Putting people at the centre of marine governance across the UK and Ireland: 20 years of society and the sea

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A B S T R A C T

Once considered a scientific, technocratic activity, marine governance has shifted from a top down, state directed process toward participatory and deliberative approaches. In parallel, there has been increasing acknowledgment of the need to consider the human dimensions of marine and coastal issues, and the role of citizens in delivering the sustainable management and protection of the marine environment. By doing so, a more complete understanding of the complex relationship between society and the sea may be achieved. Research has shown that marine practitioners recognise that higher levels of civic involvement and citizenship in the management of the marine environment would be beneficial. Despite this, questions are raised as to whether existing governing institutions, legal structures, and planning instruments enable this to readily happen in practice. This paper explores the extent to which existing marine governance instruments are positioned to engender a society of marine citizens to meaningfully engage with marine stewardship behaviours in the UK and Ireland. A multi-phased research approach critically analyses existing relevant legislation, legal and policy frameworks, focusing on themes associated with the human dimensions of marine governance, including marine stewardship. This evaluation highlights a limited inclusion of terms relating to marine stewardship nationally, but recognises the foundations are there a more strategic and cognisant recognition of human-ocean relationships within marine governance across a range of scales and contexts.

1. Marine governance across the UK and Ireland: setting the scene

Globally, our seas have long been recognised as increasingly busy spaces, supporting a complicated and complex network of users and communities. Nowhere are these complexities felt more acutely than in transboundary regions (Ansong et al., 2021; Fanning and Mahon, 2020; Mahon et al., 2017; Hassan et al., 2015), such as the marine area around the UK and Ireland. At the turn of the century, marine and coastal governance in this region was fragmented, sector driven and predominantly represented a top-down governance landscape (Peel and Lloyd, 2004). However, the last twenty years have witnessed a period of significant action, reform and change in marine governance across this space (Ansong et al., 2021; Ritchie and McElduff, 2020).

Concepts of land-sea interactions as Integrated Coastal Zone Management (ICZM) are not new (O'Hagan and Ballinger, 2009); however, truly realising integration and a holistic approach to coastal management and ocean governance remains a challenge. Whilst the first two decades of the 21st Century have witnessed significant changes; this evolution has been a relatively slow burner. Efforts to improve integration for marine issues have been happening for a considerable period (O'Hagan and Ballinger, 2009; McKenna and Cooper, 2006). At an international level, the Law of the Sea (UNCLOS) remains a key driver of global ocean policy; however, recent years have seen the introduction of other international targets, such as the 2015 UN Sustainable Development Goals (SDGs) (United Nations, 2015) and more recently, the goals set out by the UN Ocean Decade of Ocean Science for Sustainable Development. This sets out a clear call for improved integration between natural and social sciences. Positioning an interdisciplinary approach to ocean issues is crucial to achieving the goals of the Decade, and thus, sustainable use and management of the global ocean. The UN Ocean Decade aspires to transform the relationship between society and the sea, through a programme of work which sets out to enhance levels of ocean literacy (see McKinley et al., 2023; Brennan et al., 2019 for a definition and description of recognised dimensions), build on models of marine citizenship (Buchan et al., 2023; McKinley and Fletcher, 2012),

and broader environmental stewardship (Hawthorne and Alabaster, 1999).

In response to a seascape of growing complexity (see Boyes and Elliott, 2014 for more on this), ocean governance discourse has undergone a corresponding evolution, moving increasingly towards more integrated thinking, interdisciplinarity, participatory and bottom-up approaches to decision making. These include, for example, the introduction of Marine Spatial Planning (MSP) (Maes, 2008; Douvere, 2008; Gilliland and Laffoley, 2008), and increased emphasis on Marine Protected Area (MPA) designations (Defra, 2019). In addition, the widespread application of concepts such as ecosystem services (McKinley et al., 2019a) and natural capital approaches (Natural Capital Committee, 2019) continue to influence the direction of marine and coastal management and decision-making across a range of scales. However, while marine governance has traditionally been driven by ecological, and more recently economic, dimensions of ocean systems, it is important to recognise its origins as a human construct, and that it is essentially about managing human activity and its impact on the ocean, coasts and seas at various scales (Bennett, 2019; Papageorgiou and Kyvelou, 2018). Recent years have witnessed growing emphasis on stakeholder engagement in marine planning (Slater et al., 2020; Gopnik et al., 2012; Ritchie and Ellis, 2010), and increased focus on the socio-cultural issues embedded within marine planning processes (McKinley et al., 2019b), alongside efforts to reframe wider society as part of the solution to the challenges facing the global seas (Bennett, 2019; Jefferson et al., 2015).

One of the places at which the complexity of marine governance is most keenly felt is at the confluence of borders (Elliott et al., 2023). Over the last 20 years, the marine legislative and policy context has evolved significantly across the UK and Ireland, a geographic area with a complex legislative and political history, which, with the UK's relatively recent exit from the UK remains complicated (Boyes and Elliott, 2016). Until recent years, coastal and marine governance in this area has been directly guided by EU legislation, including the Marine Strategy Framework Directive (2008) and the Marine Spatial Planning Directive, as well as numerous Directives to support, conserve and manage habitat protection, bird migration and water quality to name just a few. Since the Brexit referendum in 2016, this already complex governance landscape has become more challenging. Contemporary marine and coastal governance in this region must now recognise the borders within the UK, between the four UK countries, between Ireland and the UK, *and* between the UK and the European Union – as well as the various international policies both countries are also signatories of. While transboundary challenges are not new to marine and coastal governance, with the introduction of new legislation in response to the UK's departure from the EU, as well as the development of national and regional marine plans progressing at different times and speeds, informed by the varied jurisdictional and legislative priorities of the region (Ritchie et al., 2024), the watery spaces between the UK and Ireland represent an interesting opportunity to explore interconnectivity and linkages between and within transboundary governance frameworks and to foster improved application of these frameworks (Jay et al., 2016).

The Marine and Coastal Access Act (2009) was the UK's first piece of comprehensive legislation focused on the governance of the marine environment. The devolved administrations of the UK subsequently adopted a set of high-level marine objectives to ensure consistency in approach towards the UK government vision for 'clean, healthy, safe, productive and biologically diverse oceans and seas' (HM Government 2009). This alignment was furthered by the UK-wide Marine Policy Statement (MPS) (HM Government, 2011), which placed a statutory obligation on the nations to develop marine plans. Scotland, Northern Ireland and Wales have executive responsibility for marine planning, wind and wave power, fishing and marine conservation, from 12 to 200 Nautical Miles. While each administration has developed its own approach to marine planning and delivery mechanisms to reflect the specificities of their seas and local approaches to marine governance, all

marine plans must be consistent with the MPS. In Ireland, MSP has been introduced into marine governance relatively more recently in comparison with the UK. As the competent authority, the Department of Housing, Planning and Local Government and Heritage (DHPLGH) adopted the National Marine Planning Framework (NMPF) in July 2021, which sets out a vision, objectives, and marine planning overarching policies, objectives and supporting policies in respect of marine activities over a 20-year period.

In their review of the progress and effectiveness of marine plans in the UK, Slater and Claydon (2020) found that whilst the first plans have emerged nearly all have been officially adopted as policy (except for Northern Ireland). These first-generation plans, appear tentative and limited in impact. The policies are expressed in broad, high level, strategic terms and others contain considerable ambiguity. With marine planning firmly positioned as one of the key mechanisms for achieving sustainable management of the ocean, it stands to reason that the relationship between society and the sea needs to be at the forefront of this dialogue. This aligns with the UN Ocean Decade's aspirations for a 'transformed' relationship between society and the ocean. Questions remain, however, as to whether existing marine governance structure and instruments are fit for this purpose, and, whether they provide appropriate structure and guidance to engender a society of marine stewards, with the capacity to engage in marine citizenship behaviours (Bennett et al., 2022; Buchan et al., 2023; McKinley and Fletcher, 2012).

Marine governance is of course more complex than merely considering the legislation and policies on which it is based, encompassing a wide range of actors (both formal and informal), institutions and processes across a multi-layered system (Greenhill et al., 2020; Boyes and Elliott, 2014). However, the role of primary legislation and associated policies and plans through which legislation is enacted remain a key driver within the UK and Ireland's marine governance system. Moreover, marine plans remain one of the key governance instruments in which the intersection of people and the sea is dominant – the very remit of marine plans is to manage human activity in marine spaces, with a degree of public participation a statutory requirement of the process (Flannery et al., 2018). Coupling these two aspects together, this paper focuses specifically on key governance instruments relating to marine governance, including national legislation documents, key policy instruments and existing marine plans being developed or implemented across the region. The paper explores these documents through the lens of seas and coasts being 'peopled' (Bennett, 2019) and dynamic social-cultural spaces (Peritz and Carr, 2021), and considers how the different approaches adopted across this complex geographical region, may, or indeed may not, be complementary to the relationship between people and the sea. First, we present an overview of our methodological approach, including a short introduction to the documents included in the analysis. Next, a summary of the key findings is presented, followed by concluding comments including recommendations for better consideration of people within the wider marine governance system.

2. Methodological approach

To understand marine governance in the UK and Ireland in the first two decades of the 21st century, key documents relating to marine planning, which are the basis of wider marine governance architecture of the region over the selected time period of 2000–2021 were

examined. The documents selected for review were all either primary legislation, policy instrument or plans linked to UK and Irish marine governance. In addition, each document reviewed has been scrutinised through a process of public consultation The documents included, inter alia, the Marine and Coastal Access Act, the Well-being of Future Generations Act (Wales) 2016), key policy setting documents (e.g. the UK Marine Policy Statement) and, finally, national and regional marine plans that had been developed or were under development at the time of writing[1]. Table 1 presents a summary of the documents selected for review.

To examine how concepts relating to marine stewardship are currently considered within existing marine governance instruments (Table 1), a key word search was undertaken. Key words were developed through a review of literature relating to the concept of marine citizenship (Buchan et al., 2023; McKinley and Fletcher, 2012), which was used to identify relevant search terms. Terminology includes concepts and phrases relating to marine citizenship, ocean literacy, environmental and marine stewardship, public perceptions research, as well as the inclusion of a selection of key policy drivers relating to people and marine environments (e.g. ocean literacy, well-being and heritage). The list of relevant words identified were then grouped into four thematic categories through an inductive coding process. This allowed broader thematic analysis and comparisons to be made between the documents reviewed, as well as supporting the identification of spatial and temporal trends in the way in which terms have been used in the review documents (Table 2).

An in-depth qualitative document narrative analysis was carried out, using a predetermined code book (using the thematic categories presented in Table 2) to support a manual a priori coding process. Using a qualitative narrative analysis allowed for patterns and themes to emerge from the documents (Rozas and Klein (2010)). Each document was reviewed and examined for evidence of keywords, supporting the identification of thematic codes. The number of times each key word was identified in each document was first documented to give a total number of mentions. Each use of the keywords was then contextually evaluated, reducing the overall number of mentions in the process. For example, the use of keywords in section headings was not considered within the overall final count of the key terms. Records of both presence and absence was collected for each document, allowing changes over time and variations between countries to be identified. The immediate surrounding text of every relevant mention was then examined in detail in terms of their meaning, context, and use of language (including, for example, positive or negative language and use of figurative language) (Fairclough and Wodak, 1997). For example, many of the relevant mentions to 'public' were in relation to 'public consultation' rather than in relation to relationships between people and marine and coastal spaces. Where appropriate, quotes from documents have been included to support discussion of the findings, including the context and use of how terms are being used in the reviewed documents. These critical reflections were recorded in the analysis table; facilitating the creation of conclusions and assumptions – an example of this is presented in Supplementary Material Table 1. The varying levels of inclusion and weight given to these concepts across the UK and Ireland's marine and coastal governance frameworks, and how this may have evolved over the last twenty years, is subsequently discussed.

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[1] While the Isle of Man (IoM) is positioned within the geographic region of this study, it was not included in the analysis. The 'Isle of Man Marine Plan Project'; a cross-Government project to establish a holistic approach towards the management and sustainable development of Manx territorial waters, resulted in the Manx Marine Environmental Assessment (MMEA, 2012 and updated 2018. However, the MMEA is not a policy document and is solely a statement of technical facts that were available and correct at the time of publication.

Table 1
Summary of documents reviewed.

Country	Document Title	Document Type	Year	Description
UK	Marine Policy Statement (MPS)	Policy	2011	The MPS is the framework for preparing Marine Plans and taking decisions affecting the marine environment and contributes to the sustainable management of the UK's marine area and resources. The MPS is jointly agreed by the Secretary of State for the Environment, Food and Rural Affairs, the Scottish Ministers, Welsh Ministers and the Department of Agriculture, Environment and Rural Affairs in Northern Ireland.
England and Wales	Marine and Coastal Access Act (MCAA)	Legislation	2009	Part 3 of the MCAA provides the legal basis for Marine Planning in the UK and divides the UK waters into 8 separate regions, inshore and offshore waters for England, Wales, Northern Ireland and Scotland. The Act introduced a new system of marine management, including a new marine planning system, changes to the marine licensing system, designation of marine conservation zones, as well as provisions for the development of marine plans. MCAA allowed for the designation of an Exclusive Economic Zone for the UK, and for the creation of a Welsh Zone in the sea adjacent to Wales. The Act also amended the system for managing migratory and freshwater fish and sets out provisions for enabling recreational access to the English and Welsh coasts.
England	South Area Inshore and Offshore Marine Plans	Plan	2018	The South Area Inshore and Offshore Marine Plans introduced a strategic approach to planning within the inshore and offshore waters between

Table 1 (*continued*)

Country	Document Title	Document Type	Year	Description
				Folkestone in Kent and the River Dart in Devon.
	East Area Inshore and Offshore Marine Plans	Plan	2014	The East Inshore and East Offshore Marine plans were the first two marine plans produced for English seas. The inshore Marine Plan (12 nm) area stretches between Flamborough Head and Felixstowe. The East offshore area borders the Netherlands, Belgium and France (12–200 nm).
	North West Inshore and Offshore Marine Plans	Plan	2021	The North West Inshore and Offshore Marine plans provide guidance for sustainable development of the English inshore and offshore waters between the Solway Firth border with Scotland and the River Dee border with Wales.
	South West Inshore and Offshore Marine Plans	Plan	2021	The South West Inshore and Offshore Marine plans provide guidance for sustainable development of the English inshore and offshore waters between the Severn Estuary border with Wales and the River Dart in Devon.
	North East Inshore and Offshore Marine Plans	Plan	2021	The North East Inshore and Offshore Marine plans provide guidance for sustainable development of the English inshore and offshore waters between the Scottish border to Flamborough Head, in Yorkshire. The marine areas of Norway, Denmark, Germany, Netherlands, Scotland and the east offshore marine plan area border the North East offshore marine plan area.
	HM Government 25 Year Environment Plan	Plan	2018	The Plan is a long-term management strategy for the environment that applies to England, and sets out HM Government's plans for environmental improvement within a generation. The

Table 1 (*continued*)

Country	Document Title	Document Type	Year	Description
				plan covers a range of themes including clean air, clean and plentiful water, sustainable management of natural resources, mitigating and adapting to climate change, enhancing the natural beauty and heritage of landscapes and improving connection to nature, with a chapter specifically focused on marine and coastal ecosystems (Chapter 5).
Scotland	Marine Scotland Act	Legislation	2010	An Act of the Scottish Parliament which provides a framework to help balance competing demands on Scotland's seas. It introduced a duty to protect and enhance the marine environment and includes measures to help boost economic investment and growth in areas such as marine renewables. The Executive Devolution Agreement (2009) gave Scottish Ministers powers to plan beyond territorial waters out to 220 nm and resulted in new primary legislation of the MCAA and the new Scottish legislation.
	Scotland's National Marine Plan	Plan	2015	The Plan covers the management of both Scottish inshore waters and offshore waters. The policies and objectives establish how Scotland intends to manage and use its marine resources, support development and activity in Scotland's seas, whilst incorporating environmental protection into marine decision making to achieve sustainable management of marine resources. Crucially, the National Plan must also be reflected in the development of Regional Marine

Table 1 (*continued*)

Country	Document Title	Document Type	Year	Description
Wales	Well-being of Future Generations (Wales) Act (WBFG)	Legislation	2015	Plans (RMPs) across Scotland (e.g. Shetland, Clyde). The Act sets out an ambition and legal obligation to improve the social, cultural, environmental and economic well-being of Wales. The Act requires public bodies in Wales to consider the long-term impact of their decisions, to work better with people, communities and each other, and to prevent persistent problems such as poverty, health inequalities and climate change.
	Environment (Wales) Act	Legislation	2016	The Act provides an iterative framework to ensure that sustainable management of Welsh natural resources is a core consideration in decision-making. The Act positions Wales as a low carbon, green economy prepared to adapt to the impacts of climate change and encompasses a number of topics including: sustainable management of natural resources (SMNR), climate change, waste reduction and management, fisheries, marine licensing, flooding and coastal erosion. As part of the Act, 7 Area Statements have been produced to support the management of Wales's natural resources, guided by the 5 SMNR principles and the 7 ways of working from the WBFG Act.
	Wales National Marine Plan (WNMP)	Plan	2019	The Welsh Government produced a marine plan for the Welsh inshore region (out to 12 nautical miles) and offshore region (12–200 nautical miles). The Welsh National Marine Plan (WNMP) contains plans and policies to

Table 1 (*continued*)

Country	Document Title	Document Type	Year	Description
				support our vision for clean, healthy, safe and diverse seas, guide future sustainable development, and support the growth of marine space and natural resources ('blue growth').
Northern Ireland	Marine Act Northern Ireland	Legislation	2013	The Act provides for the development of marine plans for Northern Ireland's inshore region and for the designation of marine conservation zones. It appointed the Department of Agriculture, Environment and Rural Affairs (DAERA) as the Marine Plan Authority for Northern Ireland.
	Draft Northern Ireland Marine Plan (dNIMP)	Plan	2018	The marine plan vision for Northern Ireland is for "A healthy marine area which is managed sustainably for the economic, environmental and social prosperity of present and future generations". Despite original intended timelines, the final marine plan is yet to be published, due in part to the collapse of the NI Executive between Jan 2017 and Jan 2020, and again in 2022. The final marine plan will be a single document made up of two plans, one for the inshore region and one for the offshore region.
Ireland	Planning & Development (Amendment) Act (Ireland) 2018 – Part 5: Marine Spatial Plans	Plan	2018	The MSP Directive was transposed into Irish legislation by way of regulations made in 2016. Since the regulations were made under the European Communities Act 1972, they were strictly limited to measures required to transpose the directive. In October 2018 the regulations were repealed and replaced by Part 5 of the Planning and Development (Amendment) Act 2018.

Table 1 (*continued*)

Country	Document Title	Document Type	Year	Description
	Maritime Area Planning Act	Legislation	2021	The Act establishes a legal basis for marine spatial planning, and places marine plans and Marine Planning Policy Statements on a statutory footing in Ireland. The Act established a new marine consenting and licensing regime. The legislation also creates a new regulatory authority, the Maritime Area Regulatory Authority (MARA).
	National Marine Planning Framework	Plan	2021	This sets out the overarching policies, objectives and supporting policies in respect of marine activities over a 20 year period. It will inform decisions regarding the current and future development of the maritime area and seeks to integrate sectoral needs within the three overarching pillars of forward planning (economic, environmental and social).

Table 2

Search protocol used for keyword search task (* denotes truncated search terms to allow for additional related words to be identified through the search).

Search Protocol	
Theme	Search terms
People	Citizen* or public or society or community or resident or stakeholder or custodians or guardians or gatekeeper or warden or people
Attitudes and connection	Perception* or value*or opinion* or attitude* or concern* or interest* or perspective* or viewpoint or view* or vision or knowledge or emotion or feeling or awareness or belief or responsibility or relationship or connection or attachment or memory or experience
Action and Behaviour	Stewardship or behaviour or citizenship
Emerging Policy Drivers	Ocean literacy or well-being or heritage

3. Results

Following an in-depth assessment of the governance instruments outlined in Table 1, an overview of the findings and initial insights is presented in SM Table 1. While there are clear differences in the language used across the documents reviewed, some common threads emerged from the data. Despite the evolving dialogue calling for increased ocean literacy and stewardship from societal audiences emerging in ocean governance discourse, there were several search terms that were not found in any of the documents reviewed. These absences included the terms: custodians, guardians, gatekeeper, wardens, emotions, feelings, viewpoint, connection, and attachment. The implications of these absences are discussed further later in the paper.

In order to gather further insight into the evolution of marine planning and wider marine governance across the UK and Ireland, sources were grouped geographically, and then further categorised into two groups of documents: 1. Primary Legislation/Policy and 2. Marine Plans. The themes presented in Table 2 were used to explore the spatial and temporal variation and evolution evident within marine governance, and the context in which terms have been used over the 20-year period of the review. Where appropriate, quotes from the reviewed documents have been included in italics to support discussion of the themes.

3.1. Analysis of primary legislation

In the context of underlying legislation relating to marine planning, there were clear differences in how and when topics have been considered within legislation and specific marine plans published at the time of analysis and writing. Table 3 presents a summary of findings across the documents reviewed relating to the legislative context of the UK and Ireland, followed by a discussion of the findings for each theme.

3.1.1. People

While there is some variation, all of the documents contain references to the theme of People, with the exception of the Marine and Coastal Access Act. Closer evaluation found that references tend to be quite implicit and lacking in clear actions or direction. As a key policy driver, the Marine Policy Statement was found to have the highest number of mentions relating to this theme (15). This frequency was primarily driven by cross references to the UK's High Level Marine Objectives (UK Government and Devolved Administrations, 2009). In the context of Scotland and Ireland, all references connected to the theme of People were found to be linked to statements of public participation: a statutory aspect of the marine planning process. Similarly, the Environment (Wales) Act (2016) was found to have one specific reference to this theme through the Sustainable Management of Natural Resources principles (a foundation of the Act) to: "*make appropriate arrangements for public participation in decision-making*" (p.8). Finally, perhaps surprisingly, given the wider role and remit of the Well-being of Future Generations (Wales) Act (2015), there were no relevant mentions of this theme identified. Nevertheless, it is important to acknowledge the formation of the Public Service Boards across Wales, and their role in implementing the seven well-being goals set out by the Act.

3.1.2. Attitudes and Connections

All Acts, except for those specific to Scotland, contained references to the Attitudes and Connections theme (total mentions 28). In the MPS, which is relevant across the whole of the UK, focus was placed on the importance, and designation, of cultural and heritage interests, and the need for these to be protected for future generations. Despite this recognition of marine culture and heritage, clear evidence of encouraging stewardship is limited throughout the MPS. There is a singular mention of the growth in interest in tourism and wildlife experiences which, while not directly linked to the notion of stewardship/citizenship and public connection, may present opportunities to enhance feelings of marine citizenship or connection (McKinley et al., 2020). There is also one mention of the impact of climate change and how the value and use of marine and coastal systems may change in the future.

As shown in Table 3, there is little consideration of this theme within the MCAA, with only one relevant mention relating to having a representative "*acquainted with the needs and opinions of the fishing community of the district*". This text indicates a growing awareness of needing to take different opinions from the community into account within marine and coastal decision making.

Analysis of the two key pieces of Welsh legislation revealed one implicit reference each, with the Well-being of Future Generations Act referencing societal behaviour with a link to the potential health and well-being benefits which may be derived from marine and coastal

Table 3
Legislative context across UK and Ireland.

	UK level		Wales		Scotland	Northern Ireland	Ireland		Total no. per grouping across Acts
	UK MPS 2011	MCAA 2009	WBFG Act (Wales) 2015	Environment (Wales) Act 2016	Marine Scotland Act 2010	Marine Act (NI) 2013	Planning & Development Act (Ireland) 2018	Maritime Area Planning Act 2021	
People	15	0	3	1	5	6	1	17	**48**
Attitudes & Connection	9	1	1	2	0	14	0	1	**28**
Action & Behaviour	0	0	0	0	3	0	0	0	**3**
Emerging Policy Drivers	4	0	0	0	0	0	0	0	**4**
Total no. per Act	**28**	**1**	**4**	**3**	**8**	**20**	**1**	**18**	**83**

spaces; while the Environment (Wales) Act referred to the guiding Sustainable Management of Natural Resources principles which emphasises the need to *"take account of the benefits and intrinsic value of natural resources and ecosystems"*. In Northern Ireland, the majority of relevant mentions relating to the term 'interest'. This is perhaps reflective of the fact that the Statement of Public Participation and consultation draft are for '*interested persons*'. In this regard '*interested persons*' refers to those likely to be interested in, or affected by, policies proposed in the marine plan, and members of general public. 'Responsibility' was only referred to in terms of the responsibilities of government and, similarly, only the 'opinion' of the Department was discussed. In all, there was a clear lack of explicit mention of the connection and attitudes of people. This was also found to be true in the Irish legislation.

3.1.3. Action and behaviour

This theme was found to be largely unrepresented in the Acts reviewed in this study. Only the Marine Act Scotland makes implicit references relating to this theme through mentions of stakeholder engagement.

3.1.4. Emerging policy drivers

Most of the Acts reviewed make no reference to the identified emerging policy drivers considered in this study. As discussed above, the UK Marine Policy Statement included mentions to cultural heritage and heritage assets. Given that cultural services tend to be how the majority of people experience and engage with natural environments (e.g. visiting coastal towns), it is pertinent to include this as a consideration within this overarching piece of legislation. The MPS included some mentions to the well-being of communities, possibly before this had become a dominant theme within marine and coastal spheres.

3.2. Analysis of marine plans

Table 4 provides a summary of the findings from the assessment of marine and environmental plans across the UK and Ireland. Similar to the legislative findings (Table 3) there is notable variation in the number of mentions to each theme between specific marine plans published at the time of analysis and writing.

3.2.1. People

When assessing the marine and environment plans developed or under development at the time of the study, most references to the theme of People were found to relate to the role of public authorities in the planning process and the implications for governance. In the context of England's marine plans, analysis indicated a notable change over time in terms of the inclusion of terms relating to the theme of People, from no consideration at all in the East plans (first published in 2014), while in the plans developed in 2021 references range from 16 (North west) to 31 (South west). References most frequently related to managing and supporting public access to marine and coastal spaces (evident since the 2018 publication of the South Area plans). All of the plans published in 2021 contained an explicit reference to public access to the marine environment being essential for realising the economic, environmental and social benefits of sustainable coastal communities. These newer plans also include reference to '*enhancing public knowledge*' and appreciation of the marine environment through the implementation of the marine plan (e.g. NW-SOC-1), signalling a clear change in language in the later marine plans for England's marine areas. England's 25 Year Environment Plan identifies the role of society in contributing to the improvement of the natural environment and contains specific objectives on this front: "Focusing on increasing action to improve the environment from all sectors of society" (p.28). The majority of references are implicit and are in connection with nature more broadly. Thus, the relevant mentions of this theme could be considered to relate to cross-

Table 4
Marine and environmental plans.

Region	England							Scotland	Wales	NI	Ireland	Total per grouping across plans
Plan	25 Environment Plan	South	East	North West	North East	South West	South East	SNMP	WNMP	NIMP (draft)	NMPF	
Year	2018	2018	2014	2021	2021	2021	2021	2015	2019	2018	2021	
People	17	9	0	16	18	20	17	28	22	17	26	**194**
Attitudes & Connections	19	0	4	2	6	2	7	4	20	14	20	**98**
Action & Behaviour	5	0	0	0	0	0	0	2	2	1	2	**12**
Emerging Policy Drivers	30	6	0	4	12	23	12	13	77	11	19	**207**
Total per plan	**71**	**15**	**4**	**22**	**46**	**56**	**19**	**47**	**121**	**43**	**67**	**511**

society working to deliver improved connection to nature in its broadest sense, which could also be applied in a marine and coastal context. Analysis found no mentions of terms relevant to the theme of People in Chapter 5 indicating a clear lack of consideration of the human dimensions of marine and coastal spaces, suggesting that the frequently cited *'out of sight, out of mind'* challenge of this form of blue space needs to be addressed, even at the scale of national policy. There are frequent references to 'stakeholders', seemingly referring to those working in industry, landowners or policy makers, rather than identifying communities and members of the public as being part of that stakeholder group. This is emulated across the majority of the other plans examined.

The WNMP contains minimal mentions to the public as stakeholders. It does, however, consider public health and the need to take account of public benefit associated with planning and designation of MPAs. The WNMP also explicitly refers to the well-being of coastal communities. There is limited mention of the concept of *'sense of place'* and its benefits to communities. It recognises the need to be supportive and conserve the diverse Welsh language landscapes ('varying linguistic profiles') across Welsh coastal communities.

In Scotland's NMP many of the references to 'people' (28 mentions) are in relation to public/stakeholder participation and engagement, including the statement of public participation and the Marine Planning Partnerships supporting marine planning at a regional level across Scotland. Society is mentioned in the context of "A*chieving a sustainable economy, promoting good governance and using sound science responsibly are essential to the creation and maintenance of a strong, healthy and just society capable of living within environmental limits"* (p.15); demonstrating an appreciation of the importance of embedding sustainability and equitability in marine governance.

In Northern Ireland's draft Marine Plan, the majority of mentions to the People theme concern the need to secure and protect public access to the marine and coast, and the need to recognise nature conservation, biodiversity and geodiversity as social assets, not merely economic ones. The marine is recognised as a place that people come to enjoy and, consequently, seascape is central to people's enjoyment of, and perception of, the marine area. It is suggested that *"As seascape relates to people's perception of their area, it may be appropriate to include seascape within any pre-application stakeholder engagement (pg.72)*. No further explanation or assertion in terms of how this should be achieved is provided.

The close link between people and the marine is acknowledged several times in Ireland's NMPF - *"Ireland's economy, culture and society is inextricably linked to the sea."* (p.8). However, whilst the role of the marine in sustaining citizens is outlined, the responsibility of citizens in sustaining the marine environment is less explicit. It is acknowledged that residents, coastal communities and visitors all gain social benefits from the marine over time, but to varying degrees. In particular, the potential role of sport and recreation (including blueways and greenways) in enhancing community health, well-being and quality of life is noted. The importance of providing people with the opportunity to have a say in how their maritime area is managed is noted, and a key objective is to establish policy and planning frameworks that ensure effective and meaningful public and stakeholder participation in the planning process. A role for the public is established in relation to specific marine activities. The role of multiple stakeholders, including communities, to work collaboratively to advance tourism, environmental and coastal/marine specific goals in the Wild Atlantic Way (WAW) is outlined. In relation to nonindigenous species, the importance of awareness raising so that stakeholders and maritime users know what they can do to reduce their spread is noted. It is suggested that those who participate in marine leisure activities are more likely to protect the environment: noting the *"... considerable overlap between those who enjoy marine leisure activities such as diving and those who are passionate about protecting marine ecology"* (p.172). It is stated that proposals should avoid, minimize or mitigate significant adverse impacts on public access and proposals demonstrating enhanced and inclusive public access to marine area

should be supported.

3.2.2. Attitudes and Connections

In England's 25 YEP, the majority of references to this theme relate to concepts of 'value', including some mention of intrinsic values and the need to take account of multiple types of value. In the specific context of the marine environment, the 25 YEP calls for a move away from only thinking about economic values:

> *"We need to understand the full value of the marine environment and incorporate that into the decisions we take: this is key to the 'natural capital' approach that has informed this 25 Year Environment Plan. An understanding of marine economic, social, historical, and environmental values can help incentivise behaviours and practices that support stewardship and sustainability.* (p. 106)"

However, despite the UK's status as a coastal and island nation, inclusion of these terms throughout the document in a marine and coastal context is implied, rather than clearly stated. This lack of attention afforded to Attitudes and Connections is further exemplified by the fact that while there has been a slight increase in consideration of this theme in the marine plans published in 2021, across the whole spectrum of England's marine plans, references to this theme range from 2 (in the North West and South West) to a maximum of 7 in the South East. Increasingly the plans include explicit reference to the concept of 'seascapes', and how this might influence public perception of a marine area. There is reference to the need to '*guide decision making from the viewpoint of social benefits'* (p.42, East Marine Plan). Again, a change in focus and language appears evident in the later plans, with references not only to enhancing public knowledge, but also consideration of the need to recognise the different values which can be attributed to the marine environment and how seas and coastal spaces can be valued by coastal communities.

The marine plans of Wales and Ireland contained the most mentions of the terms pertaining to the Attitudes and Connections theme (both contain 20 relevant mentions). In Wales's National Marine Plan, the majority of these references relate to the notion of values; specifically economic value, and gross added value associated with sustainable development and economic growth related to the implementation of the plan. Within the Plan, there is some discussion of different value types, with particular emphasis on the need to recognise the cultural values of the Welsh coastline and the 'linguistic landscape' in Wales. Despite this, assessment of the Plan found no explicit consideration of how public values can be applied.

Scotland's National Marine Plan was found to contain few terms relevant to this theme. There was one reference to perceptions of seascapes in relation to marine renewable energy, with three further mentions recognising the need to take account of diverse perspectives, views and attitudes in decision making.

In Northern Ireland's draft Marine Plan, there is some recognition of the influence of definitions and values of seascapes on an individual's perceptions of a marine area, and as noted previously, it is suggested that future marine planning may need to include greater consideration of seascape in pre-application and stakeholder engagement processes. Whilst the Plan clearly recognises the involvement of those with an interest in, and responsibility for, the marine area is central to successful marine planning, there is no explicit reference to the general public as having responsibility for managing the marine area. Indeed, only a limited number of references (3) explicitly refer to the individual or community level. Although the Plan states that stakeholder engagement processes will provide the opportunity for people to voice concerns and add to the knowledge base, there is no discussion of the continual role or responsibility of communities as marine citizens.

Similar trends can be found in Ireland's NMPF. Whilst the majority of mentions of 'value' are to economic value, the value of the marine ecosystem for human well-being and the need to increase awareness of the benefits of engaging with the sea are also noted. Strengthening

maritime identity and increasing enjoyment and awareness of the value, opportunities and social benefits of engaging with the sea are key objectives of the plan. The importance of safeguarding the historic environment for its intrinsic value is noted, and a dedicated section is provided on natural capital and the value that nature produces directly and indirectly to people. In terms of 'knowledge', it is recognised that 'supporting knowledge' exists to varying degrees for different marine environmental concerns. For example: in relation to offshore renewables, it is stated: *"Account must also be taken of legitimate public interest in … the protection of the marine environment."* (p.123). Furthermore, *"Intangible cultural heritage refers to the practices, expressions, knowledge and skills that communities and groups recognise as part of their traditional inheritance and pass from generation to generation"* (p. 88), highlighting an awareness of local, intangible, traditional knowledge. Overall, however, there is a clear emphasis on scientific knowledge, and the role and importance placed on more local expertise is less clear.

It is noted that the opportunity to experience sense of place, enjoyment, health and well-being from the marine environment is always available but that social benefits are experienced differently by residents and visitors, and that active intervention is needed to sustain and improve them. It is stated that project proposals should identify sites and features that support general awareness and appreciation.

3.2.3. Action and behaviour

Again, the theme of Action and Behaviour was found to have the fewest references to any of the terms in this grouping across the plans reviewed as part of this study, with only 2 references found in the Scottish, Welsh and Irish marine plans, 1 in Northern Ireland, and no references in the marine plans relating to England. The 25 YEP contained the most mentions which were found to be predominantly associated with littering behaviour, albeit there is only one specific mention of marine litter behaviour. The need to better understand the multiple values of the marine environment which can nurture pro-environmental behaviours is also outlined in the plan. In Scotland's National Marine Plan, the only reference is to 'stewardship' in the context of managing finite resources, such as oil and gas and the need to transition to carbon neutral energy systems. Wales's National Marine Plan includes a direct call for a 'just society' (and hence stewardship) through reference to the High Level Marine Objectives. While not specifically relating to the coast or marine, reference is made in Ireland's NMPF to the sustainable stewardship of the landscape as outlined In the National Landscape Strategy. The need to change behaviours and attitudes to ensure water safety so that the marine environment can be enjoyed with confidence and safety is also stated.

3.2.4. emerging policy drivers

In total, analysis found 207 references associated with the Emerging Policy Drivers theme across all Plans assessed in this study. This number was driven primarily by the WNMP with comparatively limited reference to emerging policy topics in the other documents reviewed. The WNMP includes multiple references to well-being (62), which is unsurprising given the legislative direction provided by the WBFG. These mentions include a number of specific policies relating to the well-being of coastal communities, and Wales as a whole, through the delivery of the plan. Within the England specific plans, the Secretary of State's opening remarks in the South Area Inshore and Offshore Plan, for example, refers to the need to improve the well-being of coastal communities. Furthermore, the Plan specifies the need to identify and conserve heritage assets in terms of the enjoyment people derive from such assets. This demonstrates further recognition that access to the marine environment contributes to societal health and well-being. The 25 YEP was found to include a number of comments referencing a need to better understand the broader cultural value and assets of the wider environment. In addition, the role of stewardship in improving links to cultural and natural heritage is also acknowledged: *"Initiatives to protect and improve our natural world and cultural heritage are acts of stewardship*

by which we discharge our debt to it, and so are moral imperatives in themselves, but they are also economically sensible" (p.16). The focus on marine and coast was again found to be limited. There were 28 mentions of well-being, but without any explicit link to marine and coastal systems. Despite this, encouragingly the analysis found one explicit mention of the historical lack of understanding of the 'full values' of marine environments leading to a disregard and a legacy of poor choices with regards to marine environmental management. This signals the start of a turning point in policy development for marine and coastal systems, at least for England as the geographical focus of the Plan. As in the other categories, when exploring the marine plans for England, a temporal shift appeared evident, with a higher number of references to the topics relating to this theme in the newer plans compared to the earlier plans. The South West plan included 23 references to this theme, including explicit consideration of marine and coastal heritage assets.

Assessment of Scotland's National Marine Plan found that all references relate to a recognition of the significance of heritage assets, including the value of social and economic heritage assets and public access to them. Similarly, the majority of references in Northern Ireland's draft Marine Plan relate to promoting the preservation and enjoyment of marine related heritage assets. These are noted to contribute to the cultural, identity and economy of the region. Furthermore, there is a dedicated section on natural heritage which recognises its importance in directly sustaining life, well-being and economic growth.

Ireland's NMPF states that maritime heritage and traditions connect us to the ocean and are an integral part of life. The importance of preserving heritage for the tourism sector, in particular, is noted several times, as it is recognised that heritage assets attract people to the marine and enhance public appreciation of it. Whilst not explained in the text, this may enhance people's relationship with the marine and thus inspire stewardship behaviours. It is stated that the Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media works with communities and other stakeholders to recognise and safeguard Ireland's intangible cultural heritage. In this way, a role for communities is noted, but no further detail is provided. Sport is seen as facilitating the link between people and heritage, and thus may be regarded as a precursor to stewardship: *"Marine sports and leisure clubs and activities occupy a very important position in Irish coastal communities, offering opportunities for physical activity, facilitating social cohesion and integration through volunteering and social participation, and indeed maintaining links to our maritime heritage"* (p.169). Whilst the majority of mentions to 'well-being' are in reference to economic well-being, the role of marine leisure and sport in enhancing local well-being is mentioned. There is limited discussion on how to enhance this or protect it beyond securing access to the coast and seas.

4. Discussion

As global ocean governance continues to evolve, the increasing emphasis on understanding civic interactions and connections with these watery spaces must be considered (Jefferson et al., 2021; Bennett, 2019). The UN Ocean Decade presents an opportunity to further integrate these dimensions into ocean governance and policy making; however, for this to deliver effective change within ocean governance, there needs to be a formalised process, not a 'nice to have'. Through this paper, we have explored how marine governance in the UK and Ireland is responding to this discourse, with a particular focus on key marine and coastal legislative documents, as well as MSP instruments as a key management tool where practical change can be realised, mirroring recent governance effort in both the UK and Ireland. While analysis found the focus of the existing marine plans to be on current and future activities which use marine space or resource, it is the relationships between the people, the marine citizens, who carry out these activities and are likely to use the plans, and the seas, which require more in-depth attention. More research is needed to truly understand how public

perceptions of marine governance, sense of stewardship (Bennett et al., 2022), and enabling concepts of marine citizenship (Buchan et al., 2023; McKinley and Fletcher, 2012) and ocean literacy (McKinley et al., 2023) have already been, or could be incorporated into marine governance and management instruments. Further, while the concepts of natural capital and ecosystem services can provide a useful framework for understanding human-ocean relationships, it is important to acknowledge other ways of understanding and assessing diverse values and relationships held between people and the ocean (e.g. the Intergovernmental Panel for Biodiversity and Ecosystem Assessment Values Assessment (IPBES, 2022)). While not a focus of this paper, it is important to recognise the additional scholarship (Sullivan, 2014; Sullivan and Hannis, 2014, for example) that delves into the concept of natural capital in more depth looking at issues, inter alia, commodification of nature which would allow for much needed deeper analysis of how these concepts, and indeed others, may facilitate, or not, putting people at the centre of marine governance.

As perhaps expected, the marine governance landscape, encompassing the underpinning legislation as well as the various geographical locations of the marine plans examined, across the UK and Ireland, has evolved significantly over the last two decades. Looking at the first marine plans published, it is evident that there was very limited consideration of aspects relating to marine stewardship within them. While the varying scope, scale and indeed length of the documents analysed in this study may impact the level to which this is referred to, the analysis presented here nevertheless provides a snapshot of the extent to which each term is, or is not, referred to and in what context. By taking a document analysis approach to interrogate the evolution of marine governance, including legislation and policy documents, across the research area, we have found that, despite positive conversations and a seemingly growing recognition of the importance of marine social sciences and its role in delivering effective ocean policy, gaps remain, echoing other studies (Gilek et al., 2021; Pennino et al., 2021; Brooker et al., 2019). Key policy drivers in the UK marine region have historically lacked meaningful inclusion of any human or civic dimensions of the ocean, perhaps partially driven by an over-emphasis on ecological and economic parameters which have been the dominant framings of sustainable ocean management (e.g. through the concept of ecosystem services or natural capital mentioned above), and indeed of the notion of the 'blue economy' more broadly. , contributing to the pervasive dichotomy between people and nature, and a resultant lack of civil involvement or consideration of human dimensions within wider marine governance (Brennan, 2018). Recently, however, there has been a rethinking of the dominant framings of the blue economy, including through the COST Action "RethinkBlue), for example, which has explored the impacts of blue economy thinking on marine sectors, as well on human well-being and social equity, while Bennett et al. (2021) note that marine governance structures, which are externally driven and top-down, are resulting in the 'de-peopling' and 'de-politicization' (p.130) of the marine landscape and highlight the inadequate specificity and consideration regarding social impacts and benefits.

This study found that there are a number of key terms which are completely absent from the documents reviewed, including emotions, custodians, and attachment. This is of note given the growing recognition of the role of society in addressing the challenges facing the ocean and coastal spaces of different scales (Bennett et al., 2022). In this study, one key example identified is the UK's Marine and Coastal Access Act - although the limited explicit consideration of people and their relationship with the ocean is perhaps not surprising given the age of this instrument (2009). More encouragingly, the relatively recent 25 Year Environment Plan explicitly mentions the need to take account of the diverse values of the marine environment, indicating a potential shift in marine policy spheres and a growing recognition of multiple ways of engaging with and valuing marine spaces, environments and resources.

Through our analysis, despite the absence of some terms, we found that focus was commonly on topics relating to the theme of People

(through words such as 'citizen' and 'stakeholder' in different contexts'), perhaps indicating a growing and shared appreciation of the need for improved consideration of these dimensions (as explored by other scholars including Santos et al., 2021; Pennino et al., 2021; McKinley et al., 2019; Bennett, 2019); however, this was not consistent across the governance landscape explored. Further, our analysis also found that the theme of 'action and behaviour' had the fewest references, which might suggest that whilst there is a growing recognition of the role of civil society as important marine and coastal stakeholders, they are not always seen as having a specific and actionable role within formal marine policy and governance (Brooker et al., 2019; Pennino et al., 2021). The findings from this review suggest that, historically, concepts of marine citizenship and related topics of connections between people and the ocean, have not been explicitly considered within the formal legislative frameworks in place across the UK and Ireland marine area (McKinley and Fletcher, 2012; Buchan et al., 2023). Despite some signs of hope and ocean optimism (Borja et al., 2022), this study found that where terms relating to people are included in key marine governance instruments, these tended to be expressed in a non-committal, implicit manner, rather than providing an explicit formal framework for inclusion of these dimensions within wider marine governance, mirroring trends seen in other studies (Zuercher et al., 2022; Flannery et al., 2020). For example, while there are some encouraging signs in the more recent marine governance instruments reviewed, analysis found the dominant focus to be on themes relating to understanding values, perceptions and attitudes held by different groups across society (included in the Attitudes and Connection theme). There was limited consideration of topics relating to meaningful actions or behaviours that could be taken at either an individual or collective scale, meaning that despite a growing call for improved stewardship and transformation of the relationship between society and the sea (McKinley et al., 2020, 2022; Bennett et al., 2022; Buchan et al., 2023), consideration of these human dimensions remain sparse within the majority of the formal marine governance structures in either the UK or Ireland.

Although this study found the consideration of people in marine governance to be limited and weak across the region, there are bright spots and some hints of change. For example, the 25 YEP appears to represent an evolution and a relatively recent change in language, with explicit consideration of the multiple values which may be attributed to the marine environment, including diverse social values, while Wales's aspirational Well-being of Future Generations (Wales) Act, presents a clear example of explicit and legal recognition of the relationships between people and their environment within legislative frameworks, with this legislative direction mirrored by repeated consideration of well-being of coastal communities within the Welsh National Marine Plan. Despite there being ongoing questions with regards to the weight of the Act and how it will be implemented in the context of marine planning, these examples provide hope that marine governance is moving in the right direction (McKinley et al., 2019a,b; Davies, 2017).

Clearly this is a quickly evolving space, with the more recently published documents perhaps signalling something of a 'sea-change' in marine governance. For the marine governance landscape in the UK and Ireland to be fit to deliver against both national and international obligations and goals, there is a need for this trajectory to continue and for future marine governance instruments to strive for a truly integrated, transboundary and holistic approach, which centres the interconnected relationships between people and the ocean within marine governance. As well as legislative reform, other opportunities to facilitate this could be through the marine spatial plan monitoring and review cycle. Additionally, using insights gathered through the UK Ocean Literacy Assessments carried out in 2021 and 2022 (e.g. Defra, 2022) could guide future policy direction. Whilst not policy documents per se, the leadership from Defra, in collaboration with the Ocean Conservation Trust, and other government bodies across the UK of these assessments of UK levels of ocean literacy, further indicates positive shifts within decision-making institutions.

As management tools, marine plans are relatively young, and while the EU Marine Spatial Planning Directive's deadline of member states to have marine plans in place by March 2021 will have been a key driver, much has changed in both the governance and research landscapes since the MSP process started (e.g. Brexit, COVID-19, increased recognition of marine social sciences within policy spheres, including the creation of marine social science teams within government departments). As future marine plans are developed at varying geographical scales (e.g. Ireland's Designated Maritime Area Plans and Scotland's Regional Marine Area Plans), there is scope for these to change further, particularly given calls for a transformed relationship between society and the ocean (as called for from the UN Ocean Decade). Moving beyond tokenistic levels of public participation in marine governance, specifically within the marine planning process, has the potential to increase the legitimacy of the marine governance processes, challenging historical top-down approaches, ensuring a truly community driven and participatory process which considers the ecological, social, economic and cultural dimensions of marine governance. As national and regional plans undergo their scheduled review processes (for example, the current National Marine Plan 2 process underway in Scotland (Scottish Government, 2023), this may be an opportunity to better integrate the diverse relationships between people and the sea into the planning process – particularly given Scottish Government's earlier recognition of the need for management of Scotland's seas to meet the long-term needs of both people and nature (Brennan et al., 2019). This will require the creation of interdisciplinary and cross sectoral teams of researchers and practitioners within marine governance processes, with specific inclusion of marine social science research which can be used to better understand the relationships between people and their marine and coastal spaces (Grimmel et al., 2019; Saunders et al., 2019; Smith and Brennan, 2012). There is a risk that relationships between policy makers and stakeholders could be damaged, there is a need to actively consider whose voices and values are being heard and included within marine governance processes, how trust can be built (Cvitanovic et al., 2018), and what power dynamics may be influencing the capacity for people to engage meaningfully (Fudge et al., 2021; Franke et al., 2021). For this to be achieved, there is an opportunity to build on existing requirements within marine legislation, which acts as a baseline for public participation and consultation on the production of the marine plans, for example.

Finally, for future marine governance to be socially inclusive and just (Bennett et al., 2021), processes must be put in place which ensure that all voices and values are heard and included, with particular attention given to those who have historically been unrepresented within marine governance. It should be noted that mechanisms to deliver against this aspiration are underway. For example, led by the Coast and Seas Partnership Cymru, Wales is in the process of developing a national Ocean Literacy Strategy, which provides an opportunity to develop a framework for strengthening the link between people and the sea, inclusive of all voices and actors. It is of note that all of the marine plans reviewed explicitly mentioned the need to create and ensure public access to marine resources, supporting diverse uses, including tourism, sport, recreational use, businesses and cultural heritage, while some of the more recently published documents included mentions of the role and importance of marine stewardship to address the challenges facing the ocean, coasts and seas, both in the UK and beyond. With this in mind, it is important to recognise that many marine uses and activities cross multiple policy spheres, and that if we are to enhance and foster greater levels of ocean literacy and related marine stewardship, marine governance cannot be developed in isolation. For marine governance to deliver environmental, economic, social and cultural benefits for society, whilst also promoting marine recovery, explicit recognition of human dimensions of marine governance must be at its centre.

5. Concluding comments

This paper provides an overview of existing marine governance instruments viewed from a human dimension and marine stewardship perspective. Although there is still room for improvement, the UK and Ireland's experiences provide useful lessons for other nations developing their own marine plans. Evaluation of the documents indicate room for improvement – for example, there is a need for interdisciplinarity within the marine governance and planning fields of research and practice. As the UK and Ireland continue to navigate a new legislative framework on account of the Brexit process, there is a real opportunity for these nations to be more strategic and cognisant of the relationship between their communities and the ocean. The existing legislative framework and first generation of marine plans that have been developed to date across the region provide the foundations for this, but more progress is needed. Given the initiative and continual reviews inherent in the marine planning process, there is the potential that the landscape will continue to evolve and become more holistic and integrated.

While the evolution of marine plans and marine governance more broadly across the UK and Ireland has moved relatively quickly, but the content of some has struggled to keep up with the external drivers of broader marine governance such as UN Ocean Decade and the SDGs. Nevertheless, through this paper we have identified a potential turning point on the horizon as we move towards reaching the parallel ambitions of developing a sustainable blue economy, supporting ocean recovery, and fostering greater ocean literacy and citizenship. Crucially, there is a need to take account of marine social science insights to ensure appropriate inclusion of indicators of these human dimensions and foster and improve ocean literacy and overall stewardship of our marine and coastal spaces across the UK and Ireland, and indeed beyond the project region. Future MSP review processes should take account of this increased emphasis on the human dimensions of marine and coastal systems and ensure these are adequately included within key legislation, updated marine plans and their implementation guidance. Specifically, marine governance processes at regional, national and global scales need to think beyond economic values and the historical emphasis on maritime industries, and to improve their consideration of social and cultural values recognising the importance of including diverse perspectives and values from across the broadest definition of marine and coastal actors and stakeholders, thereby increasing legitimacy of these processes, improve social acceptability of marine planning and support implementation of global marine governance.

CRediT authorship contribution statement

Emma McKinley: Writing – review & editing, Writing – original draft, Visualization, Validation, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Linda McElduff:** Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Heather Ritchie:** Writing – review & editing, Writing – original draft, Validation, Methodology, Investigation, Formal analysis, Data curation, Conceptualization.

Declaration of competing interest

Data availability

Data will be made available on request.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.ocecoaman.2024.107235.

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