

Scottish Highly Protected Marine Areas (HPMAs) Consultation

Scottish Government Response to the Consultation

November 2023

Executive Summary

We asked:

From 12 December 2022 to 17 April 2023, the Scottish Government consulted on Highly Protected Marine Areas (HPMAs). The proposed approach behind HPMAs was to strictly protect and leave undisturbed all natural processes of the marine ecosystem within HPMA site boundaries, including the seabed, water column habitats and everything that lives in the protected area to allow for the protection and recovery of marine ecosystems. The Scottish Government consulted on what HPMAs in Scotland should look like, how they should be selected and implemented, and how they could impact our lives.

More specifically, the consultation sought views on the proposed HPMA policy for introducing powers to designate HPMAs in Scottish inshore waters. For the Scottish offshore region (beyond 12 nautical miles out to the outer limits of the UK continental shelf), it was recognised that the introduction of HPMAs, as proposed, was subject to the necessary powers being transferred by the UK Government to the Scottish Government. The intention, however, was that the proposed policy framework and the site selection guidelines would also apply to HPMAs in offshore waters, subject to the necessary powers being transferred.

We asked for your views on the draft Policy Framework, draft Site Selection Guidelines, initial Strategic Environmental Assessment (SEA), initial Socio-economic Impact Assessment (SEIA), partial Island Communities Impact Assessment (ICIA) and partial Business and Regulatory Impact Assessment (BRIA).

You said:

You provided us with 4,502 individual responses. Of these, 2,458 were substantive responses with respondents providing their own views and 2,044 were campaign responses in which respondents expressed the views of a co-ordinated campaign. The substantive responses were broken down as; 289 organisations and 2,169 individuals.

Key findings of the consultation included that:

- The responses were highly polarised with the vast majority of respondents expressing views either firmly in support or opposition of the proposals. 55% of all respondents supported the introduction of HPMA's and 43% of respondents opposed the introduction of HPMA's with only 2% holding neutral or ambivalent views.
 - A large majority of respondents who supported the proposals submitted their responses as part of a single campaign. When campaign responses are removed, the views of respondents were 76% opposed, and 20% supporting the proposal.
- Concerns regarding the potential impacts on local communities, particularly in rural coastal areas and islands, were shared by both those in support of and those against the proposals.
 - The importance of stakeholder and community input in developing policies and selecting and managing sites was emphasised across many of those responses. Collaboration, partnership working and building on the knowledge and values of local people was emphasised by both opposed and supporting respondents.
 - Those respondents also often highlighted concerns around taking a blanket approach to marine protection, and instead suggested building on the local knowledge and values of people who live by and work on the sea, and respect local sustainable fishing practices.
- Many of the respondents who opposed HPMA's questioned the decision to include a 10% target, and often worried that this could be disproportionately concentrated in the inshore area. Those who supported this target recognised the alignment with international commitments.
- Respondents who opposed also often found the 2026 timeline for delivery to be unrealistic, especially when considering the need to engage with local communities and to collect robust scientific evidence.
- While there was clear agreement in the importance protecting and conserving our marine environment, many respondents, who opposed, expressed the view that the HPMA policy as proposed was not the correct approach for achieving this outcome.

We did:

In June 2023, the Cabinet Secretary for Net Zero and Just Transition provided an update on HPMA's in the Scottish Parliament. In the statement, the Cabinet Secretary emphasised that the analysis of consultation responses was ongoing and that a full response of the consultation and next steps will be published after the summer recess. At the same time, the Cabinet Secretary shared some initial intentions in the statement in acknowledgement of the strength of feeling and concerns that the implementation of HPMA's by 2026 could limit aspirations for genuine collaboration with communities, which is integral to Scotland's approach to a fair and just transition. The Cabinet Secretary therefore announced her intention, that while remaining firmly committed to enhancing marine protection, the Scottish Government will no longer seek to implement HPMA's across 10% of Scotland's seas by 2026.

In response to the findings of the consultation – in particular to the highly polarised nature of responses, significant concerns on impacts to coastal and island communities, as well as concerns over the proposed 10% target and 2026 timeline for delivery – the Scottish Government will no longer seek to implement the proposed policy as consulted on. This means HPMA's will not be introduced in 10% of Scottish seas by 2026 and the draft HPMA Policy Framework and draft Site Selection Guidelines, as consulted on, will not be finalised and published. Furthermore, the Scottish Government no longer intends to progress the establishment of new legal powers for introducing HPMA's in Scottish inshore waters through a Bill in the Scottish Parliament this parliamentary term.

Despite firm opposition to the policy proposal, the consultation findings also showed clear support for the goals of protecting and conserving our marine environment. The Scottish Government will instead continue to work to enhance marine protection in line with our draft Biodiversity Strategy ambition for Scotland to be nature-positive by 2030 and will recognise the [EU Biodiversity Strategy for 2030](#) targets over the same timescale.

A key learning outcome emphasised by this consultation is the importance of stakeholder and community input. Your feedback will form part of our ongoing dialogue with you on how we work together to enhance marine protection.

The Scottish Government appreciates the time and thought respondents put into suggestions for alternative approaches and ideas, (with some examples found in Annex A) which will feed into our next steps on enhanced marine protection.

It is clearer than ever that we are in the midst of a nature and climate crisis and we must be prepared to take action proportionate with the scale of that challenge, but we must do so via a fair and just transition which empowers communities.

Moving forward, we are committed to work with coastal and island communities, fishers, aquaculture, tourism, and all affected sectors to enhance marine protection in Scotland for the benefit of all.

It is vitally important that we act to ensure that our seas remain a source of economic prosperity for our nation today, and in the future.

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1 Introduction

1.1 Format of this Consultation Report

This consultation report presents the key findings from the Scottish [Highly Protected Marine Areas consultation](#), and how these will be used for future policy development.

1.2 Background

The [Bute House Agreement](#) included the commitment to designate “a world-leading suite of Highly Protected Marine Areas (HPMAs) covering at least 10% of our seas by 2026”. The public consultation on the draft policy framework, draft Site Selection Guidelines, initial Strategic Environmental Assessment (SEA), initial Socio-economic Impact Assessment (SEIA), partial Island Communities Impact Assessment (ICIA) and partial Business and Regulatory Impact Assessment (BRIA) was carried out between December 2022 and April 2023 to seek views on the policy as proposed.

1.2.1 How the consultation documents were created

The consultation documents were produced collaboratively by policy officials in the Scottish Government Marine Directorate and staff from the Scottish Government’s nature advisors: NatureScot and the Joint Nature Conservation Committee (JNCC). NatureScot and JNCC led on the draft Site Selection Guidelines and the Scottish Government Marine Directorate led on the production of other consultation documents including the draft Policy Framework.

1.2.2 Engagement during Policy Development

1.2.2.1 Stakeholder Engagement

Early stakeholder engagement was carried out through a series of meetings during Spring and Summer 2022. Stakeholders were introduced to the commitment and delivery plan and their input informed the development of the draft Policy Framework and draft Site Selection Guidelines. Stakeholders engaged at this stage included:

- Association of Scottish Shellfish Growers (ASSG)
- British Trout Association (BTA)

- Coastal Communities Network (CCN)
- Communities Inshore Fisheries Alliance (CIFA)
- Convention of Scottish Local Authorities (COSLA)
- Crown Estate Scotland (CES)
- Oceana
- Regional Inshore Fisheries Groups (RIFGs) including:
 - North and East Coast Regional Inshore Fisheries Group (NECRIFG)
 - Orkney Sustainable Fisheries (RIFG)
 - Outer Hebrides Regional Inshore Fishery Group
 - Shetland Fisherman's Association (SFA)
 - West Coast Regional Inshore Fisheries Group (WCRIFG)
- Royal Yachting Association (RYA)
- Salmon Scotland
- Scottish Creel Fishermen's Federation (SCFF)
- Scottish Environment LINK
- Scottish Environment Protection Agency (SEPA)
- Scottish Fishermen's Federation (SFF)
- Scottish Renewables
- Scottish Sea Farms Ltd
- Scottish Seaweed Industry Association (SSIA)
- Scottish White Fish Producers Association (SWFPA)

1.2.2.1 Within Government

Broad engagement was carried out across different policy areas within the Scottish Government and the UK Government, and feedback from these discussions was incorporated into the drafting of the consultation documents.

1.3 Consultation Process

The consultation was launched on 12 December 2022 and in recognition of the Christmas break, the standard period of consultation was extended from 12 to 14 weeks. A further four-week extension was given in response to feedback regarding

the volume of information published, resulting in an 18-week consultation period, closing on 17 April 2023.

The consultation launch was announced by Mairi McAllan MSP, the then Minister for Environment and Land Reform¹, supported by social media content and stakeholder communications.

The consultation comprised a package of documents:

- **Consultation Paper** – set out the background, process and rationale for the consultation and contained the consultation questions.
- **Draft Policy Framework** - set out the proposed definition and aims of HPMA's and what this would mean for different activities taking place in Scottish waters.
- **Draft Site Selection Guidelines** - described the proposed process for identifying and selecting (future) sites to designate as HPMA's in Scottish waters.
- **Initial Sustainability Appraisal** - provided an assessment of any cumulative impacts (environmental and socio-economic) of the HPMA policy, based upon the draft policy framework and site selection guidelines.
- **Partial Island Communities Impact Assessment Screening Report (ICIA)** - completed the first two stages of the statutory ICIA process by identifying issues that merit further exploration through research and engagement with island representatives.
- **Partial Business and Regulatory Impact Assessment (BRIA)** - presented an initial assessment of the potential costs, benefits and risks of introducing HPMA's and their potential impacts on the public, private and third sectors.

Ten public online information sessions were run concurrently within the live consultation period. Initially seven sessions were held in February 2023, but due to demand and the extended timeline of the consultation, three additional sessions were added at the times most suitable for interested parties. These well-attended sessions introduced the consultation documents and provided opportunities for

¹ Since the publication of the consultation, there has been a ministerial change and Mairi McAllan MSP is now Cabinet Secretary for Transport, Net Zero and Just Transition

participants to ask questions in advance of providing their written response to the consultation.

Responses to the consultation could be made online via Citizen Space, by email, or in writing.

1.4 Consultation Analysis

The analysis of the consultation responses was carried out independently by Griesbach and Associates. The analysis report can be found [here](#)

2 Key Themes & Learning

While the proposals to introduce HPMA as consulted on will not be taken forward, the effort and volume of responses received produced key themes which will be used as learning points for future policy development.

The key themes are set out in this section divided into subthemes.

2.1 The Proposal

2.1.1 Support for Protecting Marine Environment

Respondents, including those opposed to HPMA as consulted on, commonly supported the need to protect and conserve our marine environment with many respondents suggesting alternative approaches.

2.1.2 Community Led Collaboration and Partnership

The importance of stakeholder and community input in developing policies and selecting and managing sites was another area of agreement emphasised across responses. Collaboration, partnership working and building on the knowledge and values of local people was emphasised by both opposed and supporting respondents.

2.1.3 Building on Existing Knowledge

Respondents also commonly highlighted concerns around taking a blanket approach to marine protection, and instead suggested building on the local knowledge and values of people who live by and work on the sea, and respect local sustainable fishing practices.

2.1.4 10% Target

Many respondents opposed to the policy proposals questioned the decision to include the 10% target, and often worried that this could be disproportionately concentrated in the inshore area. Those who supported this target recognised the alignment with international commitments.

2.1.5 Timescale

Respondents who opposed the policy proposals found the 2026 timeline for delivery to be unrealistic, especially when considering the need to engage with local communities and to collect robust scientific evidence.

2.1.6 Approach to stakeholder engagement

Some respondents who were opposed said there had been inadequate engagement with key stakeholders in the early stages of developing the proposals, particularly from fishing, aquaculture and related industries, local authorities, and local communities.

Respondents of all types argued for consideration of community impacts at an early stage in site identification, and emphasised the need for community engagement and input throughout the process.

Scottish Government Comment on Section 2.1 (The Proposal)

The Scottish Government recognises that overall, respondents support the need to protect and conserve our marine environment.

The Scottish Government appreciates the time and thought given by respondents to consider alternative approaches, and these (found in Annex A) will provide an important starting point for the future of enhanced marine protection. Recognising the feedback we received through the consultation, our key considerations for future policy development are:

- We are committed to working with communities who wish to take a bottom-up approach to enhancing marine protection in their local area;
- Our future approach to developing policy associated with enhanced marine protection will be based on establishing an early dialogue with local communities;
- We will ensure any future proposals that are brought forward are supported by a robust evidence base and consider collaboratively how to embed environmental and precautionary principles;

- We will work collectively to enhance protection of our marine environment supporting the Scottish Government's National Just Transition Outcomes found in Box X at [Just Transition - A Fairer, Greener Scotland: Scottish Government response](#).

The Scottish Government has existing programmes to protect and enhance the marine environment including through implementation of fisheries management measures for the existing Marine Protected Area network and for our most vulnerable Priority Marine Features (PMFs) where they are not already in place. The policy to introduce Highly Protected Marine Areas in 10% of Scotland's Seas by 2026, as consulted on, will not be continued.

We will instead continue to work to enhance marine protection in line with our draft Biodiversity Strategy ambition for Scotland to be nature-positive by 2030 and will recognise the [EU Biodiversity Strategy for 2030](#) targets over the same timescale. We will seek to work collaboratively with communities, industry and conservation organisations, establishing a dialogue to help them shape the development of policies that deliver these targets through enhanced marine protection.

Communities are central to how we shape the future of Scotland's seas, and we are committed to working with those wishing to pursue community-led marine protection in their local area.

Stakeholders who met with Scottish Government officials during policy development are listed in section 1.2 of this report.

The stakeholder engagement plan, which was published alongside the consultation, set out how stakeholders were intended to be involved throughout the processes of identifying and designating HPMAs. However, we recognise that many communities and groups felt that they were not engaged prior to the consultation launch. We have listened to these concerns and therefore, going forward, we will engage early and allow for more space to hear from island and coastal communities, marine industries and others with an interest in protecting Scotland's seas.

2.2 Impacts of the Proposal

2.2.1 Impacts on Islands and Coastal Communities (Including Socio-Economic Impacts)

Whilst some respondents identified benefits HPMA could provide, the majority of those who opposed the introduction of HPMA believed that the policy would have unacceptable social and economic impacts for island and coastal communities.

When asked specifically for views on the partial Island Communities Impact Assessment (ICIA) Screening document, 72% of those who responded expressed opposition.

There were some key areas regarding impacts, for which most respondents shared consensus on.

These included:

- communities should be closely involved in the process of identifying, developing and managing marine conservation measures;
- there needs to be an appropriate balance struck between conservation needs and the needs of local communities;
- there needs to be a just transition.

Amongst the respondents opposing HPMA, many suggested that socio-economic wellbeing should be a key indicator in measuring the success of any conservation initiative in Scottish seas.

These respondents thought the Socio-Economic Impact Assessment had failed to understand the magnitude of the potential adverse impacts, particularly on island and coastal communities.

Many also expressed the view that the imposition of a blanket ban on fishing in HPMA would disproportionately impact the fishing sector and island and coastal communities. This was judged by many to be unnecessarily restrictive and likely to result in a significant loss of local, fishing related businesses and livelihoods with the

potential knock-on effect of people unwillingly leaving their homes and communities to seek employment elsewhere.

Scottish Government Comment

The concern over potential disproportionate socio-economic impacts and the lack of sufficient time to assess and address these in consultation with marine users and island and coastal communities, was a key factor in the decision by the Scottish Government, that the policy as proposed would not be continued.

The Scottish Government will work collaboratively with relevant stakeholders and island and coastal communities, to identify views on how we should work together to continue to enhance marine protection.

As we take forward the work necessary to enhance marine protection, we will ensure it is done so in line with just transition principles.

2.2.2 Coherence with Marine Planning for Scotland

A number of respondents suggested alternative approaches to the conservation and protection of Scotland's seas, based on an evidence-based spatial marine management plan / framework. Respondents also said that such a plan or framework should take account of the values and needs (social and economic) of island and coastal communities. Commercial fisheries management measures and their enforcement were regularly raised in this context.

Scottish Government Comment

The Scottish Government remains committed to an evidence-based approach. [Scotland's Marine Assessment 2020](#) reports the evidence for the status of our seas. This evidence base underpins our [Marine Nature Conservation Strategy](#), which sets out an approach that is delivered through a combination of spatial protections and wider seas measures. We will continue to use evidence to prioritise the protection of our seas from damaging pressures.

The Scottish Government's approach to marine planning is informed by findings from statutory reviews to the [National Marine Plan in 2018](#) and [2021](#), as well as stakeholder feedback. This has highlighted the need to update the National Marine Plan, creating a second National Marine Plan (NMP2) to help tackle the twin climate and biodiversity crises and support our net zero ambition. The new NMP2 will adopt a blue economy approach. It will help to get the right framework in place to address the increasing competition for marine space and resources, and that acknowledges the variety of demands and needs for and from the marine environment.

Through marine planning, we will work with all sectors to manage the increased competition for our shared marine space, supporting our commitments to net zero, protection of the marine environment, energy security, food security, and thriving communities. We are considering options to undertake further spatially-explicit planning as part of the NMP2 development, whilst safeguarding existing, sustainable industry and balancing the need for protection and enhancement of the marine environment.

2.2.3 Inconsistency with other Scottish Government Policies

Those who opposed the proposals often perceived conflicts between the HPMA policy and a range of legislation, policies and initiatives. Respondents felt the impact on all sectors needed to be considered and for a just transition to be provided for those affected by the proposals, particularly in island communities.

Scottish Government Comment

The Scottish Government recognises that had the HPMA policy been progressed, there would have been a need to reconcile a wide range of views and potential impacts including both those identified in the consultation documents and by respondents opposed to the policy proposals in the consultation.

There are synergies between the concerns raised in relation to consistency with other Scottish Government policies and other concerns raised by respondents. In particular, some expressed views that policies in relation to the topic of marine

conservation and protection would benefit from a more bottom-up community led approach that need not necessarily entail banning of all extractive and depositional activities in order to achieve enhanced levels of protection.

The Scottish Government's response is to recognise the value of policy development through closer engagement with local communities and bottom-up support for enhancing marine protection. This approach will allow local input into shaping any future policy thus helping ensure support and allowing for a just transition for any marine users who may be impacted.

2.3 Evidence Base

In this section, the key themes from respondents have been split into sub-themes due to the size and complexity of the information on this topic.

2.3.1. Use of robust science and evidence

Many respondents commented (both those opposed to the draft HPMA approach and those who were supportive), that robust science and evidence were important aspects, and agreed with this draft principle. Respondents were also concerned about the availability of a robust evidence base and questioned how the evidence would be used in reality.

Scottish Government Comment

Science and evidence always have and will continue to underpin our approach to marine protection and conservation. Evidence comes in many forms (survey records, fishing catches, local knowledge, modelled data), each with varying degrees of confidence. It is therefore important that each evidence type is considered in a transparent way to help feed into discussions (see also section 2.3, subsection 4). In any future and ongoing policy development we will consider opportunities to discuss types of information available with stakeholders and their ambitions. We will also consider stakeholders ambitions in terms of evidence base, alongside information on

potential impacts and how to embed the environmental principles, including the precautionary principles in further policy development.

2.3.2. Requirement for Enhanced protection

Respondents questioned the need for further protection measures and evidence of deterioration of our seas, whilst others were supportive of stricter protection, mentioning the need for urgent action considering the climate and biodiversity crises.

Scottish Government Comment

There is a range of evidence available from a variety of sources that highlights concerning trends of deterioration in the marine environment. [Scotland's Marine Assessment 2020](#) (SMA 2020) identified concerns of varying severity and spatial scale for the status of most of the ecosystem components included in the assessment of species and habitats in Scotland's seas. For example, SMA 2020 identified many concerns for salmon and sea trout, biogenic habitats (e.g., mussel beds and seagrass), plankton, and the extent of physical disturbance to seafloor habitats. Good Environmental Status (GES) has not been achieved for most of the components (a summary of progress towards GES can be viewed on the UK [Marine Strategy Assessment Marine Online Assessment Tool \(MOAT\)](#)). An updated Marine Strategy Assessment is due in 2024, however the most current data from 2018 indicates that, at the UK level, GES has not been achieved for 11 out of the 15 indicators including birds, fish, seafloor habitats, non-indigenous species, or commercial fish. The UK report on the implementation of the EU Habitats Directive (under Article 17) was published in 2019 and provides information on the conservation status of habitats and species listed in Annexes of the Directive. Assessments are made for 16 marine species and 8 marine habitats. For these, the conservation status of 12 species and one habitat is unknown, for 3 species and 7 habitats it is unfavourable and only considered favourable for one species (grey seal). OSPAR has recently assessed the environmental status of the Northeast Atlantic ([OSPAR Quality Status Report 2023](#)) and points to trends in declining biodiversity and continued habitat degradation, emphasising additional measures are required to alter this course.

The Scottish Government has an ongoing programme of work to protect and enhance the marine environment (see section 2.3.3), which will help deliver conservation goals. However, to halt the biodiversity decline and ensure a maintained path of recovery, we must together continue to take action to enhance the protection in our seas.

2.3.3. Existing MPA network.

Amongst respondents who were opposed to the introduction of HPMAs, as consulted on, many felt that strengthening the existing MPA network should be the focus over any new designations, whilst others questioned the need for strengthening the existing MPA network and the evidence behind claims of ecosystem deterioration.

Scottish Government Comment

There is ongoing work to implement management measures for fishing activities within MPAs that don't yet have them, alongside additional measures outside these sites to protect the Priority Marine Features (PMFs) most sensitive to bottom contacting mobile gear. These measures are part of [Scottish Government's three pillar approach to marine conservation](#). The three pillars are: i) Species conservation ii) Site protection iii) Wider seas policies and measures. Completion of this work will help to achieve our aim of a well-managed MPA network, as well as contributing to maintaining the natural resources and services we depend on.

Since the [MPA Network – 2018 Report to the Scottish Parliament](#), an in-depth [assessment of Scotland's seas](#) was undertaken and published in 2020. Evidence within this report, alongside other information (see section 2.3, subsection 2), indicates the health of our seas is declining and that further measures are required in response to the loss of biodiversity, impacts associated with climate change and ocean acidification, and to continue to support the aim of sustainable use of Scotland's seas. The next MPA network report to Parliament is due at the end of 2024. It will focus on the status of the MPA network since 2018, including progress towards a coherent, well-managed network.

2.3.4. Local knowledge

Many respondents, both opposed and supportive of the policy proposals, highlighted that local knowledge should be valued and used in the evidence base to identify areas.

Scottish Government Comment

Local knowledge will be a vital component in the development of any new approach to enhance marine protection. We recognise that coastal communities and those whose livelihoods depend on Scotland's seas have invaluable knowledge of their areas. Inclusion of this knowledge will be considered alongside other sources of evidence to identify potential areas for enhanced marine protection. This will require adequate engagement with communities, marine users, and other stakeholders to collaboratively develop proposals and to ensure the success of these areas for both biodiversity and people.

2.3.5. Blue Carbon Evidence

Key Findings from Consultation Responses

Some respondents argued that there is a lack of evidence on this topic with too many unknowns, whilst others stated that it was an important aspect to consider and that it may help with climate change mitigation.

Scottish Government Comment

In the last decade, there has been a significant amount of blue carbon research both within Scotland and globally (see a [2023 review](#) here). Blue carbon habitats (e.g. seagrass beds) are known to have an important role in the removal of carbon dioxide (CO₂) from the atmosphere, which means they provide a nature-based solution to help mitigate the climate crisis. Blue carbon habitats can also play an important role in the long-term storage of carbon, with some habitats, including seabed sediments, storing carbon that has accumulated over thousands of years.

We acknowledge there are uncertainties surrounding the fate of buried organic carbon in certain habitats when it is physically disturbed and re-exposed to oxygen.

In particular, the magnitude of the impact is not currently well-understood, however disturbance to blue carbon habitats has the potential to impact long-term stores of blue carbon, which may affect climate change mitigation and further exacerbate the climate crisis. In recognition of the importance of the marine environment for naturally storing carbon, and the gaps in the evidence base to inform policy development, the Scottish Government established the Scottish Blue Carbon Forum (SBCF) in 2018. Nonetheless, this uncertainty will be considered in future discussions on enhanced marine protection.

2.3.6. Essential Fish Habitats

Some respondents questioned how the definition of 'essential fish habitats' was decided and there was some scepticism over their use/importance.

Scottish Government Comment

Critical fish habitats were specifically mentioned as a potential driver for HPMA identification in the Bute House Agreement and therefore were included in the NatureScot and JNCC advice on selection criteria. The term 'critical fish habitat' has not been used previously in a Scottish policy context but is analogous to the more commonly used term 'essential fish habitat' (EFH).

The concept of EFH is broadly used in fishery ecology and management, and in particular as an aspect of the ecosystem-based approach, making an important connection between protection of habitat for both sustainable fisheries and biodiversity outcomes. EFH is of such importance it is reflected in legislation in some countries, for example in the United States where the 1976 Magnuson–Stevens Fishery Conservation and Management Act defined EFH as:

"those waters and substrata necessary to fish for spawning, breeding, feeding, or growth to maturity".

This definition was therefore used for the draft site selection guidelines. Although the focus of EFH is often on finfish, the concept can extend to other relevant species, such as commercial shellfish (Rosenberg et al 2000, STECF 2006). Using this wide

definition allows the consideration of links between critical habitats and the services they are providing (e.g., nursery, feeding, refugia, spawning etc.).

EFH include habitats which not only provide a suitable or functional habitat, but where those habitats provide an added value, e.g., in greater contribution to egg/spawn survival (spawning grounds) or greater recruitment into adult populations (nursery grounds). As a result of this EFH, when in a healthy and productive condition, can contribute disproportionately to the viability of fish populations and the provision of associated ecosystem services. This is reflected in fisheries management where in a number of areas, including Scottish waters, restrictions have been implemented for the protection of commercial species at spawning or during the juvenile stage of their life cycle.

2.3.7. Sea level changes

Some respondents were unclear how enhanced protection or HPMA's could help with sea level changes.

Scottish Government Comment

Ecosystems close to the shore can play a part in protecting coastal communities from the impacts from storms and sea level rise. For instance, certain habitats such as kelp forests or seagrass beds can help stabilise sediments and attenuate/reduce wave energy thus slowing floodwater advancing and reducing coastal damage from storms. Degrees of protection to coasts are highly variable dependent on location and habitat type. Protection of such ecosystems from high levels of human pressures will increase their ability to provide coastal protection, in turn helping to protect assets onshore.

2.3.8. Enjoyment and appreciation

The importance of enjoyment and appreciation of the marine environment, and the people who would benefit from this, were questioned by a number of respondents. Others recognised the positive effects that enjoyment and marine recreation could bring to health and wellbeing and were pleased they were being considered.

Scottish Government Comment

Enjoyment and appreciation of the marine environment could arise from various outlets, including from leisure and recreational activities such as sailing and SCUBA diving, from nature-based tourism such as wildlife watching, or the sense of connectedness, spiritual or aesthetic appreciation felt when taking a coastal walk. These benefits can be valued by both local communities and visitors alike.

The importance of oceans and seas to our physical health and mental wellbeing have also been recognised as part of the social focussed outcomes of [the Blue Economy Vision for Scotland](#).

The economic benefit generated by marine tourism and recreation is closely linked to the quality of the natural environment and can be quantified in monetary terms.

Other aspects of enjoyment and appreciation such as spirituality, aesthetic appreciation and positive mental wellbeing are not as easy to quantitatively measure – especially as what constitutes “enjoyment and appreciation” may differ significantly between individuals and local communities.

Future policies that continue to enhance marine protection will require dialogue with stakeholders at a local level to determine the importance and inclusion of “enjoyment and appreciation” in considerations within individual localities as there is no “one size fits all”.

Respondents also suggested that there was a perceived bias towards “carefully managed enjoyment and appreciation” compared to the proposed prohibited activities, with statements that many of the prohibited activities follow stricter guidelines and are more stringently monitored and assessed than recreational activities.

Scottish Government Comment

We acknowledge that recreational activities range from wild swimming to jet skis/motorboat use, and therefore the risk factors associated with these recreational activities can vary significantly. To help users access and enjoy the marine environment responsibly, the use of guidelines and codes of conduct can help

mitigate risks (e.g., [Scottish Marine Wildlife Watching Code](#), [BSAC Diver Code](#), [The Green Blue](#), [WiSe Scheme](#)).

2.3.9. Monitoring

Some respondents commented that since the introduction of MPAs, monitoring to evaluate their effectiveness (including benefits to biodiversity) has been limited and therefore questioned the capacity for HPMAs to also be monitored.

Scottish Government Comment

The Scottish MPA Monitoring Strategy was published in 2017 and we are committed to gathering appropriate evidence to assess the condition and effectiveness of our MPAs, to meet legislative obligations. The Strategy sets out a framework and principles to guide monitoring in MPAs and includes aspects of adaptive management and close working with others to improve efficiencies. This strategy is due to be updated in 2026 and evidence from our MPA monitoring will continue to be used to inform our approach to marine protection in Scotland. It is important to note that routine monitoring will not occur in every MPA, and a risk-based approach will be taken to prioritising monitoring activities as detailed in the Strategy.

2.4 Consultation Process

The consultation generated a high degree of interest indicating a willingness to engage with the Scottish Government. From the respondents who were slightly or very satisfied with the process, the comprehensive nature of the consultation was noted and the opportunity it gave to provide comments was welcomed. The information sessions and extended deadline were regarded as helpful.

However, there were widespread criticisms about the process, the accompanying documents and the questions, with the majority of respondents stating they were slightly or very dissatisfied. Criticisms were aimed at a range of issues such as the complexity of the questions and lack of accessibility.

More detail can be found in Annex 5 of the consultation analysis.

Scottish Government Comment

The subject of HPMAs is a complex one that comprises many different issues. As such, the consultation was significant in volume and covered a wide range of topics.

Every effort was made to ensure that questions were clear, objective and easy to navigate. The provision of a scale allowed respondents to indicate their level of support or opposition for/against a topic and text boxes accommodated a large variety of input. In recognition of the technicality of some of the information presented, care was taken to ask specific questions and signpost to the associated information in the relevant document.

In view of the consultation launch date of 12 December 2022, an extension of two weeks to account for the Christmas break, was added to the standard 12-week consultation period. In recognition of the volume of information published, a further four-week extension was subsequently applied to the deadline, resulting in an 18-week period of consultation.

However, the results of the online consultation questionnaire were clear: the majority of respondents who used Citizen Space were slightly or very dissatisfied with the consultation. We value this feedback, and every effort will be made to create positive changes to how we deliver any future consultations on marine protection.

Additionally, this feedback has been shared with relevant Scottish Government teams, as well as to the software providers, to inform future improvement work.

As set out in the consultation, the intention was always to develop proposals hand in hand with those who may be impacted by them. That is why we chose to consult early in the process. We want our seas to be sustainable for the future and want to work with Scotland's communities to reach that outcome together. There will be a continued and improved focus on early engagement and collaboration with stakeholders on future policies to enhance marine protection.

3 Next Steps

Moving forward, we are committed to work with coastal and island communities, fishers, aquaculture, tourism, and all affected sectors to enhance marine protection in Scotland for the benefit of all.

Our next steps will involve taking time to gather views from people across Scotland about how we improve the state of our marine environment in a way that ensures coastal communities thrive and that all of Scotland benefits from one of our most valuable ecosystems.

We know there are lots of innovative ideas out there for how we can improve protection, including some which were put forward as part of the consultation responses (See Annex A for some examples), and these are exactly what we want to hear and discuss further with stakeholders.

It is very important that those who will be affected by policies are engaged in their development. The viability of coastal and island communities matters very much to this government and we will ensure that any proposals brought forwards are pursued in line with just transition principles. So, too, do the matters of cultural importance that have been made clear at the beginning of this process.

It is vitally important that we act now to ensure that our seas continue to be a source of economic prosperity for our nation today, and in the future.

Acknowledgements

This report has been collated with Nature Scot and the Joint Nature and Conservation Committee (JNCC) feeding into their areas of responsibility and inputting to the report as a whole.

Annex A – Suggestions and alternative approaches for HPMAs from consultation responses

There were a vast number of comments, suggestions, ideas and alternative approaches within the consultation responses and the list below provides some examples separated into themes.

Communities

A number of different models were suggested to improve the process:

- Local Coastal Authorities should be established (following the Local Harbour Authority model), to resolve conflict and engage with the local communities
- Make any legislation "enabling" to allow local authorities to configure the best fit for local fisher folk. Make the implementation "local", not "national". Make the restrictions on the basis of scale to enable all small companies, boats, communities to thrive.
- The Clyde Fishermen's Trust 'A Vision - The Clyde Fishery' should be considered as a modern, carbon conscious and community empowered model.
- Allowing designated routes for cables between sea infrastructure and the shore to safeguard community's reliance on under-sea communication and power cables and additionally providing navigational safety.
- Local communities should be able to designate their own, small, HPMAs to suit their needs such as "no-take" nurseries. Such areas could be policed more effectively locally.
- A community Well Being Assessment is required, focussing on social, economic and environmental impacts.
- The use of Regulating Orders for all inshore shellfish fisheries.
- Safeguarding the designated shellfish water status.

Evidence

- Suggestion to establish a group of marine experts and representatives of local coastal communities to consider what, if any, new restrictions are required and examine evidence of how successful such restrictions have been elsewhere.
- The importance of cetaceans in the considerations for further protection was highlighted, indicating their value in different ways. Some examples below:
 - Cetaceans contribute to ocean mixing and releasing nutrients (via migration, feeding, defecating), which in turn stimulates enhanced primary production (thus absorbing carbon dioxide and producing oxygen) and contributing to mitigating climate change.
 - Whales live a long time and act as living carbon stores, when they die the carbon sinks to the seafloor where it can remain for thousands of years – carbon stocks.
 - Evidence showing the potential for successful recovery of cetaceans if major threats such as such as entanglement and ship-strikes are managed well.
 - Scotland is of international importance for cetaceans and basking sharks, and many areas of critical habitat need protection, including essential fish habitats (to support feeding, breeding and calving).
- Monitoring plans should include further investigation of cetacean prey dependencies and updating feeding ecology.

Alternative Solutions

- Preference for several smaller, legislated “no take zones” over HPMA.
- Use existing measures within the existing MPA structure and the introduction of Priority Marine Features management outside the MPAs.
- A pilot scheme trialling two highly protected marine sites (e.g. one inshore and one offshore) to measure their effectiveness and scope what is required for a full HPMA network and that would balance needs of fishing and other stakeholders.

- Focus on protection from impacts from bottom contact trawling/dredging whilst allowing low impact methods to continue.
- The reintroduction of the three mile limit.
- Consider closed system fish farms to reduce the release of food, excrement, disease, chemicals, farm escapes etc.
- Investigate low-impact artisanal fishing at sustainable levels, as part of the economic gain from any proposals: if activities are sustainable (e.g. once stocks reach a certain threshold), then they could continue.
- Prioritise stricter more general protection for the marine environment (e.g. contaminants, pollution, plastics sewage) as this would benefit all stakeholders more.
- An ecosystem-based approach to marine management should include effort- and fishing technique-based management as well as spatial management where necessary (similar to Norwegian model).
- Use existing MPA sites as 'buffer zones' to only permit low-impact activity, such as potting, creeling, diving and hand lining, alongside strict protection (no take areas) as could offer an opportunity to support lower-impact commercial industries, whilst also supporting ecosystem recovery.
- Ensure all marine tourism operators are WISE Scheme certified (or similar) to be able to operate and have a requirement to publish their environment and biodiversity policies.
- Additional considerations for further protection:
 - Areas with high levels of biodiversity
 - Habitats in deep water which are particularly vulnerable to impacts
 - Habitats supporting connectivity, particularly for migratory species
 - Essential fish habitats in freshwater for diadromous fish
 - Coastal areas where there are terrestrial land-use impacts
- Blanket bans on human activities should be considered carefully, and instead distinctions should be made in the management of what could be considered high and low-impact activities.



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