

Echoes of the Shore:

New Horizons for Marine Research and Management

EXHIBITION GUIDE





Curatorial Statement

The aim of this exhibition is to show how a diverse range of research methods have been used to reveal community-held marine values across three test-site locations: Portsmouth, Chepstow and the Shetland Islands as part of the Diverse Marine Values project.

In understanding the relationship between people and marine environments, researchers working on the Diverse Marine Values project have employed a suite of gualitative and arts-based research approaches to engage with coastal communities, ocean scientists and marine managers. These methods were selected due to their suitability to derive qualitative evidence and promote engagement across a range of sectors, in addition to facilitating dialogue and deliberation and providing space for creative thinking and experimentation. Furthermore, the methods used entailed varying degrees of participation, from researcher-led approaches to those that were coproduced with local groups, allowing researchers to tailor their methods to appeal to the needs of individuals and communities. The content of this exhibition is an assemblage of these research approaches, processes and findings, and their inherent characteristics which make them well-suited for marine management.

Despite recognition for the need to integrate a broader spectrum of values in marine management, qualitative and arts-based research approaches subsist on the margins of marine research. *Echoes of the Shore: New Horizons for Marine Research and Management* highlights the importance of listening to coastal communities and understanding their values to inform marine management, as well as drawing attention to the pivotal role of qualitative and arts-based research methods to contribute to the future direction of transdisciplinary marine research and management.

It is apparent that we can only understand relationships between people and complex marine environments through the application of a broad range of disciplines, approaches and collaborations.

To reference coastal living and coastal connections, the exhibition employs a seaside aesthetic, situating its exhibits in a littoral space, at the meeting point of land and sea. As you walk around the exhibition you will be invited to consider the diverse values of the marine environment, as well as gaining an insight into the research methods and approaches used throughout the Diverse Marine Values project.

We are very grateful to the UKRI funded Sustainable Management of UK Marine Resources (SMMR) programme for recognising the value of this exhibition as a way of highlighting transdisciplinary working, and for its inclusion as part of the 2024 SMMR conference.

Curated by

Victoria Leslie, Erika Hughes and Sayyidah Salam

The Sustainable Management of UK Marine Resources programme

The Sustainable Management of UK Marine Resources programme is working to break down barriers between marine research and policy to integrate disciplines and form new marine research teams to support enhanced decision-making within UK waters. Funded by two UK Research and Innovation research councils: the Natural Environment Research Council and the Economic and Social Research Council, it recognises that by working together we can improve the management of the UK marine environment and realise sustainable societal and economic benefits for the UK. The Diverse Marine Values project is one of six projects funded to explore new ways of forging new partnerships and approaches to marine management in the UK.





Diverse Marine Values

by Steve Fletcher

The goal of the Diverse Marine Values project is to help create a step-change in the transdisciplinary capability of the UK marine policy and research community to use diverse values in marine decision-making. Diverse values captures the idea that marine spaces have instrumental, intrinsic and relational values and communities hold a wide variety of these values including social, cultural, aesthetic and economic values. Traditionally, the values considered in marine management and decision-making are limited in their range and source and fail to reflect the full range of values marine spaces have for coastal communities. Through this project, we are using wellestablished arts-based methods to work with lesserheard voices to identify a broader range of marine values. We are testing these approaches at three very different places in the UK, the waterfront city of Portsmouth, the wild and remote Shetland Islands, and the town of Chepstow and the broader catchment of the River Wye. At these locations, we are creating new ways of exploring and combining marine values. We are then linking with national marine management practitioners to consider how these methods could be adopted more widely to support the inclusion of diverse marine values in marine decision-making across the UK.





Project Test Sites

by Jonathan Potts, Emma McKinley and Rachel Shucksmith

Three locations were selected for the Diverse Marine Values project to reflect a range of UK marine and terrestrial geographies, nationally and locally tailored governance systems, diverse communities, and distinctive cultural identities.

Portsmouth

The test site focuses on the commercial port city of Portsmouth on the central south coast of England. Portsmouth is the UK's only island city with a proud maritime history going back centuries, with rich and diverse cultural connections. These connections continue today with the city being the home of the Royal Navy (hosting two thirds of the surface fleet) and various training facilities. Additionally, Portsmouth International Port is a busy freight and ferry port, with connections to the Isle of Wight, Channel Islands and the Continent. The Port is also developing its cruise liner market and leading on port sustainability practices.

Portsmouth is also highly vulnerable to flooding and sea level rise. The current coastal defences do not offer a sufficient level of protection and are at the end of their serviceable life. Major new coastal defences are being implemented that reduce the risk of a major flood event now and for the next one hundred years. Importantly, their aim is not just defence but to stimulate regeneration, enhance the public realm and improve the setting of historic and cultural features. Themes explored here have included issues relating to climate change, coastal development and management, peoples' connections to the sea and maritime heritage. It also considers how the work done through the Diverse Marine Values project can be applied to support local stakeholders, policy makers and the public to deliver a long term, holistic and sustainable approach to managing the coastline.



The Shetland Islands

The Shetland Islands test site is the most northerly region within the United Kingdom, forming an archipelago of over 100 islands, of which sixteen are inhabited. The population of just over 22,000 is dispersed across the islands, with over two-thirds of jobs directly or indirectly dependent on the marine environment.

The management of Shetland's marine resource has been locally prioritised, and local decision making has been championed by the local council and by marine sectors such as fisheries. This led to the creation of legislation and regulation which has allowed Shetland to take greater control over local marine management than is seen elsewhere in Scotland. This management has included control over marine licensing (via the ZCC Act), inshore fisheries (via a regulating order) and marine management (via the Shetland Marine Plan). Historically Shetland's economy was based on fishing and knitwear, with aquaculture, and oil and gas emerging as a key sector in the 1980s.

The emergence of renewable energy in the form of wave, tide and offshore wind means that Shetland's economy may transition again. This transition has the potential to impact local industries and cultural heritage. The Shetland test area has provided an opportunity to examine how diverse values of the marine environment can be considered in an area where local mechanisms exist for marine management but in a highly utilised and commercially exploited marine environment.



Chepstow and the River Wye Catchment

Positioned on the boundary between England and Wales, Chepstow sits on the banks of the River Wye as it makes its way towards the dynamic Severn Estuary. Boasting the second highest tidal range in the world, the Severn Estuary is a dominant feature of the region, influencing even those communities further upstream, such as Chepstow.

This test site focuses on the town of Chepstow and the surrounding Wye catchment. This area is perhaps less traditionally considered 'coastal', yet it is a region directly influenced by the tides of the nearby Severn Estuary and the connections to the sea and coast can be seen far inland. Working in this region has given the Diverse Marine Values team the opportunity to work closely with Monmouthshire County Council following their declaration of a Motion for the Rivers and Ocean. Through our work here, we have explored community connection to the coast and the notion of rivers and estuaries as a 'local ocean' space, the concept of ocean literacy away from traditional definition of coast, as well as challenging who gets to be considered a 'coastal community'. Themes explored here have included issues relating to water quality and how this impacts community access and use of the river, as well as considering how the work done through the Diverse Marine Values project can be applied to support local authority action to deliver the Motion for the Rivers and Ocean.





Coastal Encounters: Photography and Sense of Place

by Tim Acott and Victoria Leslie

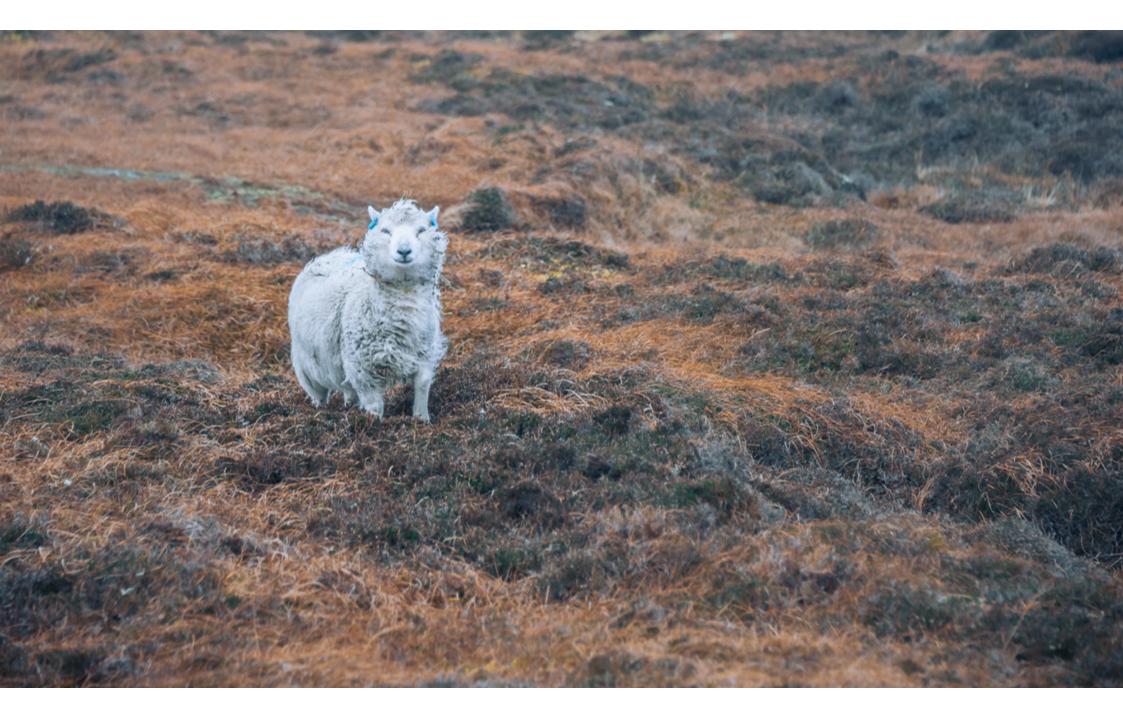
Photographs can create or consolidate a sense of place, challenging us to notice things otherwise overlooked or present the world in ways that run counter to dominant understanding. Photographs are selective snapshots of a dynamic changing world where time is halted when the shutter button is pressed. Photography is a relational encounter between the photographer and the world where the photographer is orchestrating a process of representation. New knowledge discourses and values can be created through the production, viewing and interpretation of photographs.

Three photo-essays were completed as part of the Diverse Marine Values project.

- Portsmouth: A Walled City
- The River Wye: From Source to Sea
- Shetland: Change and Transition

Tim Acott visited each location and took a series of photographs reflecting themes of coastal defences (Portsmouth), links between land and sea (the River Wye) and coastal change and transition (Shetland). The photographs were all taken using a Nikon D850 DSLR and an iphone13 pro in RAW format and processed in Lightroom Classic. Victoria Leslie visited each location seeking inspiration for writing the accompanying text. Tim and Victoria framed the photographs and text against a background of wanting to disrupt dualistic concepts of land / sea and people / nature while exploring the coast as a liminal place. Victoria and Tim saw the photo-essay as an opportunity to 'deterritorialize the research space' allowing new perspectives to enter the frame of research. Photography has the potential to allow pursuit of relational associations between diverse actants in a more-thanhuman world, making connections visible and creating values by drawing attention to new ontological frames. It is hoped that when viewed online or in an exhibition the photo-essays will become a departure point for thinking about coasts and why they are important.





Community Voices and Values

by Victoria Leslie and Sue Ranger

Community Voice Method is a well-established, interviewer-led approach for engaging with people and communities and for creating policy-relevant opportunities for engagement and deliberation around values.

In this project, over fifty people were interviewed about their relationship with the sea and coast and three films were produced using a values framework: *Shetland: Reddin Values* ('reddin' – to disentangle, unravel, sort out), *Tides of Change: Navigating Social and Environmental Change in Portsmouth* and *Watershed*. Over one hundred and fifty people attended the film screenings and accompanying workshops across the test site locations, where the film was used to stimulate discussion around community-held marine values. All three films can be viewed in the exhibition, providing a chance to understand more about the many ways people value their marine environments.





Digital Stories of Coastal Communities

by Elena Vacchelli

A participatory approach called Digital Storytelling was used to explore the values of people living in coastal communities across the UK. Digital Storytelling represents a co-creative way to engage local communities in a safe space which is achieved through a series of ad-hoc facilitated workshops where people's values are elicited through sharing their experiences of living by the sea.

This non-traditional way of collecting qualitative data allows people from coastal communities to disclose what they choose to represent about their own lives, values and beliefs in relation to the ocean in a way that is different from how the marine science community has sought to engage coastal people in the past. The novel, relational, ethics-centred approach we developed in this project emphasises the process of taking part in the workshop as an important moment of data collection, alongside the digital stories resulting from this work.







Socially Engaged Theatre and Diverse Values

by Erika Hughes, Emma McKinley and Cressida Bowyer

Recent years have witnessed a seemingly constant call for improved understanding of human-ocean relationships, resulting in a 'boom' of marine social science research. However, despite this interest in the human dimensions of the ocean, coasts and seas, gualitative and arts-based research approaches to explore values, stories and ocean literacy have remained on the periphery of ocean research. Socially engaged theatre is a participatory practice which involves people and communities in the devising and making of a theatre piece. The performance series was undertaken as part of the Diverse Marine Values project, and brought together ocean scientists, coastal and marine managers, and community members to create a series of original performance pieces. The distinct but interrelated performances combined elements of forum theatre, devised theatre, and storytelling to address marine issues important to each respective community, with a view to understanding and fostering ocean literacy.

The performance in Shetland, *Ripple Effect*, took place in collaboration with the Shetland Youth Theatre, and featured the work of ten youth performers aged 12-17. The Portsmouth performances, *Community Consultation*, featured local marine managers and has since been included in the teaching curriculum for the Coastal and Marine Management MSc at the University of Portsmouth. In both places, the performance work illustrates the ways in which theatre can serve as not only a tool for science communication, but also a research method through which human-ocean relationships can be explored. The performances helped the dramaturgical-research team, comprised jointly of specialist theatre practitioners and experts in ocean literacy, coastal management, and plastics pollution to reshape notions of data collection and stakeholder engagement. Collaborative theatre making with area stakeholders, marine scientists, and artists led to deeper conversations and embedded engagement within each coastal community. It also led to a fundamental reshaping of the questions and approaches that marine managers and scientists asked of the communities in question.





Locating Values in Decision Making

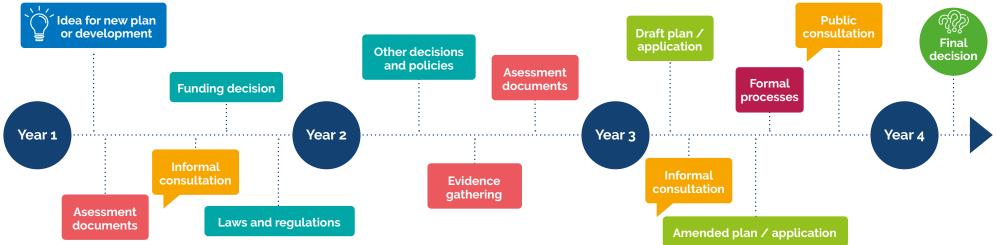
by Kathryn Fradera

The decisions made by marine authorities to make plans, allow development to happen, and to control activities are complex and all have their own processes to follow. In order to understand how creative methods such as theatre, community voice method and digital storytelling could be used within these processes we looked at six examples from across the UK.

The decisions we were looking at included a new seawall in Portsmouth, some byelaws to control fishing in Wales, a plan for redevelopment of a harbour in Shetland, as well as some spatial plans designed to shape future development in Wales and Scotland. For each example we identified how the final decision was made by mapping all of the processes and choices that went into deciding whether or not to agree with the proposed change. We identified the laws that decision-makers needed to think about, as well as all of the things that were assessed to make sure the decisions didn't result in changes that harmed the environment. We then looked at where people were able to tell decision-makers what they thought about the idea.

Through this exercise we were able to show that people can give their views on ideas for new development or plans that may affect them. However, there is more that decisionmakers could do to make it easier for people to talk to them, and to understand how decisions about the marine environment which may affect them are made.

This exhibit will explore what we mean by decision-making; the components that go into it and the types of processes that are used in UK marine management. By exploring how decisions are made we gain a better understanding of how to engage with them.



Biographies

Professor Steve Fletcher is a Professor of Ocean Policy and Economy at the University of Portsmouth. Steve is a world leading marine policy expert. His research specialises in using interdisciplinary evidence to co-create sustainable outcomes for coastal communities, particularly through values-based mixed methods approaches. Steve is the co-Principal Investigator of the SMMR Diverse Marine Values Project.

Professor Tim Acott is a Professor of Human Geography at the University of Greenwich. Tim specialises in exploring inter and transdisciplinary approaches for understanding values. He leads a work package conceptualising diverse values, assemblage theory and transdisciplinarity. Tim is co-Principal Investigator of the project and leads a photoessay exploring land / sea relations.

Dr Emma McKinley is a Senior Research Fellow at Cardiff University. Her research focuses on understanding the complex relationships between society and the sea, taking account of diverse values held by different communities, and how insights can support effective ocean governance. Emma is leading a work package exploring ways of embedding diverse values into ocean literacy, and is the Chepstow test site coordinator. **Dr Erika Hughes** is Reader in Performance and Interim Head of the School of Film, Media and Communication at the University of Portsmouth. Her work as a director of live and digital performance has been seen on stages and screens throughout Europe, North America and Asia. Erika is leading a work package that explores how arts-based methods can make diverse values visible.

Dr Rachel Shucksmith is a research group leader at the University of Highlands and Islands, and manager of Shetland Regional Marine Planning Partnership. Rachel has led Scottish Government-funded research, advancing new approaches to regional marine planning and has worked to develop guidance on inclusion of cultural values in marine planning. She is the Shetland Islands test site coordinator.

Dr Victoria Leslie is a Research Fellow at the University of Portsmouth. With an academic background in English Literature, her research explores the use of narrative in environmental research. Within this project, Victoria is using a range of arts-based research methods, including creative writing and filmmaking to elicit community-held marine values. **Dr Jonathan Potts** is the Course Leader for MSc Coastal and Marine Resource Management, at the University of Portsmouth. His teaching is interdisciplinary and spans the science-policysociety interface. His current research is driven by national and global sustainable development agendas, emphasising transferable practices for global sustainability. Jonathan is the test site lead for Portsmouth.

Dr Cressida Bowyer is an Associate Professor in Arts and Sustainability at the University of Portsmouth. A biological scientist by training, the primary purpose of her research is to address global problems using transdisciplinary and participatory methodologies. Cressida often uses arts-based research methods such as music, digital storytelling and visual arts, to engage communities.

Dr Alison Fairbrass, a Research Fellow at University College London, studies Marine Natural Capital. She explores what evidence is used in UK marine management and how this represents the diverse values of marine natural capital. Recently, she investigated natural capital approaches for managing inshore environments with DEFRA's mNCEA programme. **Professor Paul Ekins** OBE is Professor of Resources and Environmental Policy and Director of the UCL Institute for Sustainable Resources. He co-chaired the production of UNEP's flagship Global Environment Outlook (GEO-6) and developed the Natural Capital Indicator Framework which has been employed in this project.

Dr Lucy Greenhill is the Head of Blue Economy Policy at Howell Marine Consulting. She is an expert in ocean governance centred on facilitating transitions to a sustainable Blue Economy. Lucy has added her expertise in understanding the evolving science-policy interface in marine governance across the UK jurisdictions and is working with national marine management organisations to help incorporate more diverse values into decision making processes.

Beth Siddons is a Principal Consultant at Howell Marine Consulting. She is an expert in ocean policy at local, national, and inter-governmental levels. Beth has extensive experience integrating ocean priorities into long-term government strategies, policies and legislation. Within this project, she is working with national marine management organisations to help incorporate more diverse values into decision making processes. **Dr Kathryn Fradera** is a Post-Doctoral Research Associate at the University of Highlands and Islands. Her work in both academia and the private sector involves understanding how marine decisions are made and how these can be enhanced to include more understanding of stakeholder needs and a wider range of evidence.

Professor Dickon Howell is the Director and Founder of Howell Marine Consulting, and a visiting Professor at Newcastle University. He was instrumental in the set up of the MMO, as Chief Scientific Advisor, Director of Marine Development and Head of Marine Licensing. He possesses global expertise in fostering collaboration among policymakers, scientists, and stakeholders working to improve the impact of marine science in public policy.

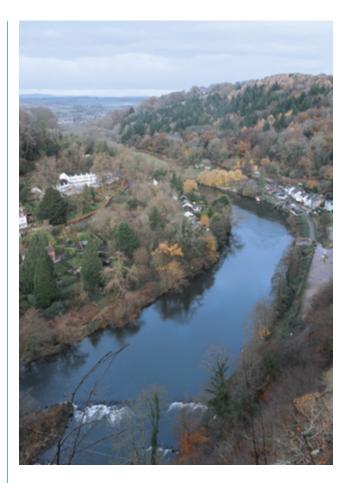
Professor Elena Vacchelli is a Professor of Sociology at the University of Greenwich with substantial transdisciplinary and international experience in researching migration policies, gender and urban studies. Currently developing participatory, co-creative and digital research epistemologies to work with marginalised groups, Elena's role in the project was to engage local communities through Digital Storytelling. **Dr Sue Ranger** is a consultant for the Marine Conservation Society (MCS). As a conservation social scientist with over three decades of experience in the UK, UK Overseas Territories and beyond Sue was well placed to contribute to delivery of the Community Voice Method approach to eliciting values. She is a Co-Founder & Director of Freestater CIC, a creative sustainability consultancy specialising in engaging people in values-based resource management and drew on over a decade of research to develop a subjective well-being benefit typology that has been applied in this project.

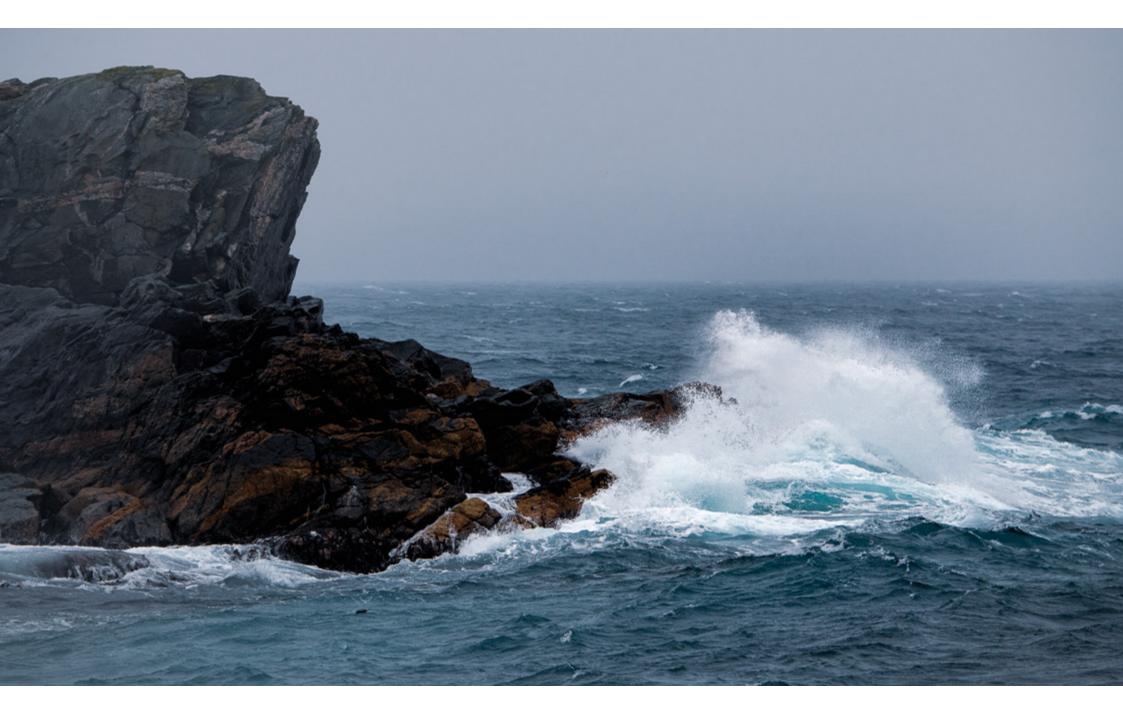
Nicola Bridge is Head of Conservation Education and Communications at Ocean Conservation Trust. She brings her highly applied expertise to WP3 around ocean literacy where she focuses on supporting the design, delivery and assessment of ocean literacy interventions. Nicola is President of the European Marine Science Educators Association enabling inspiration from ocean literacy activities elsewhere. Jon Parr is the Head of Education and Infrastructure at the Marine Biological Association. Jon has extensive experience developing and leading innovative projects in marine education. Jon was the EU H2020 Sea Change Project Coordinator which implemented ocean literacy interventions across Europe, and is working within the Diverse Marine Values team to explore ways of embedding diverse values into ocean literacy.

Dr Stephen Jay is a Reader in Marine Planning at the University of Liverpool and the Director of the Liverpool Institute for Sustainable Coasts and Oceans, bringing together expertise from the natural and social sciences from across the city's research Institutions. Stephen has been instrumental within this project in conceptualising diverse values using Assemblage Theory.

Dr Fernanda Balata is a Senior Programme Manager at the New Economics Foundation. She is a seasoned political economist and strategist with years of experience bridging policy and practice, advising governments and managing global campaigns. Although NEF has a track record of marine activities (e.g. the pioneering Blue New Deal project), Fernanda is involved in this project to share their capacity development planning and implementation expertise. **Steve Bomford** is the co-founder of Company of Makers - a social enterprise that supports military veterans and their families in Portsmouth. As this group is largely absent from marine management processes, Company of Makers has worked with the research team to introduce military veterans to the project then support their engagement with the project.

Sayyidah Salam is the Project Coordinator of the SMMR Diverse Marine Values Project based at the University of Portsmouth. Recently completing a MSc Climate Change, Development and Policy, Sayyidah has a research background in marine policy, EDI and creative participatory research methods working with communities locally and internationally.











@diversevalues

www.smmr.org.uk/funded-projects/ integrating-diverse-values-into-marine-management/

This work was supported by the UK Research and Innovation and the Natural Environment Research Council Grant number NE/V0107497/1





