

SEA of Proposed Inshore PMF Management Measures

Strategic Environmental Assessment
Screening and Scoping Report

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For:



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1 Introduction

1.1 Background

- 1.1.1 The Scottish Government is committed to maintaining a healthy and biologically diverse marine and coastal environment that continues to provide economic, social and wider benefits to meet the long term needs of people and nature. The Marine (Scotland) Act 2010¹ and the UK Marine and Coastal Access Act 2009² include powers and duties to help deliver these aspirations.
- 1.1.2 Marine nature conservation measures are based on a three pillar approach, with action at the wider seas level (policy and measures); specific species conservation measures, and through site protection measures such as Marine Protected Areas (MPAs).
- 1.1.3 In July 2014, Scottish Ministers adopted a list of 81 priority marine features (PMFs). These are species and habitats which have been identified as being of conservation importance to Scotland³. Most are a subset of species and habitats identified on national, UK or international lists. The National Marine Plan includes a policy (GEN 9 Natural Heritage) for safeguarding PMFs whereby “Development and use of the marine environment must not result in significant impact on the national status of PMFs”⁴.
- 1.1.4 The proposed consultation on and implementation of management measures on PMFs is limited to the 11 most vulnerable to bottom-contacting towed fishing gear. Many PMFs are protected within the MPA network, and these proposals specifically look at affording protection to these PMFs outwith the MPA network. It is these that are the subject of this joint Screening and Scoping Report produced as a part of a Strategic Environmental Assessment (SEA) (see Section 1.2).

1.2 Purpose of this Report

Strategic Environmental Assessment

- 1.2.1 The Environmental Assessment (Scotland) Act 2005 (‘the 2005 Act’) requires that public plans, programmes and strategies be assessed for their potential effects on the environment⁵. The development and implementation of management measures for PMFs falls under Section 5(4) of the 2005 Act and are therefore subject to SEA.

¹ Marine (Scotland) Act 2010, asp 5 [online] Available at: <https://www.legislation.gov.uk/asp/2010/5> (accessed 23/2/2018)

² Marine and Coastal Access Act 2009 [online] Available at: <https://www.legislation.gov.uk/ukpga/2009/23/contents> (accessed 23/2/2018)

³ Scottish Natural Heritage, 2018. Priority marine features in Scotland's seas. [online] Available at: <https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/priority-marine-features-scotlands-seas> (accessed 02/05/2018)

⁴ The Scottish Government, 2015. Scotland's National Marine Plan. A single framework for managing our seas. [online] Available at: <http://www.gov.scot/Publications/2015/03/6517/5> (02/05/2018)

⁵ Environmental Assessment (Scotland) Act 2005, asp 15 [online] Available at: <https://www.legislation.gov.uk/asp/2005/15/introduction> (accessed 23/2/2018)

Screening and Scoping

- 1.2.2 In accordance with the requirements of the 2005 Act, a joint screening and scoping exercise has been undertaken. Its conclusions are presented in this report and comprise the following information:
- The proposed scope and level of detail of the assessment;
 - The expected assessment methodology;
 - A summary of the environmental baseline; and
 - The prospective period of consultation on the draft proposals and the draft Environmental Report.
- 1.2.3 Information to support the screening exercise is provided in Appendix A.
- 1.2.4 This Screening and Scoping Report builds on the approach and lessons learnt from previous SEAs for fisheries management measures for inshore MPAs and Special Areas of Conservation (SACs). The views of the Consultation Authorities (Historic Environment Scotland (HES), Scottish Environment Protection Agency (SEPA), and Scottish Natural Heritage (SNH)), along with any other interested stakeholders, on this combined report are now being sought.

1.3 Report Structure

- 1.3.1 This Screening and Scoping Report is set out as follows:
- Section 1 introduces the proposals and the SEA process.
 - Section 2 provides background information on the development and implementation of management measures for PMFs.
 - Section 3 sets out the proposed approach to the assessment, including proposed methodology, reasonable alternatives, mitigation and cumulative effects.
 - Section 4 presents the legislative and policy context for the draft proposals, in addition to the proposed environmental baseline to be used to inform the assessment process.
 - Section 5 provides details of the next steps in the preparation of the draft proposals and the SEA process, including proposed consultation timescales.
- 1.3.2 Appendix A includes the environmental Screening Report for the proposed management measures on PMFs.

2 Proposals for Management Measures

2.1 Background

- 2.1.1 Scotland's National Marine Plan includes a policy (GEN 9 Natural Heritage) that safeguards PMFs whereby "Development and use of the marine environment must not result in significant impact on the national status of PMFs"⁶. Impacts of development and use on the national status of PMFs must be considered when decisions are being made, taking account of the advice of Statutory Advisors. Where planned developments or use have potential to impact PMFs, mitigation, including alternative locations, should be considered. Actions should also be taken to enhance the status of PMFs where appropriate.
- 2.1.2 In May 2017, the flame shell bed within Loch Carron was designated as an emergency Nature Conservation MPA as a direct response to scallop dredging damaging the reef. This led to a review of the current protection given to PMFs outwith the MPA network.
- 2.1.3 Similar to the implementation of designated site management measures, a phased approach to implementation of measures for PMFs will be taken, beginning with the 11 most vulnerable PMFs. These will be the subject of this SEA, and further assessments will be undertaken should other PMFs be considered in future.
- 2.1.4 Both of the SEAs undertaken for the first phase⁷ and second phase of proposed fisheries management measures in MPA / SACs noted the potential for adverse environmental effects to arise from the measures as a result of the displacement of fishing activities⁸.
- 2.1.5 The following paragraphs set out further detail on the development to date of PMFs with Table 1 setting out the 11 vulnerable PMFs for which proposed management measures are being developed.

2.2 Priority Marine Features

- 2.2.1 As noted previously, in accordance with Scotland's three pillar approach to its marine nature conservation strategy⁹ and National Marine Plan¹⁰, PMFs are a prioritised list of habitats and species of conservation importance.

⁶ The Scottish Government, 2015. Scotland's National Marine Plan. A single framework for managing our seas. [online] Available at: <http://www.gov.scot/Publications/2015/03/6517/5> (02/05/2018)

⁷ Scottish Government (2013) Planning Scotland's Seas: 2013 – Possible Nature Conservation Marine Protected Areas Consultation Overview – Strategic Environmental Assessment Report [online] Available at: <http://www.gov.scot/Publications/2013/08/2591/0> (accessed 08/03/2018)

⁸ Ibid

⁹ Marine Scotland/Scottish Government, 2011. A strategy for marine nature conservation in Scotland's seas. Available at: <http://www.gov.scot/Resource/Doc/295194/0115590.pdf> (accessed 23/2/2018)

¹⁰ Scottish Government (2014) Scotland's National Marine Plan – A Single Framework for Managing Our Seas [online] Available at: <http://www.gov.scot/Resource/0047/00475466.pdf> (accessed 05/03/2018)

2.2.2 PMFs are located across Scottish seas at varying different scales and with a range of vulnerability to human activity. This creates a challenge in attempting to adequately conserve each PMF. Marine Scotland has therefore narrowed down the 81 PMFs into a list of 11 that evidence confirms are most vulnerable to pressures from bottom-contact towed fishing gear, such as physical disturbance (Table 1).

Table 1 Most vulnerable PMFs that proposed management measures are being developed for

Priority Marine Feature	Other Designation/Protection Lists on Which They Feature
Blue mussel beds (subtidal only)	Habitat Directive ¹¹ (Annex I); OSPAR ¹² ; BAP ¹³
Cold water coral reefs	Habitat Directive (Annex I); OSPAR; BAP; CITES ¹⁴ (Appendix II)
Fan mussel aggregations	W&C ¹⁵ (Schedule 5); BAP
Flame shell beds	BAP
Horse mussel beds	Habitat Directive (Annex I); OSPAR; BAP
Maerl beds	Habitat Directive (Annex I); OSPAR; BAP
Maerl or coarse shell gravel with burrowing sea cucumbers	Habitat Directive (Annex I); BAP
Native oysters	OSPAR; BAP
Northern sea fan and sponge communities	N/A
Seagrass beds	Habitat Directive (Annex I); OSPAR; BAP
Serpulid aggregations	Habitat Directive (Annex I); BAP

2.2.3 The proposed management measure options for the most vulnerable PMFs outwith the MPA network are currently being developed by Marine Scotland, informed by advice from SNH. The guidance that is produced is likely to be focussed on managing the effects of pressures from fishing activities on PMFs, but elements of the advice may be applicable to all marine planning and licensing decisions.

¹¹ Annex I species of the European Commission's Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (The Habitats Directive).

¹² Species listed on OSPAR's Threatened and/or Declining Species and Habitats list.

¹³ Species listed as a priority species on an UK Biodiversity Action Plan.

¹⁴ Species listed on CITES Appendix II which restricts trade to improve the change of survival.

¹⁵ Species listed on Schedule 5 of the Wildlife & Countryside Act 1981 (as amended).

3 Approach to the Assessment

3.1 Purpose of the Assessment

- 3.1.1 The purpose of the SEA is to assess the potential for likely significant environmental effects associated with the implementation of management measures to protect the most vulnerable PMFs outwith the MPA network.

3.2 Scope of the Proposals to be Assessed

- 3.2.1 The scope of potentially significant environment effects associated with the proposed management measures is largely limited to beneficial effects to the PMFs, spillover benefits beyond the location of PMFs and potential negative effects as a result of the displacement of activities to other habitats away from PMFs. In terms of displacement of activities, there may also be a potential intensification of other activities in areas with PMFs that are not affected by any proposed management measures. This could include an increase in the use of other fishing gears not targeted by the proposed measures, for example, potting.
- 3.2.2 It is not considered within the scope of this SEA to review the scientific justification for the management proposals. Additionally, a Business and Regulatory Impact Assessment (BRIA) will be undertaken for any management measures that are proposed to identify any socio-economic impacts that may result from implementation.

3.3 Scope of the Assessment

- 3.3.1 An initial review of the environmental topics set out in Schedule 3 of the 2005 Act¹⁶ suggests that potentially significant environmental effects would be focused on biodiversity, soil, water and climatic factors (including marine carbon sequestration/blue carbon processes). The Screening and Scoping report proposes that the SEA should consider all these topics under the topic of “Biodiversity, flora and fauna”. The SEA topic ‘Cultural Heritage’ will also be kept under review. The rationale for scoping in and out each of the SEA topics is provided in Table 2.

¹⁶ Available at: <https://www.legislation.gov.uk/asp/2005/15/schedule/3> (accessed 15/02/2018)

Table 2 Proposed Scoped In/Out of SEA Topics

SEA Topic	In/out	Reasons for inclusion / exclusion
Biodiversity, Flora, and Fauna	In	<p>The proposals are considered to be inherently beneficial to the PMFs for which they were developed as they extend protection to the most vulnerable marine species and habitat features. However, as noted previously, it is not within the scope of this SEA to assess the proposals' effectiveness at conserving or recovering protected features.</p> <p>It is recognised that the displacement of activities could adversely affect biodiversity. There may also be a potential intensification of other activities occurring in areas occupied by PMFs that are not affected by proposed management measures. These impacts have the potential to be significant and, as such, the SEA topic of 'Biodiversity, Flora, and Fauna' has been scoped into the assessment.</p> <p>We propose that geodiversity be scoped into the assessment under the topic of 'Biodiversity' as the viability and health of both flora and fauna populations are highly dependent upon the availability of good habitats, which in turn is influenced by the condition of underlying geodiversity features such as sand banks and seabed (see below).</p> <p>We propose that potential impacts on ecological status of Water Framework Directive (WFD) water bodies are addressed under 'Biodiversity, Flora, and Fauna', given the strong link between these (see below).</p> <p>In addition, it is proposed that the potential effects of proposals and the role that the marine environment can play in the mitigation of and adaptation to climate change should also be considered under this topic heading (see below).</p>
Population and Human Health	Out	No environmental impacts on this SEA topic are considered likely to arise from the implementation of the proposed management measures. This topic has therefore been scoped out of the assessment. Social and economic effects will be considered by the BRIA.
Soil	In	The proposals could help Scotland's marine waters achieve and maintain Good Environmental Status, as per Marine Strategy Framework Directive criteria (i.e. the indicator relating to protecting and improving the condition of the seafloor in order to support the health of the greater marine environment) as well as 'good' status under the WFD. Given the close links between this topic and geodiversity, we propose to cover issues such as seafloor condition under 'Biodiversity, Flora, and Fauna.'
Water	In	The proposals could benefit WFD objectives, particularly in terms of improving the ecological status of water bodies that overlap with PMFs as well as potential spillover benefits outwith the locations of PMFs. The displacement of activities may result in negative effects on the ecological status of water bodies outwith the location of PMFs. We propose that potential impacts on ecological status be addressed under 'Biodiversity, Flora, and Fauna'. Effects on water quality or quantity are not anticipated and we propose that this be scoped out.
Air	Out	Displacement of activities targeted by the proposed management measures (e.g. fisheries) may result in longer journey times/lengths and thus lead to increased greenhouse gas emissions. However, relative to current marine vessel emissions within Scottish waters, these increases are not considered to be significant. We therefore propose that Air Quality be scoped out.
Climatic Factors	In	The proposals could result in a potential change in marine carbon sequestration/blue carbon processes and in turn climate change mitigation and adaptation. The SEA topic 'Climatic Factors' has been therefore scoped into the assessment. Given the close link between marine carbon sequestration/blue carbon and marine habitats, the potential impact of the proposals on Climatic Factors will be addressed within the topic of 'Biodiversity, Flora, and Fauna.'
Material Assets	Out	No environmental impacts on this SEA topic are likely to result from the proposed management measures. This topic has therefore been scoped out of the assessment. The socio-economic effects of the proposals on other users of the marine environment, both adverse and beneficial, will be assessed by the BRIA.
Cultural Heritage	Under review	The proposals could lead to detrimental effects on the historic environment by disturbing and/or damaging previously undiscovered underwater heritage features. It is assumed that known shipwrecks would be deliberately avoided by activities, including fishing, as wrecks pose a threat to fishing gear. Although the potential exists for damage to the underwater historic environment, it is difficult to determine the spatial extent of unknown features and the likelihood that such features would be harmed by activities targeted by the measures. Overall, the effects are unlikely to be significant but the relevance of this topic will be kept under review. Should any displaced activities take place in the vicinity of known underwater heritage features, a generic assessment of potential effects on unknown marine assets (e.g. scattered remains related to the known marine heritage assets) could be undertaken.
Landscape/Seascape	Out	The displacement of activities as a result of the proposals is unlikely to have an effect on Landscape/Seascape. This SEA topic has therefore been scoped out of the assessment.

3.4 Relationship Between this SEA and Previous Assessments

- 3.4.1 This SEA builds on the approach and lessons learnt from the previous SEAs that were undertaken for the first phase¹⁷ and second phase of MPA/SAC fisheries management measures. This will help ensure a consistent approach to the assessment of the full suite of management measures is taken.
- 3.4.2 Other relevant sources of information may include the SEAs undertaken on the proposed MPAs¹⁸ (pMPAs), draft Sectoral Marine Plans for Offshore Renewable Energy in Scottish Waters¹⁹, Management Proposals of Inshore Fisheries Groups²⁰, and, the Seaweed Policy Statement²¹.

3.5 Proposed Assessment Methodology

- 3.5.1 The key potential environmental effects that are likely to arise from the implementation of the proposed management measures are as follows:
- Potential benefits to PMFs;
 - Potential spillover benefits outwith the location of PMFs;
 - Potential adverse effects resulting from the displacement of activities and the intensification of activities in areas where they already occur (it is considered unlikely that there are any previously unfished areas that are open to commercial fishing); and
 - Potential increased fishing effort from other gear types on PMFs not affected by proposed management measures.
- 3.5.2 Based on the available data and strategic nature of SEAs, a high-level and qualitative assessment of these potential effects is proposed to be undertaken.
- 3.5.3 The assessment of potential benefits to PMFs will consider how pressure will reduce as a result of the proposed management measures, taking account of the sensitivities of specific features. This will involve undertaking a spatial analysis in GIS of current/recent activity on PMFs. The latest understanding of the sensitivity of features to pressures will also be reviewed drawing on relevant SNH/JNCC management guidance, advice documents and previous studies.

¹⁷ Scottish Government (2014) Proposals for statutory management measures in Marine Protected Areas and Special Areas of Conservation – Environmental Report addendum [online] Available at: <http://www.gov.scot/Topics/marine/marine-environment/mpanetwork/MPAMGT/consultation2014/ManagementSEA> (accessed 18/08/2017)

¹⁸ Scottish Government (2013) Planning Scotland's Seas: 2013 – Possible Nature Conservation Marine Protected Areas Consultation Overview – Strategic Environmental Assessment Report [online] Available at: <http://www.gov.scot/Publications/2013/08/2591/0> (accessed 18/08/2017)

¹⁹ Scottish Government (2013) Planning Scotland's Seas: Draft Sectoral Marine Plans for Offshore Renewable Energy in Scottish Waters – Strategic Environmental Assessment: Environmental Report and Appendix A [online] Available at: <http://www.gov.scot/Publications/2013/07/2403/0> (accessed 18/08/2017)

²⁰ Scottish Government (2013) Management Proposals of Inshore Fisheries Groups – Strategic Environmental Assessment – Environmental Report [online] Available at: <http://www.gov.scot/Publications/2013/08/7232/downloads#res430277> (accessed 18/08/2017)

²¹ Scottish Government (2013) Seaweed Policy Statement Consultation Document – Environmental Report – August 2013 [online] Available at: <http://www.gov.scot/Publications/2013/08/6786/downloads#res432098> (accessed 18/08/2017)

- 3.5.4 The assessment of potential for spillover benefits outwith the locations of the PMFs will take account of the scale of change in pressure, the potential benefits to PMFs and existing literature that has sought to quantify spillover benefits.
- 3.5.5 For the assessment of negative environmental effects, information on current/recent activity and proposed management measures will provide an indication of potential displacement levels. In terms of fishing activities, potential locations to which activities might be displaced will be assessed taking account of the amount of effort that might be displaced relative to overall effort in the local inshore area, and, where this is potentially significant:
- Characteristics of fishery (vessel/gear types, mobility of vessels, maximum steaming distances from home port);
 - Availability of suitable alternative fishing grounds;
 - Availability of suitable alternative habitat types (where these relate to specific fishery e.g. burrowed muds- Nephrops; sands/gravels – scallop); and
 - Any information from fisheries stakeholders on areas where effort might be displaced to.
- 3.5.6 The SEA objectives developed for the previous assessments on MPA/SAC fisheries management measures²² set a sound basis for taking forward this SEA. These were developed to reflect the proposed scope of the SEA and the environmental protection objectives, which remain relevant for this assessment. Table 3 sets out the SEA objectives for this assessment, based on those applied previously.

Table 3 Proposed SEA Objectives

SEA Topics	Proposed SEA Objective
Biodiversity, Flora, and Fauna	<ul style="list-style-type: none"> • To safeguard marine and coastal ecosystems, including species and habitats, and their interactions; and • To avoid pollution of the coastal and marine water environment.
Soil	<ul style="list-style-type: none"> • To maintain and protect the character and integrity of the seabed.
Water	<ul style="list-style-type: none"> • To maintain or work towards achieving good ecological status.
Climatic factors	<ul style="list-style-type: none"> • To preserve and enhance existing marine carbon stocks and carbon sequestration potential.

²² Scottish Government (2014) Proposals for statutory management measures in Marine Protected Areas and Special Areas of Conservation – Environmental Report addendum [online] Available at: <http://www.gov.scot/Topics/marine/marine-environment/mpanetwork/MPAMGT/consultation2014/ManagementSEA> (accessed 25/01/2018).

3.6 Identifying Mitigation and Monitoring Proposals and Opportunities for Enhancement

- 3.6.1 Mitigation measures have been identified as an integral part of the development of the management proposals. Alternatively, mitigation may also be identified through the assessment process.
- 3.6.2 Monitoring proposals are likely to focus on the significant environmental effects that are identified during the course of the SEA and on implementation of mitigation measures where appropriate. Where possible, existing data sources and indicators will be linked with relevant indicators, to minimise resourcing requirements for additional data collection.

3.7 Consideration of Reasonable Alternatives

- 3.7.1 The SEA will assess the reasonable alternatives identified during the development of the proposals. In addition, a reasonable alternative in which all demersal mobile fishing activity at locations of the 11 PMFs is prohibited and displaced will be assessed.

3.8 Cumulative Effects

- 3.8.1 The SEA will assess the cumulative effects of the implementation of all the proposed management measures for PMFs as a whole. The in-combination effects with other management measures from previous plans will also be considered, including the Phase 1 and Phase 2 fisheries management measures for MPAs/SACs.

3.9 Assessment Framework

- 3.9.1 The assessment of the management measures against the key potential environmental effects and the SEA objectives presented in Section 3.5 will be primarily set out in tabular form.

4 Policy Context and Environmental Baseline

4.1 Purpose of This Section

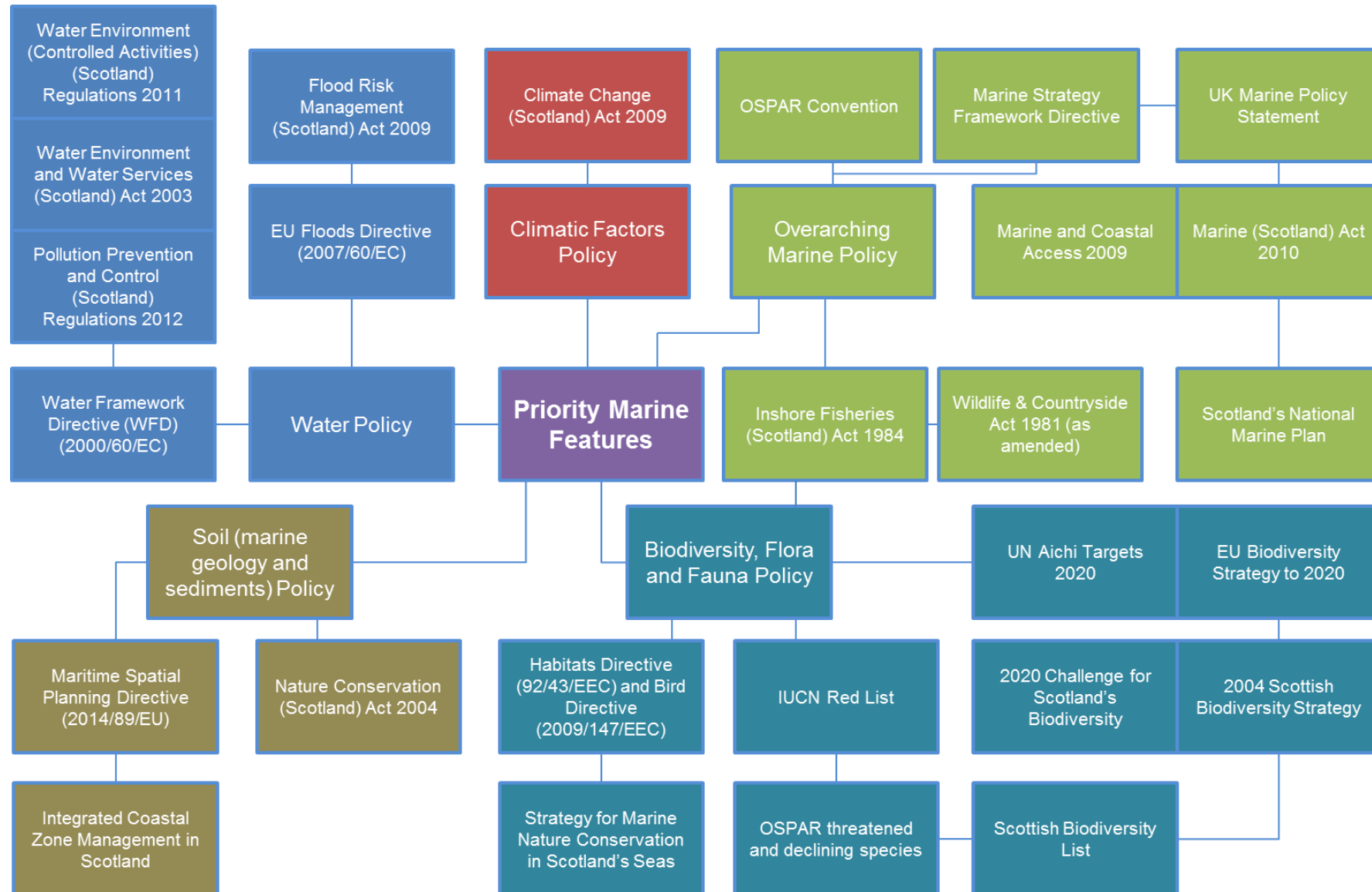
4.1.1 The 2005 Act requires Responsible Authorities to identify the broader policy context and the environmental protection objectives relevant to the plan, program, or strategy that is being assessed. The immediate policy context for the development of the proposals is described in Section 2 of this report; the following paragraphs set out the broader policy environment, in terms of relationships between the proposals and other plans, programmes, or strategies.

4.1.2 It is also a requirement of the 2005 Act that Responsible Authorities provide details of the character of the environment which may be affected, including any existing environmental problems. The baseline information is intended to help demonstrate how the receiving environment may be impacted by the implementation of the proposals.

4.2 Policy Context of the PMF Management Measures

4.2.1 The following paragraphs set out the wider policy context in which the proposed management measures sit. These focus on the wider policy objectives and the four SEA topics scoped into consideration (Table 2); biodiversity, flora, and fauna; soil; water and climatic factors. This policy context of the proposed measures is also illustrated in Figure 1.

Figure 1 PMF Management Proposals: Policy Context



Overarching Marine Policy

- 4.2.2 Species and habitat conservation is one of several key areas of interest underlying marine policy in Scotland. Additional policy areas relate to topics such as aquaculture, marine renewable energy, and the management of commercial and recreational fisheries²³. In recent years, Scotland has also embarked on a programme of national marine planning in accordance with European Union (EU) legislation and a growing international recognition of the need to balance competing interests and aims in the marine environment, including conservation. Examples of this wider marine policy are presented below, beginning with the most international policies and moving down to UK and domestic policies.
- 4.2.3 At an international level, the OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic integrated and updated the 1972 Oslo and 1974 Paris Conventions on land-generated sources of marine pollution²⁴. Specifically, it added an annex covering the protection and conservation of marine ecosystems and biodiversity²⁵.
- 4.2.4 European Directive 2014/89/EU establishes a framework for maritime spatial planning and serves as a common framework across Europe. It recognises that a comprehensive and consistent approach to maritime planning can prevent conflicts between sectors, increase cross-border cooperation, and protect the environment by identifying potential impacts early and pursuing opportunities for multiple uses of space. Within Scotland, the principles of the Directive are enacted through the National Marine Plan.
- 4.2.5 The UK Marine Policy Statement provides a vision of ‘clean, healthy, safe, productive, and biologically diverse oceans and seas’ that is shared by all UK countries and used to guide their respective marine management strategies²⁶.
- 4.2.6 The Marine (Scotland) Act 2010 acts as a framework to help balance the competing demands on Scotland’s inshore seas²⁷. It introduced a duty to protect and enhance the marine natural and historic environment while at the same time streamlining the marine planning and licensing system²⁸. Among its conservation objectives is a provision for the establishment of MPAs²⁹.

²³ Scottish Government (2017) Marine & Fisheries [online] Available at: <http://www.gov.scot/Topics/marine> (accessed 05/03/2018)

²⁴ OSPAR Commission (2017) OSPAR Convention [online] Available at: <https://www.ospar.org/convention> (accessed 05/03/2018)

²⁵ Ibid

²⁶ Scottish Government (2015) UK Marine Policy Statement [online] Available at: <http://www.gov.scot/Topics/marine/seamanagement/international/MPS> (accessed 05/03/2018)

²⁷ Scottish Government (2017) Marine (Scotland) Act [online] Available at: <http://www.gov.scot/Topics/marine/seamanagement/marineact> (accessed 05/03/2018)

²⁸ Ibid

²⁹ Scottish Government (2014) Marine and Coastal Access Act 2009 [online] Available at: <http://www.gov.scot/Topics/marine/seamanagement/marineact/ukbill> (accessed 05/03/2018)

- 4.2.7 The Marine and Coastal Access Act 2009 devolved new marine planning and conservation powers to Scottish Ministers in the offshore region (12-200 nautical miles), in addition to providing a framework for cooperative management of the marine environment between Scottish Ministers and UK Government³⁰.
- 4.2.8 Scotland's National Marine Plan fulfils joint requirements under the Marine (Scotland) Act 2010 and Marine and Coastal Access Act 2009 to prepare marine plans, providing a cohesive approach to the management of both inshore and offshore waters³¹ in accordance with EU Directive 2014/89/EU³² on maritime spatial planning. It strives to promote development in a way that is compatible with the protection and enhancement of the marine environment³³. Scotland's National Marine Plan also states that development and use of marine environment must not a significant impact on the national status of a PMF.
- 4.2.9 In terms of enforcement, the Marine (Scotland) Act 2010 covers the enforcement of protective measures within MPAs³⁴. In addition, the Inshore Fisheries (Scotland) Act 1984 includes the power to restrict fishing or prohibit the use of certain kinds of net in order to conserve the natural beauty or amenity, flora, and fauna of a marine area³⁵, and is applicable to any location within 6 nautical miles.

³⁰ Ibid

³¹ Scottish Government (2014) Scotland's National Marine Plan – A Single Framework for Managing Our Seas [online] Available at: <http://www.gov.scot/Resource/0047/00475466.pdf> (accessed 05/03/2018)

³² European Commission (2014) Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for marine spatial planning [online] Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2014.257.01.0135.01.ENG%20 (accessed 05/03/2018)

³³ Scottish Government (2014) Scotland's National Marine Plan – A Single Framework for Managing Our Seas [online] Available at: <http://www.gov.scot/Resource/0047/00475466.pdf> (accessed 05/03/2018)

³⁴ Scottish Government (2017) Marine (Scotland) Act [online] Available at: <http://www.gov.scot/Topics/marine/seamanagement/marineact> (accessed 05/03/2018)

³⁵ Inshore Fishing (Scotland) Act 1984, Chapter 26 [online] Available at: <http://www.legislation.gov.uk/ukpga/1984/26/introduction> (accessed 05/03/2018)

Biodiversity, Flora, and Fauna Policy

- 4.2.10 At the European level, the Natura 2000³⁶ network is the primary vehicle for meeting the collective aims of the Habitats (92/43/EEC)³⁷ and Birds (2009/147/EC)³⁸ Directives. Key aims include the maintenance and enhancement of biodiversity, with an emphasis on protecting rare and endangered wild species and natural habitats of European significance (these priority species and habitats are listed in Annex I and II of the Habitats Directive). The Natura 2000 network comprises terrestrial and marine Special Protection Areas (SPAs) and SACs. Many of the terrestrial sites are also underpinned by Sites of Special Scientific Interest (SSSI)³⁹.
- 4.2.11 International policies provide a framework for the conservation, protection, and sustainable use of biodiversity, flora, and fauna. In relation to the marine and coastal environment, this includes planning for sustainable fisheries and mariculture, the protection of migratory species including birds and fish stocks and the protection of marine and coastal habitats, and the management of non-native invasive species. These are often set out in the context of taking an ecosystem approach to the management and restoration of marine and coastal environments. European and Scottish policy reflect the objectives of an ecosystem approach and action for priority species and habitats. Building resilience to climate change is also a cross-cutting theme.
- 4.2.12 The 2020 Challenge for Scotland's Biodiversity⁴⁰ is Scotland's response to the United Nations (UN) Aichi Targets for 2020⁴¹ and the EU Biodiversity Strategy to 2020⁴². The 2020 Challenge supplements the 2004 Scottish Biodiversity Strategy⁴³ and lends further support to the development of a Scottish Marine Plan, a network of MPAs and protection for priority species. It also seeks to preserve and restore the health of Scotland's ecosystems at a catchment-scale and promote climate change resilience.

³⁶ Scottish Government (2016) Natura 2000 [online] Available at: <http://www.gov.scot/Topics/Environment/Wildlife-Habitats/protectedareas/NATURA> (accessed 05/03/2018)

³⁷ European Commission (1992) The Habitats Directive [online] Available at: http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm (accessed 05/03/2018)

³⁸ European Commission (2009) The Birds Directive [online] Available at: http://ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm (accessed 05/03/2018)

³⁹ Scottish Natural Heritage (2016) Sites of Special Scientific Interest [online] Available at: <http://www.snh.gov.uk/protecting-scotlands-nature/protected-areas/national-designations/sssisi/> (accessed 05/03/2018)

⁴⁰ Scottish Government (2013) 2020 Challenge for Scotland's Biodiversity: A Strategy for the conservation and enhancement of biodiversity in Scotland [online] Available at: <http://www.gov.scot/Resource/0042/00425276.pdf> (accessed 05/03/2018)

⁴¹ Convention on Biological Diversity (2010) Aichi Biodiversity Targets [online] Available at: <https://www.cbd.int/sp/targets/default.shtml> (accessed 05/03/2018)

⁴² European Commission (2011) European Biodiversity Strategy to 2020 [online] Available at: <http://ec.europa.eu/environment/nature/info/pubs/docs/brochures/2020%20Biod%20brochure%20final%20lowres.pdf> (accessed 05/03/2018)

⁴³ Scottish Government (2004) Scotland's Biodiversity Strategy: It's in Your Hands – A strategy for the conservation and enhancement of biodiversity in Scotland [online] Available at: <http://www.scotland.gov.uk/Publications/2004/05/19366/37239> (accessed 05/03/2018)

- 4.2.13 A Strategy for Marine Nature Conservation in Scotland's Seas proposes a system of 'priority marine features' (PMFs) to guide the identification of MPAs and provide focus for marine planning and other activities. It also supports the development of an ecologically coherent network of MPAs in support of strategic aims such as meeting 'Good Environmental Status' under the Marine Strategy Framework Directive and meeting the requirements of the Birds and Habitats Directives⁴⁴.
- 4.2.14 Scottish PMFs have been identified after reviewing and consolidating legislative lists and annexes and other priority/protected species lists. The protected habitat and species list consulted and reviewed, among others, the IUCN Red List⁴⁵, OSPAR threatened and/or declining species and habitats list⁴⁶, Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Appendices I, II and III⁴⁷, UK Biodiversity Action Plan (BAP) species list and the Scottish Biodiversity List⁴⁸.
- 4.2.15 The IUCN Red List has continually developed since 1964 to provide taxonomic, conservation status and distribution information on plants, fungi and animals globally. Each species is assigned a risk of extinction category in order to aid and guide decision making by understanding the extinction threat each species is currently facing. No habitats are assessed as part of the IUCN Red List, but of the 48 mobile species PMFs, 31 have been assessed by the IUCN, with 11 currently susceptible to extinction without protection or management occurring.
- 4.2.16 The OSPAR Convention for the protection of the North-East Atlantic was signed in 1992, in order to protect and conserve the marine environment. The OSPAR Biological Diversity and Ecosystems Strategy sets out that the OSPAR Commission will assess which species and habitats need to be protected. The OSPAR List of Threatened and/or Declining Species and Habitats (Agreement 2008-6) has been developed to fulfil this commitment. It is based upon nominations by Contracting Parties and observers to the Commission of species and habitats that they consider to be priorities for protection. 25 PMFs are also listed on the OSPAR list.
- 4.2.17 CITES, adopted in 1963 by 80 IUCN members, and now signed by 183 countries prohibits or limits international trade in specimens in order to preserve and protect each of the species by licensing any trade. Each appendix increases in protection from Appendix III, whereby at least one member state has requested help to limit the trade of certain species up to Appendix I, which bans almost all trade (exceptional circumstances can gain licenses e.g. museum to museum trade). 18 PMFs are also listed on Appendices I or II.

⁴⁴ Ibid

⁴⁵ IUCN (2018). IUCN Red List. Available at: <http://www.iucnredlist.org/> (accessed 05/4/2018)

⁴⁶ OSPAR Commission (2008). List of Threatened and/or Declining Species & Habitats. Available at: <https://www.ospar.org/work-areas/bdc/species-habitats/list-of-threatened-declining-species-habitats> (accessed 05/04/2018)

⁴⁷ CITES (2017). CITES Appendices I, II and III. Available at: <https://cites.org/sites/default/files/eng/app/2017/E-Appendices-2017-10-04.pdf> (accessed 05/04/2018)

⁴⁸ Scottish Government (2013). Scottish Biodiversity List. Available at: <http://www.gov.scot/Topics/Environment/Wildlife-Habitats/16118/Biodiversitylist/SBL> (accessed 05/04/2018)

Soil (Marine Geology and Sediments) Policy

- 4.2.18 It was proposed that the topic of ‘Soil’ (for example, the consideration of seabed strata and/or bottom sediments) be given consideration under the topic of ‘Biodiversity, Flora, and Fauna’. As such, soil policy and protection objectives relevant to the assessment are presented below.
- 4.2.19 At present, there is no single specific legislative or policy tool developed for the protection of soil⁴⁹. There are however other policies that indirectly protect the soil due to its close link to multiple other topics. Multiple conservation designations and the management procedures for these areas often protect to biodiversity, geodiversity, landform value, and cultural resources of the site, which in turn protects the soil/geology⁵⁰. For example, marine geology and geomorphology forms part of the basis for the designation of MPAs within Scottish waters⁵¹. Specifically, MPAs strive to protect rare and representative marine species, habitats, and geodiversity (defined as the variety of landforms and natural processes that underpin the marine landscape). Similarly, SSSI⁵² are those areas of land and water that best represent Scotland’s natural heritage in terms of its flora, fauna, geology, geomorphology, and/or a mixture of these natural features, as designated by SNH under the Nature Conservation (Scotland) Act 2004⁵³.
- 4.2.20 At the European level, the Marine Strategy Framework Directive (amended in 2017⁵⁴) includes 11 qualitative descriptors to help Member States interpret what Good Environmental Status means in practice⁵⁵. Good Environmental Status conditions are those where ‘the sea floor integrity ensures functioning of the ecosystem and benthic ecosystems, in particular, are not adversely affected’. ‘Sea-floor integrity’ is defined in terms of physical (i.e. depth), chemical (i.e. substrate type), and biological (i.e. species composition) characteristics⁵⁶. It is also regarded as crucial to achieving the Strategy’s overarching aims of protecting biodiversity and ensuring the sustainable use of the marine environment⁵⁷.

⁴⁹ Scottish Government (2009) The Scottish Soil Framework [online] Available at: <http://www.gov.scot/Publications/2009/05/20145602/0> (accessed 05/03/2018)

⁵⁰ Ibid

⁵¹ Scottish Government (2016) Nature Conservation MPAs [online] Available at: <http://www.gov.scot/Topics/marine/marine-environment/mpanetwork/ncmpas> (accessed 05/03/2018)

⁵² SNH (2017) Sites of Special Scientific Interest [online] Available at: <https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas/national-designations/sites-special-scientific-interest> (accessed 05/03/2018)

⁵³ Ibid

⁵⁴ European Commission (2017) Commission Directive (EU) 2017/845 of 17 May 2017 amending Directive 2008/56/EC of the European Parliament and of the Council as regards the indicative lists of elements to be taken into account for the preparation of marine strategies (Text with EEA relevance) [online] Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1495097018132&uri=CELEX:32017L0845> (accessed 05/03/2018)

⁵⁵ European Commission (2016) Our Oceans, Seas and Coasts – Descriptor 6: Sea-floor Integrity [online] Available at: http://ec.europa.eu/environment/marine/good-environmental-status/descriptor-6/index_en.htm (accessed 05/03/2018)

⁵⁶ Ibid

⁵⁷ European Commission (2016) Our Oceans, Seas and Coasts – Descriptor 6: Sea-floor Integrity – Why should we pay attention to the sea-floor integrity? [online] Available at: http://ec.europa.eu/environment/marine/good-environmental-status/descriptor-6/index_en.htm (accessed 05/03/2018)

- 4.2.21 Currently consideration is being given to the case for designation of 15 proposed SPAs (pSPAs) in Scottish Waters. In some cases, these are extensions to coastal SPAs and so policies targeting coastal protection and management are relevant to the present discussion. EU Directive 2014/89/EU (the Maritime Spatial Planning Directive) consolidated and expanded upon the fundamental aspects of the Council Recommendation on Integrated Coastal Zone Management of 2002 and the Protocol to the Barcelona Convention on Integrated Coastal Zone Management of 2010⁵⁸, obligating Member States to develop coastal management strategies. It aims to coordinate the development and delivery of policies across a wide spectrum of both marine and terrestrial activities in a way that is mindful of the natural limits of the coastal environment⁵⁹.
- 4.2.22 In Scotland, Integrated Coastal Zone Management is achieved via the work of seven Local Coastal Partnerships⁶⁰. In addition, Marine Scotland Science is responsible for monitoring, research, and regulation of certain coastal activities.

Water policy

- 4.2.23 It is proposed that the topic of 'Water' be given consideration under the topic of 'Biodiversity, Flora, and Fauna'. As such, water policy and protection objectives relevant to the assessment are presented below.
- 4.2.24 At the European level the Water Framework Directive (2000/60/EC) (WFD) was introduced as a more comprehensive framework for protecting, managing and improving Europe's water bodies including rivers, lochs, transitional waters (estuaries), coastal waters, and groundwater dependent wetlands⁶¹. The WFD sets out a requirement for an assessment of both chemical and ecological status of each individual waterbody and has a goal of bringing all European waters to 'good ecological and chemical status'. The Marine Strategy Framework Directive (2008/56/EC) extends the requirements of the WFD into seas beyond 1 nm.

⁵⁸ European Commission (2016) Integrated Coastal Management [online] Available at: http://ec.europa.eu/environment/iczm/index_en.htm (accessed 05/03/2018)

⁵⁹ European Commission (2014) Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning [online] Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0089> (accessed 05/03/2018)

⁶⁰ Scottish Government (2014) Managing Scotland's Coastline [online] Available at: <http://www.gov.scot/Topics/marine/marine-environment/coast> (accessed 05/03/2018)

⁶¹ European Commission (2000) Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy [online] Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32000L0060> (accessed 05/03/2018)

- 4.2.25 Scotland fulfils its water protection obligations under the WFD primarily through the Water Environment and Water Services (Scotland) Act 2003⁶² which defines the establishment of River Basin Management Plans (RBMP)⁶³, and the Water Environment (Controlled Activities) (Scotland) Regulations 2011⁶⁴. The first cycle of RBMP ended in 2014 and the second cycle began the subsequent year. The second cycle plans are informed by what was learnt through delivering the first cycle objectives and will target improvements in the development and application of specific plans/measures. The plans are focussed on action to protect and improve the water environment through a phased programme for the next 12 years.
- 4.2.26 Other relevant legislation includes the Pollution Prevention and Control (Scotland) Regulations 2012, which applies specifically to pollution originating from industry discharges⁶⁵.
- 4.2.27 The EU Floods Directive (2007/60/EC)⁶⁶ is implemented at the national level through the Flood Risk Management (Scotland) Act 2009⁶⁷. The Directive mandates the creation of flood risk management plans for all inland and coastal areas at risk of flooding, integrating their development and employment with existing River Basin Management Plans. Flood risk management plans are designed to minimise negative impacts due to flooding on a range of receptors, including human health, the environment, and cultural heritage.

Climatic Factors Policy

- 4.2.28 It is proposed that the SEA topic of 'Climatic Factors' be scoped into the assessment under the topic of 'Biodiversity, Flora, and Fauna', given the potential role of the marine environment in the mitigation of and adaptation to climate change.

⁶² Water Environment and Water Services (Scotland) Act 2003, asp 3 [online] Available at: http://www.legislation.gov.uk/asp/2003/3/pdfs/asp_20030003_en.pdf (accessed 05/03/2018)

⁶³ SEPA (2016) River Basin Management Planning [online] Available at: <http://www.sepa.org.uk/environment/water/river-basin-management-planning/> (accessed 05/03/2018)

⁶⁴ The Water Environment (Controlled Activities) (Scotland) Regulations 2011, SSI No. 206 [online] Available at: http://www.legislation.gov.uk/ssi/2011/209/pdfs/ssi_20110209_en.pdf (accessed 05/03/2018)

⁶⁵ The Pollution Prevention and Control (Scotland) Regulations 2012, SSI No. 306 [online] Available at: <http://www.legislation.gov.uk/ssi/2012/360/introduction/made> (accessed 05/03/2018)

⁶⁶ European Commission (2007) The EU Floods Directive [online] Available at: http://ec.europa.eu/environment/water/flood_risk/ (accessed 05/03/2018)

⁶⁷ Flood Risk Management (Scotland) Act 2009, asp 6 [online] Available at: http://www.legislation.gov.uk/asp/2009/6/pdfs/asp_20090006_en.pdf (accessed 05/03/2018)

- 4.2.29 In November 2016, the United Nations Framework Convention on Climate Change (UNFCCC) Paris Agreement came into force⁶⁸. The Paris Agreement is the first ever legally binding global climate deal and sets out aims to limit global warming to well below 2°C as well as pursue further efforts to limit it to 1.5°C⁶⁹. A further long-term goal is to achieve net-zero levels of global greenhouse gas emissions by the second half of this century. The Agreement also covers a range of other issues such as mitigation through reducing emissions, adaptation, and loss and damage⁷⁰.
- 4.2.30 The Climate Change (Scotland) Act 2009 creates the statutory framework for greenhouse gas (GHG) emissions reductions in Scotland. It sets a target for a reduction in emissions of the basket of Kyoto Protocol GHGs⁷¹ of 80% by 2050 as compared to the 1990/1995 baseline levels, alongside an interim target of a 42% reduction by 2020. These targets are currently being revisited through proposals for a new Climate Change Bill which recently underwent both SEA and public consultation⁷². Proposals include increasing the ambition of the 2050 target to a 90% GHG emissions reduction from baseline and an interim 2040 target of at least 78% reductions in GHG emissions from baseline levels.
- 4.2.31 The Marine (Scotland) Act 2010 specifies a duty for Ministers and the public sector to manage and progress actions within the marine environment in a way 'best calculated to mitigate, and adapt to, climate change so far as is consistent with the proper exercise of that function'⁷³. Scotland's National Marine Plan⁷⁴ considers climate change in terms of how actions undertaken within the Plan can help to mitigate GHG emissions, in addition to how these actions also need to be adapted to take into account the effects of climate change. The Plan also stipulates that the development and use of the marine environment should not have a significant impact on the national status of Priority Features. Many of these are known for their role in carbon sequestration.

⁶⁸ UNFCC (2016) The Paris Agreement [online] Available at: http://unfccc.int/paris_agreement/items/9485.php (accessed 05/03/2018)

⁶⁹ European Commission (2016) Paris Agreement [online] Available at: http://ec.europa.eu/clima/policies/international/negotiations/paris/index_en.htm (accessed 05/03/2018)

⁷⁰ Ibid

⁷¹ The basket of Kyoto Protocol greenhouse gases comprises carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), for which the baseline is 1990; and hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF₆), for which the baseline is 1995. Nitrogen trifluoride (NF₃) has subsequently been added and applies to the second commitment period of 2013-20.

⁷² Scottish Government (2017) Climate Change Bill – Consultation Paper [online] Available at: <http://www.gov.scot/Publications/2017/06/8208/0> (accessed 02/11/2017)

⁷³ Marine (Scotland) Act 2010, asp 5 [online] Available at: http://www.legislation.gov.uk/asp/2010/5/pdfs/asp_20100005_en.pdf (accessed 05/03/2018)

⁷⁴ Scottish Government (2015) Scotland's National Marine Plan [online] Available at: <http://www.gov.scot/Publications/2015/03/6517> (accessed 05/03/2018)

4.2.32 Scotland's Climate Change Adaptation Framework (a requirement of Section 53(2)(b) of the Climate Change (Scotland) Act 2009⁷⁵), alongside the Sector Action Plans, set out the potential impacts of climate change on individual sectors. This includes the need to safeguard critical marine carbon sinks such as tidal salt marshes, seagrass meadows, and kelp forests⁷⁶. Additionally, Scotland's Climate Change Adaptation Programme⁷⁷ sets out actions such as conserving marine carbon stores in addition to highlighting the need to better understand and protect the role of blue carbon ecosystems in carbon sequestration⁷⁸. The role of Marine Planning and MPAs in protecting these ecosystems is also noted⁷⁹.

4.3 Initial Environmental Baseline

4.3.1 The following paragraphs set out an indication of the content and level of detail that are likely to be included in the environmental baseline for the assessment of the proposals. The baseline information will reflect the scope of the assessment, as discussed previously.

4.3.2 Under each SEA topic, current trends and pressures will be explored, and the baseline information will be drawn from a range of sources. The SEA will build on the baseline information provided in:

- Scotland's Marine Atlas, published in March 2011, and updated information provided by NMPI;
- the suite of SEA studies undertaken by the Scottish Government, including on-going work;
- environmental research studies undertaken by Marine Scotland as appropriate; and
- Scotland's Environment Web and other Scottish Government environmental sources.

⁷⁵ Climate Change (Scotland) Act 2009, asp 12 [online] Available at: https://www.legislation.gov.uk/asp/2009/12/pdfs/asp_20090012_en.pdf (accessed 05/03/2018)

⁷⁶ Scottish Government (2011) Sector Action Plans – Marine - Actions for Sector [online] Available at: <http://www.gov.scot/Topics/Environment/climatechange/scotlands-action/adaptation/AdaptationFramework/SAP/MarineandFisheries/Actions> (accessed 05/03/2018)

⁷⁷ Scottish Government (2014) Climate Ready Scotland Scottish Climate Change Adaptation Programme – Part 2 – The Adaptation Programme [online] Available at: <http://www.gov.scot/Publications/2014/05/4669/4> (accessed 05/03/2018)

⁷⁸ Scottish Government (2014) Climate Ready Scotland Scottish Climate Change Adaptation Programme – Part 2 – The Adaptation Programme [online] Available at: <http://www.gov.scot/Publications/2014/05/4669/4> (accessed 05/03/2018)

⁷⁹ Scottish Government (2014) Climate Ready Scotland Scottish Climate Change Adaptation Programme – Part 2 – The Adaptation Programme [online] Available at: <http://www.gov.scot/Publications/2014/05/4669/4> (accessed 05/03/2018)

Biodiversity, Flora, and Fauna

4.3.3 Baseline information will include an overview of:

- key pressures to marine biodiversity, flora, and fauna in Scotland, with a key emphasis on pressures from fishing activities;
- PMFs, where this information is available through NMPi and or SNH's (Geodatabase of Marine Features in Scotland) GeMS database;
- Natura sites (i.e. SACs and SPAs) (this will include, but not be limited to, inshore and offshore SACs and the SPAs extended in 2009 to protect their adjacent marine habitats);
- Ramsar sites;
- SSSIs with marine features;
- European Protected Species, e.g. cetaceans and other marine mammals such as seals; and
- UK BAP species and habitats.

4.3.4 Identified habitats will include marine, coastal, intertidal, benthic and terrestrial habitats, as appropriate.

4.3.5 If applicable, baseline maps are likely to be included alongside narrative summaries of the environmental baseline.

Soils (Geodiversity)

4.3.6 Baseline information will include an overview of:

- seafloor geodiversity; and
- coastal geodiversity.

Water (Ecological Status of Water Bodies)

4.3.7 Baseline information will include an overview of:

- the ecological status of water bodies.

Climatic Factors (Including Carbon Cycling, Storage and Sequestration)

4.3.8 Baseline information will include an overview of:

- the impacts of climate change and carbon sequestration potential of Scotland's marine environments; and
- information to highlight links between climate change and other topic areas (e.g. Water Quality and Biodiversity, Flora, and Fauna).

5 Consultation and Next Steps

- 5.1.1 This Screening and Scoping Report has been made available to the statutory Consultation Authorities and any other interested stakeholders for comment.
- 5.1.2 Following the close of this consultation period, the responses will be analysed and used to inform the development of the draft management measures and Environmental Report that will be made available for public consultation.
- 5.1.3 It is anticipated that the PMF management measures will come into force in mid 2019. Table 4 sets out this indicative timeline.

Table 4 Indicative timeline for the development of PMF management measures.

Indicative timeline	Development of PMF management measures	Stage of the SEA
April 2018	Preparation of draft PMF management measures	Submission of Screening and Scoping Report
Autumn 2018	12 week consultation on draft PMF management measures	Consultation on SEA Environmental Report
Analysis of consultation responses received		
Early 2019	PMF statutory instrument laid before Parliament	
Mid 2019	PMF management measures come into force	Production of SEA Post-Adoption Statement - TBC

Appendix A SEA Screening Report

1.0 Introduction

1.1 As with the fisheries management measures within MPAs/SAC, we consider the proposed measures for Priority Marine Features (PMFs) to fall under Section 5(4) of the Environmental Assessment (Scotland) Act 2005 ('the 2005 Act').

2.0 Screening

2.1 This Screening Report summarises the environmental effects that are likely to result from the implementation of Marine Scotland's proposals for management measures of PMFs.

Table A1 Likely significance of identified environmental effects on environment

Criteria for Determining the Likely Significance of the Effects on the Environment	Likely to Have Significant Environmental Effects?	Summary of Significant Environmental Effects (Negative and Positive)
1(a) the degree to which the PPS sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources	Yes	The proposed management measures for PMFs identify options for the management of human activities. This may take the form of temporal restrictions of activities; limiting the scale and/or magnitude of activities on PMFs; and/or prohibition of certain activities on PMFs.
1(b) the degree to which the PPS influences other PPS including those in a hierarchy	Yes	The management measures will be implemented by Orders under the Inshore Fishing (Scotland) Act 1984 as well as through the Marine (Scotland) Act 2010.
1(c) the relevance of the PPS for the integration of environmental considerations in particular with a view to promoting sustainable development.	No	The proposals are designed to protect and conserve PMFs. Their primary mechanism is therefore not considered to promote sustainability. However, they will operate alongside existing protective legislation and strategies.
1(d) environmental problems relevant to the PPS	Yes	The proposals have been designed to protect PMFs. The proposed measures will focus on key pressures on the marine environment (e.g. bottom-contact fishing).

Criteria for Determining the Likely Significance of the Effects on the Environment	Likely to Have Significant Environmental Effects?	Summary of Significant Environmental Effects (Negative and Positive)
1(e) the relevance of the PPS for the implementation of Community legislation on the environment (for example, PPS linked to waste management or water protection)	Yes	The proposals will help fulfil the aims of Scotland's marine nature conservation strategy and National Marine plan (i.e. by providing PMFs with appropriate protection and conservation measures). They will also support Scotland's commitment to the Water Framework Directive and Good Environmental Status under the Marine Strategy Framework Directive.
2 (a) the probability, duration, frequency and reversibility of the effects	Yes	It is likely that the PMF proposals will result in significant environmental benefits.
2 (b) the cumulative nature of the effects	Yes	There is potential for the environmental effects identified to be cumulative in nature. This possibility will be explored and addressed by the assessment.
2 (c) transboundary nature of the effects (i.e. environmental effects on other EU Member States)	No	The proposals apply only to Scottish inshore waters. Transboundary effects are therefore not expected. This possibility, however, will be explored by the assessment.
2 (d) the risks to human health or the environment (for example, due to accidents)	No	No impacts are considered likely to arise from the implementation of the management measures that will impact on this SEA Topic. Social and economic effects will be considered by a Business and Regulatory Impact Assessment (BRIA).
2 (e) the magnitude and spatial extent of the effects	Yes	<p>The proposals could result in new pressures in such locations or the intensification of existing pressures.</p> <p>Where the recommended management measure is to remove or avoid pressures from a particular activity, this could result in the activity being discontinued or relocating elsewhere. In turn, new pressures could be introduced into these locations or existing pressures exacerbated.</p>

Criteria for Determining the Likely Significance of the Effects on the Environment	Likely to Have Significant Environmental Effects?	Summary of Significant Environmental Effects (Negative and Positive)
2 (f) the value and vulnerability of the area likely to be affected due to- (i) special natural characteristics or cultural heritage; (ii) exceeded environmental quality standards or limit values; or (iii) intensive land-use.	Yes	The PMFs are focussed on important and vulnerable marine habitats and species. The proposals are designed to protect and conserve these features.
2 (g) the effects on areas or landscapes which have a recognised national, community or international protection status	Yes	The purpose of the proposals is to conserve and protect PMFs, which have a recognised national protection status. Thus, any impacts are likely to be positive in this regard.

3.0 Conclusion

3.1 It has been concluded that the proposals for management measures in PMFs are likely to give rise to significant environmental effects and as such, a full SEA is required. The views of the Consultation Authorities and any other interested parties are now sought as required under the 2005 Act.

Appendix B Abbreviations

BAP	Biodiversity Action Plan
BRIA	Business and Regulatory Impact Assessment
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
EU	European Union
GeMS	Geodatabase of Marine Features in Scotland
GHG	Greenhouse Gas
GIS	Geographic Information System
HES	Historic Environment Scotland
HFC	Hydrofluorocarbons
IUCN	International Union for Conservation of Nature
JNCC	Joint Nature Conservation Committee
MPA	Marine Protected Area
NMPi	National Marine Plan interactive
OSPAR	Convention for the Protection of the Marine Environment of the North-East Atlantic
PFC	Perfluorocarbons
PMF	Priority Marine Feature
pMPA	proposed Marine Protected Area
pSPA	proposed Special Protection Area
Ramsar	Wetlands of international importance, designated under The Convention on Wetlands (Ramsar, Iran, 1971)
RBMP	River Basin Management Plan
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SEPA	Scottish Environment Protection Agency
SNH	Scottish Natural Heritage
SPA	Special Protection Area
SSSI	Sites of Special Scientific Interest
UK	United Kingdom
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
W&C	Wildlife & Countryside Act 1981
WFD	Water Framework Directive