%
Desulfobacteria	1	0.1%
Desulfuromonadia	2	0.2%
Fusobacteriia	1	0.1%
Gammaproteobacteria	234	21.4%
Gemmatimonadetes	3	0.3%
Kiritimatiellae	6	0.5%
Moduliflexia	2	0.2%
Myxococcia	4	0.4%
Nitrospiria	6	0.5%
Phycisphaerae	4	0.4%
Planctomycetes	72	6.6%
Polyangia	3	0.3%
Rhodothermia	1	0.1%
Thermodesulfovibrionia	1	0.1%
Spirochaetia	2	0.2%
Syntrophobacteria	1	0.1%

Group	Current Survey Abundance	Proportional Contribution
Verrucomicrobiae	36	3.3%
Other	436	39.9%
Total	**1094**	**100%**

I.2.2.1.6 A total of 28 taxonomic groups based on class were identified from the sediment infaunal data sets with the proportional contribution of these taxonomic groups to the overall structure of the Mona survey area detailed in Table I 3.The 'Other' category comprised the OTUs which could not be identified to class.

I.2.2.1.7 Adenophorea (n=130) was the most abundant taxonomic group across the Mona survey area and accounted for 30.6% of OTUs. The next most abundant groups were Hexanaulia (n=77, 18.1%) and 'Other' (n=77, 18.1%). Six taxonomic groups (Appendicularia, Maxillopoda, Palaeonemertea, Polyplacophora, Scyphozoa, Staurozoa) were represented by a single OTU.

Table I 11: Contribution of Gross Sediment Infaunal OTU Taxonomic Groups.

Group	Current Survey			
	Abundance	Proportional Contribution		
Adenophorea	130	30.6%		
Anthozoa	4	0.9%		
Appendicularia	1	0.2%		
Arachnida	5	1.2%		
Ascidiacea	7	1.6%		
Bivalvia	7	1.6%		
Clitellata	3	0.7%		
Echinoidea	2	0.5%		
Enteropneusta	2	0.5%		
Eurotatoria	6	1.4%		
Gastropoda	5	1.2%		
Gymnolaemata	2	0.5%		
Hexanauplia	77	18.1%		
Holothuroidea	3	0.7%		
Hoplonemertea	4	0.9%		
Hydrozoa	11	2.6%		
Malacostraca	2	0.5%		
Maxillopoda	1	0.2%		
Ophiuroidea	2	0.5%		
Ostracoda	3	0.7%		
Palaeonemertea	1	0.2%		

Group	Current Survey			
	Abundance	Proportional Contribution		
Pilidiophora	3	0.7%		
Polychaeta	61	14.4%		
Polyplacophora	1	0.2%		
Scyphozoa	1	0.2%		
Secernentea	3	0.7%		
Staurozoa	1	0.2%		
Other	77	18.1%		
Total	**425**	**100%**		

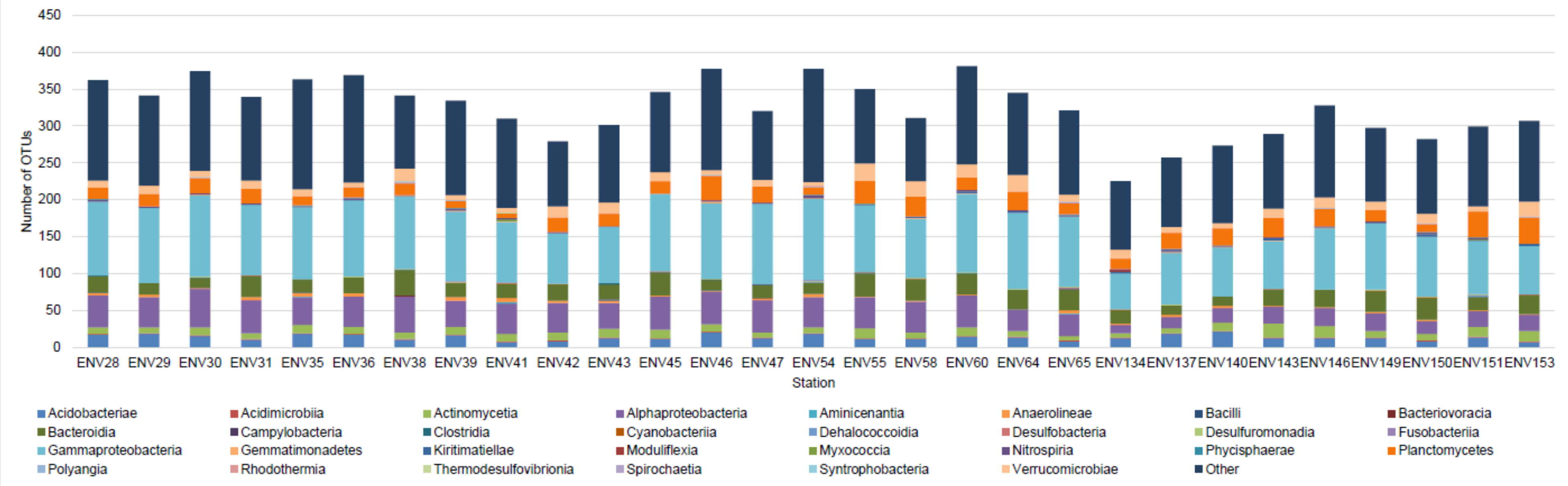

Figure I 19: Contributions of Gross Sediment Bacterial OTU Taxonomic Groups by Samples.

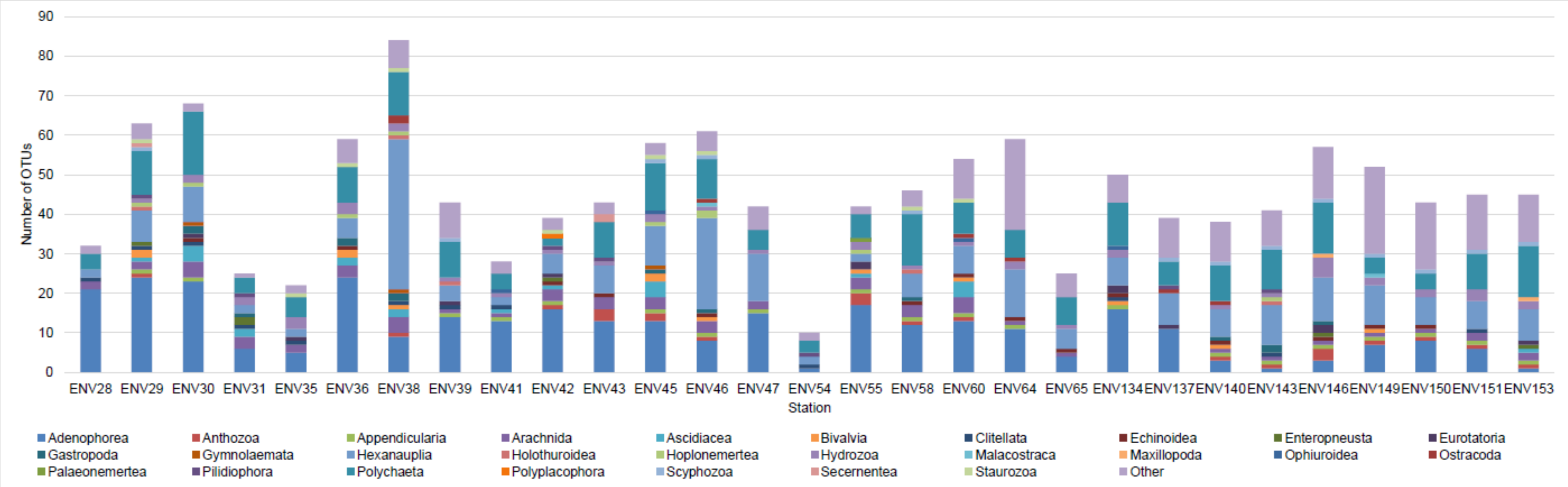

Figure I 20: Contributions of Gross Sediment Infaunal OTU Taxonomic Groups by Samples.

I.2.2.1.8 Comparative taxonomic heat trees detailing the number of OTUs across the Mona Array Area, ZoI and Offshore Cable Corridor from bacterial taxa down to the order rank is presented in Figure I 2.The taxonomic heat trees detailing the discrete infaunal taxa OTUs down to the order rank are presented in Figure I 3. The nodes (circles) represent a taxon whilst the lines detail the hierarchical relationships between taxa. The colour scale and relative width of the nodes represent the number of OTUs for each taxon. Labels without nodes represent missing taxa. Summary statistics for the sediment bacterial and infaunal richness are detailed in Table I 4.

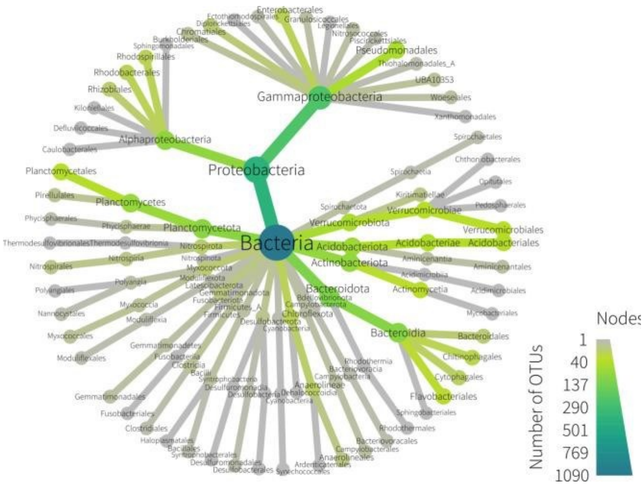

Figure I 21: Sediment Bacterial Taxonomic Heat Tress of the Number of OTUs.

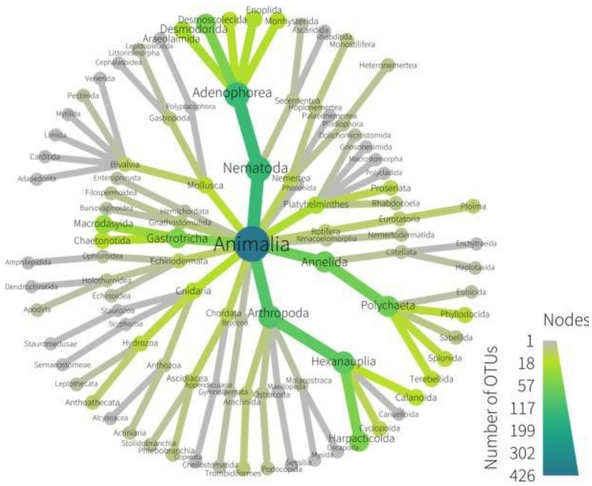

Figure I 22: Sediment Infaunal Taxonomic Heat Trees of the Number of OTUs.

Table I 12: Summary of Sediment Bacterial and Infaunal Richness.

	Bacterial		Faunal	
Minimum	225		10	
Maximum	381		84	
Mean	324.1		42.5	
±SD	39.3		15.4	

I.2.2.1.9 Accumulation plots of OTUs for the sediment bacterial and infaunal data sets for the Mona Array Area, ZoI and Offshore Cable Corridor are presented in Figure I 4. Two lines are plotted; the first (plotted in blue and often referred to as a Sobs curve) adds the new taxa to those already recorded, in sample order. The second line (plotted in red and often referred to as the UGE curve) is smooth, as it is an average output based on the samples being added in a random order 999 times (Ugland *et al.*, 2003). Sharp changes in the slope of the species in order of observation (Sobs) curve reflect notable changes in community between stations. Further, the relation of the Sobs curve to that of the permutated average of samples (such as the UGE curve generated average after 999 random sample combinations) can reflect the number of OTUs versus expectations.

I.2.2.1.10 The Sobs curve for the Mona sediment bacterial data set (Figure I 4a) initially began above the UGE curve indicating that a greater number of OTUs were present in Station ENV028 than was to be expected. The Sobs curve steeply increased with the addition of Station ENV039. Following this the Sobs curve continued to match the UGE curve until the addition of Stations ENV060, ENV064 and ENV065. Station additions after this followed the curve of the UGE curve. There were several plateaus (including Stations ENV035 to ENV036 and Stations ENV058 to ENV064) indicating groups of stations with more similar OTUs than the rate of change indicated by the UGE curve.

I.2.2.1.11 The Sobs and UGE curve of the sediment bacterial data OTU accumulation plot for the Mona survey area continued to rise with the addition of the last samples. This reflected that further samples across the Mona survey area may elicit additional OTUs to those reported though the rate of increase were low (<9 OTUs added with the last UGE stations).

I.2.2.1.12 The Sobs curve for the Mona sediment infaunal data set (Figure I 4b) sharply rose with the additions of Station ENV028, ENV029 and ENV030, rising above the UGE curve, indicating that a greater number of OTUs were present in Station ENV030 than was to be expected. Following the addition of Station ENV031 the Sobs curve fell below the UGE curve and followed the UGE curve. On addition of Station ENV039 the Sobs curve again rose above the UGE curve until the addition of Station ENV042. The Sobs curve then followed closely with the UGE curve. This suggested that the number of OTUs reported for subsequent stations were in line with the wider area and no shifts in the community were present.

I.2.2.1.13 The Sobs and UGE curve of the sediment infaunal data OTU accumulation plots for the Mona survey area continued to rise with the addition of the last sample. This reflected that further samples across the survey area may elicit additional OTUs to those reported. Rates of increase towards the end were low with <9 OTUs added to UGE in the Mona survey area.

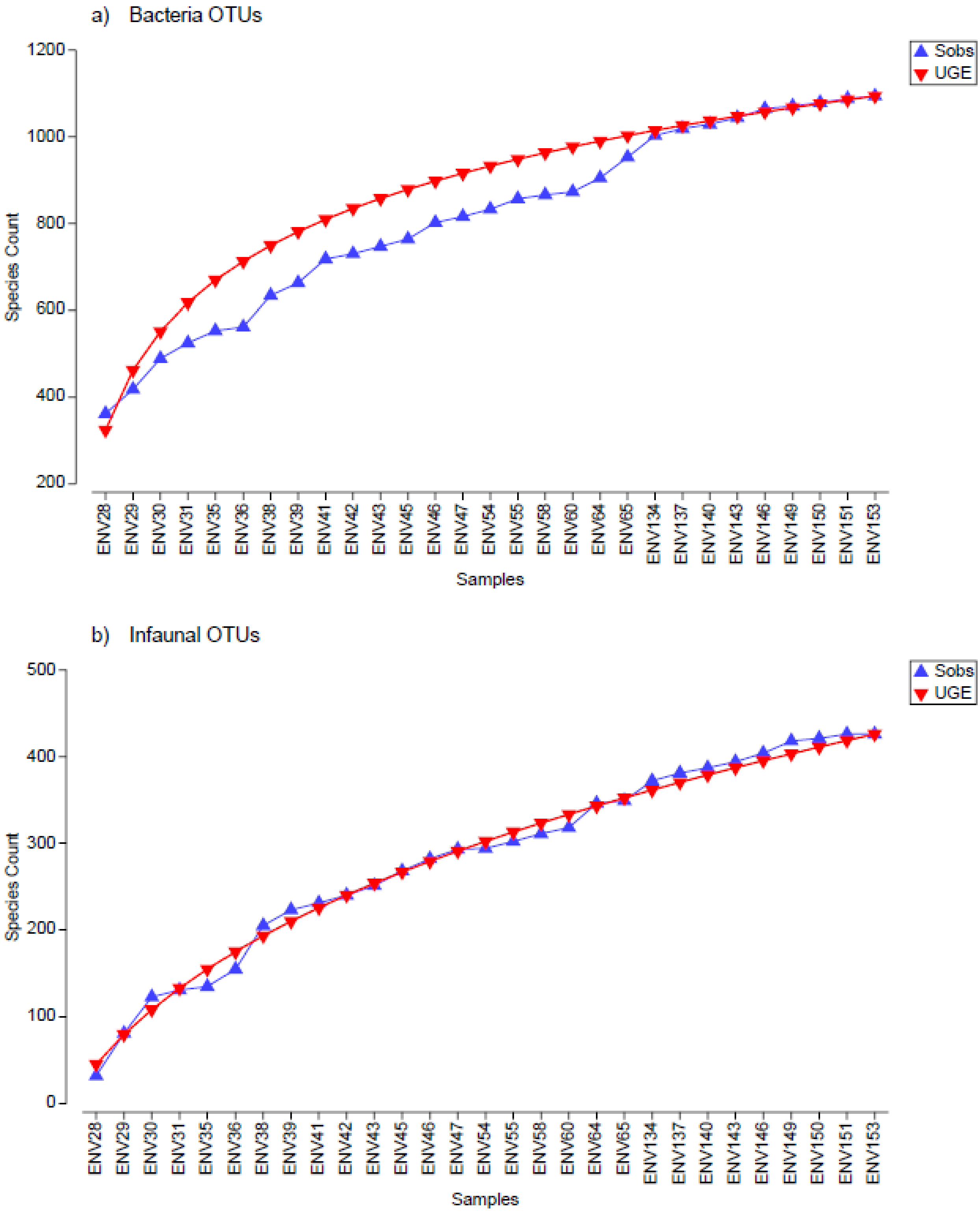

Figure I 23: OTU Accumulation Curve.

I.2.3 OTU Community Structure using Multivariate Analyses

I.2.3.1.1 The results of the CLUSTER analysis including SIMPROF analysis in the form of a Bray-Curtis similarity dendrogram and nMDS plot based upon standardised data for the sediment bacteria samples are displayed in Figure I 5 for the Mona Array Area, ZoI and Offshore Cable Corridor. Similarly results of the same analysis on the standardised infaunal data are presented in Figure I 6.

I.2.3.1.2 The CLUSTER analysis and resulting dendrogram for the Mona survey area sediment bacterial OTU data set (Figure I 5a) identified 18 groups which comprised 8 outliers (SIMPROF *a, e, f, h, j, k, o* and *p*), nine closely associated pairs (SIMPROF *b, c, d, g, i, l, m, n* and *q*) and a single cluster (SIMPROF *r*). All samples were considered more dissimilar than similar to one another and grouped at *c.*22% similarity. The generally low similarities are potentially due to the bacterial communities being far richer than equivalent metazoan communities and are less discriminately bound to the sediment given their established variation with both overlying water quality along with direct sediment physico-chemistry (Allison & Martiny, 2008; Frühe *et al.*, 2021). However, they still provide a suitable sensitive receptor to environmental pressures for monitoring impacts. (Horton *et al.*, 2019).

I.2.3.1.3 The nMDS ordination of the Mona sediment bacterial sample data set (Figure I 5b) revealed a similar pattern to the cluster analysis with a stress level of 0.16, which can be considered a useful two-dimensional representation of rank dis(similarities) and overall pattern observed in the data set.

I.2.3.1.4 Examination of the Mona sediment bacterial sample data set together with results of SIMPER analyses at a group level is presented in Figure I 5. This was restricted to explaining separations where similarity was less than 41% for conciseness. The broad groups identified showed differences due to subtle variations in taxa community structure within particular SIMPROF groups.

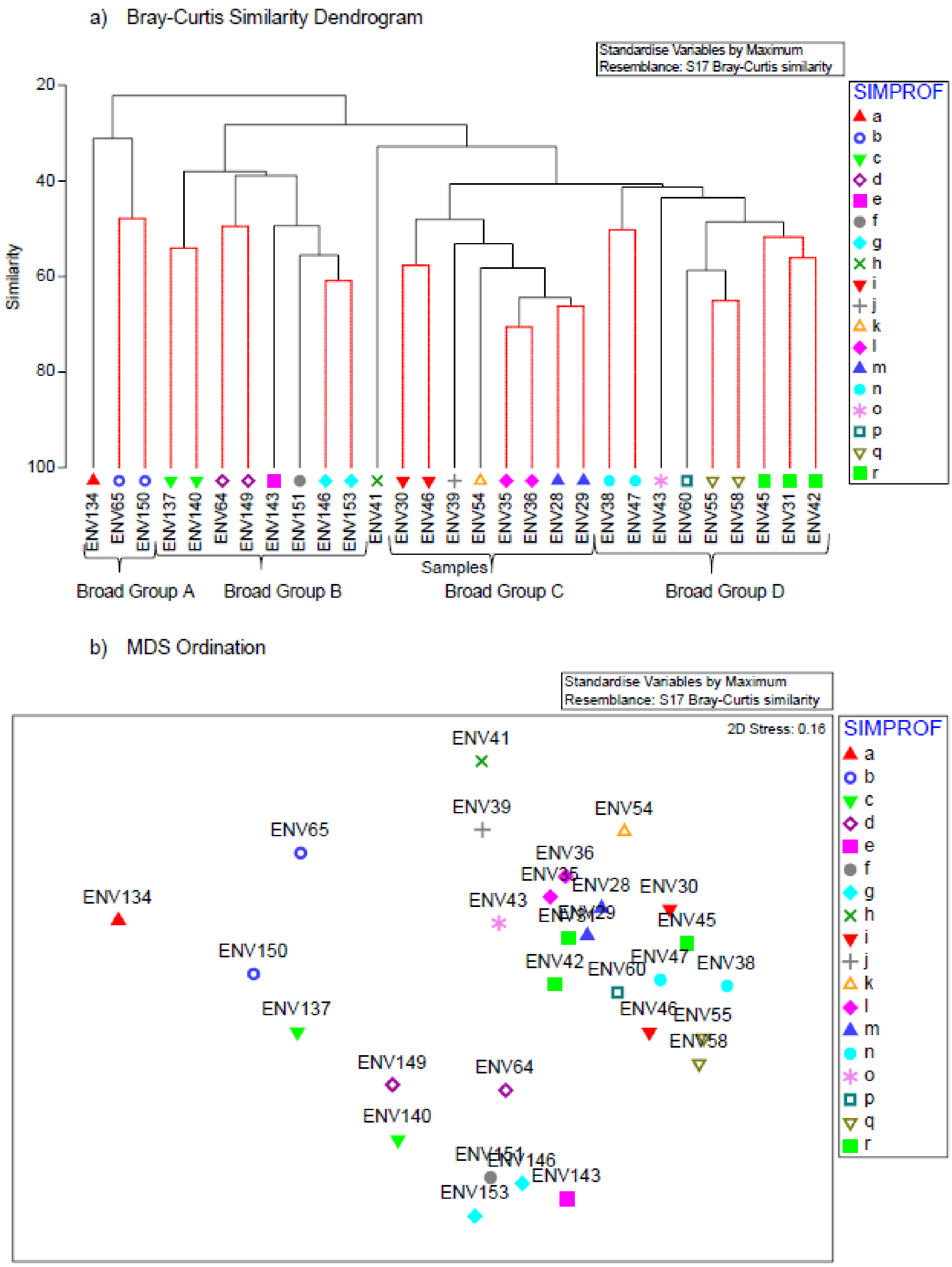

Figure I 24: Multivariate Analysis of Sediment Bacterial OTU Data by Sample.

Table I 13: Taxa Influencing Sediment Bacteria OTU SIMPROF Variation.

SIMPROF	Dissimilarity (%)	Group Influencing Sample Separation
Broad Group A vs *c-r*	78	• 58 Gammaproteobacteria OTUs were more abundant in Broad Group A (*c.* 10.1% of the dissimilarity) whilst 25 OTUs were absent (*c.*3.6% of the dissimilarity) • 26 Indeterminate Bacteria OTUs were unique to Broad Group A (*c.*3.6% of the dissimilarity whilst 48 were more abundant (*c.*9.2% of the dissimilarity) and 20 OTUs were absent from Broad Group A (*c.* 2.8% of the dissimilarity) • 25 Bacteroidia OTUs were more abundant in Broad Group A (*c.*4.4% of the dissimilarity) whilst 11 OTUs were unique to Broad Group A (*c.*1.7% of the dissimilarity)
Broad Group B vs *h-r*	72	• 33 Indeterminate Bacteria OTUs were more abundant in Broad Group B (c.5.3% of the dissimilarity) whilst 17 OTUs were absent (*c.*2.5% of the dissimilarity) • 30 Gammaproteobacteria OTUs were more abundant in Broad Group B (*c.*4.6% of the dissimilarity), 23 OTUs were absent (*c.*3.6% of the dissimilarity) and 13 Gammaproteobacteria OTUs were unique to Broad Group B (*c.*2.0% of the dissimilarity) • 13 Alphaproteobacteria OTUs were absent from Broad Group B (*c.*1.9% of the dissimilarity) • 14 Bacteroidia OTUs were more abundant in Broad Group B (*c.*2.3% of the dissimilarity) • 14 Proteobacteria OTUs were more abundant in Broad Group B (*c.*2.1% of the dissimilarity)
h vs Broad Group C and D	67	• 34 Indeterminate Bacteria OTUs were absent from SIMPROF *h* (*c.*5.4% of the dissimilarity), 32 OTUs were more abundant (*c.*8.6% of the dissimilarity) whilst 21 OTUs were unique to SIMPROF *h* (*c.*9.0% of the dissimilarity) • 30 Gammaproteobacteria OTUs were absent from SIMPROF *h* (*c.*4.8% of the dissimilarity) and 19 OTUs were more abundant (*c.*3.5% of the dissimilarity) with 10 Gammaproteobacteria OTUs being unique to SIMPROF *h* (*c.*4.4% of the dissimilarity)
Broad Group C vs Broad Group D	59	• 50 Actinomycetia OTUs were more abundant in Broad Group C (*c.*9.1% of the dissimilarity) whilst 12 OTUs were unique (*c.*2.3% of the dissimilarity) • 49 Planctomycetes OTUs were more abundant in Broad Group C (*c.*9.3% of the dissimilarity) and 8 OTUs were absent (*c.*1.1% of the dissimilarity) • 25 Acidobacteriae OTUs were more abundant in Broad Group C (*c.*4.5% of the dissimilarity)

I.2.3.1.5 CLUSTER analysis and resulting dendrograms for the Mona sediment infaunal OTU data set (Figure I 6) identified eight groups; two outliers (SIMPROF *b* and *c*), two closely associated pairs (SIMPROF *a* and *h)* and four clusters (SIMPROF *d, e, f* and *g*). All samples were more dissimilar than similar to one another, grouping together at c.1% similarity.

I.2.3.1.6 Examinations of the Mona sediment infaunal sample data together with results of SIMPER analysis; presented in Figure I 6, together with the principal contributors to the grouping and separation of the samples.

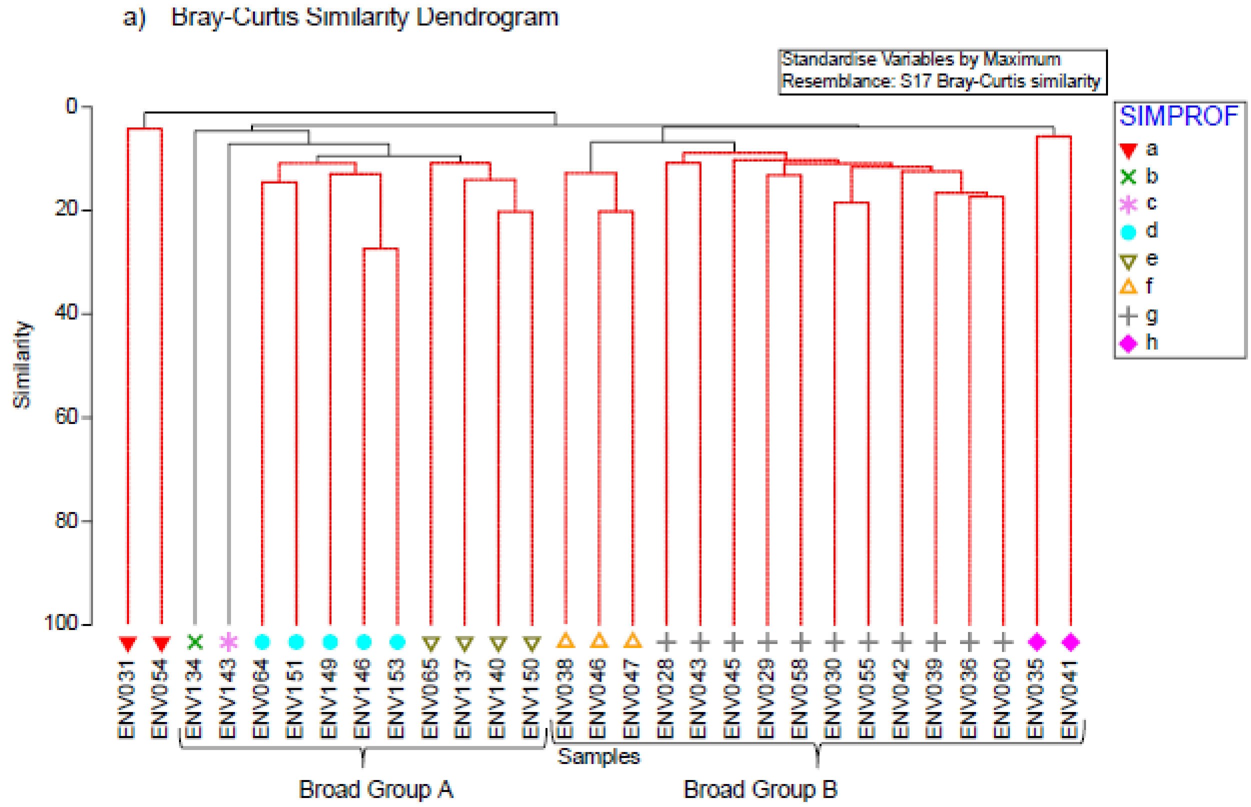

Figure I 25: Multivariate Analysis of Sediment Infaunal OTU Data by Sample.

Table I 14: Taxa Influencing Sediment Infaunal OTU SIMPROF Variation.

SIMPROF	Dissimilarity (%)	Taxa Influencing Sample Separation
a vs Broad Group A and B	99	• *Sonnenemertes cantelli* IM-8IXW3W, *Saccoglossus mereschkowskii* IM-WE05OU, Anthoathecata IM-5H30AY, Corellidae IM-2869MR and Eunicidae IM-O21ZNT were more abundant in SIMPROF *a* (*c*.9.1% of the dissimilarity) • Haplognathiidae IM-08H4J7, *Owenia fusiformis* IM-FA7TK0, Harrimaniidae IM-1L17XV, Desmodorida IM-SE37IM, Enoplida IM-J9G854 and Halomonhystera IM-1OBYJ8 were unique to SIMPROF *a* (*c*.11.4% of the dissimilarity) • Echinoidea IM-8W0YLI was absent from SIMPROF *a* (*c*.0.9% of the dissimilarity)
Broad Group A vs Broad Group B	96	• Echinoidea IM-8W0YLI, *Protodrilus* IM-CWR0S0, *Chaetonotus neptuni* IM-H37O8Q, Sabellariidae IM-WO1H6H and *Halichaetonotus* IM-4P6RNJ were more abundant in Broad Group A (*c*.3.8% of the dissimilarity) • Monhysteridae IM-R06NVS, *Temora longicornis* IM-8UYRT7 and Calanoida IM-J7MI8C were more abundant in Broad Group B (*c*.2.2% of the dissimilarity) • *Aspidiophorus tentaculatus* IM-IT4Y39 and *Ectopleura dumortierii* IM-8YD985 were unique to Broad Group A (*c*.0.7% of the dissimilarity) • Desmoscolecidae IM-04EB95 was absent from Broad Group A (*c*.0.6% of the dissimilarity)
h vs *f* and *g*	96	• Hydractiniidae IM-G58AJ7, *Chaetonotus neptuni* IM-H37O8Q, Comesomatidae IM-6739DN, *Oxystomina* IM-MQ42Y6 and *Oxystomina* IM-X5HU8P were unique to SIMPROF *h* (*c*.7.9% of the dissimilarity) • Terebellida IM-9EC1UY, Cirratulidae IM-FSK19U, Aricidea IM-1L75U0, Capitellidae IM-BB86Z4, Calyptronema IM-B6QK83 and Ophiuroidea IM-F63CIM were more abundant in SIMPROF *j* (*c*.9.8% of the dissimilarity)

I.2.4 Multivariate Comparison of Metabarcoding Results to Physico-chemical Data

I.2.4.1.1 The bacterial and infaunal OTUs detected throughout the Mona Array Area, ZoI and Offshore Cable Corridor were compared to the physico-chemical data to determine if any patterns correlated.

I.2.4.1.2 A RELATE analysis identified a 36.2% significant correlation between the sediment bacterial OTUs and physico-chemical variables. BV STEP analyses further identified three bacterial taxa groups (Acidobacteriales IM-39V8CG, Gammaproteobacteria IM-0E7JQ9 and Bacteria IM-8M219X) which best explained the correlation.

I.2.4.1.3 A RELATE analysis between the infaunal data set and the physico-chemical variables identified a 27.5% significant correlation. Seven taxa (Dorvilleidae IM-4BCCG8, Pectinariidae IM-49Y1Q1, Terebellidae IM-2QCW27, Terebellida IM-9EC1UY, Chaetonotidae IM-G6RRG9, Phoronidae IM-DKYU71, Coelogynoporidae IM-36ZQ7T).

I.2.4.1.4 Results of an analysis of similarity (ANOSIM) conducted on both the bacterial and infaunal data sets to investigate the influence of spatial distribution indicated depth (rounded to 10 m increments) was found to have a significant impact of the SIMPROF groupings ($r=0.552$, $r=0.403$, $p<0.05$).

I.2.4.1.5 Further investigation into the relationship between bacterial and infaunal OTUs and physico-chemical variables would require further sampling, however, no further sampling will be undertaken for the Mona Offshore Wind Project. This is because, the results of this analysis, as presented in this report, are considered to be sufficient for the purposes of baseline characterisation.

I.2.5 Multivariate Comparison of Macrofaunal and Metabarcoding Data Sets

I.2.5.1.1 The sediment bacterial and infaunal OTU data sets, were compared to the adult macrofaunal abundance and biomass data to determine if there was any correlation. A RELATE analysis identified a significant correlation of 68% for bacterial OTUs and 47% for infaunal OTUs when compared to the adult macrofauna abundance data. Similar results were found for biomass data indicating a 63% significant correlation for bacterial OTUs and 44% for infaunal OTUs.

I.2.5.1.2 It is important to note that despite significant correlations found only one macrofauna replicate sample was used for metabarcoding of bacteria and infauna. This is, however, considered to be sufficient for the purposes of baseline characterisation.

I.2.6 References

I.2.6.1.1 Williams, K.P., Gillespie, J.J., Sobral, B.W.S., Nordburg, E.K., Snyder, E.E., Shallom, J.M. and Dickerson, A.W. (2010) Phylogeny of Gammaproteobacteria. Journal of Bacteriology, 192(9), pp.2305-14.