Highly Protected Marine Areas Policy Framework

December 2022

Scottish Government
Riaghaltas na h-Alba

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1. Introduction

This Policy Framework sets out the Scottish Government commitment to designating a suite of Highly Protected Marine Areas (HPMAs), our aims for HPMAs and our proposals for what HPMAs are and what they will mean for different marine activities. It also describes how we will account for socio-economic factors alongside ecological considerations and policy objectives for sustainable industries, net zero targets and existing conservation measures. The commitment to designate at least 10% of Scotland's seas as HPMAs by 2026 is set out in the Bute House Agreement.

The policy framework and accompanying site selection guidelines as a whole are intended to apply to both Scottish inshore waters (0-12 nautical miles from the coast) and Scottish offshore waters (beyond 12 nautical miles). The selection and designation of HPMAs in offshore waters is subject to the prior transfer of relevant powers by the UK Government to Scottish Ministers. Sections of this document which set out our proposals in relation to legal powers to designate HPMAs therefore relate only to inshore waters. Some of the marine activities, which take place in Scottish inshore and offshore waters, relate to matters which are currently reserved to the UK Government, i.e. are not in the competence of the Scottish Parliament. The prohibition or management of these reserved activities will be subject to agreement with the UK Government. We will work closely with the UK Government to realise our vision for HPMAs in relation to offshore waters and reserved matters.

Scotland's seas are some of the most biologically diverse in Europe, supporting thousands of species of plants and animals across a wide variety of habitats. We take our role as custodians of our waters seriously. We are committed to working in collaboration with the users of our seas to ensure a clean, healthy, safe, productive and biologically diverse marine and coastal environment that meets the long-term needs of people and nature. This includes managing our seas sustainably to protect their rich biological diversity and to ensure that our marine ecosystems continue to provide economic, social and wider benefits for people, industry and society. Our long-term goal, as set out in our Blue Economy Vision, is that by 2045 Scotland's shared stewardship of our marine environment supports ecosystem health, improved livelihoods, economic prosperity, social inclusion and wellbeing.

The world faces the challenges of climate change and biodiversity loss - twin global crises which require us to work with nature to secure a healthier planet. In Scotland, the Scottish Marine Assessment 2020 showed that a number of marine species were in decline. If we do not address biodiversity loss, there is a risk that the marine environment will not remain resilient enough to provide the resources and benefits we gain from it for the long term.

The 2019 Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment of Biodiversity identified five direct drivers of biodiversity loss globally:

- changing use of the land and sea
- direct exploitation of organisms
- climate change
- pollution
- invasive non-native species

The Scottish Government is committed to introducing HPMAs covering at least 10% of inshore and offshore waters by 2026. HPMAs in Scottish waters will allow for the protection and recovery of marine ecosystems, contributing to halting biodiversity loss and aiding our efforts to mitigate and adapt to the effects of climate change. They will build upon our existing network of Marine Protected Areas (MPAs), representing a significant increase in the overall level of protection afforded to Scotland's seas.

HPMAs will afford high levels of protection to marine ecosystems by limiting or prohibiting specific human activities that may have negative impacts. Carefully managed recreational activities may still be allowed at non-damaging levels. This will provide the best possible chance of protecting and restoring marine ecosystems so they can continue to provide vital ecosystem services, such as climate regulation and provision of food and support marine industries and the communities that depend upon them. We expect HPMAs to bring some socio-economic benefits through the increased protection and recovery of marine areas. We also expect additional benefits, including for carefully managed tourism and recreational

activities, opportunities for research and education, and positive impacts on human health. The introduction of HPMAs will also contribute to achieving our UK and international environmental commitments (Box 1 below). HPMAs are also an important mechanism for delivering the commitment that we set out in our National Strategy for Economic Transformation to rebuild Scotland's natural capital by 2032. Only by protecting and enhancing our marine natural capital, can we secure the long-term economic and wellbeing benefits that we derive from our sea.

Our seas are vital to Scotland's population and key to our identity. They sustain the livelihoods of thousands of people in communities up and down the country, providing food, energy and a thriving marine tourism industry, among many other benefits. HPMAs will ultimately help to protect the resources we all rely on, ensuring we can continue to benefit from our rich seas for generations to come. Designating HPMAs will impact how we use and interact with our marine environment but making space for nature is critical to address biodiversity loss and needs to occur alongside the growing demand for marine space for human activities.

Box 1 - Meeting our domestic and international commitments

The UK Marine Strategy Regulations 2010 provide a comprehensive framework for the four UK administrations to work together to assess, monitor and take action to achieve or maintain Good Environmental Status (GES) across UK waters. The most recent assessment, published in 2019, found that several elements were not achieving GES, including seabirds, marine mammals, and seabed habitats. The introduction of HPMAs should improve this situation and contribute to achieving GES for these elements.

The proposed vision used in the Scottish Biodiversity Strategy consultation states that by 2045 we will have substantially restored and regenerated biodiversity across our land, freshwater and seas. Our natural environment of plants, animals, insects, aquatic life and other species will be richly diverse, thriving, resilient and adapting to climate change. Everyone will understand the benefits from and importance of biodiversity and will play their role in the stewardship of nature in Scotland for future generations.

The introduction of HPMAs also supports us meeting our international environmental commitments. They will contribute to the strategic objectives set out by the OSPAR Commission for the protection of the marine environment of the North-East Atlantic in the OSPAR North-East Atlantic Strategy 2030, which was adopted in October 2021. The vision for this strategy is a clean, healthy and biologically diverse North-East Atlantic Ocean, which is productive, used sustainably and resilient to climate change and ocean acidification.

Following EU Exit, the Scottish Government has committed to maintain or exceed EU environmental standards. The EU Biodiversity Strategy for 2030 sets a target of 'strict protection' of 10% of the EU's seas by 2030. Our commitment to introduce comparable high protection to 10% of Scotland's seas by 2026 exceeds this EU target.

The UN Convention on Biological Diversity post-2020 global biodiversity framework aims to put nature on a path to recovery by 2030. Designating HPMAs in Scottish waters will make a significant contribution to achieving this aim in Scotland. HPMAs will also contribute toward achieving the UN Sustainable Development Goal 14 – Life Below Water, in particular targets 14.2 and 14.5.

2. Defining Highly Protected Marine Areas

There is no internationally agreed definition of what constitutes “high” levels of protection for marine areas. In defining HPMAs in Scotland, we have considered the International Union for Conservation of Nature (IUCN) protected area categories and the European Union’s (EU) Biodiversity Strategy for 2030.

HPMAs will align with the EU Biodiversity Strategy for 2030, which proposes that 10% of EU seas should be under strict protection by 2030.

It is proposed that HPMAs will also broadly align with the three most strictly protected categories set out by the IUCN[1]. These provide nature with significant levels of protection from human activities while, in some cases, allowing for recreational enjoyment.

Proposed description of HPMAs in Scottish waters

HPMAs are proposed to be designated areas of the sea that are strictly protected to allow the marine ecosystems within to recover and thrive. These areas safeguard all of their marine life for the benefit of the planet and current and future generations; providing opportunities for carefully managed enjoyment and appreciation.

[1] These categories are Ia – strict nature reserve, Ib – wilderness area and II – national park. For more information on how the IUCN categories are specifically applied to MPAs see Guidelines for Applying the IUCN Protected Area Management Categories to Marine Protected Areas.

3. Aims of HPMAs

Designating 10% of Scotland's seas as HPMAs is intended to deliver demonstrable benefit to the achievement of the Scottish Government's vision for the marine environment and make a significant contribution to the achievement of broader UK, regional and global conservation ambition (Box 1 above).

Scotland's Nature Conservation Strategy for the marine environment outlines a 'three pillar' approach to nature conservation (species conservation, site protection, and wider seas policies and measures), in which, HPMAs are a part and aims to:

- Facilitate ecosystem recovery and enhancement
- Enhance the benefits that coastal communities and others derive from our seas
- Contribute to the mitigation of climate change impacts
- Support ecosystem adaptation and improving resilience

The designation and management of HPMAs will protect all elements of the marine ecosystem within their boundaries, including the seabed, water column habitats and everything that lives in the protected area. This will protect not only the species and habitats within them, but also the complex web of interactions and processes that form a marine ecosystem.

HPMAs will still allow for some recreational activities to continue, provided they are at non-damaging levels. This means that the entire site (i.e. all habitats and species and their supporting environment) would be protected from risk of damage: meaning that harm would be prohibited, irrespective of severity or duration, unless the effects were negligible to all marine biodiversity and associated functions and resources within the boundaries.

In areas where human activity has been relatively low, HPMAs will ensure the marine ecosystem is preserved and allow for any recovery to occur as necessary. This will also enable the effects of prevailing conditions to be monitored.

In areas where there have been more significant levels of human activity, HPMAs will allow for the recovery of the marine ecosystem to a more natural state. Some HPMAs could also allow for active restoration of historically present habitats or species, such as seagrass and native oyster beds.

4. Relationship with the existing MPA network

Scotland's existing MPA network has been developed to conserve a representative range of species and habitats in our waters. The Scottish MPA network is currently made up of several different designations, including Nature Conservation MPAs, Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)[2]. These sites are designated for the protection of specific named features (including marine habitats, mobile species and geomorphological features) and contribute to the UK and OSPAR MPA Networks. Conservation objectives are set for each MPA in order to conserve or recover listed features. There is a presumption for sustainable use of MPAs, meaning that activities can continue, providing they do not hinder achievement of the conservation objectives.

We intend for HPMAs to form part of Scotland's MPA network. They will complement and add value to the existing MPA network by affording high levels of protection to all marine biodiversity and associated ecosystem services within sites. The level of protection will be much stricter than for MPAs, with a more limited range of uses allowed.

HPMAs may overlap either fully or partially with existing MPAs in order to maximise the conservation benefits associated with stricter management approaches in a particular geographic location. HPMAs may also be located outside the current MPA network.

Alongside the introduction of HPMAs, the Scottish Government is also working on delivering fisheries management measures for existing MPAs, where these are not already in place, as well as key coastal biodiversity locations outside of these sites.

[2] Nature Conservation MPAs are designated under the Marine (Scotland) Act 2010, and SACs and SPAs are designated under the 'Habitats Regulations'.

5. The HPMA process

5.1 Roles and responsibilities

The introduction of HPMAs is a significant piece of work involving several organisations working together over a number of years. They are also being introduced at time when the Scottish Government is taking forward other marine protection policies, such as fisheries management measures in MPAs and consulting on introducing a cap on inshore fishing activity (up to three nautical miles). The introduction of HPMAs will also need to take account of Scotland's National Marine Plan as well as the development of Scotland's National Marine Plan 2, as set out in section 5.2 and in section 6. Once HPMAs are designated they will inform future iterations of the National Marine Plan.

Our statutory nature advisors, NatureScot and the Joint Nature Conservation Committee (JNCC), are responsible for developing ecological site selection guidelines, applying these to identify potential HPMA sites and engaging with stakeholders to refine these.

Scottish Ministers will decide which proposed sites are to be taken forward for consultation. At the end of the process, following consultation, responsibility for designating HPMAs also rests with Scottish Ministers.

5.2 Geographic scope

The intention is that this policy framework and the HPMA selection guidelines apply to the area of Scotland's seas below mean low water springs (MLWS) and out to the limit of the Exclusive Economic Zone (EEZ) adjacent to Scotland[3]. A special area of shared competence with the Faroe Islands is not included due to limits on our ability to manage fisheries and other activities relating to continental shelf resources by third countries in this area[4].

[3] As defined by the Exclusive Economic Zone (EEZ) Order 2013
[4] This special area is set out in the Agreement between the Government of the Kingdom of Denmark together with the Home Government of the Faroe Islands, on the one hand, and the Government of the United Kingdom of Great Britain and Northern Ireland, on the other hand, relating to Maritime Delimitation in the Area between the Faroe Islands and the United Kingdom, 18 May 1999.

There will be some areas where HPMAs will not be situated because it would not be practical or reasonable to remove or relocate existing activities or infrastructure which are not compatible with HPMA status. These include areas of national importance such as those earmarked for renewable developments (such as ScotWind and the Innovation and Target Oil and Gas (INTOG) leasing round areas and the areas of associated transmission infrastructure), existing active renewables and oil and gas infrastructure, existing ports and harbours, and some areas where defence activities are carried out. We also propose that existing active cables are excluded from the HPMA selection process as it would not be practical to move them. Avoiding these areas is not expected to significantly affect the HPMA site selection process. Energy developments are discussed in more detail in the sector specific sections within this policy framework.

5.3 Site selection guidelines

NatureScot and JNCC have jointly developed a set of HPMA Site Selection Guidelines which we are consulting on in parallel with this policy framework document.

The guidelines set out a five-stage site selection process, followed by a network level assessment. The process will accommodate third-party proposals for HPMAs. Application of the selection guidelines will explore the potential contribution an area could make towards achieving the aims of HPMAs, as set out in section 3. The process will be driven by the presence of specific functions and resources of significance to Scotland's seas and will optimise ecological, climate, social and cultural benefits whilst minimising significant impacts where possible. NatureScot, JNCC and the Scottish Government will work with stakeholders to apply the guidelines to identify a suite of HPMA proposals for consideration by Scottish Ministers and subsequent consultation.

5.4 Ensuring socio-economic factors are considered

Making space for nature is critical to address biodiversity loss, contribute to climate change mitigation and adaptation, and ensure future generations can continue to benefit from our seas. However, we recognise that there is increasing competition for

marine space and that HPMAs will impact how we interact with and utilise the marine environment.

A key aim when introducing HPMAs will be to reduce and, where possible, mitigate potential negative socio-economic impacts of designating sites. We will consider socio-economic factors alongside ecological data as part of the site selection process. In addition, socio-economic impacts are analysed in the following assessments which are considered as part of the HPMA decision-making process:

- We have conducted an initial Sustainability Appraisal, made up of an initial Strategic Environmental Report and an initial Socio-Economic Impact Assessment. These set out our methodologies for assessing environmental and socio-economic impacts and will be updated once specific sites have been proposed to assess their potential impacts.
- To ensure that HPMAs do not impact on lifeline services and that there are no significantly differential impacts on our remote and island communities compared to communities on the Scottish mainland, we have conducted a partial Island Communities Impact Assessment (ICIA) screening report (which forms part of this consultation). Responses to this report will be used to complete the screening document and make a determination on whether an ICIA is required. Depending on this determination, we will conduct a full ICIA once specific sites have been proposed.
- Aim to mitigate negative impacts on businesses and individuals where these are significant. We have conducted a partial Business and Regulatory Impact Assessment (BRIA) (which forms part of this consultation) with a view to completing a full BRIA once the consultation has been completed. Once specific sites have been proposed we will conduct site specific BRIAs.

More detail on what the designation of HPMAs will mean for different marine activities is provided in section 6 covering sectoral considerations.

5.5 Use of evidence

HPMA designation will use the best available evidence. In addition to existing data held by NatureScot and JNCC, this could also include information from a variety of

national or local sources such as industry, conservation organisations and interest groups, recreational organisations, academia and individuals. Evidence in a range of formats will be considered, for example direct sampling data, remote-sensing data, modelled data, and social data.

Whilst there will be a preference for relying upon existing data wherever possible to identify potential locations for HPMAs, the process of designating sites will be adaptive and responsive to new datasets. Work will include the identification, collation and analyses of existing data sets where necessary to address knowledge gaps. There will be opportunities during the site selection and assessment process for stakeholders to contribute to the evidence base.

More information on how evidence will be used during the selection process can be found in the Site Selection Guidelines.

5.6 Involving stakeholders

Our aim throughout this process is to ensure that it is fair, transparent and inclusive. Given the level of restrictions that HPMAs will place on human activities, a range of different stakeholders and stakeholder groups will be impacted by their introduction.

The identification of suitable HPMA sites in the seas around Scotland will be undertaken in collaboration with marine stakeholders, particularly those who have an interest in or may be affected by HPMA proposals. We will engage with stakeholders at all key stages of policy development including in the process of selecting sites proposals and will consult with stakeholders on site proposals before sites are designated.

To help guide our engagement we have produced a Stakeholder Engagement Plan. This sets out how and when stakeholders can engage throughout the process of designating HPMAs, including engagement through cross-sectoral workshops and formal consultation.

6. Sectoral considerations

6.1 Overview

The introduction of HPMAs will impact how we all use and interact with the marine environment. However, we recognise that there are differences in the types and scales of individuals and businesses that will be affected.

Engaging with these different sectors to fully consider socio-economic factors will be critical as we refine site proposals during the selection and assessment process. Another key aim will be working to ensure that, where possible, impacts are not disproportionately focused on some sectors, and that the benefits of HPMAs are spread as widely as possible.

The sections below set out some sector-specific considerations in greater detail. This includes:

- whether activities are proposed to be restricted
- whether areas will be scoped out of consideration as HPMAs (i.e. excluded from the site selection process)
- key issues and considerations to be addressed during the HPMA selection and assessment process
- key issues and considerations to be addressed in the legal powers being sought to regulate activities

For further information on how sector specific socio-economic impacts will be considered during the site selection process please see Appendix B of the Socio-Economic Impact Assessment.

6.2 Commercial fishing

It is intended that commercial fishing of any kind and by any type of vessel will not be allowed within HPMAs. This includes fishing with static gear, mobile gear and hand collection by divers.

It is proposed that fishing vessels will be allowed to transit through HPMAs. For the purpose of monitoring and to facilitate enforcement of fishing restrictions in HPMAs, it is proposed that additional requirements are introduced for vessels to transit through certain HPMAs, such as:

- minimum speed requirements for transiting sites to help ensure that fishing is not occurring
- a requirement to lash and stow all fishing gear whilst transiting sites
- enhanced reporting requirements for vessel monitoring systems

The introduction of additional requirements will be assessed and developed during the site selection process.

Several Fishery Orders grant the applicant exclusive fishing rights for a specified area and a limited time. There are currently 5 Several Fishery Orders in force. Separately, there is one Regulating Order in force, the Shetland Islands Regulated Fishery (Scotland) Order 2012/348 which confers on the Shetland Shellfish Management Organisation the right of regulating a fishery for oysters, mussels, cockles, clams, lobsters, scallops, queen scallops, crabs, whelks and razorshells on the bed of the sea adjacent to the Shetland Islands for a period of 15 years until 31st January 2028.

Should a site identified as an HPMA overlap with an area covered by a Several Fishery Order or Regulating Order, it is proposed that, upon renewal, the area covered by the HPMA would be excluded from the order. No new Several Fishery Orders or Regulating Orders would be granted in HPMAs.

Scotland's commercial fishing fleet and sea fisheries are significant contributors to rural and coastal economies and to the food and drink economy, playing an important part in many remote and potentially fragile communities. Scotland accounts for just over 8% of the total UK population[5], but landings by Scottish vessels accounted for 63% of the tonnage and 59% of the value of all landings by UK vessels in 2020[6]. While employment in the fishing fleet is a small percentage of total employment in Scotland (0.2% of the Scottish labour force in 2020[7]), it accounts for a higher percentage of employment in island communities.[8] However, beyond those directly employed at sea, the Scottish fishing industry also supports a range of jobs in the seafood processing sector – in 2019 this provided employment for 6,800 people[9].

Scotland's Future Fisheries Management Strategy sets out our approach to managing sea fisheries in Scotland in partnership with our stakeholders through 'co-management' and in a way that balances environmental, social and economic interests. Sustainability, support for biodiversity and consideration of the wider ecosystem is at the heart of how we manage Scotland's fisheries and protect our marine environment and vital to ensure we can maintain our fisheries for future generations. Protecting critical fish habitats will contribute to the long term sustainability of the fishing industry. The updated UK Marine Strategy Assessment (2019) noted the spatial extent of damage to the seabed from fishing gear was greater than that caused by other activities. Removal of all forms of fishing pressure within HPMAs is one way to reduce this pressure and contributes to achieving and maintaining Good Environmental Status whilst realising the outcomes of our Blue Economy Vision.

We recognise that the fishing industry has faced significant challenges associated with the COVID-19 pandemic and the impacts of the UK's exit from the European

[5] Figure taken from Population estimates for the UK, England and Wales, Scotland and Northern Ireland - Office for National Statistics
[6] Figures taken from Scottish Sea Fisheries Statistics 2020
[7] Figure taken from Scottish Sea Fisheries Statistics 2020
[8] This is five per cent in Shetland, three per cent in Orkney and two per cent in Na h-Eileanan Siar - Scottish Sea Fisheries Statistics 2020
[9] Figure taken from Scotland's Marine Economic Statistics 2019

Union. There is also increasing competition for space from marine renewable developments, marine conservation measures (including the existing MPA network) and other sea users. HPMAs will place further spatial restrictions on the fishing industry.

We will engage with fishers when developing HPMAs. Fishers will be able to provide valuable information about known fish congregation areas which are important for spawning and recruitment of our commercial fisheries, as well as spatial information to help us understand where fishing activity occurs, particularly for sectors of the fleet not currently covered by vessel monitoring and tracking requirements. This will help us to consider the positive and negative impacts of different proposed site locations, it will also help us to understand cumulative impacts and help us to minimise as far as possible any unintended consequences of displacement.

The Bute House Agreement has expedited and built on our 2020-2030 Fisheries Management, which puts sustainability at the heart of how we manage Scotland's seas. We have committed to consulting as soon as is practicable on inshore fisheries proposals to introduce a cap (based on current levels) on fishing activity in inshore waters up to three nautical miles; review the status of latent scallop entitlements; and extend the requirement for tracking and monitoring to all commercial fishing vessels within this parliamentary session. These proposals will complement spatial marine environment measures such as HPMAs and MPAs by further protecting the inshore seabed, progressing the objective of achieving and maintaining good environmental status for Scotland's seas.

6.3 Recreational activities

Prohibited recreational activities

It is intended that recreational fishing of any kind will not be allowed within HPMAs. This will include all fixed engine fisheries, net and coble fisheries, creel fisheries, rod and line fisheries (including catch and release) and hand gathering operating in areas below MLWS. Recreational fishing activities in areas above MLWS will not be affected as these areas will not be included within HPMAs.

Recreational collection by any method of flora, fauna, natural materials (e.g. crustaceans, molluscs, seaweed, fossils, shells, rocks, sediments, seagrass, algae) would also be prohibited below MLWS.

Other recreational activities

It is intended that other recreational activities (e.g. use of motorised and non-motorised vessels, personal watercrafts, windsurfing, swimming, snorkelling and SCUBA diving) will be allowed within HPMAs at carefully managed levels. This means that restrictions or measures to control these activities will only be introduced if it is considered necessary based on advice from NatureScot to achieve the purpose of a HPMA. Where recreational activities have no damaging impact within a HPMA they are not proposed to be restricted. For example it is unlikely that recreational swimming would require to be restricted or managed in any form due to the negligible impact of the activity.

Where appropriate, guidance will be produced to help users carry out activities in a responsible manner, consistent with the aims of HPMAs. This could include, for example, the provision of guidance on where within a HPMA leisure activities with personal watercraft are allowed at certain times of the year.

In cases where guidance is considered insufficient, the activity may need to be prohibited or restricted in the order which designates a HPMA. This could include restrictions to carry out certain recreational activities in certain parts of the HPMA and/or at certain times of the year.

It is proposed that appropriate necessary legislation will allow for the introduction of a permitting system. Such a system could be introduced to limit the number of recreational vessels which can be in a HPMA at particular times e.g. in mass participation events, or to manage wildlife tour operations. It could also apply to any other recreational activity for which reliance upon guidance would be insufficient to avoid damage to the protected ecosystem due to the nature and intensity of the recreational activity.

Marine tourism is a key sector for Scotland, contributing significantly to the economy and employment in rural and coastal locations. The sector generated £598 million Gross Value Added (GVA) and employment for 33,100 people in 2019[10]. Marine tourism activities are also important for our happiness and wellbeing and raising the profile of coastal communities.

The marine tourism sector in Scotland, as with the tourism sector globally, has been severely impacted by the COVID-19 pandemic. There is also increasing competition for space from other sea users.

HPMAs will not be no-go areas designed to keep out all human activities. Anyone living in or visiting Scotland should be able to enjoy and connect with our marine environment in a responsible way that does not damage the environment. The marine tourism industry relies on Scotland's unique natural landscape and iconic species, so it is vital that we protect and enhance these resources so that they can continue to be enjoyed and provide employment.

[10] Figures taken from Scotland's Marine Economic Statistics 2019.

6.4 Aquaculture (finfish, shellfish and seaweed)

It is intended that aquaculture of any form, including finfish, shellfish and seaweed cultivation, will not be allowed within HPMAs.

This would mean that consents for new aquaculture sites will not be granted within HPMAs and, in the event of overlaps, any existing sites within HPMAs will need to relocate in order to allow for recovery of natural processes within the HPMA. Activity in areas above MLWS will not be affected as these areas will not be included within HPMAs.

Aquaculture is an increasingly important industry for Scotland, helping to sustain economic growth in the rural and coastal communities of the north and west. While much of Scotland's aquaculture products are exported, the sector also makes an important contribution to food security. Aquaculture generated £560 million in GVA in 2019, with employment in the sector increasing by 25% from 2010 to 2019[11].

The Scottish Government supports the sustainable growth of the aquaculture sector; however, it is important that action is taken to protect and enhance marine ecosystems to ensure that they are healthy and resilient.

The proposed policy to have no aquaculture sites in HPMAs will place spatial restrictions on where aquaculture developments can be situated. It will be important that we are able to take information from the aquaculture sector into account during the HPMA selection and assessment process and properly assess the impacts of proposed designations of new HPMAs. This is to minimise, as far as possible, negative impacts on the industry as a result of the potential requirement for existing aquaculture sites to relocate, including unintended consequences of displacement, such as spatial conflict between marine users.

We will also work with the industry to identify a process for removing and relocating sites in order to minimise financial and regulatory burdens as much as possible. This could include identification of suitable alternative sites for replacement of farmed

[11] Figures taken from Scotland's Marine Economic Statistics 2019

biomass or relocation. Factors that will inform the process include existing locational guidance and consideration of any transitional arrangements, such as completion of a production cycle before a site has to relocate. Whilst the location of any new aquaculture sites will need to be assessed with the consenting and legal framework, we are working to ensure that the determination procedures of new consents and licences are as efficient and effective as possible in order to allow for a smooth transition.

6.4.1 Finfish aquaculture

It is intended that finfish aquaculture will not be allowed within HPMAs.

This would mean that consents for new finfish aquaculture sites will not be granted within HPMAs and, in the event of overlaps, any existing sites within HPMAs will need to relocate. Activity in areas above MLWS will not be affected as these areas will not be included within HPMAs.

The Scottish finfish industry produces rainbow trout, brown trout and halibut but is dominated by the production of salmon. In 2019, Atlantic salmon accounted for around 98% of the aquaculture farm gate value[12] and was both Scotland's and the UK's number one food export[13]. Finfish farms are concentrated on the west coast of mainland Scotland, Western Isles, Orkney and Shetland and are key employers in many rural and island communities.

We will look to work with the finfish sector, as set out above, to ensure that it can continue to grow sustainably, whilst allowing for the required increases in protections for our marine environment.

[12] Scotland's Marine Economic Statistics 2019 - gov.scot (www.gov.scot)
[13] A Review of the Aquaculture Regulatory Process in Scotland (www.gov.scot)

6.4.2 Shellfish aquaculture

It is intended that shellfish aquaculture will not be allowed within HPMAs.

This would mean that consents for new shellfish aquaculture sites will not be granted within HPMAs and, in the event of overlaps, any existing sites within HPMAs will need to relocate. Activity in areas above MLWS will not be affected as these areas will not be included within HPMAs.

Shellfish production in Scotland is dominated by mussels (with 8,590 tonnes produced in 2021[14]) but oysters and scallops are also cultivated. Although, shellfish farms are located throughout the west coast, Western Isles, and Orkney the majority are found in Shetland, which accounts for about 70% of all shellfish produced by farms[15].

The shellfish industry, with the exception of some of the large-scale Shetland farms, is essentially still a cottage industry with small operators and crofters adding it to their other activities. During 2021 the shellfish industry employed a total of 303 workers (141 full-time and 162 part-time and casual) largely in rural and island communities[16].

The Scottish Government supports the sustainable growth of the aquaculture sector taking place in the context of increased protection for our natural environment. Although shellfish aquaculture is recognised as one of the most environmentally benign methods of food production[17], the need for ongoing human activities (both deposition and extraction) mean that this would not be compatible with the aims of HPMAs.

We will look to work closely with the industry throughout the site selection and assessment process to make sure that any socio-economic impacts from the

[14] Figure taken from Production - Scottish Shellfish Farm Production Survey 2021
[15] Figure taken from A Review of the Aquaculture Regulatory Process in Scotland
[16] Figures taken from Production - Scottish Shellfish Farm Production Survey 2021
[17] See Aquaculture - Scotland's Marine Assessment 2020

designation of specific sites are fully considered to make any potential relocations and changes required as smooth as possible.

6.4.3 Seaweed harvesting

It is intended that seaweed harvesting will not be allowed within HPMAs.

This would mean that consents for seaweed harvesting, where these are required, will not be granted within HPMAs and, in the event of overlaps, any existing seaweed harvesting within HPMAs will need to relocate. Provisions will be introduced to prohibit seaweed gathering which does not currently require consent. Activity in areas above MLWS will not be affected as these areas will not be included within HPMAs.

There may be limited cases where marine licences will need to be granted to remove seaweed for non-commercial purposes, for example for safe navigation or from around water intakes. Consents for the removal of seaweed for essential non-commercial purposes will be considered on a case by case basis.

There is a significant seaweed resource in Scottish waters, particularly in areas west of the Outer Hebrides, the Minch and Inner Hebrides, and the north coast of Orkney. Seaweed supports marine biodiversity and provides vital habitat for many fish and shellfish species. It also provides protection from natural hazards (for example acting as a natural flood barrier) and has a role in climate regulation. Seaweed can be used as a source of food, animal feed and fertiliser, as well as being used in a range of industries such as cosmetics and pharmaceuticals.

In 2020, the sector was almost entirely dependent on wild harvesting of seaweed. This consists mainly of hand harvesting close inshore with some gathering of case seaweed from shorelines. Some mechanical cutting of egg or knotted wrack takes place. Whilst interest in cultivating seaweed and incorporating farmed seaweed into products is high, commercial farming in Scotland is still in its infancy (one

commercial farm and two research farms in 2020), although the number of marine licence applications, and licensed sites, for cultivating activities is increasing[18].

HPMAs will restrict where seaweed harvesting can be carried out in Scottish waters. Information on existing seaweed harvesting and wider areas of potential seaweed resources will be considered during the HPMA selection and assessment process to limit, where possible, impacts on existing activities and properly assess the impacts of HPMAs.

[18] For more information see Potential scale of Scottish seaweed-based industries: research paper

6.5 Oil and gas sector

The regulatory regime for licensing offshore petroleum installations and pipelines for oil and gas exploration and exploitation of oil and gas in the Scottish inshore and offshore regions is a reserved matter under the Scotland Act 1998, Schedule 5, Section D2. More generally, the authorisation and operation of oil and gas installations takes place in a complex regulatory environment, involving a mix of reserved and devolved responsibilities and authorities.

It is intended that activities associated with oil and gas exploration, extraction and storage, including any exploratory activity and the construction of new infrastructure should be avoided within HPMAs. We will work with the UK Government to avoid, wherever possible, these activities taking place within a HPMA.

We do not consider that it is reasonable and practical to expect existing active oil and gas projects to relocate. It is therefore proposed that existing active oil and gas developments (including oil and gas pipelines) will be excluded from the HPMA selection process so that overlaps with proposed new HPMAs do not occur.

Areas with inactive pipelines and other inactive infrastructure such as plugged and abandoned wells will be considered as part of the HPMA selection and assessment process, to avoid unnecessarily scoping out areas which may be suitable for designation as HPMAs. In the event of any overlap of inactive infrastructure with proposed HPMAs, decisions on whether to include these areas within sites will be taken on a case-by-case basis, with advice from Nature Scot and JNCC. This could include consideration of the spatial extent of infrastructure within a proposed site (particularly in relation to more sensitive elements of the marine ecosystem). Inactive infrastructure which requires regular maintenance or repair or which may require to be removed will not be considered for HPMA designation.

Where areas with inactive infrastructure are not scoped out of the HPMA selection process and overlap with a HPMA, it is proposed that essential repair and maintenance activities as well as the removal of inactive infrastructure are considered on a site-by-site basis.

Oil and gas production has been a major activity in Scottish waters since the late 1960s. There is extensive infrastructure associated with oil and gas developments in Scottish waters. As of 2020 there were 112 active platforms and 14,801 km of pipeline[19]. Oil and gas remain Scotland's principal sources of fuel, making up 75% of all energy consumption in 2020[20]. Scotland's long-term climate change targets will require the near-complete decarbonisation of our energy system by 2050, with renewable energy meeting a significant share of our needs.

It will be important that we can work with the sector to ensure we have the best available information on the location and types of existing activity, and on planned developments that have already been consented so that this can be considered during the HPMA site selection and assessment phase.

[19] Figures taken from Oil and gas sector and infrastructure - Scotland's Marine Assessment 2020
[20] Figures taken from Annual Compendium of Scottish Energy Statistics - December 2020

6.6 Renewable energy

This section does not cover cables associated with marine renewable developments, which are covered under section 6.8.

It is intended that no new renewable energy projects will be allowed in an area designated as a HPMA. This includes exploratory activity or construction of new infrastructure. The Scottish Ministers are the consenting authority for section 36 of the Electricity Act 1989 consents and the marine licensing authority for licensable marine activities under the (Marine (Scotland) Act 2010 (0-12 nautical miles) and the Marine and Coastal Access Act 2009 (beyond 12 nautical miles).

The transit of vessels associated with renewable energy projects through a HPMA will still be allowed.

It is proposed that existing renewable energy developments (including wind, tidal and wave), as well as an any areas with draft or adopted plans, option agreements, exclusivity agreements or consents already in place for future renewable developments will be excluded from the HPMA selection process so that overlaps do not occur.

Renewable and low carbon energy, including marine renewables, will provide the foundation of our future energy system. Between 2014 and 2018 offshore wind capacity increased by 216%, with just under 2,000 people employed in the Scottish offshore wind sector in 2018[21]. The Scottish Energy Strategy published in December 2017 sets a 2030 target for the equivalent of 50% of the energy for Scotland's heat, transport and electricity consumption to be supplied by renewable sources. The offshore renewables sector will also play a critical role in supporting Scotland's net zero by 2045 target, as well as the targets set out in the British Energy Security Strategy, published in April 2022.

Given the need for increased offshore renewable energy capacity, the introduction of HPMAs will need to compliment these targets and should not hinder their

[21] Figures taken from Renewable energy - Scotland's Marine Assessment 2020

achievement. Any areas with renewable developments that already exist, are consented, or have draft or adopted plans will be scoped out of the HPMA selection process. This will include, for example, all ScotWind projects (and their associated infrastructure) awarded in January 2021, for which option agreements are in place. The ongoing planning process for the Innovation and Targeted Oil and Gas (INTOG) leasing round will identify areas for further offshore wind development which are also proposed to be removed from the selection and assessment process for HPMAs.

While offshore renewable energy has a critical role to play in meeting climate change targets and contributing to energy security, our commitment to designate HPMAs is also an important step to address the twin climate and nature crises. HPMAs will maximise opportunities for recovery and enhancement of marine ecosystems, in turn helping ensure that our seas are more resilient to the impacts of climate change by, for example, protecting blue carbon habitats. Construction of new offshore renewable developments within HPMAs will not be allowed.

It will be important that we work with the renewable energy sector to ensure we have the best available information on the location and types of existing activity, and on planned developments that have already been consented so that this can be considered during the HPMA selection and assessment phase.

6.7 Carbon capture utilisation and storage

It is intended that the construction of new infrastructure associated with carbon capture utilisation and storage will not be allowed within HPMAs. Scottish Ministers are the licensing authority for licences required for the storage of carbon dioxide in the Scottish inshore region (0-12 nautical miles). In the offshore region (beyond 12 nautical miles), the competent licensing authority is the North Sea Transition Authority (NSTA). We will work with the UK Government to avoid carbon capture utilisation and storage, wherever possible, within a HPMA.

Areas with existing infrastructure which may potentially be repurposed for carbon dioxide (CO_2) transportation in future, such as for example existing oil and gas pipelines will be considered as part of the HPMA selection and assessment process, to avoid unnecessarily scoping out areas which may be suitable for designation as HPMAs.

In the event that existing infrastructure, which is proposed to be repurposed for CO_2 transportation, overlaps with proposed HPMAs, decisions on whether to include these areas within sites will be taken on a case-by-case basis with advice from Nature Scot and JNCC. This could include consideration of the spatial extent of infrastructure within a proposed site (particularly in relation to more sensitive elements of the marine ecosystem) and the level and environmental impact of activity required for repairs, maintenance and monitoring of the pipelines used for CO_2 transportation. Where existing infrastructure has been repurposed for carbon capture storage in a HPMA, it is proposed that essential repair, maintenance and monitoring activities are allowed.

Carbon capture utilisation and storage (CCUS) is the capture and transport of CO_2 for safe and permanent storage deep underground in a geological formation. The process captures waste CO_2 from large point sources such as biomass or fossil fuel power plants, industrial processing or cement production.

CCUS will need to be rolled out at scale to meet Scotland's climate charge target of net zero emissions by 2045. Scotland has vast potential for geological storage of

carbon under the North Sea seabed, with additional potential for the repurposing of key existing pipelines for CO_2 transportation. It is estimated that by 2030 between 7,000 and 45,000 UK jobs could be associated with CCUS[22], and the Scottish government is supporting several CCUS research and development projects in Scotland.

While CCUS has a critical role to play in meeting climate change targets, our commitment to designate HPMAs is also an important step to addressing the twin climate and nature crises. HPMAs will maximise opportunities for recovery and enhancement of marine ecosystems, in turn helping ensure that our seas are more resilient to the impacts of climate change by, for example, protecting blue carbon habitats.

We are committed to working with stakeholders during the HPMA site selection and assessment process to ensure we have the best available information on areas which have been identified as suitable for potential CCUS areas so that these can be considered during the HPMA selection and assessment process and avoided where possible.

[22] Figures taken from Carbon Capture Utilisation and Storage - Scotland's Marine Assessment 2020

6.8 Subsea cables

Military cables and cables relating to oil and gas on the seabed are not covered in this section.

Laying of new cables

The laying of new subsea cables is an activity which is subject to a marine licence. The Scottish Ministers are the marine licensing authority for licensable marine activities under the (Marine (Scotland) Act 2010 (0-12 nautical miles) and the Marine and Coastal Access Act 2009 (beyond 12 nautical miles). It is intended that, in general, the construction of new subsea cables within HPMAs will not be allowed, with the following exceptions:

- The laying of new cables in relation to lifeline services to remote and island communities, such as, for example, power distribution cables or cables related to broadband/telecommunication services
- The laying of new cables which are permitted in accordance with international law (UNCLOS)

For the limited instances where the laying of new cables are consented, the repair and maintenance of those cables can also be allowed on a case by case basis.

Existing cables and cables for consented renewable energy projects

Existing active cables would not be compatible with HPMAs due to the infrastructure and activities associated with maintaining and repairing them. We propose that existing active cables are excluded from the HPMA selection process as it would not be practical to move them. We also propose that cable routes for INTOG and Scotwind projects as well as for other planned renewable projects will not be included in the HPMA selection process.

Submarine cables are critical infrastructure, delivering communications, internet and power to Scotland and international partners via an extensive network totalling over 6,000 km[23].

Cables routed through soft sediments can be buried, however cables are also surface laid in areas where this is not possible such as rocky seabed. Cables may be protected with additional measures such as rock placement, rock bags or concrete mattresses. In many cases, this is driven by the need to protect cables from other human activities such as damage by fishing gear.

HPMAs must not restrict the provision of lifeline service to remote and island communities. However, where possible, activities associated with subsea cables should be avoided within HPMAs, and, in cases where overlaps do occur, steps taken to avoid or mitigate impacts. We will work with the electricity transmission and telecommunications sectors to ensure we have the best available information on the location and types of existing activity, and on planned developments that have already been consented so that this can be considered during the HPMA selection and assessment phase.

[23] Figure taken from Subsea cables - Scotland's Marine Assessment 2020

6.9 Aggregate extraction

This section does not cover navigational dredging which is included below under section 6.10.

It is intended that aggregate extraction will not be allowed to take place within HPMAs. Aggregate extraction is an activity which is subject to a marine licence. Scottish Ministers are the licensing authority for such marine licences in the Scottish inshore region (12 nautical miles of Scotland) and offshore region (12 to 200 nautical miles).

Marine aggregate extraction removes sand and gravel from the seabed for use as construction aggregate (in concrete), land reclamation (as fill) or beach replenishment. Although Scotland has considerable marine sand and gravel resource, historically the marine aggregate industry has been very small because land supplies are more readily accessible. In some cases, marine transportation is essential for land-based extraction due to its distribution and viability.

There are no areas currently licensed for marine aggregate extraction in Scottish waters. Aggregate extraction last occurred in two areas in the Firth of Forth and Firth of Tay, in or before 2005. There are potentially viable deposits of marine sand and gravel present in Scottish waters, however extraction is not currently seen as economically viable.

6.10 Ports and harbours

The infrastructure and activities associated with ports, harbours, ferry piers and marinas would not be compatible with the aims of HPMAs and it would not be reasonably feasible to relocate these if located within a HPMA. It is therefore proposed that HPMAs will not be designated in areas that overlap with existing ports and harbours. This will include associated infrastructure, any associated areas which are dredged for navigational purposes and associated dredge deposit sites.

However, it is intended that the development and construction of new ports, harbours, ferry piers and marinas will not be allowed within areas designated as HPMAs.

It is also intended that the deposit of dredged material associated with ports and harbours will not be allowed within HPMAs.

Ports and harbours are a key part of Scotland's maritime infrastructure. They are critical in providing links between land and sea and in the movement of goods and people. In 2018, the eleven major ports accounted for 95% of the total traffic through Scottish ports. There has been a steady decline in freight through Scotland's eleven major ports: 8% down overall from 2014 to 62 million tonnes in 2018, driven by a 45% reduction in dry bulk over the same period[24].

Scotland has over 200 ports, comprising privately owned, local authority and trust ports, plus ports run by Ministry of Defence and Caledonian Maritime Assets Ltd (CMAL). They vary in size from major commercial operations for international exports, ferry ports, ports serving the oil and gas industry in the North Sea and west of Shetland, a maintenance hub at Wick for offshore renewables, to small leisure and fishing harbours.

[24] Figures taken from Maritime transport (freight, ports and shipping) - Scotland's Marine Assessment 2020

Ports operate as commercial businesses, adapting and developing to meet the demand of the maritime industry. New areas of development include deep water berths to accommodate large cruise vessels and decommissioning projects.

HPMAs should not restrict the provision of lifeline services and critical infrastructure. Existing ports and harbours will not be considered as part of the HPMA site selection and assessment process to ensure that overlaps do not occur.

6.11 Shipping and ferries

It is intended that the transit of ships and ferries is allowed and will not be restricted in HPMAs.

Shipping and ferries are an essential part of Scotland's transport network. In 2018, one third of Scotland's total freight tonnage, including exports, was carried by water: 65 million tonnes[27]. Many islands in Scotland rely on lifeline ferry services for their communities to remain viable. In 2017, passenger water transport generated £90 million in GVA and employment for 1,100 people. A growing number of cruise ships are also visiting Scotland. The number of cruise ships calling into Scottish ports rose from 446 in 2012 to 825 in 2018[25], although this has been significantly impacted by the COVID-19 pandemic.

The unhindered movement of ships, particularly ferries, through HPMAs will be crucial for the provision of lifeline services to remote and island communities. Under international law (UNCLOS) vessels have a right of passage through the territorial waters of another country. Any vessel transiting a HPMA will need to adhere to all relevant international laws, standards and conventions, including the International Maritime Organisation and the International Convention for the Prevention of Pollution on Ships (MARPOL).

We will work with the sector during the HPMA selection and assessment process to ensure that information on existing shipping and ferry routes through potential HPMAs are considered, and that information on where HPMAs will be located can be shared with the industry in order to promote best practice. It is our intention that waste materials and ballast water will not be discharged when vessels are passing through an HPMA except in cases of emergency and *force majeure*.

[25] Figures taken from Maritime transport (passengers, ferries and cruise ships) - Scotland's Marine Assessment 2020

6.12 Military and defence

Military and defence activities are a reserved matter under the responsibility of Ministry of Defence (MoD). It is intended that HPMAs will not be designated in some areas where MoD activities are carried out, such as areas of MoD estate and other infrastructure, and areas where it is possible to define the type and extent of activities at a suitable scale to allow their exclusion.

MoD activities relating to defence may need to go ahead within HPMAs. Where activities do need to go ahead, operators and planners will need to follow relevant environmental protection guidelines.

Scotland's seas, lochs and coasts are integral to the Royal Navy's operations, training and trials. Coastal locations for the Army, Royal Air Force and Defence Test and Evaluation Ranges are also important.

Detailed information about the intensity of defence use of the seas is not available for reasons of national security. The Royal Navy's primary bases/establishments in Scotland are His Majesty's Naval Base Clyde (HMNB Clyde), Royal Marine (RM) Condor (Arbroath) and MoD Caledonia (Rosyth). There are other Reserve Forces and University units and test and evaluation facilities at the Inner Sound Raasay, Loch Goil and Loch Fyne. Scotland also hosts Joint Warrior, the UK-led multinational war exercise that takes place in spring and autumn each year.

There are measures in place to limit the environmental impact of defence activities in the maritime area. These measures will apply within HPMAs and include application of enhanced Standard Operating Procedures and moderation of activities where possible, achieved through Environmental Protection Guidelines (Maritime) (EPG(M)). Additional guidance and operational planning for Royal Navy activities is provided for by the Maritime Environmental and Sustainability Assessment Tool (MESAT), which explores, justifies and records whether negative impacts to the marine environment exist and how they have been mitigated in the planning and conduct of any activity. It is proposed that existing guidelines and assessment tools will be updated to take account of the purpose of HPMAs and their designations.

We will work with the MoD during the HPMA selection and assessment process to consider and limit overlaps between proposed HPMA sites and MoD activities.

6.13 Hydrogen production

It is intended that hydrogen production will not be allowed within a HPMA. Where the Scottish Ministers have licensing responsibilities for hydrogen infrastructure, we will avoid new infrastructure being constructed within HMPAs. Where any licensing responsibilities for hydrogen infrastructure rest with the UK Government, we will seek to work with the UK Government to avoid activities in a HPMA where possible.

HPMAs will not be designated in areas that overlap with existing hydrogen infrastructure.

Hydrogen, which can be used as an alternative to natural gas, is rapidly emerging as a sustainable solution for the decarbonisation of the economy and a key piece of the energy transition picture. Scotland has in abundance all the raw ingredients necessary to produce low-cost, clean hydrogen. The Scottish Government has an ambition to have 5GW installed hydrogen production capacity by 2030 and 25GW by 2045. To support this £100 million of funding has been committed towards the development of our hydrogen economy[26].

While hydrogen production has a potentially critical role to play in meeting climate change targets and contributing to energy security, our commitment to designate HPMAs is also an important step to address the twin climate and nature crises. HPMAs will maximise opportunities for recovery and enhancement of marine ecosystems, in turn helping ensure that our seas are more resilient to the impacts of climate change by, for example, protecting blue carbon habitats.

[26] Figures taken from Hydrogen action plan: draft

6.14 Space Ports

It is intended that the construction of any space port infrastructure, below MLWS, as well as the deposition of debris or other materials from space launches will not be allowed within HPMAs. The deposition of debris or other materials from space launches would also not be compatible with HPMAs. These activities are subject to a marine licence. Scottish Ministers are the licensing authority for such marine licences in the Scottish inshore region (0 to 12 nautical miles) and offshore region (12 to 200 nautical miles). It is proposed that that no new licences for these activities will be granted for areas covered by a HPMA.

For areas where there are existing marine licences in place for activities relating to space ports, we propose to consider on a case-by-case basis during the site selection and assessment process whether these areas are not compatible with the aims of HPMAs due to the impact of the activity on the marine environment and should be ruled out of the site selection process.

Scotland has a versatile, adaptable and growing space sector. Almost one fifth of all UK jobs in the space sector are based here and Scotland produces more small satellites than any other country in Europe. The industry has an annual turnover of £254 million but the Scottish Government wants to grow this significantly and has an ambition, in collaboration with partners, to win a £4 billion share of the global space market by 2030. Work is underway to develop spaceports across Scotland, including in rural and coastal communities in Sutherland, Shetland and the Western Isles.

7. Monitoring and compliance

7.1 Ecological monitoring

As HPMAs will form part of Scotland's MPA network it is intended that they will be subject to the existing six-yearly MPA network reporting cycle to the Scottish Parliament. In this reporting cycle, HPMAs will be reviewed to ensure that they are meeting, or are progressing towards meeting, their agreed conservation objectives and whether any additional management measures are likely to be required. Monitoring will inform future decisions on the suitability of existing management measures to ensure that allowed activities remain at non-damaging levels. We will take into account the recovery of some ecosystems or habitats may take several years (potentially decades in some cases) so measurable benefits from HPMAs may not be apparent within the timeframe of a single monitoring cycle.

7.2 Compliance monitoring and enforcement

Effective compliance monitoring and enforcement of restrictions will be crucial to HPMAs having a tangible benefit. To ensure this is successful we intend to embed and consider implications for compliance and enforcement throughout the process of identifying sites, setting their boundaries and developing the required legislation. The compliance and enforcement measures needed will therefore be considered in the context of the overall legal framework, including the site specific designation orders, as well as through regular prioritisation and assessment of our compliance assets.

HPMAs will potentially place restrictions on activities that have not previously been prohibited in Scottish waters and therefore subject to compliance, monitoring and enforcement actions, such as some recreational fishing. However, we believe the proposed simple and strict approach for protection of HPMAs will be clear for marine users to understand and comply with. This should simplify the compliance, monitoring and enforcement of restrictions in place in HPMAs.

It is intended that the enforcement powers and penalty system for HPMAs will mirror those which currently exist for MPAs, including for restrictions on activities which have not previously been prohibited in Scottish waters.

8. Proposal for legal powers in relation to HPMAs

8.1 Background

Currently the Scottish Government does not have the necessary legal powers to designate and protect HPMAs. Therefore, the intention is to deliver the necessary legislative and management framework for HPMAs, in both Scottish inshore and offshore waters.

For Scottish inshore waters (up to 12 nautical miles from the coast), there is full legislative competence within Scotland to introduce the necessary powers to designate HPMAs through primary legislation. It is proposed that HPMAs will be included within the legislative framework set by the Marine (Scotland) Act 2010, with new provisions delivered, as required, through primary legislation.

For the Scottish offshore region (beyond 12 nautical miles out to the outer limits of the UK continental shelf) legislative competence over the marine environment is currently reserved to the UK Government (with some exceptions). We are seeking agreement from the UK Government to provide for equivalent powers for Scottish Ministers to designate HPMAs in Scottish offshore waters. The UK Government would be responsible for any public consultation in relations to the creation of powers to designate HPMAs in offshore waters. The intention, however, is that this proposed policy framework and the site selection guidance will apply in relation to HPMAs in inshore and offshore waters.

Section 6 sets out the policy approach required to achieve the aims and purposes of HPMAs in relation to a wide range of marine activities. The regulation of aspects of some of these activities are reserved, i.e. in the competence of the UK Government and as such will remain outside of the competence of Scottish Parliament. The proposals in this framework do not apply to any activities relating to a matter which is a reserved matter.

8.2 Current powers to designate Marine Protected Areas

The Marine (Scotland) Act 2010 ("the Act") provides a statutory framework for the management of the marine environment in Scotland's inshore waters (up to 12 nautical miles from the coast). In UK offshore waters, including around Scotland, an equivalent framework is provided by the Marine and Coastal Access Act 2009.

The two Acts (often called the Marine Acts) allow for the designation of marine protected areas (MPAs) for nature conservation purposes by Scottish Ministers in Scottish waters. The Marine (Scotland) Act 2010 also provides powers for Scottish Ministers to designate Demonstration and Research MPAs and Historic MPAs.

Along with marine sites or marine elements of sites designated under other legislation[27] (Special Areas of Conservation and Special Protection Areas, Sites of Special Scientific Interest and Ramsar sites), Nature Conservation MPAs form a network of conservation sites in the UK marine area.

Nature Conservation MPAs are a type of MPA designed to afford protection to a range of nationally important habitats and species ("features"). Conservation objectives are set for features, allowing sustainable use of the site to continue as long as these objectives can be achieved. Features may be present across entire sites, or in parts of sites.

Once an MPA is designated, there is a duty on public authorities to carry out their functions to further the conservation objectives of the site[28]. The authority must not allow any activity they are responsible for authorising unless they are satisfied that there is no significant risk of hindering the achievement of the conservation objectives. Alternatively, they must be satisfied that the benefit to the public outweighs the risk of damage to the environment, there are no alternatives which would lower the risk, and that steps will be taken to compensate for any damage.

[27] The Conservation (Natural Habitats, &c.) Regulations 1994; The Conservation of Offshore Marine Habitats and Species Regulations 2017; The Wildlife and Countryside Act 1981
[28] Section 82 and section 83 of the Marine (Scotland) Act 2010

This process applies to all activities which require a consent, including a marine licence, planning permission, or consent under the Electricity Act 1989.

Scottish Ministers can also restrict activities in MPAs which are not subject to marine licences or other types of consent, using marine conservation orders. This mechanism has been used, for example, to introduce fisheries management measures within MPAs, including restrictions on specific gear types. As mentioned above, the Scottish Government is currently working on delivering fisheries management measures for existing MPAs where these are not already in place.

For HPMAs our intention is to prohibit activities that would cause any damage to HPMAs from the point of designation, thereby providing certainty which activities are not compatible with the highly protected status. Except in limited circumstances it would also not be compatible with the objectives for HPMAs to allow for the licensing of marine activities that would be damaging to the ecosystem within HPMAs. To realise these proposals and introduce HPMAs, we are proposing a new provisions within the existing legislative framework provided by the Marine (Scotland) Act 2010 that are tailored specifically to the designation and management requirements of HPMAs.

8.3 Proposals

This section sets out our proposals for new powers to introduce HPMAs in Scottish inshore waters.

8.3.1 Introduce new powers for Scottish Ministers to designate HPMAs in Scottish inshore waters

We are proposing to add new powers so that Scottish Ministers can designate HPMAs in Scottish inshore waters. As is currently required for new MPAs, it is proposed that Scottish Ministers will need to consult on site proposals prior to designation of a HPMA.

We also propose to set out the purposes for which a HPMA is designated: to strictly protect marine ecosystems allowing them to recover and thrive; and, in some cases, for the purpose of carefully managed enjoyment and appreciation. The latter would

mean that, in some cases, carefully managed recreational activities may be allowed within HPMAs at non damaging levels.

It is proposed that HPMAs will form part of the network of conservation sites as defined under section 79 of the Marine (Scotland) Act 2010. HPMAs should add value to the existing network, and provisions within the Act will be amended to reflect this.

We propose to provide powers for Scottish Ministers to amend or revoke, by order, existing HPMA designation orders. An amendment to a HPMA designation order may be necessary to alter HPMA site boundaries to adapt to changes of circumstances, for example as a result of scientific monitoring. As is the case for the current MPA regime[29], we propose that Scottish Natural Heritage (known as NatureScot) may issue advice and guidance to public authorities on certain matters relating to inshore HPMAs, including on matters which are capable of damaging HPMAs. We also propose that NatureScot must give advice to a public authority if requested so by a public authority.

8.3.2 Allow for activities to be prohibited from the point of designation to afford high levels of protection

It is intended that HPMAs will place strict limits on human activities to allow the protection and recovery of marine ecosystems. Examples of activities which it is proposed will not be allowed within HPMAs include (noting that insofar as aspects of some of these activities are reserved, they cannot be regulated by the Scottish Parliament):

- commercial or non-commercial (including recreational) fishing. This includes fishing with mobile and static gears, demersal and pelagic gears, hand gathering and diving
- collection by any method of flora, fauna, natural materials (e.g. crustaceans, molluscs, seaweed, fossils, shells, rocks, sediments, seagrass, algae)
- activities associated with oil and gas exploration and production*

[29] Section 80 of the Marine (Scotland) Act 2010

- activities associated with renewable energy production
- aggregate extraction
- anchoring*
- water abstraction
- mining*
- construction or installation of objects or infrastructure (including rock dump and rock armour)
- any form of aquaculture (finfish, shellfish, seaweed or other)
- other deposit or release of any substance or material (e.g. dredged material, rubbish, organic waste, chemicals)
- intentional introduction or release of plants, animals or other living organisms (except for the purposes of a recognised restoration project specifically relating to the aims of the HPMA)
- use of explosives*
- use of acoustic deterrent devices (ADDs)*
- seismic surveys*
- salvage operations*

(*We intend to work with the UK Government to avoid these activities taking place in HPMAs wherever possible.)

The granting of marine licences for the activities listed above would not be compatible with the objectives of HPMAs. We therefore intend to exclude them from activities for which a marine license can be obtained within a HPMA, apart from the limited circumstances described in section 8.3.3. We propose that these activities will not be permitted from the point of designation of the HPMA in order to allow for instant protection and enforcement of contraventions.

Where HPMA designations require the relocation of human activities, there may in some instances be a need for a transitional ‘phasing out’ period following the point of designation of a HPMA. This could be to allow, for example, for the completion of current production cycles at active aquaculture sites. We propose that powers for

transitional ‘phasing out’ will be provided for, with any transition periods having a clear end point that is detailed in HPMA designation orders.

It is proposed that carrying out any activity that is prohibited within a HPMA will be an offence and a person found guilty of an offence will be liable to a fine. We propose to keep the levels of fines at the same levels as for offences for contravening a marine conservation order: a fine not exceeding £50,000 for an offence on summary conviction an unlimited fine for convictions on indictment.[30]

We also propose that there would be a requirement for public authorities to consider whether a proposed new activity taking place outside of a HPMA is capable of affecting the ecosystem within the HPMA. The purpose of such a duty would be to ensure that public authorities do not consent to a new activity unless they are satisfied that there is no risk of the activity hindering the achievement of the objectives of the HPMA. Guidance would be provided to public authorities to help them meet this duty.

8.3.3 Establish processes to permit certain limited activities within a HPMA on a case by case basis for specified reasons

We propose to introduce powers for public authorities to permit certain damaging activities within HPMAs on a case by case basis where there are overriding reasons relating to lifeline services to remote and island communities, public safety, habitat or species restoration projects furthering the objectives of a HPMA, scientific monitoring, or in order to comply with international law and legal obligations (for example in order to comply with OSPAR decision 98/3, which prohibits the leaving wholly or partly in place of disused offshore installations), or any other over-riding reason identified by Scottish Ministers.

This could include:

- Surveys using damaging methods to ensure navigational safety*, and to monitor the condition of HPMAs or other types of MPA. This could include

[30] Section 94 of the Marine (Scotland) Act 2010.

contact with the seabed and removal of samples of sediment or marine plants and animals for analysis

- Construction such as critical infrastructure for coastal defences, or installation of moorings for recreational purposes
- New power distribution cables or broadband/telecommunication cables to an island or remote community
- Inspection, maintenance and repairs of active infrastructure such as coastal defences, carbon capture utilisation and storage infrastructure, or active pipelines and cables*
- Inspection, maintenance, repairs and removal of inactive infrastructure*. This is, for example, to comply with international environmental commitments (e.g., removal of renewables infrastructure under the OSPAR Convention)
- Habitat or species restoration projects specifically relating to the aims of the HPMA or other MPAs
- Salvage operations*
- Harvesting of seaweed to allow for the safe navigation of vessels and around water intakes

(* To the extent that activities relate to a reserved matter, we intend to work with UK government authorities to ensure a consistent approach wherever possible.)

We propose that, before granting a marine licence or other type of consent, a public authority would need to be satisfied that the activity is related to the reasons mentioned above and that there are no reasonable alternative options to otherwise carry out the activity. We also propose that the public authority would need to take advice from the statutory nature conservation advisors before the activity is permitted. We propose that the public authority would have powers to issue remediation notice requiring a person to take certain specified compensatory steps which may also include the payment of a compensation to allow for habitat or species restoration.

8.3.4 Activities which are not permitted in a HPMA but are justified in cases of emergency and force majeure

We propose that some activities otherwise prohibited in a HPMA may be justifiable in cases of emergency and *force majeure*, such as:

- for the purpose of preventing injury, loss of life or damage to property. This could include search and rescue activity, firefighting, anchoring of vessels for safe haven in storms, and any other activities required for the purpose of securing the safety of a vessel, aircraft or marine structure
- Emergency removal of obstructions or dangers to navigation
- Responses to environmental incidents such as chemical or oil spills. This could include use of substances or equipment to disperse, control, contain or recover substances

8.3.5 Measures for activities allowed and carefully managed in HPMAs

We propose that some activities will be allowed to take place in HPMAs and will be carefully managed at levels non-damaging to the marine environment. Activities which we propose can continue to take place in HPMAs are:

- SCUBA diving
- snorkelling
- swimming
- use of motorised vessels or personal watercrafts (e.g. motorboats, jet skis)
- use of non-motorised vessels or crafts (e.g. sailboats, kayaking, canoeing, paddleboarding, surf, kitesurfing, windsurfing etc)
- wildlife watching by individuals or groups
- anchoring and mooring only at specified designated locations (unless in cases of an emergency and force majeure as set out under section 8.3.4)
- scientific research using non-damaging methods for the purpose of monitoring the ecological condition of the HPMA e.g. use of drop-down video cameras

Some of these activities may require measures to be put in place in order to comply with the objectives of a HPMA. We propose that such activities would be allowed to

continue within HPMAs unless it is necessary to introduce measures to restrict them, based on advice from NatureScot. The proposal is to introduce provisions that would allow for activities to be managed through a range of mechanisms:

- Adoption of guidance (e.g. a code of conduct). Guidance provides flexibility allowing for updates if circumstances change, such as new scientific evidence on the impacts of an activity. As such it is well suited to communicating best practice within an adaptive management approach. A limitation of guidance is that it is normally advisory, meaning that non-compliance may not be an offence. The issuance of guidance could be delegated by Scottish Ministers to other bodies.
- Create provisions for a permitting system. This would entail the prohibition of certain activities (see bullet point below on use of orders to prohibit an activity) and establish a permitting system to allow authorisations to be issued. Such a system would allow conditions to be attached to permits. It could also be used to limit the number of individuals permitted to undertake the activity. It would be enforceable with penalties for non-compliance. Establishing and maintaining a permitting system would entail costs, as they require administrative resources in order to function. The power to issue permits could be delegated to other bodies.
- The designation order could also be used to prohibit an activity or otherwise specify management measures. Orders are legally robust making them particularly useful where there is certainty around how any activity will be managed. However they lack flexibility to be amended quickly if, for example, new scientific evidence emerges. Amendments require a lengthy process, including public consultation and passage through the Scottish Parliament. This can make them impractical if there is a need to make changes to management quickly.

8.3.6 Achievement of HPMA objectives

We propose a new duty on Scottish Ministers to assess the extent to which the objectives of a HPMA have been achieved.

We also propose that the existing duty on Scottish Ministers to report to the Scottish Parliament every six years on aspects of the network of conservation sites be expanded to include reporting on HPMAs. This should include the extent to which, in the opinion of the Scottish Ministers, the objectives for HPMAs have been achieved, and further steps to be taken to contribute to achieving those objectives.

Glossary

BEIS	Department for Business, Energy and Industrial Strategy
BRIA	Business and Regulatory Impact Assessment
CCUS	Carbon Capture Utilisation and Storage
CMAL	Caledonian Maritime Assets Ltd
CO_2	Carbon dioxide
EEZ	Exclusive Economic Zone
EPG(M)	Environmental Protection Guidelines (Maritime)
EU	European Union
GES	Good Environmental Status
GVA	Gross Value Added
GW	Gigawatt
HMNB	His Majesty's Naval Base
HPMA	Highly Protected Marine Area
ICIA	Island Communities Impact Assessment
INTOG	Innovation and Target Oil and Gas
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IUCN	International Union for Conservation of Nature
JNCC	Joint Nature Conservation Committee
MARPOL	Maritime Organisation and the International Convention for the Prevention of Pollution on Ships
MESAT	Maritime Environmental and Sustainability Assessment Tool
MLWS	Mean Low Water Springs
MoD	Ministry of Defence
MPA	Marine Protected Area
NSTA	North Sea Transition Authority
OSPAR	Convention for the Protection of the Marine Environment of the North-East Atlantic
REM	Remote Electronic Monitoring
RM	Royal Marine
SAC	Special Area of Conservation

SCUBA	Self-Contained Underwater Breathing Apparatus
SPA	Special Protection Area
UK	United Kingdom
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea

This publication is available at **www.gov.scot**

Any enquiries regarding this publication should be sent to us at

The Scottish Government
St Andrew's House
Edinburgh
EH1 3DG

ISBN: 978-1-80525-271-9 (web only)

Published by The Scottish Government, December 2022

Produced for The Scottish Government by APS Group Scotland, 21 Tennant Street, Edinburgh EH6 5NA
PPDAS1161022 (12/22)

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