Marine
Management
Organisation

Baseline Social Information for Marine Planning: Seascape value, quality and links with sense of place (MMO1132)

Baseline Social Information for Marine Planning: Seascape value, quality and links with Sense of place (MMO1132)

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1 Introduction

ICF with Collingwood Environmental Planning (CEP) and ABPmer were contracted by the Marine Management Organisation (MMO) to undertake a study (MMO1132) to support social baselining for England's marine plans, by identifying and improving the existing evidence base and updating understanding around social issues that are relevant to marine planning.

The first deliverable from the study, a 'social evidence review' identified the social evidence priorities for marine planning. A second set of deliverables undertook research to improve understanding of three issues of relevance to marine planning for which the social evidence review identified evidence gaps. This document presents one of the research deliverables: 'Seascape value, quality and links with sense of place'. Two other reports are published separately, one on the impacts of emergent marine sectors on deprived communities, and the other on the health and wellbeing benefits of coastal recreation and barriers to access.

In developing marine plans, the MMO[1] must consider historical, visual, cultural and archaeological impacts across all coastal areas, as set out in section 2.6.5.2-3 of the Marine Policy Statement (2011). Within this, MMO is required to consider a) the existing character of a seascape and b) how highly it is valued.

The purpose of this report is to provide evidence to enable the MMO to meet these requirements. By exploring the characteristics of seascapes that contribute to their perceived value, in particular sense of place, and by considering the potential impact of change in the characteristics identified on how the seascape is valued, this research provides a first step towards enabling seascapes that are highly or lowly valued by 'coastal residents'[2] to be identified.

1.1 Objectives and research questions

Three research objectives and five related research questions guided the research and are presented in Table 1.

Table 1: Research objectives and questions.

Objectives	Research Questions
To develop an approach to capture the way that people value a range of seascapes.	**RQ1:** What are meaningful questions to ask people when talking about sense of place in relation to a seascape?
To understand the factors influencing how individuals value different seascapes.	**RQ2:** What is known about coastal residents' perceptions and feelings towards seascape (as an element of 'sense of place')?

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[1] The delegation of marine plan functions from the Secretary of State for Environment, Food and Rural Affairs is made under section 55 of the Marine and Coastal Access Act 2009. The marine planning functions were delegated to MMO in March 2010.

[2] People who live in a coastal zone. Eurostat (2016) defines this as a region which has, "*more than half of its population within 50 km from the sea*". https://ec.europa.eu/eurostat/web/coastal-island-outermost-regions/methodology

Objectives	Research Questions
To identify the characteristics of seascapes that contribute to sense of place, and explore the linkages between the quality of these characteristics and sense of place, and their sensitivity to change.	**RQ3:** What are the characteristics of seascapes (including physical and cultural characteristics and the activities that people do in them) that influence sense of place?
	RQ4: How does sense of place contribute to the value coastal residents give to particular seascapes
	RQ5: How might changes in these characteristics [of seascapes] influence both sense of place and seascape value?

As well as providing substantive findings on these issues, a further aim of the research was to test out whether the methods applied herein could be a viable process for use by marine planners on the value of seascapes to individuals who use them. The resulting understanding could enable MMO to better consider the influence of marine plans on that which people value.

The research objectives were addressed through a three-stage process:

- A brief review of recent literature (Annex 1: Literature review).
- Public participation Geographic Information System (PP GIS) mapping exercise (Annex 2: PP GIS Survey Report).
- Focus group with members of the public in a coastal location (Annex 3: Focus Group Record).

Each of these stages has been reported on to the MMO and form the Annexes of this report. The aim of this report is to provide a synthesis across these evidence sources in relation to the research questions.

This report is organised as follows:

- Approach and method which includes an overview of the method developed for identifying valued seascapes,
- Key findings organised by Research Question; and
- Conclusions and Implications, including recommended methods for exploring seascapes and sense of place, research gaps/limitations, and areas for future research.
- Annexes 1-3 contain further details on the literature review, PP GIS mapping survey and focus group.

It is intended that this report may be read independently. If further detail is required, readers can refer to the separate Annexes which are cross-referenced throughout.

1.2   Key terms - definitions and use

The definitions of key terms used in the research are provided below:

Seascapes: There is no formal definition for seascape in the UK. In the context of the UK Marine Policy Statement (2011) that directs Marine Planning policy, references to seascape should be taken as '*meaning landscapes with views of the coast or seas, and coasts and the adjacent marine environment with cultural, historical and archaeological links with each other*' (Paragraph 2.6.5.1). For Natural England, '*seascape, like landscape is about the relationship between people and place and the part it plays in forming the setting to our everyday lives.*' (Natural England, 2012).

Natural England's Seascape Wheel provides a starting point for describing seascape characteristics in terms of cultural/social (e.g. coastal features, surface water features, sunken and buried features, etc); perceptual and aesthetic (e.g. sight, sounds, smells, touch/feel, memories, etc); and natural (e.g. geology, air and climate, sea bed etc) (Natural England, 2012). This is set out in Figure 1

Figure 1: Seascape Wheel (adapted from Natural England, 2012).
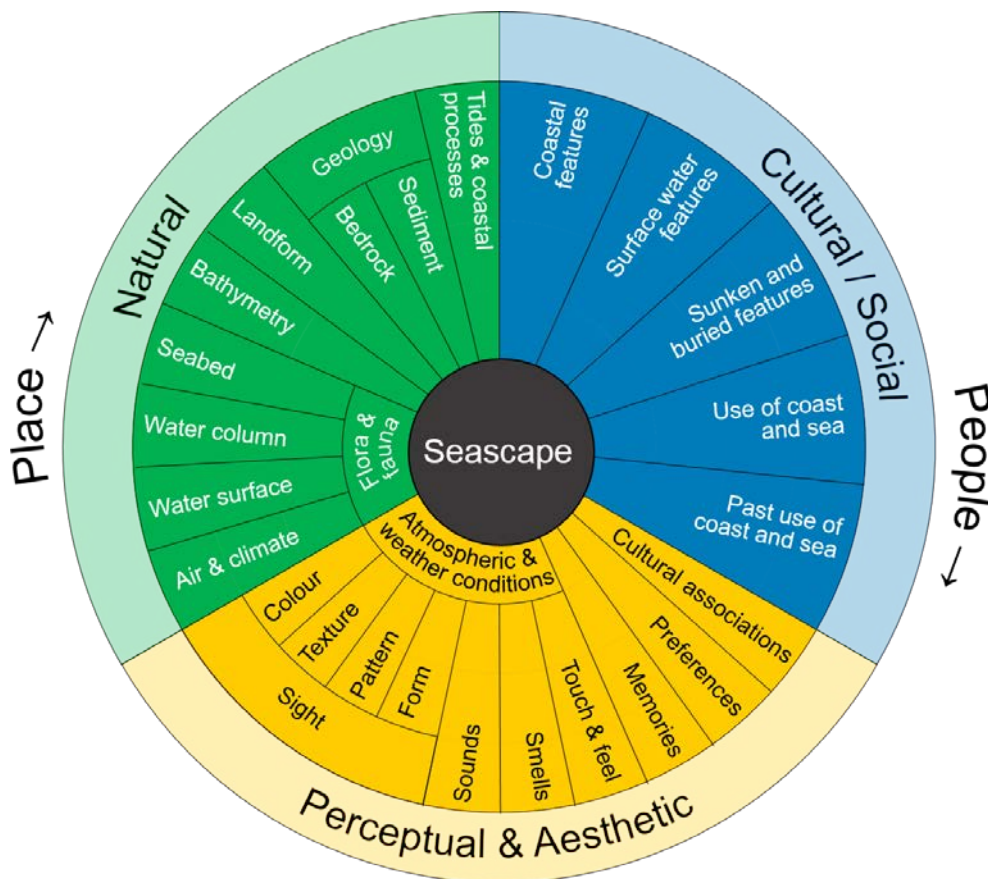
Sense of place can be usefully understood as '*how places make people feel, the meanings they associate with places, and how they influence their behaviour*' (Acott and Urquhart, 2014).

2 Approach and Method

2.1 Literature review

The aims of the literature review were three-fold:

- Contribute to method development for the PP GIS mapping exercise and the development of a discussion schedule for the focus group.
- Ensure that the field research took account of any recent evidence on the characteristics of seascapes that are important to people and the meanings and value attached to them.
- Identify any work that may have been done to link seascape character assessments with sense of place where the focus was on theoretical or practical explorations of ways of considering the importance or meanings attributed to seascapes and how to factor in the way that members of the public value seascapes as part of formal assessment processes.

The literature review explored each of the five Research Questions detailed in Table 1.

A brief non-systematic literature review was conducted limited to research and documents published since 2012, identified through a search of relevant academic literature (using Scopus), recent studies / research commissioned by Defra or the MMO and grey literature (e.g. from research projects and national-level studies), plus other key known or seminal papers already identified. Relevance and robustness criteria were applied to select publications for detailed thematic analysis.

The search results gave rise to a list of 24 papers, the 13 most relevant to the research questions of which were reviewed in detail, with additional key papers (which had been excluded based on the inclusion/exclusion criteria e.g. pre-dating the search timeframe) drawn on as needed to provide further information on the concepts and approaches used to explore sense of place.

The results of the literature review (Annex 1: Literature review) fed into the subsequent stages of the research.

2.2 Public Participation GIS mapping exercise

The main aim of the PP GIS mapping exercise was to explore the perceptions and feelings of northern Devon residents towards seascapes as an element of 'sense of place' and the characteristics of seascape that influence sense of place.

The PP GIS mapping exercise contributed to Research Questions 1, 2, 3 and 4 as detailed in Table 1.

2.2.1 Coastal study area
In choosing the coastal study area in which to conduct the online survey the following criteria were used:

- A coastal area with a range of coastal habitats and landscape characteristics;
- An area where the residents are likely to have a strong/positive association with the coast in order to facilitate recruitment of participants for both the mapping and focus group;
- An area of an appropriate scale, for example a Marine Character Area (MCA);
- The area was selected to avoid replication with the wider MMO1132 project research areas (e.g. Cornwall, Kingston upon Hull and Essex) to prevent stakeholder consultation fatigue.

Based on these criteria, Bideford Bay and Taw-Torridge Estuary MCA (MCA 42) (see MMO, 2018), was chosen as the study area, in agreement with the MMO (see

Annex 2: PP GIS Survey Report). MCA 42 is sited completely within the South West Inshore Marine Plan Area.

The study area covers all of Torridge and most of North Devon districts' coastlines (i.e. the majority of the northern coastline of Devon county). For the purposes of this report, this area is referred to as 'northern Devon'.

2.2.2 Survey approach

Drawing on the findings from the literature review, a bespoke PP GIS web-based survey was created. This comprised a map led interactive application enabling survey questions to be posed in relation to spatial locations. The application had an accompanying database to store the survey results. The application provided a simple, intuitive user interface designed to be suitable to complete on a range of devices (e.g. phones, tablets, computers).

A link to the online survey was sent to 32 organisations including local authorities, parish councils, resident's associations, local libraries, museums, councils, local nature conservation authorities, located within the study area.

Once a respondent accessed the survey, an introduction panel was displayed which described the rationale for the study, followed by an instructions panel. The respondents were then instructed to place a marker at a coastal location that they considered to be a 'special place'. Once they had selected a location, they were asked to answer a series of questions in relation to the location they had chosen.

Respondents were able to choose up to three special places on the northern Devon coastline (approximately Torridge and North Devon District Council coastline). Alternatively, if no coastal places within the study area were special to them, respondents were asked to indicate reasons why. The final section of the survey included basic demographic questions including the duration of residence in northern Devon.

The online survey was live for approximately one month during May 2019. A total of 113 respondents participated in the online survey, selecting a total of 249 special places on the northern Devon coast. Out of these respondents, only 99 completed the 'about you' questions; these results showed that 63% were female and 37% were male. The highest proportion of respondents (60%) were aged 25 to 59, whilst 37% were over 60 years old and 3% were aged 18 to 24. Nearly three quarters of respondents (74%) had lived in northern Devon for over 10 years, whilst 15% had lived there between 1 to 5 years, 10% between 5 to 10 years and 1% preferred not to specify. None of these respondents indicated they had lived in northern Devon for less than one year.[3]

The survey data provided the location (longitude and latitude) of each special place selected by respondents, along with the feelings associated with these places, the features which make them special, any activities undertaken in these locations, and

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[3] It should be noted that the survey sample and therefore the findings cannot be considered representative of the wider northern Devon population without further verification; the findings do however provide an indication of some of the perspectives held by coastal residents in this area.

frequency of visits. The survey data was analysed and used to further refine the question and format of the focus group.

Further details on the PP GIS survey are presented in Annex 2: PP GIS Survey Report.

2.3 Focus group

The focus group built on the findings from the earlier stages of the research, to further explore seascape value, quality and links with sense of place, contributing to the each of the five Research Questions (see Table 1).

To enable further exploration of the responses to the survey, the focus group was held in a coastal location, Barnstaple, in the same Marine Character Area as the PP GIS survey[4].

One 2-hour focus group with nine members of the public was held in June 2019. The focus group comprised a balanced mix of women and men; a mix of ages (the majority being in the age range 55+) and a mix of employment status (majority 'not employed and not seeking work'). Most participants had lived in northern Devon for a long time, 10 to 50 plus years. [5]

The discussion was facilitated by two experienced facilitators to ensure that all participants are able to contribute effectively and all topics were covered. Notes were taken during the discussion and verified against an audio recording which was transcribed. Transcriptions and notes were analysed using a simple thematic analysis to draw out key themes and sub-themes in relation the overarching research questions.

2.4 Cross analysis

Finally, the findings of each of the three stages were cross-analysed to assess how far these complement each other, the strength of evidence for different findings and to identify any remaining gaps and areas for future research.

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[4] The rationale for selection of the coastal community is described in Annex 3: Focus Group Record.
[5] It should be noted that the focus group largely comprised residents with very pro-environmental attitudes who do not necessarily reflect the views of all local residents and therefore these findings cannot be considered representative of the wider population without further verification, they do however provide an indication of some of the perspectives held by coastal residents.

3 Key Findings

This section presents the key findings organised by Research Question.

3.1 RQ1: What are meaningful questions to ask people when talking about sense of place in relation to a seascape?

3.1.1 Framework for understanding sense of place in the context of seascapes

There are various definitions of sense of place. In applying the concept in the context of seascapes and coastal and marine management, sense of place can be usefully understood as '*how places make people feel, the meanings they associate with places, and how they influence their behaviour*' (Acott and Urquhart, 2014). This emphasises three dimensions of sense of place (the material, the subjective and place-based activities) and rejects the idea of a deterministic relationship between the physical and psychological. Using this three-dimensional approach ensures that the exploration of emotional responses ('the subjective') is linked to uses and physical characteristics of place, which are dimensions that the MMO can influence for example through marine plans and activity licensing. This conceptual framework has been usefully applied in the context of understanding people and place relationships within fishing communities (see Figure 2; Urquhart and Acott, 2013)

Figure 2: Conceptual framework for understanding people-place relationships in fishing places (Urquhart and Acott, 2013).
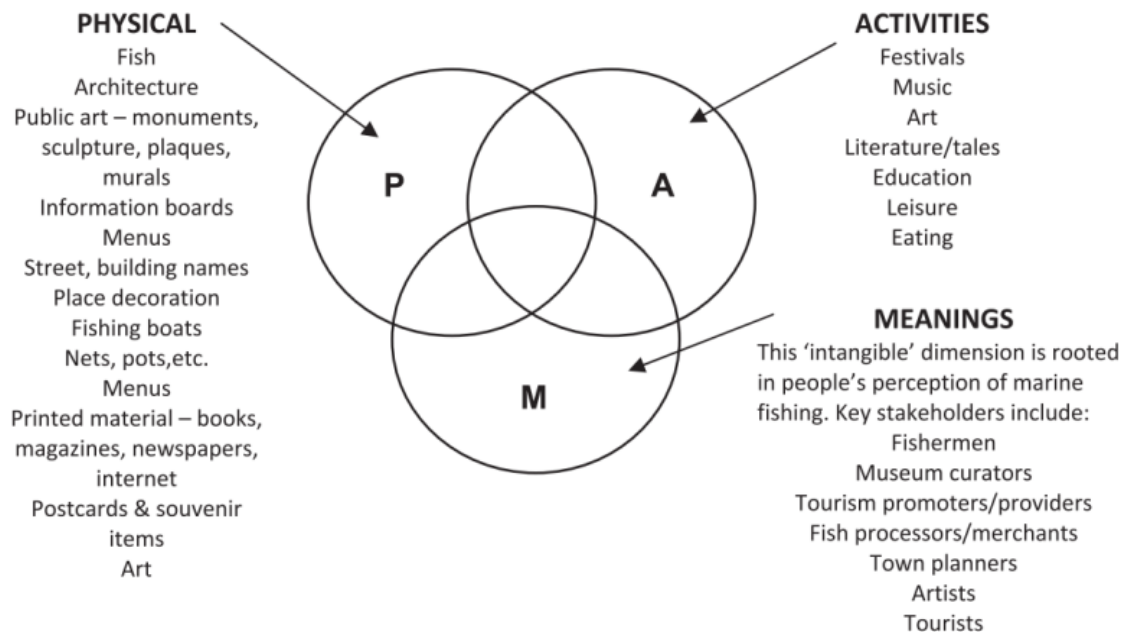
Sense of place encompasses place attachment, place identity, place dependence and place meaning (see Urquhart and Acott, 2013, 2014; Quinn et al., 2018). *Place attachment* is the emotional bond experienced between an individual or group and a place and encompasses *place dependence* and *place identity* (Masterson et al. 2017). *Place dependence* conveys an instrumental connection and is conceived as the ability of a place to satisfy important needs or facilitate goal achievement, for

example to be able to undertake particular activities. *Place identity* emphasises the dimensions of self that define an individual's identity in relation to the physical environment (Masterson et al., 2017). *Place meanings* are cognitions about a place and can either be descriptive statements about what a place is or what it is like and the images it conveys, or they can be more symbolic, for example does a place represent home or escape. The character of a place, e.g. seascape, can also be considered in place meaning (Masterson et al., 2017). A further consideration within the concept of sense of place with respect to coastal environments, is, as natural environments, their potential for facilitating benefits to well-being for example, through *restorativeness*, and *connectedness to nature*[6] (see for example, Wyles et al., 2019).

Distinguishing between these different aspects of sense of place (place attachment, dependence, identity and place meaning) is useful in ensuring that all aspects of what makes up an individual's sense of place are captured. However, these can be '*fluid dimensions of a general sense of place'* (Jarratt, 2015) and therefore are best thought of as a tool to assist in the analysis of overall sense of place and not necessarily useful in isolation from one another. This limitation has been recognised by Masterson et al. (2017) when highlighting the importance of not overlooking place meaning in sense of place research.

3.1.2 Approaches and questions to explore sense of place

Literature reviewed as part of this research typically applied qualitative or mixed methods approaches to explore sense of place (see the Literature Review in Annex 1: Literature review). Mixed method approaches, as adopted by the current research, have the advantage of providing a breadth of information where surveys are used, as well as depth of understanding where combined with qualitative approaches like focus groups. In particular, PP GIS mapping approaches, previously used for example to understand social perceptions towards landscape values (see Brown and Reed, 2012), offer the additional advantage of enabling the geographic mapping of highly or lowly valued seascapes.

Multi-item scales, such as Likert-scale statements, have often been used to explore sense of place, for example, to measure positive or neutral place attachment. In accordance with this, the current research measured sense of place through statements such as: '*This place is part of me*' and '*I am proud of this place*' (both explored place attachment; Lewicka, 2011); '*This place has good memories for me*' (related conceptually to place identity - developed by the research team and drawing on a similar phrase from Lewicka's 2011 attachment scale '*I have strong family connections to this place'*); '*This place makes me feel refreshed and revitalized*' and '*This place makes me feel calm and relaxed'* (related to restorativeness; adapted from Wyles et al., 2019 which drew on White et al., 2013); *'This place makes me feel close to nature'* (explored connectedness to nature; adapted from Wyles et al., 2019); and '*This is the best place to do the things I enjoy'* (place dependence; Jorgensen and Stedman 2001 cited in Masterson et al., 2017).

Consistent with the framework set out above (see Figure 2), it is important to elicit information on all the drivers of value including physical characteristics of seascapes

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[6] Connectedness to nature relates to an individual's emotional and cognitive bond to the natural world.

as well as the activities that people do within these locations. In the current research, Natural England's Seascapes Characteristics wheel (see Figure 1) was used to draw up a range of contextual features pertinent to the coastal study area to assess their importance in contributing to sense of place (see Annex 2: PP GIS Survey Report). This included for example, natural features such as beaches, views, wildlife, as well as sensory and cultural features. Respondents were also asked about the types of activities which make places special drawing on those used in Natural England's Monitor of Engagement with the Natural Environment survey (see Natural England, 2016). To better understand the underlying reasons for sense of place/residents' perceptions, it is useful to collect information on socio-demographic characteristics, for example length of residence.

The findings of the current research suggest the approach adopted may be a valuable tool for marine planning purposes. Indeed, feedback from focus group participants on the PP GIS survey was on the whole very positive (see Annex 3: Focus Group Record). The questions included in the research were found to be meaningful to respondents. Features of the approach that were particularly appreciated by respondents included the freedom to 'pick your own special place' (i.e. rather than being asked about a predetermined location) and the opportunity to provide additional free text responses. The added value of the focus group was in deepening understanding on how these different features, activities and feelings contribute to sense of place, and in exploring how changes in seascapes may impact on feelings and wellbeing.. The approach adopted was found to generate findings of interest to the MMO and raised points for further consideration (see subsequent sections).

3.2 RQ2: What is known about coastal residents' perceptions and feelings towards seascape (as an element of 'sense of place')?

This section focuses on what is known about coastal residents' feelings or perceptions towards seascapes (as the 'subjective' dimension of sense of place) as experienced and expressed by individuals (or a community/ies). Importantly, individual's feelings and relationships with a place can be different for different types of people (Quinn et al. 2018). Contextual factors such as the experience of mobility can influence sense of place within communities (Quinn et al., 2018). Mobility patterns can generate a diversity of place attachments and place meanings that contribute to sense of place (Quinn et al., 2018). For example, people who have recently moved to an area can establish an emotional attachment similar to that of longer-term residents, but their *place identity* can be different as this takes more time to develop than emotional bonds (Quinn et al., 2018). This can be particularly relevant to coastal communities that more commonly experience demographic shifts, specifically from migration (Quinn et al., 2018). Similarly, second homeowners are likely to assign different meanings to the location of their home than permanent local residents, for example they may be more likely to focus on environmental quality and the idea of place as an escape (Quinn et al., 2018). Further, sense of place is a dynamic concept which can vary temporally according to seasons and life context, for example, temporary changes such as avoiding cold weather, or more long-term changes such as more child-friendly location in parenthood (Bell et al. 2015). It seems likely therefore that characteristics such as age may play a factor in shaping sense of place, younger people may have a different place identity to older people or

those with children or grandchildren. While the current research did not specifically explore differences according to length of residence or socio-demographics, the findings from the survey data may be further analysed to explore the potential variations, and be complemented by further qualitative research to understand the underlying reasons for variations.

Figure 3 presents the PP GIS survey results on the feelings associated with special place(s) on the northern Devon coast in terms of sense of place. The vast majority (around 90%) of special places were perceived by respondents to evoke feelings of restorativeness (feeling 'calm and relaxed', 'refreshed and revitalized'), connectedness to nature (feeling 'close to nature'), and place identity ('good memories'). The majority were also associated with feelings related to place dependence ('best place to do the things I enjoy') and place attachment (feeling 'this place it part of me' and 'proud of this place'); place attachment was also captured through the place identity indicator. These findings were broadly consistent with the focus group discussion.

Figure 3: Responses to PP GIS survey question on 'How does this special place make you feel?' by place.
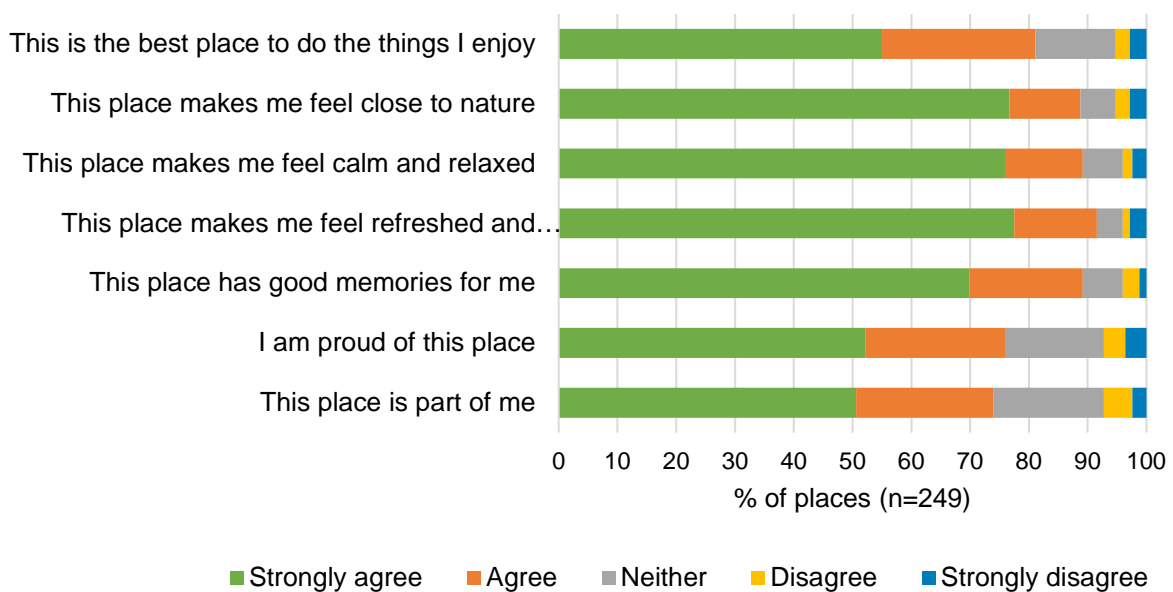
3.2.1 Restorativeness

The focus group discussion revealed very strong attachments and emotional bonds with seascapes, including beneficial impacts on wellbeing through restorativeness. This is consistent with literature which has found that blue spaces and coastal environments have been known to have a beneficial impact on wellbeing, in particular, on psychological restoration and suggests that attachment to coastal environments may be psychologically restorative because of the naturalness of the landscape (Wyles et al. 2019). In the focus group discussion there was general agreement that seascapes are vitally important for wellbeing, for example to "*recharge the batteries*", to put things into perspective, to be able to reflect, and to remove negative feelings and stresses. Examples of the restorative benefits associated with special seascapes included feeling happy, at peace, relaxed, content, and invigorated. One focus group participant in particular spoke about how

she did not have clarity or peace of mind when living away from the northern Devon coast revealing a strong connection and attachment to this particular place.

- *"you just sit on the top of a cliff and watch the sea and the sun going down beyond Lundy. You can't beat it, it just makes you feel relaxed, happy, at one with the world."*
- *"for me it's vitally important because I found that when I couldn't go out and see all this vista, of seeing absolutely nothing disturbing it, I just didn't have that same clarity, peace of mind and relaxation and the 18 months I spent living away I just couldn't find it anywhere else. I went into beautiful spaces but they weren't the same, they weren't right, so I needed to be on the coast and I needed to be on our coast."*

3.2.2 Place attachment, identity and dependence

Place identity with seascapes in northern Devon was evidenced in the focus group discussion. This was associated with the experience of growing up on the coast, and strong family connections and attachments tied up with happy memories of being in these places and of times spent with children and grandchildren. Childhood experiences were influential in shaping future relationships with the coast, for example, taking up activities such as recreational fishing.

- *"Well lots of emotions connected to it because it's where I grew up, so there is apart from just the actual sea obviously the fact that I grew up there. I mean I guess being as I've said a keen angler, that's to some extent where I started,"*
- *"we've got a lot of happy memories there from when the kids were young. […] we've taken our kids down there, we've dragged them back up."*

Place attachment including place identity and place dependence, was evidenced through expression of feeling lucky and honoured to have access to these locations, for example, for their solitude and ability to undertake activities, as well as respectfulness and awe of certain locations and features for example, the rocks, the beach, the size and scale of the cliffs. One participant described his very strong emotional attachment and respect for the northern Devon coast as feeling like being "*at one in the singular heaven".*

Special seascapes also brought up mixed emotions and feelings of sadness for some participants (and survey respondents) due to personal attachments. For example, memories of lost loved ones. Feelings of nostalgia were also expressed about how places have changed over time, for example, fewer fishing boats compared with childhood (see also Section 3.5). Feelings of anger, upset and irritation in relation to the perceived misuse of their special places or mistreatment of the wildlife therein, also reveal strong attachment to the coast (see also Section 3.5) and connectedness to nature.

- *"I often come away from there really wound up because you have got a major bird feeding site there, you've got birds out on the mud and you've got dog walkers throwing sticks and balls in the middle of the flocks of birds. They've only got a limited time to feed and their feeding time is being wrecked by people who don't understand."*

A fear of the sea was mentioned by a couple of participants in relation to going into the sea (although it was still appreciated), and also recognition that for others the sea may not have the same appeal.

Strong place attachment was also evidenced to influence how people interpret and value other general seascapes. In the focus group discussion participants drew parallels between the general seascapes presented and those they were familiar with in their local area, revealing their strong connections and attachments to their local seascapes and often valuing aspects of general seascapes that were similar to favoured local seascapes.

3.2.3 Connectedness to nature

Feelings associated with connectedness to nature were also evidenced during the focus group discussion, for example, related to opportunities to connect with nature through activities such as rockpooling (finding species) and surfing etc. (these are discussed more fully in Section 3.3)

* *"I've been paddling along with porpoises beside me, I've shaken hands with the sunfish out there just lolling and saying hello"*
* *"Oh I just feel so honoured really to be able to do what I do [rockpooling] and to find the special things that I see out there."*

3.3 RQ3: What are the characteristics of seascapes (including physical and cultural characteristics and the activities that people do in them), that influence sense of place?

This research provides an assessment of the characteristics of seascapes which influence sense of place in terms of the physical and cultural characteristics and the activities that people undertake in these special locations.

3.3.1 Physical and cultural characteristics of seascapes and sense of place

Literature on sense of place within coastal fishing communities in England has demonstrated how the physical settings of a place set boundaries for the development of place attachment (see Acott and Urquhart, 2014; Urquhart and Acott, 2013, 2014).

Figure 4 presents the PP GIS survey results on the physical features of the northern Devon coast which make places special to respondents. Consistent with the focus group, a range of characteristics of seascapes were identified as important to sense of place. The vast majority (over 80%) of respondents valued 'sights and views, expanse of sea', 'sensory characteristics', 'waves and tides', 'presence of wildlife' and 'beaches and sand dunes' as features which made a place special. 'Cliffs, rock formations and geology' and 'rocky shores and rockpools' were also valued by a high proportion (77% and 76%, respectively) of respondents, while 'seascape setting' (for example, rural, town/village) was also valued by a reasonable proportion (approximately 58%) of respondents. Notably, a much lower proportion (approximately 33% or fewer) of respondents, considered the 'sea bed', 'shipwrecks and historic elements', and 'fishing ports, boats, docks and jetties' to be important

features in making places special. (The survey findings analysed 'by respondent' were broadly similar to those analysed 'by location'; see

Annex 2: PP GIS Survey Report). It is important to note that the findings are specific to the study context; different features may be more or less popular in different seascapes and individuals. For example, the nature of the coastline in the survey case study area, whether features are more or less abundant, may influence whether they are perceived as making a place special. The findings are further explored below.

Figure 4: Responses to PP GIS survey question on 'What features make it [chosen place] special to you?' Respondent could pick any or all that were relevant to them.
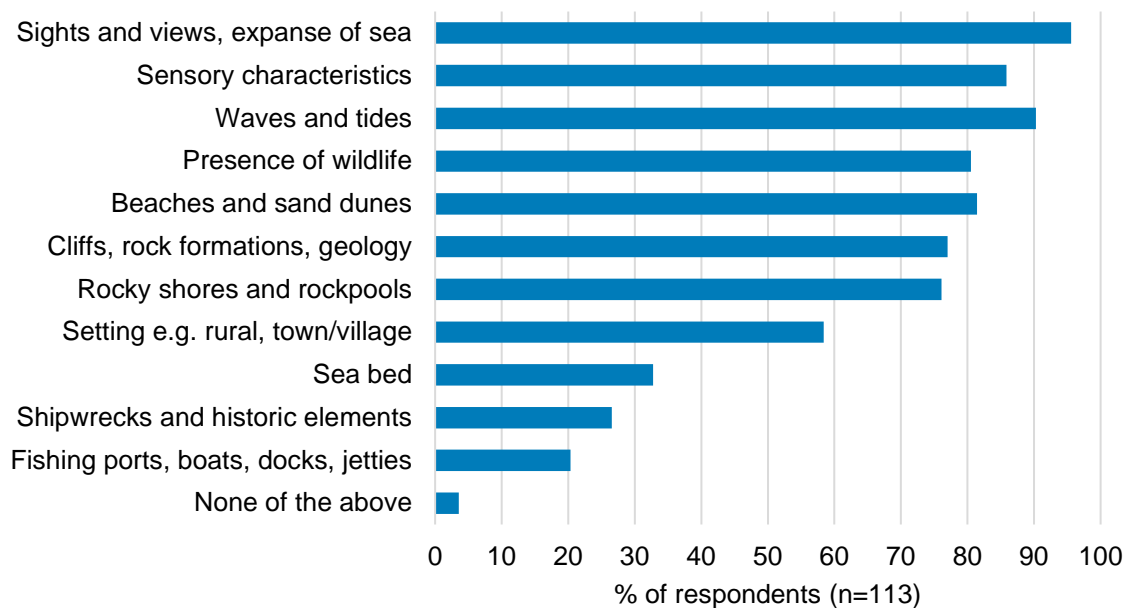
Sights and views, expanse of sea
Sights and views were important to all focus group participants and were the top feature chosen by survey participants for making a place special. An expanse of view/uninterrupted views and a sense of openness were particularly appreciated, including views from the land to the sea, (for example, Lundy Island), as well as views from the water to the land. Strong attachments were revealed through the meanings attached to particular views. For example, one focus group participant described the view of looking from the sea back towards the coastline as *"…like looking along the back of a prehistoric creature, it's absolutely amazing and there is a sense of tranquillity out there that is just as unparalleled anywhere else."*

Particular views generated a strong sense of place and attachment, for example one participant described how the feelings associated with an uninterrupted view of the northern Devon coast could not be emulated elsewhere, illustrating the powerful role views may play in shaping place identity and place dependence.

- *"[…] for those 18 months I lived away from here I moved to a different coast and I learnt it wasn't the sea and it wasn't the beach and it wasn't the shingle, it was having that uninterrupted view and I have that at home and I've always had it and I can stand there and look at nothing for hours […]. It's not the sunset, it's the fact that I've got that uninterrupted view."*

Views were appreciated for their restorative nature, their ability to clear the mind and to make you think about what's beyond; and connections with the natural world, for example, the "*immensity of the place and the power*".

Sensory characteristics

Sensory characteristics of seascapes for example, the sights, sounds, touch, weather, the colours of the rocks, were identified as important among both survey respondents and focus group participants. The northern Devon coast was described in the focus group discussion as providing "a full immersion" of all the senses, a unique feature not found elsewhere.

- *"because you're looking, you're listening, you're touching, the wind is blowing your head off or the sun is making you swelter you know, so it's a full immersion and I think that's something you get so rarely anywhere else?"*
- *"The colours are amazing, the species are amazing, the different weeds, everything about it, it's lovely."*

The sensory experiences associated with seascapes in northern Devon provide restoration and connections to nature. For example, the sounds of the sea and the waves were found to be very relaxing. Sounds and sights also heightened experiences. The power of the sea was perceived to contribute to the context of seascapes, creating atmosphere, for example, waves crashing against rocks. Examples were provided of the specialness of fishing at night, being in complete darkness but still hearing the sound of the sea; and of "*the magic*" of the sounds and sights of children enjoying the coast at Westward Ho! and Croyde.

- *"You've always got that sound on a beach haven't you of the waves, it's very relaxing sort of mesmerising sound isn't it."*
- *"the sound of the sea, because if it's on shingle or pebbles or beach or whatever, it's got a completely different tune wherever you listen to it hasn't it."*

Place attachment and identity were evidenced through the strong connections with the weather in northern Devon described by focus group participants and their ability to *feel* changes in the tides, temperature or wind direction, without any additional information: "*you know when the wind has changed*"; as well as through their connectedness with sounds of local wildlife.

- *"the sound of a fox barking and you know where the wind is, just in Croyde Bay."*

Presence of wildlife

Seascapes of the northern Devon coast were appreciated for the abundance and variety of flora and fauna, and their aesthetic appeal and vibrancy, including the presence of certain types of species for example, birds, seals, porpoises, fish, and flowers. The complex relationships within the natural world and also social-ecological systems were noted by focus group participants. Birdlife was perceived to be inextricably linked to the coast and cliffs. The findings illustrate both how presence of wildlife may contribute to coastal residents' attachment to place and the important

role of seascapes in providing opportunities to connect with nature (the role of coastal wildlife in shaping place dependence is also discussed in Section 3.3.2).

- *"I would hate sea if you had no fish in it, that would be terrible and if you didn't have fish you wouldn't have a lot of the birds there and it's a very complex web isn't it"*
- *"The coast and birdlife go together and as soon as you start talking about cliffs you see it in the form of kittiwakes on the cliffs, it's a spectacular sight from the sand."*

Beaches and sand dunes
Beaches and sand dunes were identified as a special feature by most of the survey respondents and were referred to positively throughout the focus group discussion, Activities such as exploring the beach (now and as a child), fishing, surfing and watching the tide and waves were described. Fishers in particular can have *'deep attachments'* to fishing beaches which *'also defines their identity as individuals and as a fishing community'* (see Urquhart and Acott, 2013, p45). Beaches were also appreciated for their aesthetic appeal by focus group participants for example, a "*beautiful huge expanse of sand*". Notably, sand dunes held a particular fascination linked to their continuous movement which can evoke a sense of attachment and connection to the past (see next point).

- *"one of the fascinating things about living in Croyde is that those sand dunes are moving all the time. They move winter to summer, they move year on year and that's exciting because it takes you back hundreds of years..."*

Evolving and changing nature of the coastal environment
The timelessness of seascapes, and their evolving and ever-changing nature of the coast/sea were valued, for example the changing sea and light enhance experiences and add variety enhancing activities (place dependence). The coast was appreciated for the sense it will always be there, suggesting place attachment and connection with history (personal identity).

- *"was one of the best things about the sea is it's continually changing with the light and movement, every day is different, every moment is different, being at Handrock I've got an excuse to sit there for hours and look out at it."*

Cliffs, Rocks formations and geology, rocky shores and pools
Focus group participants described the rock formations in their special place, particularly the colours of the rocks, the sheer size of the cliffs and the rockpools. Cliffs were particularly appreciated for their height - the sensation of being high up, the views and the different perspective - as well as for providing habitat for birdlife. Rocky shores were appreciated for providing opportunity to undertake rockpooling (place dependence) and for the species that can be found (connectedness to nature):

- *"Peppercombe is a good example […] Because it's a completely different colour. […] And all the rocks when you get up close they're all different rocks and different formations."*

- *"the reason I like that [the cliffs] is first of all you've got the height, so you've got lots of view and so you're up high looking. [...] when you're up on the cliffs you're actually higher looking down and you respect it as different."*

Variety of places and diversity of features

The northern Devon coast was appreciated for its abundance and variety of places and features, including expansive seascapes and also small coves which were perceived to provide cosiness, as well as the beaches, rocks, sand dunes, waves and tides, wildlife (habitats and species) and cultural aspects.

- *"What I love about it is the sheer variety [...] It's amazing, it's the only place I know where you can walk along because you've got the sand and you've got the water coming in this way and then you can see the waves out there and the water coming in this way. [..] You can also look to your right and see Appledore and the lifeboat and you've got what looks like a drunken sunken forest there, a very unusual salt marsh there. Then you can walk as far as you like and then you can see the stretch of beach and the ocean and you've got the sheep and you've got horses quite often and you've got little wildflowers."*

Naturalness, 'unspoilt' and 'spoilt'

The naturalness of coastal environments has been suggested to contribute to psychological restoration (see Wyles et al. 2019). An appreciation for the natural beauty of the northern Devon coast was captured in the focus group discussion. Participants spoke a lot about the natural setting, including the wildlife and variety of habitats (for example, sand, sea, estuary, forests, salt marshes). Much of northern Devon was perceived to have remained 'unspoilt' compared to other more commercialised coastal regions, though it was noted that some parts had become spoilt, for example, Westward Ho! village. 'Unspoilt' is subjective and open to interpretation; among focus group participants it seemed to refer to the naturalness of a seascape. The lack of 'kiss-me-quick hats' and poor mobile phone signal were used to describe positive ways in which northern Devon was 'unspoilt'. In contrast 'spoilt' seascapes seemed to relate to those which has been commercialised. For example, the experience of a seascape may be lessened or spoiled by being set in a commercialised environment, for example, if a large car park or McDonalds was present.

- *[what we mean by unspoilt?] "what I take from it, is that our coast is so naturally beautiful"*
- *"It's wonderfully unspoilt as well, you don't get kiss me quick hats, you do get your ice cream parlours and it's decent ice cream mostly but it's that sense of with a little bit of effort you are away from 21st century, you can't even get a decent mobile phone signal."*

Accessibility: 'people vs. no people'[7]

Attitudes were mixed towards the accessibility of places in northern Devon. In the focus group discussion, places that were less accessible were preferred because less people would be there (a positive), while others chose special places that were

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[7] See also the MMO1132 report on Health and wellbeing benefits of coastal recreation and barriers to access.

more accessible for personal (health) reasons, for example short walking distance. Seascapes were appreciated because of the solitude and apparent lack of human presence/ public access - *"Really lucky, no one is ever there"* - (contributing to the restorativeness), which enhanced the experience of activities (place dependence) and was recognised as important for wildlife (illustrating connectedness to nature). However, a dichotomy was noted to exist between the attractiveness of the lack of evidence of humans in a seascape, and the desire to physically experience it:

- *".. beyond Baggy point […] there are places you can go when it's just you."*
- *"To me the big attraction is the lack of human or evidence of humans. There is a dichotomy that we all want wilderness but we're allowed to go into it"*

It was recognised that seascapes may have room for both 'people' and 'no people' since they can be more or less busy at different times, meaning it was possible to enjoy solitude as well as the more social aspects. The importance of accessibility for the economy and tourists was also acknowledged.

- *"Surely there is a room for both. I mean if you've got a beautiful place, […] if you were there early in the morning with no one on the beach, if you were fishing it'd be lovely, lovely solitude, brilliant. But also in the middle of the day when there is lots of children building sandcastles that's nice as well.*

A lack of parking was perceived to contribute to the inaccessibility of places meaning fewer people would visit. Additionally, seasonal parking charges were commented on in terms of influencing the frequency of visits, for example, going more often in winter when parking is free. The presence of footpaths was commented on, for example having multiple paths was appreciated (for example, to take a triangular route), and the safety of the paths, for example, inland paths could be safer than coastal paths. The relative inaccessibility of the northern Devon coast was also perceived to effectively limit some of the potential for development (compared with the south coast).

- *"That's because you can't park that people don't go, it's difficult to get to."*

Local history and cultural components
The local history of an area, its cultural or economic heritage (for example, commercial fishing) has been shown in the literature to influence sense of place and the characteristics of seascapes that people attach a sense of place to. Places can become the locus for the formations of distinct collective identities based on shared symbolic cultural meanings (see Acott and Urquhart, 2014; Urquhart and Acott, 2013, 2014), for example the historical existence of fishing in some UK coastal towns. In the focus group discussion, on probing about whether historical and cultural aspects of special places were important, several participants commented on the importance of local history for example the stories of mining, smugglers, pirates, shipwrecks, old piers, old railway lines, and more recently the Tarka Trail (inspired by the novel 'Tarka the Otter' by Henry Williamson), suggesting these contribute to their sense of place. The historical importance of commerce on the coast was recognised to have both impacted the local coast, and provided historical places to visit.

- *"it's the history, if you walk along the coast for example if you go from North Coombe Martin you've got a lot of old mining bits that come out of the cliffs, there is lots of stories of smugglers and if you go up further to Woody Bay you've got the remains of the old pier where the steamers used to come in and the work that went into some of those structures are amazing."*

Fishing ports, boats, docks and jetties

In some UK coastal towns the impact of fishing on the physical environment has formed the basis of residents' sense of place, with both fishers and non-fishers expressing the value that fishing gives to the character of their town and an attachment to the place that defines their identity as a fishing community (Urquhart and Acott, 2013). Physical objects associated with fishing, such as the buildings, boats and gear have been found to contribute to sense of place; residents of Cornish fishing towns have spoken of the attractiveness and charm of fishing boats in a harbour and preference for these over other types of vessels such as yachts (Urquhart and Acott, 2014). In the current research only 20% of the PP GIS survey respondents identified 'fishing ports, boats, docks and jetties' as a feature on the northern Devon coast which makes places special. This was an interesting finding as (consistent with the literature), the MMO draw on the example of inshore fishing vessels contribution to sense of place when raising the topic with marine planning stakeholders. The reasons may be found in changes both in the physical environment and in social attitudes. In the focus group discussion, one participant commented on how fishing boats have gone in some of the local coastal seascapes - thus this may be a contributory factor as to why this was selected by fewer respondents as a feature which makes the coast special. Other participants commented on how a seascape image of fishing boats in a harbour was not so valued because the harbour was perceived as too enclosed and that debris from fishing (for example, fishing gear such as nets coming off fishing boats) has a negative impact on the marine and coastal environment.

- *"…the amount of gear coming off fishing boats, the nets and bits of nets, the plastic containers that fish are managed in, the shipping debris, if you could say any way they [MMO] could designate it as a litter free zone off our coast then that would be so helpful."*

3.3.2 Activities in seascapes contributing to sense of place

Place-based activities can play an important part in an individual's (or community's) experience of, and the meanings and feelings they attach to a particular place. In the PP GIS survey, approximately 81% of respondents agreed or strongly agreed that their chosen place(s) on the northern Devon coast was the 'best place to do the things I enjoy' (see Figure 3), suggesting seascapes play an important role in *place dependence,* that is, in satisfying the ability to undertake activities people enjoy.

Figure 5 presents the PP GIS survey results on the kinds of activities undertaken within seascapes on the northern Devon coast which are special to people. The vast majority of respondents selected 'walking' and 'generally being in the place', which was closely followed by 'spending time with family and friends' and 'wildlife watching' as the activities they undertook whilst at the special place (for at least one site selected). 'Playing with children' and 'water sports' were also relatively popular activities undertaken in special places. A much lower proportion of respondents

undertook activities such as 'other sports', 'recreational fishing', 'visiting attractions', 'working', and 'shopping/chores' in these locations. The survey findings analysed 'by respondent' were broadly similar to those analysed 'by location'[8]. The survey findings were also broadly consistent with the focus group discussion. These findings indicated that certain activities undertaken within special seascapes, now or as children, may generate strong attachments to the coast and be important to place identity and place dependence.

Figure 5: Responses to PP GIS survey question on 'What activities do you do there [special place]'? The figure shows the percentage of respondents who selected the activity in relation to at least one of their special places: respondents could select up to three special places.
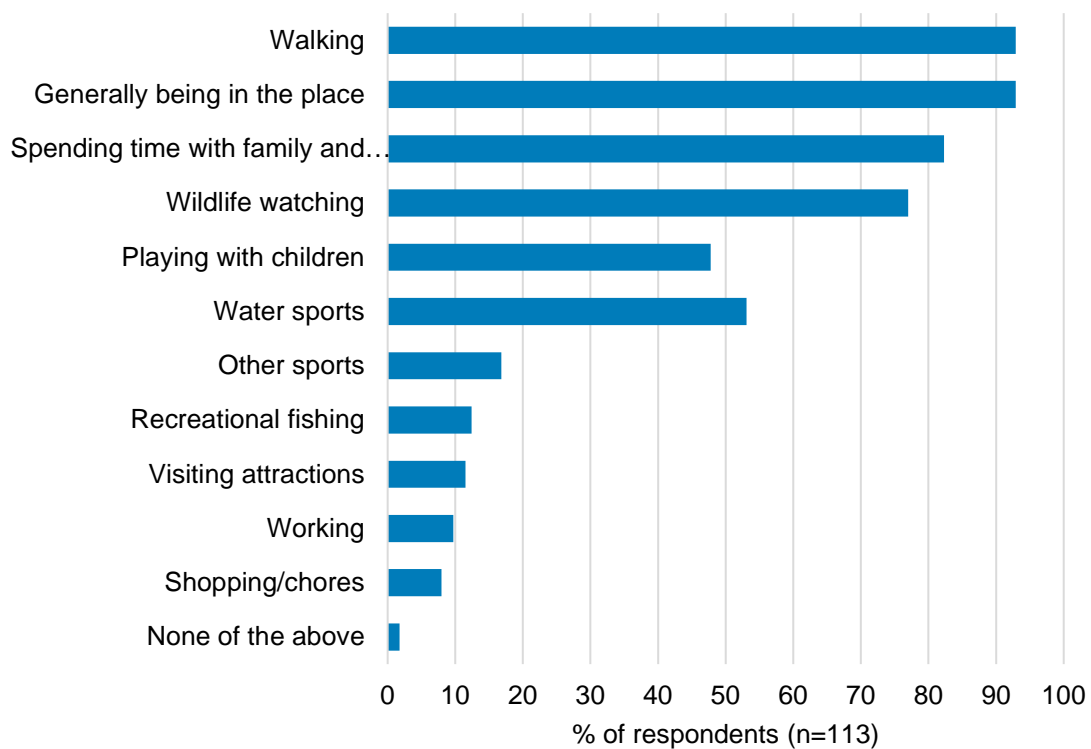
Walking
Many focus group participants commented on how seascapes provide special places to walk, for example, to walk with family, to enjoy the beauty, the views, the sea, the variety of habitats and wildlife (such as glow-worms after dark), to take photographs, and to create happy memories. Seascapes were valued for the opportunity to walk as far as you like; and the opportunity that the Coast Path brings to combine "hill walking and the sea". Dog walking was a regular/daily activity for some and revealed strong attachments and dependence to places. Wooded areas were particularly appreciated during the summer for shade.

- *"I mean soon we're going to have a coast path round the whole of the UK and you get the benefit of a hill walk effectively in North Devon, you get the benefit of hill walking and the sea."*

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[8] For example, walking, generally being in the place, spending time with family and friends and wildlife watching were the most frequent activities undertaken at the chosen locations

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- *"That's my every day walk every single day with the dogs twice a day, so that's my real special place"*

Generally being in the place
A high proportion (93%, Figure 5) of survey respondents revealed that 'generally being in the place' was an important activity associated with their special places on the northern Devon coast. This was also reflected in focus group discussion in which seascapes were appreciated as places for 'doing nothing at all' and also for being places to allow reflection.

- *I think when I'm up there, it's a reflective place, it depends what mood I'm in really."*

Spending time with family and children
Notably, the survey responses and focus group discussion revealed the important family connections and place identity that can be established from spending time with family (for example, children and grandchildren) at particular places along the coast. Other examples from the survey, included how seascapes provided the setting for special life events, for example, marriage proposal, and the resting place for loved ones.

- *"…it's got lots of happy memories for me because my children were obviously brought up here, […] I have visions of me hauling them up green cliff, 'Come on you can walk a little bit further' and I now do that with my poor grandchildren …"*

Wildlife watching/appreciation
Wildlife watching/appreciation was identified as an activity which makes seascapes special by a large proportion of the survey respondents. This was also reflected in the focus group discussion with participants involved in bird watching, rockpooling, and generally appreciating the diversity of wildlife such as coastal wildflowers. Special places on the coast were noted as being nationally important bird watching sites.

- *"The Skern we go to regularly, the orange and yellow together, that's when the sun is going down in the afternoon and it's high tide in the afternoon and the birds are being bought up the shore, it's a major birdwatching. It's of national importance as a birdwatching site with the flock of golden cover."*
- *"Bucks Mills, it's just a lovely rockpooling place,[…] There's a little stream which has always got dippers on it, dippers nest down there, so if you go at the right time you can see them."*

Water sports and other recreational activities
Seascapes were appreciated for providing unique opportunities to carry out water sports such as surfing, as well as a range of other recreational activities including fishing, swimming, going out on boats, climbing, and enjoying summer storms. Seascapes provided additional benefits of being able to concurrently enjoy the views, and wildlife, creating special experiences which may provide restorativeness and connectedness to nature.

- *"Morte Point, up the top there. […] I paddle out on a surf ski or a surfboard when the tides are right. […] there's a buoy off the points. … During the summer I very often take it in my head to paddle out around it and the view looking back is exceptional. … I've been paddling along with porpoises beside me"*

Activities from childhood

Notably, seascapes were appreciated for recreational activities undertaken during childhood[9]. The focus group discussion revealed strong connections and place identity with seascapes through childhood memories such as fishing on the beach during summer holidays, despite no longer visiting them often.

- *"So I basically chose that because I was born in Coombe Martin. […] I used to go on the beach when I was a child on a regular basis, when I was a teenager and I used to go fishing on the beach there, I used to go rockpooling there, go swimming there, would swim out in the bay in the summer holidays and we'd go out in boats from Coombe Martin, go out and explore the coastline. […] So it was basically lots of memories from a brilliant childhood and I go there from time to time but I don't go there so often, I probably visit the other places more now but it's a special place because it's got childhood memories I guess."*

Work activities including fishing

Much of the literature reviewed for this research focused on sense of place among fishing communities, highlighting how fishing plays a major role in shaping sense of place, with individual and collective identities built around the social traditions of fishing communities (see Acott and Urquhart, 2014; Urquhart and Acott, 2013, 2014; McElduff and Ritchie, 2018). While only 10% of PP GIS survey respondents identified 'working' activities to be important to the places identified as special on the northern Devon coast and similarly, 'work' activities were rarely mentioned in the focus group discussion (most participants were not working/not seeking work), studies within a different sample/seascape may yield different findings.

Visit frequency

In the PP GIS survey the majority of the special seascape locations were visited by respondents on a relatively frequent basis (at least once a week or once or twice a month). Few of the locations had been visited only once or twice, or not visited at all in the last 12 months. The focus group discussion revealed that visits to special seascape locations were affected by seasonal parking costs, for example, visits were more frequent in the winter when parking was free.

3.4 RQ4: How does sense of place contribute to the value coastal residents give to particular seascapes?

The research provided some limited findings on how sense of place contributes to the value coastal residents give to particular seascapes. The research primarily

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[9] For further discussion of the health and wellbeing benefits of accessing the coast for recreation for people with children see the MMO1132 report on Health and wellbeing benefits of coastal recreation and barriers to access.

focused on value through the lens of emotions and perceptions, or what is valued psychologically, rather than monetary values.

Sense of place is subjective but may vary systematically with '*different types of people, experiences and environments*', leading to '*systematic differences in meanings, attachment and behaviour*' (Masterson et al. 2017, p3).

Within the context of the brief literature review conducted as part of this research, the types of seascape that have been shown to contribute to sense of place include seascapes that have historical/cultural/economic value such as fishing towns (see Urquhart and Acott, 2014; Acott and Urquhart, 2014; Urquhart and Acott, 2013), and also seascapes that people have a personal or nostalgic (for example, childhood visits to the seaside) attraction to, for example seaside resorts (see Jarratt, 2015). Visitors (as opposed to coastal residents) to British seaside resorts can hold a romantic view and perceive the coast as a place of wide ranging spirituality and nostalgia and sea to be of aesthetic appeal; participants' experiences of perceived spaciousness and sea views were key to informing their sense of place (Jarratt, 2015).

In practice it may be hard to detect these types of systematic variations in place attachment unless within a homogenous community (such as those cited above), or in a study with a very large sample and scope for detailed analysis which was beyond the scope of the current research. The current research provides some initial findings on how the location of special places along the northern Devon coast vary spatially, and illustrates the potential usefulness of this approach in understanding how particular seascapes may contribute to sense of place.

Figure 6 shows the 249 locations along the northern Devon coast chosen by the 113 respondents in the PP GIS survey as special places, presented as a heatmap[10]. The figure shows in general the locations that were most frequently chosen as being special included the Taw Torridge estuary and sea cliff areas such as Baggy Point.

Figure 7 provides an example of how the level of agreement or disagreement with the phrase "I am proud of this place" was distributed across the locations selected. This suggests that in terms of having pride in a place, certain locations may generate a concentration of positive place attachment feelings (illustrated by groupings of pink and orange); and also that others may generate a more mixed response (illustrated by mixed colour groups of pink/orange, yellow, and green/blue). (It should be noted that where special places overlap not all responses may be visible i.e. due to the overlay of data).

Figure 8 shows how the PP GIS survey outputs can be used to identify locations where specific activities are undertaken, in this example 'playing with children'. Examination of the data shows that many of the special places where this activity occurred were beaches (for example, Northam, Instow, Croyde and Woolacombe)

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[10] Out of the 113 respondents that selected special places on the northern Devon coast, 53% chose three special places (the maximum allowed), 14% of respondents chose two places and 33% of respondents chose one place. See Annex 2: PP GIS Survey Report
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although non-beach areas were also chosen (for example the sea cliff area at Baggy Point).

Figure 6: Heatmap of the special places on the northern Devon coast selected during the PP GIS survey.
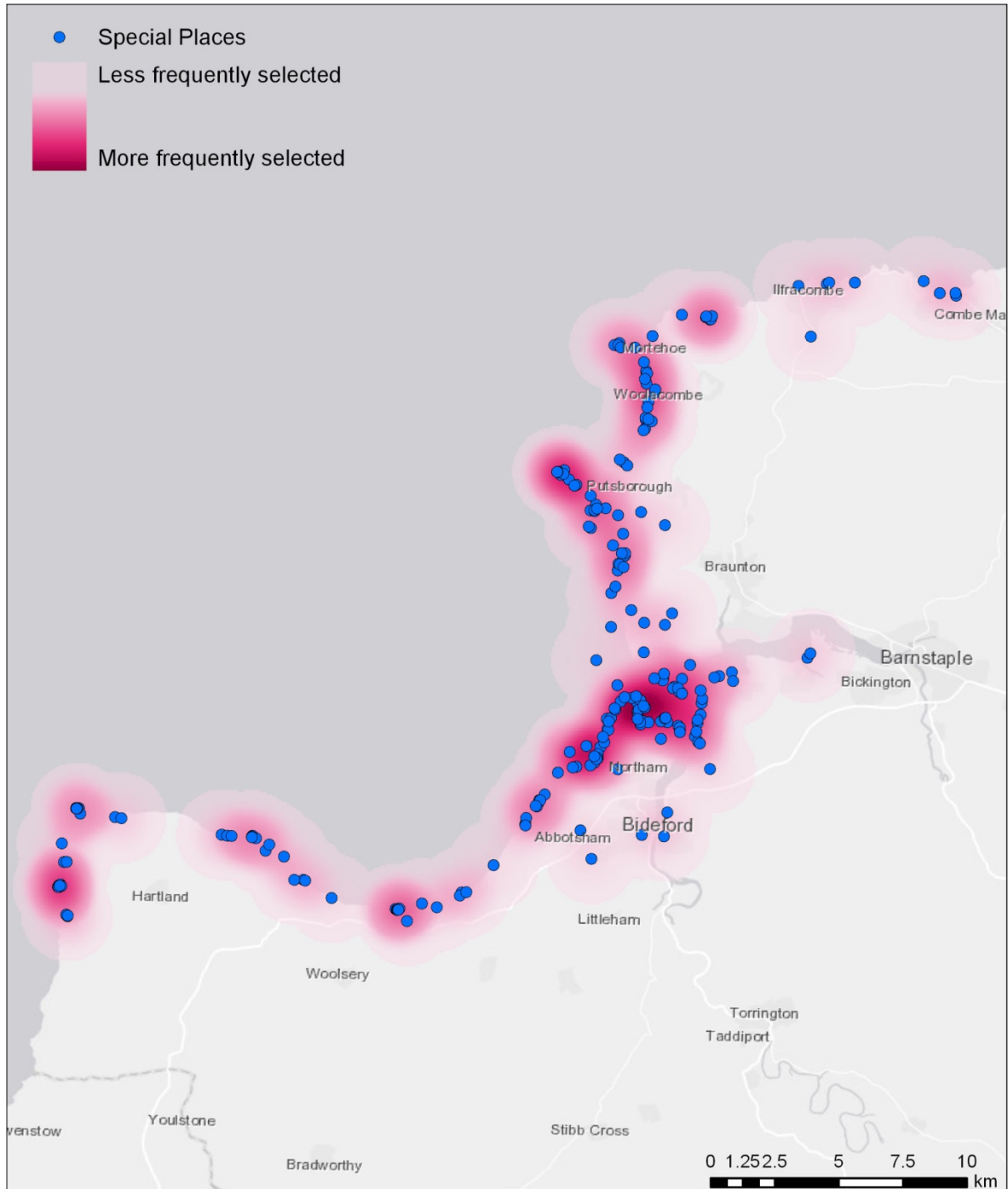
Figure 7: Spatial distribution of level of agreement with the phrase "I am proud of this place" for all special places.
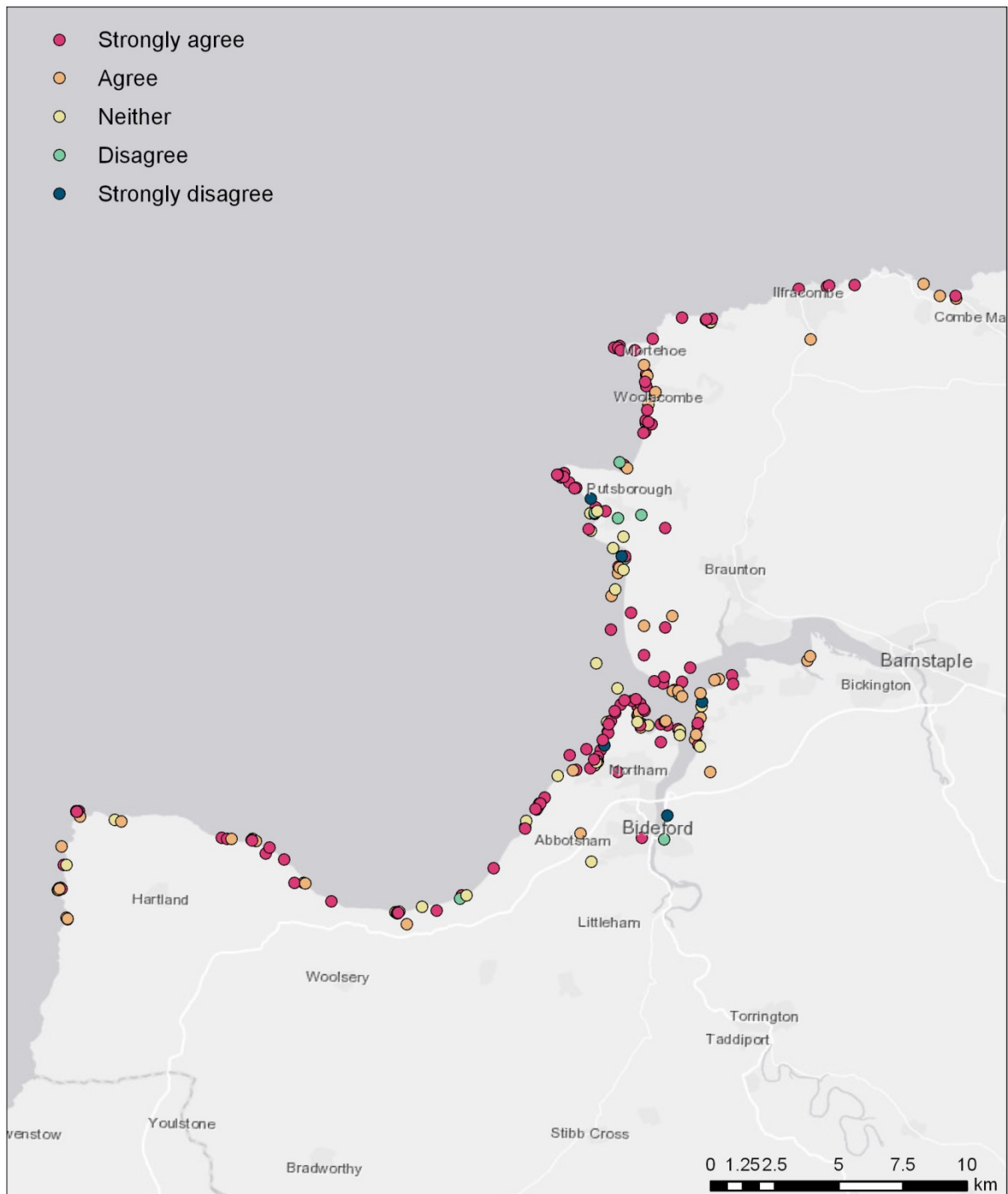
Figure 8: Spatial distribution of the places chosen where at least one of the activities was 'playing with children'.
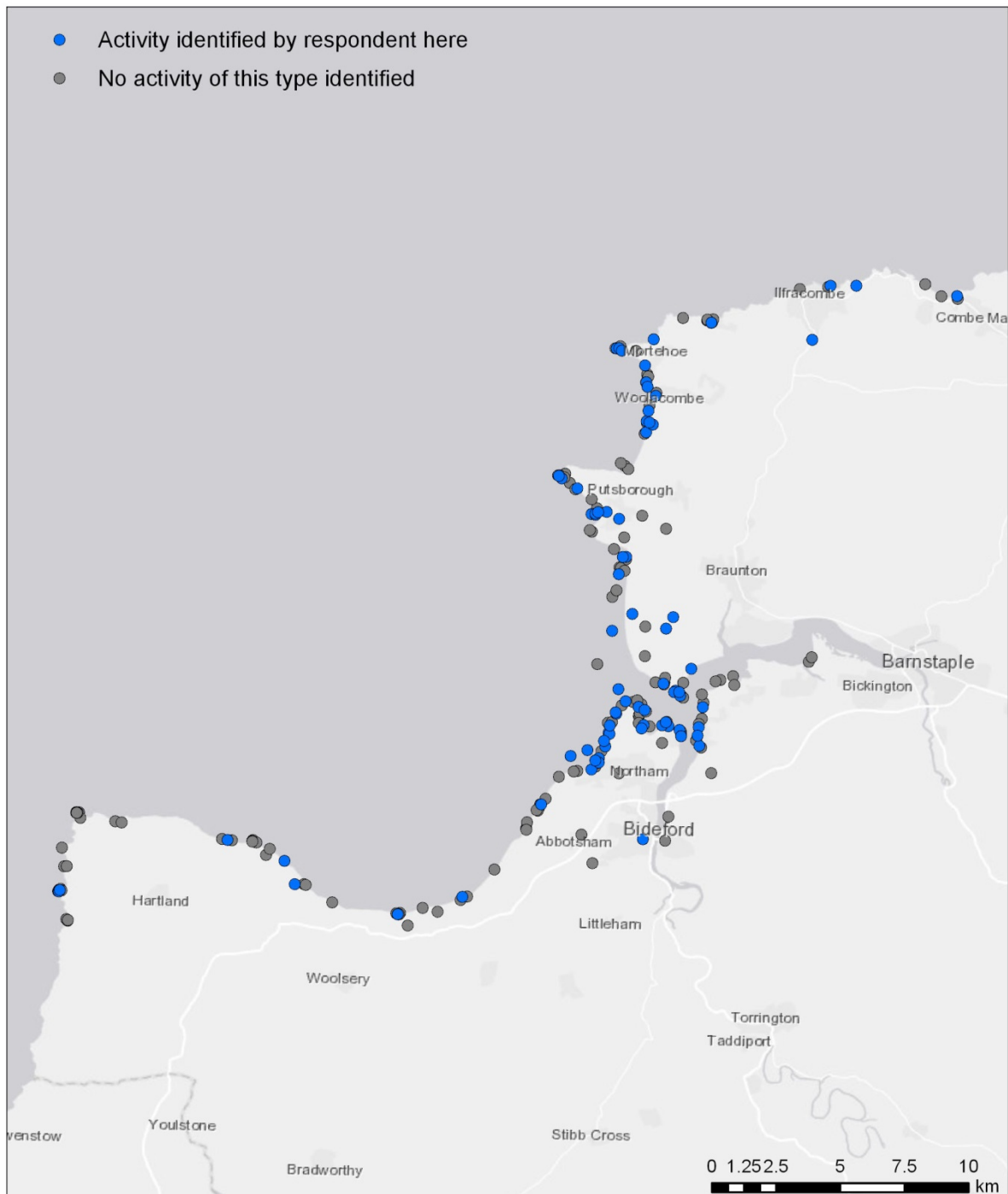
The focus group discussion revealed that some of the nine participants (all of whom were coastal residents of the northern Devon coast) display *inherent place attachment,* meaning long-term connections to a place which could be expressed by an unquestioned identification with a place (Lewicka, 2011, cited in Quinn et al., 2018). Also, some expressed an *active place attachment* whereby a person actively choses to live somewhere because it reflects an important part of their identity or

lifestyle (ibid), for example one participant had relocated to northern Devon because of the desire to dive in Lundy Island.

3.5 RQ5: How might changes in these characteristics [of seascapes] influence both sense of place and seascape value? What are the linkages between quality of seascape characteristics, sense of place and sensitivity to change?

Environmental and social changes within a place setting can impact peoples' sense of place, and, sense of place can also influence how people respond to changes within a place (see Masterson et al., 2017; Quinn et al., 2018; McElduff and Ritchie, 2018). This research provides further evidence of how natural and human-driven changes to seascapes can affect the feelings and characteristics identified as important to sense of place and in turn the responses and actions this may motivate.

3.5.1 Changes to seascapes and characteristics important to sense of place

The focus group discussion identified a number of natural and human-driven changes to seascapes which had positive and negative impacts on sense of place and wellbeing.

Natural changes

Naturally occurring changes to seascapes, for example, wind and sea moving huge rocks, the changing light and movement were valued by participants for enhancing special places by bringing about variety in experiences. The vulnerability of special places to natural elements such as storms also raised concerns.

- *"…because of the changes the ocean today and the ocean tomorrow you've never got the same place, you get a completely different effect."*

Protection of natural environment

Positively perceived human-driven changes to seascapes in northern Devon included the protection of the natural environment, such as improved sewage treatment, conservation/ protected areas such as the biosphere, areas of outstanding natural beauty (AONBs), conservation areas around Lundy Island, and National Trust sites. These changes were perceived as making it feel that someone is doing something to try and save the northern Devon coast for the future, as well as for improving the quality of activities undertaken in special places.

- *"[…] a positive change that has happened. The treatment of sewerage around our coast, Woolacombe and Croyde in particular has been improved over the years and the quality of discharge into the water is so much better."*
- *"..for me Lundy represents a flag of hope because if the will is there, changes can come about."*

Paths, trails and culture

Other positively perceived human-led changes included new attractions, for example, the South West Coastal Path and Tarka trail. The latter were valued for bringing people out into nature, and to experience wildlife such as kingfishers. Another interesting example raised by focus group participants was the 'Verity'

sculpture[11] by Damian Hirst at Ilfracombe, which represented a significant change and which has had varied reactions. Among proponents it was perceived as good for Ilfracombe because it has brought in visitors and money and improved the prosperity of the area. This was an interesting finding, as earlier in the discussion participants had expressed negativity towards increasing numbers of visitors. The Verity sculpture was seen as making a difference to sense of place, with Ilfracombe now being seen as a more attractive option for everyone and has engendered a sense that people have "done things".

- *"It's [the Verity sculpture] improved the prosperity of Ilfracombe and Ilfracombe is pretty or was pretty run down and it needed a lot of money investing in it."*

Pollution
Concern about negatively perceived human-driven changes to seascapes were widely held among participants in particular related to pollution, particularly litter and plastic pollution as well as pollution caused by historical actions such as a man-made landfill site that is now becoming exposed by changes in the natural environment. Participants were very aware of the environmental impacts of pollution, and shared strong concerns about the effects on the sea, wildlife and fears that this area of coast could be ruined within their lifetime. Other negative changes included reduction in fish and noise from jet skis.

- *"There is pollution that you don't see but the plastic is what you do see."*

Development
Strong negative attitudes were expressed by many focus group participants towards development in northern Devon due to concerns that the atmosphere and environment are being damaged. The link road was perceived to have resulted in large increases in seasonal population, cars, and traffic and changes to the atmosphere (though some parts were said to remain unchanged). Concerns were raised about development not adequately taking into account the impacts on habitats and wildlife, a widely valued feature of seascapes which contributes to sense of place. Mixed feelings towards development were also expressed, with some participants sympathising with people who have the aspiration to live in northern Devon.

- *"So Croyde is a small village, it's relatively unspoilt but since the war the little humble caravans have now become massive lodges and tin cans and it's a place where people want to turn two bedroom little bungalows into four or five bedroom holiday lets and that's changing the nature of the village"*
- *"It's extremely difficult because I hear what you're saying and I sort of take on board… I mean one of the things that concerns me is the number of houses that have been built in the whole area, but having said that I like and love living here and if I lived elsewhere is it wrong to actually aspire to live here?"*

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[11] 'Verity' by Damien Hirst is a bronze sculpture, approximately 20 metres tall, which stands on Ilfracombe pier. The sculpture depicts a pregnant woman, with an anatomical cross-section of her head and body revealing a developing foetus, holding a sword in an upstretched arm and scales behind her back (http://www.damienhirst.com/news/2012/fabrication).

3.5.2 Changing attitudes and preferences over time

Just as seascapes and their characteristics may change over time, people's attitudes, preferences and perceptions may also change, so that what is considered aesthetically pleasing / interesting now, is not necessarily the same as for previous generations, nor will it be for future generations. For example, the preferences of painters over a 200 year period, can be differentiated into distinct periods where various kinds of coastal scenery came in and out of favour, for example, wrecked ships, fishing boats and fishermen (Howard, 1991).

The focus group discussion provided an example of how attitudes towards human-driven changes to the seascape (for example, wind turbines) can change over time from against to accepting. In this particular case related to increased environmental awareness, one participant experienced this attitude change although the majority of the group expressed their concern about the impacts. Place attachment could equally support adaptation to change or be a barrier to transformative change (McElduff and Ritchie, 2018).

- *"… they were going to be putting up the wind turbines and I thought it was going to be dreadful and when it first came up it spoilt the view and I couldn't see them. But now I have got used to them and I just recognise that they actually are necessary and we actually do need that sort of change, yes."*

3.5.3 Impacts of changing seascapes on sense of place and wellbeing

Improvements in the quality of seascapes, for example water quality, were found to directly enhance wellbeing and the experiences/activities contributing to sense of place, creating a sense of happiness. The designation of the biosphere and other protected areas has generated positive feelings and hope, that something is being done to safeguard the future:

- *"Well yeah I'm pretty happy with it because I prefer not to be surfing around with stuff floating around me you know."*
- *"It makes you feel that someone is doing something to try and save it for the future.*

Socio-ecological disturbances which affect the character of a place and therefore sense of place can cause psychological and emotional distress (Masterson et al., 2017). A characteristic of northern Devon that has repeatedly been described in this research as being valuable to sense of place is the 'naturalness' or 'unspoilt' nature of the place (see Section 3.3.1). Focus group participants reported how changes that have threatened a place's character, such as pollution and development, have negatively impacted their wellbeing, supporting findings in the literature (see Masterson et al., 2017). Problems with pollution and litter have led to feelings of anxiety, powerlessness and a desire to act. Frustrations were also expressed about the lack of effectiveness of some protected area designations.

- *"Honestly because you can't sleep at night. Almost because what does life hold for us and our children."*
- *"It is seriously impacting me but a lot of people actually either haven't realised it or don't admit and I think it undermines everything that you do every day."*

Changes to the valued characteristics of seascapes which have been familiar since childhood were found to generate nostalgia and sadness, for example, the loss of fishing boats and boat trips in Coombe Martin, illustrating the strong emotions and connections that seascapes can generate.

- *"When I go back [to Coombe Martin] there is a lot of nostalgia there. It's changed a lot, the actual village has changed, but if you walk away from the village and you walk down onto the beach it's like stepping back in time because that hasn't changed. The rockpools are basically the same, the break water is still there, the tide comes in and goes out every day and the smell is the same. What was nice when I was a youngster was that you'd go there and you had all the fishing boats and you used to go out for trips around the bay with the boat and that and it was a thriving community, that's all gone, which is sad."*

3.5.4 Sense of place and responses to change in seascapes

A strong sense of place attachment is associated with care and action (Masterson et al., 2017; Kopsel et al., 2017) and may be a barrier to changing practises particularly when the unique qualities of a place are threatened (McElduff and Ritchie, 2018, Urquhart and Acott, 2013). Although a strong sense of place doesn't predict the type of action taken to protect a local environment (Masterson et al., 2017; Kopsel et al., 2017)[12], some studies show that people are more likely to fight to protect places when the symbolic meanings that underlie their place attachment are threatened by environmental or social change (Kopsel et al., 2017).

The focus group findings suggest that an increase in awareness and pro-environmental behaviour is becoming more common across northern Devon, which may be explained by a strong sense of place associated with these seascapes. People are conscious about what they are losing because they see it first-hand and therefore are more motivated to do something about it. Focus group participants spoke about the environmental movements Surfers Against Sewage and Extinction Rebellion having a large following in northern Devon and the South West more generally.

- *"…there is a huge lot of real anger that's building now and I think it's because we are so conscious of what we're losing and the preciousness…"*
- *"Well we actually see it [negative environmental impact] don't we."*

For example one participant from the focus group spoke about how a decision to develop within an AONB in northern Devon, which will threaten the naturalness that underlies sense of place, had led her to become more involved politically and to take action to protect the place that is special to her.

- *"It's made me much more political […] I've got involved in the local neighbourhood plan development."*

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[12] Place-related responses and actions generally (not specific to seascapes) are not random however, people may respond to change in place differently depending on how their respective meanings are affected by the change (Masterson et al. 2017).

It was acknowledged by focus group participants that people are more conscious now than they used to be and are taking action, for example, there is more litter picking, more 'beach owners' taking responsibility for cleaning up. Motivations for taking action included, among others, the desire to take ownership, to put it right and to ensure ongoing access to places for activities:

- *"Well the positive side of that is every time I walk, I don't think there is a day goes by I don't see somebody litter picking and I didn't see that 10 years ago or even 5 years ago, people are conscious of it now and they are picking up rubbish as they go round. Even people that are strolling along are just taking a carrier bag with them picking up."*

4 Conclusions and Implications

This research demonstrates that mixed methods approaches can be used to explore sense of place of seascapes among coastal residents. The research has identified a range of physical characteristics of seascapes in northern Devon, the activities that people do in these seascapes together with the feelings and cognitions that these evoke which make seascapes in this area special to coastal residents.

The research suggests that seascapes in northern Devon generate a range of feelings associated with sense of place among coastal residents. This includes feelings of restorativeness, connectedness to nature, and place attachment including place identity and place dependence. This coastline was perceived as vitally important for wellbeing, providing unique places for clarity or peace of mind, revealing strong connections and attachments to particular places; for recharging batteries; putting things into perspective, and removing negative feelings and stresses.

Important features or characteristics of the seascapes of northern Devon which were special to the coastal residents involved in this research included: 'sights and views, expanse of sea', 'sensory characteristics', 'waves and tides', 'presence of wildlife' and 'beaches and sand dunes', as well as 'cliffs, rock formations and geology' and 'rocky shores and rockpools' and 'seascape setting'. While previous studies have found that fishing harbours and boats play an important role in shaping sense of place among coastal communities (see Urquhart and Acott, 2013), these features were mentioned less frequently by participants in this research (survey and focus group). The naturalness (unspoilt setting) of northern Devon was valued by many participants. Attitudes were mixed towards the accessibility of places in northern Devon; both the solitude of inaccessible places, and accessibility were appreciated.

Coastal residents participating in this research reported undertaking a range of activities in seascapes which contribute to making these places special. This includes the opportunity to walk; to generally be in the place; to appreciate and watch wildlife; to undertake sport and recreation such as surfing, fishing, swimming, rockpooling. Notably, seascapes are important for activities undertaken in the past as well as the present, for example, childhood memories generated strong connections with places. There was little or no mention of visiting attractions. Elsewhere in the literature there is strong evidence to suggest that fishing plays a major role in shaping sense of place within coastal fishing communities (see Acott and Urquhart, 2014; Urquhart and Acott, 2013, 2014; McElduff and Ritchie, 2018). The less frequent mention of certain characteristics may reflect their lower prevalence on this part of the coast (for example, if there are fewer fishing villages or visitor attractions than on other parts of the coast) or bias in the sample of participants (both survey and focus group participants). This could be tested in further trials of the research methods used, for example by using the survey and focus group tools in a coastal area with a strong and ongoing fishing culture.

This research provides evidence of how natural and human-driven changes can affect the perceived value of seascapes and the characteristics identified as important to sense of place among coastal residents. Changes to seascapes can bring about positive and negative impacts on wellbeing. The research suggests that

negatively perceived changes to seascapes can promote responses among some residents with strong place attachment, for example, greater environmental awareness and more action including practical measures such as beach clean-up and political involvement. However, this may be mediated by a range of factors including the perception of wider community or society benefit rather than simply expressing sense of place.

4.1 Methods for exploring seascapes and sense of place

This research demonstrated that an online PP GIS tool can be used to explore people's perceptions and feelings towards seascapes as an element of 'sense of place' and the characteristics of seascape that influence sense of place. This approach enabled mapping of special places and a basic understanding of the features and activities which people value about particular locations and people's feelings about these locations, which may be a valuable tool for local marine planning purposes. The approach proved to be easy to apply, meaningful for respondents (as reported by focus group participants) and was able to generate clear data on factors relevant to the assessment of seascapes.
By collecting data on emotions and cognitions alongside the data on physical characteristics of coastal places and the activities people do in them which has typically been collected, the research has provided greater insights into why these seascapes are valued by coastal residents.

The research has shown that it is possible to collect good data on seemingly "soft" topics. The data collected ties into a wider body of work on sense of place, restorativeness and place attachment because the measures used are based on evidence from previous research, so although this study is small, it can be compared with other studies looking at similar topics.

Eliciting and exploring information on sense of place is important for enabling the inclusion of the human dimension within the marine planning process (Acott and Urquhart, 2014). This information may be usefully combined with other information for example ecological, archaeological, and economic data, to enable marine plans to deliver sustainable outcomes and maintain and enhance wellbeing among coastal communities.

4.2 Limitations

The current research has provided a useful exploration of sense of place and seascapes. A number of limitations were identified; the findings should be viewed with the following caveats in mind:

- The primary research focused on one specific marine character area, Bideford Bay and Taw-Torridge Estuary (MCA 42), the findings may not necessarily be transferable to other marine character areas/seascapes.
- The recruitment approach used for the survey and focus groups was voluntary meaning responses are not necessarily representative and hold the potential for self-selection bias.
- Research question 4 'How does sense of place contribute to the value coastal residents give to particular seascapes?' did not look at monetary or other

quantitative values but focused on emotions and perceptions, or what is valued psychologically.

Feedback on the survey identified minor improvements/clarifications that could be made when applying the approach in future. (see

- Annex 2: PP GIS Survey Report and Annex 3: Focus Group Record).

4.3 Additional analysis recommended

The approach adopted by this research was successful in generating a large amount of useful data on sense of place and seascapes. It was beyond the scope of the current research to analyse this in detail; further analysis could usefully investigate:

- The frequency of site selection in the PP GIS survey outputs in relation to infrastructure (for example, access) and urban centres;
- The intra- and inter-variability between locations chosen by respondents in the PP GIS survey, for example, the extent to which individuals choose the same features and activities between sites and reasons why; and whether people have different reasons for selecting the same sites;
- Explore how responses in the PP GIS survey may vary according to socio-demographic characteristics, for example, does length of residence affect the nature and strength of place attachment feelings.
- The correlations across responses in the PP GIS survey, for example, how do the activities respondents undertake correlate with what they value, for example, do walkers like views? etc.

4.4 Gaps and recommended areas for future research

A number of gaps and areas for future research were identified:

- A large proportion of the reviewed literature focused on sense of place in fishing communities/towns and therefore was of limited generalisability to other types of seascape. This also highlighted the need for sense of place research in different types of marine contexts.
- It is recommended that the approach adopted in the current research is applied to explore sense of place and seascapes in other marine character areas to further test the approach and to deepen understanding of how different contexts influence sense of place.
- There is some evidence to suggest that sense of place may vary systematically (see Masterson et al., 2017); while this may be difficult in practice to measure, if it were possible, this might provide valuable information for marine planning, therefore it is recommended to conduct a study to explore the potential to measure systematic variations in sense of place
- Research to explore relationships between seascapes and sense of place among a more diverse sample of residents including a wider range of socio-economic characteristics (such as age, gender), who may have different perceptions of and associations with seascapes. Additionally, research to explore how seascape and sense of place varies between residents and non-residents.
- Research is recommended to explore the role of negative place meanings and place non-attachment in sense of place and seascapes, for example, using similar approaches but which include multi-item scales for place alienation and placelessness (see Lewicka, 2011).

References

Acott T. and Urquhart J. (2014) Sense of Place and Socio-cultural Values in Fishing Communities Along the English Channel. In: Urquhart J., Acott T., Symes D., Zhao M. (eds) Social Issues in Sustainable Fisheries Management. MARE Publication Series, vol 9. Springer, Dordrecht

Bell, S., Phoenix, C., Lovell, R. and Wheeler, B. (2015) Seeking everyday wellbeing: The coast as a therapeutic landscape. Social Science and Medicine 142, pp: 56-67

Brown, G.G. and Reed, P. (2012) Social Landscape Metrics: Measures for Understanding Place Values from Public Participation Geographic Information Systems (PPGIS). Landscape Research 37:1, pp: 73-90

Howard, P. (1991) Landscapes : the artists' vision. Routledge: London; New York. 260pp.

Jarratt, D. (2015) Sense of place at a British coastal resort: Exploring 'seasideness' in Morecambe. Tourism 63(3), pp: 351-363

Jorgensen, B. S. and R. C. Stedman. (2001) Sense of place as an attitude: lakeshore owners attitudes toward their properties. Journal of Environmental Psychology 21(3), pp: 233-248

Köpsel, V., Walsh, C. and Leyshon, C. (2017) Landscape narratives in practice: implications for climate change adaptation. The Geographical Journal 183 (2), pp: 175-186

Lewicka, M. (2011) On the varieties of people's relationships with places: Hummon's typology revisited. Environment and Behaviour 43(5), pp: 676-709

Masterson, V., Stedman, R., Enqvist, J., Tengö, M., Giusti, M., Wahl, D., and Svedin, U. (2017) The contribution of sense of place to social-ecological systems research: a review and research agenda. Ecology and Society vol 22(1) art 49

McElduff, L., Ritchie, H. (2018) Fostering coastal community resilience: Mobilising people-place relationships. Area 50 (2), pp: 186-194

MMO (2018) Seascape Character Assessment for the South West Inshore and Offshore marine plan areas. A report produced for the Marine Management Organisation, MMO Project No: MMO1134. September 2018, pp 106. Available online at:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/750228/South_West_-_Seascape_character_assessment_report.pdf
(Accessed 1 August 2019)

Natural England (2012). An Approach to Seascape Character Assessment. © Natural England 2012.

Natural England. (2016) Monitor of Engagement with the Natural Environment (MENE): Visits to coastal England. Natural England. Publication number: NECR226

Quinn, T., Bousquet, F., Guerbois, C., Sougrati, E. and Tabutaud, M. (2018) The dynamic relationship between sense of place and risk perception in landscapes of mobility. Ecology and Society 23(2), art 39

Urquhart, J. and Acott, T. (2013) Constructing 'The Stade': Fishers' and non-fishers' identity and place attachment in Hastings, south-east England. Marine Policy 37 pp: 45-54

Urquhart, J and Acott, T. (2014) A Sense of Place in Cultural Ecosystem Services: The Case of Cornish Fishing Communities. Society and Natural Resources 27 (1), pp: 3-19

White, M. P., Pahl, S., Ashbullby, K., Herbert, S., and Depledge, M. H. (2013) Feelings of restoration from recent nature visits. Journal of Environmental Psychology 35, pp: 40-51.

Wyles, K., White, M.P., Hattam, C., Pahl, S., King, H. and Austen, M. (2019) Are Some Natural Environments More Psychologically Beneficial Than Others? The Importance of Type and Quality on Connectedness to Nature and Psychological Restoration. Environment and Behavior 51(2), pp: 111-143

Annex 1: Literature review

This annex presents the results of the first stage of the research, the preliminary desk-based research which informed the subsequent stages of the research.

This annex is organised as follows: approach to the literature review; key findings organised by research question; and, the conclusions including literature gaps identified by the review, options for future research, and suggestions on how the findings may be used in the next stage of the research to elicit information about sense of place.

A1.1 Approach to the literature review

A1.1.1 Aim of the literature review

The main aims of this literature review were three-fold:

- Contribute to method development for the mapping exercise (stage 2) and the development of a discussion schedule for the focus group (stage 3).
- Ensure that the field research took account of any recent evidence on the characteristics of seascapes that are important to people and the meanings and value attached to them.
- Identify any work that may have been done to link seascape character assessments with sense of place where the focus was on theoretical or practical explorations of ways of considering the importance or meanings attributed to seascapes and how to factor in the way that members of the public value seascapes as part of formal assessment processes.

A1.1.2 Scoping the review

In order to focus the literature review, a refined set of research questions and sub-questions were developed based on an initial set contained in the proposal agreed with MMO. The research questions and sub-questions are presented in Table A1.1.

Table A1.1. Literature review research questions and sub-questions.

Research Question	Sub-question	Notes
1) What is known about coastal residents' perceptions and feelings towards seascape (as an element of 'sense of place')?	a) What is meant by 'sense of place'? b) What is meant by 'seascape'? c) What is known about coastal residents' perceptions and feelings towards seascape (as an element of sense of place)? d) What work has been done to link seascape character assessments with sense of place?	This is scene setting and very general perspective on what is known, how much is out there, and what do we know about it.
2) How does sense of place contribute to the value coastal residents give to	a) To what extent and in what way do seascapes influence people's sense of place? What typologies/ descriptors/ scales are used to	What is known about what people value in particular seascapes (e.g. a specific bay in a context)?

Research Question	Sub-question	Notes
particular seascapes?	describe sense of place related to seascapes? b) What types of seascapes do people attach a sense of place to? What typologies/descriptors for seascapes are used? c) How important is sense of place in relation to other valued aspects of seascapes?	How important is sense of place among other values attributed to a particular seascape?
3) What are the characteristics of seascapes (including physical and cultural characteristics and the activities that people do in them) that influence sense of place?	a) What is known about the aspects or characteristics of seascapes (including physical and cultural characteristics, contextual factors such as urban or rural setting and the activities that people do in them) that influence sense of place? b) Are there systematic patterns between types of seascape and/or particular characteristics, and sense of place?	Is there anything systematic about the characteristics of a seascape which influence sense of place? Is there something inherent about an element of seascape which provides value?
4) How might changes in these characteristics influence both sense of place and seascape value?	a) What is known about how changes in characteristics influence sense of place, e.g. how the types and direction of change impact on sense of place values?	By change, we mean i.e. losing a group of trees that are part of the seascape or adding a harbour or ferry port, or change in quality, e.g. increase in litter or visitor numbers.
5) Methodological: what are meaningful questions to ask people when talking about sense of place in relation to a seascape?	a) What questions/approaches have been used to ask people about their sense of place? Note example questions, wording/phrases etc. b) What (if any) key methodological limitations/issues were noted that are relevant to the current research?	i.e. how has information on people's sense of place and seascapes been elicited?

A1.1.3 Search strategy

The literature sources included those identified using Scopus, plus other known key and/or seminal papers of relevance to the research questions (e.g. Masterson et al. 2017). The search strategy including key search strings and exclusion criteria for the Scopus literature search is outlined in Table A1.2. below.

Table A1.2. Literature review search strategy and relevance exclusion criteria.

Search string	Results	Action
TITLE-ABS-KEY ("Sense of place" AND (seascape* OR coast*) AND (value* OR characteristic* OR qualit*)) Limit to year: from 2012-2019 Limit to country/territory: United Kingdom	4 (1 relevant)	Further exclusion: Any studies that were not based (at least partly) in the UK. This was decided based on text in the title/abstract. Any books/articles that cannot access (unless appear very relevant) Remaining sources reviewed by abstract and relevant sources selected.
TITLE-ABS-KEY ("sense of place" AND (seascape* OR coast*)) Limit to year: from 2012-2019 Limit to country/territory: United Kingdom	20 (8 relevant)	Further exclusion: Any studies that were not based (at least partly) in the UK. This was decided based on text in the title/abstract. Any books/articles that cannot access (unless appear very relevant) Remaining sources reviewed by abstract and relevant sources selected.
TITLE-ABS-KEY ("place values" AND (seascape* OR coast* OR seaside OR bluespace*)) Limit to year: from 2012-2019 Limit to country/territory: United Kingdom	0	
TITLE-ABS-KEY((Value* OR Characteristic* OR qualit*) AND (seascape* OR coast*)) Limit to year: from 2012-2019 Limit to country/territory: United Kingdom	2765	Further exclusion: Any studies that were not based (at least partly) in the UK. This was decided based on text in the title/abstract. TITLE-ABS-KEY ((value* OR characteristic* OR qualit*) AND (seascape* OR coast*) AND (UK OR England OR Wales OR Scotland)) Results: 546 Any books/articles that cannot access (unless appear very relevant) Further limited to subject type: 'social science' and 'environmental science' Results: 301 Decided this search returned results that were too broad/not relevant
TITLE-ABS-KEY ("sense of place" AND (perception* OR experience*) AND (seascape*	8 (5 relevant)	Further exclusion: Any studies that were not based (at least partly) in the UK. This was

Search string	Results	Action
OR coast* OR seaside OR marine)) Limit to year: from 2012-2019 Limit to country/territory: United Kingdom		decided based on text in the title/abstract. Any books/articles that cannot access (unless appear very relevant) Remaining sources reviewed by abstract and relevant sources selected.
TITLE-ABS-KEY(seascape* OR coast* OR seaside OR marine OR bluespace) AND ("Place attachment" OR "place identity") Limit to year: from 2012-2019 Limit to country/territory: United Kingdom	83 (19 relevant)	Further exclusion: Any studies that were not based (at least partly) in the UK. This was decided based on text in the title/abstract. Any books/articles that cannot access (unless appear very relevant) Remaining sources reviewed by abstract and relevant sources selected.
TITLE-ABS-KEY (("sense of place" OR "Place attachment" OR "place identity") AND (measurement* OR method* OR scale) AND (seascape* OR landscape*)) Limit to year: from 2012-2019 Limit to country/territory: United Kingdom	23 (2 relevant)	Further exclusion: Any studies that were not based (at least partly) in the UK. This was decided based on text in the title/abstract. Any books/articles that cannot access (unless appear very relevant) Remaining sources reviewed by abstract and relevant sources selected.

A1.1.4 Review and analysis of literature

The review process comprised the following steps:

1) Apply search string to Scopus
2) Filter outputs based on title and abstract according to relevance (e.g. seascape/coastal or not, sense of place focused, UK etc)
3) Identify short list of 24 papers deemed relevant from the search and other known and/or seminal papers and order shortlist in terms of relevance, to be shared with MMO.
4) Review 13 papers by working way down the ordered shortlist
5) Extract evidence into template in relation to research questions, relevance and robustness
6) Analysis of evidence and short write up.

Criteria to assess relevance included:
- Relevant topic (i.e. first sift): seascapes/coastal, sense of place, UK, paper is accessible
- Relevance to research questions

In reviewing the robustness of each shortlisted paper, issues to consider included, for example (drawing on Defra/NERC guidance, see Collins et al., 2015):
- Specific questions and hypotheses are addressed

- Related existing research or theories are acknowledged
- The methodology used is clearly and transparently presented, and any assumptions listed
- The geography and context of the study is clear, with a discussion of how relevant findings are to other contexts
- Conclusions are backed up by well presented data and findings
- Limitations and quality have been discussed
- Sources of funding and vested interests are declared.

For example, for quantitative studies: is the sample size appropriate? Are the findings/claims appropriate (i.e. not making claims beyond the data)? For qualitative studies: has it been done in sufficient depth? Is it clear where findings have come from? etc. Where studies are highly relevant though their robustness raises some issues, they were included in the review, and any robustness concerns flagged.

The final list of literature reviewed in full as part of the research is presented in Table A1.3.; additional papers that were drawn on are included in the reference list at the end of this report.

Table A1.3. Final list of literature reviewed.

Author	Title	Year	Publication	Source
Masterson et al.	The contribution of sense of place to social-ecological systems research: a review and research agenda.	2017	Ecology and Society	Seminal
Quinn T et al.	The dynamic relationship between sense of place and risk perception in landscapes of mobility.	2018	Ecology and Society	Scopus
Urquhart J and Acott T	A Sense of Place in Cultural Ecosystem Services: The Case of Cornish Fishing Communities.	2014	Society and Natural Resources	Scopus
Urquhart, J and Acott T	Constructing 'The Stade': Fishers' and non-fishers' identity and place attachment in Hastings, south-east England.	2013	Marine Policy	Scopus
Brown G and Reed P	Social Landscape Metrics: Measures for Understanding Place Values from Public Participation Geographic Information Systems (PP GIS)	2012	Landscape Research	Seminal
Acott T and Urquhart J	Sense of Place and Socio-cultural Values in Fishing Communities Along the English Channel.	2014	Springer, Dordrecht	Seminal
McElduff L Ritchie H	Fostering coastal community resilience: Mobilising people-place relationships	2018	Area	Scopus
Bell S et al.	Seeking everyday wellbeing: The coast as a therapeutic landscape.	2015	Social Science and Medicine	Scopus
Jarratt D		2015	Tourism	Scopus

Author	Title	Year	Publication	Source
	Sense of place at a British coastal resort: Exploring 'seasideness' in Morecambe.			
Köpsel V Walsh C Leyshon C	Landscape narratives in practice: implications for climate change adaptation.	2017	The Geographical Journal	Scopus
de Groot J and Bailey I	What drives attitudes towards marine renewable energy development in island communities in the UK?	2016	Int. Jn. of Marine Energy	Scopus
Brown, G and Reed, P	Validation of a Forest Values Typology for Use in National Forest Planning	2000	Forest Science	Seminal
Wyles, K et al.	Are Some Natural Environments More Psychologically Beneficial Than Others? The Importance of Type and Quality on Connectedness to Nature and Psychological Restoration	2019	Environment and Behaviour	Known

A1.2 Key findings

The findings of this review are drawn from the results of a search in Scopus plus other key known or seminal papers already identified. The search results gave rise to a list of 24 papers, the 13 most relevant to the research questions of which were reviewed in detail.

The list of literature reviewed consisted of nine empirical studies, one review paper which draws on a large number of sense of place studies, and two papers that include both a review and empirical study. The majority of the reviewed literature takes a qualitative approach (n=8), one is a quantitative study, with the rest mainly taking a mixed methods approach (n=4). Five out of 12 of the reviewed papers were primarily focused on sense of place within seascapes, with the majority of the literature focusing on seascapes or sense of place research but not necessarily in parallel.

A1.2.1 What is known about coastal residents' perceptions and feelings towards seascape (as an element of 'sense of place')?

What is meant by 'sense of place'?
From a phenomenological perspective, sense of place[13] relies on the individual lived experience in a place (Masterson et al. 2017), specifically, the emotional attachments people associate with a place are based on social relationships and processes that occur in that particular setting (Urquhart and Acott 2013). But the more widely adopted understanding is that sense of place is based on not only the

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[13] It should be noted that sense of place has been discussed and used as a concept within geography and environmental psychology for a number of decades (e.g. Relph (1976), Canter, (1977). The research we examined draws on that heritage bringing it up to date in the context of the coast.

personal and collective meanings, experiences and perceptions constructed towards a place, but also the human-environment relationship, and is therefore also influenced by physical attributes of a place (see Acott and Urquhart, 2014; Urquhart and Acott, 2013).

Acott and Urquhart (2014) describe sense of place as "*how places make people feel, the meanings they associate with places, and how they influence their behaviour*". This emphasises three dimensions of sense of place (the material, the subjective and place-based activities) and rejects the idea of a deterministic relationship between the physical and psychological. Using this three-dimensional approach ensures that the exploration of emotional responses ('the subjective') is linked to uses and physical characteristics of place.

Sense of place has been considered in the literature to encompass combinations (not necessarily all) of place attachment, place identity, place dependence and place meaning (see Urquhart and Acott, 2013, Urquhart and Acott, 2014, Quinn et al., 2018). Place attachment is the emotional bond experienced between an individual or group and a place[14]. Place dependence conveys an instrumental connection and is conceived as the ability of a place to satisfy important needs or facilitate goal achievement. Place identity emphasises the dimensions of self that define an individual's identity in relation to the physical environment (Masterson et al*.,* 2017). Place meanings are cognitions about a place and can either be descriptive statements about what a place is or what it is like and the images it conveys, or they can be more symbolic, for example does a place represent home or escape. The character of a place, e.g. seascape or farmscape, can also be considered in place meaning (Masterson et al., 2017). The relationship among these key sense of place concepts is illustrated in Figure A1.

Figure A1 The relationship among key sense of place concepts as described by Masterson et al. (2017).
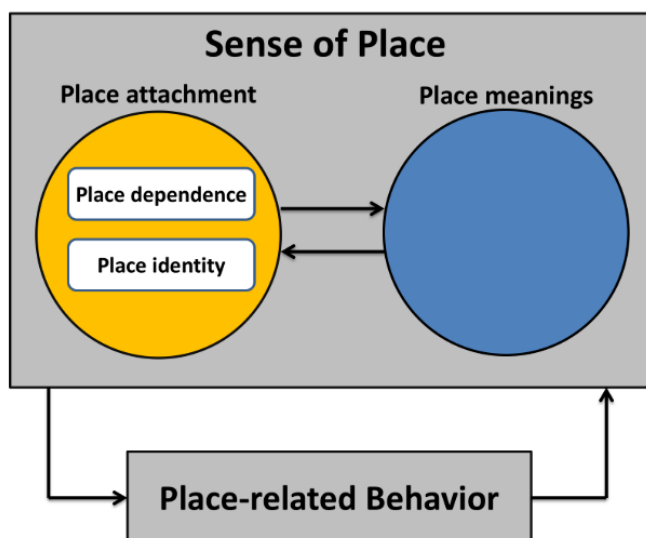

A simple definition adopted by Jaratt (2015) describes sense of place as "*feelings for a place and the elements that make that place special to a person, for example, memories of past visits, views, sounds, people, tastes, the smell.*" Jaratt (2015) asserts that whilst the concepts of place identity, place attachment and place dependence are distinguishable from each other, they are also 'fluid dimensions of a more general sense of place' and therefore deliberately avoids breaking down sense of place into these inter-related concepts.

Urquhart and Acott (2013) developed a conceptual framework to illustrate the co-contribution of the physical environment, the activities that take place there and the meanings that people associate with these activities and the place in the development of sense of place. This is outlined in Figure A2.

Figure A2 Conceptual framework for understanding people-place relationships in fishing places from Urquhart and Acott (2013).
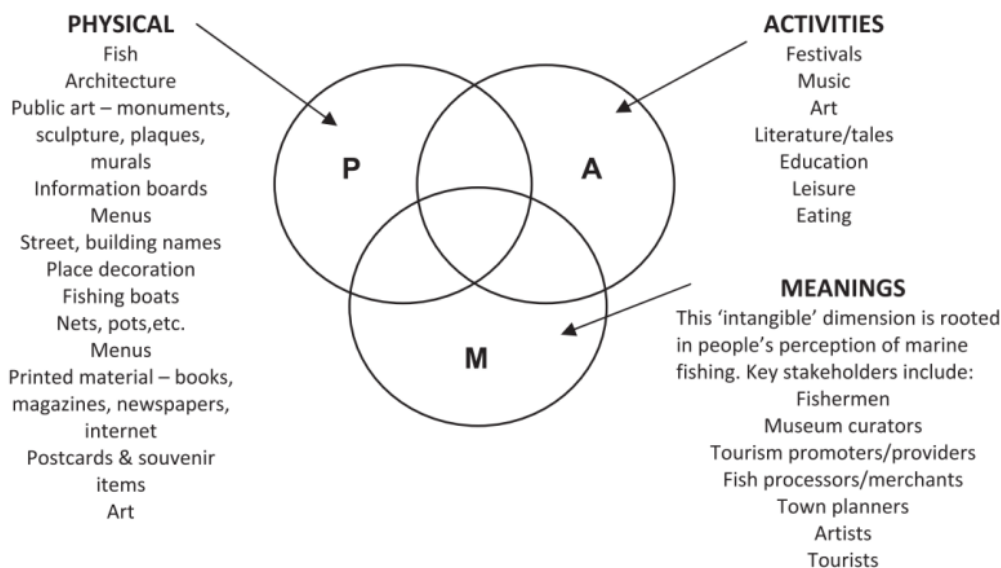
What is meant by 'seascape'?
There is no formal definition for seascape in the UK but the European Landscape Convention defines landscape as "*an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*"[15]. In the context of the UK Marine Policy Statement (2011) that directs Marine Planning policy, references to seascape "*should be taken as meaning landscapes with views of the coast or seas, and coasts and the adjacent marine environment with cultural, historical and archaeological links with each other*" (paragraph 2.6.5.1).

The Natural England Seascape Wheel adopted by MMO provides a starting point for describing seascape characteristics in terms of cultural/social (e.g. coastal features, surface water features, sunken and buried features, etc); perceptual and aesthetic

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[15] Treaty Office on http://conventions.coe.int 2000. European Landscape Convention. Chapter I Article 1.

(e.g. sight, sounds, smells, touch/feel, memories, etc); and natural (e.g. geology, air and climate, sea bed etc) (MMO, 2018). This is set out in Figure A3.

Figure A3 The Seascape Wheel (Natural England, 2012).
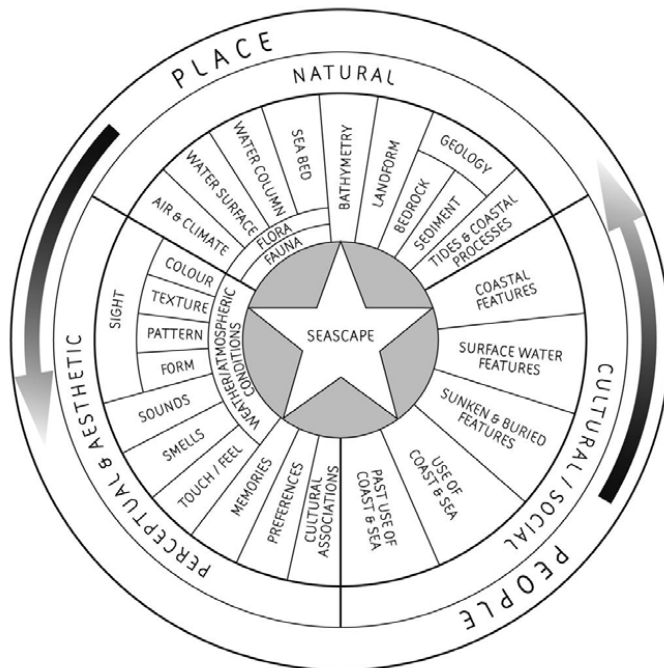
What is known about coastal residents' perceptions and feelings towards seascape (as an element of 'sense of place')?

Literature on sense of place within coastal fishing communities in England has demonstrated how the physical settings of a place (both the natural and non-natural elements) set boundaries for the development of place attachment. Places can become the locus for the formations of distinct collective identities based on shared symbolic cultural meanings (see Acott and Urquhart, 2014, Urquhart and Acott, 2013, Urquhart and Acott, 2014). For example the historical existence of fishing in some UK coastal towns and the impact this has had on the physical environment, forms the basis of residents' sense of place, with both fishers and non-fishers expressing the value that fishing gives to the character of their town and an attachment to the place that defines their identity as a fishing community (Urquhart and Acott, 2013).

In a review of literature on interactions of sense of place with risk perception, mobility, and adaptation, Quinn et al. (2018) acknowledge that the relationship with a place can be different for different social groups. For example people who have recently moved to an area can establish an emotional attachment similar to that of longer-term residents, but their place identity can be different as this takes more time to develop than emotional bonds (Quinn et al., 2018). Another example is how second home owners are likely to assign different meanings to the location of their home than locals will, for example they may be more likely to focus on environmental quality and the idea of place as an escape (Quinn et al., 2018).

Bell et al. (2015), looking at the therapeutic contributions[16] of coastal environments, highlights that the experiences sought out by visitors to different stretches of the coast are temporally dynamic, for example will depend on the seasons and life context. Participants in this study were aware of therapeutic values of the coast but noted shifts in their use of the coast over time, for example, temporary changes such as avoiding cold weather, or more long-term changes such as seeking more child-friendly locations in parenthood (see Bell et al., 2015).

These findings highlight that it will be useful to collect information on, for example, length of residence to inform a better understanding of the underlying reasons for sense of place/residents' perceptions. Considerations should also be made of the local history of the case study areas, as cultural or economic heritage (e.g. commercial fishing) have been shown to influence sense of place and the characteristics of seascapes that people attach a sense of place to.

A further consideration within the concept of sense of place specifically with respect to coastal environments, is, as natural environments, their potential for facilitating benefits to well-being. As a sub-set of the research on the benefits of natural environments, blue spaces and coastal environments have been known to have a beneficial impact on well-being and to support psychological restoration (Wyles et al., 2019). The attention restoration theory (ART) recognises four restorative qualities of natural environments including coastal environments:

- A sense of being away: Psychological distance from everyday stressors and distractions;
- Fascination: The ability to effortlessly redirect attention and capture one's surrounding environment;
- Extent: The ability to appreciate the connectedness to and richness of the environment; and
- Compatibility: The ability to associate and fulfil a person's needs and desires with what the environment offers.

Wyles et al. (2019) provide a useful overview of the evidence around restorativeness together with their study examining whether some natural environments are more psychologically beneficial than others. Using a version of the restorativeness scale together with a measure of connectedness to nature[17] they found that respondents (n = 4,515) recalled greater connectedness to nature and restoration following visits to rural and coastal locations compared with urban green space. What this research suggests is that attachment to coastal environments may also be psychologically restorative because of the naturalness of the landscape. Wyles et al. (2019) focus on visits to the natural environment which could mean more of a focus on tourists rather than on residents. Although they don't distinguish where their participants are from the majority of participants in the study had travelled less than 5 miles to the

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[16] The study identified four categories of therapeutic experience: 1) symbolic experiences related to place meanings, including sense of place; 2) immersive experiences including restorativeness e.g. switching off, 'lose themselves'; 3) achieving experiences e.g. providing environment to pursue long-term goals and more short-term benefits 'cathartic release'; and 4) social experiences e.g. coast offers various opportunities for family leisure and wellbeing.

[17] Connectedness to nature relates to an individual's emotional and cognitive bond to the natural world.

locations they were asked about, suggesting they lived locally, making the study relevant to this piece of work.

What work has been done to link seascape character assessments with sense of place?
From the 13 papers reviewed in this literature review, no literature was found that links seascape character assessment with sense of place. The study by Bell et al. (2015) maps individual activity in different coastal landscapes but not in relation to sense of place.

A1.2.2 How does sense of place contribute to the value coastal residents give to particular seascapes?

To what extent and in what way do seascapes influence peoples' sense of place? How are typologies/descriptors/scales used to describe sense of place related to seascapes?
Drawing on the different typologies of sense of place already discussed in this review (see Section A1.1.1 Aim of the literature review), the following outlines how these have been used in the reviewed literature to explain sense of place relating to seascapes.

An approach to quantifying the strength and underlying meanings of place attachment already exists within the literature where categorisation for place attachment is applied (Quinn et al., 2018). The five typologies of place attachment include inherent, active, alienation, relativity, and placelessness (Lewicka, 2011, cited in Quinn et al., 2018). Inherent place attachment relates to a long-term connection to a place and could be expressed by an unquestioned identification with a place. Active place attachment is formed when a person actively choses to live somewhere because it reflects an important part of their identity or lifestyle. Alienation, relativity and placelessness all represent forms of place non-attachment. Someone who is place alienated actively dislikes a place, a place relative individual holds an ambivalent relationship with a place, and placelessness describes someone who doesn't identify with their place of residence. The concepts of negative place attachment (alienation and placelessness), although useful in many cases, are outside the scope of this research and are not relevant to the research questions. However, the consideration of distinctions between inherent and active place attachment as well as the possibility of neutral relationships with place will be helpful in developing survey/interview questions.

Qualitative research into sense of place among fishing communities in the UK have found sense of place to be articulated by fishers in terms of personal identity relating to occupational identity, collective identity and social cohesion where fishing is part of a cultural process that has been collectively constructed, and also in terms of the contribution to the physical environment in which the landscape is bound up with fishing (see Urquhart and Acott, 2014).

Jaratt (2015) explains a sense of 'seasideness' perceived by visitors to a British coastal resort as a descriptor of sense of place. It is important to note that the results of this study only represent the views a specific group of visitors (matching the

portfolio: aged between 55-74, repeat visitors from the North of England) to one particular seaside resort (Morecambe). The characteristics of 'seasideness' included the role of the sea in underpinning the appeal of the place (aesthetically), the perception that visits to the coast have wellbeing and spiritual benefits, and the nostalgia associated with childhood visits to the seaside. Interviewees generally had a romantic view of this environment. Our research looked at local residents' perceptions and sense of place rather than visitors'. The findings of this literature review suggest that differences between residents' and tourists/visitors' place values may be worthwhile exploring in the future. This study provides the first step to filling this gap.

What types of seascapes do people attach a sense of place to? What typologies/descriptors for seascapes are used?
We recognise that there is other literature on sense of place which may have relevance in a coastal context but the search strategy for our brief review has focused on sense of place within seascapes specifically so may not have accounted for all relevant wider literature.

The types of seascape that have been shown to contribute to sense of place within this brief literature review include seascapes that have historical/cultural/economic value such as fishing towns (see Urquhart and Acott, 2014; Acott and Urquhart, 2014; Urquhart and Acott, 2013) and also seascapes that people have a personal or nostalgic attraction to, for example seaside resorts (see Jarratt, 2015). Visitors to British seaside resorts can hold a romantic view and perceive the coast as a place of wide ranging spirituality and nostalgia; participants' experiences of perceived spaciousness and sea views were key to informing their sense of place (Jarratt, 2015).

How important is sense of place in relation to other valued aspects of seascapes?
Sense of place is used throughout the literature as an approach to understanding cultural ecosystem benefits (Masterson et al., 2017, Urquhart and Acott, 2014, Acott and Urquhart, 2014). This approach can help policy makers and natural resource managers to develop a deeper understanding of the human dimensions of coastal management (Urquhart and Acott, 2014).

There was nothing found in the literature that compared how highly people value sense of place compared to other e.g. economic values of place. However, in a review of literature by Kopsel et al. (2017), some studies show that people are more likely to fight to protect places when the symbolic meanings that underlie their place attachment to that place are threatened by environmental or social change.

Literature included in this review aimed to improve understanding of sense of place to provide a starting point for exploring the social, economic and environmental relationships of seascapes in relation to fishing and fisheries management (Acott and Urquhart, 2014). Acott and Urquhart (2014) argue that understanding sense of place provides a perspective to seascapes and fisheries management that doesn't overlook cultural and social values. Sense of place analysis needs to be combined with ecological, environmental and economic valuation for example in understanding

how marine fishing can contribute to a sustainable future for UK fishing communities (Acott and Urquhart, 2014).

Cultural ecosystem benefits are generally harder to measure than, for example, economic or ecological benefits. The widespread acceptance (see Acott and Urquhart, 2014; Masterson et al., 2017; Urquhart and Acott, 2014; Kopsel et al., 2017; Quinn et al., 2018)) that a sense of place approach can better inform policy decisions of the cultural benefits of ecosystem/coastal management is relevant to the work of MMO and supports the rationalisation of this research.

A1.2.3. What are the characteristics of seascapes (including physical and cultural characteristics and the activities that people do in them) that influence sense of place?

What is known about the aspects or characteristics of seascapes that influence sense of place?

Contextual factors such as the experience of mobility can influence sense of place within communities (Quinn et al., 2018). As previously explained (see Section A1.1.3 Search strategy), mobility patterns can generate a diversity of place attachments and place meanings that contribute to sense of place, for example differences between long-term residents and mobile in-migrants (Quinn et al., 2018). This can be particularly relevant to coastal communities that more commonly experience demographic shifts, specifically from migration (Quinn et al., 2018)

The activities that people carry out in seascapes can also influence sense of place. A number of coastal communities have strong long-standing links to fishing that spans generations. It is apparent from the reviewed literature that the action of fishing is tied to the co-construction of sense of place in such coastal communities (see Urquhart and Acott, 2013; Acott and Urquhart, 2014; Urquhart and Acott 2014; McElduff and Ritchie, 2018). Individual and collective identities are built around social traditions of fishing communities, but these attachments are also mediated by the marine and coastal landscapes in which they are set (Urquhart and Acott, 2014). For example, within fishing communities, fishers can have particular attachment to a particular physical characteristic of a seascape (e.g. a particular beach (see Urquhart and Acott, 2013)) which contributes to their identity as fishers and a fishing community.

The non-natural elements of a seascape can also contribute to peoples' sense of place. Activities such as fishing can shape the material environment through their impact on the marine/coastal ecosystem but also through the development of the non-natural environment. For example in studied fishing communities, physical objects associated with fishing contributed to sense of place. Residents of Cornish fishing towns spoke of the attractiveness and charm of fishing boats in a harbour and even stated a preference for these over other types of vessels (Urquhart and Acott, 2014).

Are there systematic patterns between types of seascape and/or particular characteristics, and sense of place?

In reviewing the literature on sense of place more generally, not specifically related to seascapes, Masterson et al. (2017) assert that place-related responses and

actions are not random and place attachment and place meanings vary systematically across populations. The authors outline several key assumptions for sense of place that underlie this systematic variation:

- Sense of place forms through both individual and social experiences.
- Sense of place emerges from human interactions with the biophysical environment.
- Place attachment and meanings are subjective but vary systematically. Different types of people, experiences, and environments will lead to systematic differences in meanings, attachment and behaviour.
- Patterned relationships with place allow predictions of specific types of behaviour. For example, because of many different meanings associated with the same place, people respond to change in place differently depending on how their respective meanings are affected by the change. (Masterson et al., 2017)

Several of the reviewed studies looked at seascapes that are primarily fishing ports. Within all of these studies residents emphasised a strong attachment to the local economy, specifically fishing, which reinforces their sense of identity and belonging to place (see McElduff and Ritchie, 2018; Urquhart and Acott, 2014; Acott and Urquhart, 2014; Urquhart and Acott, 2013).

A1.2.4 How might changes in these characteristics influence both sense of place and seascape value?

What is known about how changes in characteristics influence sense of place?
Disturbances to social-ecological systems such as flooding, that is frequently experienced in coastal environments, or economic restructuring can affect the character of a place and consequently residents' place meanings, which in turn can cause psychological and emotional distress (Masterson et al., 2017).

Sense of place is considered in the reviewed literature as a useful approach to understanding people's perceptions of social and ecological change (Masterson et al., 2017; Quinn et al., 2018) and their responses to such change within a place (Quinn et al., 2018; McElduff and Ritchie, 2018). Whereas a strong sense of place attachment is associated with care and action, this doesn't predict the type of action supported (Masterson et al., 2017; Kopsel et al., 2017). Place attachment could equally support adaptation to change or be a barrier to transformative change (McElduff and Ritchie, 2018). People who are all strongly attached to a place may not necessarily be attached for the same reasons or hold the same place meanings and therefore may respond to change differently (Masterson et al., 2017).

Strong attachment to place may be a barrier to changing practices, particularly when unique qualities of place are threatened (McElduff and Ritchie, 2018). For example, proposals to build an art gallery near a strongly valued fishing beach in the UK town of Hastings received a mixed reception from residents with some feeling it would inherently change the character of the town and threaten fishing place identity (Urquhart and Acott, 2013).

A1.2.5 Methodological: what are meaningful questions to ask people when talking about sense of place in relation to a seascape?

What questions/approaches were used to ask people about their sense of place?

All papers reviewed took a qualitative or mixed-method approach to exploring people's sense of place. Although the three or four identified dimensions of sense of place have been widely acknowledged to be inter-related, many of the papers reviewed in this report do not explore sense of place as a whole but rather focus on one or two particular dimensions (see Urquhart and Acott, 2013; McElduff and Ritchie, 2018). Some key approaches and questions used to identify the different dimensions of sense of place that have emerged from the reviewed literature are as follows.

Where surveys have been used, some studies reported using multi-item scales where, for example, respondents were provided with a series of statements for which they would select a response from 1-5, from strongly agree to strongly disagree, to each statement. For example, to measure positive or neutral place attachment, Quinn et al. (2018) adopted aspects of the multi-item scale developed by Lewicka (2011) that would include statements such as "*I miss this place when I am not here*" and "*I want to be engaged with the affairs of this place*". This method of quantifying a measure of place attachment allowed the authors to gain a score for the strength of an individual's place attachment. The Lewicka (2011) scale includes the five categorisations of place attachment previously identified in this review; these include the concepts of place non-attachment that will not be explored in this study. Therefore this is not a scale that can be directly adopted but it will be useful to inform the wording of statements/questions relating to place attachment.

The review by Masterson et al. (2017) identifies that place dependence has been measured through survey items such as "*This is the best place to do the things I enjoy*", while place identity had been identified through survey items such as "*this place really reflects the kind of person I am*". To investigate coastal residents' place meanings, Quinn et al. (2018) asked people to describe their town in three words. The identified place meanings were later coded into categories that included: quality of life, heritage, water, rural status, location, economic status, and youth.

During in-depth interviews, Bell et al. (2015) used open questioning techniques to explore participants' place narratives in more detail. The questions focused on the physical and social contexts of participants' place interactions, their associated meanings and feeling, and the changes over time. Personalised maps that had been previously used to map participants' interactions with the natural environment were used as a prompt to guide the interviews (Bell et al., 2015). In addition, to offer further insight into participants' lived experiences and relationships with particular places, 'go-along interviews' (a mobile method) were also used, whereby qualitative interviews were conducted in places which the participants themselves deemed therapeutic (Bell et al, 2015).

What (if any) key methodological limitations/issues were noted that are relevant to the current research?

Masterson et al. (2017) highlights that relative neglect of place meaning in sense of place research has previously led to issues, for example, where it has been assumed that people who have strong place attachment will mobilise to protect their place from a particular threat. As previously highlighted in this review, people can share an attachment to place but differences in individuals' place meanings can influence how they respond to changes in place.

A key issue identified in the literature that will be important to bear in mind in developing the methodology of this research is that, in identifying place value typologies, different values of place are usually interwoven to some degree (see Brown and Reed, 2000).

A1.3 Conclusions

The findings of this brief literature review have highlighted a number of key considerations in exploring sense of place. Distinguishing between the different dimensions of sense of place (place attachment, dependence, identity and place meaning) is useful in ensuring that all aspects of what makes up an individual's sense of place are captured. However, it is also important to acknowledge that they are also 'fluid dimensions of a general sense of place' (Jarratt, 2015) and therefore are a tool to assist in the analysis of overall sense of place and not necessarily useful in isolation from one another. This limitation has been recognised by Masterson et al. (2017) when highlighting the importance of not overlooking place meaning in sense of place research. Therefore it will be important to capture all dimensions of sense of place through the proposed methodology.

Sense of place is a dynamic concept and varies temporally and depending on life context, with key variations between different social groups (e.g. residents and visitors or long-term residents and recent in-migrants) being identified within this review. Contextual and social factors, as well as the activities (e.g. fishing) that people do within seascapes, were found to influence people's sense of place, therefore a methodology should be developed that addresses each of these potential drivers. It would also be useful to collect data on e.g. place of residence or length of residence.

Environmental and social changes within a place setting can impact people's sense of place, but sense of place can also influence how people respond to changes within a place. Analysing variation in people's responses to change in seascapes is beyond the scope of this research however understanding what values and characteristics of seascapes contribute to residents' sense of place is useful to the current research.

This review also identified key methodological approaches to inform methods in subsequent stages of this research including the use of survey items such as multi-item scales and open questioning interview techniques. Overall it is clear that the physical characteristics of seascapes, the activities and behaviours that people do in seascapes and the emotions and cognitions that these characteristics and

behaviours evoke should be examined in order to capture sense of place adequately.

Section A1.4 Initial set of draft framing / questions to elicit sense of place information (which were further refined in subsequent stages of the research)presents an initial set of draft questions, based on the literature reviewed, to explore sense of place of residents in a specific coastal area, which were further refined as part of the development of the methods for the PP GIS mapping and focus groups (see

and Annex 3: Focus Group Record).

A1.3.1 Gaps in the literature/answers to research questions

It is important to note that a large proportion of the reviewed literature focuses on sense of place in fishing communities/towns and therefore there is limited generalisability of these findings to other types of seascape.

From this review nothing in the literature was found that compares the value of sense of place compared to other values of seascapes. Although it was widely acknowledged that more effort needs to be made to include sense of place in policy/management decisions, the literature reviewed did not provide any theoretical or practical methodology for factoring sense of place into seascape assessment/management processes.

A1.3.2 Areas for future research

Two areas for future research identified in this review but that are out of scope of this research are: research into the differences in seascape sense of place between residents and non-residents, and also the role of negative place meanings and place non-attachment in developing sense of place of seascapes.

A1.4 Initial set of draft framing / questions to elicit sense of place information (which were further refined in subsequent stages of the research)

We are interested to learn about which places along the northern Devon coast (including the sea), between Hartland Point and Morte Point, are special to you (if any) and why.

Choosing special places
Using the map, please select up to THREE places which are special to you, and for each please tell us why it is special to you. Alternatively if no places are special to you, please tell us why.

[Each time a place is selected, a pop-up pane/s will appear with questions on 'why is this place special to you?', once answered, the location and responses are saved, and the respondent is prompted to select the next special place, up to a total of 3 places.]

If no special places:
If no places on the map are special to you please tell us why?
> *I like it all* [x]
> *I don't feel strongly about any places.* [x]
> *I don't like this area* [x]
> *I don't care about where I live* [z]
> *Other: free text*

[Sources for statements: [x] developed by the research team; [z] from Lewicka 2011]
[THEN TO GO STRAIGHT TO 'ABOUT THE PERSON']

Why is this place special to you? For each place:

1. How does this special place make you feel? Please rate how strongly you agree with each of the following statements from 1 strongly disagree to 5 strongly agree [Five point scale: strongly disagree, disagree, neither agree nor disagree, agree, strongly agree]

- This place is part of me [a]
- I am proud of this place [a]
- This place has good memories for me [b]
- This place makes me feel refreshed and revitalized [c]
- This place makes me feel calm and relaxed [c]
- This place makes me feel close to nature [d]
- This is the best place to do the things I enjoy [e]

[Sources for statements:
[a] Attachment - from Lewicka 2011 various place/city/town attachment scales
[b] Relates conceptually to identity - developed by the research team; draws on a similar phrase from Lewicka's 2011 attachment scale 'I have strong family connections to this place'.
[c] Restorativeness - adapted from Wyles et al.*,* 2019 which draws on White et al.*,* 2013.
[d] Connectedness to nature - adapted from Wyles et al., 2019
[e] Dependence - from Jorgensen and Stedman 2001 cited in Masterson et al.*,* 2017]

2. Do particular features of the place which make it special to you? Tick all that apply.
Beaches and sand dunes
Rocky shores and rockpools
Cliffs, rock formations, geology
Sea bed
Waves and tides
Presence of wildlife e.g. fish, birds
Sensory characteristics e.g. light, sounds, smells, fresh air
Sights and views, expanse of sea
Fishing ports, boats, docks, jetties
Shipwrecks and historic elements
Setting e.g. rural, town/village
None of the above

[Sources: adapted from the seascape wheel - does not include all aspects]

3. What activities do you do here? Tick all that apply.
Generally being in the place (e.g. Sitting, relaxing, sunbathing etc)
Working e.g. commercial fishing, working in shop/cafe etc.
Walking (including short walks, rambling or hill, dog walking)
Spending time with family and friends
Playing with children
Visiting attractions
Wildlife watching
Recreational fishing

Water sports (e.g. swimming, sailing, surfing, diving, motorised watercrafts)
Other sports (e.g. coasteering, rock climbing, drones)
None of the above

[Source for activities: various, some developed by research team, some adapted from MENE Coastal Report, ABPmer NE survey, many grouped]

4. **Are there any other reasons why this place is special to you?**
Free text

5. **Roughly how often do you typically visit this place? Include all visits, regardless of duration. Tick one option**.
At least once a week
Once or twice a month
Once every 2 or 3 months
Once or twice over last 12 months
No visits in last 12 months

[Source of scale: MENE coastal report]

[REPEAT FOR ALL THREE PLACES. THEN]

6. **Which one of these places is most special to you?**

About the person: socio-demographics
7. **Gender:**
Male
Female
Prefer not to say
Other (specify) – FREE TEXT BOX

8. **Age:**
Under 16
16-24
25-59
60 +
Prefer not to say

9. **How long have you lived locally to this area (northern Devon)?**

10. **Postcode [or if GDPR issues, first part of postcode]**

Survey Feedback
11. **Please could you tell us how you found the survey:**
Provide a measure scale from 'very difficult to use' to 'very easy to use'
Please use this box for any final comments [Free text box]

A1.5 References

Acott T. and Urquhart J. (2014) Sense of Place and Socio-cultural Values in Fishing Communities Along the English Channel. In: Urquhart J., Acott T., Symes D., Zhao M. (eds) Social Issues in Sustainable Fisheries Management. MARE Publication Series, vol 9. Springer, Dordrecht

Altman, I. and Low, S. M. (1992) Place attachment, New York, Plenum Press.

Bell, S., Phoenix, C., Lovell, R. and Wheeler, B. (2015) Seeking everyday wellbeing: The coast as a therapeutic landscape. Social Science and Medicine 142, pp: 56-67

Brown, G. and Reed, P. (2000) Validation of a Forest Values Typology for Use in National Forest Planning. Forest Science 46(2), pp: 240-247

Brown, G.G. and Reed, P. (2012) Social Landscape Metrics: Measures for Understanding Place Values from Public Participation Geographic Information Systems (PPGIS). Landscape Research 37:1, pp: 73-90

Canter, D (1977) The Psychology of Place. London: Palgrave Macmillan.

Collins, A.M., Coughlin, D., Miller, J. and Kirk, S. (2015) The Production of Quick Scoping Reviews and Rapid Evidence Assessments: A How to Guide. Defra. NERC. Joint Water Evidence Group (JWEG)

de Groot, J. and Bailey, I. (2016) What drives attitudes towards marine renewable energy development in island communities in the UK? International Journal of Marine Energy 13, pp: 80-95

European Landscape Convention, open for signature at Florence on 20 October 2000 (2000) Florence, Council of Europe. Chapter 1, Article 1.

Jarratt, D. (2015) Sense of place at a British coastal resort: Exploring 'seasideness' in Morecambe. Tourism 63(3), pp: 351-363

Jorgensen, B. S. and R. C. Stedman. (2001) Sense of place as an attitude: lakeshore owners attitudes toward their properties. Journal of Environmental Psychology 21(3), pp: 233-248

Köpsel, V., Walsh, C. and Leyshon, C. (2017) Landscape narratives in practice: implications for climate change adaptation. The Geographical Journal 183 (2), pp: 175-186

Lewicka, M. (2011) On the varieties of people's relationships with places: Hummon's typology revisited. Environment and Behaviour 43(5), pp: 676-709

Manzo, L. and Devine-Wright, P. (2013) Place Attachment: Advances in Theory, Methods and Applications. London: Routledge

Masterson, V., Stedman, R., Enqvist, J., Tengö, M., Giusti, M., Wahl, D., and Svedin, U. (2017) The contribution of sense of place to social-ecological systems research: a review and research agenda. Ecology and Society vol 22(1) art 49

McElduff, L., Ritchie, H. (2018) Fostering coastal community resilience: Mobilising people-place relationships. Area 50 (2), pp: 186-194

MMO. (2018) Seascape Character Assessment for the South West marine plan area. A report produced for the Marine Management Organisation, MMO Project No: MMO1134. September 2018, pp 106

Natural England. (2016) Monitor of Engagement with the Natural Environment (MENE): Visits to coastal England. Natural England. Publication number: NECR226

Quinn, T., Bousquet, F., Guerbois, C., Sougrati, E. and Tabutaud, M. (2018) The dynamic relationship between sense of place and risk perception in landscapes of mobility. Ecology and Society 23(2), art 39

Relph, E. (1976) Place and Placelessness, London: Sage

Spence, E., Pidgeon, N. and Pearson, P. (2018) UK public perceptions of Ocean Acidification – The importance of place and environmental identity. Marine Policy 97, pp: 287-293

UK Marine Policy Statement HM Government Northern Ireland Executive Scottish Government Welsh Assembly Government March 2011. London: HMSO. Available online at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69322/pb3654-marine-policy-statement-110316.pdf (Accessed 1 August 2019)

Urquhart, J. and Acott, T. (2013) Constructing 'The Stade': Fishers' and non-fishers' identity and place attachment in Hastings, south-east England. Marine Policy 37 pp: 45-54

Urquhart, J and Acott, T. (2014) A Sense of Place in Cultural Ecosystem Services: The Case of Cornish Fishing Communities. Society and Natural Resources 27 (1), pp: 3-19

White, M. P., Pahl, S., Ashbullby, K., Herbert, S., and Depledge, M. H. (2013) Feelings of restoration from recent nature visits. Journal of Environmental Psychology 35, pp: 40-51.

Wyles, K., White, M.P., Hattam, C., Pahl, S., King, H. and Austen, M. (2019) Are Some Natural Environments More Psychologically Beneficial Than Others? The Importance of Type and Quality on Connectedness to Nature and Psychological Restoration. Environment and Behavior 51(2), pp: 111-143

Annex 2: PP GIS Survey Report

This annex provides further detail about the online public participation Geographic Information System (PP GIS) survey, including the aims and objectives of undertaking the survey, the approach, the results and a summary of the key findings.

A2.1 Aims and objectives

The aim of the online survey was to utilise an online public participatory mapping exercise to explore the perceptions and feelings of northern Devon residents towards seascapes as an element of 'sense of place' and the characteristics of seascape that influence sense of place.

The findings of the literature review (see Annex 1: Literature review) were used to develop a series of questions within the survey that enabled participants within a study area to select coastal locations that they like to visit and explore the reasons why they like to visit these location, via a series of standard questions (see Section A2.2).

A2.2 Approach

A2.2.1 Selection of case study area

The following factors were considered important in selecting a coastal study area in which to conduct the online survey:

- A coastal area with a range of coastal habitats and landscape characteristics;
- An area where the residents are likely to have a strong/positive association with the coast in order to facilitate recruitment of participants for both the mapping and focus group;
- An area of an appropriate scale, for example a Marine Character Area (MCA);
- The area was selected to avoid replication with the wider MMO1132 project research areas (e.g. Cornwall, Humber and the south east of England) to prevent stakeholder consultation fatigue.

Based on these criteria, Bideford Bay and Taw-Torridge Estuary MCA (MCA 42), was chosen as the study area, in agreement with the Marine Management organisation (MMO). This area includes the coastline between Hartland Point in the south of the MCA to Morte Point in the north of the MCA (see Figure 10, MMO, 2018).

A2.2.2 PP GIS Survey approach

The PP GIS web-based survey was built as a map led interactive application with an accompanying backend SQL database to store the survey results. The application was designed to provide a simple, yet intuitive user interface that could allow users to select and drag a marker onto the map, select related options when prompted and the corresponding inputs for each participant to be recorded in the database.

The web application was comprised of server-side, HTML5, CSS3 and Opensource JavaScript code enabling the delivery of a responsive website to meet the needs of the anticipated range of devices (e.g. phones, tablets, computers) used to complete

the survey. As each special place was selected by users, the longitude and latitude were then saved to the database before they moved on to selecting their next location.

To ensure special places were relevant to the area defined for survey, two measures were designed into the application. These were to limit the spatial extent of the map itself to the relevant section of the northern Devon coast[18] and restrict access to the questions for their special place until the user had zoomed in far enough to ensure the location was correctly positioned.

Once a respondent accessed the survey, an introduction panel was displayed which described the rationale for the study, followed by an instructions panel (see Figure A13). The respondents were then instructed to place a marker at a coastal location that they considered to be a 'special place'. Once they had selected a location, they were asked to answer a series of questions in relation to the location they had chosen. The questions were designed to explore:

- How the special place made them feel – by rating their agreement or disagreement with phrases associated with a 'sense of place' as determined in the literature review;
- What features made the place special to them – by selecting pre-set options from a list of features;
- What activities (if any) they undertook at the special place – by selecting pre-set options from a list of activities;
- How frequently they visited this location – by selecting a frequency range from a pre-set list of options.

The survey was designed to enable respondents to choose a location and answer questions in relation to the location, up to a maximum of three times (i.e. they were able to choose up to three special places).

Alternatively, if the respondent did not feel that any coastal areas within the study area were special to them, they were instructed to click a specific 'sad face' icon. They were then asked to indicate why they did not consider any places to be special to them through selecting pre-set options from a list and/or entering free text to provide their own explanation.

Once the respondents had selected up to three locations and answered the subsequent questions (or selected 'no special places and answered the subsequent question), they were invited to indicate their age range, gender, the length of time they had been residents in northern Devon and provide the first four digits of their postcode to enable some basic demographic information about the respondents to be obtained. The respondents were able to opt out of answering any or all of these demographic questions.

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[18] The spatial restriction applied was an approximation of the MCA boundary and hence in practice survey respondents were able to select locations just outside of the actual MCA area chosen.

Once the respondents had answered all of the above and selected 'finish', the longitude and latitude of the locations selected and the answers provided by the respondents were recorded in the database as described above.

The online survey was live for approximately one month during May 2019 (02/05/2019 to 30/05/2019).

The survey panels described above are shown in Figure A13.

A2.2.3 Dissemination strategy

A link to the online survey was disseminated to 32 local authorities, organisations and community groups located within the study area. These third parties were contacted via email by the project team and asked if they would circulate an invitation to participate in the online survey via their website and/or social media channels. Third parties contacted included local libraries, museums, councils, parish councils, local nature conservation authorities, resident's associations and other local community or interest groups.

A2.2.4 Analysis of survey responses

Once the online survey was closed, the database of responses was exported for analysis.

The spatial locations selected by the respondents were plotted as points superimposed over the same point data visualised using a simple heatmap symbology to highlight relative aggregational intensity of special places. This heatmap indicates 'areas' within the case study area which were most frequently selected as a 'special place' by respondents.

Within the time and resource constraints of this study, it was not possible to undertake a detailed analysis of the relationship between the locations selected (i.e. the spatial data points) and the survey responses associated with that location (i.e. the reasons for why each one was considered special to the respondent). Instead, the descriptors and free text from all the respondents were collated to assess the frequency of the descriptors chosen to describe why a coastal location was special to them. These results are presented in Section A2.3 Results.

A2.3 Results

A total of 113 respondents participated in the online survey, selecting a total of 249 special places on the northern Devon coast. Out of these respondents, only 99 completed the 'about you' questions; these results showed that 63% were female and 37% were male. The highest proportion of respondents (60%) were aged between 25 to 59, whilst 37% were over 60 years old and 3% were aged between 18 to 24. Nearly three quarters of respondents (74%) had lived in northern Devon for over 10 years, whilst 15% had lived there between 1 to 5 years, 10% between 5 to 10 years and 1% preferred not to specify. None of these respondents indicated they had lived in northern Devon for less than one year.

The postcode information provided by 99 out of the 113 respondents indicated that the highest proportion (40%) lived in the Bideford area (EX39), whilst 22% lived in

Barnstaple (EX31 and EX32), 15% in Ilfracombe or Woolacombe (EX34), 2% Braunton (EX33), Holsworthy (EX22) and Torrington (EX38), and 1% Beaworthy (EX21) and South Molton (EX36).

Out of the 113 respondents that selected special places on the northern Devon coast, 60 respondents (53%) chose three special places (the maximum allowed), 16 respondents (14%) chose two places and 37 respondents (33%) chose one place. Figure A4 below shows the 249 spatial locations chosen by the respondents, presented as a heatmap. The figure shows that, in general, the locations that were most frequently chosen as being special included the Taw Torridge estuary and sea cliff areas such as Baggy Point.

Figure A4 Heatmap of the special places on the northern Devon coast selected during the survey.
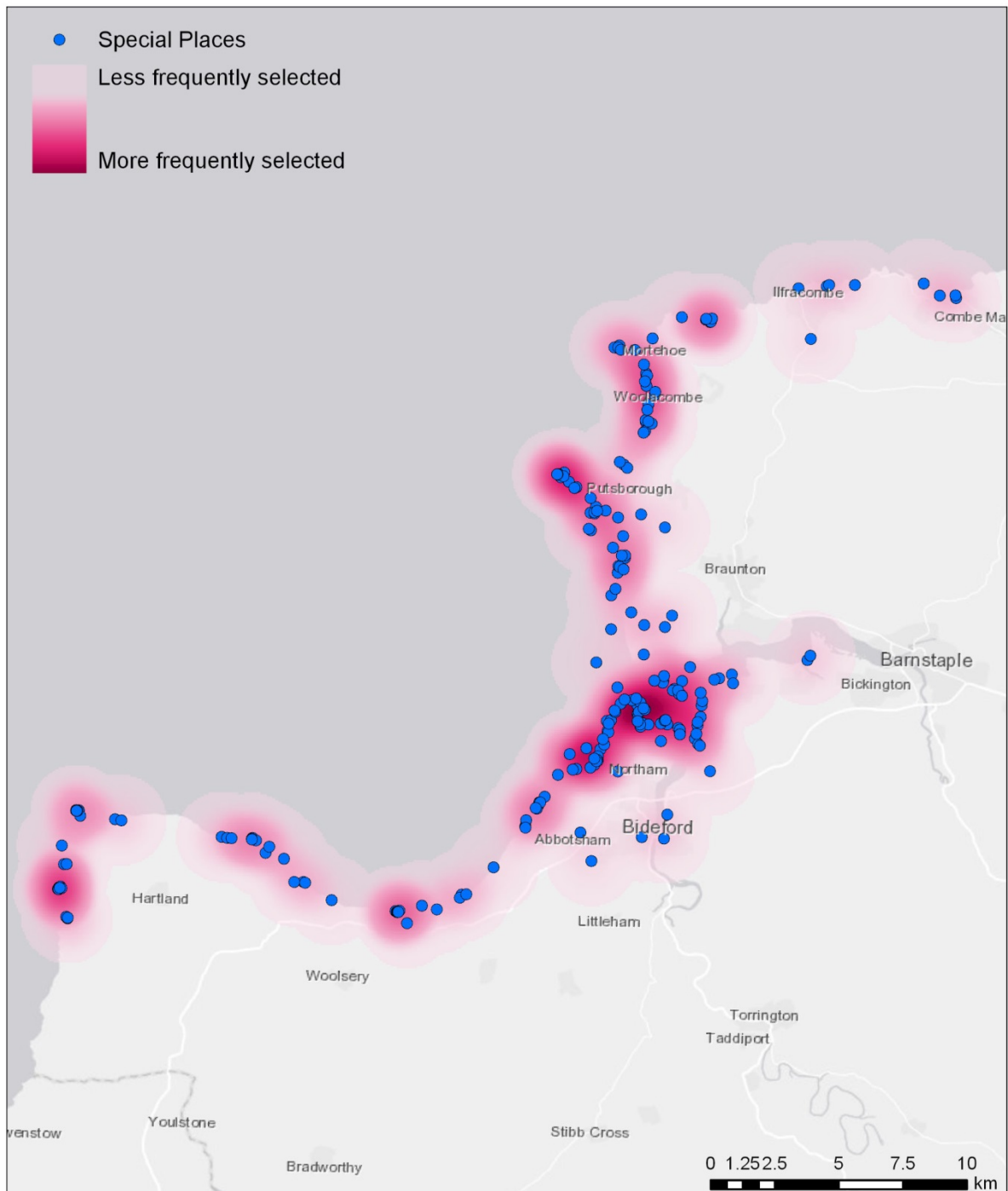
Question 1 asked respondents to rate the extent to which they agreed with statements about how their chosen location(s) made them feel (Figure A5). shows the level of agreement with each phrase for the locations chosen. The results indicate that for the majority of special places chosen (over 70%), the respondents strongly agreed or agreed with each of the phrases presented to them.

Figure A5 Responses to Survey Question 1 'How does this special place make you feel?' by place.
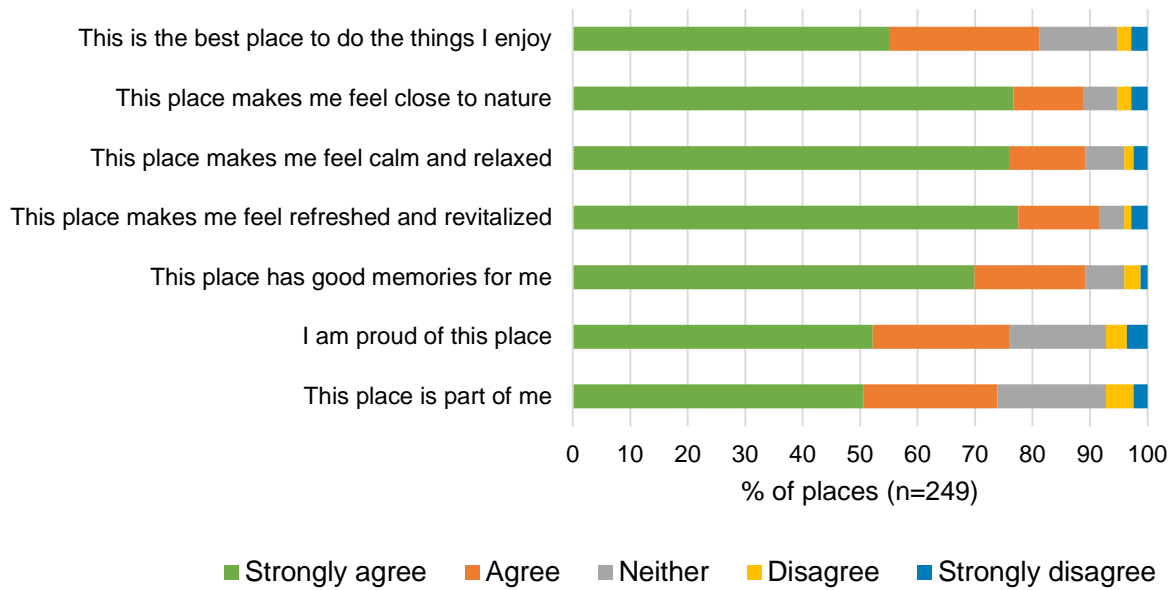

Almost all (around 90%) of the special places were perceived by respondents to evoke the following feelings:

- This place makes me feel refreshed and revitalized;
- This place makes me feel close to nature;
- This place makes me feel calm and relaxed;
- This place has good memories for me.

An example of how the level of agreement or disagreement with the phrase "I am proud of this place" was distributed across all of the locations selected is shown in Figure A6. The reasoning behind the respondents level of agreement / disagreement with all phrases was explored further in the focus group, the outcomes of which are described in Annex 3: Focus Group Record.

Figure A6 Level of agreement with the phrase "I am proud of this place" for all special places
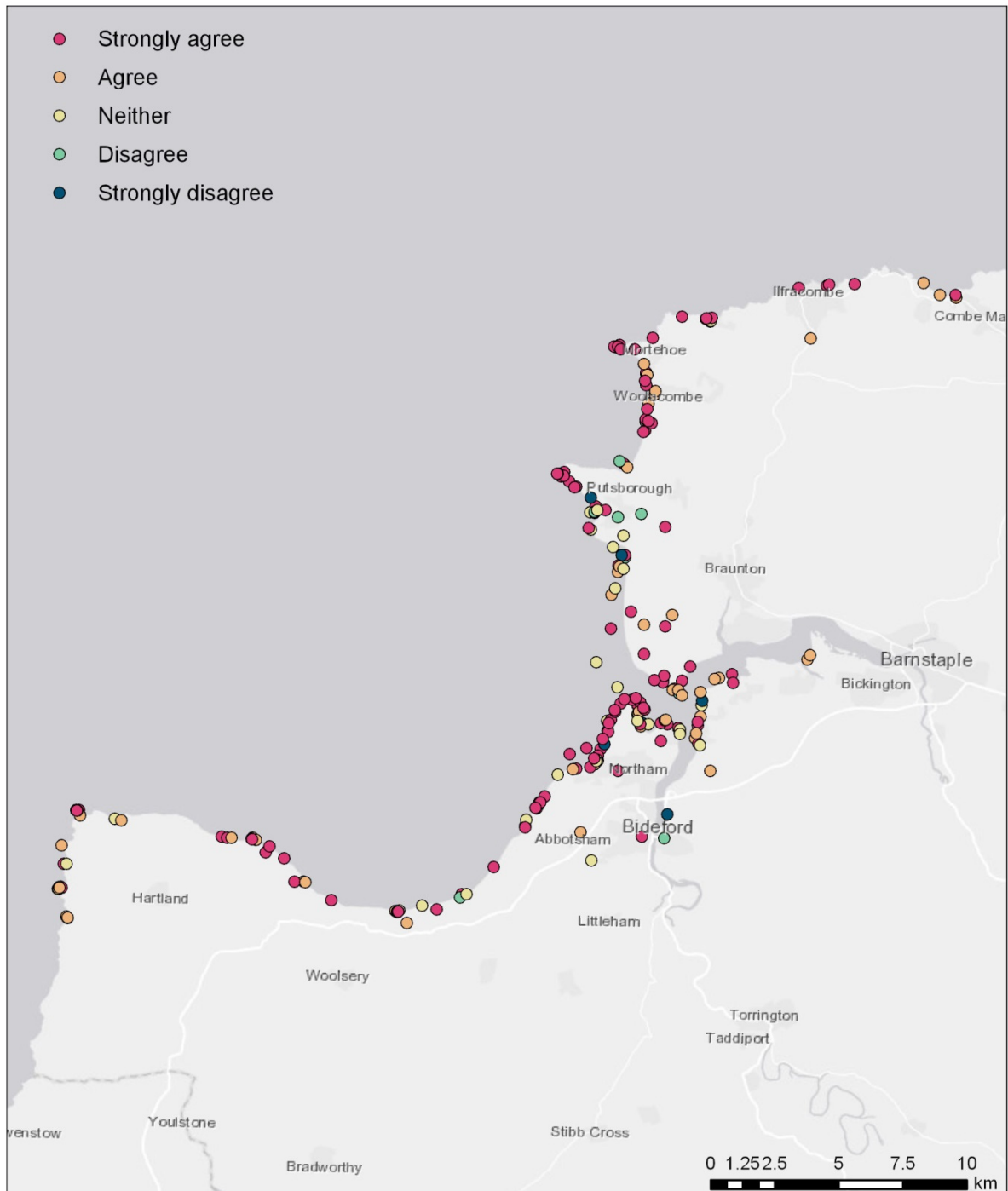
Survey questions 2, 3 and 4 explored the features which made the selected location special to respondents, the activities undertaken at their chosen location and the frequency that they visited the location.

Figure A7 shows that the feature most frequently selected to describe why the location was special to them was 'sights and views, expanse of sea'. The sensory characteristics, physical features such as waves and tides and the presence of

wildlife were also frequently chosen features. Figure A8 shows that over 80% of respondents stated that sights and views, expanse of sea, sensory characteristics, waves and tides, presence of wildlife and beaches and sand dunes, were features which made a place special to them (for at least one site selected).

Figure A9 shows that, with regard to the activity undertaken at the special location, walking, generally being in the place, spending time with family and friends and wildlife watching were clearly the most frequently selected activities undertaken at the chosen locations. Figure A10 shows that over 90% of respondents selected walking and generally being in the place as the activities they undertook whilst at the special place (for at least one site selected), whilst over 50% of respondents also selected spending time with family and friends, wildlife watching and water sports as activities undertaken (for at least one site selected).

Figure A11 shows how the PP GIS survey outputs can be used to identify locations where specific activities are undertaken, in this example 'playing with children'[19]. Examination of the data shows that many of the special places where this activity occurred were beaches (for example, Northam, Instow, Croyde and Woolacombe) although non-beach areas were also chosen (for example the sea cliff area at Baggy Point).

Figure A12 indicates that the majority of special places were visited by the respondents on a relatively frequent basis (once or twice a month or at least once a week).

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[19] For further discussion of the health and wellbeing benefits of accessing the coast for recreation for people with children see the MMO1132 report on Health and wellbeing benefits of coastal recreation and barriers to access.

Figure A7 Responses to Survey Question 2: 'What feature makes it [chosen place] special to you?' by place. Respondents could select up to three special places and pick any or all features that were relevant to them.


% of places (n=249)
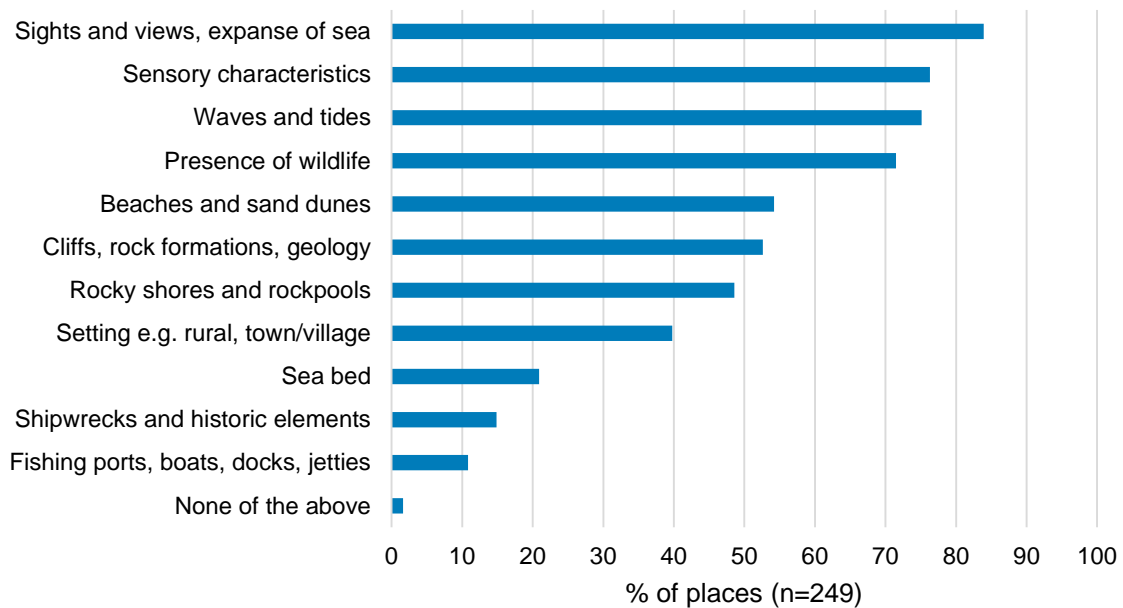
Figure A8 Responses to Survey Question 2: 'What feature makes it [chosen place] special to you?' Respondents could select up to three special places and pick any or all features that were relevant to them.

% of respondents (n=113)
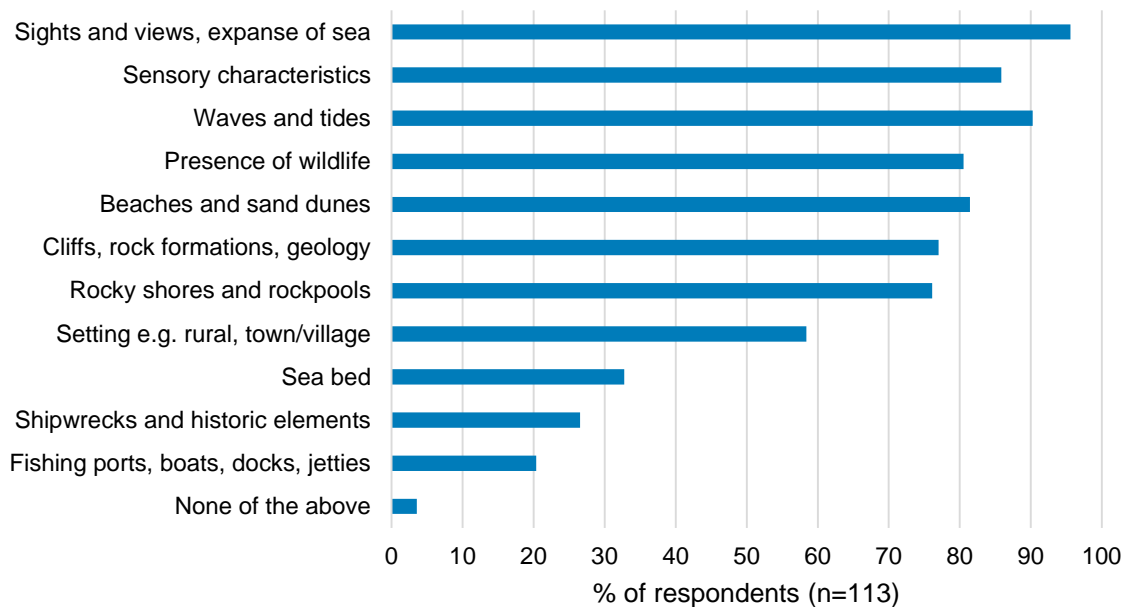
Figure A9: Responses to Survey Question 3: 'What activities do you do there [special place]?' by place. Respondents could select up to three special places and pick any or all activities that were relevant to them.

% of places (n=249)
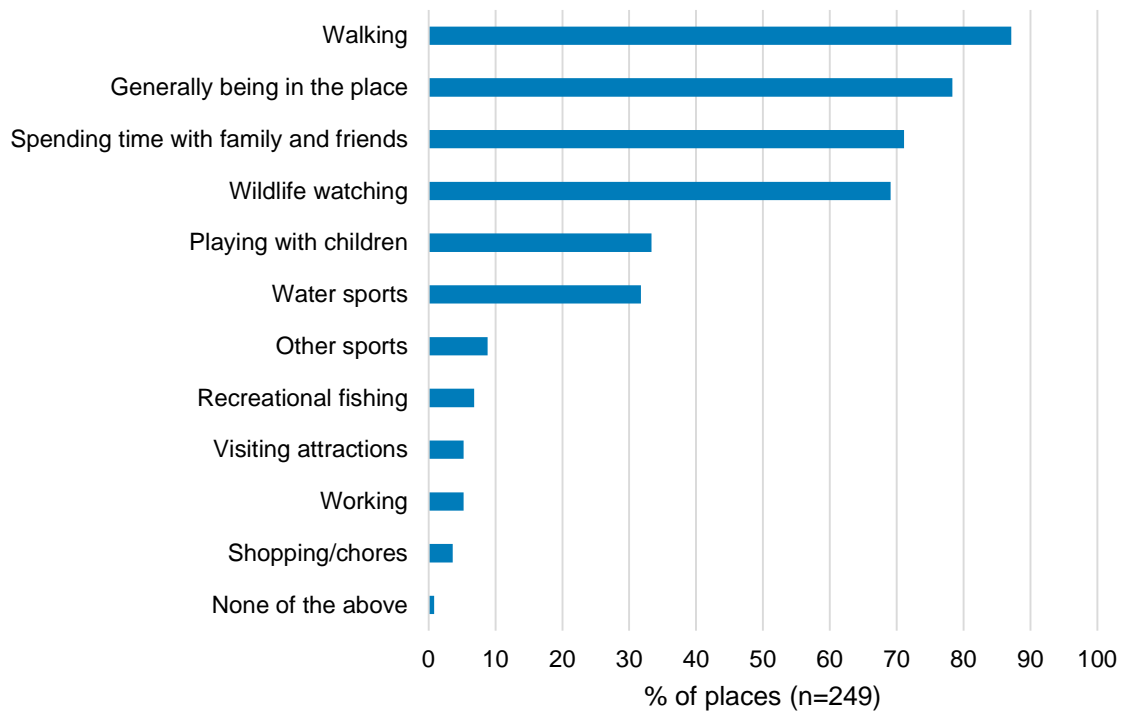
Figure A10: Responses to Survey Question 3: 'What activities do you do there [special place]'? The figure shows the percentage of respondents who selected the activity in relation to at least one of their special places: respondents could select up to three special places.

% of respondents (n=113)
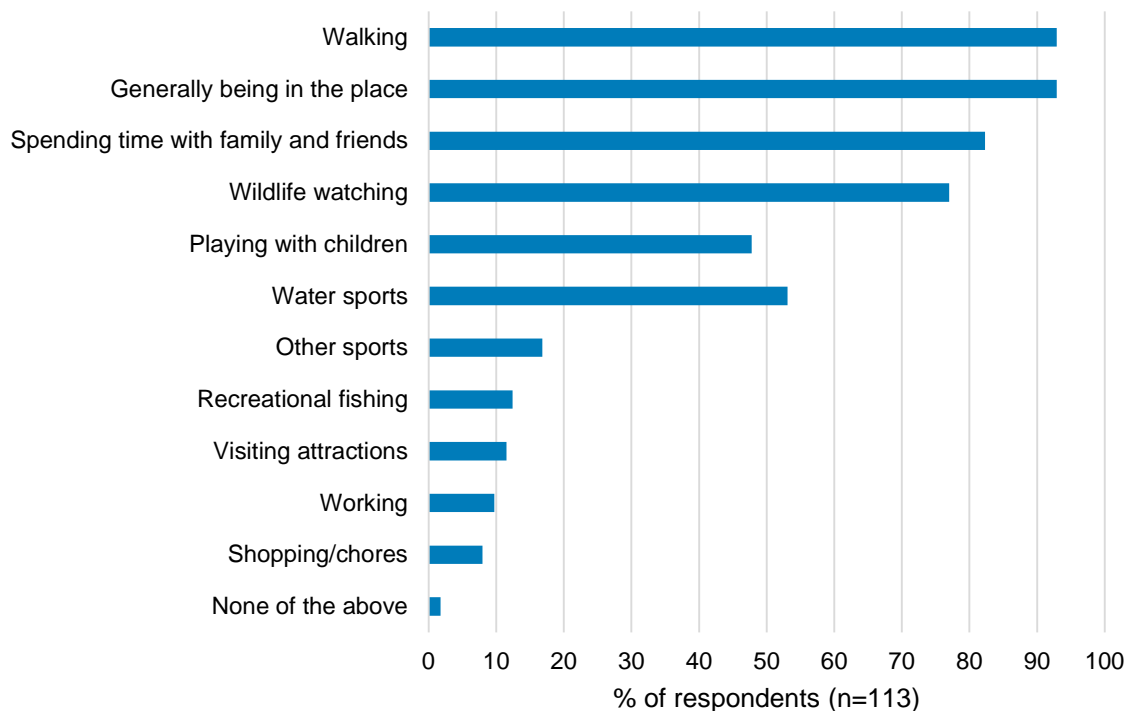
Figure A11: Spatial distribution of the places chosen where at least one of the activities was 'playing with children'
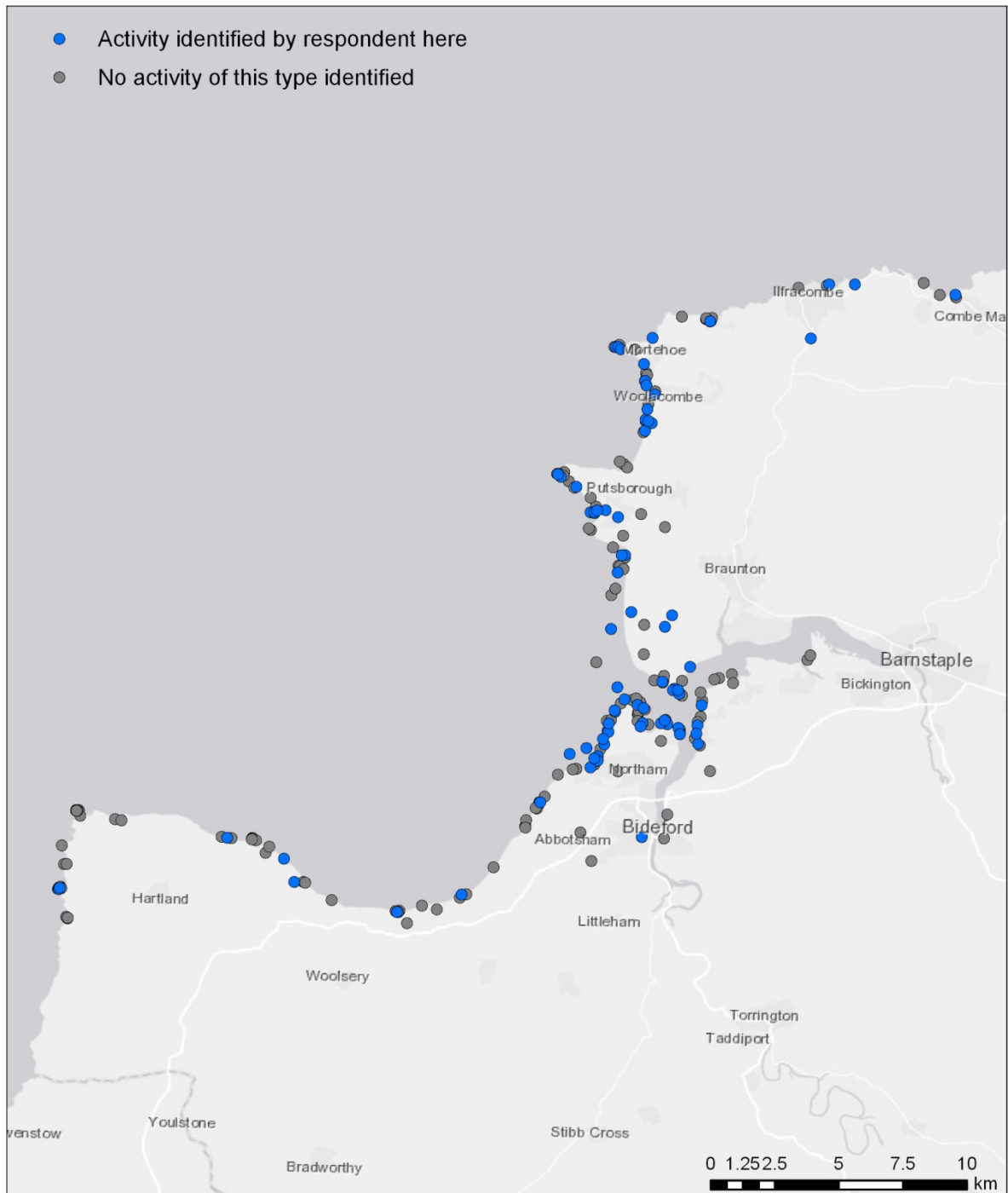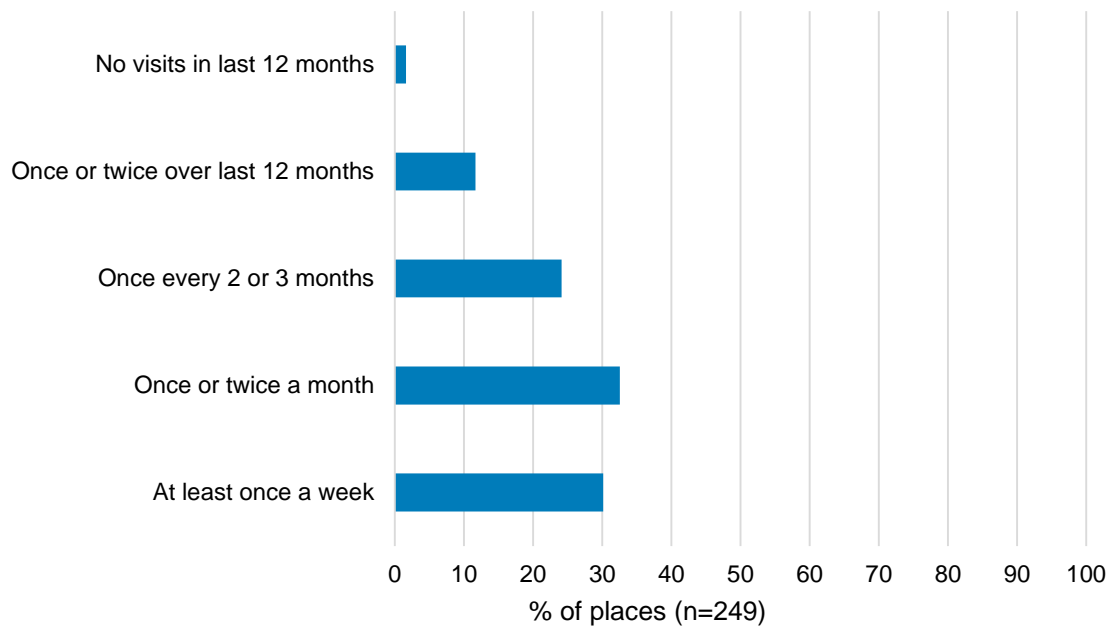
Figure A12: Responses to Survey Question 4: 'How often do you visit [this special place]? by place. Respondents could select up to three special places.

The respondents were also given the option of providing further information about why their selected location was special to them, via a free text box. A summary of the themes (assigned using judgement by the project team after the survey) and descriptors (words/phrases) provided by the respondents are shown in Table A2.1. Some respondents provided one word descriptors for a location whilst others provided more detail, which were judged during analysis to refer to several of the themes shown in Table A1. The most frequent themes were personal attachments, natural features, activities and amenities (mainly the former), views, and setting. Some of the descriptors were unique, whilst others, for example, peaceful, quiet and beautiful, were used by many respondents about their chosen location.

Only one respondent clicked the 'sad face' icon to indicate that no places were special to them. However, the respondent then explained that they didn't feel able to choose one special place as the whole coastline was special to them.

Table A1: Summary of reasons why locations were special to the respondents.

Theme	Descriptors*	Frequency of theme (n=134)**
Setting	Peaceful, quiet, tranquil, wild, isolated, secretive, beautiful, unique, stunning, space, spectacular scenery, magical place, atmospheric, away from crowds, not accessible by roads, unspoilt, enjoy the air, amazing, magnificent, sense of history, quaint village, unspoilt coastal village	33
Views	Sea views, sea, storm watching, harbour at night with lights and hills in background, sunsets, stunning views, light, reflections, largely undeveloped, uninterrupted views, unfettered sea views	34
Natural features	Trees, bluebells, woodland, cliffs, bats, dramatic wave platforms, rock features, biodiverse dune features, expanse of sand, wildlife, rugged coastline, can witness the force of nature, stormy seas, wild waves, spray, clean water, area of outstanding natural beauty, shells on the beach, bird call	45
Heritage features	Hillforts, fishing boats	5
Activities and amenities	Surfing, walking, walking the dog, rockpooling, picnic spots, cycling, run, Tarka Trail, cafes, photography, work, local pub	40
Feelings	Inspiration, comfort, wellbeing, convivial, time for self, refreshed, calming, lost in surroundings (that are ever changing), relaxing, convivial, put problems into perspective, sense of exploration	8
Personal attachments	Memories of family including childhood, resting place of loved ones, sentimental value, special events (e.g. marriage proposal), Family trips, Resident, lived there whole life, family there	46
* Some respondents provided one word descriptors whilst others provided sentences. The theme (or themes) being referred to by the respondent were assigned by the project team using judgement. As such these results are indicative only. ** As some free text descriptions related to multiple 'themes' the total frequency exceeds the number of free text entries made (134).		

A2.4 Key findings and conclusions

This study demonstrated that an online public participatory GIS tool can be used to explore people's perceptions and feeling towards seascapes as an element of 'sense of place' and the characteristics of seascape that influence sense of place. In this instance, the information was used as a starting point for further exploration of this issue through a focus group (see Annex 3: Focus Group Record).

Feedback about the experience of completing the online survey was obtained from the focus group participants who had completed the survey. Several respondents

enjoyed the experience and found it interesting and thought provoking. Respondents had been able to complete the survey on a range of devices (mobile, tablet and computer). A few commented on difficulty in being able to be precise in placing the marker; whilst these participants had completed the survey on tablets, it was not clear whether this was due to the device used. The accuracy of marker placement in relation to the features chosen by the respondent (e.g. beaches and sand dunes, cliffs etc) was not specifically assessed in this project. However, if required, this could be assessed in future studies, either through visual assessment of marker placement against satellite images, or by assessing the overlap between markers and data layers of specific habitats or features.

Several participants commented on having difficulty in deciding which special place to choose for reasons including the variety of places, changes with seasonality and moods, as well as a perception that all the coast is special/loved.

Although it was beyond the scope of this study to undertake detailed spatial assessment of the PP GIS survey outputs, the study demonstrates the potential to use such tools to further explore the relationship between sense of place/seascapes and specific locations. For example, future analysis could investigate:
- The frequency of site selection in relation to infrastructure (e.g. access) and urban centres;
- The intra- and inter-variability between locations chosen by respondents e.g. do individuals chose the same features and activities between sites and or do people have different reasons for selecting the same sites;
- The correlations across responses, e.g. do the activities respondents undertake correlate with what they value e.g. do divers like wrecks, walkers like views etc.

A2.5 Full survey text

The full text of the public participation GIS survey, shown as the sequence of panels presented to the respondents, is shown in Figure A13.

Figure A13: The Public participation GIS survey

Special Places on the Northern Devon Coast 📋

This survey invites local residents in Northern Devon to map coastal locations which are special to them and explore why. Your responses will help us to understand how coastal views contribute to enjoyment of the coast.

The survey is part of a wider study, being undertaken on behalf of the Marine Management Organisation (MMO). The wider study aims to help the MMO consider the potential influence of marine plans and projects on coastal areas and views (seascapes) that people value.

Participation in the survey is voluntary and anonymous. The survey should take no more than 10 minutes to complete.

We are seeking responses from adults (aged 18 or over) who live in Northern Devon. The survey focuses on the stretch of coast between Hartland Point and Morte Point but residents from any area of Northern Devon can respond.

Thank you for your interest in this survey.

Previous | Next

Special Places on the Northern Devon Coast 📋

The survey is being undertaken by Collingwood Environmental Planning and ABPmer for the MMO and hosted by ABPmer (view Privacy Policy).

The survey does not ask for information that will identify you personally. Should you reveal any personally identifiable data in the free text responses it will be deleted.

Your aggregated and anonymous responses will be analysed solely in line with the objectives of the survey and will not be used for any other purpose. The results of the survey will contribute to a report which will be available on the MMO's website in due course.

Previous | Next

Special Places on the Northern Devon Coast 📋

Using the map, please select up to THREE places which are special to you, and tell us why each is special to you.

To add a new place please click on the Add Marker button below to add a 📍 marker to the map.

You can drag the marker around the map and zoom in ➕ and zoom out ➖ to place the marker more precisely. To select and save the COASTAL location you must zoom in as far as possible and then click on the 📋 icon. This will open the questions pane for that special place.

N.B. You can't save a place if you are zoomed out too far.

Alternatively if no places are special to you, click on the 🙁 icon and please tell us why.

Previous | Add Marker

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Questions about why this place is special 📋 ✕

What features (if any) make it special to you? Tick all that apply or select 'None of the above'
- ☐ Beaches and sand dunes
- ☐ Rocky shores and rockpools
- ☐ Cliffs, rock formations, geology
- ☐ Sea bed
- ☐ Waves and tides
- ☐ Presence of wildlife e.g. fish, birds
- ☐ Sensory characteristics e.g. light, sounds, smells, fresh air
- ☐ Sights and views, expanse of sea
- ☐ Fishing ports, boats, docks, jetties
- ☐ Shipwrecks and historic elements
- ☐ Setting e.g. rural, town/village
- ☐ None of the above (you can say more in a text box later)

Previous   **Next**

Questions about why this place is special 📋 ✕

How does this special place make you feel? Please rate how strongly you agree with each of the following statements
1 = strongly disagree; 3 = Neither; 5 = strongly agree

This place is part of me
● 1 ● 2 ● 3 ● 4 ● 5
I am proud of this place
● 1 ● 2 ● 3 ● 4 ● 5
This place has good memories for me
● 1 ● 2 ● 3 ● 4 ● 5
This place makes me feel refreshed and revitalized
● 1 ● 2 ● 3 ● 4 ● 5
This place makes me feel calm and relaxed
● 1 ● 2 ● 3 ● 4 ● 5
This place makes me feel close to nature
● 1 ● 2 ● 3 ● 4 ● 5
This is the best place to do the things I enjoy
● 1 ● 2 ● 3 ● 4 ● 5

Previous   **Next**

Questions about why this place is special 📋 ✕

What activities (if any) do you do here? Tick all that apply or select 'None of the above'
- ☐ Generally being in the place (e.g. Sitting, relaxing, sunbathing etc)
- ☐ Working (e.g. Commercial fishing, working in shop/cafe etc)
- ☐ Walking (e.g. Short walks, rambling or hill, dog walking)
- ☐ Spending time with family and friends
- ☐ Playing with children
- ☐ Visiting attractions
- ☐ Wildlife watching
- ☐ Recreational fishing
- ☐ Water sports (e.g. Swimming, sailing, surfing, diving etc)
- ☐ Other sports (e.g. Coasteering, rock climbing etc)
- ☐ Shopping/chores
- ☐ None of the above (you can say more in a text box later)

Previous   **Next**

Questions about why this place is special 📋 ✕

Are there any other reasons why this place is special to you? [Optional]

[   ]

Roughly how often do you visit this place? Count all visits, regardless of duration.
- ● At least once a week
- ● Once or twice a month
- ● Once every 2 or 3 months
- ● Once or twice over last 12 months
- ● No visits in last 12 months

Previous   **Submit**

1 Marker Added 📍

What Next?

Thank you for submitting a place special to you.

[Add Another Marker] [About You and Finish]

No Special Place 😞

Please tell us why no places on the map are special to you? Tick all that apply

- ☐ I like it all
- ☐ I do not feel strongly about any places
- ☐ I do not like this area
- ☐ I do not care about where I live
- ☐ I have just moved to the area
- ☐ Other

If other, please say why [Optional]

[   ]

[Previous] [Submit]

About You 👤

Age
- ⚫ Under 18
- ⚫ 18-24
- ⚫ 25-59
- ⚫ 60 +
- ⚫ Prefer not to say

Gender
- ⚫ Female
- ⚫ Male
- ⚫ Non-binary
- ⚫ Prefer not to say

How long have you lived in Northern Devon?
- ⚫ Less than 1 year
- ⚫ 1-5 years
- ⚫ 5-10 years
- ⚫ >10 years
- ⚫ Prefer not to say

Please enter the first part of your postcode (for example EX34) [Optional]

[   ]

[Submit]

Annex 3: Focus Group Record

A3.1 Introduction

This annex presents further details on the focus group with members of the public on special places along the northern Devon coast. The focus group built on the findings from the literature review (see Annex 1: Literature review) and public participation GIS survey (PP GIS) (see Annex 2: PP GIS Survey Report), to further explore seascape value, quality and links with sense of place.

This annex is organised as follows: approach to the focus group research including purpose, recruitment strategy, summary of the focus group discussion schedule, and approach to the analysis; key findings organised by theme/research question; and finally, the conclusions including gaps/limitations and areas for future research.

A3.2 Approach to the focus group

A3.2.1 Purpose
The purpose of the focus group was to:
- understand the factors influencing how individuals value a range of seascapes.
- identify the characteristics of seascapes of highly valued seascapes that contribute to sense of place and
- explore the relationship between the quality of these characteristics and sense of place, and their sensitivity to change.

A3.2.2 Location
To enable further exploration of the responses to the survey the focus group was held in a coastal location in the same Marine Character Area as the PP GIS survey[20]. Barnstaple was selected on the basis that was considered to be a location that people in northern Devon would be familiar with, may travel to regularly, and has good transport links. One 2-hour focus group with nine members of the public was held in June 2019 in Barnstaple.

A3.2.3 Recruitment
Participants were recruited directly through the PP GIS survey and through contacting local organisations involved in disseminating the survey link. A cash incentive was used to ensure that a range of participants are attracted and to cover travel costs. A screening questionnaire was used to help achieve a balance of participants in terms of gender, age, employment status, residential area.

The focus group comprised:
- Balance of women and men: 5 women and 4 men.
- Mix of ages, with the majority being in the age range 55+ and one participant in the age group 35-44.
- Mix of employment status, with the majority being 'not employed and not seeking work' and others in full-time employment, self-employed, and part-time employment

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[20] The approach to identifying a coastal location is described in Annex 2: PP GIS Survey Report.

Almost all of the participants had lived in North Devon for a long time, 10 to 50 plus years; including three who had lived in North Devon for all/almost all of their life. The remaining two participants had lived in the area for three years or less, one of whom was specifically drawn to the area because of the opportunity to dive around Lundy Island.

A3.2.4 Focus group discussion schedule
The focus group discussion schedule comprised four key sections:
- participant feedback on online survey;
- general seascapes – likes and dislikes;
- special places: how the seascape contributes to the experience of being in a coastal environment;
- impact of changes to the coastal environment on sense of place

A3.2.5 Analysis
Notes were taken during the discussion. An audio recording was also made to allow notes to be verified. The notes and transcript were analysed to draw out key themes and sub-themes in relation to the overarching research questions.

A3.3 Key findings:

The following sections provide a summary of the discussions under the main themes covered. It should be noted that as this is qualitative research, based on one group of coastal residents rather than a representative sample, the findings should be interpreted as giving an indication of the kinds of perceptions, attitudes, and experiences members of the public may hold towards seascapes and sense of place. The findings may be used to gain a deeper understanding of these issues and to help interpret the findings of the quantitative research (PP GIS survey; see Annex 2: PP GIS Survey Report).

A3.3.1 Participants feedback on the PP GIS survey
As part of the introduction session participants were invited to share their views on the PP GIS online survey which they had completed in the weeks prior to the focus group. The response to the survey was generally very positive.

The survey was found to be enjoyable (BA1; BA2[21]) and very interesting (BA6). One participant commented on particularly appreciating being able to write what you wanted and the freedom to pick your own place (BA1). Another commented that it had been thought provoking and after the survey felt there was possibly more to add/think about (BA5):

Two participants reported the survey was fairly simple, straightforward (BA9; BA8); and not overly taxing (BA8). One participant remarked that more questions could have been included (BA8):
- *"The online survey was pretty straightforward, not very taxing, I'd have been expecting more questions"* (BA8)

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[21] BA codes are used to attribute comments to session participants anonymously

Rationale for selecting special places varied. This included: taking the view they were choosing one place as a starting point; choosing the best liked place (BA2); concentrated on one place (BA9); picking places for different reasons (BA1); and selecting places because of connections (BA4):

- *"The survey I really enjoyed, like a lot of people have said it's really difficult to pinpoint exactly where to go but I just went with the places that I like the best"* (BA2)
- *"I think I put Coombe Martin down as a special place because I grew up there"* (BA4)

Several participants commented on having difficulty in *deciding* which special place to choose. Reasons for this included the variety of places (BA5), changes with seasonality (BA5; BA7) and moods (BA5), as well as a perception that *all* the coast is special/loved (BA5; BA6). For example, one participant mentioned wanting to pick a 'winter' and 'summer' special place.

- *"I also had difficulty thinking of three places because all of it so special and it is so varied that there are places to go depending on the mood and the season and what activity you want to do"*

Precision: A few participants commented on difficulty in being able to be precise in placing the marker, for example, when picking 'little places' (this participant had used a tablet), and also due to the pop-up (i.e. information box with the questions) making it difficult to know if the marker was in the correct place. Most of the group had completed the survey on a tablet, and a few on phones. One person specifically mentioned completing it on a traditional monitor, which he felt meant he avoided any problems with precision.

- *"It was quite difficult because some of them [the special places] are quite obscure, I found it quite difficult to pinpoint exactly where I was trying to get. But yeah it was fine."* (BA2)

Several participants had special places which they had wanted to mark but felt they couldn't, for example, 3 participants had wanted to select Lundy island and one participant had wanted to select a place further up the estuary (e.g. Torridge). Reasons for this related to a perception that they should focus on the coast, but it was unclear if this was also because of the map boundary. If the former, a potential learning may be to make it clearer to participants in the instructions that sea/islands/further up the estuary etc. could be also selected.

On probing whether the group would have liked to be able to choose more than 3 places, the response was mixed and inconclusive. Discussion points included: took the view choosing one place was a starting point; concentrated on one place; and picked places for different reasons.

- *"I mean for me where do you stop, if you hadn't put it at 3 we'd have been there all day wouldn't we."*
- *"I think I took the point of view that putting down what I did was a starting point rather than anything and I thought there would be an opportunity for further contribution with this"*
- *"I took it slightly differently in that I looked at it and thought I love all of the North Devon coast, there isn't a bit that I don't love, but this is my actual*

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special area, I want to concentrate on that one place, so I didn't mind only having three"

A3.3.2 General seascapes – likes and dislikes
Participants where shown a set of 12 colour images of different seascapes in England (none of which were in northern Devon) and invited to discuss which seascapes and features they liked/disliked, and to choose their favourite and explain why.

Table A3.1: Summary of responses to general seascapes

Image number	Description of seascape	Number of participants choosing this as favourite seascape*	Participant(s)
1	Lighthouse		
2	Cliff face		
3	Fishing boats in harbour		
4	Seals lying on a beach	2	BA1, BA6
5	Sand dunes/beach	1	BA8
6	Coastal path, cycling, walking		
7	Expanse of view and sea with sunset	3	BA4, BA8, BA9
8	Rocky shore/ rockpools	1	BA6
9	Rural coastal town/village		
10	Seaweed in the sea	3	BA2, BA4, BA6
11	Waves crashing against rocks	3	BA3, BA5, BA7
12	Windy beach with groins		

Notes: * some participants chose more than one favourite seascape.

Many participants were drawn to more than one seascape, finding it difficult to choose a particular favourite:
- *"I think they've all got their own appeal"*
- *"It's quite a difficult decision really, I am drawn to Rhossili because I like the seascape and that one is what I'm most drawn to but I also the actual seaweed one appeals"*

The discussion highlighted a number of features or characteristics of the seascapes that are considered important/special:

A richness/presence of wildlife was important to several participants (BA1, BA2, BA6, BA7). The vibrancy of wildlife (e.g. seals, seaweed) and the natural world was appreciated (BA1) as well as the rockpools for finding very small species (BA6) The complex relationships or web was noted, with the example that there would be no birds without fish and a sea without fish would not be good (BA4). Another participant considered that birdlife was missing from the images which was

considered an omission as they are inextricably linked with cliffs and the coast (BA7).

- *"That [the seals] and the seaweed because you've got the movement and the natural world and the seals, it's the movement and the vibrancy of the natural world and you can see in those pictures. All the others are beautiful scenes but that's got more going on for me."* (BA1)
- *"… the seals definitely because there is a lot of them so it indicates a richness of wildlife"* (BA1)
- *"The coast and birdlife go together and as soon as you start talking about cliffs you see it in the form of kittiwakes on the cliffs, it's a spectacular sight from the sand."*

The power of the sea was noted (BA3, BA8); it gives the context to all of these seascapes (BA8); and creates atmosphere, for example in seascape 11 the waves crashing against rocks (BA3):

- *"I can't really pick a favourite one, but number 11 just showing the power of the sea and it kind of gives more atmosphere, when the sea is like that you can smell it and feel it and that's why."* (BA3)
- *"the coast path I get the best of both worlds. I've got my hills and I've got the power of the sea"*

Participants appreciated the expanse of view/uninterrupted views and a sense of openness that many of the seascapes provide (BA1, BA4, BA5, BA9). These were appreciated for their ability to make you think about what's beyond (BA4, BA5) and to clear the mind:

- *"in my mind a seascape is an open place and that looks more enclosed perhaps"*
- *"It'd be really easy for me, number 7 because for those 18 months I lived away from here I moved to a different coast and I learnt it wasn't the sea and it wasn't the beach and it wasn't the shingle, it was having that uninterrupted view and I have that at home and I've always had it and I can stand there and look at nothing for hours and that one would allow me to do that. It's not the sunset, it's the fact that I've got that uninterrupted view."* (BA9)
- *"Well it's just that has got the expanse hasn't it, you've got the Rhossili beach there and you've got the Atlantic, you've got that huge expanse, you can think what's beyond it, you've got the waves coming in, it's just a nice image."*
- *"I think the sky is so important to the seas as well. [It's important in what context to you?] Because the width of the sky and the way it changes and the light and all of that it makes a huge difference to your experience."* (BA1)
- *"To quality qualify when I say I'm looking at nothing, what I mean is there is nothing interrupting my vision, the clouds, the sea, the birds, the seals that I see from time to time, the different wildlife, everything else that you see but you're not having to focus on any of it, your mind is completely clear."*

Participants also appreciated the views looking from the water to the land:

- *"We've some of the most spectacular sea cliffs in the whole of Britain and the best way to see those is from a boat looking in."*

One participant remarked on the importance of small coves which were not represented in the seascapes presented; the northern Devon coast has cosiness as well as expansiveness (BA8). Seascapes with a diversity of features – for example, including beaches, rocks, sand dunes and wildlife were also appreciated. Sensory aspects of seascapes were also appreciated – including the wind, the smell, the noise:

- "*the sound of the sea, because if it's on shingle or pebbles or beach or whatever, it's got a completely different tune wherever you listen to it hasn't it.*"

Timelessness as well as the ever-changing nature of the coast/sea. For example, the fascination of the sand dunes which move all the time (BA5) and the changing sea (BA4) and light means that visiting the same place tomorrow compared to today has a different effect because of the ocean (BA7). Timelessness was related to the power of the ocean (BA8) and recognition that the coastal landscape is evolving and changing, as well as the sense that the coastline will always be there (BA4) suggesting a sense of attachment and connection with history:

- *"one of the fascinating things about living in Croyde is that those sand dunes are moving all the time. They move winter to summer, they move year on year and that's exciting because it takes you back hundreds of years, you think about the Tsunami in the 17th century that swept up the Bristol channel and flattened places and there are still marks up on building in different places."*
- *"Croyde is part of a living, moving, changing, landscape."*
- *"the timelessness of the coastline. That there is a great sense of it's always been there, one would like to think it always will be."*
- "…*because of the changes the ocean today and the ocean tomorrow you've never got the same place, you get a completely different effect.*" (BA7)
- *"that sense of expansiveness [both in time and space] I think takes you or takes me into all sorts of fanciful thoughts."*

Context is important. Some participants value the seascapes that are 'unspoiled' or 'not commercialised'(BA3); for example, the experience/value of a seascape may be lessened or spoiled by a commercialised environment for example, if there was a large car park or McDonalds present. Another participant didn't count image 3 as a seascape (boats in harbour) because it is too enclosed (BA9)

- *"I like the ones that are because they're unspoilt, they're not commercialised"* (BA3).

There were mixed views on public accessibility. Many participants liked seascapes because of the apparent lack of human presence/ public access (BA6, BA7). For example, the times when there is no one else around during cliff walks is seen as a positive experience (BA5), or where seals are present it may be important to keep people away (BA6). It was also recognised that there is a dichotomy between the attraction of the lack of evidence of humans in a seascape and the desire to experience it (BA7):

- *"it could be a breeding place, it's a good haul out and I think it would be important to keep the public away from that beach"*
- *"To me the big attraction is the lack of human or evidence of humans. There is a dichotomy that we all want wilderness but we're allowed to go into it and a*

significant number of those photographs the attractive bit is there aren't any people there."

- *"there are few people who get beyond Baggy point, you might meet a few walkers in the summer but it's not busy and there are places you can go when it's just you."*

Other participants acknowledged the importance of accessibility for the economy and tourists (BA1), but also that there is room for both (i.e. people and no people) since seascapes can be more or less busy at different times, meaning it was possible to enjoy both solitude as well as the more social aspects (BA4).

- *"I think I enjoy both really, so I need both. I need the cliff and I also like, I think boats speaks of actually well there has to be accessibility and an economy very importantly so that in some ways the boats and the tourists make it. It has to be a mixed thing really."*
- *"Surely there is a room for both. I mean if you've got a beautiful place, if you look at the Rhossili for example, beautiful huge expanse of sand, beautiful there, I've never been there on a winters day but when I've been there in summer beautiful beach, miles of sand, beautiful if you were there early in the morning with no one on the beach, if you were fishing it'd be lovely, lovely solitude, brilliant. But also in the middle of the day when there is lots of children building sandcastles that's nice as well.*

The historical importance of commerce on the coast was recognised to have both impacted and led to historical places to visit (BA2, BA3), for example "*world war two grave and bits on Saunton [?] Sands*".

Particular seascapes were also valued because of the potential to do the things that people enjoy such as, rockpooling, snorkelling, exploring the beach and hill/cliff walking, as well as 'doing nothing at all' and just looking at the views:

- *"it obviously looks very clean and I just want to put snorkels on and go and explore, is it deep, is it rockpools. It's just got that sense of everything that I'd like about exploring around a beach."*
- *"it looks like a nice summer's evening I could imagine that being a pleasant type place to spend a few hours"*
- *"So I specifically do rockpooling and a lot of us spend hours and hours and hours rockpooling and that's a good beach and I would spend hours there."*
- *"I mean soon we're going to have a coast path round the whole of the UK and you get the benefit of a hill walk effectively in North Devon, you get the benefit of hill walking and the sea."*

Notably, throughout the discussion on general seascapes many participants drew parallels between the general seascapes presented and those they were familiar with in their local area, revealing their strong connections and attachments to their local seascapes and often appreciating the aspects that were similar to their local seascapes:

- *"I think my first thoughts about them, I can see that none of them are really Devon but immediately I was picturing places that are very similar to this….So it's looking at the pictures immediately draws me into places I've been here."*

A3.3.3 Special places: how the seascape contributes to the experience of being in a coastal environment

Participants were invited to identify on a map of the northern Devon coast one place that was special to them and to describe their experience of this place in terms of: where it is, what they do in this special place, and how being in the place - physically, mentally or virtually - makes them feel.

Special places on northern Devon coast

All participants identified at least one special place along the northern Devon coast. Several participants struggled to decide on one special place (BA3, BA7, BA5, BA4). Two participants chose 2 different places depending on the season (i.e. winter and summer), reasons for this included that birds are only present in the winter not the summer; and another chose 2 places, one close to home as she has arthritis so it's an effort to get up to her other place:

- *"I've put a winter and a summer on, because we'd never go to the Skern in the summer because there aren't any birds there but the winter there are."*

Places that were identified as special to participants (place names) included:
- Hartland Quay (BA3, BA5)
- Bucks Mills/Peppercombe beach (BA2, BA6)
- The Skern (BA1, BA7)
- Morte Point (BA8)
- Coombe Martin (BA4)
- Local cliff walks (no place name specified) (BA9, BA7)

One participant's special place was in the sea (BA8).

What people do in their special places:

Walking, including dog walking, was the most popular activity carried out by participants in their special places along the northern Devon coast. Other activities included appreciating the wildlife/wildlife watching, rockpooling, water sports such as surfing/paddling, fishing or swimming, and reflecting on life. Several participants mentioned spending time with family and friends. Interestingly, no-one mentioned visiting attractions or undertaking work or shopping/chores when talking about their special places. Discussion points included:

Walking (BA3, BA1, BA9, BA7, BA5): the opportunity to walk as far as you like (BA1); and to walk with family (BA9) revealed happy memories and family connections over time with particular places. For example, one participant would take her children when they were younger and now takes her grandchildren (BA9). Walking in special seascapes provides the opportunity to experience the seascapes including the variety of habitats along the coast including the trees, woodland, as well as the water and the wildlife (such as Glow-worms after dark), the views and to take photographs (BA1,).

- *"…it's got lots of happy memories for me because my children were obviously bought up here, […] and now when they come, I have visions of me hauling them up green cliff, 'Come on you can walk a little bit further' and I now do that with my poor grandchildren when they come to visit on the promise that they get lunch at the Pig on the Hill which is about a mile off that track. So it has sort of family memories for me and it's just very, very beautiful […] and it*

has happy memories because as I say my children have all been dragged up and down there."

- *"It's amazing, it's the only place I know where you can walk along because you've got the sand and you've got the water coming in this way and then you can see the waves out there and the water coming in this way. So you can take some wonderful photographs of the water like that."*
- *"the footpath down through a hedgerow so you only get the glimpses of the sea as you're coming down, you've got all that to come. So you will see a gateway and a hedgerow coming up and you'll have beautiful views through to Lundy from there, it's just lovely. Then you walk all the way through there and then there is woods, so you're on the south west coast path, then you're covered by trees and that's old woodland, it's really pretty, really quiet and again you're very high up and you can just see the water in the distance.*
- *"If you walk after dark at this time of year, I'm going back a few years ago now but there is lots of glow worms."*

Special places along the coast provided locations for dog walking (BA2, BA5). Wooded areas were seen as good in summer as they provide tree cover for walking with the dog; and also paths which provide a triangular route (BA2). For one participant the opportunity to walk the dog within walking distance from home was appreciated (this participant has arthritis; see characteristics/accessibility section) (BA5).

- *"That's my every day walk every single day with the dogs twice a day, so that's my real special place"*
- *"I have got arthritis so there is a bit of an effort to get up to the point to do it regularly with the dog as a daily thing, it's not a sort of half day trek, it's something I can do as and when."(BA5)*

Wildlife watching/appreciation was mentioned by several participants, including bird watching (BA7, BA1) and generally appreciating the diversity of wildlife e.g. sheep, horses, wildflowers (BA1). One special place was recognised as nationally important bird watching sites (BA7). One participant was an enthusiastic rockpooler visiting her special place during spring tides which take place twice a month:

- *"The Skern we go to regularly, the orange and yellow together, that's when the sun is going down in the afternoon and it's high tide in the afternoon and the birds are being bought up the shore, it's a major birdwatching. It's of national importance as a birdwatching site with the flock of golden cover."* *(BA7)*
- *"Bucks Mills, it's just a lovely rockpooling place,[…] There's a little stream which has always got dippers on it, dippers nest down there, so if you go at the right time you can see them."*

A range of recreational activities were undertaken by participant in their special places. One participant especially appreciated being able to engage in water sports in his special place, paddling out to where the navigational buoys are and enjoying the view looking back towards the coastline and the wildlife (BA8). Other recreational activities undertaken by participants in their special places included fishing, swimming, going out on boats, climbing (BA4, BA6). Notably, some of these related to activities undertaken in the place during childhood (BA4), reflecting childhood

memories and strong connections with these places despite no longer visiting so often:

- *"Morte point, up the top there. […] You either walk out there or I paddle out on a surf ski or a surfboard when the tide's are right. […] there's a buoy off the points. … During the summer I very often take it in my head to paddle out around it and the view looking back is exceptional. … I've been paddling along with porpoises beside me, I've shaken hands with the sunfish out there just lolling and saying hello"*

- *"So I basically chose that because I was born in Coombe Martin. So I grew up and then I used to go on the beach when I was a child on a regular basis, when I was a teenager and I used to go fishing on the beach there, I used to go rockpooling there, go swimming there, would swim out in the bay in the summer holidays and we'd go out in boats from Coombe Martin, go out and explore the coastline. Did some pretty stupid things, climbing cliffs and that, but I wouldn't have had it any different. So it was basically lots of memories from a brilliant childhood and I go there from time to time but I don't go there so often, I probably visit the other places more now but it's a special place because it's got childhood memories I guess." (BA4)*

One participant talked about how she would go to her special place to reflect, she had a tradition to go and reflect and review the year with her late husband (BA5).

Features or characteristics of special places
A range of characteristics of seascapes were recognised to make places special, including, the views and expanse of sea, beaches, presence of wildlife, geology and rock formations, the sensory characteristics, the natural beauty of the northern Devon coast ('unspoilt'), accessibility and local history. Discussion points included:

Views: All participants felt the view is important to why a place is special (BA3, BA2, BA7, BA8, BA9). This included views of the expanse of the sea (BA3), views from the land looking out to sea, for example seeing Lundy Island (BA2, BA7) and appreciating the sunset from the cliffs (BA7), as well as views from the sea looking to the land (BA8). One participant described the view of looking back towards the coastline from the ocean as like 'looking along the back of a prehistoric creature'.

- *" … when you get onto the south west coast path itself you have got wildlife, you've got the birds, you've got the reptiles, it's all there and you're looking straight to Lundy. On a clear day you can see to South Wales, it's just great." (BA2)*

- *" It's as if you're looking back and you're in line with Morte point and you look and it's like looking along the back of a prehistoric creature, it's absolutely amazing and there is a sense of tranquillity out there that is just as unparalleled anywhere else." (BA8)*

- *" if you're looking at it from the land out to the race, that's where the currents meet, you can see the immensity of the place and the power, if you're on land you can gaze out to the sunset, if you're in the water you can look back onto the shore" (BA8)*

The presence of wildlife, including flora and fauna was valued (BA1, BA9, BA7) including certain types of species for example, birds (BA7), seals, sunfish, porpoises

(BA7), and deep water species (BA6), as well as abundance/variety of wildlife (BA1, BA9):

- *" then you can see the stretch of beach and the ocean and you've got the sheep and you've got horses quite often and you've got little wildflowers." (BA1)*
- *" it's just very, very beautiful, there's lots of wildlife and you do see seals" (BA9)*
- *"… when the sun is going down in the afternoon and it's high tide in the afternoon and the birds are being bought up the shore, it's a major birdwatching" (BA7)*
- *"once you're there you've got sea all around you and you can rockpool and high tide there are deep water species, you don't have to wait for the really low tides because there you can find them because you've got the deep sea either side of you but you're on this shore, which is amazing." (BA6)*

Participants described the rock formations in their special place (BA6, BA3), particularly the colours of the rocks (BA6), the sheer size of the cliffs (BA3) and the rockpools (BA6):

- *"The colours of the rocks, they've been sloshed obviously through the ice age and then erupted."*
- *"Peppercombe is a good example because you look along, you go to a higher piece of coast path and look down at Bideford Bay, you can see Pepper Combe instantly. Because it's a completely different colour. It's completely different to the rest of the… And all the rocks when you get up close they're all different rocks and different formations." (BA6)*

Several participants commented on appreciating the unspoilt nature of their places (BA5), the natural beauty of northern Devon (BA9), and its unusual setting with lots of variety in terms for example sand, sea, estuary, forests, salt marshes (BA1) and being different on each visit (BA2). Visitors/people always say that they find new amazing places as there's so many different places (BA9). The lack of 'kiss-me-quick hats' and poor mobile phone signal are positive characteristics. An example was given of the relative inaccessibility of the coast which effectively limits some of the potential for development (compared with South Devon), talking about a pier which was once built but was destroyed by the sea/weather 30 years later (BA9):

- *[what we mean by unspoilt?] "what I take from it, is that our coast is so naturally beautiful" (BA9)*
- *"What I love about it is the sheer variety […]… It's amazing, it's the only place I know where you can walk along because you've got the sand and you've got the water coming in this way and then you can see the waves out there and the water coming in this way. [..] You can also look to your right and see Appledore and the lifeboat and you've got what looks like a drunken sunken forest there, a very unusual salt marsh there. Then you can walk as far as you like and then you can see the stretch of beach and the ocean and you've got the sheep and you've got horses quite often and you've got little wildflowers." (BA1)*
- *"It's wonderfully unspoilt as well, you don't get kiss me quick hats, you do get your ice cream parlours and it's decent ice cream mostly but it's that sense of with a little bit of effort you are away from 21st century, you can't even get a decent mobile phone signal." (BA5)*

- *"I absolutely detest Westward Ho village and how it's become"*
- *"Bucks Mills is different every time I go because the wind shifts the huge stones"*

Attitudes were mixed towards the accessibility of places in northern Devon; some participants chose places that were seen as less accessible because less people would be there (and this was considered a positive). One example was given of a location where you can only park along hedgerow where there's only room for one car at a time (BA2) and another where people park further away and walk to the place. Others chose places that were more accessible for personal reasons, for example having arthritis and not being able to go further. The presence of footpaths (BA2, BA5) was commented on, for example the opportunity to take a triangular route because there are 2 paths (BA2); and also the safety of the paths, coastal path and an inland path which is safer (BA5). Visits to seascapes were affected by seasonal parking costs – visiting more frequently in the winter when you don't have to pay (BA1).

- *"Really lucky, no one is ever there. It's not, well I never see anyone, ever."*
- *"That's because you can't park that people don't go, it's difficult to get to."*
- *"What most people do is park in a layby in Horns Cross and walk to Packham from there, or do the park and run but for dog walking that's slightly too far really for me."*
- *"I go there probably about once a month or if I've got a friend coming down that's always one of the places I take them there and we go more in the winter because you can have to pay in the summer" (BA1)*

Participants commented on the sound of the sea, the waves which can be very relaxing (BA4), the different sounds of the pebbles (BA7, BA2) and of wildlife and birds such as oyster catchers. The magic of fishing at night and being in complete darkness but still being about to hear the sound of the sea (BA4). The sounds of children's excitement/enjoyment of being at the coast was also appreciated (BA6):

- *"The sound of the sea, there are so many different sounds. You can just sit there and hear the pebbles running to and fro."*
- *"Where you've got the cliffs you've got a magnificent echo."*
- *"You've always got that sound on a beach haven't you of the waves, it's very relaxing sort of mesmerising sound isn't it."*
- *"…particularly at Westward Ho or Croyde, you hear the sound of the children that live miles from the sea and it's their treat of the year to come to the sea and they're so excited and they just can't believe it and they go and dip their toes in and it's just magic, just to hear them and see them, it's just lovely."*

Seascapes in northern Devon were valued for providing a full emersion of the senses which were perceived as rare to get anywhere else, including the sights, sounds, touch, weather, the colours of the rocks etc:

- *"because you're looking, you're listening, you're touching, the wind is blowing your head off or the sun is making you swelter you know, so it's a full immersion and I think that's something you get so rarely anywhere else?"*
- *"The colours are amazing, the species are amazing, the different weeds, everything about it, it's lovely."*

Participants talked about feeling very connected to the weather in northern Devon, for example being able to tell when the tide or the wind changes just by feeling it and feeling slight temperature changes (BA5, BA9) or "*just are aware of it*" (i.e. without looking up information) and visiting their special place during summer storms. Knowing the sounds/being familiar with sounds and where the wind is changing:

- *"Very definitely you become very aware of weather when you live in Devon, in North Devon, you know when the wind has changed. I can lay in bed and I know where the tide is, I can wake at 3 in the morning and I can tell you where the tide is, whether it's coming out or going in. I know when it has moved from a north westerly to a south westerly, you just become…*
- *"I would say to someone 'Oh the tide's are down' and they look at me as though I'm mad but I'm actually feeling it."*
- *"If there's a good storm go out there"*

Other characteristics of special places that were thought of as special included the presence of woodland or tree cover (BA2, BA6); and also being high up (BA2, BA9). Height was appreciated as it gives a different perspective (BA9).

- *"I'll take the cliff park up to the north […] the reason I like that is first of all you've got the height, so you've got lots of view and so you're up high looking. […] when you're up on the cliffs you're actually higher looking down and you respect it as different."*
- *"you can't see the view necessarily in woods and the woods are very important. [What makes them important?] The trees, the life, just the whole sense of being woods which is absolutely wonderful."*

Although not mentioned spontaneously, on probing about whether historical and cultural aspects of special places were important, several participants commented on the importance of local history for example the stories of mining, smugglers, pirates, shipwrecks, old piers, old railway lines, and more recently the Tarka Trail.

- *"it's the history, if you walk along the coast for example if you go from North Coombe Martin you've got a lot of old mining bits that come out of the cliffs, there is lots of stories of smugglers and if you go up further to Woody Bay you've got the remains of the old pier where the steamers used to come in and the work that went into some of those structures are amazing."*
- *"There is a smugglers [tunnel] at Woolacombe, […] when I was talking to somebody who lives there, a friend of mine who knew that place he said there is a smugglers tunnel that goes right underneath from that reception of the hotel, it's blocked up now but it used to go right out and they used to visit it."*
- *"…there is the cottages down on the coast path that was filmed as part of Sense and Sensibility, there is Drakes Harbour at Hartland Quay, there is masses of stuff, so you can be the pirates and all sorts, Lundy with the tales of Benson and also the slave ship that was wrecked off the coast coming from Ilfracombe, there is masses. It almost makes you as fanciful as well as accurate."*

Feelings generated or associated with special places
Participants were asked how their special places made them feel. Special places were associated with a wide range of positive feelings including:

Feeling lucky (BA2, BA5) to have access to such places, for the solitude (BA2), to be able to undertake activities and find such special things (BA6).

- *"Really lucky, no one is ever there."* (BA2)
- *"Oh I just feel so honoured really to be able to do what I do [rockpooling] and to find the special things that I see out there."* (BA6)

Feeling happy and relaxed, peaceful, content, joy (BA1, BA2, BA6, BA9), and also happy and invigorated as well as reflective – a mixture of emotions (BA5).

- *"you just sit on the top of a cliff and watch the sea and the sun going down beyond Lundy. You can't beat it, it just makes you feel relaxed, happy, at one with the world."*
- *"Just very relaxed, very content with everything."*
- *That feeling of being lucky I would certainly identify with that, but it's invigorating, it makes me happy, I think when I'm up there, it's a reflective place, it depends what mood I'm in really." (BA5)*
- *"It can be relaxing but the walk out there is not easy, so I won't say it's entirely relaxing. If I stay on the beach and sit and watch the tide come and go, the rock formation all along that coast is just amazing. It's just the rocks are twisting in different directions, it's just so magic."*

Feeling of happiness were often associated with happy family memories of being in their special places with children, grandchildren – taking them for walks in these locations etc (BA9, BA7) revealing strong family connections. Strong memories and family attachments were evident through the discussions, associated with growing up in these locations, or through times spent with children, and also sad feelings through family memorials located at these places (BA7):

- *"So it's got wonderful views, lots of wildlife, lots of flora and fauna and it has happy memories because as I say my children have all been dragged up and down there. Happy family memories of taking children when they were younger, now grandchildren (BA9)"*
- *"we've got a lot of happy memories there from when the kids were young. […] we've taken our kids down there, we've dragged them back up."* (BA7)
- *"Well lots of emotions connected to it because it's where I grew up, so there is apart from just the actual sea obviously the fact that I grew up there. I mean I guess being as I've said a keen angler, that's to some extent where I started,"*

Reflective (BA5) – the tradition of going on New Year's Day to review the year with her husband (now passed away) (BA5)

- *I think when I'm up there, it's a reflective place, it depends what mood I'm in really."* (BA5)

Feelings of respect for the place (BA8) and very strong emotional attachment which one participant expressed through a poem:

- *"at one in the singular heaven"* (BA8)

Feelings of awe related to the rocks, the beach, the size and scale of the cliffs (BA3)

- *" … I feel a bit in awe of it because you've got all the rocks and then when you go down onto the beach you don't realise how big the cliffs are until you see somebody standing either at the bottom of them or the top, if you know what I*

mean. Even though you're there and you can see it you still don't realise the scale of it,"

Feelings of nostalgia were expressed by one participant, because the place was where he grew up, and he felt sad because what was nice when he was younger (fishing boats) has now gone (see Section A3.3.4) and he felt lots of emotions with this place, and connections through growing up here, and as it was where he first starting fishing (BA4)

Feelings of anger, upset, irritation were also experienced by other participants in relation to the perceived misuse of their special places or mistreatment of the wildlife therein, for example threats/dangers to birdlife (BA7), as well as the noise of jet skis (BA4, BA7) disturbing the ambience:

- *"I often come away from there really wound up because you have got a major bird feeding site there, you've got birds out on the mud and you've got dog walkers throwing sticks and balls in the middle of the flocks of birds. They've only got a limited time to feed and their feeding time is being wrecked by people who don't understand." (BA7)*
- [What is it about the jet skis?] *"They're noisy. They destroy the ambience of the place. I can understand that people enjoy using jet skis, I get that, but I almost feel there should be limited times and not all the time."*

How special places affect wellbeing
There was general agreement among the participants that the coast is vitally important for wellbeing. Examples were shared of how being in northern Devon/the coast gives clarity or peace of mind which cannot be found in other places revealing the strong connection and attachment to this particular place (BA9). The coast was seen as vital to reset one's own perspectives and recharge batteries (BA8); and to puts things into perspective, and removes negative feelings and stresses (BA9)

- *"for me it's vitally important because I found that when I couldn't go out and see all this vista, of seeing absolutely nothing disturbing it, I just didn't have that same clarity, peace of mind and relaxation and the 18 months I spent living away I just couldn't find it anywhere else. I went into beautiful spaces but they weren't the same, they weren't right, so I needed to be on the coast and I needed to be on our coast. " (BA9)*
- *"I think it's absolutely vital to have places like this, like this coastline coming up to allow people to reset their own perspectives, to recharge the batteries and to escape and to provide all of that and the sense of wellbeing you get being any of the places we've mentioned here, and thousands more along the coast, is amazing."*
- *"You come in from a horrible day at work and you know you've got to take your dogs out and you don't want to go out and the weather is horrible, you're feeling really uptight and miserable and you get out there and within 10 minutes you suddenly realise it's gone. It's just completely gone. The stress of the day and everything else, you just walk along and the rain is pattering, you get home and you think 'Yeah it wasn't such a bad day after all', so it just puts it all into perspective'."*

A fear of the sea is mentioned by a couple of participants in relation to fear of going in the sea (although they still go in), and also recognising that for others the sea may not have the same appeal:

- *"I'm fearful, I admit, to go in the sea, but I still love it." (BA3)*
- *"So my mother in law detests the sea, she can't understand why I like the sea, she thinks it's forboding, it's very intimidating and she just is fearful of it, it's dangerous."(BA4)*

Quality of seascapes

Participants were invited to consider and rate the quality of the seascapes in their special places, setting side personal feelings and instead focusing on the quality of its features and the experience from a scale of 1 to 10 where 1 is extremely poor quality and 10 is excellent quality. All of the participant perceived personally their special places would be at the top of the scale for quality:

- *"I meet so many people that have never found this place before, it's amazing. Walking and they'll say 'I didn't even know this was here I've travelled all round everywhere, I've been all over the world and this place is amazing' and it does have the whole of that coast a magical quality and when people discover it they really… But we don't want too many discovering it at the same time."*

A3.3.4 Impacts of changes to the coastal environment on seascape value

A number of changes both natural and manmade have happened or are ongoing along the northern Devon coast that impact peoples' sense of place. These have had both positive and negative impacts on perceived value of seascapes.

Naturally occurring changes

Naturally occurring changes to seascapes were mentioned frequently throughout the focus group, for example, the wind and sea moving huge rocks, the changing light, and the power of the ocean (BA6). Such changes were generally viewed positively in terms of enhancing special places by bringing about different experiences. Although as noted earlier storms were identified as presenting possible threats to vulnerable places:

- *"Bucks Mills is different every time I go because the wind shifts the huge stones. They are seriously big some of them, they move to a different place next time I go. I can't believe that the wind and the sea has that power to move such big objects." (BA6)*

Negatively perceived human-driven environmental changes

An ongoing negatively perceived human drive changes to the seascapes of northern Devon for many of the participants is pollution, particularly litter and plastic pollution (BA4, BA5, BA6). Although some participants felt that there have been some improvements recently, historical pollution and previous waste management policies mean that this is a big issue on the northern Devon coast. Participants were very aware of the environmental impacts of pollution, and shared strong concerns about the effects on the sea, and fears that this area of coast could be ruined within their lifetime. Other negative changes included reduction in fish and noise from jet skis.

- *"There are three things that I have seen change which three of them annoy me, the reduction in the number of fish in the sea. I can remember the huge schools [or shoals?] that we used to see which have gone. The plastic, which*

is everywhere, and to some degree from the noise from the likes of jet skis and stuff like that annoy me." (BA4)

- *"There is much more pollution out there."*
- *"There is pollution that you don't see but the plastic is what you do see."*
- *"It's just the sea, it's the sea and what's happening to the sea, it's the pollution, it's this world"*

Participants expressed awareness and concerns about the impacts on the environment, on birds and wildlife, and lack of appropriate management and their fears that this will get worse and ruin special places within their lifetime (BA9). For example, several expressed concerns about a historical man-made landfill site now becoming exposed by the change in the pebble ridge (BA4, BA7,BA9), containing rubbish from the 1950s for which local residents are now "*paying the price*" (BA7):

- *"… There's an old dump, a landfill site which [XXX] was saying about, because of the change in the sea bringing the pebble ridge back naturally it's exposing what used to be a landfill up until about 20 years ago, so it's all at threat of polluting the ocean there."*
- *"it was government policy all over the country, not just North Devon has got this problem, loads of areas have because it was infilled into sea area rather than putting it into land areas". (BA9)*
- *" we're aware of the impact and the fact that it will gradually get worse if it's not managed and the management at the moment is to allow nature to take its course and allow it to turn the pebble ridge and separate the dump so that the sea actually cuts it off, then they're talking about building a barrier at some stage but nobody has got any money and nobody has got any real idea of doing it. But it makes you feel like you were saying that this beautiful special area could be ruined, within my lifetime. I'm not talking about my children's lifetime, I'm talking about we lost 20 metres of dunes in the winter this year." (BA9)*
- *"Well it's what is in that tip, what poisons and what toxins are trapped there from what impact is that going to have on the environment when it's released to the bird life, to the fish life and everything." (BA4)*

There are concerns about the amount of fishing gear coming off fishing boats and the need for better control of the debris, including a suggestion for a designated litter free zone off the coast (BA8).

- *"…the amount of gear coming off fishing boats, the nets and bits of nets, the plastic containers that fish are managed in, the shipping debris, if you could say any way they [MMO] could designate it as a litter free zone off our coast then that would be so helpful." (BA8)*

Strong negative attitudes were expressed by some participants towards development in northern Devon for example through the building of large residential developments (BA5, BA7), and also the construction of a link road which has made a 3 hour journey into a 1 hour journey, making the area much more accessible (BA7). This has led to concerns that the environment and the atmosphere are being damaged (BA5, BA9). For example the road was perceived to have resulted in large seasonal increases in population, cars, traffic, meaning more people which has changed the atmosphere in particular places though some parts remain unchanged (BA7).

- *"Croyde is a small village, it's relatively unspoilt but since the war the little humble caravans have now become massive lodges and tin cans and it's a place where people want to turn two bedroom little bungalows into four or five bedroom holiday lets and that's changing the nature of the village. People are wanting to build so they have the view and so there is a monstrous building.[…] the rocks are full of concrete to create the base for this"* (BA5)
- *"It's criminal what's happening here but there is so many houses being built."*
- *"The most fundamental change is that when we moved down here 40 years ago the link road didn't exist, and to get from Taunton to here was two to three hours, the link road came in and from Taunton to here suddenly became an hour. So North Devon became far more accessible, which was attractive for industry and attractive for tourism, so the summer time population in the area is now four times the size it was 40 years ago when I moved here. That has made a dramatic change, far more cars, far more traffic, far more people and that inevitably is concentrated in the honey pots of Westward Ho, Woolacombe and Croyde and left the other areas relatively unchanged but it has changed the whole atmosphere of North Devon against the North Devon I came to 40 years ago."* (BA7)
- *"I absolutely detest Westward Ho village and how it's become"* (BA9)

Another participant expressed mixed feelings about development sharing concern about the growth in housing but also an understanding for why more people have the aspiration to live in northern Devon (BA4):
- *"It's extremely difficult because I hear what you're saying and I sort of take on board… I mean one of the things that concerns me is the number of houses that have been built in the whole area, but having said that I like and love living here and if I lived elsewhere is it wrong to actually aspire to live here?"*

Several participants raised concerns that development is not adequately taking into account the impacts on habitats and wildlife, for example on birds and waders (BA6). These changes were felt to have negatively impacted wellbeing and sense of identity among some of the birdwatchers in the group (BA6, BA7). Negative feelings were associated with the biosphere/AONBs because northern Devon has recently had that first ever planning decision to allow development within an AONB, apparently for political reasons (BA7)
- *"There's hotspots for the wildlife as well that don't seem to be considered enough."*
- *"Yelland for instance, it's very important for birds, for the waders for the wildlife, that is a really seriously important site, they're going to build there, they're going to destroy a huge habitat."*
- *"I like to go bird watching there […] there are lots of high tide roosts on that area where they're going to build and they're going to be lost."*
- *"I have the negative feeling […] we had the first ever planning decision that put a building in an AONB in the whole of the country for the political reasons. We have the biosphere leaning to protect the estuary and yet they're allowing development within the biosphere area where birds are meant to be sacrosanct."*

Positively perceived human-driven changes to the environment
Many positive human-driven environmental changes were also recognised, including steps taken to protect the local environment. Treatment of sewage has improved over the years and the quality of the discharge is much better now. Although there are still some runoff issues, including from agriculture. (BA8). The conservation area at Lundy Island has made a positive difference, which has shown that when there's a will, the action happens (BA5). The protected areas such as the biosphere and AONBs, national trust sites (BA8 BA5) – make it feel like someone is doing something to try and save it (northern Devon coast) for the future (BA8).

- *"I was going to say that change is a positive change that has happened. The treatment of sewerage around our coast, Woolacombe and Croyde in particular has been improved over the years and the quality of discharge into the water is so much better."*
- *"Can I also say about the biosphere that's a positive change."*
- *"I think the thing from Croyde or any point on that coast, knowing that the conservation area has made a difference. So for me Lundy represents a flag of hope because if the will is there, changes can come about."*

The whole group agreed that the South West Coastal Path is a huge positive change (BA8). The Tarka Trail is a cycle path/footpath (BA4). It's flat and accessible, it brings people out into nature, as it allows people to walk from anywhere (BA2), and to experience wildlife such as kingfishers. One participant considered it is not maintained well enough for cyclist to use it properly instead they use the road:

- *"Yes, the south west coast path, that's a huge one for this area, and the Tarka trail."*
- *"Cyclists don't use it [the Tarka trail] because it's not maintained well enough for their tyres so they go on the road."*
- *"[on the Tarka Trail] you've got the possibility of the Kingfishers, you've got all the wildlife on your doorstep and it's just very peaceful."*

Other positive human-led cultural changes such as improved/increased amounts of art exhibitions, craft fairs and other cultural attractions. For example, the 'Verity' sculpture by Damian Hirst at Ilfracombe village has been a significant change which has had various reactions, some people love it, some people hate it which generates discussion (BA7). It has been good for Ilfracombe because it has brought in visitors and money, and improved the prosperity of the area; more people are introduced to the area who then enjoy the wider area of northern Devon as well (BA8). Ilfracombe was very run down and needed money invested. Verity has spawned more arty shops in the area (BA4). This benefit associated with Verity bringing more people to the area was an interesting finding, as earlier in the discussion participants had expressed negativity towards increasing numbers of visitors. One participant has never heard of the Verity sculpture (BA3).

- *"I probably am out of step here but I think Verity has been very good for Ilfracombe."*
- *"It's [the Verity sculpture] improved the prosperity of Ilfracombe and Ilfracombe is pretty or was pretty run down and it needed a lot of money investing in it."*

The Verity sculpture was seen as making a difference to the sense of place; Ilfracombe is now seen as a more attractive option for everyone (BA7) and engendering positivity from doing things to the area:

- *"Yes, it has made Ilfracombe a more attractive option. [To you or to others?] To everyone, because people have been and done things."*

Other cultural events associated with the coast/seascape included the establishment of an artist working in the woods in Bucks Mill. Barnstaple theatre festival has made the area more lively (BA1). Appledore book fair has been running for 20 years but is getting bigger and better (BA9 BA7). There's also a wide range of crafts, jewellers, pottery art festivals, and open gardens around northern Devon. (BA5, BA9).

- *"There are some [cultural events] on the seascape because at Bucks Mills they had an artist working, I know personally working in the woods, so there have been a few things, so I think it all adds to the richness. "*

Additionally, the whole group agreed that surfing is hugely popular in northern Devon (BA4)

Impacts of changes in the quality of seascapes on wellbeing
Several participants reported diminished wellbeing as a result of negative changes to the environmental quality of their seascapes and continued threat of further changes, resulting in concerns about the future, a sense of powerlessness, and a sense that it undermines their day to day lives. Participants felt that people in northern Devon are conscious of what they're losing and it's impacting people's wellbeing; one participant cannot sleep at night because of it and feels a lack of power about what can be done. She feels what's happening to the sea (pollution) underlies everything they do (BA1). The problems with pollution have led to feelings of anxiety and a desire to do something about it:

- *"Honestly because you can't sleep at night. Almost because what does life hold for us and our children."*
- *"And it's the lack of power."*
- *"It is seriously impacting me but a lot of people actually either haven't realised it or don't admit and I think it undermines everything that you do every day."*
- *"So the overall feeling is one of anxiety and a wish to do something if it's possible."*

Frustration were also expressed about the lack of effectiveness of the protected area designations:

- *"Well people come up with these schemes and say 'This is wonderful' and look after you, but when you actually try and see if they do look after you they don't, then you get very brassed off."*

Another participant expressed sadness at the loss of fishing boats and boat trips in Coombe Martin, because he has strong emotions/nostalgia about growing up in this place (BA4):

- *"When I go back [to Coombe Martin] there is a lot of nostalgia there. It's changed a lot, the actual village has changed, but if you walk away from the village and you walk down onto the beach it's like stepping back in time because that hasn't changed. The rockpools are basically the same, the break water is still there, the tide comes in and goes out every day and the smell is*

the same. What was nice when I was a youngster was that you'd go there and you had all the fishing boats and you used to go out for trips around the bay with the boat and that and it was a thriving community, that's all gone, which is sad." (BA4)

Actions taken to improve treatment of sewerage around the coast have led to improved quality of experiences associated with sense of place, for example improved water quality particularly in Woolacombe and Croyde improved the surfing experience, and for others the designation of the biosphere and other protected areas has generated positive feelings that something is being done to safeguard the future:

- *"Well yeah I'm pretty happy with it because I prefer not to be surfing around with stuff floating around me you know."*
- *"It makes you feel that someone is doing something to try and save it for the future.*

One participant says that the development changes/decisions relating to development within the biosphere area have made her much more political (BA5)

One participant commented on how attitudes towards changes to the seascape (e.g. wind turbines) can change from being against to becoming accepting over time:

- *"… they were going to be putting up the wind turbines and I thought it was going to be dreadful and when it first came up it spoilt the view and I couldn't see them. But now I have got used to them and I just recognise that they actually are necessary and we actually do need that sort of change, yes."*

Actions taken to promote or prevent changes to the northern Devon coast / a growing environmental awareness
Participants spoke about the environmental movements Surfers Against Sewage and Extinction Rebellion having a large following in northern Devon and the South West more generally. People are conscious about what they are losing because they see it first-hand (BA1, BA9). One participant shared how this had made her more political, getting involved in the local neighbourhood plan development to help influence the local area. It was acknowledged that people are more conscious now than they used to be and are taking action, for example there is more litter picking (BA9) and at Woolacombe some beach owners have taken responsibility for the litter (BA8):

- *"… I think the difference now is actually if you think about the whole surfers against sewage thing started in the south west, the south west has had a huge impact on the plastics. Plastics from coast lines, we know the whole of North Devon took up very enthusiastically, there are a very strong group of extinction rebellion in North Devon, in Barnstaple, in Bideford, lots of us went up to Waterloo Bridge, there is Cornwall, there is a huge lot of real anger that's building now and I think it's because we are so conscious of what we're losing and the preciousness…"*
- *"Well we actually see it [negative environmental impact] don't we."*
- *"It's made me much more political. With a small piece in that I've got involved in the local neighbourhood plan development and there is a tension between the localism thrust, giving power to the people, responsibility for affecting future planning at Parish level or town council level but the counter balance is the nonsense that goes on at central government level because they changed*

the rules. Their interests are almost diametrically opposed. On the one hand localism and you can influence your own area, work with the AONB and all that but then even the planners are deeply frustrated because what they're trying to protect and the local plan is a brilliant piece of work, its' extraordinary if you read it, it's very readable, but central government kind of chop the legs off."

- *"Well the positive side of that is every time I walk, I don't think there is a day goes by I don't see somebody litter picking and I didn't see that 10 years ago or even 5 years ago, people are conscious of it now and they are picking up rubbish as they go round. Even people that are strolling along are just taking a carrier bag with them picking up."*

One participant organised a beach clean-up through Bideford angling club to clear up litter on beach in Clovelly, collecting several bin bags of rubbish, including ski yoghurt pots fully intact from the 1970s, which illustrated the longevity of the problems (BA4). Motivations for taking action included the desire to take ownership, to put it right and (as an angler) to prevent fishing being banned in the area (as anglers were blamed for the litter):

- *"Primarily and initially because people had left litter there, it was an irresponsible few that was reflecting badly on everybody else. [So what made you want to do it?] Just taking ownership and just trying to put things right."* (BA4)

A3.4 Conclusions

The focus group discussion provided deeper understanding on the factors which influence how individuals value a arrange of seascapes, what it is about seascapes which contribute to sense of place and insights into the relationship between the quality of these characteristics and sense of place, and their sensitivity to change:

The discussions evidenced that individual values for seascapes as an element of sense of place are shaped by a combination of factors including what people do in these places, and the feelings/meanings/attachments people hold for these special places.

Special seascapes generated and/or were associated with a range of positive feelings, including feeling lucky to have access to such places, for the solitude, to be able to undertake activities and find such special things; feeling happy and relaxed, peaceful, content, joy; invigorated as well as reflective. Feeling of happiness were often associated with happy memories of being in their special places with family, children, grandchildren revealing strong family connections. Strong memories and family attachments were evident through the discussions, associated with growing up in these locations, or through times spent with children, and also sad feelings through family memorials located at these places. Special seascapes engendered feelings of respect and very strong emotional attachment, as well as feelings of awe related to the physical characteristics for example the size and scale of the cliffs.

Mixed emotions were also experienced towards seascapes, for example, feelings of joy associated with the precious places, but also concerns and negative feelings due to the vulnerability of special places. Feelings of anger, upset, or irritation were also

described in relation to the perceived misuse of their special seascapes or mistreatment of the wildlife therein.

There was general agreement among the participants that the coast is vitally important for wellbeing, providing clarity or peace of mind which cannot be found in other places, revealing the strong connection and attachment to this particular place; for recharging batteries; putting things into perspective, and removing negative feelings and stresses.

A wide range of characteristics of seascapes were identified as being important to seascapes values and sense of place. The sights and views and expanse of sea were important features of special places, including both from land to sea and sea to land. The presence of wildlife is also important to sense of place, particularly the variety of plants and animals found in places along the northern Devon coast, as well as the rock formations. An appreciation for the unspoilt nature of northern Devon's seascapes, the natural, and its unusual setting with lots of variety. Sensory characteristics were also very important, for many this linked to the waves and tides; the power and particularly the sounds of the sea. The northern Devon coast was described as a full emersion of all the senses, a unique feature not found elsewhere.

Strong connections to the weather in northern Devon were also described. Although not mentioned spontaneously, on probing about whether historical and cultural aspects of special places were important, several participants commented on the importance of local history for example the stories of smugglers, pirates. Attitudes were mixed towards the accessibility of places in northern Devon; for some less accessible places are appreciated because few people would be there; others appreciated accessibility for personal health reasons.

Special places were appreciated for the opportunity to walk as far as you like, to walk with family, for everyday dog walking; to appreciate and watch wildlife; to undertake sport and recreation such as surfing, fishing, swimming, rockpooling. Notably, special places were valued for activities undertaken in the past as well as the present, for example, childhood memories and strong connections with these places despite no longer visiting so often. Seascapes also offered a place to reflect. Feelings of nostalgia were expressed where seascapes had changed.

A number of changes both natural and manmade have happened or are ongoing along the northern Devon coast that impact peoples' sense of place. These have had positive and negative impacts on perceived value of seascapes.

Naturally occurring changes to seascapes were mentioned frequently throughout the focus group, for example, the sea moving huge rocks, the changing light, and were generally viewed positively in terms of enhancing special places by bringing about different experiences.

Many positively perceived human-driven environmental changes were also recognised, including steps taken to protect the local environment, for example improved treatment of sewage; conservation area at Lundy Island, biosphere reserve. Improved treatment of sewerage around the coast had generated positive changes in wellbeing, enabling higher quality experiences of activities such as

paddling/surfing. The designation of the biosphere and other protected areas have generated positive feelings that something is being done to safeguard the northern Devon coast for the future. The South West Coastal Path was seen as a positive change and also the Tarka Trail which brings people out into nature, allows people to walk from anywhere, and to experience wildlife such as kingfishers. Other positive human-led cultural changes such as improved/increased amounts of art exhibitions, craft fairs and other cultural attractions. For example, the 'Verity' sculpture by Damian Hirst at Ilfracombe.

Negatively perceived environmental changes primarily human-driven, impacting value of seascapes included pollution, particularly litter and plastic pollution, which raised concerns about the impacts on the environment, on birds and wildlife, and lack of appropriate management and their fears that this will get worse and ruin special places within their lifetime. Strong negative attitudes were expressed by some towards development in northern Devon for example residential developments and roads, leading to concerns that the environment and the atmosphere are being damaged. Concerns were also raised that development is not adequately taking into account the impacts on habitats and wildlife.

Diminished wellbeing has been experienced as a result of negative changes to the environmental quality of seascapes and continued threat of further changes, resulting in concerns about the future, a sense of powerlessness, and a sense that it undermines their day to day lives. Problems with pollution have led to feelings of anxiety and a desire to do something about it. Sadness was expressed at the loss of fishing boats since childhood illustrated the strong emotions/nostalgia and connections that seascapes can generate.

The discussion suggested a growing environmental awareness of seascapes and which has led to action to tackle or prevent (undesirable) changes to the northern Devon coast, for example, litter picks, becoming more political. Concerns about development changes/decisions can lead to more political involvement. Attitudes towards changes to the seascape (e.g. wind turbines) can change from being against to becoming accepting over time.

A3.4.1 Limitations and future research

Only one focus group was conducted which primarily focused on the northern Devon coast. The recruitment approach was voluntary meaning there was potential for self-selection bias; the participants themselves acknowledged that they held very positive views towards the coastal environment which others in their local area may not share. Additional research is recommended to gain a deeper understanding among other local community members who may not hold such strong positive views and with a wider range of socio-economic characteristics.