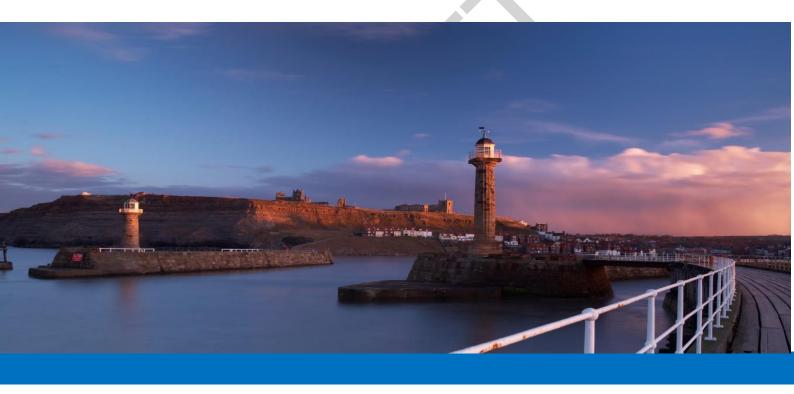


North East Inshore and Offshore Marine Plans Sustainability Appraisal. Part 1: Introduction and Methodology. Draft Report.











North East Inshore and Offshore Marine Plans Sustainability Appraisal Part 1: Introduction and Methodology. Draft Report.

Report prepared by: ClearLead Consulting Ltd. in association with WSP UK Ltd. and MarineSpace Ltd.



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1. Introduction

1.1 The Sustainability Appraisal Report

The Marine Management Organisation (MMO) has simultaneously prepared marine plans for England's north east, north west and south west inshore and offshore marine plan areas and the south east inshore marine plan area. The marine plans for the <u>south inshore and offshore</u> and the <u>east inshore and offshore</u> marine plan areas have already been published, marine plan areas were adopted in 2014 and 2018 respectively.

Through the Marine and Coastal Access Act 2009 (MCAA), the UK government introduced a number of measures to achieve its vision of 'clean, healthy, safe, productive and biologically diverse oceans and seas'. One of these measures was the provision of a marine planning system. The marine planning system is underpinned by all of the marine plans detailed above, together with the Marine Policy Statement (MPS)¹.

Marine plans, and their integration with the MPS, contribute to a plan-led regulatory system for marine activities. They provide greater coherence in policy and a forward-looking, proactive and spatial planning approach to the management of the marine area, its resources, and the activities and interactions that take place within it. Each of the marine plans seek to take account of social, economic and environmental factors that affect their relevant inshore and offshore marine plan areas and the communities that are dependent on, or have an interest in, the marine area. This report concerns the north east inshore and offshore marine plan areas only. The North East Marine Plan will cover a 20 year period. It will be monitored and reported on every three years following adoption.

The North East Marine Plan has been subject to an integrated² Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) (hereafter referred to as SA) in line with the requirements of Statutory Instrument 2004 No. 1633: The Environmental Assessment of Plans and Programmes Regulations 2004.

This report is Part 1 of the SA Report. Part 1 outlines the process and methodology of the SA. This SA Report reports on the assessment of the consultation draft version of the North East Marine Plan produced by the MMO. The SA has been carried out by ClearLead Consulting Ltd, in association with WSP UK Ltd and MarineSpace Ltd. on behalf of the MMO.

1.2 Purpose of the SA

SA considers the economic, social and environmental impacts of a plan (the three dimensions of sustainable development). The aim in undertaking an SA is to identify likely significant effects so that plan makers can take steps to avoid and/or mitigate

¹ Marine Policy Statement available at: https://www.gov.uk/government/publications/uk-marine-policy-statement

² An integrated SEA/SA refers to the fact that the assessment adheres to the requirements of the SEA regulations but also fully reflects relevant social and economic issues

the negative effects as well as identify opportunities to maximise a plan's contribution to sustainability.

The requirement for SA in the marine planning process is outlined in the MCAA, which stipulates that all marine plans are subject to SA³, and that it is undertaken in line with the procedures prescribed by Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the <u>SEA Directive</u>).

SA differs from SEA in that it gives greater consideration to socio-economic issues (although the SEA Directive refers to a possible need to consider issues such as 'population' and 'human health' and to contribute to sustainable development) alongside the environment.

The purpose of SEA is:

"...to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to contributing to sustainable development". (Article 1 of the SEA Directive).

The requirement to undertake an SA reflects the fact that, although marine plans will be developed to reflect the principles of sustainable development, it is important that there is an independent check. The SA has ensured that sustainability issues are considered in a clear and transparent manner. In particular, the SA process ensures a structured and systematic consideration of sustainability issues through its focus on testing and comparing the merits of different plan alternatives as well as consultation with key stakeholders. Note that there is no formal guidance for SA of marine plans – the closest to this would be the National Planning Practice Guidance (NPPG) for terrestrial plans⁴.

1.3 Purpose and Structure of this Report

The SEA Regulations require that an assessment is carried out on a draft version of the plan and a statutory environmental report (an SA report under the English planning system) is produced and consulted on. Part 1 of the SA Report, Introduction and Methodology (see all constituent parts detailed below), sets out the SA process followed, outlines why alternatives were selected or rejected, reports on the assessment of the draft marine plan and outlines a programme for monitoring the effects of the marine plan. This SA Report has been produced alongside the production of the North East Marine Plan and is published for consultation at the same time, providing respondents with appropriate information to base their representations about the sustainability implications of the marine plan.

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³ Schedule 5, paragraph 7

⁴ DCLG (2014) National Planning Practice Guidance [online] available at: <a href="http://planningguidance.planningportal.gov.uk/blog/guidance/strategic-environmental-assessment-and-sustainability-appraisal/sustainability-appraisal-requirements-for-local-plans/#paragraph 013.

For the sake of clarity, this SA Report is split into a number of parts. The current document is Part 1 of the SA Report: Introduction and Methodology. The other parts of the report are:

- Part 2: Scoping Information
- Part 3: Results of the Assessment

A separate Non-Technical Summary is also available.

Table 1 outlines where elements of the SEA regulations are addressed within the report.



Table 1: Fulfilling the Requirements of the SEA regulations.

What the regulations say ⁵	How this is addressed
An outline of the contents, main objectives of the plan or programme.	SA Report Part 1.
An outline of the relationship with other relevant plans and programmes.	Numerous plans and programmes exist which are either specifically relevant to the north east marine plan areas, or are relevant to the marine planning process in England as a whole. These plans and programmes, and their relationship with the relevant marine plans (for the north east, north west, south west and south east) have been detailed in:
	 SA Report Part 1 Section 2.4 SA Report Part 2 Section 2.1.2 the SA Database (Appendix A) The plans and programmes have informed
	the assessments.
The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.	SA Report Part 2 outlines the current baseline situation and the evolution of the baseline over the plan duration. These characteristics and potential interactions have been informed by information contained within the SA Database (Appendix A).
The environmental characteristics of areas likely to be significantly affected.	SA Report Part 2 outlines the characteristics of the north east marine plan areas in general and SA Report Part 3 outlines those areas likely to be significantly affected. These characteristics and potential interactions have been informed by information contained within the SA Database (Appendix A).
Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.	Sections 3 – 11 of SA Report Part 2 outline key issues (including problems) related to each SA topic. This includes sites designated pursuant to Directives 79/409/EEC and 92/43/EEC. Further information is also available in the Habitat Regulations Assessment (HRA) which is discussed in SA Report Part 1.
The environmental protection	SA Report Part 2 and Appendix A SA

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⁵ Please see Schedule 2 of the SEA regulations: *Information for Environmental Reports*.

Table 1: Fulfilling the Requirements of the SEA regulations.

rable 1. I diffining the Requirements of	
What the regulations say ⁵	How this is addressed
objectives, established at international, Community or national level, which are relevant to the plan or programme and the way those objectives and any environmental, considerations have been taken into account during its preparation.	Database outline relevant environmental protection objectives. The way that those environmental objectives have been taken into account has been through integrating them into the SA framework.
The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. The identification of the above effects should consider secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.	SA Report Part 3 sets out the significant effects of the plan and reasonable alternatives. Details of the nature of effects are provided within Appendix B: Assessment of the North East Marine Plan Preferred Policies. This includes indirect (secondary), cumulative (cumulative and synergistic), duration (short/medium/long term), permanent or temporary and negative or positive effects. Definitions are provided within Table 5 of SA Report Part 1
The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.	SA Report Part 3 sets out mitigation measures for significant adverse (negative) effects and uncertain effects and relevant enhancement measures.
An outline of the reasons for selecting the alternatives dealt with	SA Report Part 3 outlines the reasons for selecting the alternatives dealt with.
A description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.	SA Report Part 1 outlines the methodology for all stages of the SA (Section 3), and Section 3.8 specifically describes any technical difficulties that were encountered. SA Report Part 2 Section 12 outlines data gaps.
A description of measures envisaged concerning monitoring.	SA Report Part 3 Section 15 sets out monitoring measures.
A non-technical summary of the information provided under the above headings.	A separate Non-Technical Summary has been issued with this report.
The report must include the information that may reasonably be required taking into account current knowledge and	The whole SA Report addresses this.

Table 1: Fulfilling the Requirements of the SEA regulations.

What the regulations say ⁵	How this is addressed
methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process to avoid duplication of the assessment.	
Consultation: Authorities with environmental responsibility, when deciding on the scope and level of detail of the information which must be included in the environmental report (Art. 5.4).	Engagement with the SA Advisory Group (SAAG) was carried out at the scoping stage alongside more formal consultation on the Scoping Report. This is further detailed in SA Report Part 1 (Section 3.2.3) and the list of stakeholders and interested parties who comprise the SAAG provided.
Authorities with environmental responsibility and the public, shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme.	Engagement on the SA has taken place alongside the engagement on the Plan. This included engagement to support iteration 2, and engagement on the assessment of the preferred policies as reported within this statutory SA Report. Consultation on the draft plan will be allowed up to 12 weeks, following which amendments will be made prior to the plan adoption.
EU Member States, where the implementation of the plan or programme is likely to have significant effects on the environment of that country.	Potential transboundary effects have been considered in the assessment. How transboundary effects have been included within the assessments are detailed in Section 3.4.1 of the current document. Significant effects of the policies are discussed in SA Report Part 3 and full assessments can be found in Appendix B: Assessment of the North East Marine Plan Preferred Policies.
Taking the environmental report and the results of the consultations into account in decision-making (Art. 8). Provision of information on the decision: When the plan or programme is adopted, the public and any countries consulted under Art.7 must be informed	This will be set out in the SA Adoption Statement.

Table 1: Fulfilling the Requirements of the SEA regulations.

What the regulations say ⁵	How this is addressed
and the following made available to those so informed:	
The plan or programme as adopted.	
A statement summarising how environmental considerations have been integrated into the plan or programme and how the environmental report of Article 5, the opinions expressed pursuant to Article 6 and the results of consultations entered into pursuant to Art. 7 have been taken into account in accordance with Art. 8, and the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with.	
The measures decided concerning monitoring.	
Monitoring of the significant environmental effects of the plan's or programme's implementation.	MCAA requires that the MMO monitor the effect of the marine plans in relation to delivering the high level marine objectives (HLMOs) within the MPS.

1.4 Habitats Regulation Assessment

1.4.1 Introduction and Methodology

The North East Marine Plan has also been subject to an HRA. HRA refers to the assessment of the implication of a proposed plan on one or more European designated sites in view of the sites' conservation objectives. The HRA was undertaken as a requirement of the Habitats Regulations⁶ for inshore and offshore waters and assessed the effects of the North East Marine Plan on the network of Natura 2000 sites, Ramsar sites and sites identified as compensation sites. Natura 2000 is a network of areas designated to conserve natural habitats that are in danger of disappearing in their natural range, have a small natural range, or present outstanding examples of typical characteristics of the biogeographic region and/or species that are rare, endangered, vulnerable or endemic within the European Community. Their creation is specified in the Habitats and Birds Directives as outlined below and referred to collectively as European sites. These European sites include:

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⁶ The Conservation of Habitats and Species Regulations 2017 and The Conservation of Offshore Marine Habitats and Species Regulations 2017 (both as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019).

- Special Areas of Conservation (SACs) designated under the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive) for their habitats and/or species of European importance
- Special Protection Areas (SPAs) classified under the EC Directive on the Conservation of Wild Birds (the Birds Directive) for rare, vulnerable and regularly occurring migratory bird species and internationally important wetlands
- Sites of Community Importance (SCIs) that have been adopted by the European Commission but not yet formally designated by the government of each country
- Ramsar sites designated under the Convention on Wetlands of International Importance
- Candidate SACs (cSACs) that are either in Government consultation or have been submitted to the European Commission, but not yet formally adopted
- Potential Special Protection Areas (pSPAs) that that are either in Government consultation or have been submitted to the European Commission, but not yet formally adopted.

In addition to sites that have a formal designation (SAC, SPA, Ramsar site etc.) the HRA has identified areas that provide 'compensation', within the meaning of the Habitats Directive, for adverse effects on integrity of European sites arising from existing consented projects and plans. These areas of compensation are intended, in the fullness of time, to form part of the Natura 2000 network and must therefore be protected to the same standard as candidate, proposed and designated European sites.

The North East Marine Plan HRA process consists of a screening process and a fuller assessment process. For details of the methodology and data used please review the Appropriate Assessment Information Report.

1.4.2 Assessment Phase and Overall Conclusions

The screening process identified 297 UK sites and 125 EU sites which were in for appropriate assessment in the next stage of the project across all plan areas. The assessment phase of the project determined whether an adverse effect on the ability of the Natura 2000 sites to achieve their conservation objectives would arise. If potential adverse effects were identified, mitigation has been proposed to avoid such an effect. The mitigation identified is detailed below.

The overall conclusions from the HRA are that with the inclusion of the identified policy changes (see 1.4.3) it is considered that a policy framework exists that will ensure no adverse effects on the integrity of European sites arise in practice on any European sites, even though (by design) insufficient detail exists in the plans to enable individual proposals to be assessed against specific European sites, or allows project-specific mitigation measures to be discussed. This is in line with advice from the European Court of Justice regarding the 'tiering' of HRAs where there are multiple levels of plan-making. It is, however, essential that individual projects and plans within the marine environment are subject to HRA such that the intentions of the protective policy framework are delivered in practice.

All Habitats Regulations Assessment reports are available at the following weblink:

https://www.gov.uk/topic/planning-development/marine-planning

1.4.3 HRA Mitigation

The Appropriate Assessment Information Report contains the following mitigation:

- Explicitly enshrining the requirement for project-level HRA in the marine plans –
 there needs to be an explicit policy framework incorporated into the marine plans
 to ensure that applicants and scheme promoters are aware of the need for HRA
 (even if only to confirm no likely significant effects) for all schemes and that this
 must consider effects in combination with other plans and projects
- Consideration of matters that cross the terrestrial/marine environment planning borders when determining the acceptability of schemes there is a risk that issues which span the marine/coastal and terrestrial environment are overlooked because they fall between planning responsibilities. It is recommended that the supporting text for the access policies in all seven marine plans acknowledges the balance to be struck between supporting increased access to the coast and marine environment and potential conflicts with European site conservation objectives and that particularly close attention will be given to ensuring any access provision schemes are compatible with conservation objectives and any existing or future recreational pressure mitigation strategies devised by coastal local authorities
- A monitoring and Iterative Plan Review (IPR) provision an Iterative Plan Review process enables the delivery of development to be managed and the plan (and its HRA) to be updated in future reviews. The results from monitoring data from consented projects and on-going research programmes can be fed into subsequent developments in order for lessons to be learnt and evidence gaps filled, thus reducing potential impacts to European sites.

1.5 Natural Capital

MMO have explored the inclusion of natural capital through the SA process. MMO have discussed with academia, lead experts in government and the SA consultancy team as to what could be possible at this stage of the SA and in the future.

As Marine natural capital is still in its infancy, it was ultimately deemed too early to incorporate a robust natural capital approach into the SA. At the time of the SA being undertaken, no clear definition of what the natural capital approach is for the marine area exists. It is therefore unfeasible to define and implement any methodology within the sustainability appraisal process.

Once a definition and agreed approach is confirmed at a national level, it may be possible to include natural capital in a marine plan SA.

The plan policies will, however, include reference to natural capital to facilitate the development of the consideration of marine natural capital in policy decision making.

2. Background to the North East Marine Plan

2.1 Context

In being consistent with the MPS, England's North East Marine Plan will contribute to the achievement and integration of sectoral activity through specific policies within a framework of economic, social and environmental considerations. The marine plan will reflect the MPS at the sub-national level, taking into account the social, economic and environmental factors that affect the north east marine plan areas and the communities that are dependent on, or have an interest in, the north east marine plan areas.

2.2 Vision and Objectives

The UK Government vision for the marine environment is for, "clean, healthy, safe, productive and biologically diverse oceans and seas". The MPS⁷ is the framework for preparing Marine Plans and taking decisions affecting the marine environment. The UK high level marine objectives (HLMOs), published in January 2009⁸, are an integral part of the MSP and set the broad outcomes for the marine plan areas in achieving this vision, and reflect the principles for sustainable development. The HLMOs are detailed in Box 1.

Marine plans are intended to guide:

- marine users to the most suitable locations for different activities
- the use of marine resources to ensure sustainable levels
- all marine users, to ensure everyone with an interest has an opportunity to contribute to marine plans
- a holistic approach to decision making and consideration of all the benefits and impacts of all the current and future activities that occur in the marine area.

The North East Marine Plan has a defined vision which is reproduced in Box 2. The vision is achieved by the HLMOs.

As the marine plan has to monitor its contribution towards the achievements of the HLMOs, a decision was made early in the planning process to not develop specific plan objectives as this added additional complexity to the monitoring approach. This was informed by lessons learnt following the publication of the East and South Marine Plans.

Plan area specificity is therefore achieved not through plan level objectives, but rather through the delivery of the policies which are underpinned by plan-level

⁷ Marine Policy Statement available at: https://www.gov.uk/government/publications/uk-marine-policy-statement

⁸ HMG,NIE, WAG, SG (2009) Our Seas A Shared Resource - High Level Marine Objectives (online) available at:

 $[\]underline{https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/18}\\ \underline{2486/ourseas-2009update.pdf}$

evidence. It is this plan level evidence which is contained within the SA Database (Appendix A).

Box 1: High Level Marine Objectives.

Achieving a sustainable marine economy

- infrastructure is in place to support and promote safe, profitable and efficient marine businesses
- the marine environment and its resources are used to maximise sustainable activity, prosperity and opportunities for all, now and in the future
- marine businesses are taking long-term strategic decisions and managing risks effectively. They are competitive and operating efficiently
- marine businesses are acting in a way which respects environmental limits and is socially responsible. This is rewarded in the marketplace.

Ensuring a strong, healthy and just society

- people appreciate the diversity of the marine environment, its seascapes, its natural and cultural heritage and its resources and act responsibly
- the use of the marine environment is benefiting society as a whole, contributing to resilient and cohesive communities that can adapt to coastal erosion and flood risk, as well as contributing to physical and mental wellbeing
- the coast, seas, oceans and their resources are safe to use
- the marine environment plays an important role in mitigating climate change
- there is equitable access for those who want to use and enjoy the coast, seas and their wide range of resources and assets and recognition that for some island and peripheral communities the sea plays a significant role in their community
- use of the marine environment will recognise, and integrate with, defence priorities, including the strengthening of international peace and stability and the defence of the UK and its interests.

Living within environmental limits

- biodiversity is protected, conserved and where appropriate recovered and loss has been halted
- healthy marine and coastal habitats occur across their natural range and are able to support strong, biodiverse biological communities and the functioning of healthy, resilient and adaptable marine ecosystems
- our oceans support viable populations of representative, rare, vulnerable, and valued species.

Promoting good governance

- all those who have a stake in the marine environment have an input into associated decision-making
- marine, land and water management mechanisms are responsive and work effectively together, for example through integrated coastal zone management and river basin management plans
- marine management in the UK takes account of different management systems that are in place because of administrative, political or international boundaries

Box 1: High Level Marine Objectives.

- marine businesses are subject to clear, timely, proportionate and, where appropriate, plan-led regulation
- the use of the marine environment is spatially planned where appropriate and based on an ecosystems approach which takes account of climate change and recognises the protection and management needs of marine cultural heritage according to its significance.

Using sound science responsibly

- our understanding of the marine environment continues to develop through new scientific and socio-economic research and data collection
- sound evidence and monitoring underpin effective marine management and policy development
- the precautionary principle is applied consistently in accordance with the UK Government and Devolved Administrations' sustainable development policy.

Box 2: North East Marine Plan Vision.

The vision for the north east marine plan areas in 2041

The north east marine plan areas have made effective and sustainable use of the space and resources available taking account of the distinctive characteristics of the areas. A sustainable marine economy has been achieved benefiting both large industries and small businesses. Increases in local employment have improved the retention of talented and trained employees within marine industries. Infrastructure is in place to support both existing and emerging sectors allowing for a diverse marine economy, making use of renewable energy and carbon capture usage and storage opportunities.

Pristine sandy beaches, together with rich cultural heritage and biologically diverse seas support a growing tourism and recreation sector, increasing the health and wellbeing of residents and visitors. Coastal communities are resilient and have adapted to coastal change, whilst the role of the marine environment in climate change mitigation is being realised. The industrial heritage of the Durham Coast, and rivers Tyne, Tees and Wear continues to provide a range of opportunities which contribute towards the cohesion of local communities.

The environment of the north east marine plan areas has been effectively protected, conserved and where appropriate restored. Emerging environmental issues such as underwater noise and marine litter have been effectively addressed. The principle of 'environmental net gain' is well established with developments leaving the natural environment in a measurably better state than beforehand. A long established ecologically coherent network of marine protected areas, alongside coastal designations, continue to provide sanctuary for birds and sea life across the north east marine plan areas.

Sustainable development is plan-led and transboundary effects are considered effectively though effective communication across regional, national and international borders.

How will the north east marine plan areas look in 2041?

Box 2: North East Marine Plan Vision.

The north east marine plan areas are healthy and thriving with internationally recognised environmental, economic, cultural and historic assets. A sustainable marine economy and a strong, healthy and just society have been established in the region. Resilience to climate change and living within environmental limits has improved and enhanced the unique environment of the north east marine plan areas whilst ensuring protection into the future. In 2041, the North East Marine Plan has successfully co-ordinated the needs of multiple overlapping sectors, activities and interests. Understanding of the marine environment has developed through new scientific and socio-economic research. Our understanding of the north east plan areas is better than ever before through sound science (including data collection, monitoring and research) that underpins effective marine management, policy developments and transboundary cooperation. The interconnected nature of the marine economy, environment and society has been recognised in decision-making ensuring that improvements in all areas have been made.

Achieving a sustainable marine economy

A sustainable marine economy has been achieved in the north east marine plan areas. Marine development and activities are thriving with both large industries and small businesses benefitting from sustainable economic growth. Job security has improved and the increase and diversification of employment has resulted in the retention of qualified employees.

Increased sustainable shipping and port operations has facilitated continued international trade and travel. Infrastructure to support important activities such as fisheries has been maintained, and improvements have been made to incorporate diversification opportunities including aquaculture. Aquaculture schemes, such as the Amble lobster hatchery, are benefitting the sustainable fishing industry by conserving and rebuilding commercial stocks.

The north east marine plan areas continue to support profitable and efficient businesses that deliver services across the UK via the provision of power supply and telecommunication services through subsea cabling. Pipelines and inshore infrastructure continue to support energy provision, including oil and gas which continues to be an important activity and source of employment across the north east marine plan areas.

Building on the success of the innovative Blyth offshore demonstrator site, the north east marine plan areas now host a diverse offshore energy industry, creating more jobs within the area. Pioneering new technologies are now in use allowing renewables to extend beyond the limit of the continental shelf into deeper waters. Historically industrial areas, such as Hartlepool, are benefitting from investments in innovative engineering and are contributing to the renewables supply chain through maintenance and manufacturing. Marine activities in the north east marine plan areas are making a significant contribution to net zero carbon through pioneering wind energy technologies, and advancements in carbon capture use and storage that enable reuse of decommissioned hydrocarbon infrastructure whilst also creating new job opportunities.

Ensuring a strong, healthy and just society

The unique remote character of the north east inshore marine plan area, such as in Northumberland and North Yorkshire, continues to attract tourists to enjoy both the thriving natural environment and cultural heritage. The rich industrial heritage of the Durham Coast, and rivers Tyne, Tees and Wear is conserved and sits alongside areas of

Box 2: North East Marine Plan Vision.

natural beauty and marine protected areas. The integrated management of marine protected areas across the north east plan areas has promoted sustainable eco-tourism, providing opportunity for visitors to view the spectacular wildlife of the area such as impressive congregations of seabirds. Increased knowledge of the marine environment and heritage is encouraging the protection of natural and historic assets, through due consideration and assessment within decision-making processes.

There is greater awareness of the important role that the marine environment can play in mitigating climate change. Natural flood defences and carbon sinks, such as mudflats in the Tees and saltmarsh found around Holy Island, are contributing to climate change mitigation whilst playing an important role in the local and regional ecosystem.

Sustainable tourism has been supported and increased by investments such as the coastal community fund, and provided a driver for regeneration of seaside towns and the wider area. Improved knowledge and appreciation of the coast, via the development of facilities and visitor centres such as that at Seaham Harbour, has resulted in an economic boost as well as increased health and wellbeing benefits.

Initiatives promoted by partnerships such as the Durham Heritage Coast have increased diversification of recreational activities. Increased and enhanced access to the coast has drawn in recreational users such as kayakers and surfers. Coastal towns, for example Sunderland and South Shields, have benefitted from sustainable development which has ensured safe and clean beaches for locals and tourists to enjoy. This has provided a wealth of social benefits such as increased wellbeing and a greater connectivity to the marine area.

Access to sustainable fisheries resources has been enhanced and their importance as a social and environmental resource, in addition to an economic one, is recognised. Community support for local fishermen and locally caught produce has increased through the work of local initiatives. Reducing the pressure on commercial stocks and diversifying the fishing industry has created new opportunities for coastal communities. Activities within the north east marine plan areas recognise and integrate with defence priorities, and the region continues to support Ministry of Defence practice and exercise areas.

Living within environmental limits

Healthy marine and coastal habitats occur across the north east marine plan areas. The principle of 'environmental net gain' is well established with developments leaving the natural environment in a measurably better state than beforehand.

Favourable conservation status has been achieved across an ecologically coherent network of different marine protected areas throughout the north east marine plan areas, such as Flamborough Head Special Area of Conservation, Runswick Bay Marine Conservation Zone, Berwickshire and North Northumberland Coast Special Area of Conservation and Farnes Marine Conservation Zone. Both within and beyond these marine protected areas effective management and responsible development has resulted in environmental net gain and improvements to natural capital. The network of marine protected areas, and management beyond individual sites, has ensured the

Box 2: North East Marine Plan Vision.

protection of species, habitats and geological features within the north east marine plan areas. The geologically-diverse shores of North Yorkshire continue to support habitats for seabirds who breed on the rugged cliffs and feed in the shallow waters. Strong working relationships between marine and terrestrial authorities has assisted protected estuarine sites such as the Tees Estuary Special Protection Area, a leading example of how industry and environment can co-exist.

Fish and shellfish populations in the north east marine plan areas are healthy and thriving through the effective management of nursery and spawning habitats.

Inputs of pollutants and litter into the north east inshore and offshore marine plan areas have reduced through a combination of better controls and greater public awareness of impact on the marine area. Understanding the impacts of underwater noise on the species within the north east marine plan areas has increased and been appropriately managed. The threat of non-native species populations from aquaculture development and other sources such as shipping have been minimised and are well controlled using appropriate bio-security measures.

Promoting good governance

The North East Marine Plan has promoted and achieved good governance by spatially planning the use of the marine environment and strengthening the integration of marine and terrestrial planning systems. Transboundary issues are tackled collaboratively through effective communication with nations bordering the north east offshore marine plan area (Norway, Denmark, Germany and the Netherlands) and devolved administration (Scotland) which borders the north east inshore and offshore marine plan areas. Public authorities, including local authorities that share the north east inshore marine plan area borders, are utilising the plan and working efficiently together to address transboundary issues.

2.3 Content of the North East Marine Plan

The North East Marine Plan is divided into 4 chapters and also includes a supporting technical annex that sets out clear direction for application of the policies.

Chapter 1: Background and introduction

This chapter outlines the purpose of marine plans and outlines the national and international policy framework including details of the MPS, HLMOs and the Marine Spatial Planning Directive. It also describes what the north east marine plan areas are like and sets out the plan making stages which have been followed.

Chapter 2: Vision, objectives and policy

This chapter sets out a vision statement for the north east marine plan areas to 2041 and outlines the objectives and policies of the plan.

Chapter 3: Using and implementing the North East Marine Plan

This chapter outlines how the North East Marine Plan should be used, including some general considerations for its use and some helpful hints on how to read the plan.

Chapter 4: Monitoring, review and reporting

This chapter outlines details of the three year progress report which will be produced as a legal requirement under Section 61 of the MCAA.

2.4 Relationship with Other Key Plans and Programmes

The MPS applies to the entirety of the UK. In England, it has been used as the framework for preparing marine plans which covers the English marine area. A total six marine plans relevant to English marine area will be published, encompassing a total 11 marine plan areas, as shown in Figure 1. The six marine plans will provide a strategic approach to management of the marine area, with sustainable development as the key focus.

Marine plans will set out how the MPS will be implemented in specific areas. The marine plans will provide detailed policy and spatial guidance for an area and help ensure that decisions within a plan area contribute to delivery of UK, national and area specific policy objectives. The MPS does not provide specific guidance on every activity which will take place in, or otherwise affect, UK waters. By providing a framework for development of marine plans, the MPS ensures necessary consistency in policy goals, principles and considerations that must be taken into account, including in decision making. It identifies those activities to which a degree of priority is expected to be given in marine planning, but does not state, and is not intended to imply, which activities should be prioritised over any others. Relative priorities will be most appropriately determined through the marine planning process, taking into account a wide range of factors alongside UK policy objectives, including the specific characteristics of the individual marine plan area.

The MPS and marine planning systems will sit alongside and interact with existing planning regimes across the UK. These include town and country planning and other legislation, guidance and development plans in each administration. In England and Wales, this also includes the development consent order regime for nationally significant infrastructure projects (NSIPs). In England and Wales, consents for NSIPs, including the offshore renewable energy (over 100mw) and port developments, need to be determined in accordance with the Planning Act 2008. Where a relevant National Policy Statement has been designated, NSIP applications must be decided in accordance with the National Policy Statement, subject to certain exceptions, and having regard to the MPS. In all other circumstances, the decision is for the Secretary of State. The marine planning authorities in England and Wales should have regard to any relevant NPS in developing marine plans and in advising other bodies.

The MCAA requires the marine planning authority to notify local planning authorities of its intention to prepare a marine plan, whose area of jurisdiction adjoins (or under the MCAA, is adjacent to) the marine plan area⁹. As the marine plan area boundaries will extend up to the level of mean high water spring tides while terrestrial planning boundaries generally extend to mean low water spring tides, the marine plan areas will physically overlap with that of terrestrial plans. This overlap ensures that marine and land planning will address the whole of the marine and terrestrial environments respectively, and not be restricted by an artificial boundary at the coast. The geographic overlap between the marine plan and existing plans will help decision makers to work effectively together and ensure that appropriate harmonisation of plans is achieved¹⁰.

Integration of marine and terrestrial planning will be achieved through:

- consistency between marine and terrestrial policy documents; terrestrial planning policy and development plan documents already include policies addressing coastal and estuarine planning, and it is these policies which marine plans will seek to complement rather than replace, recognising that both systems may adapt and evolve over time
- liaison between respective responsible authorities for terrestrial and marine planning, including in plan development, implementation and review stages; this will help ensure, for example, that developments in the marine environment are supported by the appropriate infrastructure on land and reflected in terrestrial development plans, and vice versa
- sharing the evidence base and data where relevant and appropriate so as to achieve consistency in the data used in plan making and decisions.

Activities taking place on land and in the sea can have impacts on both terrestrial and marine environments. The coast and estuaries are highly valued environments, as well as social and economic assets The UK administrations are committed to ensuring that coastal areas, and the activities taking place within them, are managed

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⁹ As set out in Schedule 6 to the Marine and Coastal Access Act 2009

¹⁰ In preparing a Marine Plan in the English and Welsh inshore regions, a marine plan authority must take all reasonable steps to secure that the Marine Plan is compatible with the relevant Planning Act plan (as defined under the Marine and Coastal Access Act 2009) for any area in England, Wales or Scotland which is related to the Marine Plan area.

in an integrated and holistic way in line with the principles of Integrated Coastal Zone Management (ICZM). The principles of ICZM are integrated within the MCAA.

As well as supporting the HLMOs set out in the MPS (see Box 1), the policies of the North East Marine Plan will support other relevant government aspirations such as those set out in the <u>25 Year Environment Plan</u>, the <u>Industrial Strategy</u>, the <u>Clean Growth Strategy</u> and sustainable development¹¹ of the marine area.

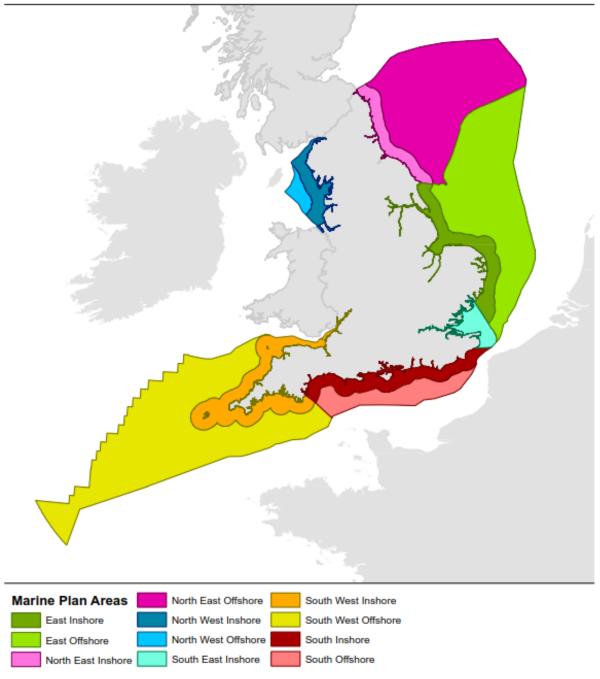


¹¹ As defined in <u>United Kingdom Sustainable Development Strategy</u>

Figure 1: Marine Plan Areas.



Marine Plan Areas in England



Date of Publication: August 2019 Coordinate System: ETRS 1989 UTM Zone 30N Projection: Transverse Mercator Datum: ETRS 1989

Not to be used for Navigation. Contains public sector information, licensed under the Open Government Licence v3.0. UK Hydrographic Office © [2018]. Ordnance Survey data © copyright and database right [2018]. National Oceanic and Atmospheric Administration © copyright and database right [2015]. Marine Management Organisation © [2019].

3. SA Methodology

3.1 Introduction

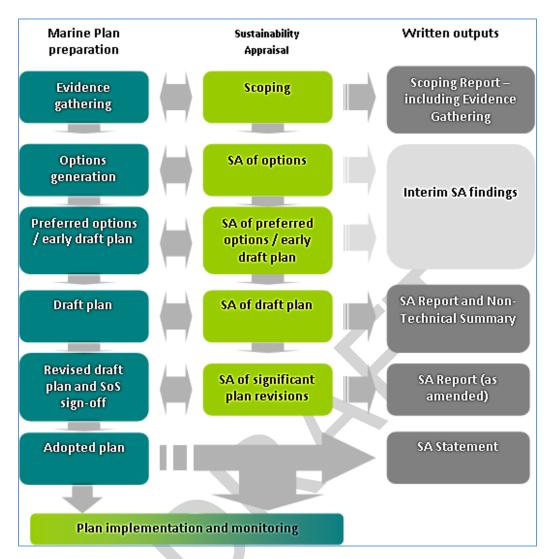
The stages in the SA process have been developed to take into account the five procedural stages of SEA:

- stage A: (scoping) setting the context, establishing the baseline and deciding on the scope of the assessment
- stage B: developing and refining alternatives and appraising the effects
- stage C: preparing the SA Report
- stage D: consulting on the SA Report and the North East Marine Plan and assessing any significant changes
- stage E: monitoring the significant effects of implementing the North East Marine Plan.

In practice, the SA is an iterative process which has been undertaken in parallel with the development of the North East Marine Plan and has fed into the development of the North East Marine Plan at appropriate intervals – see Figure 2 below.

The methodology that has been used for each stage of the SA is discussed in Sections 3.2 to 3.9.

Figure 2: Stages in the SA Process.



3.2 Stage A Scoping

The purpose of the scoping stage was to decide the coverage (scope) and the level of detail of the SA. These details were subject to engagement in line with the requirements of the SEA Regulations. The scoping report was produced by a consortium composed of Ramboll Environ, ClearLead Consulting Ltd and Marine Planning Consultants in April 2016. The draft scoping report was engaged on from 11th April 2016 to the 13th May 2016. Following some small factual changes, the final scoping report was published by the MMO. The scoping report forms part of the suite of documents which support this SA Report.

The scoping report covers the English marine plans for the north east inshore and offshore, north west inshore and offshore, south west inshore and offshore and south east inshore. The scoping report was the first formal output of the SA process. The scoping report provides baseline information on the environmental, social and economic characteristics of the marine plan areas, including the likely evolution of

the baseline without the marine plans. It sets the framework and approach for the SA process and explains how the SA will be undertaken for the four marine plans which cover the north east, north west and south west inshore and offshore areas and the south east inshore area.

The scoping report provides information about the proposed approach and provides background information about the existing conditions specific to the north east plan areas. The scoping report outlines an SA framework which the North East Marine Plan and its alternatives are measured against in order to test their sustainability. The SA framework is set out in Table 2 below.

The SA framework has been developed with the guiding principles of sustainable development¹² in mind while considering the requirements of the SEA Regulations, which lists a number of issues that might be included as part of any assessment¹³. It integrates the relevant environmental protection objectives of relevant plans and programmes listed within the SA Database (see SA Report Part 2 and Appendix A SA Database). It is also drawn from the experiences of the SA of the South and East Marine Plans and from information suggested at an SA Advisory Group (see Section 3.2.3) workshop held on the 2nd March 2016 to help define the scope.

Collection of baseline data is an important part of SA. The overall approach to the scoping report was to focus on collecting data and information that is crucial to the decision-making process and then using this to effectively scope in (and out) those issues that are relevant to each plan. Please note that the word "issues" was used to denote potentially negative issues (challenges) and positive issues (opportunities) and refers to issues which are significant in helping to set the scope of the SA. This is consistent with SA best practice. The data that has been collected within the scoping report and subsequently updated as the assessment has progressed has been used to develop the evidence base to support both the scoping stage and the assessment stages of the SA.

The scoping report took a new approach to presentation, as follows:

- a fully searchable SA baseline database (Appendix A) has been produced as part
 of the SA scoping process which includes information that can help to
 characterise the plan areas, identify impacts upon receptors, legislative and
 policy targets and objectives that should be met, issues that have been identified
 for each sub-topic and also identifies known data gaps the database was used
 to inform scoping decisions and has been built upon as the SA and marine plan
 processes developed, including an update in August 2017 and April 2019
- a series of report cards were produced at the scoping stage which provided a
 more accessible way of interpreting the findings of the SA scoping process and
 have been used to define the scope of the SA; expert judgement has been used
 to determine which elements of the baseline / issues have been discussed on the
 report cards.

sub-paragraphs (a) to (l).

¹² Taken from HM Government, Securing the Future - UK Sustainable Development Strategy (2005) ¹³ Schedule 2 (6): (a) biodiversity; (b) population; (c) human health; (d) fauna; (e) flora; (f) soil; (g) water; (h) air; (i) climatic factors; (j) material assets; (k) cultural heritage, including architectural and archaeological heritage; (l) landscape; and (m) the inter-relationship between the issues referred to in

It should be noted that no single strand of sustainable development is considered more or less important than any another, and the topics considered as part of the SA have been afforded equal weight in the appraisal process. Table 2 below sets out the SA framework which has been used to structure the assessment of the marine plans. Further detail on the development of the SA Framework is provided within SA Report Part 2 Section 2.1.

Table 2: SA Framework.

	Overarching SA topic	SA Sub-Topic
si	Cultural Heritage	 heritage assets within marine plan areas heritage assets adjacent to marine plan areas
Aspect	Geology, Substrates and Coastal Processes	seabed substrates and bathymetrycoastal features and processes
mical	Seascape and Landscape	effects on seascape and landscape
Physical and Chemical Aspects	Water	 tides and currents water temperature and salinity pollution and water quality marine litter
hysic	Air Quality	air pollutants
a	Climate	 greenhouse gas emissions climate change resilience and adaptation
spects	Communities, Health and Wellbeing	 health and wider determinants of health and effects on communities effects on protected equality groups
Social and Economic Aspects	Economy	 ports and shipping fisheries and aquaculture leisure / recreation tourism marine manufacturing defence aggregate extraction energy generation and infrastructure development seabed assets

	Overarching SA topic	SA Sub-Topic
Ecological Aspects	Biodiversity, Habitats, Flora and Fauna	 protected sites and species benthic and intertidal ecology fish and shellfish marine megafauna plankton ornithology invasive non-native species

The scoping report also helped to outline what the geographical and temporal scope of the SA should be. An overview of the geographical and temporal scope considered, and specific detail provided in Section 3.4.1.

3.2.1 Geographical Scope

The North East Marine Plan includes the north east inshore and the north east offshore marine plan areas.

The north east inshore marine plan area covers an area of approximately 687 kilometres of coastline stretching from the Scottish border to Flamborough Head in Yorkshire, taking in over 6,000 square kilometres of sea.

The north east offshore marine plan area includes the marine area from 12 nautical miles extending out to the seaward limit of the Exclusive Economic Zone, a total of approximately 50,000 square kilometres of sea. The marine plan areas are illustrated in Figure 1.

The north east marine plan areas border the east marine plan areas as well as Scottish, Norwegian and Danish marine areas. As such, the geographical scope of the SA should be wider than the total 56,000km² of sea encompassed within these marine plan areas, and should consider effects on other countries (transboundary effects) where applicable.

3.2.2 Temporal Scope

The North East Marine Plan covers a 20 year period, and therefore the SA has considered the effects of the plan over the next 20 years and beyond where possible. It should be noted that making predictions beyond 5 years into the future increases the levels of uncertainty in the prediction of effects, with this uncertainty increasing over longer time horizons.

3.2.3 Engagement on the Scoping Report

The scoping report is the primary mechanism for engaging on the scope and level of detail of the SA. The engagement on the scoping report was carried out in accordance with the requirements of Regulation 12(5) and (6) of the SEA Regulations. The scoping engagement began on the 11th April 2016 and closed on 13th May 2016. The scoping report was issued to the following statutory consultees:

- Natural England
- Historic England
- The Environment Agency.

In addition, the scoping report was issued to the following organisations for comment:

- Associated British Ports
- Association of Inshore Fisheries and Conservation Authorities
- British Marine Aggregate Producers Association
- Chamber of Shipping
- Department for Environment, Food and Rural Affairs
- Devon Coastal Partnership
- Durham Heritage Coast
- Marine Scotland (The Scottish Government)
- National Federation of Fishermen's Organisations
- North West Coastal Forum
- Oil and Gas UK
- Renewables UK
- Royal Yachting Association
- Severn Estuaries Partnership
- Tamar Estuaries Consultative Forum
- Thames Estuary Partnership
- The Crown Estate
- Visit England
- Welsh Assembly Government
- Wildlife and Countryside Link.

A number of these organisations, in addition to the statutory bodies and the MMO, form the SA Advisory Group (SAAG). The SAAG consists of the following organisations:

- Associated British Ports
- Association of Inshore Fisheries and Conservation
- British Marine Aggregate Producers Association
- Chamber of Shipping
- Devon Coastal Partnership
- Durham Heritage Coast
- Historic England

- Joint Nature Conservation Committee
- Natural England
- National Federation of Fishermen's Organisations
- North-West Coastal Forum
- Royal Yachting Association
- Severn Estuaries Partnership
- Tamar Estuaries Consultative Forum
- Thames Estuary Partnership
- The Crown Estate
- The Environment Agency
- Marine Scotland (The Scottish Government).

The SAAG was convened by the MMO to informally advise on the approach, development and delivery of the SA. The overall objective of the advisory group is to guide and advise on the delivery of the SA for the North East, North West, South West and South East Marine Plans. The advisory group provides objective procedural, technical and general advice:

- to facilitate the marine plan SA process
- to input, as appropriate to each stage of the SA process (scoping, appraisal of alternatives, appraisal of the draft plan and SA reporting)
- to promote stakeholder involvement
- to ensure appropriate consideration of relevant information, including that arising from engagements
- to achieve timely preparation of quality documents to inform appraisal decisions.

The group met on 2nd March 2016 to discuss the scope of the SA and views expressed at this meeting informed the scoping report. The Iteration 2 SAAG was held on 28th February 2018. As part of this session, the SAAG members were invited to comment on the approach being taken to the options assessment and examples of some of the completed assessments of the groupings were provided.

To assist in the assessment of the preferred options, a further assessment workshop was held with the SAAG on 19th June 2019. The Advisory Group discussed the key issues identified in the preferred policies assessment with facilitation and note taking provided by the consultants.

3.3 Stage B Assessing the Options

3.3.1 Introduction

The SEA Directive requires that the assessment identifies and evaluates reasonable 'alternatives' to what is proposed within the plan. Please note that this report uses the terms options and alternatives interchangeably.

Article 5(1) of the SEA Directive states:

"...an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated".

Good practice is to consider reasonable, realistic and relevant alternatives which are sufficiently distinct to enable a meaningful comparison of their different environmental effects.

This stage involved assessment of the alternative options against the SA framework, taking into account the evidence base provided within the SA Database. The guiding principle in the assessment of the options was to ensure that the assessment was proportionate, particularly as the North East Marine Plan is a strategic plan which does not address site or project-specific details. Therefore, the key features of the options assessment approach were:

- an approach that assessed each option as a whole and to the same level of detail. 252 policy options were packaged into 32 policy groupings¹⁴ (Table 3), and the assessment provided a comparison of the options within each grouping
- an evidence-led assessment which referred to the baseline information to provide quality assured evidence as the basis of the assessment
- focused on identifying key potential significant effects to inform the decision making between options.

The assessment was organised within an Excel workbook which contained all of the relevant groupings. This ensured a rigorous, evidenced based approach to the assessment.

The assessment of options was undertaken in two stages:

- screening

assessment of significant effects.

The main focus of the assessment was on the identification of significant effects.

An example of the options considered under one policy grouping are provided in Box 3 below, and an example of the assessment output provided in Figure 3.

¹⁴ Four groupings (Cumulative Effects, Governance, Evidence Gaps and Implementation) contained options which are not possible to assess through the SA because they are overarching policies and the options were not distinct.

Table 3: North East Groupings and Options.

Grouping	Number of Options	Grouping	Number of Options
Access	12	Fisheries	8
Air Quality	6	Habitat Loss	18
Aquaculture	5	Historic Environment	9
Climate Change – Infrastructure	10	Infrastructure	10
Climate Change – Species	6	Litter	7
Coastal Change – Infrastructure	7	MPA Geodiversity	15
Coastal Change – Natural Processes	11	Non-Native Species	7
Co-existence	13	Ports and Harbours	4
Disturbance	10	Renewables- Cables	8
Dredge Disposal	4	Seascape	5
Dredge Harbours and Ports	4	Shipping	8
Ecosystem Approach	7	Species	13
Employment	15	Tourism and Recreation	9
Energy	9	Water Quality	12

Box 3: Example Structure of Groupings and Policies.

Plan Area: North East

Grouping: Aquaculture

Issues covered:

919NE Identify and protect areas of future aquaculture potential, to facilitate development of projects and to improve integration between marine and terrestrial elements.

601NE Barriers to developing the aquaculture industry include insufficient infrastructure in older ports and harbours and a lack of integration with the existing fishing industry.

Possible responses

A: Do nothing

B: Existing policies in combination

X-AQ-2 Proposals that enable and maintain the provision of infrastructure for sustainable fisheries and aquaculture and related industries will be supported.

C: Proposals that identify and protect areas of future aquaculture potential will be supported.

D: Proposals that demonstrate diversification of fisheries into more sustainable methods of fishing including the development of infrastructure to facilitate this will be supported.

E: None of the above

Please state why you have selected these responses.

3.3.2 Screening of SA Sub-Topics

Prior to the assessment of significant effects, a screening process was carried out to determine whether the SA sub-topics were relevant to the specific grouping.

In order to determine this, assessors carried out a brief review of the SA Database (see Appendix A) for relevant information. Following this, the assessor selected either 'Yes' or 'No' to indicate whether each SA sub-topic is screened in or out. This subsequently greyed out the row within the assessment spreadsheet, in order to avoid accidental inclusion within the assessment process.

For any sub-topics which were deemed to be irrelevant to the grouping, a justification was entered into the worksheet. In order to ensure consistency, only two justifications were used:

- no key baseline issue of relevance
- no potential impact pathway.

In the options assessment stage, justification was not provided for the sub-objectives screened in, as the assessment process provides the required validation.

3.3.3 Assessing the Sustainability Effects of the Options

The second step in the assessment of options stage was to identify the potential significant effects and uncertainties of the options. Each option was considered against the relevant SA Framework sub-topics. Expert judgement and the updated SA Database (developed at the scoping stage of the SA process and refreshed in August 2017 prior to the assessment) were used as evidence for the assessment.

The north east assessment workbook contained separate tabs for each grouping, with all options listed (A, B, C, D etc.) across the top row of each grouping tab. The number of options varied between groupings. Each option was assessed in turn. In order to provide consistency, assessors used the following significance criteria for the assessment of each option, the definitions of which are included in Table 5:

- potential significant positive effects
- potential significant negative effects
- no significant effects
- uncertain (depending on implementation)
- uncertain (lack of evidence)
- potential minor positive effects
- potential minor negative effects.

Justification for significance was provided by reference to the SA Database. Assessors identified relevant issues and baseline data and provided at least one relevant topic identifier (e.g. Cultural_167) from the 'SA Database Topic Identifier' columns. Justification was not required for options that were deemed 'Not Significant', as there was no baseline data which would give rise to a significant effect.

For each of the groupings, the first option was always 'do nothing' (i.e. option A in Box 3) and the final option was always 'none of the above' (i.e. option E in Box 3). The 'none of the above' options are all unknown and therefore all of the assessments recorded an 'uncertain (depending on implementation)' effect against each SA sub-topic for this option.

Following the completion of the assessment, assessors provided a commentary which justified the assessment and highlighted any potential significant effects resulting from specific options.

3.3.4 Mitigating Potential Negative Effects of Options

At the options assessment stage of the SA, the key recommendation was to avoid taking forward options which the SA identified could result in significant negative effects. It was also recommended that policy authors select the options which enhance the significant positive effects and seek to provide sufficient detail to minimise the uncertainty associated with the implementation of a policy.

In addition, the assessors highlighted, where possible, mitigation which could be considered to assist in the identification and development of the preferred options for the north east marine plan areas.

3.3.5 Options Assessment Outputs

The options assessment workbook generated a pivot table for each grouping and an interactive graph. The table counted the number of effects (specifically, significant positive, significant negative, not significant, uncertain depending on implementation and uncertain lack of data). An example of this is shown in Figure 3.

These graphs provided a quick visual representation of the findings of the assessment for each grouping, allowing a comparison to be made of the relative performance of options.

The options assessment of the draft North East Marine Plan was reported in an options assessment SA report which can be found here.

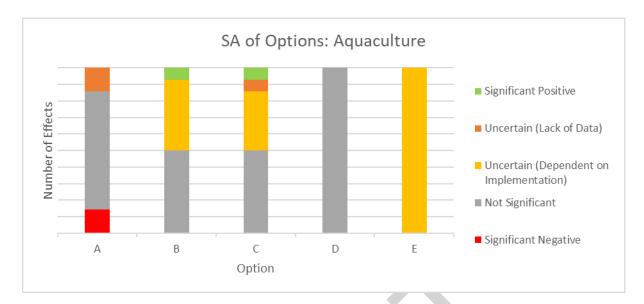


Figure 3: Example Options Assessment Output.

3.4 Stage B: Assessing the Draft Marine Plan

3.4.1 Assessing the Draft North East Marine Plan Preferred Policies

The SA of the North East Marine Plan preferred policies has been undertaken as a 'baseline-led' assessment which considers how the baseline situation will change with the North East Marine Plan in place.

A qualitative approach has been used, comprising the assessment and description of effects, rather than a quantitative approach which is not considered appropriate or feasible at this strategic level, in view of the form and content of the plan.

The SA of the draft North East Marine Plan focuses on the preferred policies completed in April 2019 with updated, stable, policy wording provided in July 2019. This consists of 59 policies arranged within 29 groupings as shown in Table 4.

Table 4: Draft North East Marine Plan Groupings and Policies.

Policy grouping	Policy Code	Policy grouping	Policy Code	Policy grouping	Policy Code
Economic				_	
Aggregates	NE-AGG-1	Aquaculture	NE-AQ-1	Cables	NE-CAB-1
	NE-AGG-2		NE-AQ-2		NE-CAB-2
	NE-AGG-3	Dredging and	NE-DD-1		NE-CAB-3
Co-existence	NE-CO-1	Disposal	NE-DD-2	Oil and Gas	NE-OG-1
					NE-OG-2
Ports and	NE-PS-1		NE-DD-3		NE-CCUS-2
Harbours (including					NE-CCUS-1
shipping)	NE-PS-2	Renewables	NE-REN-1		
	NE-PS-3		NE-REN-2		
	NE-PS-4		NE-WIND-1		
Environmenta	al				
Air Quality	NE-AIR-1	Biodiversity	NE-BIO-2	Natural Capital	NE-NG-1
Climate	NE-CC-2		NE-BIO-3	Disturbance	NE-DIST-1
change	NE-CC-3		NE-BIO-1	Invasive non- native species	NE-INNS-1
	NE-CC-1				NE-INNS-2
	NE-CC-5	Cumulative effects	NE-CE-1	Underwater Noise	NE-UWN-1
	NE-CC-6	Marine	NE-MPA-1		NE-UWN-2
Marine Litter	NE-ML-1	Protected Areas	NE-MPA-2	Water Quality	NE-WQ-1
	NE-ML-2		NE-MPA-3		
			NE-MPA-4		
Social					
Access	NE-ACC-1	Defence	NE-DEF-1	Social benefits	NE-SOC-1
Fisheries	NE-FISH-1	Governance	NE-CBC-1		NE-SOC-1
	NE-FISH-2	Seascape and Landscape	NE-SCP-1	Employment	NE-EMP-1
	NE-FISH-3	Tourism and recreation	NE-TR-1	Heritage Assets	NE-HER-1
				Infrastructure	NE-INF-1

As in the options assessment stage, the assessment of the preferred options policies was organised within an Excel workbook which ensured a rigorous, evidenced based approach to the assessment. Each grouping of policies has been assessed against the SA Framework of topics and sub-topics.

The same approach to assessment has been taken as for the assessment of options:

- preferred policies have firstly been screened to identify sub-topics of relevance to the policy grouping
- an assessment of significant effects was performed in relation to the relevant sub-topics only.

In the preferred policies assessment stage, justification was provided for the subobjectives screened in for presentational purposes.

The assessment criteria set out within Table 5 have been used to identify the potential effects of the North East Marine Plan policies.

Please note that in instances where a neutral effect has been identified, i.e. the plan policy is unlikely to alter baseline conditions significantly, the requirement to detail the reversibility, permanence, duration, spatial extent and magnitude of effects has not been necessary.

Table 5: Policies Assessment Criteria.

Notation	Description		
Degree to w with the futu	Degree to which baseline conditions may change (significance of effect) compared with the future baseline situation		
++	Significant Positive Effect: The plan policies are likely to lead to significant improvements in baseline conditions.		
+	Minor Positive Effect: The plan policies are likely to lead to some improvements in baseline conditions.		
0	Neutral Effect: The plan is unlikely to alter baseline conditions significantly.		
-	Minor Negative Effect: The plan policies are likely to lead to a deterioration in baseline conditions.		
	Significant Negative Effect: The plan policies are likely to lead to a significant deterioration in baseline conditions.		
?	Uncertain Effect: It is not known whether the plan policies would lead to an improvement or deterioration in the baseline conditions. ¹⁵		
Direct / Indirect			
Direct	Effects that are a direct result of the plan policies.		

¹⁵ Please note that for the purposes of this SA, uncertain effects have been treated as potentially significant and mitigation measures suggested.

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Notation	Description								
Indirect	Effects that are secondary i.e. they occur away from the original effect or a a result of a complex pathway.								
Reversibility	of effects								
Reversible	It is considered that the effects upon the receptor group could be reversed if activities were to change in the future. The effects could be long-lasting but the receptor may hence be able to recover or indeed improvements could be diminished.								
Irreversible	It is considered that the effects upon the receptor group could not be reversed. This may apply to situations where, for example, features are destroyed forever or systems/trends are irrevocably changed.								
Permanence	of effects								
Permanent	Effects could be lasting or intended to last or remain unchanged indefinitely.								
Temporary	Effects are not likely to be lasting or permanent.								
Duration									
Short	Within three years of plan adoption – within the reporting period i.e. policy would have an immediate effect.								
Medium	Within plan period (up to 20 years from adoption)								
Long	Beyond plan period (more than 20 years from adoption)								
Spatial Exte	nt								
Beyond both plan boundaries	Effects are predicted to extend beyond the plan boundaries (i.e. transboundary) and could affect the terrestrial environment, neighbouring marine plan areas or other states.								
Inshore and offshore plan-wide	Effects are predicted to occur within the inshore and offshore plan areas.								
Inshore plan-wide only	Effects are predicted to occur within the inshore plan area only.								
Localised	Effects are predicted to have a relatively small spatial extent, confined to the local area, typically <5km from source, within the plan boundaries.								
Magnitude o	f effects								
High	Likely total loss of or major alteration to the receptor in question The effects are predicted to be permanent and irreversible.								
Medium	Partial loss of / alteration / improvement to one or more key elements / features/ characteristics of the receptor in question The effects are predicted to be medium-long term but reversible.								

Notation	Description
Low	Minor loss / alteration / improvement to one or more key
	elements / features/ characteristics of the receptor in question
	The effects are predicted to be reversible and short term.

The assessment refers to other preferred policies within the plan which can provide mitigation for anticipated effects. This is important as decisions in the marine plan areas need to be made using the marine plan in its entirety rather than using individual policies in isolation. Policies will need to be read and applied together as they each cover different requirements.

A judgement has been made with regards to each of the criteria in Table 5 with reference to relevant baseline data within the SA Database (Appendix A).

Potential transboundary effects have been addressed within the assessment in three ways:

- through consideration of the spatial extent of potential effects (see Table 5)
 which has contributed to the significance of potential effects
- through identification of potential cumulative effects which could affect neighbouring areas, in combination with other projects, plans and programmes (see below)
- through inclusion of a governance policy grouping within the North East Marine Plan which addresses potential transboundary effects of the plan and has been assessed through the SA with recommendations having been put forward in SA Report Part 3.

The consideration of potential cumulative effects has considered two factors:

- cumulative or synergistic effects which could potentially arise from the combined effects of the North East Marine Plan preferred policies
- cumulative or synergistic effects which could potentially arise from the combined effects of the North East Marine Plan with other relevant plans and programmes.

The assessment spreadsheets also identify measures that are recommended to mitigate or further enhance the policies at the draft plan stage.

An example assessment spreadsheet is provided in Table 4.

Figure 4: Example Preferred Options Assessment Spreadsheet.

Unusual hieritage Massess within markine plan was a few season of the se	A Topic	SA Sub-topic	Area	Policy Grouping	Policy Code	Policy	Releva	tion	Relevant data identifiers	Indirec	t on	Temporary/ Irreversible/	Extent	gni tud			on	Mitigation already provided by plan policies
Allowal Heritage Assets North Marlie NI-MPA2 N	ultural Heritage	Heritage Assets within marine plan	North	Marine Protected	NE-MPA-1 NE-MPA-2 NE-MPA-3	NE-MPA-1: Proposals that support the objectives of marine protected areas and the ecological coherence of the marine protected area network will be supported. Proposals that may have adverse impacts on the objectives of marine protected areas must demonstrate that they will, in order of preference: a) avoid, b) minimise, () mitigate adverse impacts, with due regard given to statutory advice on an ecologically coherent network. NE-MPA-2: Proposals that enhance a marine protected area's ability to adapt to climate change, enhancing the resilience of the marine protected area network will be supported. Proposals that may have adverse impacts on an individual marine protected area's ability to adapt to the effects of climate change and so reduce the resilience of the marine protected area network, must demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate adverse impacts. NE-MPA-3: Where statutory advice states that a marine protected area site condition is deteriorating or that features are moving or changing due to	Yes	Potential impact				The second second	-		No cumulative	Heritage Assets within marine plan areas No significant effects have		
						NE-MPA-1: Proposals that support the objectives of marine protected areas and the ecological concernce of the marine protected area network will be supported. Proposals that may have advetse impacts on the objectives of marine protected areas miss demonstrate that they will, in order of preference of an area of the marine protected areas miss demonstrate that they will, in order of preference of amountain the protected areas advice on an ecologically coherent network. RE-MPA-2: Proposals that enhance a marine protected areas ability to adapt to climate change, enhancing the resilience of the marine protected areas network will be supported. Proposals that may have adverse impacts on an individual marine protected areas ability to adapt to the effects of climate change and so reduce the resilience of the marine protected area network, must demonstrate that they will, in order of preference, a) avoid, b) minimise, c) mitigate adverse impacts. NE-MPA-3: Where statutory advice states that a marine protected area size.	No.											

3.4.2 Use of Spatial Data

The assessments of policies have been informed by the MMO's interactive marine planning service, the Marine Information System (MIS). The MIS is to be superseded by an alternate service, Explore Marine Plans, which will also be accessible online.

The MIS evidence base drew data from various sources including the MMO, delivery partners and industry, and compiled information on sectors and activities which have been submitted to support the development of marine plans.

Where potential interactions between different sectors or activities have been identified in the assessment, the MIS assisted greatly in providing the visual data required to showcase how potential interactions might be had based on the spatial distribution of specific activities in relation to the receptors which may be affected. For example, aquaculture was identified as having potential interactions with the ports and shipping and the tourism and recreation SA sub-topics. Via the MIS, it was possible to add data layers relevant to the assessment to the map, including current and future aquaculture sites, location of ports around the United Kingdom, and the Tourism & Recreation, Recreation Models and RYA Recreational Boating layers.

3.5 Stage C: Preparing the Draft SA Report

The draft SA Report for the North East Marine Plan constitutes three parts, the current document being Part 1. Following consultation on the North East Marine Plan and its preferred options, the draft SA Report will be updated to become the 'Final SA Report'.

Material and documents generated as part of the SA process are available at the following weblink:

https://www.gov.uk/topic/planning-development/marine-planning

An SA statement which sets out how environmental / sustainability considerations and consultee comments have been integrated into the North East Marine Plan will be produced at adoption of the North East Marine Plan.

3.6 Stage D: Consulting on the SA Report

The draft North East Marine Plan and accompanying SA Report will be consulted on with the public and other key stakeholders during Quarter 1 of 2020.

Following consultation, responses relating to the SA will be reviewed and responded to. Amendments to the SA will be undertaken in response to consultees' comments as appropriate.

3.7 Stage E: Monitoring the Effects of the Plan

Monitoring the effects of the plan will be the responsibility of the MMO. The MCAA requires that the MMO monitor the effect of the marine plans in relation to delivering

the HLMOs within the MPS. Monitoring recommendations will be put forward for integration into the MMOs marine plan monitoring within the SA Adoption Statement. See Part 3 of this SA Report for further details on monitoring.

3.8 Difficulties Encountered

Ministry of Housing, Communities and Local Government (formerly Department of Communities and Local Government (DCLG)) guidance¹⁶ on SEA efficiency and effectiveness clarifies that the level of detail of an assessment should correspond to the level of detail of the plan being appraised. This reflects the SEA Regulations which state:

"The report must include the information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process to avoid duplication of the assessment".

The North East Marine Plan is a regional scale strategic plan which does not seek to address site or project-specific details. The large majority of the policies in the plan are generic or criteria-based policies without a clear spatial dimension. The plan cannot directly result in the development of new projects. The plan provides guidance for decision makers to assist in consenting (or otherwise) activities in the marine plan areas. As such, the exact location and nature of new activities will also depend upon market forces and development applications being received.

Due to the regional level of the plan, a certain level of uncertainty exists when predicting the effects of specific proposals or groups of proposals. Strategic impacts can be identified with the most certainty, together with the extent to which the marine plans seek to avoid or offset these impacts. Consequently, this SA's predictions and proposed mitigation measures will primarily be at a strategic level.

Much of the assessment is guided by the professional judgement of the team making the assessment, backed by evidence where available, included within the SA Database (Appendix A). Substantive stakeholder engagement (with the SAAG) was also used to inform the assessment, as will public consultation on the plan and draft SA Report in the next iteration, i.e. prior to the finalisation of the 'Final SA Report'. Based on this multi-faceted approach, it is considered that a robust strategic level assessment has been carried out.

Decision-makers will be required to adhere to the policies in the North East Marine Plan and the MPS when considering the potential impacts of an activity and when taking decisions about whether consent for a specific activity should be granted. Whilst it is assumed that decision-makers should make decisions based upon the most sustainable outcomes, this reliance on judgement results in a further level of uncertainty in the assessment. This is in part mitigated by the requirement for

¹⁶ DCLG (2010) 'Towards a more efficient and effective use of Strategic Environmental Assessment and Sustainability Appraisal in spatial planning', https://webarchive.nationalarchives.gov.uk/20120919202841/http://www.communities.gov.uk/docume

nts/planningandbuilding/pdf/1513010.pdf

statutory consultation bodies (such as the Environment Agency, Historic England, Natural England and the Joint Nature Conservation Committee) to be consulted on applications for consent received in the marine environment through the marine licensing process under MCAA 2009, Environmental Impact Assessments (EIAs) and HRAs and also for developments seeking consent under the Town and Country Planning Act¹⁷.

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¹⁷ The Town and Country Planning Act 1990 http://www.legislation.gov.uk/ukpga/1990/8/introduction