National Marine Plan 2

Strategic Environmental Assessment Scoping Report

September 2023

Scottish Government
Riaghaltas na h-Alba

Table of Contents

List of Figures

List of Tables

1. Introduction

Background

1.1. Scottish Ministers are required under the Marine (Scotland) Act 2010 to prepare and adopt a national marine plan for the Scottish marine area. In accordance with this requirement, Scotland's National Marine Plan (NMP) was published in 2015. Scottish Ministers are required, under Part 3 of the 2010 Act to keep the plan under review. Since its adoption in 2015, the current National Marine Plan has been reviewed twice, in 2018 and 2021, in line with statutory requirements. The statutory reviews concluded that there is an urgent need to tackle the twin crises of climate change and biodiversity loss, as well as a need to reflect significant emerging matters, which have become core drivers for developing a new national marine plan.

1.2. The decision to update and replace the existing National Marine Plan was formally announced by Ministers in Parliament in October 2022 and in the Programme for Government 2022-23. Marine Directorate are currently preparing the updated National Marine Plan 2, also referred to as 'the plan' or 'NMP2' in this report. As with the first National Marine Plan, NMP2 will cover Scottish territorial waters (0-12 nautical miles) and Scottish offshore waters (12-200 nautical miles) (Figure 1).

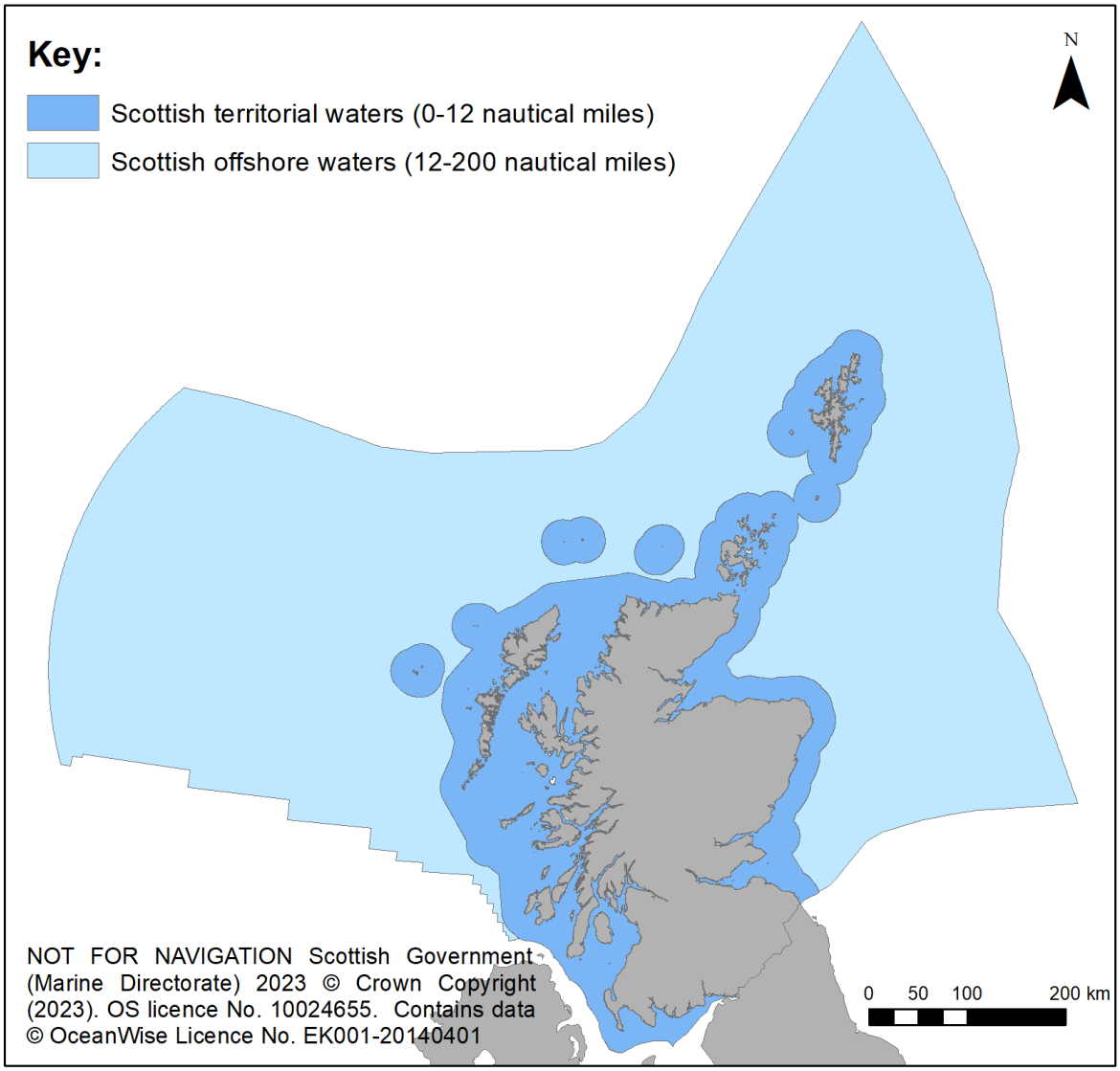

Figure 1. Map indicating the extent of National Marine Plan 2, including Scottish territorial water (0-12 nautical miles) in dark blue and Scottish offshore waters (12-200 nautical miles) in light blue.

1.3. The implementation of National Marine Plan 2 has the potential to have significant environmental effects. A Strategic Environmental Assessment (SEA) will therefore be required under the Environmental Assessment (Scotland) Act 2005 and the Environmental Assessment of Plans and Programmes Regulations 2004.

1.4. As NMP2 falls under Section 5(3) of the 2005 Act and under part 5(2) of the 2004 Regulations, the SEA will proceed directly to scoping.

1.5. The Marine and Coastal Access Act 2009 requires Marine Directorate, as the Responsible Authority, to carry out an appraisal of the sustainability of NMP2 (Schedule 6 S.10(1)). The SEA forms part of the wider Sustainability Appraisal (SA), along with the Habitat Regulations Appraisal (HRA) and the Socio-

Economic Impact Assessment (SEIA).[1] The SA process, encompassing the findings of the SEA, HRA, and SEIA will be undertaken by appointed contractors.

1.6. The purpose of scoping is to identify the environmental topics to be taken into consideration during the SEA and, thus, to set the scope of the environmental assessment. It will also identify the assessment methods to be used and to confirm the proposed consultation period for the draft NMP2 and Environmental Report. This report sets out the findings of the scoping process undertaken for the plan. The views of the Scottish Consultation Authorities (CAs), the UK Consultation Bodies, and interested parties on the scoping report are now being sought.

Report Structure

1.7. This report includes the following sections:

- Section 1 introduces the plan, including its broad legislative and policy context, and provides a description of the plan.
- Section 2 defines the context for the SEA, including an overview of relevant environmental protection objectives and a broad environmental baseline related to the plan.
- Section 3 sets out the approach to the assessment of the plan.
- Section 4 provides details of the next steps in both the SEA and plan preparation, including proposed timescales for consultation.

Legislative and Policy Context for Plan Preparation

1.8. National Marine Plan 2 is being prepared in the context of international, European, United Kingdom (UK) and Scottish marine legislation, policy, and guidance (Figure 2).

[1] The Socio-Economic Impact Assessment (SEIA) is not a statutory assessment but is conducted as best practice. The SEIA will aim to identify the extent to which existing, proposed and future marine industries and activities may be affected by policies contained within the NMP2, and to estimate the potential social and economic effects arising from these policies.

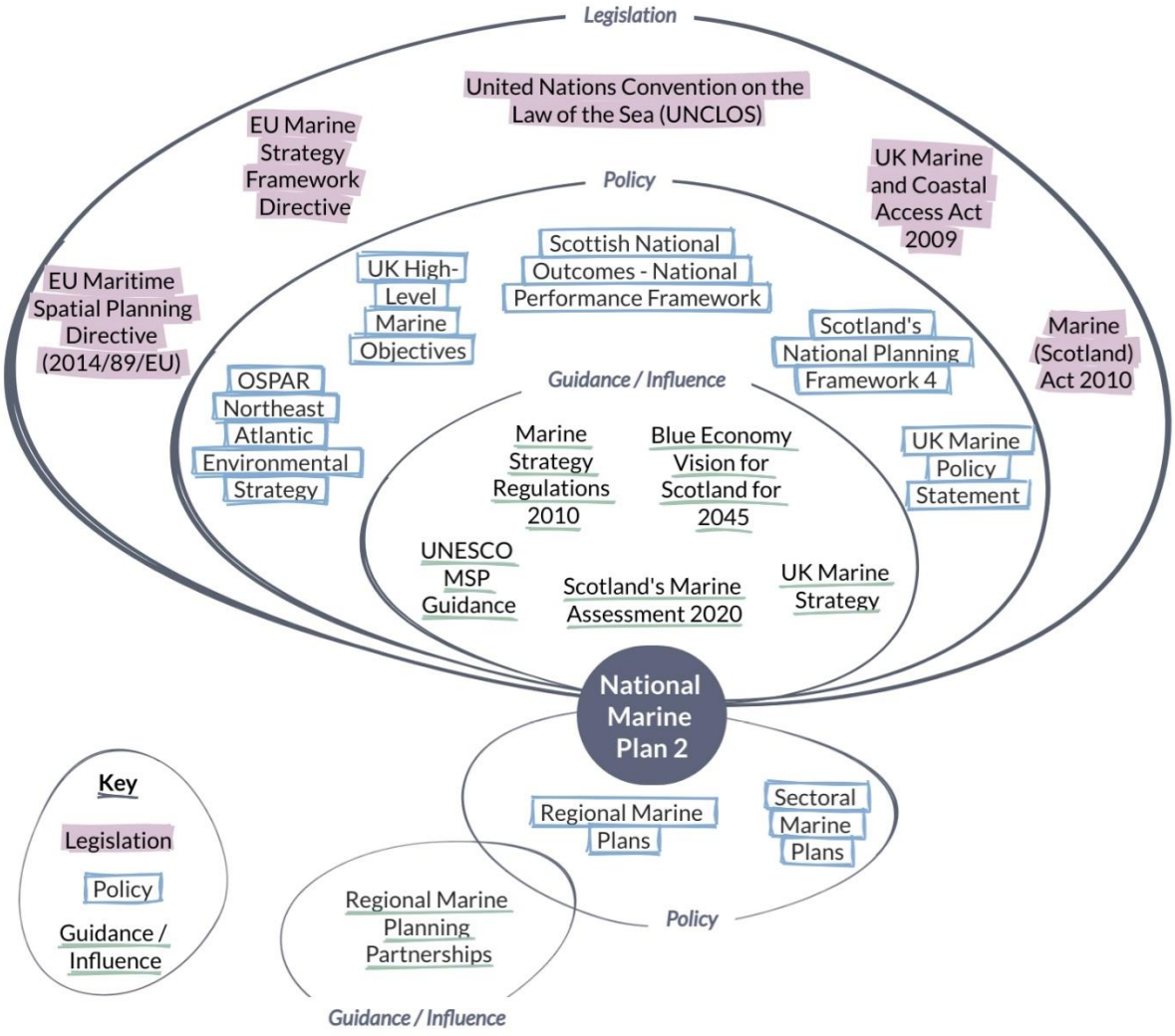

Figure 2. The broad context of National Marine Plan 2 at the international, EU, UK, and Scottish levels, including legislation (pink, top outer circle), policy (blue, top middle circle), and guiding and influencing factors (green, top inner circle). There exist inter-connections between many of the elements highlighted in the figure. NMP2 will continue to provide the context for the Regional and Sectoral marine planning processes, which allow for more localised and spatial considerations.

1.9. At the international level, the United Nations Convention of the Law of the Sea established the right of coastal nations to set laws and regulate the use of the marine area out to 12 nautical miles. The Convention also establishes exclusive economic zones from 12 to 200 nautical miles from the coast, within which the coastal nation has sole rights over all natural resources. The OSPAR convention for the Protection of the Marine Environment of the North-East Atlantic regulates international cooperation on environmental protection in the North-East Atlantic. The OSPAR convention combined and updated the

1972 Oslo and 1974 Paris Conventions to extend the cooperation of the Contracting Parties to cover all human activities that might adversely affect the marine environment of the North-East Atlantic.

1.10. At the European level, the European Union (EU) Marine Strategy Framework Directive (Directive 2008/56/EC) aims to protect more effectively the marine environment across Europe, achieve Good Environmental Status (GES) of the marine environment, and protect the resource base upon which marine-related economic and social activities depend. The UK's regional cooperation under the Directive takes place through the existing framework of the OSPAR convention. The Directive is transposed in UK legislation by the Marine Strategy Regulations 2010 and, following the UK's departure from the EU, the UK reports progress towards GES through its Marine Strategy.

1.11. The National Marine Plan enacts principles of EU Directive 2014/89/EU on maritime spatial planning, which establishes a framework for maritime spatial planning aimed at promoting the sustainable growth of maritime economies, the sustainable development of marine areas and the sustainable use of marine resources. As the UK is no longer a member of the EU, EU legislation, as it applied to the UK on 31 December 2020, is now a part of UK domestic legislation as set out in the EU (Withdrawal) Act 2018.

1.12. At the UK level, the Marine and Coastal Access Act 2009 requires that marine plans are prepared for the UK marine area (0 to 200 nautical miles). The devolved administrations (the Scottish Government, the Welsh Assembly Government, and the Northern Ireland Executive) have jurisdiction over marine planning matters in their respective waters from 0 to 12 nautical miles (inshore waters). For the purposes of marine planning, the marine area from 12 to 200 nautical miles (offshore waters) is executively devolved to the Scottish Ministers.

1.13. In accordance with this legislation, the UK Government and devolved administrations prepared a joint Marine Policy Statement (MPS). The MPS provides the framework for preparing marine plans and taking decisions related to the marine environment, and the Marine and Coastal Access Act 2009 requires that Marine Plans must be in conformity with the MPS. The MPS outlines the UK vision for 'clean, healthy, safe, productive and biologically diverse oceans and seas'. It sets out the 'High Level Objectives' for the marine environment, along with policy objectives for key activities that take place in the marine environment that were agreed amongst the four UK administrations to fulfil this vision.

1.14. In Scotland, the legislative and management framework for the marine environment is established by the Marine (Scotland) Act 2010. The National Marine Plan for Scotland, adopted in 2015, reflects the legislative provisions outlined in both the Marine (Scotland) Act 2010 and the Marine and Coastal

Access Act 2009, providing a cohesive approach to the management of both inshore and offshore waters.

1.15. The Marine (Scotland) Act 2010 provided for the development of Regional Marine Plans in 11 marine regions in Scottish waters out to 12 nautical miles, as set out in the Scottish Marine Regions Order 2015. The Regional Plans will be directed by the objectives and policies of the National Marine Plan, developed by regional Marine Planning Partnerships, and can better reflect local circumstances and priorities. The landward extent of each of the marine regions is defined the Scottish Marine Regions Order 2015.

1.16. To facilitate the sustainable development of offshore renewable energy in Scottish waters, through the Renewables 1 policy in Scotland's National Marine Plan (2015), the Scottish Government has introduced a system of sectoral marine planning. Any regional and sectoral marine plans that are developed are subject to their own plan-level assessments, including SEA.

1.17. National Planning Framework 4 (NPF4) is Scotland's national spatial strategy for terrestrial planning and the development and use of land. It sets out Scottish spatial principles, regional priorities, national developments, and national planning policy. NPF4 includes national planning policy related to coastal areas and aquaculture, and alignment between NPF4 and NMP2 is key.

1.18. The Bute House Agreement, a shared policy programme between the Scottish Government and Scottish Green Party Parliamentary Group, includes commitments to enhance marine environmental protection and strengthen the framework of support for the marine renewables and offshore wind sectors.

1.19. There are a significant number of policy and legislative drivers at national, UK-wide, European, and global levels that apply to the various users of the marine environment (including transport, fishing, shipping, energy, and renewables). These requirements will be taken into account throughout the development of the draft Plan.

1.20. Scotland's Marine Assessment 2020 (SMA2020) provides an assessment of both the state of Scotland's seas and of the main activities and pressures, and it will provide the broad evidence base for development of NMP2. It will provide environmental information for the baseline against which the plan will be both developed and environmentally assessed. Where required, additional and updated baseline information will be taken into account as part of the environmental baseline.

1.21. The Blue Economy Vision sets out the Scottish Government's long-term ambition for Scotland's Blue Economy to 2045 and provides an overarching framing for Scotland's marine policies, plans and decisions. It promotes an approach that is consistent with Scotland's National Performance Framework and our international obligations. The Vision sets out six long-term Blue

Economy outcomes across environmental, economic, and social benefits for our marine environment, for people and our economy. The outcomes describe our high-level ambition for transformative change in the way we see and use our oceans. NMP2 will adopt a blue economy approach and act as a key delivery mechanism for Scotland's Blue Economy Vision.

Description of the Plan

1.22. NMP2 will continue to provide the guiding planning framework, that has been initiated by the first National Marine Plan, for sustainable development and management of use of our seas.

1.23. The new NMP2 will adopt a Blue Economy approach. It will help to get the right framework in place to address the increasing competition for marine space and resources, and that acknowledges the variety of demands and needs for and from the marine environment and continue to support licencing and consenting decisions.

1.24. The plan area covers Scottish territorial and offshore waters, extending from Mean High Water Spring (MHWS) tide to 200 nautical miles, with the landward extent of the Scottish Marine Regions defined in the Scottish Marine Regions Order 2015. As with the existing National Marine Plan, NMP2 will include provisions for reserved functions such as oil and gas, shipping and telecommunications, for which Scottish Ministers have planning responsibility, however licensing of these matters will remain reserved to UK Ministers. In accordance with the Marine Acts, National Marine Plan 2 will be reviewed every 3 and 5 years and updated as required.

1.25. NMP2 will therefore contain:

- The vision for the plan, set out in Marine Directorate's marine vision[2] and agreed at the UK level
- High-level objectives for the plan, in alignment with Scottish Government ambitions and commitments, UK High-Level Objectives, and international commitments such as objectives set out in OSPAR's North-East Atlantic Environment Strategy 2030 or the criteria for good environmental status under the Marine Strategy Framework Directive
- Sector- or region- specific objectives and policies

1.26. NMP2 will continue to provide the overarching framework for the sectoral marine planning process and the context for Regional Marine Plans in Scotland.

[2] A vision for clean, healthy, safe, productive, biologically diverse marine and coastal environments, managed to meet the long-term needs of people and nature.

2. Context

Policy Framework

2.1. The Environmental Assessment (Scotland) Act 2005 requires responsible authorities to identify the broader policy context and the environmental protection objectives relevant to the plan that is being assessed. The broader policy context is described in paragraphs 1.8 -1.18.

2.2. Key environmental protection objectives are set out by SEA topic below. The relevance of the below policies and objectives across several SEA topics is acknowledged but, for this report, have been listed under only one topic for brevity.

Biodiversity, Flora and Fauna

2.3. In Scottish territorial waters, the requirements of the EU Habitats Directive (92/43/EEC) and the EU Birds Directive (2009/147/EC) are translated into specific legal obligations by the Conservation (Natural Habitats, &c.) Regulations 1994. In Scottish waters beyond 12 nautical miles from land, the Offshore Marine Habitats and Species Regulations 2017 transpose the Habitats and Birds Directives into UK legislation, with technical corrections due to the UK's exit from the EU made through the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. These requirements focus on the protection of species and habitats of European significance, including marine habitats and species such as birds and mammals, and guide the designation of protected sites, such as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). The overall objective of the requirements is to ensure that the species and habitats that they protect are maintained at, or restored to a favourable conservation status throughout their natural range in Europe.

2.4. The UK Marine Strategy covers 11 elements, known as descriptors, including biological diversity (D1) and food-webs (D4) that relate to the high-level objective for Good Environmental Status to ensure that the population abundance of indicator species (including cetaceans, seals, birds, fish, pelagic habitats and benthic habitats) indicates healthy populations that are not significantly affected by human activities.

2.5. The Wildlife and Countryside Act 1981 provides the framework for protection of species other than European Protected Species and sets out protection objectives for specified birds and wild animals. The Wildlife and Natural Environment (Scotland) Act 2011 introduced Scottish legislation that affects the way land and the environment is managed, and it amends the Wildlife and Countryside Act 1981. The Environment Strategy for Scotland (2020) provides an overarching framework for Scotland's existing environmental strategies

and plans, with a vision to restore nature and end Scotland's contribution to climate change.

2.6. The Scottish Biodiversity Strategy to 2045 sets out the Scottish Government's ambition for Scotland to end biodiversity loss and be Nature Positive by 2030, and to have restored and regenerated biodiversity across the country by 2045. The Strategy will drive the transformation needed to manage and restore terrestrial, freshwater, and marine biodiversity resources in Scotland, as well as provide a framework for prioritising and coordinating actions and investments.

Population and Human Health

2.7. The Bathing Water Directive 2006/7/EC and the Bathing Waters (Scotland) Regulations 2008 safeguard public health by imposing minimum water quality standards on both terrestrial and coastal bathing waters. SEPA and local authorities have the responsibility to monitor bathing water microbiology and ensure the information is publicly available during the bathing season.

2.8. The Seveso III Directive (2012/18/EU) strengthens preceding legislation aimed at reducing the incidence of major industrial accidents and pre-emptively mitigating their environmental effects, with an emphasis on limiting the consequences to human health. Directive 2012/18/EU is implemented in the UK through the Control of Major Accident Hazards Regulations 2015.

2.9. The EU Floods Directive (2007/60/EC) is implemented at the national level through the Flood Risk Management (Scotland) Act 2009. The Directive mandates the creation of flood risk management plans for all inland and coastal areas at risk of flooding, integrating their development and deployment 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.

2.10. The Land Reform (Scotland) Act 2016 makes minor amendments to the Land Reform (Scotland) Act 2003, which set out a new right of responsible access that covers Scottish onshore, inland water, and coastal environments.

2.11. The National Plan for Scotland's Islands (adopted 2019) was prepared as a provision under the Islands (Scotland) Act 2018 and provides a framework for action to meaningfully improve outcomes for island communities. As required by the 2018 Act, the plan includes proposals in relation to: improving and promoting environmental wellbeing, health and wellbeing, and sustainable economic development; improving transport services and digital connectivity; and enhancing biosecurity, among others.

2.12. The Blue Economy Vision for Scotland sets out the long-term ambition for Scotland's blue economy to 2045. It sets out six outcomes across a range of environmental, social, and economic ambitions, including equal access to the

benefits provided by ocean resources and healthy and functioning marine ecosystems. The Blue Economy Vision offers framing for Scotland's National Marine Plan.

Soil (Marine geology, sediments, and coastal processes)

2.13. The EU Maritime Spatial Planning Directive (2014/89/EU) 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 2010, obligating the development of coastal management strategies. In Scotland, Integrated Coastal Zone Management is achieved on a national scale through the alignment of marine and terrestrial planning and consenting regimes. At a regional level in Scotland, Regional Marine planning, through Marine Planning Partnerships, will consider and agree the need for more detailed coastal management of the inshore region, including the coastal zone, with terrestrial planning authorities and relevant stakeholders.

2.14. The UK Marine Strategy covers 11 elements, known as descriptors, including sea-floor integrity (D6) that relates to the high-level objective for Good Environmental Status to ensure the health of seabed habitats is not significantly adversely affected by human activities.

2.15. The Scottish Soil Framework provides an overarching policy framework for the protection of soils in Scotland and, although it relates largely to the onshore environment, this includes coastal areas and the principles are applicable more widely. The Framework notes the impacts that rising sea levels and associated seasonal incursion by seawater could have on coastal soils.

2.16. In Scotland, marine geodiversity forms part of the basis for designation of Nature Conservation Marine Protected Areas (MPAs).[3]

Water

2.17. The International Convention for the Prevention of Pollution from Ships (MARPOL) regulates accidental and operational releases of pollutants into the marine environment by the shipping industry, including oil and other chemicals. The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972, or the London Convention, along with the 1996 London Protocol aims to control all sources of marine pollution and prevent pollution of the sea through regulation of dumping into the sea of waste materials.

2.18. The Water Environment and Water Services (Scotland) Act 2003 (Part 1, Chapter 1, Section 3) defines the seaward limit of the scope of the Water

[3] JNCC (2019) Nature Conservation Marine Protected Areas [online] Available at: https://jncc.gov.uk/our-work/nature-conservation-mpas/ (accessed 17/03/2023)

Framework Directive in Scotland as being three miles on the seaward side from the nearest point of the baseline from which the breadth of the territorial sea of the UK adjacent to Scotland is measured (i.e., three nautical miles from the territorial baseline).

2.19. The EU Water Framework Directive (2000/60/EC) provides a more comprehensive approach to managing and protecting Europe's water bodies on land and up to three nautical miles from shore. It sets out a requirement for an assessment of both chemical and ecological status, with a goal of bringing all European waters to 'good' chemical and ecological status. Scotland primarily fulfils its water protection obligations under the Water Framework Directive through the Water Environment and Water Services (Scotland) Act 2003, which defines the establish of River Basin Management Plans, and through the Water Environment (Controlled Activities) (Scotland) Regulations 2011. Other relevant legislation includes the Pollution Prevention and Control (Scotland) Regulations 2012, which applies specifically to pollution originating from industry discharge.

2.20. The Marine Strategy Framework Directive (MSFD) both extends the requirements of the Water Framework Directive in seas beyond one nautical mile and introduces further requirements and objectives. The MSFD is reported in the UK through the UK Marine Strategy, which covers 11 elements, known as descriptors, including eutrophication (D5), hydrographical conditions (D7), and contaminants (D8). The related high-level objectives for Good Environmental Status are, respectively: minimise human-induced eutrophication in UK marine waters; ensure that the nature and scale of any permanent changes to hydrographical conditions resulting from anthropogenic activities do not have significant long-term impacts on UK habitats and species; and ensure concentrations of specified contaminants in water, sediment, or marine biota, and their effects, are lower than thresholds that cause harm to sea life, and are not increasing.[4]

2.21. The European Commission's Nitrates Directive 91/676/EEC aims to protect water quality across Europe by promoting the use of good farming practices that prevent nitrates from polluting the water environment. The Action Programme for Nitrate Vulnerable Zones (Scotland) Regulations 2008 were produced to meet Scotland's legal and environmental obligations for Nitrate Vulnerable Zones and these regulations set out what is required from farmers to comply with the Nitrate Vulnerable Zones rules.

2.22. A Designation Order (The Water Environment (Shellfish Water Protected Areas: Designation) (Scotland) Order 2013) identifies 84 waters as 'shellfish water protected areas'. Regulations (The Water Environment (Shellfish Water Protected Areas: Environmental Objectives etc.) (Scotland) Regulations 2013)

[4] Defra (2019) Marine Strategy Part One; UK updated assessment and Good Environmental Status October 2019 [online] Available at: Marine Strategy Part One: UK updated assessment and Good Environmental Status (publishing.service.gov.uk) (accessed 17/03/2023)

on the setting of environmental objectives for those areas have also been made. Continued protection and improvement of shellfish growing waters has been ensured through the integration of these within the river basin management planning process.

2.23. The Marine Litter Strategy for Scotland was first published in 2014 and serves to co-ordinate action on marine litter throughout the whole of Scotland. The refreshed Marine Litter Strategy, published in 2022, outlines new priority actions to tackle marine litter in Scotland, building on the work already conducted through the original strategy. The purpose of the strategy is to develop current and future measures to prevent litter from entering the marine and coastal environment, and to support its removal, in order to bring ecological, economic and social benefits.

Air

2.24. The EU Ambient Air Quality Directives (2008/50/EC and 2004/107/EC) define common methods to monitor, assess and inform on ambient air quality in the EU and establish objectives for ambient air quality to avoid, prevent or reduce harmful effects on human health and the environment. The Air Quality Standards Regulations 2007 transpose the EU objectives into UK law.

2.25. The Cleaner Air for Scotland strategy provides a national framework which sets out how the Scottish Government and its partner organisations propose to achieve further reductions in air pollution and fulfil legal responsibilities.

Climatic Factors

2.26. The United Nations Framework Convention on Climate Change Paris Agreement is a legally binding international treaty on climate change that entered into force in 2022. The overarching goal of the Agreement is to hold the increase in global average temperature above pre-industrial levels to well below 2°C and pursue efforts to limit the increase to 1.5°C.

2.27. The British Energy Security Strategy sets out how Great Britain will accelerate homegrown power for greater energy independence. It recognises the importance of accelerating the transition away from oil and gas and the related need for the development and deployment of renewables, including offshore wind. The Strategy sets out specific ambitions for offshore wind, including an aim to cut the processing time for offshore renewable development by over half. The strategy also sets out the ambition to reach up to 1GW of Carbon Capture Utilisation and Storage (CCUS) enabled “blue” hydrogen production operational or in construction by 2025. One Scottish CCUS cluster has been identified as a “reserve” to be delivered following those identified as a priority in English waters.

2.28. The North Sea Transition Deal supports the UK for the energy transition. Through the Deal, the UK’s oil and gas sector and the UK Government will

work together to deliver the skills, innovation and new infrastructure required to decarbonise North Sea oil and gas production as well as other carbon intensive industries.

2.29. The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 amends the Climate Change (Scotland) Act 2009, setting targets to reduce Scotland's emissions of all greenhouse gases to net-zero by 2045 at the latest. It includes interim targets for reductions of at least 75% by 2030 and 90% by 2040. Scotland's Climate Change Plan 2018-2032 update sets out the Scottish Government's pathway to achieving the targets set out in the 2019 Act, including through delivery of actions set out in the 2020 Offshore Wind Policy Statement.

2.30. The draft Scottish Energy Strategy and Just Transition Plan, published in January 2023 sets a target of securing 50% of total energy usage from renewable sources by 2030. The Strategy lists renewables and low carbon solutions as a strategic priority, including exploring new opportunities for floating offshore wind. The consultation (which ran in 2023) sought views on whether the current ambitions of producing 8-11GW of offshore wind in Scottish waters by 2030 (as set out in The Offshore Wind Policy Statement, 2020) should be increased. Specific targets have also been set for renewable and low-carbon hydrogen production, of 5GW by 2030 and 25GW by 2045.

2.31. Climate Ready Scotland: climate change adaptation programme 2019-2024 is the second Scottish Climate Change Adaptation Programme. It sets out the Scottish Government's five-year programme for climate change adaptation, including a marine-specific outcome that states: 'Our coastal and marine environment is valued, enjoyed, protected and enhanced and has increased resilience to climate change.'

2.32. Scotland's National Planning Framework 4 (NPF4) contains coastal development policies (Policy 10), with the policy intent being "to protect coastal communities and assets, and support resilience to the impacts of climate change" and the outcome being "coastal areas develop sustainably and adapt to climate change."

Material Assets

2.33. The UN Agreement on Straddling Fish Stocks and Migratory Fish Stocks 2001 sets out principles for the conservation and management of specified fish stocks and establishes that management measures must be based on the precautionary approach and the best available scientific information.

2.34. The laying of cables and pipelines is one of the freedoms of the High Seas under the UN Convention of the Law of the Sea 1981 (UNCLOS). Submarine renewable power cables are subject to licensing controls anywhere within 0-200 nautical miles. International power interconnectors and international telecommunication cables are also subject to licensing controls.

2.35. The Joint Fisheries Statement sets out the policies of the fisheries policy authorities for achieving, or contributing to the achievement of, the eight fisheries objectives of the Fisheries Act 2020. The Joint Fisheries Statement forms part of the UK Fisheries Management and Support Framework and sets out the ambition of the UK to continue delivering world class, sustainable management of fisheries.

2.36. The Harbours Act 1964 gives powers to Scottish Ministers to make various types of harbour order, for the purposes of introducing new harbour legislation or amending existing harbour legislation of local application to a specific harbour or group of harbours. Harbour authorities are responsible for managing safe and efficient harbours, which includes specific responsibilities in relation to the safety of vessels and people within the harbour, efficient navigation and the protection of the port environment. Harbours underpinned by a local legislative framework of powers are Statutory Harbour Authorities (SHAs) in terms of the Harbours Act 1964 and those with statutory pilotage powers in addition, are also Competent Harbour Authorities (CHAs) in terms of the Pilotage Act 1987.

2.37. The UK and Scottish Governments jointly selected Inverness and Cromarty Firth and Firth of Forth as locations for the establishment of two new Green Freeports. These Green Freeports aim to help to level up Scotland and bring new, high-skilled jobs to successful areas, and are backed by £52 million in UK Government funding that will primarily be used to address infrastructure gaps.[5]

2.38. The Holistic Network Design (HND) work delivered by NationalGrid ESO conducted a high-level assessment on potential offshore transmission infrastructure and cabling infrastructure for ScotWind offshore wind projects. The outcome of the Offshore Transmission Network Review (ONTR) HND was published on 7 July 2022. The Networks Options Assessment (NOA) provides National Grid ESO's recommendation for which network reinforcement projects should receive investment, and when, and the NOA 2021/22 Refresh incorporates the recommended offshore network design set out in the Holistic Network Design (HND).

2.39. Scotland's Future Fisheries Management Strategy sets out the approach to managing Scottish sea fisheries to ensure the long-term sustainability and profitability of the inshore, onshore and marine fisheries sector whilst also putting in place the right protections for fish stocks and the marine environment. Scotland's draft Future Catching Policy (FCP) directly supports a number of key principles in the Future Fisheries Management Strategy and it develops new rules, in cooperation with stakeholders, to regulate activity at

[5] Department for Levelling Up, Housing and Communities (2023) Joint cooperation to deliver two new Green Freeports in Firth Of Forth and Inverness and Cromarty Firth [online] Available at: https://www.gov.uk/government/news/joint-cooperation-to-deliver-two-new-green-freeports-in-firth-of-forth-and-inverness-and-cromarty-firth (accessed 09/06/2023)

sea in order to support the increased accountability and sustainability of Scottish fisheries.

2.40. The Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003 consolidated the majority of Scottish salmon and freshwater fisheries law. It provides the framework for a number of regulatory areas, including protection of juvenile and spawning salmon, passage of salmon, and legal methods of fishing and offences. The Scottish wild salmon strategy sets out the vision, objectives and priority themes to ensure the protection and recovery of Scottish Atlantic wild salmon populations.

2.41. The Aquaculture and Fisheries (Scotland) Act 2013 ensures that farmed and wild fisheries, and their interactions with each other, continue to be managed effectively, maximising their combined contribution to supporting sustainable economic growth with due regard to the wider marine environment.

2.42. The Scottish Government's Reaching 100% programme commits to the provision of superfast broadband to every home and business in Scotland to deliver a future-proofed, national fibre network. This contributes to the implementation of the Digital Strategy for Scotland and is likely to involve the installation of submarine cables.

2.43. The Infrastructure Investment Plan for Scotland 2021-22 to 2025-26 sets out a long term vision of infrastructure in Scotland, which supports an inclusive, net zero carbon economy and includes details on over £26 billion of major projects and large programmes. The Infrastructure Investment Plan includes marine and coastal considerations, such as investment in coastal change adaptation and support of green and blue spaces to provide access to nature.

Cultural Heritage

2.44. The United Nations Convention of the Law of the Sea stipulates under article 303 that 'states have the duty to protect objects of an archaeological and historical nature found at sea and shall co-operate for this purpose.[6]

2.45. The Joint Nautical Archaeology Policy Committee Code of Practice for Seabed Developers is a voluntary code of practice that provides a framework that seabed developers can use in conducting their activities in an archaeologically sensitive manner. Further guidance includes those developed specifically for the offshore renewable energy sector that set out protocols to deal with the marine historic environment.[7]

2.46. The Ancient Monuments and Archaeological Areas Act 1979 provides for the protection of archaeological heritage, including the scheduling of monuments.

[6] United Nations (1994) United Nations Convention on the Law of the Sea [online] Available at: UNCLOS+ANNEXES+RES.+AGREEMENT (accessed 06/04/2023)
[7] For example: COWRIE (2007) Historic Environment Guidance for the Offshore Renewable Energy Sector [online] Available at: archaeo_guide (wessexarch.co.uk) (accessed 17/03/2023)

Although the Act is primarily intended for terrestrial locations, it includes provisions for the designation of submarine sites. The 1979 Act was modified by the Historic Environment (Amendment) Scotland Act 2011.

2.47. The Protection of Military Remains Act 1986 makes it an offense to interfere with the wreckage of any crashed, sunken or stranded military aircraft or designated vessel without a licence. All crashed military aircraft receive automatic protection, but vessels must be individually designated, either as controlled sites or protected places.

2.48. The Historic Environment Policy for Scotland is a policy statement for decision making for the whole of the historic environment and outlines six policies that define how the historic environment should be managed.

2.49. The Marine (Scotland) Act 2010 included an article on the establishment of historic Marine Protected Areas to safeguard a wide range of heritage assets at the coast edge, on the foreshore, and out to sea. This extends and replaces the protection previously afforded to underwater heritage by the Protection of Wrecks Act 1973.

Landscape/Seascape

2.50. The European Landscape Convention 2000 promotes the protection, management and planning of European landscapes and organises European-level cooperation on landscape issues. The Convention includes inland water and marine areas in its coverage and emphasises the importance of both non-designated and protected landscapes.

2.51. National Planning Framework 4 incorporates landscape considerations in its National Planning Policy and sets out the role of Scotland's natural heritage and landscapes in informing land use planning.

2.52. The 2019 People, Place and Landscape position statement from NatureScot and Historic Environment Scotland outlines their approach to working towards a shared vision where all Scottish landscapes are vibrant, resilient, inspiring and beneficial.

2.53. The Place Principle was adopted by the Scottish Government and the Convention of Scottish Local Authorities (COSLA) to help overcome organisation and sectoral boundaries, to encourage better collaboration and community involvement, and improve the impact of combined energy, resources and investment. The principle promotes a shared understanding of place.

Inter-relationships between these issues

2.54. Many of the policies and strategies mentioned in previous sections are likely to have cross-cutting relationships between SEA topics. In addition, the following cross-cutting policies are of relevance.

2.55. Scotland's National Strategy for Economic Transformation sets out the priorities for Scotland's economy as well as the actions needed to maximise the opportunities of the next decade to achieve our vision of a wellbeing economy. The strategy includes commitments around natural capital, including: to a four-capital approach to economic recovery and "Rebuilding Scotland's Natural Capital by 2032"; and to establishing a values-led, high-integrity market for responsible private investment in natural capital. In addition, the strategy also includes in its programme of action a commitment to deliver on the ambitions of ScotWind and future renewable energy developments.

2.56. The Scottish Government is clear that transitioning to a circular economy is key to tackling the climate and biodiversity crisis, and this means reducing demand for raw material, increasing reuse and repair, and recycling more. Making Things Last: a circular economy strategy for Scotland sets Scottish priorities for moving towards a more circular economy, to build a strong economy, protect our resources and support the environment. Consultation was undertaken in 2022 on a draft Circular Economy bill and Route Map (Delivering Scotland's Circular Economy: A Route Map to 2025 and Beyond). The forthcoming Circular Economy Bill will provide the legislative framework required to support Scotland's transition to a zero waste and circular economy, increase reuse and recycling rates, and modernise and improve waste and recycling services. The draft Route Map sets out a strategic plan to deliver Scotland's zero waste and circular economy ambitions.

2.57. Scotland's Third Land Use Strategy (Land use – getting the best from our land: strategy 2021 to 2026) sets out the Scottish vision, objectives and policies to achieve sustainable land use. This strategy includes a marine section as effective management of natural capital needs to be integrated across land and sea, and it includes explicit reference to the role of the National Marine Plan.

2.58. The Scottish Government Wellbeing economy monitor brings together a range of indicators to provide a baseline for assessing progress towards the development of a wellbeing economy in Scotland. It was developed to look beyond GDP to measure economic success and track the status of natural capital, as part of the four capitals approach.[8]

[8] Scottish Government (2022) Wellbeing economy monitor [online] Available at: Wellbeing economy monitor - gov.scot (www.gov.scot) (accessed 09/06/2023).

Environmental Baseline

2.59. The Environmental Assessment (Scotland) Act 2005 requires responsible authorities to provide details of the character of the environment which will be affected by the proposed plan, including any existing environmental problems. This section of the scoping report provides an indication of the content and level of detail to be provided in the environmental baseline for NMP2.

2.60. NMP2 sets national level policies rather than those focused on localised spatial issues, so the assessment will be based on an appropriate, national-scale environmental baseline. Scotland's Marine Assessment 2020 will form the primary evidence base for the environmental baseline. The following sections provide an overview of the relevant baseline information and identification of, where possible, the associated environmental problems.

Biodiversity, flora and fauna

2.61. The 462,000 km^2 that makes up the Scottish marine environment is comprised of a variety of habitats which are home to over 6,500 species of animals and plants. Scotland's marine biodiversity encompasses the small plants and animals found in the plankton that makes up the basis of the marine food web up to top predators, such as marine mammals, including important populations of grey and harbour seals and a range of cetacean species. The fish community extends from shallow coastal waters to the deep ocean, with Scotland's diverse fish community exploited both by humans for food and recreation, and by many bird species, including internationally important populations of breeding seabirds and wintering waterbirds. The shellfish and other invertebrate fauna includes a variety of species that are essential to ecosystem function with a few important commercial species. Scotland has one of the lowest biodiversity intactness indexes globally and is facing decline in its biodiversity. Out of 15 components in the UK Marine Strategy, 6 had not achieved Good Environmental Status by 2018 (birds, fish, benthic habitats, non-indigenous species, commercial fish, and marine litter) and 5 had partially achieved GES (cetaceans, seals, pelagic habitats, food webs, and underwater noise).[9]

2.62. A list of 81 priority marine features (PMFs) was adopted by Scottish Ministers in 2014 and includes a range of habitats and species that have been identified as being of conservation importance in Scotland, the UK, the North-east Atlantic, and globally. A total of 245 MPAs cover approximately 37% of Scotland's marine environment and include 231 MPAs designated for nature conservation (Nature Conservation MPAs; Special Areas of Conservation (SACs); Special Protection Areas (SPAs); Sites of Special Scientific Interest

[9] Defra (2019) Marine Strategy Part One; UK updated assessment and Good Environmental Status October 2019 [online] Available at: Marine strategy part one: UK updated assessment and Good Environmental Status - GOV.UK (www.gov.uk) (accessed 17/03/2023)

(SSSIs); and Ramsar sites), nine MPAs designated for other purposes (one Demonstration and Research MPA; and eight Historic MPAs), and five other area-based measures.[10]

2.63. Invasive non-native species are organisms that are found outwith their natural range as a result of human action and that are not under control and have a significant adverse impact on native biodiversity, or socio or economic interests. The three high-impact non-native species that are established within Scotland's inshore regions are: Common cord-grass (*Spartina anglica*); carpet sea squirt (colonial tunicate, *Didemnum vexillum*); and leathery sea squirt (*Styela clava*). Three Scottish Marine Regions (West Highland, Argyll, and Clyde) are considered as areas having many concerns (red status); six Scottish Marine Regions (Forth and Tay, Moray Firth, Outer Hebrides, Orkney Islands, Shetland Isles, and Solway) are considered as areas having some concerns (amber status); no Scottish Marine Regions have been verified as free of non-native species although the North East and North Coast are considered data insufficient.

2.64. Scotland's seas support internationally important populations of breeding seabirds, groups of birds that spend most of their life at sea or along the coast, and wintering waterbirds, birds that live on or around water. 24 species of seabird regularly breed in Scotland and 21 of the seabird species that breed in Scotland are now on the red (due to significant declines in population or significant contractions of breeding ranges or numbers) or amber (due to moderate declines in population or moderate contractions of breeding ranges or numbers) lists of Birds of Conservation Concern.[11] Scotland's coasts and inland waters provide overwintering habitat for internationally important populations of migratory waterbirds, many of which are long distance migrants.

Population and human health

2.65. Scotland's population of 5.44 million in mid-2018 was at its highest ever recorded and is projected to grow to 5.58 million by 2026 and to 5.69 million in 2041.[12] Data from Scotland's 2011 census indicate that there were 93 inhabited islands in Scotland with a population of 103,700 (2% of the total Scottish population). Over 90% of people in Scotland live within a settlement, with settlements clustered around the coastline and in the central belt.

[10] Scottish Government, Policy: Marine environment: Marine Protected Areas (MPAs) [online] Available at: Marine Protected Areas (MPAs) - Marine environment - gov.scot (www.gov.scot) (accessed 05/04/2023)
[11] RSPB, What is the Red List of UK Birds? [online] Available at: Endangered Birds | Red, Amber and Green Explained - The RSPB (accessed 27/07/2023)
[12] National Records of Scotland (2019) Demographic Trends in Scotland: Response to the Infrastructure Commission for Scotland Call for Evidence [online] Available at: Demographic Trends - Response to the Infrastructure Commision for Scotland Call for Evidence (nrscotland.gov.uk) (accessed 20/03/2023)

2.66. Marine recreation and tourism covers a range of activities, including walking/hiking/running, beach activities, photography, yachting/sailing, swimming, wildlife tourism, diving, kayaking, angling, surfing, and cruise ship visits. The Scottish Marine Recreation and Tourism Survey highlighted the importance of good environmental conditions and abundant marine life to marine tourists. Tourism, recreation, and leisure activities in the marine environment can be complementary to environmental protection and enhancement when managed appropriately. The survey also showed that 'General marine and coastal recreation' was the most popular activity listed by participants, followed by longer distance walking, bird watching, and visits to historic sites as the three next most popular activities. Key concentrations of recreation and tourism activity occurred in the Firth of Clyde, Argyll and West Highland coast, the Lothians and Fife coastline, and the Moray Firth.[13]

2.67. As of 2022, Scotland has a total of 87 designated bathing waters with 84 located in coastal areas. Of these, 98% are classified as either excellent (44%), good (40%) or sufficient (14%), and 2% (both in the Forth and Tay inshore region) are classified in poor condition.[14]

2.68. In 2020, Scotland's marine economy generated £4 billion in gross value added (GVA) (2.8% of the overall Scottish economy) and employed 68,600 people (2.6% of total Scottish employment). Marine GVA and employment are particularly important to rural economies, for example, contributing 14% to the GVA of the Shetland Islands.[15]

Water

2.69. The majority of Scottish coastal waters are classified as high or good overall condition by SEPA; however, a few areas within the Clyde and Forth and Tay inshore regions are classified as moderate condition and areas of poor condition are indicated in the Solway and Forth and Tay inshore regions.[16]

2.70. The marine environment acts as a sink for many hazardous substances, such as persistent organic pollutants (POPs) and heavy metals. They find their way into the marine environment through a number of different sources and pathways, with indirect or direct release from industrial and sewage works discharges into rivers a major source. 99.8% of Scotland's transitional and coastal water bodies have achieved 'Good' chemical status under the Water Framework Directive, with the only failing waterbody located in the Clyde.

[13] Scottish Government (2015) Scottish Marine Recreation and Tourism Survey 2015 [online] Available at: [ARCHIVED CONTENT] (nrscotland.gov.uk) (accessed 20/03/2023)
[14] SEPA (2022) Bathing Waters: Current classifications [online] Available at: Bathing Waters : Summary of last season (sepa.org.uk) (accessed 20/03/2023)
[15] Scottish Government (2023) Scotland's Marine Economic Statistics 2020 [online] Available at: https://www.gov.scot/publications/scotlands-marine-economic-statistics-2020/pages/1/ (accessed 20/03/2023)
[16] SEPA (2022) Water Classification Hub [online] Available at: Water Classification Hub (sepa.org.uk) (accessed 20/03/2023)

Other sources of pollution include: discharges and release of oils and chemicals from shipping and offshore installations; the transport of marine litter (any persistent manufactured or processed solid material discarded, disposed of or abandoned in the marine and coastal environments, including material lost at sea in bad weather) to sea by rivers, drainage systems, sewage run-off or wind (from terrestrial sources such as landfill sites, public refuse facilities, and road transport); and sea based sources of marine litter, such as shipping, fishing, and offshore oil and gas platforms.

2.71. As part of the National Performance Framework, the Clean Seas Indicator was developed in parallel with the Sustainability of Fish Stocks Indicator and it measures the percentage of biogeographic regions with acceptably low levels of contaminants. As of 2020, 93% of contaminant assessments in Scottish marine waters show concentrations that are unlikely to harm marine organisms, which was unchanged between 2017 and 2020.[17]

Climatic factors

2.72. Scotland's First Minister declared a climate emergency in April 2019 and Scottish Ministers have pledged to reduce greenhouse gas emissions significantly and reach net zero (balancing the amount of emitted greenhouse gases with the equivalent emissions sequestered or offset) by 2045. In addition to targets to reduce greenhouse gas emissions, Scottish Ministers have committed to a framework to adapt to the already changing climate through the Second Scottish Climate Change Adaptation Programme 2019-2024, which includes a dedicated chapter for the marine and coastal environment.

2.73. Climate change is the most critical factor affecting Scotland's marine environment. The impacts of anthropogenic climate change are already evident, including on the physical environment of the ocean, and on the wider marine ecosystem and the links between its component species. Effects on the physical environment include warming ocean temperature, sea-level rise, ocean acidification, and changes to: salinity and oxygen concentration of seawater; currents; waves; storms; coastlines; and water column stratification. Changes to the wider marine ecosystem include changes in the abundance and distribution of key species, such as those species that are economically important (i.e., commercially exploited fishes), that play key roles in ecosystems (i.e., plankton), and that act as sentinels of ecosystem health and are valued by humans (i.e., seabirds and marine mammals).

2.74. The marine environment offers opportunities to mitigate for climate change through the management of marine habitats that absorb and store carbon (i.e., salt marsh and seagrass) and through certain marine industries (i.e., marine renewable energy and carbon capture and storage). The marine

[17] Scottish Government. National Performance Framework: Clean seas [online] Available at: Clean seas | National Performance Framework (accessed 20/03/2023)

environment can also offer opportunities to mitigate the potential impacts of climate change, for example the creation or restoration of coastal habitats can mitigate flood risk.

Air

2.75. Air pollution can have repercussions for many aspects of quality of life, including human health and biodiversity. In general, Air Quality Management Areas are located inland within Scotland's urban areas and they largely result from transport emissions. However, ships and other marine vessels release a significant proportion of total anthropogenic air pollutants, including nitrous oxides, sulphur oxides, particulate matter, and volatile organic compounds.

Soil (Marine geology, sediments, and coastal processes)

2.76. Scotland's varied coastline reflects contrasts in rock types, previous glacial processes, and changing sea levels. Scotland has some of the highest cliffs and largest sand dunes in the UK, with ancient hard strata dominating the north and west coasts, and younger, weaker rocks forming the south and east coasts.[18] The coast is classified as 70% hard coasts (i.e., composed of rocks and cliffs), 29% soft coasts (i.e., composed of unconsolidated gravels, sand and silts), and less than 1% artificial (i.e., harbours and sea walls).[19]

2.77. Although 75% of Scotland's coast is broadly stable, 12% is erosional and 8% is accretional.[20] The coast is uniquely exposed to climate change, due to the effects of rising sea levels that are intensifying coastal erosion. Coastal erosion and flood risk are interlinked. Storms can cause significant, episodic changes to the coastal landscape and can also affect coastal and marine habitats and species through direct physical disturbance by waves and currents. They can also have an impact on coastal and marine infrastructure and operations.

2.78. The sediments around Scotland are generally sandy or gravelly and originate from deposits during the Quaternary glaciation. Strong currents and wave action may also have prevented deposition of recent muddy sediment or have winnowed it to leave a coarse-grained lag deposit. Muddy sediments occur principally nearshore or, further offshore, in depressions on the sea floor, where currents may be relatively weak. They also occur beyond the shelf break (200m water depth) to the west of Scotland. The concentration of calcareous material varies greatly in seabed sediments reflecting the amount of shell material in different areas; locally, they can be very high. Marine sediments play an important role in ecosystem functioning, as they can act as nursery or spawning areas for a range of ecologically and commercially

[18] NatureScot (2022) Coasts [online] Available at: Coasts | NatureScot (accessed 21/03/2023)
[19] NatureScot (2022) Coastal erosion [online] Available at: Coastal erosion | NatureScot (accessed 21/03/2023)
[20] NatureScot (2022) Coastal erosion [online] Available at: Coastal erosion | NatureScot (accessed 21/03/2023)

important species and provide habitats for benthic fauna, supporting biodiversity. Certain marine sediments can also act as carbon stores.

2.79. Disturbance of seafloor habitats from towed, bottom-contacting fishing activity is predicted to be widespread and is predicted to occur, to some degree, in all regions. The only regions which lack significant disturbance, and which are not indicated to have benthic habitats in poor condition, are in deeper waters of the edge of the continental shelf. Of the 21 Scottish Marine Regions, nine have seafloor habitats that are predicted to be in poor condition across more than half their area.

Cultural heritage

2.80. Scotland has eight Historical MPA designations but there are many more unprotected sites of interest. There are many historic built and archaeological sites on the foreshore and seabed, including the remains of ships and aircraft lost at sea, and valued harbours, lighthouses, and other structure on the coast. There are 22 protected wreck designations under the Protection of Military Remains Act 1986 in Scottish waters. In addition, a large portion of Scotland's marine heritage resources are unrecorded, undiscovered, and unprotected.

2.81. The combination of seawater and sediment provides an important setting within which the preservation of marine archaeological remains is supported. However, the wash from vessels, anchoring, dredging, construction of port facilities and bridges have the potential to adversely affect these resources. Piers, wharves and breakwaters can result in changes to sediment which exacerbate erosion and have secondary effects on the marine historic environment. Climate change impacts, such as disturbance of submerged heritage assets from increased wave action, changes in local sediment supply causing damage or loss of submerged heritage assets, and ocean acidification causing enhanced rates of corrosion in metal shipwrecks and artefacts are expected into the future.[21]

2.82. It is estimated that there may also be around 38,000 historic features around the coast, including scheduled ancient monuments (SAMs), gardens and designated landscapes, archaeological remains, listed buildings, and those within conservation areas. For these sites, the sea can be an integral part of their setting and a key element in how they are experienced, understood and appreciated. Approximately 10% of 352 historic environment sites that were analysed by Historic Environment Scotland are currently exposed to Coastal Flooding in a way that is deemed unacceptable and 10% of sites analysed are exposed to Coastal Erosion in a way that is considered unacceptable.[22] This

[21] Historic Environment Scotland (2019) A Guide to Climate Change Impacts [online] Available at: A Guide To Climate Change Impacts | Historic Environment Scotland (accessed 05/04/2023)
[22] Historic Environment Scotland (2018) A Climate Change Risk Assessment [online] Available at: Climate Change Risk Assessment | Historic Environment Scotland (accessed 05/04/2023)

assessment only covers Historic Environment Scotland's estate and, therefore, likely underestimates the substantial level of challenge faced by coastal and marine historic environment assets. Further risk is also expected in the future due to climate change.

2.83. Marine and coastal archaeology is largely undiscovered and unprotected, which leaves it potentially vulnerable to threats such as coastal erosion and disturbance by human activity (i.e., vessel anchoring, construction).

Landscapes and seascapes

2.84. Scotland's seascapes are highly valued, with diverse character and widely perceived scenic quality. Its features range from machair plains to towering cliffs, shifting dunes and sandy beaches to islands, sea lochs and firths to rocky headlands on the open coast. Although many settlements are on the coast, less than 15% of its length has been developed.[23] This means that much of the coast has a natural character, with some areas providing a sense of wildness.

2.85. Coastal Character Assessment identifies, describes and maps Scotland's coasts and complements Scotland's Landscape Character Assessments, which focus on terrestrial landscapes. Coastal characterisation considers additional characteristics associated with the coast, such as marine influences and the character of the coastal edge. The following 13 broad National Coastal Character types have been identified and mapped by NatureScot: remote high cliffs; rock coastline/open sea views; deposition coastline, open views; outer firths; developed inner firths; narrow coastal shelf; kyles and sea lochs; enclosed bays, islands and headlands; sounds, narrows and islands; outer firth with islands; less developed inner firths; deposition coasts of islands; and low rocks islands coasts.[24]

Material assets

2.86. Consideration of Material Assets in SEA covers a wide variety of assets and resources, including built assets such as infrastructure relating to energy generation and distribution, formal flood protection schemes, transport, and telecommunications. Natural assets can include aggregates, oil and gas reservoirs, natural flood management features, carbon capture and storage aquifers, and fish stocks.

2.87. Oil and gas exploration and production has been a major activity in Scottish offshore waters since the late 1960s and there is extensive on- and offshore infrastructure associated with these developments. There are 112 active platforms and 14,801 km of pipeline, with most oil and gas fields located in the

[23] SNH (2002) Natural Heritage Futures: Coasts and Seas [online] Available at: Coasts and Seas text (nls.uk) (accessed 06/04/2023)
[24] NatureScot (2018) National coastal character map [online] Available at: National coastal character map.pdf (webarchive.org.uk) (accessed 04/04/2023)

North Sea. There have been large increases in marine renewable energy generation capacity (wind, wave, and tidal), with the majority of installed renewables capacity in Scotland from offshore wind.

2.88. Scotland's history of oil and gas production has resulted in an extensive network of pipelines across the North Sea, which connect previously exploited depleted oil and gas fields. Depleted gas fields and aquifers have the potential to act as carbon dioxide storage sites. On 31 July 2023, the UK government provided an update on the conclusion of the CCUS Cluster Sequencing Track-2 expression of interest, which found that the Scottish Acorn transport and storage (T&S) system remained one of the two new clusters best placed to deliver UK objectives for Track-2.[25] Acorn also retains its status as Track-1 reserve cluster.

2.89. Offshore wind accounts for a rapidly growing proportion of Scotland's renewable energy portfolio. By the fourth quarter of 2022, Scotland had a total installed offshore wind capacity of 2,166 MW with an additional 4,200 MW in planning, 1,100 MW awaiting construction, and 2,817 MW under construction.[26] In 2022 the ScotWind leasing process, managed by Crown Estate Scotland, announced the awarding of Option Agreements to 20 projects for a total potential capacity of 27.6 GW within the 15 Plan Option areas identified in the Sectoral Marine Plan for Offshore Wind Energy (2020).[27] In 2023, Crown Estate Scotland offered 13 projects Exclusivity Agreements under the leasing round for Innovation and Targeted Oil and Gas (INTOG) decarbonisation. Five innovation projects were selected totalling 499 MW capacity and eight targeted oil and gas decarbonisation projects were selecting, totalling 5 GW.

2.90. Scotland has over 200 ports that provide infrastructure for the national, regional and local economies in which they operate. These 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, ports supporting offshore renewables, to small leisure and fishing harbours. Ferries make up an essential part of Scotland's transport network with services covering both island and mainland communities, and a significant proportion of Scotland's freight is carried by water.

2.91. Submarine cables are critical infrastructure that deliver communications, internet, and power, inwards to Scotland, outwards to international partners,

[25] Department for Energy Security and Net Zero (2023) Update to industry on conclusion of the CCUS Cluster Sequencing Track-2 expression of interest [online] Available at: Update to industry on conclusion of the CCUS Cluster Sequencing Track-2 expression of interest - GOV.UK (www.gov.uk) (accessed 01/08/2023)
[26] Scottish Renewables (2023). Statistics Energy Consumption by Sector [online] Available at: https://www.scottishrenewables.com/our-industry/statistics (accessed 05/06/2023)
[27] Crown Estate (2022). Three ScotWind Clearing project agreements confirmed [online] Available at: https://www.crownestatescotland.com/news/three-scotwind-clearing-project-agreements-confirmed (accessed 05/06/2023)

and domestically between islands and remote communities. In addition, there are military cables on the seabed. Telecommunications cables are typically fibre optic and significantly differ (in size, weight, installation, maintenance and general handling) from subsea power cables, which include distribution, transmission, and export cables.

2.92. Approximately £18 billion of Scottish buildings and infrastructure lie within 50 meters of the shoreline. About one quarter, or £5 billion, of these assets are protected by artificial defences with the other £13 billion of these assets protected by natural defences, such as sand dunes.

2.93. The extraction of aggregate (sand and gravel) from the seabed last occurred in or before 2005 in two areas within the Forth and Tay Scottish Marine Region and there are not currently any licences to extract, however, large potential resource areas have been identified. Additionally, some navigational dredgings have been used for port construction.

2.94. As part of the National Performance Framework, the Sustainability of Fish Stocks Indicator was developed in parallel with the Clean Seas Indicator and it measures the percentage of fish stocks fished sustainably. It indicates that, in 2020, 69% of commercial fish stocks were fished at sustainable levels in Scottish waters and that performance is improving. The percentage fished sustainably in 2020 is the highest level recorded since data collection began in 1991 and represents an increase of 35 percentage points from 2000.[28]

2.95. Atlantic salmon contributes the majority (96% in 2020) of Scotland's marine aquaculture value (£362 million Gross Value Added) with mussels the main shellfish species produced through aquaculture in Scotland.[29] Strict guidelines exist to ensure that the environmental effects of aquaculture are assessed and managed safely with the majority of aquaculture taking place along Scotland's west coast, and in the Orkney and Shetland islands. There is a continuing presumption against further finfish aquaculture development on the north and east coasts to safeguard migratory fish species.

3. Approach to the Assessment

Elements of National Marine Plan 2 to be assessed

3.1. As noted in paragraph 1.20, National Marine Plan 2 will contain:

[28] Scottish Government. National Performance Framework: Sustainability of Fish Stocks [online] Available at: Sustainability of Fish Stocks | National Performance Framework https://nationalperformance.gov.scot/chart/clean-seas(accessed 20/03/2023)
[29] Scottish Government (2023) Scotland's Marine Economic Statistics 2020 [online] Available at: https://www.gov.scot/publications/scotlands-marine-economic-statistics-2020/pages/1/ (accessed 19/05/2023)

- The vision for the plan, set out in Marine Directorate's marine vision and agreed at the UK level

- High-level objectives for the plan, in alignment with Scottish Government ambitions and commitments, UK High-Level Objectives, and international commitments such as objectives set out in OSPAR's North-East Atlantic Environment Strategy 2030 or the criteria for good environmental status under the Marine Strategy Framework Directive

- Sector- or region- specific objectives and policies

3.2. The SEA will perform a broad assessment of the high-level objectives and a more targeted/in-depth assessment of the specific objectives and policies of the plan.

3.3. The UK high level objectives, vision, and its outcomes were agreed amongst the four UK administrations and underwent their own assessment process, thus, they are beyond the scope of this assessment. Any Regional Marine Plans and Sectoral Marine Plans developed under the National Marine Plan framework are subject to separate SA/SEA processes.

3.4. Initial review, considering a precautionary approach, suggests that all SEA environmental topics are to be scoped into the assessment due to the nature and scale of National Marine Plan 2 and the potential for likely significant effects to occur across all topics. Thus, the SEA is proposed to consider: biodiversity, flora, and fauna; population and human health; soil (including marine geology, sediments, and coastal processes); water; air; climatic factors; material assets; cultural heritage; landscape and seascape; and the inter-relationships between them.

Further comments from the Consultation Authorities and interested parties on Marine Directorate's initial assessments on relevant environmental topic areas are welcomed. Responses will be used to inform the approach to assessment.

Assessment Methodology

Consultation responses will inform the approach to the assessment.

SEA Objectives

3.5. SEA objectives will be used to assess the elements of the plan identified in paragraphs 3.1 and 3.2.

3.6. Initial review work by the Marine Directorate has identified a series of key environmental issues (Table 1) against which the contractor will assess and develop the SEA Objectives

3.7. The SEA objectives used to assess the National Marine Plan 2015 (Table 2) will be assessed, updated, and modified by the contractor undertaking the full

assessment and production of the Environmental Report. A set of final SEA objectives will be developed taking into consideration the feedback received through this consultation and the key environmental issues identified.

Table 1. Key environmental issues identified by Marine Directorate.

SEA Topic	Key Environmental Issues
Biodiversity, Flora and Fauna	• Protecting priority marine features (PMFs) and meeting the conservation objectives of protected sites • Addressing the challenge of biodiversity loss by both halting biodiversity loss and restoring/regenerating biodiversity • Minimising risk of introduction and establishment, and reduce the adverse impacts of invasive non-native species • Protecting and allowing for the recovery, restoration, or enhancement of marine and coastal ecosystems, habitats and species
Population and Human Health	• Ensuring that the physical health, mental health and wellbeing benefits from ocean, sea, coastal and inter-linked freshwater resources for people are equitably accessed and enjoyed • Limiting the impacts of marine industries on recreation and sustainable marine tourism; Limiting the impacts of recreation and tourism on the marine natural and historic environment • Reducing risk of harm to people from natural hazards, including storms, flooding, and coastal erosion • Limiting the human health impacts of air and water pollution • Allowing for sustainable development on Scottish islands and rural coastal areas
Soil (Marine geology, sediments, and coastal processes)	• Limiting the impact of bottom-contact activities with the potential to disturb the seabed and cause habitat loss (e.g., bottom-contact fishing, dredging and marine construction), including direct damage and sediment re-suspension • Maintaining natural physical processes • Enhancing the seabed and benthic habitats to take advantage of multiple benefits, such as natural carbon sequestration • Reducing risk of harm to the environment from natural hazards, including storms, flooding, and coastal erosion • Minimise the risk to Scotland's coastline from coastal erosion/Avoiding exacerbation of

	coastal erosion and maintaining the integrity coastal processes (e.g., by conserving or enhancing marine habitats with a role in reducing risk of flooding or coastal erosion)
Water	• Limiting eutrophication, preventing pollution by hazardous substances (including hydrocarbons), preventing pollution by radioactive substances, preventing inputs of and significantly reducing marine litter • Ensuring concentration of water contaminants is at acceptably low levels within the Scottish Government's National Performance Framework's Cleans Seas indicator[30] and enhancing water quality where possible • Maintaining or exceeding minimum environmental standards for water quality (e.g., as set out in the EU Water Framework Directive, Water Environment and Water Services (Scotland) Act 2003, EU Bathing Water Directive, and the Bathing Water (Scotland) Regulations 2008) • Limiting discharge of harmful ballast water within Scotland's seas
Air	• Maintaining or exceeding minimum environmental standards for air quality (e.g. as set out in the Air Quality (Scotland) Regulations 2000, the Air Quality (Scotland) Amendment Regulations 2002, and the Air Quality (Scotland) Amendment Regulations 2016; and in the European 2008 Ambient Air Quality Directive and the Air Quality Standards (Scotland) Regulations 2010). • Avoiding exacerbation of poor air quality and reducing air pollution from vessels and other human activities within the marine environment
Climatic Factors	• Reducing climate change-induced impacts on the physical and chemical properties of the seas and oceans and on marine plants and animals (e.g. ocean acidification and warming); Reducing climate change-induced impacts on the historic environment (e.g., alteration and acceleration of decay processes of historic monuments and archaeological sites) • Reducing emissions of Greenhouse Gases and aerosols from marine activities and industries (e.g., vessels, ports, fishing activity, oil and gas)

[30] Scottish Government. National Performance Framework: Clean seas [online] Available at: Clean seas | National Performance Framework (accessed 20/03/2023)

	• Supporting mitigation of and adaptation to climate change impacts and increasing resilience of people, communities (including islands), and nature to the changing climate • Maintaining or exceeding Scottish net zero targets
Material Assets	• Conserving, enhancing, and sustainably exploiting marine biological resources (e.g., fish stocks, fish spawning and nursery areas, and genetic stocks) • Minimising impacts on existing infrastructure (e.g., formal flood defences, coastal access routes, ports and harbours, and energy infrastructure) that could result in secondary natural and historic environmental impacts; Or allowing for the removal of infrastructure, where required, to minimise secondary impacts or aid in environmental enhancement
Cultural Heritage	• Limiting impacts of marine activities, developments, and natural processes so as to protect and enhance coastal and marine historic and cultural heritage • Maximising the multiple benefits of the cultural environment
Landscape/Seascape	• Conserving and enhancing the beauty, remoteness and wildness, where applicable, and sense of place of the natural and cultural environment and promoting the protection of coastal landscapes and seascapes
Inter-relationships/Interactions between these factors	• Minimising and addressing cumulative effects of past, current and emerging human activities in the oceans, seas, coastal waters, and inter-linked freshwater environments, including alignment between marine and terrestrial • Ensuring consideration of ecosystem-scale impacts • Ensuring consideration of a natural capital lens to understanding plan impacts on ecosystem services

Table 2. SEA objectives used to assess the National Marine Plan 2015.

Topic: Communities, Population and Human Health	
1	Maintain or improve the accessibility and connectivity of remote island and coastal communities?
2.	Promote access to the coastal and marine resource for tourism and recreation?

3.	Contribute to the resilience and cohesion of coastal and island communities?
Topic: Biodiversity, Flora, and Fauna	
4.	Avoid disturbance of key species as a result of marine activities?
5.	Safeguard marine and coastal ecosystems and their interactions?
Topic: Water	
6.	Avoid pollution of the coastal and marine water environment?
7.	Maintain and/or improve the ecological status of Scottish waters?
Topic: Air	
8.	Avoid adversely impacting on air quality, with particular regard to known existing concentrations of transport and industrial related pollution close to the coast?
Topic: Climatic Factors	
9.	Reduce greenhouse gas emissions from vessels and other marine activities?
10.	Contribute to adaptation to climate change?
Topic: Cultural Heritage	
11.	Improve understanding and knowledge about the marine historic environment?
12.	Protect the site and setting of marine and coastal historic environment features?
Topic: Landscape/Seascape	
13.	Ensure that the value and special qualities of designated landscapes is protected?
14.	Recognise and respect the value of wider (non-designated) landscapes and seascapes?
15.	Encourage sectors to take into account the relative sensitivities of different seascapes?
Topic: Marine geology and coastal processes	
16.	Avoid exacerbating coastal erosion?
17.	Maintain the integrity of coastal processes?

18.	Maintain and protect the character and integrity of the seabed?

The view of the Consultation Authorities and interested parties on the key environmental issues (Table 1) and the 2015 objectives (Table 2) is sought.

Assessment Framework

3.8. The high-level objectives and specific objectives and policies in National Marine Plan 2 will be assessed against the SEA objectives. The assessment will also consider and record any cumulative and synergistic effects, along with the characterisation of these effects. Assessment of NMP2 objectives and policies against the SEA objectives will be undertaken alongside NMP2 development, as the development of the plan is an iterative process.

3.9. Findings will be summarised in narrative and set out in matrix format, including indication of the direction (i.e., positive or negative) and scale (i.e., strong or weak) of the magnitude of the effects and with explanation of how decisions were reached.

3.10. Reasonable alternatives to the plan objectives and policies will be identified during the policy development and assessments processes, as NMP2 development is an iterative process. These alternatives will relate to different prioritisation focuses and the achievement of wider Scottish government priorities. For example, alternatives could include plans focussed on prioritising economic growth, prioritising the achievement of net zero targets, prioritising the halting of biodiversity loss, or prioritising positive social outcomes. Any reasonable alternatives identified will also be assessed.

3.11. The results of the assessment will be reported in the Environmental Report and a non-technical summary will be included to aid in consultation.

Identifying mitigation and monitoring proposals

3.12. The SEA will identify mitigation and, where possible, enhancement measures as a key part of the assessments process. Any appropriate mitigation and enhancement measures identified through the SEA process will be incorporated into the National Marine Plan 2 policy development process.

3.13. Monitoring proposals will be identified and developed throughout the assessment process. They are likely to focus on the significant environmental effects that are identified throughout the SEA and on the implementation of mitigation measures where appropriate. Monitoring proposals will be incorporated with the wider monitoring and evaluation framework for National Marine Plan 2. Where possible, existing data sources, environmental indicators, and monitoring programmes will be utilised.

The views of the Consultation Authorities and interested parties on the proposed approach to the assessment of the National Marine Plan are sought.

4. Next Steps

4.1. This sets out the next steps for the SEA, including an indicative timeline (Table 3).

4.2. Marine Directorate propose a period of consultation on National Marine Plan 2, the SEA Environmental Report, and other assessments of 16 weeks.

Table 3. Indicative timeline and high-level milestones for NMP2 and its associated SEA.

Indicative Timing	**High-level milestone**
October 2022	Publication of Statement of Public Participation and ministerial announcement of NMP2.
September - October 2023	Stakeholder consultation on SEA scoping report. Scoping report to be submitted to SEA Gateway for Consultation Authorities/Bodies and to be made available via Citizen Space for public consultation.
Summer 2024	Public consultation on draft plan and associated assessments (e.g., SA, HRA, SEA, SEIA, BRIA, and ICIA), (16 weeks).
Winter 2024/2025	Consultation Analysis report.
2025	Plan adoption and publication of post-adoption statement.

Consultation

4.3. This Scoping Report has been provided to the statutory Consultation Authorities/consultation bodies for comment, in addition to being made available to relevant Member States and members of the public.

4.4. Following the close of this consultation, the responses will be analysed and used to inform the development of the Environmental Report and draft plan that will be made available for public consultation as per the proposed timeline (Table 3).

Responding to this Consultation

4.5. We are inviting responses to this consultation by 30 October 2023.

4.6. Please respond to this consultation using the Scottish Government's consultation hub, Citizen Space (http://consult.gov.scot). Access and respond to this consultation online at https://consult.gov.scot/marine-scotland/national-marine-plan-2-strategic-environmental. You can save and return to your responses while the consultation is still open. Please ensure that consultation responses are submitted before the closing date of 30 October 2023.

4.7. If you are unable to respond using our consultation hub, please complete the Respondent Information Form to:

National Marine Planning Team

Scottish Government

Area 1B North

Victoria Quay

Edinburgh, EH6 6QQ

Handling your response

4.8. If you respond using the consultation hub, you will be directed to the About You page before submitting your response. Please indicate how you wish your response to be handled and, in particular, whether you are content for your response to published. If you ask for your response not to be published, we will regard it as confidential, and we will treat it accordingly.

4.9. All respondents should be aware that the Scottish Government is subject to the provisions of the Freedom of Information (Scotland) Act 2002 and would therefore have to consider any request made to it under the Act for information relating to responses made to this consultation exercise.

4.10. If you are unable to respond via Citizen Space, please complete and return the Respondent Information Form included in this document.

4.11. To find out how we handle your personal data, please see our privacy policy: https://www.gov.scot/privacy/.

Next Steps in the Process

4.12. Where respondents have given permission for their response to be made public, and after we have checked that they contain no potentially defamatory material, responses will be made available to the public at

http://consult.gov.scot. If you use the consultation hub to respond, you will receive a copy of your response via email.

4.13. Following the closing date, all responses will be analysed and considered along with any other available evidence to help us. Responses will be published where we have been given permission to do so. An analysis report will also be made available.

Comments and Complaints

4.14. If you have any comments about how this consultation exercise has been conducted, please send them to the contact address above or at NationalMarinePlanning@gov.scot.

Scottish Government consultation process

4.15. Consultation is an essential part of the policy-making process. It gives us the opportunity to consider your opinion and expertise on a proposed area of work.

4.16. You can find all our consultations online: http://consult.gov.scot. Each consultation details the issues under consideration, as well as a way for you to give us your views, either online, by email or by post.

4.17. Responses will be analysed and used as part of the decision-making process, along with a range of other available information and evidence. We will publish a report of this analysis for every consultation. Depending on the nature of the consultation exercise the responses received may:

- indicate the need for policy development or review
- inform the development of a particular policy
- help decisions to be made between alternative policy proposals
- be used to finalise legislation before it is implemented

4.18. While details of particular circumstances described in a response to a consultation exercise may usefully inform the policy process, consultation exercises cannot address individual concerns and comments, which should be directed to the relevant public body.

National Marine Plan 2 Strategic Environmental Assessment (SEA) Scoping Report

Scottish Government
Riaghaltas na h-Alba

Respondent Information Form

Please Note this form **must** be completed and returned with your response.

To find out how we handle your personal data, please see our privacy policy: https://www.gov.scot/privacy/

Are you responding as an individual or an organisation?

☐ Individual

☐ Organisation

Full name or organisation's name

Phone number	

Address

Postcode	
Email Address	

The Scottish Government would like your permission to publish your consultation response. Please indicate your publishing preference:

☐ Publish response with name

☐ Publish response only (without name)

☐ Do not publish response

Information for organisations:

The option 'Publish response only (without name)' is available for individual respondents only. If this option is selected, the organisation name will still be published.

If you choose the option 'Do not publish response', your organisation name may still be listed as having responded to the consultation in, for example, the analysis report.

We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?

☐ Yes

☐ No

Questionnaire

Question 1

Do you have any comments on either the environmental topic areas or assessment methodology proposed?

The proposed scope, including the relevant environmental topic areas, and assessment methodology are set out in Section 3 of SEA Scoping Report.

Question 2

What are your views on the broad policy framework and is there any further information that you feel should be considered?

The broad policy framework included in this Scoping Report identifies the broader policy context and environmental protection objectives relevant to the plan that is being assessed (Policy Framework – section 2). This will be used to inform the assessment process.

Question 3

Is there any further information or data that you feel should be considered as part of the environmental evidence base for the assessment?

The proposed evidence included in this Scoping Report will be used to inform the assessment process (Environmental Baseline – section 2).

Question 4

What are your views on the early work set out in the report to identify key environmental issues that will be used to inform the development of SEA Objectives for assessment (SEA Objectives - Section 3, Table 1)?

Are there any additional environmental issues that should be considered in the assessment?

Question 5

What are your views on the SEA Objectives used to assess National Marine Plan (2015), (SEA Objectives – Section 3, Table 2)?

These objectives will be revisited as part of the development of methodology for the SEA for NMP2.

Question 6

Do you have any further comments on the SEA scoping report?

If you would like more information on National Marine Plan 2, please contact NationalMarinePlanning@gov.scot.

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: 978-1-83521-253-0 (web only)

Published by The Scottish Government, September 2023

Produced for The Scottish Government by APS Group Scotland, 21 Tennant Street, Edinburgh EH6 5NA
PPDAS1341482 (09/23)

w w w . g o v . s c o t