Developing a
Regional Marine Plan
for the Clyde

Sustainability Appraisal including Strategic Environmental Assessment



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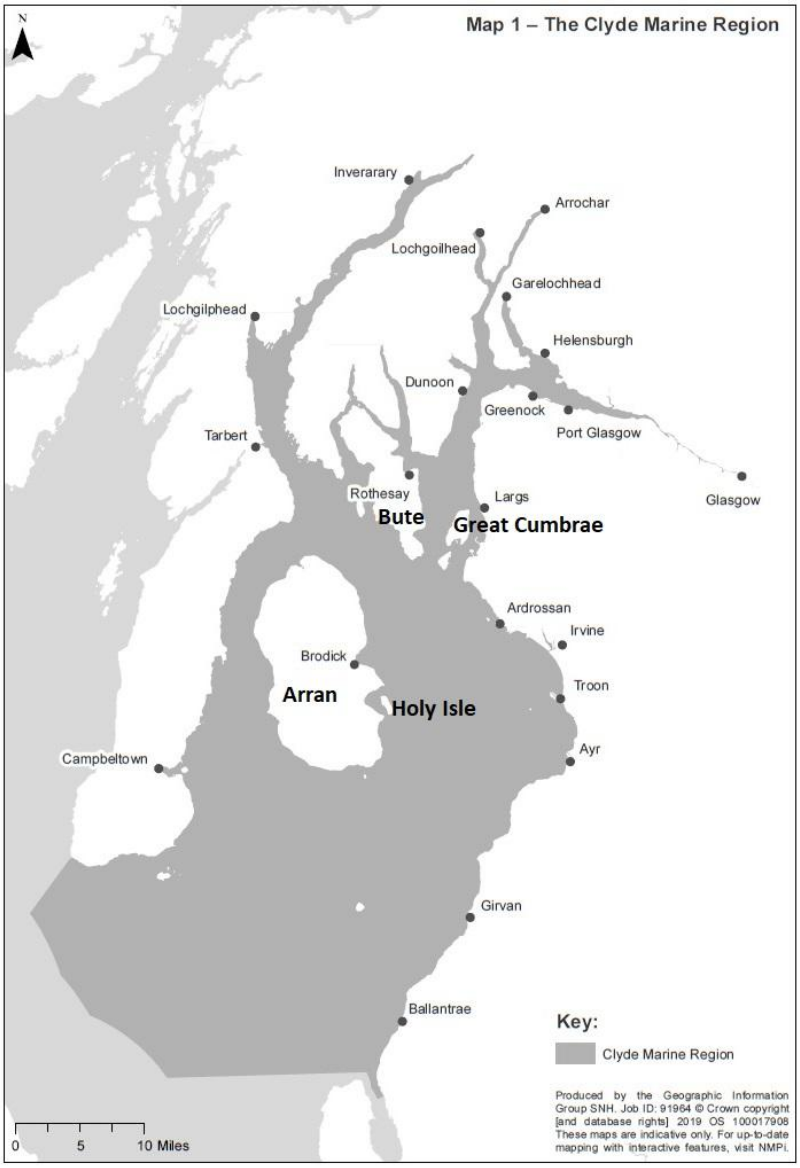
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Abbreviations used in this document

Term	Abbreviation
Clyde Marine Planning Partnership	CMPP
Clyde Marine Region	CMR
Clyde Marine Region Assessment	CMRA
Clyde Regional Marine Plan	CRMP
Good Ecological Status (classification under the Water Environment and Water Services (Scotland) Act 2003)	GEcS
Good Ecological Potential (classification under the Water Environment and Water Services (Scotland) Act 2003)	GEcP
Good Environmental Status (classification under the Marine Strategy Regulations (2010))	GEnvS
Mean High Water Springs	MHWS
Mean Low Water Springs	MLWS
National Marine Plan	NMP
Priority Marine Features	PMFs
Regional Marine Plan	RMP
Shellfish Water Protected Areas	SWPAs
Sustainability Appraisal including Strategic Environmental Assessment	SA-SEA

1. Introduction – Draft Clyde Regional Marine Plan and the purpose of this Strategic Appraisal

The Clyde Marine Planning Partnership (CMPP), acting under the Delegation of Functions (Regional Marine Plan for the Scottish Marine Region for the Clyde) Direction 2017, will develop a Regional Marine Plan for the Scottish Marine Region for the Clyde as defined in Article 3 of the Scottish Marine Regions Order 2015 (hereafter referred to as the 'Clyde Marine Region' (CMR)). The Clyde Regional Marine Plan (CRMP) will be in line with Scotland's National Marine Plan (NMP) (2015) and is expected to contribute to the management of the competing demands for the use of the Region, while protecting and enhancing the marine environment. Once the Plan development process is complete, the CRMP will be submitted to Scottish Ministers for adoption and approval.



Map 1: The Clyde Marine Region as defined by the Scottish Marine Regions Order 2015, with populated islands labelled.

The development of the draft CRMP has been driven by members of the CMPP, with wider stakeholder views also incorporated through sectoral- and issues-based working group meetings, workshops and public engagement. There was consideration of the existing legislative context and where and how the draft CRMP could add value to what is already in place. The starting point for policy development was consideration of the findings of the Clyde Marine Region Assessment (CMRA; 2018), which identified the main issues in the Region. A socio-economic review (2018) was undertaken to consider relevant strategies, policies and reports; its findings were considered when developing policies. The pre-consultation draft CRMP was developed over 2018 and early 2019 and this underwent a 'pre-consultation' in 2019.

Following the pre-consultation, the objectives, policies and recommendations were updated to reflect the feedback received during this process, contributing to the development of the draft CRMP – the version of the CRMP that this Assessment considers. Further stakeholder discussions were held, particularly to consider revisions for the Natural Heritage, Sea Fisheries and Aquaculture chapters. A 'usability' workshop was also held to improve policy. These outputs contributed towards the development of the draft CRMP. During draft CRMP development, two public dialogue[1] exercises were undertaken to enable more detailed conversation with those people not usually involved in marine planning. This work also informed policy development.

Under the Environmental Assessment (Scotland) Act 2005, a Strategic Environmental Assessment of the draft CRMP is required to identify any environmental impacts of proposed policies across a range of environmental issues; such as biodiversity, flora, fauna, soil, water, etc. This process ensures that the environmental impact is systematically considered during the Plan making process and, where they might occur, any mitigation measures and monitoring processes are put in place. A Sustainability Appraisal takes account of any potential social and economic impacts of proposed policies, in addition to the potential environmental impacts above.

An interim Sustainability Appraisal, including a Strategic Environmental Assessment Report (SA-SEA), was developed for the pre-consultation draft CRMP. Undertaking SA-SEA development alongside Plan development at this early stage allowed SA-SEA considerations to inform the Plan making process, and modifications that were identified through this process are shown in Appendix 5.

The pre-consultation provided an opportunity for wider stakeholders and the public to consider the interim SA-SEA alongside the pre-consultation draft CRMP and use it to inform their views on the CRMP itself. The feedback process on the pre-consultation draft and further dialogue with CMPP members and Marine Directorate contributed to the development of the draft CRMP, and this SA-SEA.

1.1. Contents and main objectives of the draft Clyde Regional Marine Plan

The draft CRMP identifies objectives and policies to encourage the sustainable development of marine industries; incorporate environmental protection and, where possible, enhancement; take account of social considerations in marine decision-making; and have a role in contributing to the mitigation of, and adaptation to, climate change.

The CRMP will add value to the current policy framework already in place through the NMP by taking into account local circumstances and priorities, and smaller ecosystem units. The draft CRMP was produced using the Ecosystem Approach, which looks to promote conservation and sustainable use in an equitable way. This is compatible with achieving Good Environmental Status (GEnvS) under the Marine Strategy Regulations (2010).

[1] Public Dialogue public engagement (https://bit.ly/2H0jDny).

Once finalised and adopted, the CRMP will apply to the CMR, which extends from Mean High Water Springs (MHWS) seawards out to the sea lochs in the north of the region, down to the tip of the Mull of Kintyre and eastwards across the Clyde Sea to the Ayrshire coast, to Loch Ryan. It encompasses the islands of Arran, Bute and Cumbrae (see Map 1 of the Clyde Marine Region).

The Marine (Scotland) Act 2010 requires that consenting authorities must take authorisation or enforcement decisions in accordance with Scotland's NMP and the CRMP, once it is adopted by Scottish Ministers. Public authorities must also have regard to the CRMP when making any decision which could affect the Region and the CRMP will be reviewed after three years.

The draft CRMP is therefore designed to provide a statutory policy framework for public authorities to make decisions on the placement and management of proposed developments and activities, is not retrospective to existing infrastructure, and will guide other decisions by public authorities which may impact the Region. It provides locally relevant information and policy to support implementation of the NMP. The CRMP will also serve as a guide to all marine users in the management of activities within the Region.

The draft CRMP contains objectives which set out the overall aim and intent for each of the chapters. Policies within the draft CRMP are for the use of applicants to inform proposals, public authorities to guide decision-making and other marine users to understand how the policies support the sustainable development and use of the Region.

The CMRA and Scotland's Marine Assessment 2020 identified pressures on the Region's marine and coastal environment, such as marine litter and the spread of non-native species, which cannot be addressed through public authority decision-making alone. Recommendations for marine users/local management are included throughout the draft CRMP to inform the general management of all activities within the Region, including those which are not managed through planning or licensing, such as marine and coastal sport, recreation and tourism. Implementation of these recommendations by marine users at the local level will have a significant role in driving protection and enhancement of the marine and coastal environment and ensuring sustainable activities take place. These recommendations are not enforced or funded by public authorities, but are developed and promoted by a wide range of organisations, some of which are Members of the CMPP. They may be included by public authorities in planning or licensing decisions, as further information or guidance, at the public authorities' discretion. All objectives, polices and recommendations have been assessed as part of the SA-SEA process as they can all potentially result in an effect on the SA-SEA topics.

The CRMP will contribute to the current management framework established by the NMP. It will also align with terrestrial planning. The marine and terrestrial planning regimes overlap in the intertidal zone (the area between high and low tide) – marine planning extends to Mean High Water Springs (MHWS) and terrestrial planning extends to Mean Low Water Springs (MLWS). Aquaculture developments are also required to seek planning permission through the terrestrial system. Many coastal developments and activities have links to the marine economy and potential impacts on marine natural, historic and cultural heritage. It is important that terrestrial and marine planning are joined up both in strategic planning terms, but also for licensing and consents for individual applications.

Key facts about the Plan

Responsible Authority	Marine Directorate
Title	Clyde Regional Marine Plan
Purpose	Set a framework for the sustainable development and management of the marine and coastal environment of the Clyde

	Marine Region, ensuring the protection and enhancement of the environment in order to address issues at the regional level.
What prompted the Plan?	The Marine (Scotland) Act 2010 introduced a new statutory marine planning framework which required the creation of a National Marine Plan and enabled the creation of Regional Marine Plans. Subsequently 11 marine regions were created under the Scottish Marine Regions Order (2015). Shetland and Clyde regions were the first to establish planning partnerships and begin developing Regional Marine Plans for their respective regions.
Subject	Marine Spatial Planning
Period covered	2027/8-2030/31 initially
Frequency of updates	The CRMP is to be reviewed three years from adoption and updated or replaced if required.
Area covered	Clyde Marine Region (up to MHWS and the Normal Tidal Limit of the River Clyde)
Summary of nature/content	The CRMP will provide a framework that guides and promotes sustainable development of the Region. It seeks to maintain, and enhance the health of the Region, including the biodiversity, landscape and seascape, by protecting and improving its natural resources. The CRMP will promote sustainable and socially inclusive development and use of marine and coastal resources and encourage the reconnection of people with the sea through cultural heritage, work opportunities, educational initiatives and recreational pursuits. The CRMP will contribute to Scotland's transition to a low-carbon economy and ensure that decisions affecting the management of the Region are taken in a way that maximise opportunities to mitigate and adapt to the consequences of climate change.
Objectives	The overall intention of the CRMP is set out through the vision, aims and guiding principles. There are also sector and issue specific objectives.
Date	May 2026
Contact	Clyde Marine Planning Partnership CMPP_INFO@nature.scot 07825 658962

1.2. Relationship with other relevant plans, programmes and strategies

The draft CRMP is informed by and is in accordance with the NMP and the UK-wide Marine Policy Statement. These plans are already in accordance with relevant International legislation. The detail of the legislative and policy context for the NMP is set out within the Sustainability Appraisal Report[2] for the NMP, and specifically within Appendix 2: Environmental Protection Objectives. At a national and regional level, development of the CRMP is influenced by a wide range of other plans, programmes and strategies. Where those have a statutory basis, the draft CRMP must be in line with them. These are listed in Appendix 6.

The draft CRMP will not replace or remove existing regulatory regimes or legislative requirements. It will provide a consistent overarching framework to be used when reaching decisions about development and activities in the Region. The CRMP will operate within the context of, and seeks

[2] https://www.gov.scot/Publications/2013/07/7449

alignment with both statutory and non-statutory plans, including the National Planning Framework 4, Strategic Development Plans, Local Development Plans[3], City Region and Growth Deals[4], Clyde Mission[5], River Basin Management Plans, Flood Risk Management Plans, Inshore Fisheries Group Management Plans, Integrated Coastal Zone Management Plans and Shoreline Management Plans. The draft CRMP also operates within the context of wider national industry groups.

The CMR borders the Solway and Argyll Scottish Marine Regions and the Northern Ireland marine area. The Solway and Argyll Scottish Marine Regions have not yet begun to develop Regional Marine Plans. The Marine Plan for Northern Ireland is currently being finalised.

1.3. Environmental Protection Objectives

The draft CRMP complies with existing national and international environmental protection objectives established at international and/or UK level and as set out within existing plans, programmes or strategies. These are set out in Annex 2 of the NMP: Sustainability Appraisal Report. In addition to these wider measures, a number of objectives have been developed within the CRMP. These are:

- Objectives on **climate change** state that development and activities should contribute to Scotland's transition to net-zero carbon emissions by 2045, minimise emissions of greenhouse gases and are adapted to be resilient to the impacts of climate change. Natural carbon stores and the associated benefits and services they provide are maintained and enhanced in the Region and people, biodiversity and the environment are resilient to climate change impacts.
- With regard to **cultural heritage and the historic environment** the objectives are to ensure that these assets, whether visible, buried, submerged or intangible are protected and enhanced. People's knowledge and experience of these assets is enhanced through improved awareness.
- The objective of **landscape/seascape** is that nationally and locally important landscape/seascape character of the Region is protected and enhanced at both a wider and a local level to contribute to the quality of life and wellbeing of local communities and visitors.
- The objective relating to **coastal processes** focuses on increasing the resilience of development(s) and activities to the dynamic nature of the coast, including the impacts of climate change, using natural assets where possible.
- Ensure the integrity of **seabed sediments** ensuring that their associated benefits are maintained and enhanced through sustainable management of sediments and the seabed.
- Objectives relating to **biodiversity, flora and fauna** concern the protection and enhancement of the health of the marine and coastal natural heritage of the Region, including the ecosystem services it provides. Knowledge and data of natural features is improved to identify options for their enhancement and to inform sustainable development. People's experience and knowledge of the coastal and marine environment is enhanced through improved awareness of the natural heritage of the Region. The risk of introduction and spread of non-native species is reduced and management of known pathways is improved in the Region, with a reduction of the impact of non-native species on both the

[3] See The Relationship between the Statutory Land Use Planning System and Marine Planning and Licensing, Circular 1/2015 (https://bit.ly/2GhXQYc).
[4] City Region and Growth Deals are agreements designed to deliver long-term strategies to improve economies. In the Clyde Marine Region, there are currently three Deals in place: Glasgow City Region Deal (https://bit.ly/2UZ44nK), Ayrshire Growth Deal (https://www.ayrshire.gov.uk/AyrshireGrowthDeal/) and Argyll and Bute Growth Deal (https://bit.ly/2y5MUfc).
[5] Place-based approach to maximise the full potential of the Clyde (Inner Firth from South Lanarkshire to Inverclyde on both sides of the Clyde), launched by the Scottish Government in 2020.

ecosystem and economy. The amount of marine litter in the Region is reduced and there is an increase in beach cleaning activities and data collection on the sources of litter.

- There are a range of objectives that support **population and human health**. These include improving opportunities for people to access and enjoy the Region's coast and waters for recreation and sport, ensuring human activities do not have detrimental impact on water quality and targeting action on marine litter to improve people's enjoyment and recreational experiences in the marine and coastal environment.

The draft CRMP also seeks to ensure that **air and water quality** are not negatively impacted by the objectives, policies and recommendations. In addition to this, the draft CRMP seeks to contribute to the achievement of GEcS under the Water Environment and Water Services (Scotland) Act 2003. The statutory requirements[6] of this report require that the Environmental Protection Objectives are included. However in the interest of covering the full scope of the draft CRMP and the Sustainability Appraisal topics of marine economy and society, the objectives relating to these areas are summarised below:

- For the **marine economy** the overarching objectives for all sectors are supportive and encourage safe and appropriate multiple use of infrastructure and the marine spatial area between sectors and ensuring infrastructure and the supply chain adequately supports sectors operating in the Region. The marine economic objectives also include improved data and knowledge which can inform sustainable development, identify opportunities for protection and enhancement and to strengthen our understanding of cumulative impacts and mitigation measures.

  There are also specific objectives for each of the sectors operating in the Region. These include:
  - For **sea fisheries**, the objectives are to achieve a sustainable, diverse and resilient marine ecosystem which enables a wide range of fishing opportunities, supplies local and other markets, supports sustainable stock levels, is resilient to the impacts of climate change, where by-catch is reduced, spatial management is employed to protect and enhance areas of importance to fishing activities and knowledge and data on areas of importance to fisheries activities are improved.
  - For **aquaculture**, the objectives are the sustainable development and diversification of the sector which provides economic benefits to rural areas and where sites actively contribute to the protection and enhancement of the marine environment.
  - For **sport, recreation and tourism**, the objectives are that the Region provides world class sustainable sport, recreation and tourism experiences for local people and visitors and the benefits generated by this activity are spread across local communities and beyond. Public access to the sea is improved in the Region with supporting infrastructure.
  - For **shipping, ports, harbours and ferries**, the objectives are supporting the sustainable development of the market for cruise ships, increasing the use of ports, harbours, and other coastal facilities for the construction, servicing and decommissioning of structures and vessels, improving connectivity and exploring the use of dredged materials for environmental enhancement.
  - For **energy, subsea cables and pipelines**, the objectives are a reduction in the reliance on fossil fuels, in line with Sectoral Marine Plans and that the laying, replacement and maintenance of subsea cables is undertaken with consideration of all users.

[6] Environmental Assessment (Scotland) Act 2005 - https://bit.ly/3owvP8V

    - For **defence** the objective is that operations of His Majesty's Naval Base Clyde are undertaken with due consideration of other users and the marine environment.
    - For **marine aggregates**, the objective is that these resources are safeguarded in the Region and any future exploitation is in line with regulations, in particular regarding potential environmental impact.
- As well as the benefits that can result from many of the economic and environmental objectives for **society**, there is a chapter in the draft CRMP on 'Connecting People to the Clyde Marine Region', which promotes societal ambitions of the draft CRMP and acknowledges the vital role that people have as part of the ecosystem and conversely the reliance people have on healthy and resilient ecosystems. Objectives related to society include promoting meaningful engagement of local communities and marine users in the decision-making process for proposals in the Region, people's knowledge and enjoyment is improved through sustainable and responsible use, and experiences of the natural environment and responsible public access in the Region is improved.

2. Assessment Methodology

The process of developing the SA-SEA has been an iterative one. As the pre-consultation draft CRMP was developed, objectives and policies were assessed against the SEA and SA objectives for each topic. This ensured that potential significant environmental, social or economic effects arising from the draft CRMP were identified and mitigation measures were considered and identified, or policies amended where necessary. This enabled improvements to be made to the objectives and policies throughout the process. The diagram table below highlights the key stages of the SA-SEA process.

During the scoping stage, the scoping report stated that potential effect on any of the SEA topics could not be ruled out and so all were scoped in. Consultation Authorities in their responses to the scoping report agreed with this and accordingly all environmental topics identified in the Environmental Assessment (Scotland) Act 2005 have been scoped into the SA-SEA. The scoping report also set out a proposed methodology, which has been used to complete the SA-SEA assessment. A summary of the Consultation Authorities' responses and the subsequent action taken to address/incorporate the comments into the SA-SEA report is noted in Appendix 2. Moreover, Appendix 1 provides a checklist of requirements of the Environmental Assessment (Scotland) Act 2005 with the sections of this document where responses to the requirements are presented.

Following the pre-consultation, this version of the CRMP was amended according to the feedback received. The Consultation Authorities responded to the interim SA-SEA, and all responded that there was no significant comments to make/they were content with the findings of the Assessment. Their responses are noted within the pre-consultation report, which can be found on the CMPP website. Following this, workshops were organised to discuss changes to the Sea Fisheries, Aquaculture and Natural Heritage chapters. A Public Dialogue exercise was undertaken with communities in Glasgow, Ayr and Dunoon to gather their views on draft policies. In addition to this CMPP Members' provided feedback and a 'Usability Workshop' was organised. Feedback was provided from this workshop to improve the readability and usability of the draft CRMP, including specific changes to policies. This report has been updated to reflect these changes.

The draft CRMP contains:

1. Introduction and context
2. Vision, aims and approach to objectives and policies
3. Section 1: General policies which cover cross-cutting issues including: *Climate Change; Historic Environment; Landscape/Seascape; Coastal Processes, Coastal Flood and Storm*

Damage; Natural Heritage; Non-Native Species; Marine Litter and Connecting People to the Region.

4. Section 2: Sector policies which cover *All Sectors; Sea Fisheries; Aquaculture; Sport, Recreation and Tourism; Shipping, Ports, Harbours and Ferries; Energy, Subsea cables and Pipelines; Defence and Marine Aggregates*.
5. Annex – Guidelines on national and regional authorisations, consents and assessments
6. Glossary

Vision, aims, objectives, policies and recommendations of the draft CRMP within numbers 2-5 above will be assessed against the SA-SEA objectives laid out below in Table 1. The SA-SEA objectives have been identified taking into account the scope of the SA-SEA, environmental protection objectives, the CMRA and comments from the Consultation Authorities. The objectives themselves have been framed in a way to illustrate where aspects of the natural environment can provide both social and economic benefits to people. Examples of ecosystem services have been included in the third column below to illustrate the types of ecosystem services that will be considered in the SA-SEA.

As proposed at the scoping stage, a matrix was used for the detailed assessment of the vision, aims, guiding principles, objectives, policies and recommendations. Within the matrices, a key is used to indicate whether the impact will be positive, neutral or negative, what the nature of the impact is (e.g. permanent or temporary), what mitigation and monitoring can be put in place and additional explanatory text and comments. Mitigation measures are considered in accordance with the mitigation hierarchy: avoid, minimise, restore and offset. The SA-SEA also considers the cumulative effects of all the policies within the draft CRMP set within the context of the NMP. Where additional or reasonable, alternative policies have been identified and developed through the Plan making process; the SA-SEA assessment also considers these against the SA-SEA objectives. A narrative summary of the results of the assessment is included in Section 4 of the report. Detailed assessment matrices are included in Appendix 3 of the report.

The SA-SEA does not include a Habitats Regulations Appraisal, and this has been carried out as a separate Assessment.

In terms of any difficulties or issues in carrying out the SA-SEA, the CMRA provided a vital resource and outlined the environmental baseline and identifying environmental problems. Completing the CMRA was the first stage in Plan development and there were difficulties in compiling the CMRA, for example lack of data in some areas, such as noise. For economic activity, in some instances it was difficult to disaggregate information down to the Region scale, and so for some economic information, this is taken at the wider CMR scale, which includes whole Local Authority areas. This is fully outlined and explained in the CMRA and is acknowledged where this is the case. The interim SA-SEA (which was completed alongside the pre-consultation draft CRMP) was carried out by the staff of the CMPP, who benefitted greatly from the advice and guidance of the Consultation Authorities, through their comments provided on the SA-SEA scoping report, and of the CMPP Members.

The diagram below illustrates the relationship between the development of the CRMP and the SA-SEA, linking these processes and highlighting the key input points.

Relationship between the draft Clyde Regional Marine Plan and the Sustainability Appraisal, including Strategic Environmental Assessment

Stages in SA-SEA Process	Stages in RMP Development	Key Input Points
Establishing the baseline	Development of Clyde Marine Region Assessment	CMPP Members, SEPA, NatureScot, Marine Directorate, MASTS[7]
Screening and scoping Review policy options in terms of impact on Society-Economy-Environment Develop Interim SA-SEA Report	Development of pre - consultation draft	Screening and scoping report considered by consultation authorities Sectoral working groups, issue-based workshops, CMPP Members' meetings, public engagement. 10 week open consultation on pre-consultation draft and interim SA-SEA Report
Further review of policy revisions for SA-SEA requirements	Revision and preparation of draft RMP	12 week public consultation on draft RMP and SA-SEA including active stakeholder engagement
Post adoption statement	Ministerial approval and adoption Publication	Post consultation procedures by Scottish Ministers
Monitoring effects of implementing the RMP	Keeping matters under review	CMPP Members' meetings

[7] Marine Alliance for Science and Technology Scotland

Table 1: SA-SEA Objectives incorporating ecosystem services

SEA Topic	SEA Objectives	Examples of ecosystem services that will be considered
Biodiversity, flora and fauna	1. Conserve and enhance the integrity of ecosystems, their interactions and the benefits they provide. 2. Prevent damage to important biological sites and protected species, including the benefits they provide. 3. Contribute to GEnvS and GEcS of the CMR being achieved - meeting the requirements of the Marine Strategy Regulations (2010) and the Water Environment and Water Services (Scotland) Act 2003 and sustaining the benefits of natural processes and resources.	• Some marine species are a source of food and healthy habitats provide the capacity for these species to carry out different stages of their life cycle – such as feed, create burrows, and provide areas for spawning and protection for juveniles – with success. • Some species play an important role in waste breakdown and detoxification, ensuring the aquatic environment is safe for people to use. • Many marine species are also important for carbon sequestration and storage, either within their own mass (e.g. maerl) or through transfer to sediment (e.g. seagrass).
Population and human health	4. Contribute to healthy ecosystems – biodiversity and geodiversity – that are seen as an essential part of supporting human health and wellbeing.	• Spending time by the sea has long been recognised for its benefits to physical and mental health and wellbeing. • There is a non-use value of particular relevance to protected sites whereby people value knowing that iconic species and habitats exist without necessarily using them and that they will be available to benefit future generations.
Sediments, marine geology and coastal processes	5. Contribute to ensuring that ecosystems and their associated benefits are maintained and enhanced through sustainable management of geodiversity[8] and associated sediments, seabed and the natural processes supported by these features. 6. Prevent damage to important geological sites including the benefits they provide. 7. Avoid exacerbating coastal erosion and to maintain the integrity of coastal processes and the benefits they provide.	• Geodiversity provides many ecosystem services, such as a diversity of seabed habitats and physical features necessary for the existence of marine life, the basis for energy development and the attenuation of erosive forces close to shore. • Sediments provide habitats for species, such as mud burrows for Norway lobster (*Nephrops norvegicus*) and sand/gravel for King scallops (*Pecten maximus*). Ensuring the protection of these ensures that these species can thrive and the benefits for people can continue to be derived. • Sediments play an important role in waste breakdown and detoxification, ensuring the aquatic environment is safe for people to use. • Sediments also act as carbon stores. • Marine sediments have an important role in nutrient cycling.

[8] Geodiversity is the variety of rocks, fossils, minerals, natural processes, landforms and soils that underlie and determine the character of our landscape and environment. http://www.ukgap.org.uk/geodiversity.aspx

SEA Topic	SEA Objectives	Examples of ecosystem services that will be considered
	8. Contribute to ensuring that the inherent capacity of the natural environment to cope with flooding is not detrimentally affected.	• Habitats such as saltmarsh, mudflats and sand dunes can protect coastal areas from storm damage and help adaptation to sea-level rise.
Water	9. Contribute to ensuring GEnvS and GEcS of the CMR is achieved - meeting the requirements of the Marine Strategy Regulations and the Water Environment and Water Services (Scotland) Act 2003 and sustaining the benefits of natural processes and resources.	• Maintaining clean and safe waters for swimming and other immersion sports contributes to people's sense of place and interaction with the marine environment and maintains the cultural heritage of popular seaside destinations for immersion sports, including designated bathing sites. • There are benefits to economic activities such as aquaculture. • Having clean and safe bathing waters enables people to utilise the marine environment for exercise and sport.
Air	10. Avoid exacerbating poor air quality in coastal areas, sustaining the benefits of natural resources and processes.	• Good air quality provides a regulating service, supporting ecosystems and species. Poor air quality reduces the ability of species, including humans, to thrive and their ability to be productive and provide other ecosystem benefits.
Climatic factors	11. Contribute to a timely and commensurate Clyde regional contribution to climate change mitigation. 12. Contribute to ensuring that adaptation actions are taken into account to support the natural adaptive capacity of systems in order to sustain the benefits of natural processes and resources. 13. Contribute to ensuring that adaptation to climate change impacts (e.g. sea-level rise, coastal erosion and flooding) is considered in developments and activities.	• The effects of climate change reduce the capacity of species and habitats to be productive and provide ecosystem benefits, such as provision of food. Climate change may cause species to move out of the Region and impact phytoplankton and zooplankton production – the basis of the food web.
Material assets	14. Contribute to ensuring both built and natural resources are used efficiently and sustainably, delivering multiple benefits for material assets and working in partnership with nature.	The assessment considers material assets to include the infrastructure around the region, such as harbour facilities, piers, jetties, coastal paths and coastal defences. As such, no significant ecosystem services have been identified for consideration for this SEA topic. Some SEA processes consider assets such as natural flood management processes, marine aggregates or certain habitats to be material assets. Within this SEA, these are considered under different SEA topics.
Cultural heritage	15. Protect and where appropriate enhance the historic marine environment and the benefits it provides.	• Protecting and enhancing cultural heritage, such as historic sites and popular beaches contributes to people's sense of place and interaction with the marine and coastal environment.

SEA Topic	SEA Objectives	Examples of ecosystem services that will be considered
	16. Avoid damaging known and unknown coastal and marine archaeology and the benefits it provides. 17. Avoid adversely impacting on the character and setting of historic sites and buildings and the benefits they provide.	• Consideration should be given around known historic sites and coastal and marine archaeology or unknown archaeology and its potential presence in the locality of known features.
Landscape/seascape	18. Promote the protection of landscapes/seascapes and where possible avoid or minimise adverse effects on landscapes/seascapes and the benefits they provide.	• The CMR is unique in the Scottish coast in terms of the amount and expanse of sea broadly contained by the mainland. There is a complexity and variety of seascapes which, coupled with industry and coastal development, have contributed to the natural and cultural landscapes much appreciated by locals and visitors to the Region.

SA Topic	SA Objective	Examples of ecosystem services that will be considered
Marine Economy	19. Support the development of a sustainable marine economy in the CMR across a range of sectors and business sizes. 20. Contribute to the sustainable use of the CMR's resources to support the long-term viability of marine sectors. 21. Protect marine assets (such as mineral assets) in the CMR, maintaining the potential to utilise them in the future. 22. Remove or avoid barriers to new marine enterprise opportunities. 23. Safeguard and/or create jobs that support the development of a sustainable marine economy across new or existing sectors and that support/provide benefits to coastal communities within the CMR.	• Utilising the marine environment and natural resources provides goods and services that can support economic activity. • Most marine-related industries rely on the natural environment to provide benefits needed for the operation of the industry. For example, fisheries are dependent on fish stocks being available to harvest; aquaculture relies on supporting and regulating services such as nutrient cycling and waste treatment; sport, recreation and tourism rely on the provision of clean and safe waters and seascapes.
Society	24. Maintain or improve accessibility and connectivity of coastal and island communities. 25. Promote access to coastal and marine resource for tourism and recreation. 26. Support a reduction in the magnitude of poverty and social exclusion and promote equality for all communities. 27. Contribute to communities' sense of place, including protection of and access to marine-related heritage.	• Spending time by the sea and undertaking sports and recreation in and on the sea have long been recognised for their benefits to health and wellbeing. • The seascape has aesthetic properties that have inspired a wealth of literature and art. Residents of west coast urban areas, including Glasgow, along with visitors from further afield, take great pleasure in a visit to enjoy the benefits provided by the marine and coastal environment. • Economic activity in the CMR supports local communities and supply chain activity further afield.

SA Topic	SA Objective	Examples of ecosystem services that will be considered
	28. Maintain or improve the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience.	• The Clyde has a rich maritime heritage which the public recognises and celebrates. Access to all of these aspects of the CMR should be encouraged on an equal basis for all to enjoy.

Assessment of reasonable alternatives
The Environmental Assessment (Scotland) Act 2005 requires that reasonable alternatives to the CRMP are considered and assessed as part of the SEA. The alternative approaches to the draft considered are:

1. *No change/business as usual*. This alternative considers the impact if the CRMP is not put in place, and regional/local decisions are based on the NMP and other current legislation and regulations.
2. *Regional Marine Plan targets action on issues identified which contribute to delivery of the collective vision and aims of regional stakeholders. This is done through the combined use of statutory policy relating to authorisations and consents, and non-statutory recommendations which guide and can inform the use of the marine and coastal environment***.** This alternative targets action on identified issues and contributes to delivery of the collective vision and aims of regional stakeholders through the mechanism of policy focussed on licensing and consents and on recommendations to guide best practice and use.

The full assessment of these alternatives is available in section 4.11 and Appendix 4.

3. Current state of the environment and context of the Clyde Marine Region

The CMRA was prepared to fulfil the legislative requirements of the direction from the Marine (Scotland) Act 2010 (part 3, section 4b and 4c) and was published in February 2018. It provides detail of key environmental baseline information and issues for the development of the draft CRMP. The Assessment identifies the pressures on the environment arising from different sectors and the impact of human activity. The baseline information for the SA-SEA will be primarily drawn from the information included in the CMRA, now eight years old, and updated information will be taken into account where necessary from appropriate sources. The Assessment can be found on the CMPP website[9].

The CMRA is divided into sections which correspond to the UK High Level Marine Objectives to deliver 'clean, healthy, safe, productive and biologically diverse oceans and seas'. This is also reflected in the structure of Scotland's Marine Assessment 2020[10]. These are discussed in the CMRA under three main sections: Clean & Safe, Healthy & Biologically Diverse and Productive. Each chapter in the Clean & Safe and Healthy & Biologically Diverse sections considers the functioning of ecosystem services within the CMR. Each of the chapters within this section are scored (or assessed) according to their condition, given a confidence rating according to the level of data available and an indicator arrow is used to highlight the trend for each area – improving, static or deteriorating. The Productive section of the CMRA analyses key economic and spatial data concerning human activities and considers the potential environmental pressures and impacts of those activities. It also considers potential future trends.

3.1. Environmental baseline information and context of the Clyde Marine Region

A summary of the information within the CMRA is given below as a summary of the baseline information that has been used for the SA-SEA. For more detail and information, the full CMRA will be used.

[9] http://www.clydemarineplan.scot/marine-planning/clyde-regional-marine-plan/#CMRA
[10] Scotland's Marine Assessment 2020 - https://bit.ly/3WD1oKW

3.1.1. Biodiversity, flora and fauna

The CMRA chapters relevant to this topic of biodiversity, flora and fauna are noted below with their CMRA score, trend and associated confidence level and were cross-checked with SMA2020 data where possible:

CMRA Chapter	Assessment score	Trend	Confidence
Habitats – Intertidal rock and sediments	Some or local concerns	Deteriorating	High
Habitats – Subtidal rock	Subtidal rock: Few or no concerns	Static	Medium
	Biogenic reefs: Some or local concerns	Deteriorating	
Habitats – Shallow and shelf subtidal sediments	Many concerns	Static	Medium
Marine fish (demersal and pelagic) and shellfish	Many concerns	Static	Medium
Sharks, skated and rays	Basking sharks: Some or local concerns	Improving	Medium
	All other elasmobranchs: Many concerns	Deteriorating	
Whales, dolphins and porpoises	Some or local concerns	Static	Low
Seals	Some or local concerns	Improving	High
Seabirds and water birds	Some or Local concerns	Deteriorating	High
Protected areas – nature conservation	Seabirds: Some or local concerns	Deteriorating	High
	Others: Some or local concerns	Static	
Marine non-native species	Some or local concerns	Deteriorating	Medium
Noise	Some or local concerns	Static	Low

3.1.1.1. Key habitats

The Region supports rich and varied marine and coastal wildlife. The Region's habitats are divided into three broad types including:

- **Intertidal rock and sediments** include habitats of bedrock, boulders and cobbles that lie between MHWS and MLWS. The various animals and plants found on rocky shores are adapted to survive the stresses created by regular immersion and emersion in sea water and the related fluctuations in temperature and salinity caused by exposure to the sun and rain at low tide. On many rocky shores there is a distinct vertical zonation pattern brought about by a small number of dominant species inhabiting broad bands on the surface. Intertidal sediments are mobile or dynamic shingle, gravel sand and mud or a combination of these as well as saltmarsh soils. Important areas for intertidal sediments in the Region are the mudflats and pockets of saltmarsh in the Clyde estuary, the heads of the lochs and the sandflats on the Ayrshire coast. Intertidal rock and sediment habitats support species such as dwarf seagrass (*Zostera noltii*) and blue mussel beds (*Mytilus edulis* and the polychaete *Fabricia sabella,* grouped according to the European Environment Agency Habitat classification), which are susceptible to pressures including climate change. Mudflats and sandflats are sensitive to physical disturbance such as beach grooming or some types of developments.
- **Subtidal rock** includes bedrock, boulders and cobbles that occur below the low water mark. Communities that occur here are affected by the availability of light where seaweeds inhabit areas nearer the surface with plenty of light and animals like sponges and soft corals inhabit

deeper areas where less light is available. Subtidal communities can also be influenced by waves, tidal action and salinity. Areas of subtidal rock are limited within the Region and these occur to the south of Arran, along the Ayrshire coastline and subtidal extensions of rocky shorelines of cliffs. Biogenic reefs are made up of living organisms, such as molluscs, and can also create a 'rocky' habitat, these are identified as having some/local concerns within the CMRA and with a deteriorating trend, due to the decline of species such as flame shell (*Limaria hians*) beds.

- **Shallow and shelf subtidal sediments** include shingle, gravel, sand and mud. Shallow subtidal sediments extend from the mean low water mark to around 70m; shelf sediments are those found from 70-200m depth. They cover the majority of the seabed in the Region and the CMRA identifies their condition as having many concerns, with a static trend. This habitat type supports a wide range of species including northern feather star (*Leptometra celtica*) and ocean quahog (*Artica islandica*).

There is some overlap with these habitats, and the SEA topic of *Sediments, marine geology and coastal processes*, which is discussed below as the habitats are formed of sediments and geological features such as bedrock, boulders and cobbles.

3.1.1.2. Mobile species

The Region supports many mobile species including:

- **Fish and shellfish** – Historically, the CMR was renowned for its herring (*Clupea harengus*) fishery and the reasons for the collapse of the fishery are probably due to a decline in spawning stock, high fishing mortality and lack of recruitment to the spring-spawning stock. Other fisheries for cod (*Gadus morhua*), hake (*Merluccius merluccius*), saithe (*Pollachius virens*) and whiting (*Merlangius merlangus*) peaked from the 1960s to the 1980s; however, landings of these stocks have also since declined. Whilst the total biomass of finfish in the Clyde is now similar to that of the 1930s and 1940s, the fish community is characterised by a reduced dominance of various large commercial species and an increase in the stock of whiting, made up of mostly young individuals. There are now fewer large adult finfish, meaning that many are below the size that can be legally caught and sold commercially. There is no quota for whitefish used in the Region. Stock assessments for Norway lobster (*Nephrops norvegicus*) show that the current amount being fished is appropriate to ensure sustainable future catches. Brown crab, velvet crab and European lobster are currently fished close to or above FMSY (fishing at Maximum Sustainable Yield) in the Clyde and more data is needed to assess the state of king scallop stocks[11]. It is envisaged that as survey coverage becomes more standardised from year to year and the time series increases in length, there should be sufficient data to provide a stock assessment for king scallops in this area. King scallop landings have decreased from 400 tonnes in the late 1970s to 133 tonnes in 2022[12].
- **Sharks, skates and rays** – This group are known as elasmobranchs. Basking shark (*Cetorhinus maximus*), spurdog (spiny dogfish; *Squalus acanthias*), porbeagle shark (*Lamna nasus*) and common skate (*Dipturus batis*) are Priority Marine Features which occur in the Region. These elasmobranchs are vulnerable to a range of pressures, such as bycatch, the impacts of climate change and collisions with vessels, and populations can take a long time to recover from depletion as they are usually slow-growing and late to reach maturity, resulting in low fecundity. All species of elasmobranchs found in Europe are on the OSPAR list of threatened and declining species. There is little stock information for these animals in the Region; however, survey data has been used to estimate numbers for some species.

[11] Fish and Shellfish Stocks 2016, Marine Directorate Science (https://bit.ly/3YhaK0g).
[12] Scottish scallop stocks: results of 2023 stock assessments (https://bit.ly/4akrB8n)

- The Region is home to a wide variety of **seabirds and waterbirds**. Although the Clyde does not support a significant share of Scotland's seabirds, large populations are found in various sites around the Clyde. They inhabit the islands and coast of the Region, perhaps most well-known are the population of gannets (*Morus bassanus*) on Ailsa Craig. Other sites favoured by seabirds include the Ayrshire cliffs and Sanda islands group. Across the whole of the UK seabird abundances have been declining since the early 1990s. They are affected by pressures such as climate change and localised impacts such as reduced breeding space due to overgrowth of vegetation. The Inner Clyde estuary is an important site for wintering waterbirds and supports a population of internationally important redshanks (*Tringa totanus*), as well as oystercatcher (*Haematopus ostralegus*), eider (*Somateria mollissima*) and cormorants (*Phalacrocorax carbo*). Overall Wetlands Birds Surveys for the Region appear to show declines in numbers for several of the species counted. Pressures affecting waterbirds include intermittent risk of disturbance from human activities, and in the longer term sea-level rise is likely to have significant effects on the extent and distribution of intertidal and saltmarsh habitat.
- **Dolphins, porpoises and whales** – Of the 23 species of these animals which have been recorded in Scotland only the harbour porpoise (*Phocoena phocoena*) and minke whale (*Balaenoptera acutorostrata*) are regularly spotted in the Region. Harbour porpoises are the most abundant cetacean species in the Region and the high density of these animals here suggests it may be an area of importance for them (notably there is a high density of porpoises during summer, suggesting the Region is particularly important for breeding and rearing young). The front that occurs around the Clyde Sea Sill is considered to be a key attraction for cetaceans visiting the Region from spring to autumn, due to the mixing of waters and the upwelling of nutrients. The precise numbers of these animals is unknown as data comes mainly from sightings, rather than effort-related surveys, which can give information on absolute abundance. In addition these species are highly mobile and at global level their population range is far greater than the Clyde region.
- Both species of Scottish **seals** – the Atlantic grey (*Halichoerus grypus*) and the harbour or common seal (*Phoca vitulina*) - are present within the Region. The harbour seal is the more common of the two species. The most recent published count for harbour seals in the Clyde Estuary (area differs slightly to the CMR) was 1,167 in 2015 up from 811 in 2007. Grey seals were counted at 304 in 2015, up from 272 in 2007. These numbers are based on counts of actual hauled out seals during August and therefore represent a minimum number. They are not an estimation of the population size[13] of these species within the Region. Counts of hauled out seals in the Region for 2018 provide the numbers for grey seals as 407 and for harbour seals as 1712 in the Region[14]. The CMRA identified that there are a range of pressures that may generally affect seals, but the extent and magnitude of most have not been quantified and there have been no studies in the CMR. Potential pressures include exposure to hazardous substances, entanglement in marine litter, bycatch, a reduction in prey distribution and biomass due to habitat damage and climate change, collision with ships, the use of acoustic deterrent devices and disturbance from recreational activities at haul-out sites.

3.1.1.3. Protected habitats, species and Priority Marine Features (PMFs)

The CMRA identified protected areas as having some/local concerns with a static trend and protected areas notified for seabird features as having some/local concerns with a deteriorating trend, both with a high level of confidence in this assessment. Over the last 30-40 years, various pieces of Scottish, UK and International Legislation have been introduced to help protect locations

[13] Lonergan et al. 2013 estimated the harbour seal haul-out probability during the August survey window to be 72%. Russell et al. 2016 (SCOS BP 2016/03) estimated the grey seal haul-out probability during the August survey window to be 23.9%.
[14] C. Morris, Personal communications, email, April 2020

which are recognised for their natural, ecological and/or cultural value (more on this below). Their protection and management help to ensure that they remain in good condition currently and into the future, or that their condition is restored where required. The designated sites in the Region include: Nature Conservation Marine Protected Areas (NCMPA), Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC), Special Protection Areas (SPA) and a Ramsar Site, of which there is updated Scottish Government policy on consideration of RAMSAR sites[15]. Some of these sites form part of the Marine Protected Area Network such as the Clyde Sea Sill MPA and Ailsa Craig SPA. There are also other coastal sites, which are designated for geological features and biological features that are marine and/or coastal, or features that are reliant on the marine and/or coastal environment, such as Sanda Islands SSSI. These sites are listed in the table below. This table includes sites considered by the Habitats Regulations Appraisal, which looks at which European sites may be impacted by the draft CRMP, and includes some freshwater and terrestrial sites, outwith the Region. More information on their features, condition and management can be found at NatureScot SiteLink[16].

Table 1 – Relevant nature conservation designated sites within/adjacent to the Clyde Marine Region

	Designation	Site name
Sites that contribute to the Marine Protected Area network in the Clyde Marine Region[17]		
1.	RAMSAR	Inner Clyde
2.	Special Protection Area (SPA)	Inner Clyde
3.	SPA	Ailsa Craig
4.	SPA	Loch Lomond
5.	SPA	Arran Moors
6.	SPA	Glen Etive and Glen Fyne
7.	SPA	Glen App and Galloway Moors
8.	SPA	Black Cart
9.	Nature Conservation Marine Protected Area (NCMPA)	Clyde Sea Sill
10.	NCMPA	South Arran
11.	NCMPA	Upper Loch Fyne and Loch Goil
12.	SAC	Tarbert Woods
13.	SAC	Lendalfoot Hills Complex
14.	SAC	Loch Lomond Woods
15.	SAC	Endrick Water
16.	Site of Special Scientific Interest (SSSI)	Inner Clyde
17.	SSSI	Ballochmartin Bay
18.	SSSI	Kames Bay
19.	SSSI	Southannan Sands
20.	SSSI	Bogside Flats
Other relevant coastal sites within the Clyde Marine Region These are located at the coast and are designated for geological features and biological features that are marine and/or coastal, or features that are reliant on the marine and/or coastal environment		
21.	SSSI – Biological	Sanda Islands
22.	SSSI – Biological	Ruel Estuary
23.	SSSI – Biological	North end of Bute
24.	SSSI – Biological	Western Gailes

[15] Wetlands - protecting Ramsar sites: updated Scottish Government policy (https://bit.ly/3Sohie5)
[16] https://sitelink.nature.scot/home
[17] The Historic Marine Protected Area Iona I is also part of the Marine Protected Area Network in the Clyde Marine Region, but it is not designated for nature conservation purposes.

25.	SSSI – Biological	Troon Golf links and Foreshore
26.	SSSI – Biological	Turnberry Dunes
27.	SSSI – Biological	Ballantrae Shingle Beach
28.	SSSI – Geological	Strone Point, North Loch Fyne
29.	SSSI – Geological	Rhu Point
30.	SSSI – Geological	Dumbarton Rock
31.	SSSI – Geological	Largs Coast section
32.	SSSI – Geological	Ardrossan to Saltcoats coast
33.	SSSI – Geological	Turnberry lighhouse to Port Murray
34.	SSSI – Geological	Girvan to Ballantrae Coast
35.	SSSI – Geological	Scavoch
36.	SSSI – Geological	North Newton Shore
37.	SSSI – Geological	Laggan
38.	SSSI – Geological	Corrie foreshore and Limestone Mines
39.	SSSI – Geological	South Coast of Arran
40.	SSSI – Geological	Dippin Head
41.	SSSI – Geological	Drumadoon - Tormore
42.	SSSI – Mixed	Maidens to Doonfoot
43.	SSSI – Mixed	Ailsa Craig
44.	SSSI - Mixed	Clauchlands Point - Corrygills

PMFs have been determined by NatureScot and the Joint Nature Conservation Committee (JNCC) to provide a new focus for marine conservation activities. There is a wide range of PMF habitats found in the Region, including maerl beds (*Phymatolithon calcareum, Lithothamnion glaciale* and *Lithotamnion corralloides*), seagrass beds (*Zostera noltii*, *Zostera marina* and *Ruppia maritima*) and flame shell beds (*Limaria hians*). These habitats provide shelter and protection to many other species and provide nursery areas for a range of fish and shellfish species, including commercially important species. The broad PMF habitat type 'burrowed mud' is widespread around the Region and supports many burrowing species like Norway lobster, fireworks anemone (*Pachycerianthus multiplicatus*) and the tall sea pen (*Funiculina quadrangularis*).

3.1.2. Population and human health

There are a diverse range of communities around the Region, including the urban population of Glasgow, the island communities of Arran, Holy Island, Bute and the Cumbraes, the peri-urban areas of West Dunbartonshire, Inverclyde, Renfrewshire and Ayrshire and those located more rurally around the Kyles of Bute, the Clyde sea lochs and the east part of the Mull of Kintyre. The area is home to approximately 200,000 people with an additional 650,000 in Glasgow city. The Clyde estuary has been heavily developed and has been a centre of industrial activity since the industrial revolution, although this has declined in the last 50 years or so. Long stretches of the coast now have housing and other developments, especially the Inner Firth and along the Ayrshire coast. Many communities derive benefits from living on or near the Clyde and utilise the environment for recreational or socio-economic activity.

Coastal communities around the CMR are diverse: the majority of towns, such as Helensburgh, Gourock, Largs and Troon, are characterised by an older age profile amongst the population; there are a few important fishing and port towns like Campbeltown and Tarbert; some towns are characterised by their reliance on employment in manufacturing, retail, wholesale, transport and administration like Greenock and Ayr; and there is a military community based in Garelochhead[18].

[18] Duffy, P. D., and T. A. Stojanovic (2018) The Potential for Assemblage Thinking in Population Geography: Assembling Population, Space and Place. Population, Space and Place 24 (3) e2097. https://doi.org/10.1002/psp.2097.

Glasgow, a major conurbation and the largest city in Scotland, originated at an important crossing point in the river Clyde and developed into a major port. The Region has a mix of rural and urban populations[19].

The Scottish Index of Multiple Deprivation (SIMD) ranks small areas from the most deprived to least deprived based on a number of criteria. There is a high concentration of the most deprived areas within Glasgow city, extending into Renfrewshire and West and East Dunbartonshire. Within the CMR, communities which fall into the most deprived 20% in Scotland are found in Campbeltown, Ayr, Girvan, Troon, Saltcoats, Ardrossan, Stevenson, Kilwinning, Rothesay, Dunoon, Gourock, Port Glasgow, Greenock, Dumbarton, Clydebank, Helensburgh and Lochgilphead.

The core marine sectors of the Region are shipping and transport, sea fisheries and aquaculture, and the ancillary marine sectors of fisheries and aquaculture fish processing, and sport, recreation and tourism. Table 2 demonstrates the percentage economic contribution of the Clyde Marine Region to Scotland's marine sectors (Fishing, Aquaculture, Support for oil & gas processing, Ship building, Construction and water transport services, Passenger water transport, Freight water transport, Renting & leasing of water transport equipment, Marine Tourism) from 2022-2023[20], the most up to date data at the time of writing.

Table 2: Economic Overview by local authorities in the Clyde Marine Region, 2022 to 2023 (2023 prices)

	GVA £M		**Turnover £M**		**Employment'000s**	
Local Authority	**2022**	**2023**	**2022**	**2023**	**2022**	**2023**
Argyll & Bute	130	175	371	382	4.7	5.4
Glasgow City	331	354	833	847	4.5	5.2
Inverclyde	111	95	254	252	1.7	1.8
North Ayrshire	35	37	86	95	1.7	1.8
Renfrewshire	43	36	77	77	1.5	1.6
South Ayrshire	53	44	108	96	1.8	1.9
West Dunbartonshire	20	16	31	27	0.4	0.4
Total	**723**	**757**	**1,760**	**1,776**	**16**	**18**
Percentage of Scottish total	**13**	**13**	**14**	**14**	**23**	**24**

Within the sea fisheries sector, landings in the Clyde Marine Region are made by boats registered in Scotland and Northern Ireland and, to a lesser degree, the Isle of Man and other parts of the UK. Total Scottish direct employment in the fisheries sector in 2024 was 3,375 jobs, of which activity in the Campbeltown and Ayr Sea Fisheries Statistical Districts accounted for 14.5% (543 jobs)[21]. Value of landings in 2024 for the same districts was £26M[22].

Aquaculture makes a significant contribution to the economy of the Clyde, providing year round jobs in more remote rural and coastal communities. Direct employment and some support services are important for certain areas, such as the Cowal and Kintyre peninsulas. Wider supply chain activities, including the processing of products, benefit those areas where such activities are located, with these tending to be in more urban locations around Glasgow. Finfish farming accounts for a majority of the production sites, with activity concentrated on salmon farming in and around Loch Fyne and Loch Striven. Finfish farming can also occur outside categorised areas. The value of salmon farming

[19] Defining Scotland by Rurality (https://bit.ly/2RZygwl).
[20] Scotland's Marine Economic Statistics 2023 (https://bit.ly/437nhpX)
[21] Scottish sea fisheries statistics 2024 (https://bit.ly/3ZLrrBY). Figures are recorded according to Sea Fisheries Statistical Districts, so they do not accurately reflect the geographic area of the Clyde Marine Region. The Campbeltown district includes part of Argyll.
[22] Ibid.

in the Clyde and Argyll[23] Marine Regions was around £227M in 2022, which represented 18.5% of total Scottish production[24].

Shellfish farming in the Region is generally smaller scale, single owner businesses. Again, activity is largely concentrated in Loch Fyne and Loch Striven. Farmed species include the blue mussel, Pacific oyster (*Crassostrea gigas*), native oyster *(Ostrea edulis*) and the queen scallop (*Aequipecten opercularis*). The value of mussel production in the Clyde and Argyll Marine Regions[25] was just under £0.5M in 2022, which represents around 5.5% of Scottish mussel production[26]. The value of Pacific oyster production in the Clyde Marine Region was £139,810 in 2022 (8.3% of Scottish production) and the value of queen scallops in the Clyde and West Highlands Marine Regions[27] was £78 in 2022 (0.06% of Scottish production)[28].

In terms of contribution to the economy, marine tourism in the Clyde Marine Region was £135M GVA in 2021, 27% of the total Scottish marine tourism GVA that year[29] and employment was 7,200[30]. Marine sport, recreation and tourism can act as a driver to support economic regeneration in coastal and island economies. The contribution of marine tourism to island, rural and fragile communities is well recognised[31].

Ferries are vital to the communities around the Clyde Marine Region. 2.7 million[32] passengers use ferry services connecting communities in the Clyde and providing links to the islands of Arran, Bute and Cumbrae. The Region is a popular cruise destination, where the majority of cruise ships dock at Greenock Ocean Terminal. In 2024, around 150,000 cruise passengers visited the Region, representing 15 % of cruise passengers to Scotland[33].

Inappropriate development in the marine and coastal environment can affect both the quality of life and human health in local communities. Many effects may be indirect and temporary (e.g. increased construction traffic, increased harbour activity or reduced access for key coastal walking, sailing routes or fishing grounds). Longer term effects may include visual impacts, noise disturbance and the creation of waste and litter.

Water quality can also impact on human health and the ability to generate a livelihood and food production from our marine and coastal environment. Recreational immersion sports and activities such as swimming, diving and snorkelling rely on clean and safe waters. Bathing water quality is monitored by the Scottish Environment Protection Agency (SEPA) during the bathing season (15 May to 15 September) to ensure levels of pathogens are not too high as pathogens can cause gastrointestinal illnesses and ear infections. There are 14 sites in the Region which are designated protected bathing areas and these are monitored routinely. Details of these protected bathing areas are noted in the CMRA. Similarly fish and shellfish products are tested by the Food Standards Scotland (FSS) official control (OC) monitoring programme[34] to ensure they are safe to consume. Toxins and microorganisms can become concentrated in shellfish flesh and are harmful to consume.

[23] Data for Clyde and Argyll Marine Regions have been merged due to commercial confidentiality. The value of salmon farming in the Clyde alone is likely approximately half of the value of salmon farming in the Clyde and Argyll Marine Regions.
[24] Scottish fish farm production survey 2022, Appendix 3 (https://bit.ly/4tmXl47)
[25] Data for Clyde and Argyll Marine Regions have been merged due to commercial confidentiality.
[26] Scottish fish farm production survey 2022, Appendix 2 (https://bit.ly/4etXn6w)
[27] Data for Clyde and West Highlands Marine Regions have been merged due to commercial confidentiality.
[28] Scottish shellfish farm production survey 2022, Appendix 2 (https://bit.ly/4etXn6w)
[29] Scotland's Marine Economic Statistics 2021 (https://bit.ly/3PWS3OH)
[30] Scotland's marine economic statistics 2017, Section 11 Marine Tourism, Table 17 (https://bit.ly/4uAVeL3)
[31] Giant Opportunities 2026-2030: A Strategic Framework for Scotland's Marine Tourism Sector (https://bit.ly/48lRdf9)
[32] Scottish Transport Statistics 2024. Ferry routes included in this figure: Wemyss Bay – Rothesay, Ardrossan – Brodick, Claonaig – Lochranza, Largs – Cumbrae, Colintravie – Rhubodach, Tarbert – Portavadie, Ardrossan – Campbeltown, Gourock – Dunoon. (https://bit.ly/47N9eaV).
[33] Cruise ship levy: consultation (https://bit.ly/3Qhf5k7).
[34] Food Standards Scotland shellfish results (https://bit.ly/3qghBcV)

Shellfish Water Protected Areas (SWPAs) and Classified Shellfish Harvesting Areas (CSHAs) have been designated to protect shellfish growing areas.

3.1.3. Sediments, marine geology and coastal processes

The CMRA chapters relevant to this topic are noted below with their CMRA score, trend and associated confidence level and were cross-checked with SMA2020 data:

CMRA Chapter	Assessment score and trend	Trend	Confidence
Hazardous substances including biological effects	Clyde estuary, Inner Firth, Holy Loch, Garroch Head: Many concerns	Static	High
	Other lochs and outer Firth: Some or local concerns	Improving	

The CMRA scores for the habitat types of intertidal rock and sediments, sub-tidal rock and shallow and shelf subtidal sediments, highlighted in section 3.1.1., are also relevant to this SEA topic, as they are underpinned by sediments and geological features. The Firth of Clyde has a coastline of over 1,200 km and includes eight sea lochs, five estuaries and numerous islands including Arran, Bute and the Cumbraes. The diverse nature of the area largely results from its underlying geology with the global and local effects of glaciation during the last ice age. The Firth is bisected by the Highland Boundary Fault. The southern part is relatively un-indented and low in relief whilst the coastline in the northern part is more resistant to erosion, resulting in a more indented and dramatic landscape. Several of the sea lochs are fjordic in nature being long, narrow and deep with shallow sills at their mouths. Since the retreat of the ice around 10,000 years ago, Western Scotland has slowly been rising, relative to sea level. This process has contributed to the formation of raised beaches along parts of the Clyde coast, such as the raised shingle spit at Ballantrae. A recent assessment[35] shows that in Scotland, sea-level rise is outpacing vertical land 'rebound', and all of Scotland's firths will be exposed to increased erosion rates due to sea-level rise.

Glacial action has created a broad underwater sill with an average depth of 40-50m which divides the North Channel from the Arran Basin, known as the Clyde Sea Sill. The sheltering effect of the Kintyre peninsula and Arran, coupled with deep waters and a moderate tidal range, leads to a seabed dominated by mud. The area also contains a range of habitats with long sandy stretches along the Ayrshire coast and hard ground along the edge of the deep channels in the North Channel and Loch Fyne. There are also rocky shores and sandy bays in the sea lochs. The inner Firth, around the islands of the Cumbraes and Bute, is a sheltered area with a relatively small tidal range and rate. Water circulation is generally weak, with the direction of movement dictated by the wind when it exceeds a gentle breeze. Under conditions of gentler winds, the water circulation is a weak northwards movement as part of the general circulation of the Firth.

Sea-level rise will increasingly affect many parts of the CMR's coast, bringing increased risks of estuarine and coastal erosion and flooding. In some places this may threaten coastal communities, important infrastructure, and natural assets. Cumulative sea-level rise is projected to be at least 85 cm higher in 2100 than in 2017 around the Region[36]. At the coast the impacts may be further exacerbated through increased storm wave heights and increases in river and surface water flooding.

The industrial legacy of the Region means that some hazardous substances are found in high concentrations in the sediments in the estuary. Sewage and dredge spoil sludge dumping was also

[35] Marine Climate change Impacts Partnership Report Card 2020 (https://bit.ly/34AZIGW).
[36] UK Climate Projections 18 (https://bit.ly/2XtmEGt) as included in SEPA's Climate change allowances for flood risk assessment in land use planning report (2019) (https://bit.ly/2O4Bb63).

carried out in the Clyde and this has led to higher levels of heavy metals in the sediment around these areas, including in the estuary. Some sites have a greater potential to accumulate contaminants due to the hydrophobic nature of some hazardous substances, which means they accumulate more readily in sediments with a high organic content in the CMR. The use and disposal of hazardous substances is now regulated and their concentrations monitored over time to ensure certain activities are not carried out in contaminated areas, e.g. shellfish harvesting.

In general the impact of human-induced changes is seen on the overlying sediments, rather than on the seabed geology, although some developments do have the potential to impact on the seabed geology. Parts of the upper Clyde estuary, harbours and ports are dredged to maintain or increase the depth of navigation channels and berthing areas to ensure the safe passage of vessels. Cloch point is used for the disposal of dredged material, and this may have altered topography. Impacts of dredge and trawl fishing are evidenced in parts of the Clyde.

Manganese nodules are found just below the surface of the sea bed in many of the sea lochs. There are oil and gas reserves within the CMR. There is currently no marine aggregate extraction taking place in the CMR.

3.1.4. Water

The CMRA chapters relevant to this topic are noted below with their CMRA score, trend and associated confidence level and were cross-checked with SMA2020 data:

CMRA Chapter	Assessment score and trend	Trend	Confidence
Water Framework Directive – transitional and coastal waters	Few or no concerns	Improving	High
Microbiological contaminations – Shellfish water protected areas	Some or local concerns	Static	High
Microbiological contaminations - bathing waters	Some or local concerns	Improving	High
Eutrophication	Few or no concerns	Improving	High
Oil and chemical spills and accidents	Few or no concerns	Improving	High
Dissolved oxygen	Inner Clyde estuary: Some or local concerns	Improving	High
	Rest of CMR: Few or no concerns	Static	
Marine litter	Some or local concerns	Deteriorating	Low

An integrated approach to the protection, improvement and sustainable use of water resources is driven by the Water and Environment and Water Services (Scotland) Act 2003 and in Scotland this is managed by the Scottish Environment Protection Agency (SEPA). The overall aim is for water bodies to achieve 'Good Ecological Status' (GEcS) or Good Ecological Potential (GEcP) in the case of heavily modified or artificial water bodies. The majority of the coastal and estuarine water bodies in the Region are in 'Good' condition. A few are currently classified as 'Moderate' largely as a result of point source discharges and modifications to the bed, banks or shores of the water bodies as a result of land uses and navigation. SEPA continues to work with partners to deliver GEcS or GEcP. There are additional designations for shellfish growing waters to ensure shellfish products are safe to consume: legislation directs SEPA to assess and classify each shellfish protected area. This work is done with FSS who sample, analyse and report water quality in production areas throughout the year to ensure shellfish are safe for consumption, or determine if they require further treatment. At the end of each year FSS provide SEPA with this data who use it to classify the wider shellfish water

protected areas (SWPA). SEPA's classification gives an overview of the water quality over the year for the whole SWPA.

Bathing waters are also protected in Scotland to ensure people can continue to enjoy the coast and marine environment for recreational activities in a clean and safe environment. Within the Region a number of areas are designated bathing sites. The condition of these is monitored by SEPA for water quality during the bathing season for safety. Failure to meet classification at these sites can often be as a result of run-off from agricultural land after heavy rainfall or diffuse pollution.

3.1.5. Air

Air pollution can have many repercussions on quality of life and long term air pollution exposure is associated with a number of health complaints[37]. Local Authorities monitor air quality in their area in order to make sure that the national air quality objectives will be achieved throughout the UK. If a Local Authority identifies an area where the objectives are not likely to be achieved, it must declare an Air Quality Management Area and develop a Local Air Quality Action Plan to improve air quality. There are currently no AQMAs at the coast within the CMR, indicating that there is no exceedance or likely exceedance of air quality objectives in these areas. To view current AQMAs, please visit this website[38]. SEPA also regulates and monitors certain industries that can generate airborne pollution under the Pollution Prevention and Control regime.

The National Atmospheric Emissions Inventory[39] (NAEI) holds emissions based information and the inventory holds data on levels of key pollutants generated by various sectors/industries across the UK. This tool highlights which areas of the Region are affected by air pollution. The NAEI shows point sources for pollutants, as well as total emissions for transportation, and highlights some higher pollution levels along key shipping routes, for example but do not reveal the specific contribution from local shipping activities. Emissions from marine vessels are often localised in ports and the local area, for example, due to the running of engines to provide on-board power whilst vessels are in port. The Air Quality in Scotland website also shows air quality pollution level summaries from monitoring sites across the CMR[40] and also shows mapped data for diffusive samplers[41] which are widely used for indicative monitoring of ambient nitrogen dioxide. None of the coastal sampling sites within the CMR exceeded monitoring level thresholds for action at the time of drafting.

The NAEI maps emissions data for 2015 in the Region and highlights that the highest nitrogen dioxide (NO_2) levels were between 0.3-1 and 1-25 t/1x1km and the highest sulphur dioxide levels were between 0.1-0.5 t/1x1km.These high levels are found along the shipping lane leading from the inner Firth out towards the Clyde Sea Sill and Northern Ireland. There are also some coastal point sources of sulphur dioxide around Gare Loch, Inverclyde and the North Ayrshire coastline. Particulate matter across a size range between greater than 2.5 µm and less than 0.1 µm is highest in the Region; specifically in Glasgow, Renfrewshire and Inverclyde and parts of North Ayrshire (0.2-1 t/1x1km) when looking at total emissions across all sectors. The greater Glasgow area, Inverclyde, Gare Loch and the North Ayrshire coastline show high concentrations, compared to other parts of the Region coastline for various pollutants, including arsenic, benzene, cadmium, carbon monoxide and the pollutants noted above.

Atmospheric emissions from shipping are controlled at international, European and UK levels. Annex VI of the MARPOL convention limits the level of NO_x and SO_x from engine emissions. The Sulphur

[37] https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution
[38] https://uk-air.defra.gov.uk/aqma/maps/
[39] http://naei.beis.gov.uk/
[40] http://www.scottishairquality.scot/. This website was developed by Ricardo Energy & Environment on behalf of the Scottish Government.
[41] http://www.scottishairquality.scot/latest/diffusion-sites

Content of Liquid Fuels Directive (as amended by Directive 2005/33/EC) limits the sulphur content of heavy fuel oil, gas oil, marine gas oil and marine diesel oil.

Vessels generate emissions of sulphur dioxides, nitrogen oxides, particulate matter and carbon dioxide as a result of the fuel used. These emissions can be significant, especially in areas with heavy marine traffic, and contribute towards air pollution and increasing greenhouse gas emissions. To reduce the impact that vessels have on air quality and climate change, the International Maritime Organisation introduced a 0.5 % global sulphur cap on vessel fuel in 2020[42]. To meet these regulations, vessels will need to either use fuel that is low in sulphur or install exhaust gas cleaning systems which are designed to remove sulphur oxides from the ship's engine and boiler exhaust gases[43].

3.1.6. Climatic factors

The CMRA chapters relevant to this topic are noted below with their CMRA score, trend and associated confidence level and were cross-checked with SMA2020 data:

CMRA Chapter	Assessment score and trend	Trend	Confidence
Climate change – impact on marine life	Concerns for the future/ Many unknowns	No trend identified	Low/medium
Climate change – sea-level rise and coastal flooding	Some or Local concerns	Deteriorating	High

The impacts of climate change impacts on the marine and coastal environment can include but are not limited to: increase in sea and air temperatures, ocean acidification and sea-level rise. These impacts may lead to: changes in primary productivity and knock-on impacts on the food web, a northward shift of cold water species and a range expansion of warm water species, changes in life cycle patterns, reduced ability of certain species to form shells, increase in number and distribution of non-native species. Sea-level rise is likely to cause coastal systems to migrate landwards and can threaten built infrastructure and heritage features.

The sea plays an important role in the carbon cycle and carbon storage. Carbon stores can be found in sediment, seaweed, seagrass, saltmarsh and animals (for example in carbon-based structures such as shells and coral). The Region contains examples of all of these carbon stores. Threats to carbon stores can include the physical disturbance of seabed sediments, habitat loss, increased turbidity, increased seawater temperatures and ocean acidification. These threats can affect the ability of plants to photosynthesise and of some organisms to form carbon-based structures like shells and maerl. Species near the edges of their thermally limited geographical ranges may also be threatened. Potential carbon sinks in the Region are mapped in the CMRA and on the National Marine Plan Interactive (NMPi).

The increase in sea temperature in the Region over the last 25 years has been between 0.4°C and 0.5°C per decade. This warming of the oceans, combined with melting land ice, is leading to a rise in sea-level. Warmer sea temperatures continue to melt sea ice which creates a positive feedback mechanism. Reduced sea ice cover accelerates the rate of ocean warming because more energy is absorbed by water that is no longer covered by ice. Changes in Arctic sea ice cover also have the potential to affect atmospheric circulation which could impact the UK's climate[44]. An increase in the

[42] Frequently Asked Questions on the 2020 global sulphur limit – International Maritime Organisation (https://bit.ly/37OpesM)
[43] Sulphur 2020 – cutting sulphur oxide emissions (https://bit.ly/2UdJy1r)
[44] Marine Climate Change Impacts: Report Card 2020 (https://bit.ly/2uXwXXa).

concentration of atmospheric carbon dioxide has led to increased ocean acidification. These chemical and physical changes are likely to have impacts on marine and coastal life, such as plankton species and other such communities which sustain marine ecosystems.

Storm surges can also cause a temporary rise in sea-level. Storm surges are caused by storms and high winds pushing the seawater towards the coast. There is also an effect of water being 'pulled' by low pressure; about 1 cm for every 1 hPa change in pressure. Coastal flooding in the Region is not only caused by extreme surge events, but also moderate surges when there is a high spring tide. There is also a funnelling effect linked to the depth and shape of the seabed in the sea lochs and estuary.

Flood risk is expected to increase in the coming years due to climate change causing more intense rainfall, wetter winters and rising sea levels. The National Flood Risk Assessment undertaken by SEPA concluded that coastal flooding, from a combination of high tides and stormy conditions, currently accounts for approximately 17% of all predicted impacts in Scotland. The National Flood Risk Assessment also identified Potentially Vulnerable Areas. In 2015 SEPA published a Flood Risk Management Strategy for each of the 14 Local Plan Districts covering Scotland. Delivery plans were subsequently published for each area setting out how flood risk will be managed, coordinated, funded and delivered between 2016 and 2022. For the CMR, the related regions are: Clyde and Lomond, Ayrshire and Highland Council and Highland and Argyll. More information is available in the CMRA.

3.1.7. Material assets

Many industries within the region rely on built infrastructure on the coast to support their operations. Marine vessels (e.g. fishing vessels and recreational vessels, Timberlink transport) utilise ports, harbours, jetties, slipways, moorings and pontoons. Fisheries and aquaculture are supported by processing facilities which are often located near the coast. Some infrastructure is purpose-built, for example Ocean Terminal, to accommodate cruise liners in Greenock and also aquaculture facilities. There is a well-developed ferry route around the CMR which connects the mainland to the Clyde islands and the Mull of Kintyre and includes routes to outside the Region. A Ministry of Defence base is located at Faslane on the western shores of Gare Loch, along with the nearby Naval Armaments Depot located at Coulport. Sport, recreation and tourism is facilitated by a range of infrastructure around the Clyde, with boat-based infrastructure, as mentioned above, and slipways which can provide ingress and egress for a range of activities. There is a range of long-distance coastal paths and routes throughout the Region.

While there are no active commercial offshore wind and marine renewable energy schemes in the Clyde Marine Region, one draft tidal option is located to the south of the Kintyre peninsula. The National Offshore Wind Turbine Test facility at Hunterston was the UK's only onshore test facility for offshore wind turbines; the test turbines at this site were decommissioned in 2018 and 2019. Ayr, Troon and Inchgreen have been identified as potential support sites for marine renewables, providing operations and maintenance (see Map ENCA 1). Hunterston B nuclear power station's decommissioning process has moved from defueling to the next stage, with the site's licence transferred from EDF Energy to Nuclear Restoration Services (NRS) in April 2026[45]; its coastal location is important for access to water from the Clyde for industrial cooling.

Finnart Oil Terminal, a petrochemical transfer facility located on the eastern shore of Loch Long, is capable of receiving Very Large Crude Carriers and Ultra Large Crude Carriers. There are two land-

[45] UK Government News Article (2026) (https://bit.ly/3OU5yOY)

based pipelines that transport crude oil across Scotland to the Grangemouth refinery and return the refined products for export.

Submarine power, transmission and telecommunications cables are a key component of the CMR's enabling infrastructure and are of recognised national and international economic importance, providing power and broadband connectivity to businesses and households on the mainland and the islands. In addition, this infrastructure will support the development of the renewable sector. A map of the cable and pipeline infrastructure in the Region is available in the CMRA.

There are a number of wastewater treatment works around the Region where waste water is treated before it is released into rivers of the sea. A map of these facilities can be found in the CMRA.

Claddoch power station on Arran is licensed to abstract water. Other industries which carry out abstraction include fish processing, chemical treatment and agriculture.

3.1.8. Cultural heritage

The Region has a rich maritime history linked to its industrial past as a key shipping port – 'Glasgow made the Clyde and the Clyde made Glasgow'. Much of the cultural heritage and built environment has been shaped by the Clyde and surrounding seas. Coastal towns and villages have relied on the fishing industry and its supply chain for employment and ship building has been synonymous with the River Clyde for centuries. The Region has an intrinsic link with the maritime environment and heritage, including: maritime wrecks; historic buildings and sites; maritime and heritage museums; historic ports, docks, quays, warehouses and cranes. These all provide a historical record of the important role the Clyde played in the growth of the Region. There is a wide range of archaeological sites around the CMR, indicating the long standing habitation and use of the area. These sites include Neolithic standing stones, iron-age forts to more recent castles and even more recent industrial history.

Cultural heritage also includes intangible heritage, such as art, songs and traditional maritime activities. Some of this stems from Gaelic speaking culture and heritage, and many place names around the Region show that the people of much of the area were once Gaelic speaking, due to the area historically being in the eastern part of the Gaelic kingdom Dál Riata that encompassed the western seaboard of Scotland and part of Ireland.

The historical and cultural assets in the Region make a notable contribution to the Region's visitor and tourism provision, whilst also providing an educational resource and contributing to the sense of place. The preservation of these assets helps foster the emotional and cultural identity of the Region.

Much cultural heritage is recognised through designations of various kinds, for example Historic Marine Protected Areas and scheduled monuments. Gardens and designed landscapes are also an important part of Scotland's historic environment. Much data on these features can be found through Historic Environment Scotland, the Environment Scotland website, the national records of the historic environment and historic environment records held by planning authorities. Our knowledge of cultural heritage is ongoing and the potential presence of unknown, archaeological and historic features should be taken into consideration by developments and activities taking place.

3.1.9. Landscape/seascape

A detailed assessment of the landscape/seascape of the Firth of Clyde was carried out in 2012[46]. This identified key coastal characteristics and key sensitivities to development/change, while also providing guidance which can be used to assist in managing the coastal landscape/seascape. The assessment highlights that the Region is unique in Scotland in terms of the amount and expanse of sea broadly contained by the mainland. The overall complexity and variety of seascapes can be seen when travelling northwards through the Firth from the open sea, through sounds to straits and lochs that make up the inner channels. The complexity of the seascape is complemented by the variety of coastal geomorphological features, hinterland topography, land management and settlement patterns. Long stretches of coast are well settled especially on the Inner Firth and along the Ayrshire coast. The inter-visibility across the Firth of the coasts ensures that numerous landmark features are visible beyond their own coastal character area, including built structures such as the cranes at Port Glasgow. One of the most widely recurring features across the southern extent of the Clyde is Ailsa Craig.

3.2. Likely evolution of the baseline without the implementation of the Clyde Regional Marine Plan

Some environmental pressures experienced within the Region are likely to be independent of any influence of the CRMP or developments and activities within the Region, for example climate change. Climate change will continue irrespective of whether the CRMP is in place or not. However, seeking opportunities and providing guidance to improve adaptation and mitigation for developments and activities within the coastal and marine environment is one of the aims and areas where the CRMP can implement change at the regional level and at the scale of individual proposals.

There are various measures, processes, programmes and legislation in place to ensure the ongoing improvement and protection of the marine environment. This includes work on improving the natural environment, such as the Water Environment and Water Services (Scotland) Act 2003 and the Marine Strategy Regulations (2010); processes such as Environmental Impact Assessments (EIAs) and Habitats Regulations Appraisals and regulatory measures enforced by organisations such as SEPA. These measures, processes and programmes would continue regardless of the adoption of the CRMP. However, the process of developing the CMRA enabled the identification of regional and local issues. Specifically, it has highlighted areas of the marine and coastal environment where there are many concerns, and the development of the draft CRMP enables targeted policy to address these concerns and also policy which supports the regional delivery/implementation of policies within the NMP and other legislation. In this way, the draft CRMP seeks to address concerns, act as a catalyst around generating improvements in these areas and prevent the deterioration of areas identified in the CMRA as having some/local concerns.

Many environmental trends are driven by complex interactions and relationships, and are sometimes influenced by factors and elements outwith the Region. Some of these relate to the human impact on the environment, such as inappropriate developments, unsustainable use of resources and existing activities taking place in the marine and coastal environment. In the future, without the CRMP, increased developments, competition for space and use of resources is likely to increase the level of pressures on the natural environment. The draft CRMP seeks to work with existing legislation, supporting its implementation where necessary to guide appropriate developments and use of the marine and coastal environment, with the aim of: reducing the negative impacts of developments and the overuse of natural resources; and improving the appropriate placement of developments and activities. This can result in positive impacts on the

[46] Seascape / landscape assessment of the Firth of Clyde (https://bit.ly/3C0LPD9)

health and wellbeing of coastal communities that might otherwise be unrealised or eroded. The draft CRMP also requires developers and those carrying out activities, to involve local communities in meaningful engagement of proposals. Improving engagement in consultation processes contributes to well-considered developments and activities that take into account the opinions and local knowledge and expertise of coastal communities as well as how to avoid potentially detrimental environmental impacts.

Wider work, in terms of research on the natural environment and improving socio-economic factors, is also likely to continue regardless of adoption of the draft CRMP. However, the work and discussions that have informed draft policy and recommendations, and the research gaps identified in the CMRA can help prioritise research activity, including through the development of a draft Action Plan. This is likely to progress as Plan development continues and after it is adopted.

The CRMP will provide a statutory basis to strengthen partnership working, communication and collaboration amongst regional stakeholders, encouraging them to be involved in the stages of Plan development, monitoring and implementation.

3.3. Environmental problems and issues

The table below provides a summary of the main environmental issues faced by each of the SEA Topics. Data was drawn from the Clyde Marine Region Assessment, NatureScot Sitelink and references cited.

SEA topic	Problems and issues
Biodiversity, flora and fauna	Biodiversity, flora and fauna is vulnerable to the impacts of climate change such as increased sea temperatures and rainfall patterns. In particular, sea fans (*Swiftia pallida*) are at the southern limit of their distribution in the CMR. Climate change will impact which species of fish, shellfish and algae will be available to both wild fisheries and aquaculture operations. Climate change pressures on intertidal species are likely to be exacerbated by non-native species, a number of which are present in the CMR. Non-native species can be introduced through the movement of vessels (of all kinds) and through industries such as aquaculture. For example, the Pacific oyster, which is cultured in Loch Fyne, is now thought to be able to spawn in Scottish waters. Farmed salmon themselves can escape from cages and dilute the genetic makeup of wild stock. They can also act as a vector for the sea lice parasite, transferring them to wild fish. Whilst non-native species are on the rise, there is no evidence of detrimental impacts on ecosystem services as yet; however, this may be due to a lack of research into this area. Biogenic reefs and shallow shelf subtidal sediments are vulnerable to the impacts of fishing which can result in physical habitat changes. This can reduce overall habitat and community diversity and potentially reduce substrates' suitability for settlement for larval animals. Biological pressures can also occur through the removal of target and non-target species. The ecosystem of the Region has changed over the last 50 years as a result of fishing activity from supporting a diverse finfish fishery to now being a single species fishery, as populations no longer support a demersal or pelagic fishery. Lesser black-backed gulls (*Larus fuscus*) and herring gulls (*L. argentatus*) at Ailsa Craig SPA were last assessed as 'Unfavourable, no change' in 2019 and kittiwakes (*Rissa tridactyla*) as 'Unfavourable Recovering' in 2024. This is thought to be as a result of national declines and reductions in food availability. In the Inner Clyde SSSI, the cormorant feature was last assessed as 'Unfavourable, no change' in 2026, although there are currently no recorded pressures that are causing this condition. On Sanda Islands SSSI, cormorant (breeding) and fulmar (*Fulmarus glacialis*) features were last assessed as 'Unfavourable Declining' in 2017, likely due to climate change and not as a result of local issues. In some areas in the Region bird populations are affected by the introduction of invasive species on land, such as mink (*Neovison vison*). There is concern over richness and evenness of demersal and pelagic fish species that have previously been targeted by commercial fisheries. The impact of this on the wider ecosystem and food webs is not fully understood. Over recent years there have been annual surveys of herring in the Firth of Clyde, which shows that the stock remains at a level which is too low to support any significant

SEA topic	Problems and issues
	commercial fishery. Groundfish species (cod, haddock (*Melanogrammus aeglefinus*), hake, plaice (*Pleuronectes platessa*), saithe, whiting and turbot (*Scophthalmus maximus*)) contribute very little to overall quantities of fish landed in the Region. There is a sustainably managed Norway lobster fishery, largely for export markets. There are concerns over the sustainability of the scallop fishery due to lack of official stock assessment and management. Population trends for elasmobranchs show that several species, having faced historic pressures such as overfishing, are declining. Impacts on these species are taking place on a wider scale to that of the Region. There is some evidence to suggest that basking sharks are experiencing an overall long-term increasing trend, with a small but significant increase in the sightings of larger individuals. The precise population status of cetaceans occurring in the Region is unknown as data are mainly restricted to sightings rather than effort-related surveys which can give information on absolute abundance. There are declining trends in the numbers of key apex predators (e.g. cetaceans, sharks, skates, rays and seabirds) which may both impact the healthy functioning of the ecosystem and act as an indicator that other ecosystem services are compromised. There is a high density of harbour porpoises in the CMR, indicating that this is an important area for these species. Both the Atlantic grey seal and the harbour seal are found throughout Scotland and are both present in the Region, though in lower numbers. The latest count in the Region for hauled out grey seals as 407 and for harbour seals as 1712[47]. There are a range of pressures that may generally affect seals, but the extent and magnitude of most have not been quantified and there have also been no studies in the CMR. Potential pressures include exposure to hazardous substances, entanglement in marine litter, bycatch, and a reduction in prey distribution and biomass due to habitat damage and climate change. The invertebrate assemblage feature at Western Gailes SSSI was last assessed as 'Unfavourable no change' in 2013. The sand dunes on which the invertebrates (this includes the bee fly (*Phthiria pulicaria*), hoverfly (*Eumerus sabulonum*), clown beetle (*Hypocaccus rugiceps*), seed weevil beetle (*Diplapion stolidum*), ground beetle (*Amara praetermissa*) and hairy-horned beetle (*Orthocerus clavicornis*)) live are in unfavourable conditions. The saltmarsh feature at Clauchlands Point- Corrygills SSSI was last assessed as 'Partially destroyed, favourable maintained' in 2017. Flora and fauna are adversely impacted by marine litter, through entanglement and ingestion. Litter can enter the marine environment through the waste water system or due to overflow. There are concerns over microplastic ingestion by species (incl. Norway lobster), such as limiting species' growth and their resistance to disease. This is not an issue exclusive to the Clyde.

[47] C. Morris, Personal communications, email, April 2020

SEA topic	Problems and issues
	Many of the hazardous substances which have left a polluting legacy in the Clyde estuary are now banned or regulated to reduce and control their environmental impact. However, their historic legacy has impacted the CMR's ability to provide provisioning services in some areas. Contamination by hazardous substances in the Clyde estuary and inner Firth can limit consumption of filter feeders, e.g. mussels. Classified Shellfish Harvesting Areas (CSHAs) occur in the inner and outer Firth and the lochs – the 2025 results show that some are classified as B which means treatment is required because *E. coli* is too high for direct human consumption. Levels of polychlorinated biphenyls (PCBs) in biota (such as plaice) are at unacceptably high levels in several parts of the CMR. Some industries can discharge effluent directly into the marine environment, and although licenses are granted for this activity, the cumulative impact of this is not known. In some cases, the effects of discharge can be localised. For example, nutrient enrichment and deoxygenation can occur under fish farm cages or as a result of eutrophication from agricultural run-off in a particular area, which can adversely impact marine organisms. Marine vessels can contribute to pollutants in the marine and coastal environment through the use of antifoulants. In addition, sewage discharge from marine toilets can impact on water quality and contribute to marine litter. Activities and developments taking place in the marine and coastal environment can contribute to noise pollution. The aquaculture industry uses Acoustic Deterrent Devices to deter seals from fish cages. There is concern on the effect that regular exposure to these devices has on the hearing and behaviour of animals, in particular marine mammals. The introduction and increase in non-native species within the region is of concern, for example wireweed (*Sargassum muticum*) can dominate rock pools and common cord grass (*Spartina anglica*) which colonises lower zones of saltmarshes and intertidal mudflats, excluding native flora and fauna.
Population and human health	Communities and populations can be impacted negatively by a poor or low quality environment. Water quality especially can be linked to human health and impact most significantly during recreational activities – bathing, diving and sailing. Bathing water classifications from 2018/19 showed three out of 14 bathing waters to be in poor condition: Ayr (south beach), Heads of Ayr and Irvine. However data from 2025 show these to have now been improved to sufficient/good. Areas of the Region where hazardous substances have left a historic legacy and areas of shellfish farming impact the surrounding environment's ability to provide provisioning services. Litter in coastal and marine areas also has a negative impact on people's enjoyment of the environment. The CMR is home to many industries providing jobs and economic activity. Core marine sectors include shipping and transport, sea fisheries and aquaculture with ancillary marine sectors including fisheries and aquaculture fish processing and sport, recreation and tourism. Across the core marine sectors there has been a decline in employment across the Region from 2012-2017. Economic activity in the ancillary sectors is driven by sport, recreation and tourism. While employment grew from 2010 to 2013, it has since suffered a decline post 2013.

SEA topic	Problems and issues
	According to the SIMD, in the CMR, within Glasgow and Renfrewshire and West and East Dunbartonshire there is a high concentration of the most deprived areas. Campbeltown, Ayr, Girvan, Troon, Saltcoats, Ardrossan, Stevenson, Kilwinning, Rothesay, Dunoon, Gourock, Port Glasgow, Greenock, Dumbarton, Clydebank, Helensburgh and Lochgilphead all have communities which fall into the most deprived 20% in Scotland. Ferry and road links offer important connections to island and rural coastal communities with the rest of the Region. Industries operating in rural and sometimes isolated communities provide important socio-economic activity for these areas.
Sediments, marine geology and coastal processes	Development and expansion of breakwaters, jetties and marinas can include land reclamations and can lead to disturbance of the seabed and coastline. Subsequently, this may lead to a change in erosion and accretion patterns. The Clyde estuary coast has been morphologically altered due to the construction of quay walls, industrial, residential and transport infrastructure developments. This limits the ability of the natural coastline (saltmarsh, mudflats, and sand dunes) to protect coastal areas from storm damage and to adapt to sea-level rise. Some areas exist that may be suitable for managed realignment. The decreasing extent of saltmarsh impacts the provision of waste breakdown, wave energy reduction, protection against erosion and carbon sequestration. The shingle feature at South Coast of Arran SSSI were last assessed as 'Unfavourable declining' in 2017 due to extraction. The maritime cliff feature was last assessed to be in 'favourable declining' condition in 2011. Shingle at Ballantrae shingle beach SSSI was last assessed as 'Unfavourable no change' in 2026 for various reasons including extraction, invasive species, water management and recreation/disturbance. Management measures are in place that should in time improve the feature to favourable condition (Unfavourable Recovering Due to Management). Sand dunes at Troon Golf Links and Foreshore SSSI and Western Gailes SSSI were last assessed as in 'Unfavourable no change' condition in 2014 and 2013 respectively due to flood/defence/coastal defence works, invasive species, under grazing and water management. The long-term lack of grazing has resulted in long-term habitat diversity loss and encroachment by native and non-native scrub. Scrub management by the golf course has restored some dune grassland and further measures are under discussion. The condition at Western Gailes is as a result of the removal of strandline habitat due to unauthorised beach cleaning, which has now ceased. At Girvan to Ballantrae Coast SSSI the Ordovician Igneous feature was assessed as 'Unfavourable' (no change) in 2002 due to dumping/storage of materials. However it was last assessed as 'Favourable maintained' in 2023 due to management measures in place.
Water	The Clyde estuary has historically been narrowed by land reclamation and deepened to allow access to ports. The decreased water flow which has occurred as a result of this has led to layering of the water column and has contributed to the deoxygenation of the Clyde estuary in the past. Since the 1970s, oxygen levels in the Clyde have been steadily improving to the point where the inner Clyde is now able to support most ecosystem functions.

SEA topic	Problems and issues
	The majority of the coastal and estuarine water bodies in the Region are classified as in 'Good' condition under the Water Environment and Water Services (Scotland) Act 2003. A few are currently classified as 'Moderate' largely as a result of point source discharges and modifications to the bed, banks or shores of the water bodies as a result of land uses and navigation. SEPA continues to work with partners to deliver GEcS or GEcP. Water bodies in the south Bute to east of Arran corridor have highlighted concerns until very recently over the condition of benthic invertebrates which provide nutrient cycling services. There are additional designations for shellfish growing waters to ensure shellfish products are safe to consume. There are 16 CSHAs and six SWPAs within the Region and one which straddles the boundary between the Clyde and Solway Marine Regions (See Map AQUA 2). Diffuse pollution from rural land is the main issue affecting water quality; SEPA works with land managers and public bodies to improve this situation[48]. Levels of oxygen within the inner and outer Clyde estuary are improving. The inner Clyde is now reaching levels which will support most ecological processes. Generally there has been improvement in the water quality of bathing waters, although diffuse pollution and combined sewer overflows at certain points in Ayrshire exceed the capacity of plants and micro-organisms to assimilate, buffer or process faecal contaminants. This prevents effective waste processing and water purification services. Marine litter is an increasing problem on the shoreline and can have an impact on ecosystem services. It can lead to a loss of amenities for local residents and detrimentally impact tourism and recreational activities. Careful planning of development should provide increased opportunities for tourism, recreation, education and research in the coastal zone.
Air	Some types of marine- and coastal-based industry, such as transport or shipping can have localised effects on air quality. The NAEI maps emissions data for 2023[49]. It highlights that nitrogen dioxide, compared to the rest of the Region, is high along the shipping lane leading from the inner Firth out towards the Clyde Sea Sill and Northern Ireland. It is recorded as between 0.3-1 and 1-25 t/1x1km here. Similarly, sulphur dioxide is noted in high concentration compared to other parts of the Region (0.1-0.5 t/1x1km). There are some coastal point sources of sulphur dioxide around Gare Loch, Inverclyde and the North Ayrshire coastline. Particulate matter greater than 2.5 µm and less than 0.1 µm is highest (0.2-1 t/1x1km) in the Region in Glasgow, Renfrewshire and Inverclyde and parts of North Ayrshire when looking at total emissions across all sectors. A few point sources along the coast are noted for particulate matter, including industrial sites and crematoriums. The greater Glasgow area, Inverclyde, Gare Loch and the North Ayrshire coastline show high concentrations, compared to other parts of the Region coastline for various pollutants including arsenic, benzene, cadmium, carbon monoxide and the pollutants noted above.

[48] See SEPA information on Shellfish Water Protected Areas (https://bit.ly/36z0Zxq).
[49] National Atmospheric Emissions Inventory Interactive map (https://bit.ly/3SWLQUI)

SEA topic	Problems and issues
Climatic factors	Under a low emissions scenario, sea-level rise around the Clyde is extremely likely to be in the range of 0.07 m to 0.48 m. Under a high-emissions scenario, this range is likely to be 0.29 m to 0.88 m. There may be opportunities around the Clyde for alternative 'greening the grey infrastructure' or bioengineering solutions that could be utilised as part of existing or future hard engineering. Some infrastructure, e.g. Bowling railway station, would currently appear to be at risk from sea-level rise and increased flooding. The National Flood Risk Assessment undertaken by SEPA concluded that coastal flooding, from a combination of high tides and stormy conditions, currently accounts for approximately 17% of all predicted impacts in Scotland. It also identified Potentially Valuable Areas which around the Clyde include parts of the Argyll & Bute, Inverclyde and North and South Ayrshire Coastline, particularly around the inner Firth. There are no Air Quality Management Areas at the coast within the Region. Air quality pollution level summaries from monitoring sites across the CMR[50] show mapped data for diffusive samplers[51], which are widely used for indicative monitoring of ambient nitrogen dioxide. None of the coastal sampling sites within the Region exceed monitoring level objectives.
Material assets	In terms of material assets, stakeholders around the Region report that many harbours are in disrepair due to lack of investment or upgrading in recent years. Some coastal paths around the Region also suffer from a lack of maintenance or are in disrepair as a result of coastal erosion.
Cultural heritage	The water quality issues noted above can affect people's ability to enjoy the coastal and marine environment within the Region. Concerns over declining trends in numbers of key apex predators (e.g. cetaceans, sharks, skates, rays and seabirds) may impact the wildlife tourism sector, as has happened to the sea angling sector. The Region is home to a variety of cultural and historical assets, both on the coast and underwater. The main issue and threat to the protection of this heritage is the potential impact of developments and activities to unknown artefacts. Developers and those carrying out activities need to be aware of the potential to disturb and damage submerged and obscured artefacts; especially around areas where there is known heritage.
Landscape-seascape	The Region is unique in the Scottish coast in terms of the amount and expanse of sea broadly contained by the mainland. There is a complexity and variety of seascapes which, coupled with industry and coastal development, have contributed to the natural and cultural landscape much appreciated by locals and visitors to the Region. The seascape and landscape character of the Region has aesthetic properties that have inspired a wealth of literature and art, and form part of the Region's cultural heritage.

[50] http://www.scottishairquality.scot/. This website was developed by Ricardo Energy & Environment on behalf of the Scottish Government.
[51] http://www.scottishairquality.scot/latest/diffusion-sites

4. Sustainability Appraisal-Strategic Environmental Assessment results

The results shown in table 3 below are a summary of the main findings of the assessment of the CRMP's objectives, policies and recommendations. Sections 4.1 to 4.12 go into further detail of the main findings for each of the SEA topics. The detailed assessment matrices which show the full analysis can be found in full in Appendix 3.

The assessment recognises that all developments and activities have the potential to cause negative impacts on the natural environment; however overall, no major negative impacts were identified. This is due to the structure of both the NMP and the draft CRMP, which presents cross-cutting policies to be adhered to alongside (NMP) or in advance of (draft CRMP) sectoral policies, reducing the likelihood of any damaging or detrimental impacts on the natural environment. The objectives and policies of the draft CRMP have been developed in line with the NMP, which is based on a framework of sustainable development. In addition to this, the cross-cutting General Policies of the NMP work to prevent or reduce adverse impacts of developments and activities on the coastal and marine environment. A number of the NMP General Policies support good governance, co-existence of various activities and promoting socio-economic benefits. These set an overarching framework, through which sectoral policies are implemented. The impacts identified on the Marine Economy from the objectives, policies and recommendations which deliver protection and enhancement of the environment were in some cases to have short-term negative impacts on the marine economy, but overall are positive of the long-term sustainability of the marine economy, and also contribute benefits to society. In addition to this SA-SEA a Business Impact Regulatory Assessment (BRIA) will be carried out on the draft CRMP. This will look in more detail at the impacts, in terms of potential costs and benefits to businesses in the Region, as a result of the draft CRMP.

The structure of the draft CRMP reflects the structure of the NMP in terms of the ordering of the chapters. Furthermore, the *All Sectors* chapter promotes appropriate consultation with all stakeholders and the public, multiple use of infrastructure and various other measures which can act to reduce conflict between activities and promote shared use of resources and space. Where the assessment identified negative impacts, mitigation measures have also been identified, or the policies have been adjusted as part of the iterative development of the draft CRMP alongside the assessment, as is highlighted in Section 2. The cross-cutting chapters of the draft CRMP are:

1. Climate Change
2. Historic Environment
3. Landscape/Seascape
4. Coastal Processes, Coastal Flood and Storm Damage
5. Natural Heritage
6. Non-Native Species
7. Marine Litter
8. Connecting People to the Clyde Marine Region

The process of carrying out this assessment has highlighted the importance of the inter-relatedness of both the NMP and the draft CRMP and in particular, General Policies 1-4 of the NMP, and the relevance they have, to mitigate potential negative impacts identified on the Marine Economy and Society topics within the assessment. The policies relate to a presumption in favour of sustainable development, sustainable development and use which provides economic and social benefit to Scottish communities, and the co-existence of sectors and activities.

The assessment found that where there is a positive impact on the SEA (environmental) topics, this largely has a positive impact for society. Similarly, where policies show a positive impact this ensures the protection and longevity of the natural resources which many marine sectors rely on to operate. Some of the objectives and policies can result in short term negative impacts, many show mixed

impacts. Uncertain impacts mainly arise where the specific nature of developments and activities is not known.

Throughout the process of carrying out the interim SA-SEA, changes were proposed to the objectives and policies to reduce negative impacts. Those that were identified for the pre-consultation draft CRMP stage are noted in the table in Appendix 5. Following the pre-consultation, the draft CRMP was amended according to the feedback received and through further feedback from CMPP Members' and workshop sessions. As a result of this extensive feedback and iterative modification of the CRMP, in assessing these updated policies and developing the SA-SEA, no further improvements to the draft CRMP were identified.

It is noteworthy that there are not many major detrimental impacts noted. This is for the reasons noted above but is also in part likely due to the fact that consideration of the impacts of the objectives and policies was built into the format and process of workshops and discussions with stakeholder groups, which were used as a starting point for developing the pre-consultation draft.

Section 3.3 identifies the existing issues and problems for each of the SEA topics. The potential impacts of sectoral activities and developments are noted within the assessment matrices in Appendix 3 and within the CMRA.

Table 3 below provides a summary of the types of impacts (ranging from 'major positive impact' through 'uncertain impact' to 'major negative impact') identified for each SA-SEA topic according to policy areas of the draft CRMP. Each cell is a summary of the impacts of the policies within each policy area and further discussion is provided in the following Sections 4.1 to 4.12. For a full breakdown of the impact of each individual policy, please see Appendix 3.

Table 3: Overview of types of impact identified for each SA-SEA topic according to each of the draft CRMP's policy areas

Assessment Key:

Symbol/Colour	Meaning
++	Major positive impact
+	Minor positive impact
0	Neutral impact
-	Minor negative impact
--	Major negative impact
?	Uncertain impact

	SA-SEA Topic										
Policy areas	Biodiversity, flora and fauna	Population and human health	Sediments, marine geology and coastal processes	Water	Air	Climatic factors	Material assets	Cultural heritage	Landscape /seascape	Marine Economy	Society
Vision	++	++	++	++	++	++	++	++	++	++	++
Aims	++	++	++	++	++	++	++	++	++	++	++
Guiding principles	+	+	+	+	+	+	+	+	+	+	+
Climate Change	+, -	+	?, +, -/?	0, +	0, +	++, +	+	?, 0, +	+, 0,?	-, +, ?	+, 0
Historic Environment	+, ?, 0	+	0	0	0	0, +	0	++, +	?, 0	+, 0, ?	+, 0
Landscape/Seascape	0	0	0, +	0	0	0	0	0	+	+, ?, 0	+, 0
Coastal Processes, Coastal Flood and Storm Damage	0, +, -, ?	0 ,+	+, ++, ?	?, 0, +	0	0, +, ++, ?	+, ?, 0	0, ?, +	?, 0	+, ?, -, 0	?, 0, +
Natural Heritage	++, +	+, ++	+, ++	+	0	+, 0	+, 0	?, +, 0	0, +	-, +, 0, ?	+, 0
Non-Native Species	+	+	+	+	0	0	+	+	0	+, -, 0	+, 0
Marine Litter	+, ?	+	+, 0	+	0	+, 0	0	+, 0	0	-, +, 0, ?	+, 0
Connecting people to the Clyde Marine Region	0, +	+, 0	+, 0	+, 0	+, 0	+, 0	+, 0	+, 0	+, 0	0, +, ?	0, +
All sectors	0, +	+, 0	+, 0	+, 0	0, +	+, 0	+, 0, ?	+, 0	+, 0	+, -, ?	+, 0, ?
Sea Fisheries	++, 0, +	+, 0	+, 0	0	0	+, 0	0	+, 0	0	-, +, 0	+, -, ?/+, 0
Aquaculture	+, 0	0, +	0, +	0, +	0	0, +, ?	0, +	0, +	0, +, ?	+, -. 0, ?	+, 0
Sport, Recreation and Tourism	0, +,?	0	0	0	0, ?	0, ?	0, +	0	0	+, 0, -	+, 0
Shipping, Ports Harbours and Ferries	0,?, +	0, +,?	0, +,?	0, +, ?	0,+, ?	0, +, ?	0, +, ?	0, +, ?	0, +, ?	+, ?	+, -, 0, ?
Energy, Subsea Cables and Pipelines	+, 0	+, 0	+, 0	+,0	+, 0	+, 0	+, 0	+, 0	+, 0	+, 0	+, 0
Defence	?, 0	?, 0	?,0	?,0	?,0	?,0	?,0	?,0	?,0	?,0	0
Marine Aggregates	0	0	0	0	0	0	0	0	0	0	0

4.1. Biodiversity, flora and fauna

The objectives for this topic are:

1.	Conserve and enhance the integrity of ecosystems, their interactions and the benefits they provide
2.	Prevent damage to important biological sites and protected species, including the benefits they provide.
3.	Contribute to GEnvS and GEcS of the CMR being achieved - meeting the requirements of the Marine Strategy Regulations (2010) and the Water Environment and Water Services (Scotland) Act 2003 and sustaining the benefits of natural processes and resources.

The policies of the *Section 1: General Policies* are all found to have a positive or neutral impact on the objectives identified for biodiversity, flora and fauna, except for objective CC 1, policy CC 1 and policy CP 3 where, if it is the case that managed realignment or flood defences are considered the most appropriate adaptation activity, this could lead to habitat change/loss, which may have a negative effect on biodiversity, flora and fauna. However, a cost-benefit analysis of any proposal may find that the positive impact of implementing managed realignment may outweigh the costs of habitat change. The impacts of these interventions is dependent on the locality, type and size of any proposals and the assessment assumes that adverse impacts on biodiversity, flora and fauna will have been mitigated through existing consent processes and supported by any required underlying assessments.

The impact identified is also driven by the vision, aims and guiding principles of the draft CRMP, and following the framework of the NMP. The chapters where the assessment identified positive impacts in particular include:

- *Climate Change and Coastal Processes* – these objectives and policies drive mitigation and adaptation activity, through seeking to support/prevent damage to carbon stores, through strengthening/replacing flood defences or protecting the dynamic nature of the coastal zone and its capacity to deal with flooding and sea-level rise, as some examples. This has wider benefits for biodiversity, flora and fauna, whether through contributing to mitigation activity, contributing to its ability to adapt to the impacts of climate change or as a result of strengthening resilience to its impacts. Overall these policies can contribute to the conservation and enhancement of the integrity of ecosystems and their interaction and the benefits they provide, prevent damage to important biological sites, in particular objectives CC 1 and 2 and the policies of the *Climate Change* chapter.
- The objectives and policies of the *Historic Environment* chapter were either neutral or positive for biodiversity, flora and fauna. Neutral as the protection and/or enhancement of historic assets will have no impact. Alternatively, depending on the location and type or asset, the protection of these can also protect species and habitat from disturbance or removal, thereby contributing to the conservation and enhancement of the integrity of ecosystems, their interaction and the benefits they provide. The impact is uncertain for policy HE 2, these could lead to positive impacts, dependant on the nature of the enhancement activity set out in the policy.
- *Natural Heritage* – this chapter in particular seeks to support the delivery of the policies within the NMP and other existing legislation for the protection of biodiversity, flora and fauna. Objectives 1-3 and policies NH 2&3 seek to increase opportunities for enhancement, re-creation or restoration of habitats through new or not widely adopted measures such as considering how positive benefits can be delivered from developments or sharing data. The chapter also promotes consideration of wider measures, such as cumulative impacts. Each of these measures can contribute to conservation and enhancement of ecosystems, their interactions and the benefits they provide, prevent damage to important biological sites and protected species,

including the benefits they provide and contribute to ensuring GEnvS and GEcS is achieved. The inclusion of Policy NH 1 is positive, this policy supports policy GEN 21 of the NMP and its implementation in the Region and will promote consideration of the impact of cumulative effects on the marine and coastal environment.

- *Non-Native Species* – these policies recognise the threat of non-native species and aim to reduce the risk they present to biodiversity, flora and fauna through promoting best practice and improving knowledge on the impacts. Where the recommendations are implemented, this will also have a positive effect.
- *Marine Litter* – this poses a number of threats to biodiversity, flora and fauna such as ingestion, strangulation, accumulation in coastal and marine sediments and the policies and recommendations within this chapter aim to support efforts to reduce and remove marine litter from the marine and coastal environment, ultimately leading to benefits for biodiversity and flora.
- *Connecting People to the Clyde Marine Region* – The intention of this chapter is to facilitate the connection of people to the Region, in a sustainable way for recreation, employment, education and cultural experiences. Overall the objectives and policies which implement the objectives were found to be positive for biodiversity, flora and fauna. Objective and policy CONNECT 1 support good engagement practices and facilitate the inclusion of local knowledge that can protect and enhance biodiversity, flora and fauna. Objective and policy CONNECT 2 support increased ocean literacy and access to the marine and coastal environment which can drive behaviour change and further protection and enhancement of natural heritage resources. The recommendations of this chapter, where they are implemented, will also have a positive effect furthering the aims of increased sustainability, knowledge of the Region, engagement and good practices noted above.

The assessment identified the impacts of the *All Sectors* chapter as neutral or positive as they promote sustainable development, multiple use of the marine and coastal environment and supports consideration of wider environmental impacts across sectors. Objective SEC 4 is identified as having a positive impact, as it requires cumulative impacts of developments and activities to be mitigated.

The objectives and policies within the *Sea Fisheries* chapter are found to have a major positive, positive or neutral impact on biodiversity, flora and fauna. They support the aspiration to achieve a sustainable, diverse and resilient ecosystem which supports a diverse fisheries sector with reduced bycatch levels within the region. They also support a collaborative approach to fisheries management, in conjunction with the West Coast Regional Inshore Fisheries Group, Marine Directorate, fisheries representatives and other parties and an improved understanding of fish and shellfish stocks, as well as improved understanding of habitats which are important to fish and shellfish and therefore fishing activities. In particular, Objectives FISH 1-3 and 5-7, Policies 1-2 and the recommendations rFISH 1-3 were found to have a positive impact on biodiversity, flora and fauna.

The impacts identified from the *Aquaculture* chapter on biodiversity, flora and fauna are largely neutral, as the objectives and policies drive operators to have cognisance of and follow Scottish Government and Local Authority guidance, which is already in place, or anticipated to come into force in the future, and does not provide additional benefits. The impacts are not noted as negative either as the objectives drive the sustainable development of the industry in line with the environmental carrying capacity of the Region. Where impacts are positive, this is related to policies which promote sustainable practices around live capture of wrasse, sea lice and disease management and reducing fish escapes, research and development initiatives which support the sustainable development and reduce the environmental impact of the sector and which can

promote environmental enhancements and consideration of all impacts by Local Authorities, such as are outlined in policies AQUA 1 and 2.

Within the *Sports, recreation and tourism* chapter, there is a particular positive impact on biodiversity, flora and fauna from a few of the policies and the recommendation which promote consideration of the impact of sport, recreation and tourism activities on the marine and coastal environment. Specifically, Policy SRT 1 encourages use of particular mooring systems which reduce negative impacts on the seabed and promotes pump out, wash down and waste management facilities which can contribute to a reduction in water pollution and releasing waste at sea. It also promotes wildlife tourism and ecotourism, which promotes knowledge and enjoyment of the regional marine and coastal environment. Policy SRT 3 considers events for recreational vessels and requires organisers to undertake appropriate steps to reduce the negative impacts associated with such activities. The chapter also encourages wildlife tour operators to become WiSe certified, through Recommendation rSRT 1, which promotes best practice guidelines being followed and can reduce negative and stressful interactions with marine mammals.

The impacts of the objectives and policies of the *Shipping, Ports, Harbours and Ferries* chapter are mixed. The impact of objective SHIP 1, policy SHIP 1, 3 and 4 (this policy has mixed impacts) are neutral. The assessment acknowledges the potential for these policies to result in negative effects; however these are mitigated by policies within *Section 1: General Policies* and *the All Sectors* chapter of the draft CRMP. Some impacts are uncertain (for objective SHIP 2 and policy SHIP 2 and 5 (this policy has mixed impacts) as this is dependent on the nature of work (e.g. project size, type of structures) and the location and type of construction undertaken. Objectives SHIP 2, 3, 4 and policy SHIP 5 are noted as having positive impacts as they contribute to climate change mitigation and environmental enhancement. Where Recommendation SHIP 1 is applied, it will have a positive impact as it reduces emissions of sulphur into the water and potentially from settling into sediments, where its accumulation could have a potentially negative impact on biodiversity, flora and fauna.

The *Energy, Subsea Cables and Pipelines* chapter is partly focused on reducing reliance on fossil fuels and promoting renewable sources of energy. This is positive for biodiversity, flora and fauna as contributions to climate change mitigation efforts can reduce the overall impacts of climate change on biodiversity, flora and fauna. However the construction of renewable energy sources has the potential to have a negative impact, and some policies were noted as having an uncertain impact – this would be dependent on location, type and size of any renewable construction. However, many of the objectives and policies of this chapter are in line with existing regulations and support their implementation at the regional level. The policies support spatial measures as set out in Sectoral Marine Plans for example, which will consider specific impacts. As a result, these policies are found to have a neutral or positive effect where they support the implementation of NMP at the regional level.

Within the *Defence* chapter, the assessment identifies the objective and recommendation as having a neutral impact, the aim of the chapter is positive and promotes integration of the Ministry of Defence with the draft CRMP, the impact is not considered positive as the nature of the Ministry of Defence's operations within the Clyde is outwith the scope of natural enhancement.

The impact of the *Marine Aggregates* chapter was identified as neutral, due to the context of these policies in the light of other sections of the draft CRMP and the NMP.

4.2. Population and human health

The objective for this topic is:

4.	Contribute to healthy ecosystems – biodiversity and geodiversity – that are seen as an essential part of supporting human health and wellbeing.

The assessment reflects that where there are positive impacts on the objectives for biodiversity, flora and fauna, this can result in positive impacts for the objectives for population and human health, similarly where the effect on biodiversity, flora and fauna is neutral or negative; this is also the case for population and human health. The *Natural Heritage* chapter in particular identifies a number of major positive impacts. Positive impact on population and human health is usually also associated with a positive impact on water and sediments, geology and coastal processes. This illustrates the importance of the health of the natural environment and the benefits and services it provides to supporting human health, and indeed that humans are part of this system and rely on its healthy functioning to support our own lives. Similarly the policies of the *Climate Change* chapter are driven by objectives which seek to contribute to the national objectives of achieving net zero carbon by 2045 and increase the resilience of the Region's ecosystems and communities to climate change impacts and adapt to these challenges where possible.

Biodiversity, flora and fauna; sediments, water and air are the component parts of an ecosystem, which can be defined as a community of interacting living organisms and their physical environment. Ecosystems provide services which give benefits to people; these benefits make human life possible and they also add to our quality of life and can include: food, water, fertiliser, medicines, recreation, spiritual and cultural wellbeing, nutrient cycling, formation of habitats, carbon storage, climate regulation and waste breakdown. The assessment findings for impacts on socio-economics within the region are discussed below in section 5.10.

4.3. Sediments, marine geology and coastal processes

The objectives for this topic are:

5.	Contribute to ensuring that ecosystems and their associated benefits are maintained and enhanced through sustainable management of geodiversity and associated sediments, seabed and the natural processes supported by these features.
6.	Prevent damage to important geological sites including the benefits they provide.
7.	Avoid exacerbating coastal erosion and to maintain the integrity of coastal processes and the benefits they provide.
8.	Contribute to ensuring that the inherent capacity of the natural environment to cope with flooding is not detrimentally affected.

The objectives and policies of the *Climate Change* chapter present mixed impacts for the objectives for sediments, marine geology and coastal processes. This is largely related to the types of adaptation activity undertaken (e.g. managed realignment which may impact sediment dynamics), to the potential of any marine developments to contribute to climate change adaptation, and any potential benefits that may result from these on sediments. Objective CC 2 and policy CC 2 which seek to protect and where possible enhance carbon sinks can result in benefits to sediments and coastal processes.

Within the *Coastal Processes* chapter, objective CP 1, Policy CP 1, 2 and 4 acknowledge the dynamic nature of coastal processes and that developments and activities should be developed to accommodate this. In addition, current developments and activities should be resilient to the dynamic nature of the coast including the impacts of climate change. This approach can avoid exacerbating coastal erosion and maintain the integrity of coastal processes and the benefits they provide. Objective CP 1 and Policies CP 1 and 2 also ensures that the inherent capacity of the natural environment to cope with flooding is not detrimentally affected. The policies have a positive impact

as they require developments and activities to consider the sustainable management of geodiversity and the ecosystems services they provide (such as seabed habitats and physical features and the natural processes supported by these features) and to consider the dynamic nature of marine and coastal sediments. They also highlight the need to consider future projections for sea-level rise, flooding, wave overtopping impacts, Flood Risk Management plans, shoreline management plans, any wider implications that the development/activity would have on flooding or coastal erosion and protection of natural features which hold capacity to cope with flooding. Although some of these aspects are a consideration in existing processes/legislations/protections, bringing them together within this section of the draft CRMP allows for a strategic consideration of all the potential impacts on sediments, geology and coastal processes and conversely how these processes can impact on a development/activity. This can aid better planning and decision-making.

The *Historic Environment* and *Landscape/Seascape* chapters identified the impacts on sediments, marine geology and coastal processes as neutral. Positive impacts were identified through the *Natural Heritage*, *Non-Native Species* and *Marine Litter* chapters. Non-native species can impact on the integrity of the water environment and on sediments, marine geology and coastal processes; the *Non-Native Species* chapter is positive as it reduces the risk of non-native species introduction and supports measures to reduce their spread. The objectives and policies of the *Connecting people to the Clyde Marine Region* chapter are found to be positive or neutral.

Assessment of the sectoral policies identified many positive impacts. Examples of this include Objectives FISH 1, 6 and 7, Policies FISH 1&2 which support sustainable, diverse and resilient ecosystems to support a sustainable fishing industry which can provide benefits for seabed habitats and the overall integrity of the seabed or objective AQUA 2 and policy AQUA 2 which can drive the contribution to research and development initiatives which support sustainable development of the sector. Policy AQUA 1 and AQUA 2 can also contribute to a reduction on the impact of chemical and medicine inputs on the seabed sediments. Recommendation SHIP 1 was also identified as having a positive impact, where this is applied. Where an objective or policy supports activities that could lead to construction or works in the marine and coastal environment (e.g. ensure infrastructure can adequately support sectors, laying cables) impacts are uncertain, this is the case of objective SEC 2 and policies SEC 2 and 3, however the assessment assumes that as this policy exists within the context of the NMP, the policies within the *General Policies* section of the draft CRMP and existing licensing and consenting processes, any negative impacts will be mitigated by these factors and the overall impact is neutral.

4.4. Water

The objective for this topic is:

9.	Contribute to ensuring GEnvS and GEcS of the CMR is achieved - meeting the requirements of the Marine Strategy Regulations and the Water Environment and Water Services (Scotland) Act 2003 and sustaining the benefits of natural processes and resources.

The assessment found that the policies and objectives of *General Policies* section of the draft CRMP would have mainly positive, and some neutral impacts on achieving the objective for water. The policies and objectives seek to support efforts around the region to maintain or achieve the ambitions of the Marine Strategy Regulations (2010) and the Water Environment and Water Services (Scotland) Act 2003. The policies of the *General Policies* section drive protection and where possible many policies and recommendations encourage enhancement of the natural environment. This has positive or neutral impacts on water quality. Within this section, any negative impacts identified are short term and temporary, for example in policy CP 3, the installation of new or replacement flood defences and coastal erosion and flooding alleviation works may have a detrimental impact on water

quality and may cause hydrological alterations. This impact is also dependent on type and location of any flood defences or coastal erosion and flood alleviation works.

Overall, the measures within Section 2 of the draft CRMP result in a positive or neutral impact on water, due to the wider policy contest of the NMP and Section 1 of the draft CRMP. Objectives SEC 1 & 2 and Policy SEC 2 could result in increased construction or maintenance of infrastructure or increased vessel movements and this could result in siltation that temporarily affects water quality. Similarly objective SHIP 2 and Policy SHIP 2 could result in increased movement of vessels carrying marine structures increasing disturbance of sediments and turbidity in the water column, negatively impacting water quality. The assessment found that these impacts were likely to be identified more clearly at the project level, and existing processes would result in mitigation measures to reduce adverse impacts. Policy AQUA 1 and AQUA 2 can also contribute to a reduction on the impact of chemical and medicine inputs and therefore have a positive impact on water quality. Recommendation SHIP 1 can have a positive effect where it is applied.

4.5. Air

The objective for this topic is:

10.	Avoid exacerbating poor air quality in coastal areas, sustaining the benefits of natural resources and processes.

The majority of the objectives and policies within the *General Policies* section are noted as having a neutral impact on achieving the objective noted above. These policies are intended to protect and enhance the marine and coastal environment and so there may be indirect benefits, as where the policies support healthy and well-functioning ecosystems, this can support delivery of regulating services which ensure air purification.

Objective SEC 1, 2 and Policy SEC 2 within the *All Sectors* chapter have the potential to have an uncertain impact, however the assessment identified the impact as neutral. These relate to actions which could lead to increased activity in specific locations (where there is multiple use of infrastructure), increased marine transport or construction, maintenance and/or expansion of infrastructure within the region. These activities and/or developments could lead to temporary, localised negative impacts on air quality, but this would be dependent on the scale, type and location of any activities and/or developments and existing regulations and legislation must be taken into account around protecting air quality, which would mitigate any negative impact, so the impact is identified as neutral. Policy SRT 1, Objective SHIP 2 and Policy SHIP 2 had similar findings for comparable reasons.

Policy SHIP 3, which promotes improved connectivity and a move to more sustainable transport could have a positive impact on air quality, as a reduction in use of fossil fuels could reduce localised air pollution from particulate matter associated with using fossil fuels. Similarly, Objective SHIP 3, could reduce bulk freight road traffic, and have a positive impact on localised air quality. Objective ENCA 1 also seeks to support national policy to reduce reliance on fossil fuels, carbon emissions and can reduce air pollution.

4.6. Climatic factors

The objectives for this topic are:

11.	Contribute to a timely and commensurate Clyde regional contribution to climate change mitigation.

12.	Contribute to ensuring that adaptation actions are taken into account to support the natural adaptive capacity of systems in order to sustain the benefits of natural processes and resources.
13.	Contribute to ensuring that adaptation to climate change impacts (e.g. sea-level rise, coastal erosion and flooding) is considered in developments and activities.

The draft CRMP aims to embed and drive activities, uses and developments of the marine and coastal environment to consider and undertake climate change mitigation and adaptation activities as far as possible. Delivery of this is focussed through the *Climate Change* chapter which must be adhered to in advance of the sectoral policies, and also within the *All Sectors* chapter. The assessment of these policies found positive and major positive impacts to climatic factors. Overall the effect of these policies is to drive developments and activities to actively minimise emissions of greenhouse gases and adaptation activities, therefore contributing to wider climate change mitigation and adaptation targets and protect and where possible enhance carbon sinks. This chapter is successful in meeting the objectives for this SEA topic.

The *Coastal Processes* chapter is also important in delivering the objectives noted above, principally in terms of climate change adaptation, and puts forward measures which promote adaptation to climate change impacts, both with regard to protecting natural processes (such as flood management processes) and considering climate change impacts in developments and activities to future-proof them against these impacts and safeguard their continued use. The assessment identified indirect benefits from these policies on climate change mitigation.

The *Natural Heritage* chapter objectives and policies also contribute to a positive impact on the objectives for climatic factors. The objectives, policies and recommendations of this chapter drive protection and encourage enhancement, restoration and/or rehabilitation of natural heritage features, contributing to ecosystem health and strengthening the resilience of ecological networks to withstand pressures and impacts related to climate change. These measures also include carbon stores, further contributing to climate change mitigation, this is seen in Objectives 1 and 2, Policy NH 3 and Recommendation rNH 1, for example, on harvesting seaweed, which can act as carbon stores amongst a number of other ecosystem services such as providing essential nursery habitat for some fish species.

Objective ML 2 and Policy ML 1 require marine and coastal related developments to contribute to a circular economy which is based around the principals of minimising waste and making the most of resources, this can contribute to the regional overall efforts to contribute to climate change mitigation.

Within the *All Sectors* chapter the overall impact again has the potential on climatic factors to be uncertain but the assessment assumes that the policies of the NMP and other existing legislation around climate change mitigation and adaptation will be taken into account. Objectives to ensure the region has adequate infrastructure could lead to the construction of new infrastructure which has the potential to contribute to greenhouse gas emissions; however, infrastructure should be built to be resilient to climate change impacts and therefore contribute to the Region's adaptation activities. This could also be the case for infrastructure modifications/updates. It is anticipated that the majority of the negative impacts generated by such activity are mitigated through the environmental protection policies within the NMP and the policies within the *General Policies* section of the draft CRMP. Objectives which promote multiple- use of infrastructure, could lead to less infrastructure being constructed and therefore less greenhouse gas emissions. Where sectoral chapters identified uncertain impacts, the assessment considers that any adverse impacts (mainly related to construction, increased vessel movement etc.) are mitigated through consideration of the climate change policies of the draft CRMP and the policies of the NMP. This is the case for objective SHIP 2 and policy SHIP 2. Overall, the assessment shows that this chapter can have a positive

contribution to climatic factors, especially considering the aim of objective SHIP 3 which can support a reduction in freight transport via road of timber, objective SHIP 4 which supports environmental enhancements through the use of dredged material and policy SHIP 5, which states support for infrastructure upgrades related to the powering of vessels to contribute to a reduction in greenhouse gases.

A number of positive impacts were identified to climatic factors within the *Sea Fisheries* chapter. Objective FISH 4 supports the resilience of the industry to climate change, encouraging adaptation to changes in species distribution and abundance, this is supported by Policy FISH 1&2. Recommendation rFISH 2 seeks to deliver scientific research and practical measures to enable fisheries management to deliver improvements to the marine ecosystem. This can include a better understanding of climate change impacts on fisheries, helping to inform adaptation activities. This positive impact was also found as a result of objective AQUA 2, which drives research and development initiatives to support the sustainable development of the aquaculture sector, including proposals to consider the implications of climate change.

Taken together the policies of the *Sport, Recreation and Tourism* chapter result in benefits to climatic factors, seeking to ensure that an increase in sport, recreation and tourism activities does not result on adverse impacts to the natural environment, including minimising greenhouse gas emissions and supporting adaptation to climate change impacts.

The policies of the energy chapter drive a reduction in the use of fossil fuels within the region, contributing to climate change mitigation. Overall this can contribute to the national target of Scotland reaching net-zero emissions by 2045.

4.7. Material assets

The objective for this topic is:

14.	Contribute to ensuring both built and natural resources are used efficiently and sustainably, delivering multiple benefits for material assets and working in partnership with nature.

The assessment found that the policies and objectives of the *Climate Change* chapter are positive on the whole for material assets as they seek to reduce climate change impacts and increase resilience across the region to the impacts of climate change. This is beneficial for material assets that are in particular vulnerable to flooding, sea-level rise, or changes in temperature. Similarly, the *Coastal Processes* chapter also found benefits for material assets, as this section promotes and protects the use of natural flood defence mechanisms, and this can in places also provide protection for certain material assets. This is also the case for the *Natural Heritage* chapter, where it is the case that natural heritage features can contribute to flood protection as this chapter seeks to protect and enhance the natural heritage features which contribute to this service, which can add to protection of coastal infrastructure.

Non-native species can be destructive and damaging to infrastructure, restricting its use and even causing damage. The *Non-Native Species* chapter seeks to reduce the threat posed by non-native species and as such can provide benefits to marine assets.

The impacts on material assets from *Historic Environment*, *Landscape/Seascap*e and *Marine Litter* chapters were found to be neutral. *Connecting People to the Clyde Marine Region* chapter was found to have a neutral or positive effect on material assets. Within objective CONNECT 2 and Policy CONNECT 1 impact is positive, as improvements in people's experiences and knowledge of the coastal and marine environment and overall ocean literacy can drive behavioural changes and

improvements by individuals and also drive wider community support for specific measures to protect and enhance marine assets, such as the coastal paths, trails and walkways and other forms of access noted in Policies CONNECT 2&3.

With regards to the sectoral policies, the objectives and policies of the: *Sea Fisheries, Aquaculture*, *Defence* and *Marine Aggregates* chapters were neutral. The *All Sectors* chapter found neutral or uncertain impacts in some cases, but overall promotes adequate infrastructure within the region, which could result in improvements to material assets.

Similarly within the *Sport, Recreation and Tourism* chapter many policies had a neutral or uncertain impact, however overall when taken together with the preceding chapters, where the policies encourage increased use or multiple use hubs for marine sport and recreation, this can have a positive impact on material assets by ensuring they are used efficiently and sustainably, delivering multiple benefits and working in partnership with nature. The cumulative impact of multiple use would need to be monitored, as this could result in overuse of infrastructure, however this will be applied through other policies within the *All Sectors* chapter and consideration of the NMP policies. The assessment found similar results for the *Shipping, Ports, Harbours and Ferries* chapter – neutral or uncertain impacts were identified. However, taken together and with the policies of the *All Sectors* chapter, impacts are likely to be neutral or positive.

The results of the *Energy, Subsea Cables and Pipelines* chapter were mixed, but on the whole positive as these policies can reduce climate change impacts in the long term, resulting in benefits to material assets that could be vulnerable to climate change impacts.

4.8. Cultural heritage

The objectives for this topic are:

15.	Protect and where appropriate enhance the historic marine environment and the benefits it provides.
16.	Avoid damaging known and unknown coastal and marine archaeology and the benefits it provides.
17.	Avoid adversely impacting on the character and setting of historic sites and buildings and the benefits they provide.

The ambition of the *Historic Environment* chapter is to protect and where appropriate enhance the cultural heritage of the region, and so the objective and policies in this section provide benefits to the regional heritage. Within *Climate Change* and *Coastal Processes* chapters, Policies CP 3 and CP 4 were found to have indirect positive impacts on cultural heritage, these policies seek to reduce the risk presented by climate change by enhancing the capacity of carbon sinks, installing flood defences, coastal erosion and flood alleviation works. Protection or enhancement works undertaken through adaptation activities may result in enhanced protection of coastal and marine cultural and historic assets from storm surges, flooding and coastal erosion. These benefits are also apparent through Natural Heritage objectives 1-3. It is anticipated that any use of space which would result in negative effects would be considered at the project level within existing consenting processes and be mitigated in this way.

The objectives and policies of the *Non-Native Species* chapter also present positive benefits to cultural heritage in the Region. Some non-native species could damage or otherwise adverse impacts from occurring to the character and setting of historic sites, archaeology, other features and the benefits they provide, if they become established in, on or around them. The objective and policies within this chapter aim to reduce the risk of non-native species becoming established. Marine litter can also have an adverse aesthetic effect and the objectives and policies (and recommendations where they are followed) within the marine litter chapter progress measures to reduce litter

entering or remove marine litter from the environment have a positive impact, reducing the negative aesthetic impact on cultural heritage. The policies of Chapter 8 were found to be neutral or positive. Considering where they were found to be positive, this includes Policy CONNECT 2 which promotes protection of cultural heritage. Objective CONNECT 1, Policy 1 and recommendation rCONNECT 1 are also positive as meaningful engagement of local communities and marine users who have knowledge of and access to contribute to consultations can improve the nature of developments and activities, including their impact on local heritage. Objective CONNECT 2, recommendations rCONNECT 3, 4 and 5 are all found to have a positive effect on cultural heritage, through supporting measures which contribute to removing litter which can have a negative impact on the aesthetic value of cultural heritage and on improving people's knowledge and enjoyment through sustainable use leading to an improvement in ocean literacy and protection of cultural heritage in the marine and coastal environment.

Within the sectoral chapters, largely, the objectives and policies have a neutral impact on cultural heritage, except where there may be activities and developments taking place which have the potential to have negative or unknown impacts upon cultural heritage, especially where it is unidentified. This includes: Objective SEC 1, Policy SEC 2 (uncertain impacts, but could lead to more construction), Objective SHIP 2, Policies SHIP 2&3 and Objective ENCA 2. The assessment identified that negative impacts would be more adequately identified at the project level and mitigated through existing consenting processes and supported by the *Historic Environment* chapter policy.

Positive impacts were identified under: Objectives SEC 1&3 which promotes multiple use of infrastructure and can reduce the need for construction and improved availability of data which can better inform decision making; objective FISH 1 which seeks to support a wide range of sustainable fishing opportunities, which can maintain and improve some local communities' links to cultural heritage relating to fisheries, where the industry was historically larger/more active; Recommendation rDEF 1 provides benefits through Ministry of Defence integration with the finalised CRMP and Objective ENCA 1 can contribute to reducing climate change impacts on cultural heritage, as they support application/implementation of existing regulations at the regional level.

4.9. Landscape/Seascape

The objective for this topic is:

18.	Promote the protection of landscapes/seascapes and where possible avoid or minimise adverse effects on landscapes/seascapes and the benefits they provide.

There are existing pressures on the landscape/seascape of the Region from many of the activities and developments of the area, both at sea and on the coast. Many existing processes are in place to manage the impact of these, and mitigate for negative impacts. The assessment reflects that these processes will still factor in the management and mitigation of negative impacts identified from the objectives and policies. The assessment finds that the Landscape/seascape chapter results in positive impacts for this topic, and seeks to support the delivery of the NMP policies and contribute to the protection and enhancement of landscape/seascape around the region. It provides additional detail for consideration for the River Clyde in Glasgow city. Recommendation rSCAPE 1, where followed, increases consideration of maintaining infrastructure and facilities, such that they do not have a significant adverse impact.

The policies within the coastal processes chapter can result in indirect positive effects on the landscape/seascape as any adaptation activity carried out by developments/infrastructure renewal may offer an associated level of protection from climate change impacts, such as sea-level rise, to

the landscape/seascape. This is dependent on the location of any developments and the type of adaptation activity carried out.

Similarly for other environmental topics, there may be an impact on landscapes/seascapes where construction of new infrastructure/facilities is undertaken or to aims develop connectivity and transport networks are put forward. This is facilitated through Objective SEC 2 and Policy SEC 2 but taken together with Objective SEC 1 the need for construction or maintenance of infrastructure can be reduced as this objective promotes the multiple use of infrastructure where possible. This section must be taken in advance of the sectoral policies and so, along with the Landscape/Seascape chapter, mitigates the similar negative impacts identified in: Objective SRT 1; Objective SRT 2; Policy SRT 2; Objective SHIP 2; Policy SHIP 2 and Objective ENCA 2.

4.10. Socio-economic factors

The objectives for Marine Economy and Society are:

19.	Support the development of a sustainable marine economy in the Clyde Marine Region across a range of sectors and business sizes.
20.	Ensure the sustainable use of the Clyde Marine Region's resources to support the long-term viability of marine sectors.
21.	Protect marine assets (such as mineral assets) in the Clyde Marine Region, maintaining the potential to utilise them in the future.
22.	Remove or avoid barriers to new marine enterprise opportunities.
23.	Safeguard and/or create jobs that support the development of a sustainable marine economy across new or existing sectors and that support/provide benefits to coastal communities within the Clyde Marine Region.
24.	Maintain or improve accessibility and connectivity of coastal and island communities.
25.	Promote access to coastal and marine resource for tourism and recreation.
26.	Support a reduction in the magnitude of poverty and social exclusion and promote equality for all communities.
27.	Contribute to communities' sense of place, including protection of and access to marine-related heritage.
28.	Maintain or improve the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience.

The marine economy and society of the Region face existing pressures, and these include: employment (particularly in remote coastal areas and for some island communities) and job opportunities, potential for conflict between sectors, competition for space and accessibility and connectivity for remote and island communities. The vision, aims and guiding principles of the draft CRMP seek to deliver sustainable development within the region, which in turn supports productive and thriving coastal communities, while allowing nature to flourish and protecting the natural resources on which many marine industries rely. This goal can present tensions between economic productivity and environmental protection and enhancement. However the policies of the NMP overall, support sustainable development and the draft CRMP contributes to this marine management framework.

Broadly speaking, the assessment finds that many of the policies can have mixed effects on the marine economy – on the whole, the policies are positive for sustainable development and protection of natural resources on which many industries and activities rely. Many policies have an uncertain impact on creating and/or safeguarding jobs and on barriers to new marine enterprises. In many cases there are short term negative impacts related to increased operational time and cost (e.g. in additional considerations for applications), but this is balanced by long-term benefits associated with moving towards sustainable development and ensuring that activities and uses of

the marine and coastal environment do not affect its capacity to provide ecosystem services and benefits now and in the future.

Where there is a negative or uncertain impact on safeguarding and or creating jobs, this has a connection to societal factors and can impact on a community's sense of place and not supporting a reduction in poverty. Impacts on the marine and coastal natural environment also impact on some of the objectives for society – especially around contributing to a community's sense of place, access to marine related heritage and maintaining or improving the experiences of recreational users. Where policies encourage or support increased activity, there is potential for this to cause conflict between sectors for space and resources or in presenting barriers to new marine enterprises.

There is the potential for there to be negative impacts between sectors – for example through conflict for use of space and competition over use of infrastructure. The *All Sectors* chapter seeks to address some of these issues and it is anticipated that consideration of NMP general policies 1-4 will be of particular relevance in mitigating negative impacts (such as those noted above) on the marine economy and society. Also important will be the detail provided on project type, location, etc., at project level, which will make clearer some of the potential impacts on marine economy and society, and the existing licensing and consent processes which can mitigate the potential negative impacts identified.

Specific impacts of each of the chapters of the draft CRMP on society and economy are laid out in the following paragraphs:

Within the *Climate Change* chapter, there were mixed impacts on the marine economy. Impacts can be negative depending on the nature of the development of adaptation activity taken forward as a result of these policies. This may increase barriers to marine enterprise as a result of ongoing costs related to minimising greenhouse gas emissions, for example through the use of new technologies. Impacts can also be positive, as the chapter supports sustainable development, protects natural resources and the long-term viability of the sectors. For society, impacts overall were found to be positive as it ensures development and activities are minimising the contribution to climate change and also supports adaptation activities to develop resilience to the effects of climate change. It ensures that any development or activity which relates to the accessibility and connectivity of coastal and island communities that may be impacted by climate change in the future will be maintained and that recreational access and quality of experience is also maintained.

The impact of the *Historic Environment* chapter is mixed. In the case of objective HE 1 the impact is unclear; the objective is in line with and support NMP policy GEN 6, however it introduces consideration of intangible historical and cultural heritage and so this objective may introduce new measures that need to be taken into account and may add or create barriers to new marine enterprise opportunities within the Region. Objective HE 2 and policies HE 1&2 are positive for sectors within the marine economy that would benefit from the protection and enhancement of historical and cultural assets such as some tourism operations or activities such as diving. The impact was found to be positive or neutral for society. Protection and enhancement of cultural and historic assets, contribute to a community's sense of place, the overall heritage of the region and promote access to coastal and marine resources for tourism and recreation.

The impact of the *Landscape/Seascape* chapter was found to be positive to the marine economy. The objectives and policies do not provide anything new, in terms of specific measures, to existing licensing/consenting processes, but it widens the consideration of the regional landscape/seascape characteristics, adding to existing guidance and protecting landscape/seascape resources in the CMR. These objectives and policies also provide a synthesis of information on various landscape

designations that are protected through existing legislation and so can provide clarity for applicants and decision makers. The chapter was found to have a positive impact for society, as it supports the implementation of national policy at the regional scale and nationally and locally important landscape/seascape contribute to a community's sense of place and maintain or improve the experience of recreational users of the marine and coastal environment, in terms of quality of experience.

The *Coastal Processes* chapter overall, with consideration of the NMP policies, has a positive impact on the marine economy as it encourages the incorporation of consideration of climate change impacts and broader environmental considerations into planning and decision-making. It promotes the sustainable use of the region's natural resources to support the long-term viability of marine and coastal developments and activities, ensuring they are resilient to the impacts of climate change and taking into account coastal processes and dynamics. It is unclear if the objectives and policies will remove or avoid barriers to new marine enterprise opportunities and there may be extra, initial costs involved in taking these factors into consideration; however, this could be offset by the benefits provided by improving the overall longevity of uses, activities or developments by improving their resilience to climate change impacts. The impact is also unclear on safeguarding and/or creating jobs. There may also be costs around improving resilience to current coastal zone developments and activities, however these too could be outweighed by improving adaptation to climate change and long term resilience. For societal impact, this is found to be neutral or uncertain for some objectives relating to connectivity, accessibility and in promoting access to coastal and marine tourism. This will be dependent on the type of development or activity proposed. It is anticipated that this chapter has a positive effect overall on contributing to a community's sense of place and can maintain and improve the experiences of recreational users of the marine and coastal environment, particularly in areas vulnerable to flooding. It ensures developments and activities are 'future-proofed' (as far as possible) to any climate change impacts, so that the uses/services these developments may provide to communities are protected into the future. Any positive effect is dependent on the type and context of the development or activity.

Impacts were also mixed for the *Natural Heritage* chapter, with similar results to the *Climate Change* chapter. Generally all the objectives, policies and recommendations had mixed impacts on the marine economy. The impact was positive from all, as all support the development of a sustainable marine economy in the Region and ensure the sustainable use of the Region's resources to support the long-term viability of marine sectors. Some negative or unknown effects were found from Objectives NH 1&2 and Policies 2-3 as these introduce new considerations for proposals and this may present some barriers to marine enterprise opportunities which may impact on jobs that support the development of the marine economy, as they can limit areas where businesses operate, or present other constraints on operations such as the need for taking into account additional considerations primarily at the application stage but also potentially later at the implementation stage of a proposal. In terms of the impact on society, all the objectives, policies and the recommendation were found to have a positive effect on a community's sense of place, including protection of and access to marine related heritage and in terms of improving or maintaining the experiences of recreational users of the marine and coastal environment. No individual objective, policy or recommendation was found to have an impact on the accessibility and connectivity of island and coastal communities, promoting access to coastal and marine resource for tourism and recreation or on supporting the reduction of the magnitude of poverty and coastal exclusion and equality for all communities. However in combination this chapter can have a positive impact on these SEA objectives in the long-term, especially as enhancement measures as a result of the policies are implemented and the ecosystem services provided by the region and improved.

The *Non-Native Species* chapter highlights that there are short-term operational costs related with implementing some of the measures identified in this chapter, however these can result in long-term benefits to businesses which can be affected by non-native species, and not excessive to measures which are already in place – the policy in this chapter support the delivery of NMP GEN 10. Overall this chapter supports the sustainable development of the region by protecting both habitats which some businesses may rely on and infrastructure and machinery important to some business operations. The chapter has a positive impact on society, for these reasons and the natural heritage benefits provided.

Both positive and negative impacts were identified in the *Marine Litter* chapter. There may be additional costs for some sectors of the marine economy; ensuring that structures and developments do not contribute to marine litter or putting in place best practice measures to prevent the accidental release of plastic nurdles, flakes and pellets may lead to additional construction, maintenance and/or operational costs. It is not clear if this will create barriers for new marine enterprise opportunities or have an impact on safeguarding and/or creating jobs that support new or existing sectors. However, this chapter is supporting delivery of NMP policy GEN 11 within the region. There are benefits for sectors such as sport, recreation and tourism that rely on cleanliness of the water and would benefit from the removal of litter in beauty spots, for example. This chapter has a positive impact for society and contributes to maintaining the experiences of recreational users of the marine and coastal environment, in terms of quality of experience and contributes to a community's sense of place. No impact is identified on contributing to a reduction in poverty or maintaining or improving accessibility and connectivity of coastal and island communities.

Within Chapter 8, the measures proposed to connect people to the Region were found to have a positive or neutral (no impact identified on some of the SEA objectives) impact on the marine economy and society. The objectives support the development of a sustainable marine economy in the Region either generally for all sectors or for specific sectors (e.g. Objective CONNECT 2 could result in direct positive impact for the Region's fishing, aquaculture and seafood industries), they protect marine assets in the Region and ensure that sustainable use of the regional resources to support the long-term viability of marine sectors. For society they were found to be positive as they contribute to a communities' sense of place, including protection of and access to marine-related heritage and or also had a positive effect on maintaining or improving the experiences of recreational users of the marine and coastal environment.

Overall the *All Sectors* chapter is positive for the marine economy as it promotes efficient operations (which could result in cost savings) within some sectors that rely on marine and coastal infrastructure. The chapter supports the development of a sustainable marine economy, protects marine assets and maintains the potential to utilise them in the future. It can also remove barriers to new marine enterprise opportunities and may also safeguard or create jobs – though this is uncertain. The assessment does acknowledge that multiple use of infrastructure can result in some negative impacts to the marine economy; for example, if certain infrastructure was in high demand, there could be operational delays. For these reasons, there may also be mixed impacts on safeguarding and/or creating jobs. Objective SEC 1 and Policy SEC 1 both require the appropriate use to be considered, and that firstly any negative impact on other marine users has been minimised and/or mitigated and secondly that they do not create an unacceptable burden on existing infrastructure and services that cannot be resolved. These measures may require those putting forward proposals to spend more time on the consultation process and subsequently address concerns around how current use may be affected. Although this requires more time and consideration, this approach is positive as it supports a more informed and inclusive consultation process which can improve the nature of developments and activities and efficiency of use by multiple sectors. The impact on society was identified as positive or neutral from this chapter. The

objectives, policies and recommendations where they are implemented can maintain or improve the accessibility and connectivity of coastal and island communities, they can promote access to coastal and marine resources for tourism and recreation and there could be maintenance and improvement to the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience. Individually no impact was identified on the measures effect on reducing the magnitude of poverty and social exclusion, however taken together the cumulative effect on this objective is likely to be positive.

On the whole the *Sea Fisheries* chapter was found to have a positive impact on the marine economy as it promotes the sustainable development of the industry including consideration of stocks and how to improve fishing practices as well as improving technology on fishing vessels, facilitates information gathering to inform management and planning decisions, supports better planning, collaborative working, supports identification of areas important for the sector's activities and seeks to reduce conflict. These measures may introduce some operational costs e.g. implementing tracking on vessels, but the assessment finds the long-term benefits to be positive. The impacts are also positive for society; supporting the fishing industry into the future can also support the local communities which rely on these activities. A productive fishing industry can also improve a community's sense of place; this in turn can indirectly result in positive impacts to tourism in such areas. Promoting opportunities to supply local and other markets can develop people's awareness of the resources and benefits available from the local marine environment, and this factor can also improve a sense of place and provide benefits to tourism. The chapter, through promoting a diverse and sustainable fishing industry, can help to support a reduction in poverty and social exclusion in rural areas where livelihood options can be limited.

The *Aquaculture* chapter is on the whole positive for the marine economy. There may be associated operational costs related to implementing sustainable development principles and limiting operations to the carrying capacity of the Region, however, in the long-term, the impact of the chapter is positive as it supports the sustainable development of the sector and the sustainable use of the region's resources.

Taken together the objectives and policies of the *Sport, Recreation and Tourism* chapter are positive for the marine economy as it supports sustainable development of the sector. Benefits to society are also clear; this chapter supports better connectivity and access to the coastal and marine environment of the Region as well as recreational opportunities and resources. This is done through consideration of various aspects, for example in Policy SRT 1 improved access is promoted through encouraging extension of the tourism season, support links to transport networks which facilitate increases participation for local communities and visitors. Policy SRT 2 supports proposals which will maintain, improve or introduce slipways and other infrastructure which enable access to the water. Where implemented the combined effect of these chapters can result in many health and wellbeing benefits for people.

The impacts of the objectives and policies of the *Shipping, Ports, Harbours and Ferries* chapter are, overall positive as it supports the development of a sustainable marine economy in the region. In some cases it is unclear if objectives/policies will remove or avoid barriers to new marine enterprise opportunities or if they will safeguard and/or create jobs. Some impacts are uncertain (for objective SHIP 2 and Policy SHIP 2 as this is dependent on the nature of work (e.g. project size, type of structures) and the location and type of construction undertaken. The impact is also positive for society, as the chapter has a positive impact on improving accessibility and connectivity of coastal and island communities and promotes access to recreational resources.

Within the *Defence* chapter, the objective and recommendation promote the integration of Ministry of Defence activity with the draft CRMP and for operations within the Clyde to have due

consideration of other marine users and the marine environment. This is positive, but overall the impact is neutral as the objective and recommendation are in support of existing processes and stakeholder engagement that the Ministry of Defence already conducts. There is the potential for some negative impacts if other marine activities are excluded or restricted from areas where the Ministry of Defence is operating, however there may be no change from the current situation. As such, defence activities may impose barriers to new marine enterprise activities, though this is unclear. Nonetheless, other activities have coexisted alongside defence activities for a long time (e.g. agreements between the Ministry of Defence and some marine sectors like the fishing sector). This chapter was found to have a neutral impact on society.

For *Marine Aggregates*, the impacts of the chapter are mixed on the marine economy. It is worth noting that this is not an industry which is currently operational within the region, but the inclusion of this chapter in the draft CRMP allows the future development of this sector in the region to be taken into account. The chapter facilitates extraction of aggregates where necessary, enabling businesses to carry out their operations. The conditions set out introduce some new operational and cost-related considerations to what is already in place. It is difficult to determine the extent of the potential negative impact to the marine economy on this, as they would need to be assessed on a case-by-case basis. This could have an impact on increasing barriers to marine enterprise opportunities or on safeguarding and/or creating jobs, for this and other sectors where the activities of this sector can cause disruption or displacement. The impact on society is found to be neutral.

In terms of the *Energy, Subsea Cables and Pipelines* chapter, where renewable structures are placed these could exclude, displace or reduce capacity for some marine enterprises to operate in some areas. This is highlighted in the assessment for the Energy chapter and these negative impacts are mitigated by NMP policies and the *All Sectors* chapter. This industry could create new enterprise opportunities and jobs. Overall the assessment finds that this chapter supports the long term sustainable development of the region's marine economy and while it may negatively impact recreational users (dependant on project), benefits can also be realised through climate change mitigation and potential jobs created. Negative impacts on other users can be mitigated through consideration of policies of the NMP and policies within the All Sectors chapter.

Overall the majority of policy areas have a neutral or positive effect on the objectives for society, in particular many of the measures can have a positive effect on contributing to communities' sense of place, including protection of and access to marine related heritage and maintaining or improving the experiences of recreation users of the marine and coastal environment, both in terms of access and quality of experience. This is an important outcome of the draft CRMP and can enable people to benefit from cultural ecosystem services, such as sense of place, recreation, aesthetic, spiritual and health and wellbeing that are associated with being at the coast.

4.11. Assessment of Alternatives

As noted in section 2, two alternatives were proposed through the process of developing the draft CRMP and the SA-SEA report. These alternatives have been assessed against the SA-SEA objectives, and tables presenting the detailed results are shown in Appendix 4. The alternatives and a summary of the assessment results are shown below:

- ***No change/business as usual.*** The assessment indicates that this alternative would deliver a positive or neutral impact on the SA-SEA topics; the existing planning framework provides protection for these areas and opportunities for enhancement of the marine and coastal environment and provides a framework which seeks to manage activities and/or developments to ensure the sustainable development of the marine economy and society.

However, the existing legislative framework would not necessarily deliver as strong an impact at a regional level as an RMP, particularly the NMP, as the policies within this are high level and not location specific or specific to the needs and issues of or opportunities for a particular Region. Without the development of a RMP, there is no mechanism for implementing regional considerations put forward in the NMP. As a result of not having a RMP, the gap between national and regional decision-making processes represented by the RMP would not be filled. The process of developing a RMP entails taking into account regional stakeholders' knowledge, views and experiences and regional policies would be developed on this local knowledge, which can help identify and address local issues and importantly opportunities for positive impacts, particularly for society and the marine economy. Public engagement opportunities in regional marine planning may also increase the public's understanding of coastal and marine issues in the Region, and enables their involvement and contribution to the planning process.

Although the NMP does not prevent considerations of regional and local issues, the process of regional marine planning allows for them to be fully incorporated and considered through the development of regionally relevant policies. Regional marine planning also allows for better linkages to be developed with terrestrial planning and decision-making at the regional level. The RMP can lead to a more informed site selection process and reduced planning risk and uncertainty. This benefit is supplemented by the fact that regional marine planning allows consideration of issues to happen at a smaller ecosystem scale and regional/local operational scale for businesses, developments and activities.

- **RMP targets action on the issues identified which contribute to the delivery of the collective vision and aims of regional stakeholders. This is done through the combined use of policy relating to authorisations and consents, and non-statutory recommendations which guide and inform the use of the marine and coastal environment.** The assessment shows that this alternative approach will result in positive impacts for all the SEA topics and both positive and negative impacts for the SA topics. It provides consideration of regional issues and contributes to the delivery of the collective vision and aims of local stakeholders within the framework of the NMP. This approach includes policies which support the regional implementation of existing legislation and regulations, policies which introduce new measures to address the needs and opportunities of the Region and regional stakeholders, and non-statutory recommendations to support action in areas where there are particular issues within the Region. The policies support consistency in regional decision making, across marine license applications and also by joining-up land-sea decision making across the various Planning Authorities in the region. In addition to this, the recommendations provide another approach through which to address the issues identified in the CMRA, which cannot be addressed through decision-making mechanisms alone.

  The CMPP is also in a position to communicate with and promote the policies and recommendations amongst a wide range of regional stakeholders and coastal communities, particularly with regard to the recommendations, which are applicable to many coastal communities and informal users. This alternative enables a 'top down, bottom up' approach to dealing with, and resolving over time, issues within the region. Whilst measurement of the overall objectives of the CRMP is possible, it will be not be possible to attribute changes to the recommendations being implemented or carried out.

  In summary, this approach can add regionally relevant policies to the decision making processes for the marine and coastal environment which will aid this process and help to

address regional issues, while providing guidance and a practical approach for all users through the inclusion of recommendations. For these reasons, it is the preferred approach.

4.12. Cumulative effects

The assessment finds that the objectives and policies taken together will have an overall positive impact on the SA-SEA topics and so the overall cumulative effect of the draft CRMP is likely to be positive. This is due to how the CRMP, when finalised, will be used and the consideration of the full marine planning context, in terms of the existing framework established by the NMP. The CRMP should be read as a whole and in conjunction with the NMP. Proposed developments and activities must comply with legislative and regulatory requirements and should adhere to all General Policies in Section 1, before considering the Sector Policies in Section 2. This process facilitates the consideration of the cross-cutting policies of Section 1 to be understood and taken into account in advance of the Sector Policies in Section 2, reducing the likelihood of environmental deterioration which may occur as a result of human activity, especially when considered together with the NMP and other existing legislation which aims to protect and enhance the natural heritage of the marine and coastal environment and promote sustainable development. Furthermore, the policies of the NMP provide direction on the co-existence of activities, direct development and use across and between sectors; these policies mitigate environmental deterioration and contribute to the development of a sustainable marine economy.

The policies for both the sustainable development of the marine economy (which provides employment and contributes to the local economy) and protection and where possible enhancement of the marine and coastal environment (which provides essential benefits and services for humans) interlink to provide benefits for society and take into consideration the health and wellbeing of coastal communities.

An example of where the cumulative effect of the draft CRMP is stronger can be seen in the assessment results for one of the objectives for Society 'Support a reduction in the magnitude of poverty and social exclusion and promote equality for all communities.' It is not clear in many cases to see how individual policies can have a great effect on this, however the cumulative effect of the contribution of multiple policies being implemented can have a greater positive effect. There are also likely to be synergistic positive effects across all policies of the draft CRMP on Society.

Similarly, the policies of the Marine Litter chapter could be said to have a minor positive effect when taken individually, but cumulatively the effect is much greater and they have a stronger effect on the problem of marine litter in the Region, as this chapter sets out measures which seek to address this issue from many angles. Polices and recommendations range in coverage from policies targeted at development of infrastructure to promoting action of loss of plastic pellets at manufacturing sites. Their application cumulatively will have a stronger effect on reducing the burden of marine litter within the Region. This applies in other cases too, for example the cumulative effect of mitigation activity with applied across sectors and environmental enhancement activity when considered cumulatively across individual proposals.

Many of the objectives and policies are general statements and so the value of them will become evident when they are applied within individual proposals by applicants and as the draft CRMP becomes statutory and embedded in decision-making processes.

The draft CRMP frames and strengthens wider policy ambitions of the NMP within the Region, contributing to their delivery and achievement. The NMP and the final adopted CRMP will work together to deliver a framework of social, economic and environmental policies that will inform the right activity and/or development taking place at the right scale and place for the benefit of society,

environment and economic development. The process of development of the draft CRMP furthers the identification of issues at the local level, to be taken into account by users and in carrying out activities and developments, tailoring the creation of policies to specifically deal with the needs and issues, as well as opportunities identified.

The draft CRMP supports the existing NMP framework, working to encourage sustainable economic growth and development, seeking to deliver the right type of economic growth in the right place culminating in environmental protection and enhancement and benefits to coastal communities. The positive impacts for coastal communities is also supported by the integration of the draft CRMP with Local Development Plans, and by the alignment of policies of these two planning mechanisms unless relevant considerations indicate otherwise.

5. Monitoring and mitigation

After the adoption of the draft CRMP, a monitoring report will be carried out within three years of its adoption. This will consider the effects of the policies and their effectiveness and progress in securing the (then adopted) CRMP's vision, aims and objectives. The measures identified in the objectives of the (then adopted) CRMP will be used as a baseline for measuring progress towards achieving these objectives. This monitoring will also focus on the unanticipated effects, as no significant effects of the draft CRMP have been identified at this stage of the process. Monitoring will also take into account the findings of ongoing external monitoring (e.g. monitoring carried out by SEPA of water body condition, air pollution, NatureScot monitoring related to protected areas and species and Marine Directorate and Marine Directorate Science monitoring and reporting, although this list is not exhaustive), that provide an indication of the state of the marine and coastal environment and socio-economic conditions within the CMR.

The application of the then adopted CRMP can also be measured through Marine Licence applications received within the region. The uncertain or potential negative impacts identified in the assessment of objectives and policies can be more clearly identified at the project level thus enabling clearer mitigation strategies than those identified through the assessment where needed.

Proposals for monitoring will be further addressed in the Post-Adoption Statement, which will come later in the process of CRMP development (see the 'Relationship between this Regional Marine Plan and the SA-SEA' in section 2).

Appendix 1 – SEA checklist

	Requirements of the Act	Section
a)	An outline of the contents and main objectives of the CRMP and of its relationship (if any) with other qualifying plans and programmes.	1.1-1.2
b)	The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the CRMP.	3.1-3.2
c)	The environmental characteristics of areas likely to be significantly affected.	3-3.1
d)	Any existing environmental problems which are relevant to the CRMP including, in particular, those relating to any areas of particular environmental importance, such as areas designated [under the Birds and Habitats Directive]	3.3
e)	The environmental protection objectives, established at international, Community or Member State level, which are relevant to the CRMP and the way those objectives and any environmental considerations have been taken into account during its preparation.	1.3
f)	The likely significant effects on the environment including :	4
	i. Biodiversity	4.1
	ii. Population	4.2
	iii. Human health	4.2
	iv. Fauna	4.1
	v. Flora	4.1
	vi. Soil (sediments, marine geology and coastal processes)	4.3
	vii. Water	4.4
	viii. Air	4.5
	ix. Climatic factors	4.6
	x. Material assets	4.7
	xi. Cultural heritage, including architectural and archaeological heritage	4.8
	xii. Landscapes and seascapes	4.9
	xiii. The inter-relationship between the issues referred to in heads i to xii	4.12
g)	The measures envisaged to prevent, reduce and offset, as fully as possible, any significant adverse effects on the environment of implementing the CRMP.	4, 5 and Appendix 3
h)	An outline of the reasons for selecting alternatives dealt with and A description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of expertise) encountered in compiling the required information).	4.11 2
i)	A description of the measures envisaged concerning monitoring in accordance with section 19.	5
j)	A non-technical summary of the information provided under paragraphs 1-9	This will be provided as a separate document.

Appendix 2 - Summary of Consultation Authorities' responses to SA-SEA Scoping report

Consultation Authority response	CMPP team response/Action
Historic Environment Scotland	
Ensure that baseline for the historic environment is holistic in its consideration of the historic environment. Ensure that the baseline for the historic environment includes designated and undesignated landscapes and unknown archaeological and historic features, including underwater and coastal features.	Comments noted and consideration of this point incorporated into assessment of objectives and policies. Further sources of data also included in section 4 of this report.
NatureScot	
When considering 'sediments , marine geology and coastal processes', may be helpful to recognise that some of the processes outlined in the objectives are active and that maintaining their dynamic nature may be a desired outcome.	Comments noted and reflected in the environmental protection objectives and in the Assessment matrices.
Scottish Environment Protection Agency	
Recommend that flooding and natural flood management are included in the SEA objectives	Additional objectives added under 'Water' and 'climatic factors'.
Some of the plans, programmes and strategies included may have been subject to SEA. It may be useful to prepare a summary of the key SEA findings that may be relevant to the CRMP.	The findings of the SA of the NMP have been taken into consideration.
The Environmental Report should clearly set out where it is expected that other plans, programmes or strategies are better placed to undertake a more detailed assessment of the environmental effects.	The assessment takes into account and considers existing planning processes.
Would find it helpful if the Environmental Report included a summary of the scoping outcomes and how comments from the Consultation Authorities were taken into account.	Comments noted. The Consultation Authorities responses and how they have been taken into account are summarised within this table.

Appendix 3 - Assessment matrices

Assessment Key:

Symbol/Colour	Meaning
++	Major positive impact
+	Minor positive impact
0	Neutral impact
-	Minor negative impact
--	Major negative impact
++/-,+/-- etc.	Mixed impacts
?	Uncertain impact
P/T	Permanent/Temporary effect
S/M/L	Short/Medium/Long-term effects
Se/C/Sy	Secondary/cumulative/synergistic effects

Abbreviations used in the Assessment matrices:

Term	Abbreviation
Good Ecological Status (classification under the Water Environment and Water Services (Scotland) Act 2003)	GEcS
Good Environmental Status (classification under the Marine Strategy Regulations (2010))	GEnvS
National Marine Plan	NMP
Sustainability Appraisal including Strategic Environmental Assessment	SA-SEA

Visions, Aims and Guiding Principles

VISION: The marine and coastal environment of the Clyde Marine Region is clean, healthy, safe, productive and biologically diverse, with fair access for all. It is managed to ensure sustainable multiple use which enables nature to flourish and supports thriving resilient local communities.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	++	P/L Achievement of the vision could also result in many	No mitigation is required as impacts are identified as positive.	The vision is found to have a major positive impact for all SEA and SA Topics as it sets out a balanced approach between development and fair use that allows for the protection and enhancement of the marine and coastal environment and supports thriving resilient local communities. The marine environment supports many human activities and provides essential services such as food provision,
Population and human health	++			
Sediments, marine geology and coastal processes	++			

VISION: The marine and coastal environment of the Clyde Marine Region is clean, healthy, safe, productive and biologically diverse, with fair access for all. It is managed to ensure sustainable multiple use which enables nature to flourish and supports thriving resilient local communities.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Water	++	other secondary beneficial effects.		nutrient, air and water cycling, and the inherent non-use value of the marine and coastal environment.
Air	++			
Climatic factors	++			
Material assets	++			
Cultural heritage	++			
Landscape/seascape	++			
SA topics				
Marine economy	++	As above.	As above.	As above.
Society	++			

AIMS: Contribute to Scotland's transition to a low-carbon economy; Support resilient local communities in the Clyde Marine Region to mitigate and adapt to the consequences of climate change; Promote the use of marine and coastal assets in the Clyde Marine Region to respond to climate change issues; Provide a policy and planning framework for safe and sustainable development and use which encourages innovation and attracts future investment in marine and coastal assets in the Clyde Marine Region; Provide a plan for decision makers to have regard of when responding to marine developers on the early identification of localities of most and least constraint, including consideration of potential environmental factors and sectoral interactions; Underpin the regeneration of urban coastal areas and support a sustainable economy in rural coastal areas; Maintain and enhance the health of the Clyde Marine Region, including biodiversity and the landscape/seascape, by protecting and improving its natural resources; Ensure that the Marine Protected Area network contributes to the protection and enhancement of the Clyde Marine Region's biodiversity, and identify other opportunities for environmental enhancement; Ensure that use and developments contribute to protection and enhancement of the Clyde Marine Region's Priority Marine Features; Promote sustainable and socially inclusive development and use of marine and coastal resources, including through improvements in access; Support the connection of people to the Clyde Marine Region through cultural heritage, work opportunities, educational initiatives and recreational pursuits; Contribute to the wellbeing and cultural diversity of local communities.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	++	P/L Achievement of the aims could also result in many other synergistic, cumulative and secondary	No mitigation is required as impacts are identified as positive.	The aims are all found to have a major positive impact for all the SEA and SA Topics as they seek to ensure the delivery of: • Sustainable development in appropriate locations which underpins the regeneration of urban and coastal areas. • Maintaining and enhancing the health of habitats and species in the CMR. • Promoting socially inclusive development, reconnection of people with the marine and coastal environment through cultural heritage, employment, educational initiatives and recreation.
Population and human health	++			
Sediments, marine geology and coastal processes	++			
Water	++			
Air	++			
Climatic factors	++			
Material assets	++			

AIMS: Contribute to Scotland's transition to a low-carbon economy; Support resilient local communities in the Clyde Marine Region to mitigate and adapt to the consequences of climate change; Promote the use of marine and coastal assets in the Clyde Marine Region to respond to climate change issues; Provide a policy and planning framework for safe and sustainable development and use which encourages innovation and attracts future investment in marine and coastal assets in the Clyde Marine Region; Provide a plan for decision makers to have regard of when responding to marine developers on the early identification of localities of most and least constraint, including consideration of potential environmental factors and sectoral interactions; Underpin the regeneration of urban coastal areas and support a sustainable economy in rural coastal areas; Maintain and enhance the health of the Clyde Marine Region, including biodiversity and the landscape/seascape, by protecting and improving its natural resources; Ensure that the Marine Protected Area network contributes to the protection and enhancement of the Clyde Marine Region's biodiversity, and identify other opportunities for environmental enhancement; Ensure that use and developments contribute to protection and enhancement of the Clyde Marine Region's Priority Marine Features; Promote sustainable and socially inclusive development and use of marine and coastal resources, including through improvements in access; Support the connection of people to the Clyde Marine Region through cultural heritage, work opportunities, educational initiatives and recreational pursuits; Contribute to the wellbeing and cultural diversity of local communities.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Cultural heritage	++	positive effects.		• Contribute to Scotland's transition to the low-carbon economy; maximise opportunities to mitigate and adapt to the consequences of climate change and to improve resilience. These goals support all the SA-SEA objectives of the assessment, and so the aims are found to have a major positive impact.
Landscape/seascape	++			
SA topics				
Marine economy	++	As above.	As above.	As above.
Society	++			

Guiding principles: Sustainable Development, Support delivery of Good Environmental Status, Ecosystem Approach, Adding value not complexity, Multiple responsible use of marine space.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L Achievement of the guiding principles could also result in many other synergistic, cumulative and secondary positive effects.	No mitigation is required as impacts are identified as positive.	The guiding principles of the draft CRMP are positive for the SA/SEA Topics. Similarly to the aims, they balance the needs of development and activity with protection and enhancement of marine and coastal resources. The principles also seek to simplify planning and management of the Region by considering the regional context and adding value to the existing framework set out by the NMP. The guiding principles set the context for a practical approach to use the marine space, encouraging multiple responsible use where it can be achieved sustainably. Such use could result in the most social, economic and environmentally positive outcomes for the Region.
Population and human health	+			
Sediments, marine geology and coastal processes	+			
Water	+			
Air	+			
Climatic factors	+			
Material assets	+			
Cultural heritage	+			
Landscape/seascape	+			

Guiding principles: Sustainable Development, Support delivery of Good Environmental Status, Ecosystem Approach, Adding value not complexity, Multiple responsible use of marine space.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
SA topics				
Marine economy	+	As above.	As above.	As above.
Society	+			

Section 1 – General Policies

Climate Change

Objective CC 1: Development(s) and use in the Clyde Marine Region are carbon neutral and resilient to the impacts of climate change by 2045.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+ -	P/L S/T	Where managed realignment is identified as the preferred option for adaptation activity, this will have been determined through other decision-making processes and underlying assessments will have been carried out (e.g. EIA, Flood Risk Assessment). The draft CRMP is not expected to change these assessments but is instead aimed at providing guidance and support to	The objective is positive as mitigation activities will limit the overall contribution to climate change and will subsequently reduce the impact of climate change effects on biodiversity, flora and fauna and the integrity of ecosystems. This will protect their ability to provide ecosystem services necessary for the effective functioning of the ecosystem. Reducing the impact of climate change on biodiversity, flora and fauna enables these elements to remain resilient to other pressures, such as invasive species, which may lead to deterioration of their status under the Marine Strategy Regulations (2010). There may be some negative impacts if managed realignment is considered as the most appropriate adaptation activity in some areas. This could lead to some areas being sacrificed, leading to habitat loss for the benefit of others, in order to protect essential habitat/infrastructure. Mitigation against these effects is discussed in the adjacent column.
Population and human health	+	P/L		The objective would have a positive long-term impact as it would contribute to reducing the impact of climate change, enabling continued use and enjoyment of the marine and coastal environment, particularly for recreational activities, and therefore allowing people to continue to derive therapeutic and recreational benefits from the environment. Dependent on siting and context, protection works undertaken through adaptation activities may result in enhanced protection of coastal and marine cultural and historic assets from storm surges, flooding and coastal erosion.
Sediments, marine geology and coastal processes	? + -/?	P/L Se ?		The impact of the objective is dependent on the type and siting of coastal developments and activities. These factors will determine which adaptation and mitigation activities are undertaken and these may or may not have a beneficial impact on geodiversity and their natural processes. The assessment assumes that developments and activities will consider important geological sites when looking at mitigation and adaptation options. The objective has an indirect positive effect as mitigation activities will limit the overall contribution to climate change and in turn, in combination with national/international effort, will contribute to the reduction in the severity of climate change impacts such as flooding, coastal erosion and storm surges within the Region. Mitigation activities such as increasing the capacity of carbon stores can also have secondary effects of enhancing habitats and species, and ecosystem services and benefits can continue to be provided.

Objective CC 1: Development(s) and use in the Clyde Marine Region are carbon neutral and resilient to the impacts of climate change by 2045.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
			developers and users in consideration of potential negative impacts. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decision. Users of the CRMP must also adhere to the policies of the NMP, as well as all the policies of Section 1 and Chapter 9: All Sectors of the CRMP.	There may be some negative impacts if managed realignment is considered as the most appropriate adaptation activity in some areas. This could lead to some areas being sacrificed leading to a change in a certain coastal area for the benefit of others in order to protect essential habitat/infrastructure. Mitigation against these effects is discussed in the adjacent column.
Water	0			No impact is identified.
Air	0			No impact is identified.
Climatic factors	++	P/L		The objective is positive as it is focussed on climatic factors, and drives developments and activities to be carbon neutral and to undertake adaptation activities, therefore contributing to wider climate change mitigation and adaptation targets.
Material assets	+	P/L		Material assets are at risk of being damaged or disturbed by climate change impacts such as sea-level rise and storm surges. Driving marine and coastal developments and activities to minimise their emissions of greenhouse gases will have a contribution to meeting climate change targets, which can reduce the predicted impacts of climate change. Developments and activities, which may be contributing to the development of future material assets or maintenance of current assets, will improve their resilience in the future and will also work in partnership with nature.
Cultural heritage	?			The impacts of this objective are uncertain, dependent on siting and type of adaptation activity. Protection works undertaken through adaptation activities may result in enhanced protection of coastal and marine cultural and historic assets from storm surges, flooding and coastal erosion. There may be some indirect benefits as mitigation activities will limit the overall contribution to climate change and this in turn will reduce the effects of climate change impacts on cultural heritage assets.
Landscape/seascape	+	P/L		The impacts of climate change, such as sea-level rise at storm surges, can result in increased erosion/accretion and this may have localised impacts on the seascape of the Region; loss of some areas may even occur in extreme cases. Driving marine and coastal developments and activities to minimise their emissions of greenhouse gases will contribute towards national climate change targets, which can reduce the predicted impacts of climate change. Adaptation activities may also protect elements of the landscape/seascape which could be subject to loss or damage as a result of the impacts of climate change, such as sea-level rise.
SA topics				
Marine economy	- +	T/M P/L Dependent on the nature and duration of mitigation		This objective may have mixed effects on the development of a sustainable marine economy. It is in line with the Scottish Government goal of reducing greenhouse gas emissions to net-zero by 2045 and so this aspect of the policy does not introduce any new measure which would impose new considerations for the marine economy. Depending on the nature of the development or activity, it may increase barriers to marine enterprises as a result of ongoing costs related to improving resilience to the impacts of climate change, this could have a knock on impact around job creation.

Objective CC 1: Development(s) and use in the Clyde Marine Region are carbon neutral and resilient to the impacts of climate change by 2045.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
		and adaptation activity)		All activities taking place within the marine and coastal environment rely on that environment for their continued productivity and success and so in the long term adopting mitigation and adaptation measures is a positive objective as it ensures the sustainability of the environment being relied upon. It also provides an element of future-proofing for these activities, promoting their long-term sustainability and improved resilience in the face of climate change impacts. Depending on siting and type of activity or development the objective may protect marine assets in the Region, maintaining the potential to utilise them in the future. These considerations can have a positive impact on safeguarding jobs that support the development of a sustainable marine economy across new or existing sectors and that support/provide benefits to coastal communities within the Clyde Marine Region.
Society	+, 0	P/L		The objective is positive in the long term as it ensures development and activities are minimising the contribution to climate change and also considering adaptation activities to develop resilience to climate change impacts. It ensures that any development or activity which relates to the accessibility and connectivity of coastal and island communities that may be impacted by climate change in the future will be maintained and that recreational access and quality of experience is also maintained. No impact is identified on reducing the magnitude of poverty and social exclusion on promoting equality for all communities nor on promoting access to coastal and marine resources to tourism and recreation, although this may be an indirect effect of developments/activities contributing to adaptation work. The effect is only a minor positive impact as regional actions can only have a limited impact on the overall effects of climate change. However, by ensuring development and activities are considering mitigation and adaptation and building this into their processes and operations, this contributes to Scotland's emission reduction targets.

Objective CC 2: Natural carbon stores and the associated benefits and services they provide are maintained and enhanced in the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive or neutral.	Carbon stores within the Clyde Marine Region include seagrass habitats, kelp habitats, sediments, saltmarsh and within the shells and coral of some marine and coastal animals. These habitats and species, while serving as carbon stores, also have additional functions and services within the marine and coastal environment. Seagrass acts as a nursery habitat and kelp habitats provide a buffering function to protect coastal zones from storm damage and can reduce coastal erosion. They also provide feeding grounds and shelter for various marine species. Sediments also provide habitat for some species. The objective is positive as it protects significant stores from damage, ensuring the benefits they provide are also protected and can continue to support the integrity of the ecosystem, their interactions and wider ecosystem services. It also stipulates that, stores should be enhanced, which will in the long term is likely to further improve biodiversity and ecosystem functioning and resilience to climate change impacts. This objective can prevent damage to important biological sites, including protected species and the benefits they provide. It also prevents deterioration of

Objective CC 2: Natural carbon stores and the associated benefits and services they provide are maintained and enhanced in the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				this resource, and therefore can continue to contribute towards achieving GEnvS under the Marine Strategy Regulations (2010) and GEcS under the Water Environment and Water Services Act 2003.
Population and human health	+			This objective is positive as it focusses on the protection of habitats which act as carbon stores, ensuring they can continue to provide associated benefits and services, and that these can continue to contribute to human health and wellbeing. It is also positive as it promotes enhancement.
Sediments, marine geology and coastal processes	+			Protection against damage to carbon stores can provide protection for the essential services provided by sediments, marine geology and coastal processes (e.g. sediments as burrows for marine animals, seaweeds and the protection it affords through buffering coastlines from storms).
Water	+	S/T		Removal of some carbon stores could result in increased turbidity in the water column, affecting water quality. Protection of these features prevents such impacts on water quality.
Air	0			No impact is identified.
Climatic factors	+	P/L		Protection of carbon stores in the Clyde contributes to wider climate change mitigation measures; the objective is therefore positive in terms of contributing to climate change mitigation. Damage of carbon stores could result in the release of carbon, contributing to climate change. Although the objective does not propose any new adaptation measures, it protects the features of the coastal environment which are at risk from climate change impacts (e.g. kelp as a storm buffer and reducing coastal erosion), and so maintains their resilience in the face of climate change.
Material assets	+			The objective may have positive impacts on material assets such as coastal infrastructure, dependent on the siting and type of the carbon store. Some carbon stores may provide natural flood management processes and protection, and removal of such carbon stores could reduce flood protection benefits (e.g. kelp forests).
Cultural heritage	0 ?			No direct impact identified. May be indirect effects, as noted above for material assets.
Landscape/seascape	0 ?			No direct impact identified. May be indirect effects, as noted above for material assets.
SA topics				
Marine economy	+ -			This objective is expected to have a positive impact as it supports the development of a sustainable marine economy across a range of sectors within the Region. The objective protects natural resources, supporting the long-term viability of marine sectors. The objective can also protect material assets, through protecting the services provided by some carbon stores (e.g. kelp habitats and coastal protection services). The objective can also present some negative impacts to some marine enterprises, dependent on location - developments and activities may need to relocate or reconsider proposals in order to ensure carbon stores are maintained. This can raise barriers to marine enterprise and could impact on the safeguarding and/or creation of jobs that support the development of a sustainable marine economy across new or existing sectors and that support/provide benefits to coastal communities within the Clyde Marine Region.

Objective CC 2: Natural carbon stores and the associated benefits and services they provide are maintained and enhanced in the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Society	+ 0			The objective is positive for society, as it protects ecosystem services, such as protection against wave buffering, which can have impacts on the coastal zone, such as erosion. This could have a negative impact on the accessibility and connectivity of coastal and island communities' access to marine and coastal recreation and tourism and detrimentally affect people's experiences of the marine and coastal environment. No impact is identified on the other SA objectives for this topic.

Policy CC 1: Proposals for development and/or use should demonstrate that they have considered appropriate and proportionate measures to: **a) minimise emissions of greenhouse gases over the lifespan of the proposal;** **b) adapt to the current and future likely impacts of climate change over the full lifespan of any proposal, including any decommissioning/remediation required;** **c) support or increase sustainable transport use and local transport solutions if applicable.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+ -	P/L S/T	As for Objective CC1	As for Objective CC1. The policy supports the implementation/delivery of NMP policy GEN 5 as well as other legislation and initiatives to deliver climate change mitigation and adaptation.
Population and human health	+	P/L		
Sediments, marine geology and coastal processes	? + -/?	P/L Se ?		
Water	0			
Air	0			
Climatic factors	++	P/L		
Material assets	+	P/L		
Cultural heritage	?			
Landscape/seascape	+	P/L		
SA topics				
Marine economy	- +	T/M P/L (Dependent on the nature and duration of mitigation and adaptation activity)	As for Objective CC1	As for Objective CC1
Society	+, ?, 0	P/L		

Policy CC 2: Proposals for development and/or use should avoid significant harm or damage to carbon stores, including those in intertidal habitats in the Clyde Marine Region. Where an impact on a recognised carbon store (see Maps CC 1 & 2) may occur, it should be demonstrated prior to development taking place that any impacts can be suitably mitigated, using the mitigation hierarchy.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L and secondary	No mitigation is required as impacts are identified as positive or neutral.	The policy is positive as it seeks developments and activities to demonstrate that they will avoid damage to and/or where possible enhance, thereby preventing the deterioration of, the capacity of carbon stores in the CMR. This will provide benefits to ecosystems, their interactions and the benefits they provide, while also contributing to climate change mitigation activity through maintaining or enhancing carbon sinks in the Region. The policy can have an indirect positive effect on contributing to several descriptors under the Marine Strategy Regulations (2010).[52] Some carbon sinks also provide additional ecosystem services, such as nursery habitats, feeding grounds and buffering coastlines from storms and wave action. The policy is in support of NMP GEN 5.
Population and human health	+	P/L		Maintaining/enhancing carbon stores is a climate change mitigation activity and contributes to Scotland's greenhouse gas emission reduction targets. This will have an overall positive effect for coastal and marine ecosystems as it will ensure that the environment can continue to provide benefits necessary to support human health and wellbeing.
Sediments, marine geology and coastal processes	+	P/L		The policy is positive as it aims to maintain/enhance ecosystems related to carbon stores (e.g. saltmarshes, seagrass and seaweeds). These habitats contribute to coastal processes and sediment dynamics – maintaining and enhancing them ensures that these processes will continue to function. The benefit these habitats provide, such as wave action buffering, may also help protect important geological sites and in turn the benefits that these features provide. Maintaining such habitats can also avoid exacerbating coastal erosion, maintain the integrity of coastal processes and ensure the natural environment's inherent capacity to cope with flooding is not detrimentally affected and may, in fact, also be enhanced.
Water	0			No impact is identified.
Air	0			No impact is identified.
Climatic factors	+	P/L Se		The policy is positive as it aims to maintain existing, and/or enhance the Region's mitigation activity by maintaining and/or enhancing carbon stores. There is no direct effect on adaptation activity; however, enhancing carbon stores can provide indirect benefits as the habitats and species that provide this service can provide additional benefits (e.g. wave action buffering) which can protect against climate change impacts (e.g. coastal erosion and flooding).
Material assets	+	Se		There is no direct impact on material assets; however, enhancing carbon stores can provide indirect benefits as the habitats and species that provide this service can provide additional benefits (e.g. wave action buffering) which can protect against climate change impacts (e.g. coastal erosion and flooding) which may have a detrimental effect on material assets located at the coast.
Cultural heritage	+	Se		As above for material assets.
Landscape/seascape	+	Se		As above for material assets.
SA topics				
Marine economy	+ ?	P/L ?		The policy does not introduce new measures, and is similar to NMP GEN 5 section 4.9. The policy will have a positive effect as it supports the development of a sustainable economy in the Region. It ensures the sustainable use of the Region's

[52] http://ec.europa.eu/environment/marine/good-environmental-status/index_en.htm

Policy CC 2: Proposals for development and/or use should avoid significant harm or damage to carbon stores, including those in intertidal habitats in the Clyde Marine Region. Where an impact on a recognised carbon store (see Maps CC 1 & 2) may occur, it should be demonstrated prior to development taking place that any impacts can be suitably mitigated, using the mitigation hierarchy.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				resources thereby supporting the long-term viability of marine sectors which rely on the environment in which they operate. The policy has indirect positive benefits for the protection of marine assets. It is unclear if the policy will remove or avoid barriers to new marine enterprise opportunities or have any effect on safeguarding or creating jobs that support the development of a sustainable marine economy across new or existing sectors and that support/provide benefits to coastal communities within the Clyde Marine Region – this will depend on the nature of any development or activity, but as noted above this policy does not introduce new measures as similar details are already set out in the NMP.
Society	0 +	Se		No direct effects are identified. There may be indirect effects if there is a loss of carbon stores that provide additional ecosystem services (e.g. wave buffering). When these benefits are removed, there could be detrimental impacts on the coastal zone (e.g. erosion). This could have a negative impact on the accessibility and connectivity of coastal and island communities, access to marine and coastal recreation and tourism and detrimentally affect people's experiences of the marine and coastal environment. No impact is identified on supporting a reduction in the magnitude of poverty and social exclusion and no effect is identified on an increase in equality for all communities.

Policy CC 3: Proposals for development and/or use are encouraged to deliver positive effects on the capacity of recognised carbon stores (as identified in the Scottish Blue Carbon Action Plan) including to support their expansion.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L, where this policy implemented.	No mitigation is required as impacts are identified as positive or neutral.	Increased capacity of carbon stores can provide benefits to ecosystems, their interactions and the benefits they provide, while also contributing to climate change mitigation activity through maintaining or enhancing carbon sinks in the Region. The policy can have an indirect positive effect on contributing to several descriptors under the Marine Strategy Regulations (2010).[53] Some carbon sinks also provide additional ecosystem services, such as nursery habitats, feeding grounds and buffering coastlines from storms and wave action.
Population and human health	+	P/L		Enhancing carbon sinks is a climate change mitigation activity and contributes to Scotland's greenhouse gas emission reduction targets. This will have an overall positive effect for coastal and marine ecosystems which will ensure that the environment can continue to provide benefits necessary to support human health and wellbeing.
Sediments, marine geology and coastal processes	+	P/L		The policy is positive as it encourages positive effects on ecosystems related to carbon stores (e.g. saltmarshes, seagrass and seaweeds). These habitats contribute to coastal processes and sediment dynamics – maintaining and enhancing them ensures that these processes will continue to

[53] http://ec.europa.eu/environment/marine/good-environmental-status/index_en.htm

Policy CC 3: Proposals for development and/or use are encouraged to deliver positive effects on the capacity of recognised carbon stores (as identified in the Scottish Blue Carbon Action Plan) including to support their expansion.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				function. The benefit these habitats provide, such as wave action buffering, may also help protect important geological sites and in turn the benefits that these features provide. Enhancing such habitats can also avoid exacerbating coastal erosion, support the integrity of coastal processes and ensure the natural environment's inherent capacity to cope with flooding is not detrimentally affected and may, in fact, also be enhanced.
Water	0			No impact is identified.
Air	0			No impact is identified.
Climatic factors	+	P/L Se		The policy is positive as enhancement of carbon stores is a contribution to the Region's mitigation activity. There is no direct effect on adaptation activity; however, enhancing carbon stores can provide indirect benefits as the habitats and species that provide this service can provide additional benefits (e.g. wave action buffering) which can protect against climate change impacts (e.g. coastal erosion and flooding).
Material assets	+			There is no direct impact on material assets; however, enhancing carbon stores can provide indirect benefits as the habitats and species that provide this service can provide additional benefits (e.g. wave action buffering) which can protect against climate change impacts (e.g. coastal erosion and flooding) which may have a detrimental effect on material assets located at the coast.
Cultural heritage	+	Se		As above for material assets.
Landscape/seascape	+			As above for material assets.
SA topics				
Marine economy	+			Where this policy is undertaken it can be expected to have an indirect positive impact on the marine economy, as it supports the development of a sustainable economy in the Region. It ensures the sustainable use of the Region's resources thereby supporting the long-term viability of marine sectors which rely on the environment in which they operate. The policy has indirect positive benefits for the protection of marine assets, maintaining the potential to utilise them in the future. As this policy only encourages proposals to deliver enhancement activities, no negative impact is anticipated as the cost/benefits would be taken into account before enhancement activity is proposed.
Society	+, 0	Se		No direct effects are identified. This policy may provide indirect positive impacts on maintaining or improving the experiences of recreational users of the marine and coastal environment, in terms of quality of experience. No other impact is identified on the other SEA objectives for this topic.

Policy CC 4: Proposals for the enhancement of marine and coastal natural carbon stores, such as habitat restoration or creation and native species restoration, and proposals for other nature-based solutions to mitigate and adapt to the impacts of climate change will be supported and encouraged where they demonstrate consideration of potential climate change impacts on the proposal, and are in accordance with the other policies within this Plan.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L, where this policy implemented.	No mitigation is required as impacts are identified as positive or neutral.	As above for Policy CC 3
Population and human health	+	P/L		
Sediments, marine geology and coastal processes				
Water	0			
Air				
Climatic factors	+	P/L		
Material assets	+	Se		
Cultural heritage	+	Se		
Landscape/seascape				
SA topics				
Marine economy	+			As above for Policy CC 3
Society	+ 0	Se		

Policy CC 5: Proposals for nature-based solutions to mitigate and adapt to the impacts of climate change are encouraged and will be supported where they demonstrate appropriate consideration of the effects of the proposal on the wider ecosystem, and are in accordance with the other policies within this Plan.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L, where this policy implemented.	No mitigation is required as impacts are identified as positive or neutral.	As above for Policy CC 3
Population and human health	+	P/L		
Sediments, marine geology and coastal processes				
Water	0			
Air				
Climatic factors	+	P/L		
Material assets	+	Se		

Policy CC 5: Proposals for nature-based solutions to mitigate and adapt to the impacts of climate change are encouraged and will be supported where they demonstrate appropriate consideration of the effects of the proposal on the wider ecosystem, and are in accordance with the other policies within this Plan.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Cultural heritage	+	Se		
Landscape/seascape				
SA topics				
Marine economy	+			As above for Policy CC 3
Society	+ 0	Se		

Recommendation CC1: Developments are encouraged to promote climate justice and help society and the environment to be more resilient to the current and future likely impacts of climate change.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L, where this policy implemented.	No mitigation is required as impacts are identified as positive or neutral.	As above for Policy CC 3
Population and human health	+	P/L		
Sediments, marine geology and coastal processes				
Water	0			
Air				
Climatic factors	+	P/L		
Material assets	+	Se		
Cultural heritage	+	Se		
Landscape/seascape				
SA topics				
Marine economy	+			As above for Policy CC 3
Society	+ 0	Se		

Historic Environment

Objective HE 1: Marine and coastal historical and cultural assets in the Clyde Marine Region, whether visible, buried, submerged or intangible, are protected and enhanced.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+		No mitigation is required as impacts are identified as positive or neutral.	Depending on the location and type, protection of these assets can provide protection to species and habitats which have developed around or on the asset and would be damaged with its disturbance or removal. This objective could therefore indirectly contribute to the conservation of integrity of ecosystems, their interactions and the benefits they provide. It also can prevent damage to important biological sites and protected species, including the benefits they provide.
Population and human health				Indirectly, the objective supports healthy ecosystems which are an essential part of human health and wellbeing and so it is also positive for human health.
Sediments, marine geology and coastal processes	0			No impact is identified.
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage	++	P/L		The principle of the objective is to protect and where appropriate enhance cultural and heritage assets, so it will have a major positive effect in terms of protection of cultural and heritage assets. It can also contribute to the prevention of damage to known and unknown coastal and marine archaeology, by requiring the wider consideration of the historic environment by marine users and developers. The objective is positive as it prevents developments and activities impacting on the character and setting of historic sites and building, including the benefits they provide to communities around the Region and beyond. It is unclear how the objective will enhance cultural and heritage assets. This can be determined depending on the type of activity and/or development and on a site-by-site basis through existing processes (licensing, consents, planning permission or management).
Landscape/seascape	?			There can be a positive impact on landscape/seascape, where historical and cultural assets contributes to the unique character of the landscape/seascape, and so preserving it can also be positive for landscape/seascape, however this is uncertain as the impact is dependent on the location and type of asset and the contribution it makes to the landscape/seascape character.
SA topics				
Marine economy	? 0	S/T		The objective is in line with and support NMP policy GEN 6, however it introduces consideration of intangible historical and cultural heritage and so this objective may introduce new measures that need to be taken into account and may add or create barriers to new marine enterprise opportunities within the Region. The impact is unclear. The objective does not have any effect on the other SA-SEA objectives for this topic.
Society	+ 0	P/L		The effect is positive as protecting cultural and heritage assets contribute to a community's sense of place. The impact will be stronger in some parts of the Region than in others, depending on the type and location of assets,

Objective HE 1: Marine and coastal historical and cultural assets in the Clyde Marine Region, whether visible, buried, submerged or intangible, are protected and enhanced.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				where developments or activities are proposed that may affect them and the overall importance and contribution of these assets to an area and the cultural/historic heritage of the Region. No impact is identified on the other SA-SEA objectives.

Objective HE 2: People's knowledge and experience of the marine and coastal historic environment is enhanced through improved awareness of the historical and cultural assets of the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	Se	No mitigation is required as impacts are identified as positive or neutral.	The impact is indirectly positive as the objective can support measures to protect and enhance historical and cultural assets, which can lead to protection and enhancement of species which have become established on or near heritage assets. This can contribute overall to the integrity of ecosystems, and prevent damage to important biological species. Ensuring healthy ecosystems supports human health and wellbeing.
Population and human health				
Sediments, marine geology and coastal processes	0			No impact is identified.
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage	+	P/L		The objective is positive for cultural heritage as increased awareness, knowledge and experience of the historic environment can lead to increased support for its protection and enhancement. Improved awareness in and of itself is can also have a positive impact as this supports the cultural ecosystem services such as people's sense of place, spiritual and aesthetic values and recreational capacity.
Landscape/seascape	0			No impact is identified.
SA topics				
Marine economy	+ 0	P/L		The impact is positive as promoting awareness of the historical and cultural heritage of the Region can provide a boost of related sectors through increased custom and visits to historic sites for example. This objective can also support sustainable use of the Region and may contribute to safeguarding of jobs that support the development of a sustainable marine economy for this sector. No impact is identified on the other SEA objectives.
Society	+ 0	P/L		The impact is positive as it can promote access to coastal and marine resources for tourism and recreation – where people's awareness is improved, there may be higher demand which could lead to improvements in transport networks and other mechanisms which can promote accessibility. It

Objective HE 2: People's knowledge and experience of the marine and coastal historic environment is enhanced through improved awareness of the historical and cultural assets of the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				is not clear that this objective would promote a reduction in the magnitude of poverty or promote equality, but it could reduce social exclusion, by contributing to education of historical and cultural assets. It can also have a positive impact on communities' sense of place by promoting people's awareness of local heritage for example and can have a positive impact on improving the experiences of recreations users of the environment, both in terms of access (as discussed above) and quality of experience.

Policy HE 1: Development(s) and/or activities will only be supported if they protect marine and coastal historic environment and cultural assets, their context and accessibility. If detrimental impact on historic environment and cultural assets is unavoidable, development(s) and/or activities must:

- **demonstrate that alternative proposals have been explored,**
- **minimise impacts on these assets, and**
- **ensure mitigation measures are in place.**

SEA topics	Impact	Nature of impact	Mitigation	Explanatory text
Biodiversity, flora and fauna	+	Se	No mitigation is required as impacts are identified as positive or neutral.	Although the measures set out in the policy are already in place through national legislation, this policy supports its implementation at a Regional level. The impact is indirectly positive as protecting historical and cultural assets also protects space for biodiversity flora and fauna and protects species which may have become established on or near particular assets. In this way the policy can indirectly support the conservation of integrity of ecosystems and the benefits and services they provide. Ensuring healthy ecosystems can also support human health and wellbeing.
Population and human health				
Sediments, marine geology and coastal processes	0			No impact is identified.
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage	+	P/L		The policy has a positive impact on historical and cultural assets, as although it does not introduce any new measures it supports existing policy at a Regional level. The policy states that enhancement should take place where appropriate, requiring developers and users to have wider consideration of heritage assets and the benefits they provide.
Landscape/seascape	0			The policy has an uncertain impact and will depend on the context of any development or activity. Impact on the historical and cultural assets may have an indirect impact on the surrounding character of the landscape/seascape and the size, type and siting of the historical or cultural asset, for example if this involves removal. The impact of this policy

Policy HE 1: Development(s) and/or activities will only be supported if they protect marine and coastal historic environment and cultural assets, their context and accessibility. If detrimental impact on historic environment and cultural assets is unavoidable, development(s) and/or activities must: • **demonstrate that alternative proposals have been explored,** • **minimise impacts on these assets, and** • **ensure mitigation measures are in place.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				is likely to be neutral in most cases, as if there is any impact on historic assets, mitigation measures are required and the policy indicates that the preservation in situ will always be the preferred.
SA topics				
Marine economy	0			This policy does not propose new measures to those already in place either through terrestrial legislation/policy and/or through the NMP policies to protect cultural heritage below MHWS. Therefore, the impact to the marine economy is considered neutral.
Society	+ 0	P/L		The policy is positive as although it does not introduce any new measures, it supports the application of existing policy at a Regional level and explicitly promotes access to coastal and marine resources. This can contribute to communities' sense of place through protection of and access to marine-related heritage, which can be a central component of, or at least a contributing factor to an area's character. It maintains people's recreational use of the marine and coastal environment. No impact is identified on supporting the reduction of the magnitude of poverty and social exclusion and promoting equality for all communities.

Policy HE 2: Proposals for development and/or use are encouraged to identify opportunities for enhancement of historic environment and cultural assets and/or their accessibility.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	?	Se	Existing consenting processes for coastal and marine developments are in place and these are likely to be supported by underlying assessments (e.g. EIA, flood-risk). These are currently the primary mechanisms for the identification, assessment and, where necessary, avoidance and/or mitigation of any potential flooding or coastal erosion impacts associated with coastal or marine development. This policy is not expected to change these assessments but is instead aimed at	Where this policy is applied, the impact is positive as it can support enhancement for biodiversity, flora and fauna and therefore also support human health and wellbeing (as is detailed for the policies and objectives above), however ultimately the impact is uncertain as positive benefits are dependent on the nature of the enhancement.
Population and human health				
Sediments, marine geology and coastal processes	0			No impact is identified.
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage	+	P/L		Where this policy is applied, the impact is positive as it will deliver enhancements to historical and cultural assets, supporting the objectives for this SEA topic.

Policy HE 2: Proposals for development and/or use are encouraged to identify opportunities for enhancement of historic environment and cultural assets and/or their accessibility.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Landscape/seascape	?		providing guidance and support to developers and users by considering potential issues and adaptation. Where an impact is uncertain, it is expected further determination of the impact could be made by considering the specific details of any proposals. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions. Users of the CRMP must also adhere to the policies of the NMP, as well as all the policies of Section one and Chapter 9: All Sectors.	The impact is uncertain on landscape/seascape. This policy could provide a positive impact as landscape/seascape may indirectly benefit from enhancement to historical and cultural assets, however this is dependent on the nature of the enhancement activity.
SA topics				
Marine economy	+ 0			Enhancement activities could support the further development of a sustainable tourism and recreation sector in the Region. No other impact is identified on the SEA objectives. No negative impacts are identified as the policy only encourages enhancement.
Society	+ 0			This policy could promote access to coastal and marine resources for tourism and recreation and could contribute to communities' sense of place, including protection of and access to marine related heritage. It can also maintain or improve the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience.

Recommendation HE 1: Efforts should be made to protect and promote non-structural and intangible marine and coastal cultural heritage. For example, through museums, visitor centres, festivals, or incorporation into development proposals.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	?	Se	Existing consenting processes for coastal and marine developments are in place and these are likely to be supported by underlying assessments (e.g. EIA, flood-risk). These are currently the primary mechanisms for the identification, assessment and, where	As for Policy HE 2
Population and human health				

Recommendation HE 1: Efforts should be made to protect and promote non-structural and intangible marine and coastal cultural heritage. For example, through museums, visitor centres, festivals, or incorporation into development proposals.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Sediments, marine geology and coastal processes	0		necessary, avoidance and/or mitigation of any potential flooding or coastal erosion impacts associated with coastal or marine development. This policy is not expected to change these assessments but is instead aimed at providing guidance and support to developers and users by considering potential issues and adaptation. Where an impact is uncertain, it is expected further determination of the impact could be made by considering the specific details of any proposals. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions. Users of the CRMP must also adhere to the policies of the NMP, as well as all the policies of Section one and Chapter 9: All Sectors.	
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage	+	P/L		
Landscape/seascape	?			
SA topics				
Marine economy	+ 0			As for Policy HE 2
Society	+ 0			

Landscape/seascape

Objective SCAPE 1: Nationally and locally important landscape/seascape character of the Clyde Marine Region is protected and enhanced, at both a wider and a local level to contribute to the quality of life and wellbeing of local communities and visitors.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0		No mitigation is required as impacts are identified as	No impact is identified.
Population and human health				

Objective SCAPE 1: Nationally and locally important landscape/seascape character of the Clyde Marine Region is protected and enhanced, at both a wider and a local level to contribute to the quality of life and wellbeing of local communities and visitors.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Sediments, marine geology and coastal processes			positive or neutral.	
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape	+	P/L		The intended aim of the objective is to protect, and enhance nationally and locally important seascapes within the Region and to contribute to the quality of life and wellbeing of local communities and visitors. This will protect the recreational and therapeutic effects derived from the unique and complex variety of seascapes around the CMR. The objective does not introduce new requirements; however it provides additional detail which can contribute to improved decision-making, including the requirement for coastal based developments to consider seascape and regional consideration through the policies noted below, so the impact is noted as positive.
SA topics				
Marine economy	+	P/L		This objective does not introduce any requirements that are not already in place through other consent and licensing processes, so there is no adverse impact on adding or removing barriers to new marine enterprises or on safeguarding and/or creating jobs. It helps to support the delivery of national legislation at the Regional level and highlights the particular contribution of landscape/seascape to the wellbeing of people. The objective supports the development of a sustainable marine economy in the Region across a range of sectors and business sizes, and can safeguard and/or create jobs that support and provide benefits to coastal communities within the region, as it supports the protection of areas of important landscape/seascape character.
Society	+ 0	P/L		The objective is positive as protection and enhancement of nationally and locally important landscape/seascape contributes to a community's sense of place and maintains or improves the experience of recreational users of the marine and coastal environment, in terms of quality of experience. Where enhancement is possible, enhancement may include promoting access to coastal and marine resource for tourism and recreation. The objective promotes consideration of this. No effect is identified on the accessibility and connectivity of coastal and island communities, or on supporting a reduction in the magnitude of poverty, social exclusion and promoting equality.

Policy SCAPE 1: Proposals for development and/or use should demonstrate that they have considered, where appropriate:

a) the Seascape/Landscape Assessment of the Firth of Clyde, the relevant planning authority Landscape Assessments and other relevant Strategic Development Frameworks, character appraisals or supporting documentation;

b) how the proposal takes into account its effects on the existing character, experience and quality of the landscape/seascape. Where negative or intrusive visual effects are likely, steps should be taken to avoid or minimise effects. This includes developed, altered and cultural landscapes as well as natural areas;

c) **a high standard of design, in terms of siting, scale, colour, materials and form to ensure the development or coastal use change will be accommodated within specific landscape and seascape types (as shown in Map SCAPE 2).**

SEA topics	Impact	Nature of impact	Mitigation	Explanatory text
Biodiversity, flora and fauna	0		No mitigation is required as impacts are identified as positive or neutral.	No impact is identified.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape	+	P/L		Although the policy is aligned with NMP policy GEN 7, it provides more detailed guidance and introduces regional consideration requiring development and/or activity to refer to the Seascape/landscape Assessment of the Firth of Clyde. This can help improve the decision making processes/clarity for proposals in determining the siting and/or design of proposed developments and/or activities in both marine and coastal locations. Therefore the policy is found to have a positive impact. In particular it promotes specific aspects to take into consideration to reduce the negative effects a proposal may have on landscapes/seascapes, such as specific measures to improve landscape character in the inner Clyde estuary.
SA topics				
Marine economy	+ ?			This policy does not introduce any requirements that are not already in place through other consent/licensing processes, apart from the consideration of regional information in any proposed development(s) and/or activity. The impact of the additional consideration of this guidance is unclear and depending on the type and location of proposal may add to operational/time implications for development(s) and/or activities. The policy is positive overall as it widens the consideration of the regional landscape/seascape characteristics, adding to existing guidance, and providing further clarity for proposals. The impact on removing or adding to barriers for marine enterprises or on safeguarding/creating jobs is uncertain; there may be additional costs associated with revised design of developments or materials used. The policy is positive as it protects landscape/seascape resources in the CMR, so that the potential to use them in the future is maintained and the development of a sustainable marine economy is supported.

Policy SCAPE 1: Proposals for development and/or use should demonstrate that they have considered, where appropriate:

a) the Seascape/Landscape Assessment of the Firth of Clyde, the relevant planning authority Landscape Assessments and other relevant Strategic Development Frameworks, character appraisals or supporting documentation;

b) how the proposal takes into account its effects on the existing character, experience and quality of the landscape/seascape. Where negative or intrusive visual effects are likely, steps should be taken to avoid or minimise effects. This includes developed, altered and cultural landscapes as well as natural areas;

c) **a high standard of design, in terms of siting, scale, colour, materials and form to ensure the development or coastal use change will be accommodated within specific landscape and seascape types (as shown in Map SCAPE 2).**

SEA topics	Impact	Nature of impact	Mitigation	Explanatory text
Society	+ 0			The policy is positive as it contributes to communities' sense of place, local heritage and connection to the area by guiding developments and activities to maintain the integrity of the landscape/seascape. No effect is identified on the accessibility and connectivity of coastal and island communities or on supporting a reduction in the magnitude of poverty, social exclusion and equality.

Policy SCAPE 2: Proposals for development and/or use in the Inner Clyde estuary should consider how the proposal takes into account its effects on the distinctive character of the River Clyde Development Corridor.

SEA topics	Impact	Nature of impact	Mitigation	Explanatory text
Biodiversity, flora and fauna	0		No mitigation is required as impacts are identified as positive or neutral.	No impact is identified.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape	+	P/L		This policy brings together existing measures for various national or regional landscape designations and so while it does not introduce any new measures it reduce complexity somewhat and helps to deliver existing policy measures at a regional level. The policy is positive as it promotes the protection of landscapes/seascapes and where possible avoid or minimise adverse effects on landscapes/seascapes and the benefits they provide.
SA topics				

Policy SCAPE 2: Proposals for development and/or use in the Inner Clyde estuary should consider how the proposal takes into account its effects on the distinctive character of the River Clyde Development Corridor.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Marine economy	+ 0 ?	Mixed		This policy brings together existing measures for various national or regional landscape designations and so while it does not introduce any new measures it can reduce complexity somewhat and helps to deliver existing policy measures at a regional level. The policy is positive as it protects landscape/seascape resources in the CMR, so that the potential to use them in future is maintained. It is unclear whether the policy will support the development of a sustainable marine economy in the Region across a range of sectors and business sizes or what the impact will be on safeguarding and/or creating jobs
Society	+ 0			The policy is positive as it contributes to communities' sense of place, by guiding developments and activities to maintain the integrity of the landscape/seascape. No effect is identified on the accessibility and connectivity of coastal and island communities or on supporting a reduction in the magnitude of poverty, social exclusion and promoting equality.

Policy SCAPE 3: Proposals for development and/or use that affect National Scenic Areas, National and Regional Parks, or Local Landscape Areas should demonstrate that they have considered that: **a) they will not adversely affect the integrity of the area or its special qualities for which it has been designated, or** **b) any such adverse effects are clearly outweighed by social, environmental or economic benefits of national importance (or local importance for Local Landscape Areas).** **It should be considered whether or not a Design Statement is required to support a proposal for development or use that affects a National Scenic Area or National or Regional Park.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0		No mitigation is required as impacts are identified as positive or neutral.	No impact is identified.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape	+	P/L		This policy brings together existing measures for various national or regional landscape designations and so while it does not introduce any new measures it reduce complexity somewhat and helps to deliver existing policy measures at a regional level. The policy is positive as it promotes the protection of landscapes/seascapes and where possible

Policy SCAPE 3: Proposals for development and/or use that affect National Scenic Areas, National and Regional Parks, or Local Landscape Areas should demonstrate that they have considered that: **a) they will not adversely affect the integrity of the area or its special qualities for which it has been designated, or** **b) any such adverse effects are clearly outweighed by social, environmental or economic benefits of national importance (or local importance for Local Landscape Areas).** **It should be considered whether or not a Design Statement is required to support a proposal for development or use that affects a National Scenic Area or National or Regional Park.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				avoid or minimise adverse effects on landscapes/seascapes and the benefits they provide. It requires development(s) and/or activities to demonstrate consideration around Natural Scenic Areas or National Parks.
SA topics				
Marine economy	+ 0 ?	Mixed		This policy brings together existing measures for various national or regional landscape designations and so while it does not introduce any new measures it can reduce complexity somewhat and helps to deliver existing policy measures at a regional level. The policy is positive as it protects landscape/seascape resources in the CMR, so that the potential to use them in future is maintained. While this policy will have no effect on removing or avoiding barriers to new marine enterprise opportunities, it may present additional responsibilities through the need to provide a design statement in some circumstances. It is unclear whether the policy will support the development of a sustainable marine economy in the Region across a range of sectors and business sizes or what the impact will be on safeguarding and/or creating jobs
Society	+ 0			The policy is positive as it contributes to communities' sense of place, by guiding developments and activities to maintain the integrity of the landscape/seascape. No effect is identified on the accessibility and connectivity of coastal and island communities or on supporting a reduction in the magnitude of poverty, social exclusion and promoting equality.

Recommendation rSCAPE 1: Efforts should be made to maintain developments, infrastructure and facilities in a coastal or marine location in such a way that they do not have a significant adverse impact on the landscape/seascape qualities of an area.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0		No mitigation is required as impacts are identified as positive or neutral.	No impact identified.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				

Recommendation rSCAPE 1: Efforts should be made to maintain developments, infrastructure and facilities in a coastal or marine location in such a way that they do not have a significant adverse impact on the landscape/seascape qualities of an area.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Cultural heritage				
Landscape/seascape	+	P/L		Where this recommendation is applied it can have a positive impact on promoting the protection of landscapes/seascapes and avoid or minimise adverse effects on landscapes/seascapes and the benefits they provide by preventing infrastructure and facilities falling into disrepair.
SA topics				
Marine economy	+ 0	P/L		No negative impacts are identified from this recommendation and it is voluntary so the party responsible can judge how and when to apply this recommendation so as to mitigate any potential negative operational or financial impacts associated with carrying it out. Carrying out the recommendation can result in the removal of barriers to new marine enterprise opportunities that may arise through improving visual amenity and could support safeguarding jobs. It can also protect marine assets maintaining the potential to utilise them in the future where they are maintained. No impact is identified in terms of supporting the development of a sustainable marine economy or in ensuring the sustainable use of the Region's resources.
Society	+ 0	P/L		There may be an indirect benefit to contributing to a communities' sense of place through adequately maintaining infrastructure and facilities which maintains the landscape/seascape. No impact is identified on the other objectives for this topic.

Coastal Processes, Coastal Flood and Storm Damage

Objective CP 1: Development(s) and/or use in the Clyde Marine Region are resilient to the dynamic nature of the coast, including the impacts of climate change, using natural assets and soft engineering where possible.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0		Existing consenting processes for coastal and marine developments are in place and these are likely to be supported by underlying assessments (e.g. EIA, flood-risk). These are currently the primary mechanisms for the identification, assessment and, where necessary, avoidance and/or mitigation of any potential flooding or coastal erosion impacts associated with coastal or	No impact is identified.
Population and human health				
Sediments, marine geology and coastal processes	+	P/L		The objective has a positive impact as it acknowledges the dynamic nature of coastal processes and that developments and activities should be developed to accommodate this and current developments and activities should be resilient to the dynamic nature of the coast including the impacts of climate change. This approach can avoid exacerbating coastal erosion and maintain the integrity of coastal processes and the benefits they provide. This objective also ensures that the inherent capacity of the natural environment to cope with flooding is not detrimentally affected.

Objective CP 1: Development(s) and/or use in the Clyde Marine Region are resilient to the dynamic nature of the coast, including the impacts of climate change, using natural assets and soft engineering where possible.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Water	? 0	?	marine development. This policy is not expected to change these assessments but is instead aimed at providing guidance and support to developers and users by considering potential issues and adaptation. Where an impact is uncertain, it is expected further determination of the impact could be made by considering the specific details of any proposals. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions. Users of this CRMP must also adhere to the policies of the NMP, as well as all the policies of Section one and Chapter 9: All Sectors – of the CRMP.	This objective may contribute to improvements under descriptor 6&7[54] of the Marine Strategy Regulations (2010), resulting in a positive effect.
Air	0			No impact is identified.
Climatic factors	0 +	P/L		The objective is not expected to have any effect on the regional contribution to climate change mitigation. It is positive as it promotes adaptation to climate change impacts, both with regard to protecting natural processes (such as flood management processes) and considering climate change impacts in developments and activities to future-proof them against these impacts and safeguard their continued use into the future.
Material assets	+ ?	Mixed		The objective is positive for new material assets (that may come about as a result of new coastal zone developments and activities) as they will be adapted to the impacts of sea-level rise and flooding. It also seeks to ensure resources are used efficiently and sustainably, working in partnership with nature. The objective seeks to prioritise the use of natural assets, such as natural flood management processes. There may be indirect benefits to existing built material assets as the objective aims to implement adaptation and improve resilience to flooding, sea-level rise, etc., but it is unclear if there will be benefits as it may not be feasible to 'build in' adaptation in some cases. The ability to 'build in' adaptation will depend on the context and siting of any developments and activities.
Cultural heritage	0			There is no impact is identified on cultural heritage.
Landscape/seascape	?			The objective may have indirect positive effects on the landscape/seascape as any adaptation activity carried out by developments/activities may offer an associated level of protection to the landscape/seascape from climate change impacts. This is dependent on the location of any developments and the type of adaptation activity carried out.
SA topics				
Marine economy	+ ?	Mixed		The objective is positive for the development of a sustainable marine economy as it encourages the incorporation of consideration of broader environmental impacts into planning and decision-making. It promotes the sustainable use of the regional natural resources to support the long-term viability of marine and coastal developments and activities. It is unclear if the objective will remove or avoid barriers to new marine enterprise opportunities. There may be extra, initial costs involved; however, this could be offset by improving the overall longevity of the project by improving its resilience to climate change impacts. The impact is also unclear on safeguarding and/or creating jobs. There may also be costs around improving resilience to current coastal zone developments and activities; however these too could be outweighed by improving adaptation to climate change and long term resilience.

[54] Descriptor 6: The sea floor integrity ensures functioning of the ecosystem. Descriptor 7: Permanent alteration of hydrographical conditions does not adversely affect the ecosystem.

Objective CP 1: Development(s) and/or use in the Clyde Marine Region are resilient to the dynamic nature of the coast, including the impacts of climate change, using natural assets and soft engineering where possible.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Society	? 0 +	Mixed		It is unclear if the objective will have an impact on maintaining or improving accessibility and connectivity of coastal and island communities or if it will promote access to coastal and marine resource to tourism and recreation. This will depend on the type of development/activity being proposed or its siting and context, and any impact it may have on access. In addition, developments and activities need to take into account Policy Sec 1 which seeks to enhance access to the marine environment where possible and appropriate. It is not anticipated that this objective will have any impact on supporting a reduction on the magnitude of poverty and social exclusion and promoting equality for all communities. The objective is expected to have a positive effect on contributing to a community's sense of place and can maintain and improve the experiences of recreational users of the marine and coastal environment, particularly in areas vulnerable to flooding. It ensures developments and activities are 'future-proofed' (as far as possible) to any climate change impacts, so that the use/services these developments may provide to communities are protected into the future. Any positive effect is dependent on the type and context of the development or activity.

Policy CP 1: Proposals for development and/or use below the Mean High Water Springs should demonstrate that they have considered the following, proportionate to the scale of development:

- **a) the latest available UKCP sea-level rise and flood risk projections, and wave overtopping impacts where possible, relevant to the full lifespan of the proposal, including any decommissioning/remediation required,**
- **b) broader future climate projections and risks and opportunities identified within the UK national, regional and local climate change risk assessments,**
- **c) the Scottish Environment Protection Agency's Development Management Guidance, the relevant Local Flood Risk Management Plan and any relevant Coastal Change Adaptation Plan,**
- **d) sediment dynamics within the relevant coastal cell, including historical trends as indicated in outputs of the Dynamic Coast project and current or future anticipated dynamics,**
- **e) any potential exacerbation of flooding or coastal erosion in the wider area,**
- **f) protection and use of natural assets for coastal protection, including through options for managed realignment and beach nourishment, and allowing space for the natural assets themselves to adapt to climate change; and**
- **g) opportunities for Integrated Green Grey Infrastructure where natural assets cannot be used for flood alleviation.**

SEA topics	Impact	Nature of impact	Mitigation	Explanatory text
Biodiversity, flora and fauna	+ 0	Mixed	Mitigation: Existing consenting processes for coastal and marine developments are in place and these are	The impact of the policy is positive as it requires developments and activities to consider the broader environmental impacts of climate change, which developments or activities may exacerbate (depending on siting and context). This can prevent damage or loss to marine and coastal habitats and biodiversity, which could protect the benefits the marine and coastal environment provides to communities. There may be positive impacts on biodiversity where opportunities for Integrated Green Grey Infrastructure are incorporated and beach nourishment is considered.

Policy CP 1: Proposals for development and/or use below the Mean High Water Springs should demonstrate that they have considered the following, proportionate to the scale of development:

- **a) the latest available UKCP sea-level rise and flood risk projections, and wave overtopping impacts where possible, relevant to the full lifespan of the proposal, including any decommissioning/remediation required,**
- **b) broader future climate projections and risks and opportunities identified within the UK national, regional and local climate change risk assessments,**
- **c) the Scottish Environment Protection Agency's Development Management Guidance, the relevant Local Flood Risk Management Plan and any relevant Coastal Change Adaptation Plan,**
- **d) sediment dynamics within the relevant coastal cell, including historical trends as indicated in outputs of the Dynamic Coast project and current or future anticipated dynamics,**
- **e) any potential exacerbation of flooding or coastal erosion in the wider area,**
- **f) protection and use of natural assets for coastal protection, including through options for managed realignment and beach nourishment, and allowing space for the natural assets themselves to adapt to climate change; and**
- **g) opportunities for Integrated Green Grey Infrastructure where natural assets cannot be used for flood alleviation.**

SEA topics	Impact	Nature of impact	Mitigation	Explanatory text
			likely to be supported by underlying assessments (e.g. EIA, flood-risk). These are currently the primary mechanisms for the identification, assessment and, where necessary, avoidance and/or mitigation of any potential flooding of coastal erosion impacts associated with coastal or marine development(s). This policy is not expected to change these assessments but is instead aimed at providing guidance and support to developers and users by considering potential issues and adaptation. Where an impact is uncertain, it is expected	There may be indirect positive impacts when considering ecosystem processes, such as sediment dynamics, and the protection and use of natural assets may also conserve and enhance associated habitats and species. No impact is identified on the other objectives.
Population and human health	+	Dependant on the duration/longevity of the development or activity.		The impact of the policy is positive as it requires developments and activities to consider the broader environmental impacts of climate change, which developments or activities may exacerbate (depending on siting and context). This can prevent damage or loss to marine and coastal habitats and biodiversity, which could protect the benefits the marine and coastal environment provides to communities.
Sediments, marine geology and coastal processes	++	P/L		The policy has a positive impact as it requires developments and activities to consider the sustainable management of geodiversity and the ecosystems services it provides, such as seabed habitats and physical features and the natural processes supported by these features by considering the dynamic nature of marine and coastal sediments. It also highlights the need to consider future projections for sea-level rise, flooding, wave overtopping impacts, Flood Risk Management plans, shoreline management plans, any wider implications that the development/activity would have on flooding or coastal erosion and protection of natural features which hold capacity to cope with flooding. The policy promotes an approach which seeks to deliver multiple benefits working in partnership with nature and to continue to provide benefits, such as flood alleviation and flood management processes. Although some of these aspects are a consideration in existing processes/legislations/protections, bringing them together in this policy allows for a strategic consideration of all the potential impacts on sediments, geology and coastal processes and conversely how these processes can impact on a development/activity. This can aid better planning and decision-making. It is assumed that any protected geological features will be considered through existing processes/legislations/protections. Any impact will also depend on the siting of a development or activity.
Water	+ 0			This policy has a positive effect as it can contribute to improvements under descriptor 6&7 of the Marine Strategy Regulations (2010), resulting in a positive effect. It is not expected to contribute to meeting the requirements of the Water Environment and Water Services (Scotland) Act 2003.

Policy CP 1: Proposals for development and/or use below the Mean High Water Springs should demonstrate that they have considered the following, proportionate to the scale of development:

- **a) the latest available UKCP sea-level rise and flood risk projections, and wave overtopping impacts where possible, relevant to the full lifespan of the proposal, including any decommissioning/remediation required,**
- **b) broader future climate projections and risks and opportunities identified within the UK national, regional and local climate change risk assessments,**
- **c) the Scottish Environment Protection Agency's Development Management Guidance, the relevant Local Flood Risk Management Plan and any relevant Coastal Change Adaptation Plan,**
- **d) sediment dynamics within the relevant coastal cell, including historical trends as indicated in outputs of the Dynamic Coast project and current or future anticipated dynamics,**
- **e) any potential exacerbation of flooding or coastal erosion in the wider area,**
- **f) protection and use of natural assets for coastal protection, including through options for managed realignment and beach nourishment, and allowing space for the natural assets themselves to adapt to climate change; and**
- **g) opportunities for Integrated Green Grey Infrastructure where natural assets cannot be used for flood alleviation.**

SEA topics	Impact	Nature of impact	Mitigation	Explanatory text
Air	0		further determination of the impact could be made by considering the specific details of any proposals. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions. Users of the CRMP must also adhere to the policies of the NMP, as well as all the policies of Section one and Chapter 9: All Sectors of the CRMP.	No impact is identified.
Climatic factors	+	P/L		The policy has a positive effect as it promotes adaptation to climate change impacts, both with regard to the protection of natural processes (such as flood management processes) and that climate change impacts are considered in developments and activities. The policy has recognition of the natural environment's own capacity for resilience through the requirement for development to take into account allowing space for natural assets themselves to adapt to climate change. There may be indirect benefit as the considerations under this policy can lead to the protection of habitats which provide carbon sinks, thereby contributing to the Region's climate change mitigation activities.
Material assets	+	P/L		The policy will have a positive impact on new material assets or any material assets affected by infrastructure renewal as it promotes adaptation activity, ensuring that resources are used efficiently and sustainably, thereby, future-proofing against climate change impacts.
Cultural heritage	0 ?	Uncertain		There is no direct impact identified. There may be an indirect effect derived from protecting the use of natural assets for coastal protection, which may in turn protect some cultural or historical assets from climate change impacts. However, this depends on the siting and nature of development/activities, the nature of the developments and any assets in proximity to this.
Landscape/seascape	?	Uncertain		The policy may have indirect positive effects on the landscape/seascape as any adaptation activity carried out by developments/infrastructure renewal may offer an associated level of protection from climate change impacts, such as sea-level rise, to the landscape/seascape. This is dependent on the location of any developments and the type of adaptation activity carried out.
SA topics				
Marine economy	+ ?	P/L		The policy is expected to have a positive effect on the development of a sustainable marine economy as it encourages the consideration of broader environmental impacts, specifically around coastal processes and how the coastal zone is impacted by climate change, into planning and decision-making. It promotes the

Policy CP 1: Proposals for development and/or use below the Mean High Water Springs should demonstrate that they have considered the following, proportionate to the scale of development:

- **a) the latest available UKCP sea-level rise and flood risk projections, and wave overtopping impacts where possible, relevant to the full lifespan of the proposal, including any decommissioning/remediation required,**
- **b) broader future climate projections and risks and opportunities identified within the UK national, regional and local climate change risk assessments,**
- **c) the Scottish Environment Protection Agency's Development Management Guidance, the relevant Local Flood Risk Management Plan and any relevant Coastal Change Adaptation Plan,**
- **d) sediment dynamics within the relevant coastal cell, including historical trends as indicated in outputs of the Dynamic Coast project and current or future anticipated dynamics,**
- **e) any potential exacerbation of flooding or coastal erosion in the wider area,**
- **f) protection and use of natural assets for coastal protection, including through options for managed realignment and beach nourishment, and allowing space for the natural assets themselves to adapt to climate change; and**
- **g) opportunities for Integrated Green Grey Infrastructure where natural assets cannot be used for flood alleviation.**

SEA topics	Impact	Nature of impact	Mitigation	Explanatory text
				sustainable use of regional natural resources to support the long-term viability of marine and coastal developments and activities. It is unclear if the policy will remove or avoid barriers to new marine enterprise opportunities, or will safeguard and/or create jobs. There may be extra initial costs involved; however, this could be offset by improving the overall longevity of the project through improving resilience to climate change impacts.
Society	? 0 +			It is unclear if the policy will have an impact on maintaining or improving accessibility and connectivity of coastal and island communities. It is dependent on the siting and context of any developments and infrastructure renewal. It is unclear if the policy will promote access to coastal and marine resource to tourism and recreation – this would be dependent on the type of development/activity being proposed or the siting and context and any impact it may have on access. It is expected where development/infrastructure renewal would have an impact on the factors noted above, the application of this policy would lead to positive impacts for the reasons noted above under the SEA topics and the associated benefits this would provide to society. It is not anticipated that this policy would have any effect on supporting a reduction in the magnitude of poverty and social exclusion and promoting equality for all communities. The policy is expected to have a positive effect on contributing to a community's sense of place and can maintain and improve the experiences of recreational users of the marine and coastal environment, particularly in areas that are vulnerable to flooding. It ensures developments and activities are 'future-proofed' to any climate change impacts, ensuring that the use/services these may provide to communities are protected into the future. Any positive effect is dependent on the type and context of the development or activity.

Policy CP 2: Natural or artificial coastal zone and marine features which provide or could provide flood defence in the future should not be removed without due consideration of future flood risk. Removal of artificial coastal defence materials should only be supported when it can be demonstrated that there are no significant adverse impacts for the environment. Proposals for the removal of artificial coastal defence materials should demonstrate that they have considered positive impacts for the environment, for example where removal may offer a realignment option to allow accommodation space for natural coastal readjustment, habitat restoration and improved long-term resilience.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L Se	Existing consenting processes for coastal and marine developments are in place and these are likely to be supported by underlying assessments (e.g. EIA, flood-risk). These are currently the primary mechanisms for the identification, assessment and, where necessary, avoidance and/or mitigation of any potential flooding of coastal erosion impacts associated with coastal or marine development(s). This policy is not expected to change these assessments but is instead aimed at providing guidance and support to developers and users by considering potential issues and adaptation.	The impact is positive as it prevents removal of features which provide flood defence services without due consideration (and in the case that a decision is made to remove them this must be done in accordance with policy CP 1); this can provide secondary benefits by conserving the integrity of ecosystems, their interactions and the benefits they provide. It may also have a secondary benefit of preventing damage to important biological sites and protected species, including the benefits they provide and ensuring GEnvS and GEcS is achieved. The second part of the policy around removal of coastal defence prevents significant damage to the environment that may be caused by the removal of these materials. It is positive as it protects habitats and species against contaminants or materials that may leach into the marine and coastal environment. The policy has a positive effect as it has consideration of the broad environmental impacts of flooding. Removal of defences is only allowed in cases where positive action of the environment or landscape/seascape can be identified. The policy can also improve the awareness of flooding and coastal erosion issues, and the importance of features which provide flood defences, or could do so in the future.
Population and human health	+	P/L		The policy has a broad long term positive impact by protecting coastal habitats from flooding as a result of removal of features which provide flood defence. Where they are removed Policy CP 1 should be taken into consideration. Although the removal of defence materials could result in the alternative use/loss of some of the coastal environment as a result of some measures such as managed realignment, there would still be an overall benefit by accommodating changes which may alleviate flood risk in an area. This allows people to continue to use and derive benefits from these areas.
Sediments, marine geology and coastal processes	+	P/L		The policy has a positive effect on ensuring the inherent capacity of the natural environment to cope with flooding is not detrimentally affected as it protects natural coastal and marine features that could provide flood defence. Benefits are also provided to this topic from artificial features which provide the same service. If they are removed the considerations in policy CP 1 should be followed, ensuring that flooding and sea-level rise is taken into consideration. Risk of flooding is not increased by removal of coastal defence as this cannot take place unless options for delivering positive impacts have been identified and it is demonstrated that there are no significant adverse impacts for the environment or landscape/seascape. The policy is also positive as it aims to improve the awareness of flooding and coastal erosion issues. Any negative impact on sediments as a result of this may be outweighed by the long term natural benefits provided by accommodating space for natural coastal readjustment.
Water	?	T/L		The policy can contribute to meeting descriptors 8&9 of the Marine Strategy Regulations (2010) as it stipulates that coastal defence materials can only be removed where there are no significant impacts on the environment.
Air	0			There is no impact identified.

Policy CP 2: Natural or artificial coastal zone and marine features which provide or could provide flood defence in the future should not be removed without due consideration of future flood risk. Removal of artificial coastal defence materials should only be supported when it can be demonstrated that there are no significant adverse impacts for the environment. Proposals for the removal of artificial coastal defence materials should demonstrate that they have considered positive impacts for the environment, for example where removal may offer a realignment option to allow accommodation space for natural coastal readjustment, habitat restoration and improved long-term resilience.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Climatic factors	+ 0		Where an impact is uncertain, it is expected that further determination of the impact could be made by considering the specific details of any proposals. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions. Users of the CRMP must also adhere to the policies of the NMP, as well as all the policies of Section one and Chapter 9: All Sectors.	The ambitions of this policy are to prevent the deterioration of the natural environment to provide flood defence and not increase the risk of flood events; this will have a positive impact. The policy contributes to the increased resilience to flooding and raises awareness of the associated risks of this. This policy has no effect on climate change mitigation.
Material assets	0 ?			This policy allows for the removal of material assets which provide flood protection; however, the reasons for removal might outweigh the functions provided. In the case of artificial coastal defence, the policy specifies that removal can only take place where alternative positive impacts have been identified and delivered. There may be unintended impacts on other material assets in the area of any work undertaken. It is unclear what this would be as it would depend on the location and type of work carried out.
Cultural heritage	0			No impact identified.
Landscape/seascape	0			No impact identified.
SA topics				
Marine economy	+ ?			This policy provides additional detail to the policy provided by the NMP, policy GEN 8. The policy has a positive impact on ensuring the sustainable use of the Region's resources to support the long-term viability of marine sectors. It is not clear what impact this policy will have on supporting the development of a sustainable marine economy in the Region across a range of sectors and business sizes or on protecting marine assets in the CMR, maintaining the potential to use them in the future or on safeguarding and/or creating jobs that support the development of a sustainable marine economy across new or existing sectors and that support/provide benefits to coastal communities within the Clyde Marine Region. The policy may have a negative effect on entry to new marine enterprise opportunities.

Policy CP 2: Natural or artificial coastal zone and marine features which provide or could provide flood defence in the future should not be removed without due consideration of future flood risk. Removal of artificial coastal defence materials should only be supported when it can be demonstrated that there are no significant adverse impacts for the environment. Proposals for the removal of artificial coastal defence materials should demonstrate that they have considered positive impacts for the environment, for example where removal may offer a realignment option to allow accommodation space for natural coastal readjustment, habitat restoration and improved long-term resilience.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Society	+			The policy's intention to protect features which provide or could provide flood defence can have a positive impact on maintaining or improving accessibility and connectivity of coastal and island communities as it does not increase the vulnerability of these routes/mechanisms to the impacts of climate change. For similar reasons it can have a positive impact on access to coastal and marine resources for tourism and recreation and on contributing to a community's sense of place, including protection of and access to marine related heritage and maintaining or improving the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience. No impact is identified on supporting the reduction of the magnitude of poverty and social exclusion and promoting equality for all communities.

Policy CP 3: The installation of new or replacement flood defences, coastal erosion and flooding alleviation works will be encouraged if coastal erosion or flooding threatens existing public infrastructure, important built development, including historic environment features, and where relocation options are not feasible.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	?	P/L	Existing consenting processes for coastal and marine developments are in place and these are likely to be supported by underlying assessments (e.g. EIA, flood-risk). These are currently the primary mechanisms for the identification, assessment and, where necessary, avoidance and/or mitigation of any potential flooding of coastal erosion impacts associated with coastal or marine development(s). This policy is not expected to change these assessments but is instead aimed at providing guidance and support to developers and users by considering potential issues and adaptation. Where an impact is uncertain it is expected that further determination of	The impact of this is uncertain as works are only supported in cases where public infrastructure is threatened and so it seems likely that it will largely have a neutral impact. In addition the policies of the NMP and the Natural Heritage chapter of the CRMP must be taken into account and will mitigate any negative impact on biodiversity, flora and fauna. There may be some cases where installation of replacement flood defences are necessary, and their construction may have a negative impact on this SEA topic. It is assumed in these cases that the benefit of bolstering flood defences will outweigh the negative impacts on the natural heritage features which may be damaged/lost. This would be dependent on the locality, type and size of any proposed flood defence.
Population and human health	+	P/L		This will have a positive impact on human health as it can reduce the risks to human health arising from flooding and coastal erosion.
Sediments, marine geology and coastal processes	?			The effect is unclear. The policy may result in a change in sediments and coastal processes but it is not clear if this will be positive, neutral or negative as it is dependent on the nature or the flood defences being installed or replaced.
Water	?			The installation of new or replacement flood defences and coastal erosion and flooding alleviation works may have a detrimental impact on water quality and may cause hydrological alterations. This is dependent on the type and location of any flood defences or coastal erosion and flood alleviation works.
Air	0			No impact is identified.

Policy CP 3: The installation of new or replacement flood defences, coastal erosion and flooding alleviation works will be encouraged if coastal erosion or flooding threatens existing public infrastructure, important built development, including historic environment features, and where relocation options are not feasible.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Climatic factors	? 0		this could be made by considering the specific details of any proposals. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions. Users of the CRMP must also adhere to the policies of the NMP, as well as all the policies of Section one and Chapter 9: All Sectors of the CRMP.	Flooding and coastal erosion can be caused by climate change and so installation of new or replacement flood defences may contribute to the Region's adaptation efforts. The policy has no effect on climate change mitigation.
Material assets	+	P/L		The ambition of the policy is to reduce the risk to material assets from flooding. Any secondary effects on material assets are likely to be considered at the project-level and the impact of this will be considered within existing consenting processes (e.g. marine licensing/town and country planning determination).
Cultural heritage	+	P/L		The ambition of the policy is to reduce the risk to cultural heritage from flooding. Any secondary effects on cultural heritage are likely to be considered at the project-level and the impact of this will be considered within existing consenting processes (e.g. marine licensing/town and country planning determination).
Landscape/seascape	?	P/L		There may be some negative impact on landscape/seascape and it is expected more detail of what this could be will be evident at the project-level and the impact of this will be considered within existing consenting processes (e.g. marine licensing/town and country planning determination).
SA topics				
Marine economy	+ ? 0	Mixed		This policy will have a positive impact on coastal marine assets that are at risk from flooding, by maintaining the potential to utilise them in the future. It also ensures that Region's resources are used sustainably to support the long-term viability of marine sectors. It is unclear if this policy will remove or help avoid barriers to new marine enterprise opportunities. There is no effect on the development of a sustainable marine economy in the Region across a range of sectors and business sizes or on safeguarding and/or creating jobs
Society	+	P/L		The ambition of this policy is to protect and 'future-proof' public infrastructure, built development and significant natural and cultural heritage features, guaranteeing that the benefits and services they provide will continue into the future. This may include infrastructure related to transport and connectivity, thereby maintaining or improving accessibility and connectivity of coastal and island communities. It may also maintain tourism and recreation resources. It will have a positive impact on contributing to a community's sense of place by protecting and 'future-proofing' access to marine related heritage. It is not anticipated that the policy will support a reduction in the magnitude of poverty and social exclusion nor impact the improvement of equality for all communities.

Policy CP 4: For large marine and coastal infrastructure projects below the Mean High Water Springs that involve an element of lock-in or irreversibility , a climate change risk assessment (detailing flooding and coastal change risks to communities, businesses and infrastructure) should be undertaken and proportionate adaptation features should be included within the proposal in line with best practice guidelines.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0		No mitigation is required as impacts are identified as positive or neutral.	No impact is identified.
Population and human health				
Sediments, marine geology and coastal processes	+	P/L		The policy can facilitate the appropriate siting or other adaptation measures being applied to proposals, which can have a positive impact in preventing exacerbation of coastal erosion and maintaining the integrity of coastal processes and the benefits they provide. It can also be positive as it supports the inherent capacity of the natural environment to cope with flooding is not detrimentally affected. No impact on the other objectives for this topic is identified.
Water	0			No impact is identified.
Air				
Climatic factors	+ 0	P/L		The policy is positive as it support the SEA objective for this topic of ensuring that adaptation actions are taken into account to support the natural adaptive capacity of systems in order to sustain the benefits of natural processes and resources and that adaptation to climate change impacts are considered in developments and activities. No impact is identified on this policies contribution to climate change mitigation.
Material assets	+	P/L		This policy is positive for ensuring the long term lifespan of future material assets and supports working in partnership with nature.
Cultural heritage	0			No impact is identified.
Landscape/seascape				
SA topics				
Marine economy	- +	T/S P/L		This policy could result in short negative impacts for a proposal if the results of a climate change risk assessment suggested that significant changes were required to improve resilience towards climate change impacts. However, this would likely be outweighed by the long term benefits of increasing resilience and protecting any proposals from damage as a result of climate change impacts.
Society	+	P/L		Where proposals are more secure and resilient to the impacts of climate change, this is beneficial to the SA objectives for this topic.

Recommendation CP 1: Communication and connectivity between marine users and land users is encouraged to ensure that the coastal zone is managed and protected appropriately.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0		No mitigation is required as impacts are identified as positive or neutral.	No impact is identified.
Population and human health				
Sediments, marine geology and coastal processes	+	P/L		The recommendation can facilitate the appropriate siting or other adaptation measures being applied to proposals, which can have a positive impact in preventing exacerbation of coastal erosion and maintaining the integrity of coastal processes and the benefits they provide. It can also be positive as it supports the inherent capacity of the natural environment to cope with flooding is not detrimentally affected. No impact on the other objectives for this topic is identified.
Water	0			No impact is identified.
Air				
Climatic factors	+ 0	P/L		The recommendation is positive as it supports the SEA objective for this topic of ensuring that adaptation actions are taken into account to support the natural adaptive capacity of systems in order to sustain the benefits of natural processes and resources and that adaptation to climate change impacts are considered in developments and activities. No impact is identified on this recommendation's contribution to climate change mitigation.
Material assets	+	P/L		This recommendation is positive for ensuring the long term lifespan of future material assets and supports working in partnership with nature.
Cultural heritage	0			No impact is identified.
Landscape/seascape				
SA topics				
Marine economy	- +	T/S P/L		No impact is identified.
Society	+	P/L		Where proposals are more secure and resilient to the impacts of climate change, this is beneficial to the SA objectives for this topic.

Natural Heritage

Objective NH 1: The overall health of marine and coastal ecosystems of the Clyde Marine Region and the ecosystem services they provide are protected and enhanced, particularly with regard to achieving the conservation and/or management objectives for the relevant Marine Protected Area network sites, other coastal designated sites, Priority Marine Features (irrespective of location), and other protected habitats and species.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	++	P/L	Existing consenting processes for coastal and marine	This objective seeks to protect and enhance marine and coastal natural heritage. This would have a major positive impact on biodiversity, flora and fauna. There would also likely be positive impacts on sediments,

Objective NH 1: The overall health of marine and coastal ecosystems of the Clyde Marine Region and the ecosystem services they provide are protected and enhanced, particularly with regard to achieving the conservation and/or management objectives for the relevant Marine Protected Area network sites, other coastal designated sites, Priority Marine Features (irrespective of location), and other protected habitats and species.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Population and human health	+		developments are in place and these are likely to be supported by underlying assessments (e.g. EIA, HRA). Where an impact is uncertain, it is expected further determination of this could be made by considering the specific details of any proposals. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decision. Users of the CRMP must also adhere to the policies of the NMP, as well as all the policies of Section one and Chapter 9: All Sectors of the CRMP.	marine geology and coastal processes (particularly in terms of ensuring the natural capacity of the environment to cope with flooding in not detrimentally affected and in avoiding exacerbating coastal erosion and to maintain the integrity of coastal processes and the benefits they provide) depending on the type of protection and enhancement activity carried out and what species and habitats these are directed at. The objectives supports existing conservation objectives, by achieving the conservation and/or management objectives for designated sites and protected species. These combined positive impacts would ensure positive outcomes for population and human health as people would be able to enjoy ongoing benefits from these natural assets as they are protected. Increased benefits could be experienced where these natural assets are enhanced. Therefore, continued use and enjoyment of the marine and coastal environment, particularly for recreational activities, would be enabled and people would continue to derive therapeutic and recreational benefits from the environment. Protection and enhancement of natural heritage also ensures the natural environment's capacity to provide ecosystems services is safeguarded. This includes provisioning services (such as the provision of diverse and healthy fish stocks) and regulating (such as the ability of natural coastlines to protect coastal areas from storm damage and to adapt to sea-level rise).
Sediments, marine geology and coastal processes	+			
Water	+	Se		There may be an indirect positive impact from protection and enhancement of natural heritage to water quality. Marine animals such as mussels and other bivalves are filter feeders and can have a role in improving water quality. In addition, the ecosystem ability to provide waste breakdown and detoxification services can be supported through this objective. Ensuring that these species and habitats are protected, and where appropriate enhanced, ensures they can continue to contribute to improved water quality.
Air	0			No impact is identified
Climatic factors	+	P/L		This objective encompasses protection of habitats and Priority Marine Features which act as carbon sinks (e.g. seagrasses, kelp and some seabed sediments). This will have a positive contribution to climate change mitigation. Ensuring the protection and enhancement of natural heritage in the marine environment can also improve its resilience and capacity to adapt in the face of climate change impacts.
Material assets	+			There may be indirect positive impacts on material assets, as a result to benefits achieved through this objective to services such as natural flood protection, as the natural heritage features which support this service are protected/ enhanced which in turn can offer improved protection to some material assets located at the coast.
Cultural heritage	?			There may be indirect benefits for cultural heritage, dependent on siting and context. Protection or enhancement works undertaken through adaptation activities may result in enhanced protection of coastal and marine cultural and historic assets from storm surges, flooding and coastal erosion.
Landscape/seascape	0			No impact is identified.
SA topics				

Objective NH 1: The overall health of marine and coastal ecosystems of the Clyde Marine Region and the ecosystem services they provide are protected and enhanced, particularly with regard to achieving the conservation and/or management objectives for the relevant Marine Protected Area network sites, other coastal designated sites, Priority Marine Features (irrespective of location), and other protected habitats and species.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Marine economy	- +	S/T P/L		The objective ensures the sustainable use of the Region's resources to support the long-term viability of marine sectors. It protects marine assets in the Region and maintains the potential to utilise them in the future. The objective may have a negative effect by limiting where some businesses may operate, creating barriers to new marine enterprises. For example, since the introduction of Marine Protected Areas in the CMR, the local fishing industry have reported that a number of boats and jobs have been lost as a result of these protections, with a loss of income to the Clyde marine economy. It is not clear what effect this objective will have on safeguarding and/or creating jobs. This is dependent on the location and extent of any protection or enhancement activities.
Society	+ 0	P/L		There is no impact identified on accessibility and connectivity of island and coastal communities or promoting access to coastal and marine resources for tourism and recreation. This objective is not expected to have any effects on altering the magnitude of poverty and coastal exclusion and equality for all communities. This objective can have a positive effect on a community's sense of place, including protection of and access to marine-related heritage. It can also have a positive benefit in terms of improving or maintaining the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience.

Objective NH 2: Development and use of the marine and coastal environment, in combination with measures to protect habitats and species, have an overall positive impact on biodiversity and the health of the Clyde ecosystem.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	Existing consenting processes for coastal and marine developments are in place and these are likely to be supported by underlying assessments (e.g. EIA, HRA). Where an impact is uncertain it is expected further determination of	This objective seeks to ensure there is an overall positive impact on biodiversity and the health of the ecosystem through the combined measures of well-considered development which may in some cases contribute to enhancement of habitats and species and use of the region and protection measures, therefore the objective is positive for biodiversity, flora and fauna. There would also be positive impacts on sediments, marine geology and coastal processes, depending on the measures carried out and what species and habitats these are directed at. These combined benefits would ensure positive outcomes for population and human health as people would be able to enjoy ongoing benefits from these natural assets as they are protected. Increased benefits could be experienced where these natural assets are maintained and/ or enhanced. Therefore, the continued use and enjoyment of the marine and coastal environment, particularly for recreational activities, would be enabled and people would continue to derive therapeutic and recreational benefits from the environment.
Population and human health	+			
Sediments, marine geology and coastal processes	+			

Objective NH 2: Development and use of the marine and coastal environment, in combination with measures to protect habitats and species, have an overall positive impact on biodiversity and the health of the Clyde ecosystem.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Water	+	Se	this could be made by considering the specific details of any proposals. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions. Users of the CRMP must also adhere to the policies of the NMP, as well as all the policies of Section one and Chapter 9: All Sectors of the CRMP.	This objective could have secondary positive impacts on the water environment. Protection of habitats and species ensures that where their functions contribute to improved water quality, they can continue to do so. Where enhancement actions are undertaken this will increase the positive impact.
Air	0			No impact is identified.
Climatic factors	+	P/L		Similarly to water quality, this objective could have secondary positive impacts on climatic factors. The objective has a positive impact as it seeks to minimise the negative impact on habitats and species, including those which have a role in climate change mitigation (carbon sinks such as seagrasses, kelp and some seabed sediments). This will have a positive contribution to climate change mitigation, and the positive impact will be greater where enhancement activities are carried out. Ensuring the protection and in certain cases enhancement of natural heritage in the marine environment can also improve its resilience and capacity to adapt in the face of climate change impacts.
Material assets	+	P/T		There may be indirect positive impacts on material assets, as a result to benefits achieved through this objective to services such as natural flood protection, as the natural heritage features which support this service are protected/enhanced which in turn can offer improved protection to some material assets located at the coast.
Cultural heritage	?			There may be indirect benefits for cultural heritage, dependent on siting and context. Protection or enhancement works undertaken through climate change adaptation activities may result in enhanced protection of coastal and marine cultural and historic assets from storm surges, flooding and coastal erosion.
Landscape/seascape	0			No impact is identified.
SA topics				
Marine economy	+ -	P/L		The objective ensures the sustainable use of the Region's resources to support the long-term viability of marine sectors. The objective protects marine assets in the Region and maintains the potential to utilise them in the future. The objective may have a negative effect by limiting where some businesses may operate, creating barriers to new marine enterprises. It is not clear what effect this objective will have on safeguarding and/or creating jobs. This is dependent on the location and extent of any protection or enhancement activities.
Society	+ 0	P/L		There is no impact identified on the accessibility and connectivity of island and coastal communities nor on promoting access to coastal and marine resource for tourism and recreation. This objective is not expected to have any effect on supporting a reduction of the magnitude of poverty and coastal exclusion and equality for all communities. This objective can have a positive effect on a community's sense of place, including protection of and access to marine-related heritage. It can also have a positive benefit in terms of maintaining the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience.

Objective NH 3: Knowledge and data on marine and coastal species, habitats and ecosystems within the Clyde Marine Region are improved to identify opportunities for their protection and enhancement and to inform sustainable development.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	++	P/L	No mitigation is required as impacts are identified as positive or neutral.	This objective will have a positive impact; increased knowledge and data on marine and coastal features will contribute to conserving and enhancing the integrity of ecosystems, their interactions and the benefits they provide. It will also contribute to the prevention of damage to important biological sites and protected species, including the benefits they provide. It can also contribute to the achievement of GEnvS and GEcS, meeting the requirements of the Marine Strategy Regulations (2010) and the Water Environment and Water Services (Scotland) Act 2003and sustaining the benefits of natural processes and resources. Similarly, the objective can ensure the ecosystems and their associated benefits are maintained and enhanced through sustainable management of geodiversity and their natural processes. Improved data and knowledge can prevent damage to important geological sites, including the benefits they provide. Improved knowledge and data can contribute to avoid exacerbating coastal erosion and maintain the integrity of coastal processes and the benefits they provide. These impacts contribute to healthy ecosystems, both biodiversity and geodiversity and this in turn has a positive impact on population and human health, ensuring that humans can continue to derive benefits from enhancements to the marine and coastal environment. It also reduces the risk to human health that may arise from a degraded environment, water pollution, flood risk, coastal erosion, etc.
Population and human health	+			
Sediments, marine geology and coastal processes	++			
Water	+			Improved knowledge and data on the water environment will have a positive impact on water, and can contribute to achieving and maintaining GEnvS and GEcS, meeting the requirements of the Marine Strategy Regulations (2010) and Water Environment and Water Services (Scotland) Act 2003.
Air	0			No effect is identified.
Climatic factors	+			This objective encompasses improved knowledge and data on marine and coastal features which act as carbon sinks (e.g. seagrasses, kelp and some seabed sediments). This will have a positive contribution to climate change mitigation and the Region's contribution to climate change mitigation in a timely and commensurate way. Ensuring the protection and enhancement of natural heritage in the marine environment can also improve its resilience and capacity to adapt in the face of climate change impacts. The objective also specifies the identification of adaptation options, further contributing to adaptation measures.
Material assets	+			This objective seeks to improve knowledge and data of marine and coastal natural features to inform sustainable development. This can inform best suited and appropriate placement of material assets such as flood defences and energy and telecommunications infrastructure.
Cultural heritage	+ 0	Se		Improved knowledge and data of marine and coastal natural features could provide indirect benefits to the protection and enhancement of the historic marine environment by contributing data and knowledge on cultural heritage. In particular, it may enhance our knowledge of unknown coastal and marine archaeology. It will have no effect on avoiding adverse impacts on the character and setting of historic sites and the benefits they provide.
Landscape/seascape	0			No impact is identified.
SA topics				

Objective NH 3: Knowledge and data on marine and coastal species, habitats and ecosystems within the Clyde Marine Region are improved to identify opportunities for their protection and enhancement and to inform sustainable development.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Marine economy	+ 0	P/L		This objective can support the development of a sustainable marine economy by contributing to the knowledge base of natural heritage features to help guide appropriate placements of marine and coastal developments and activities, ensuring they take place in the most appropriate locations. This supports such operations in the long term and ensures that growth of the marine economy is undertaken in a sustainable way. The objective does not affect barriers to new marine enterprises and no effect is identified on safeguarding and/or creating jobs, except within the environmental sector depending on funding.
Society	+ 0	P/L		The objective has a positive effect on society as it can contribute to a community's sense of place through better knowledge of the Region and it can maintain or improve the experiences of recreational users. No impact is identified on supporting a reduction of the magnitude of poverty and social exclusion and promoting equality for all communities.

Policy NH 1: Proposals for development and/or use should a) consider, where appropriate the potential for cumulative impacts affecting the marine and coastal environment; and b) not result in significant adverse impacts on the national status of Priority Marine Features.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	++		No mitigation is required as impacts are identified as positive or neutral.	This policy restates existing legislative requirements in place both within the NMP and in other legislation/policy and synthesises key environmental protection measures. The inclusion within the CRMP reiterates the duty to protect and where appropriate enhance marine and coastal natural heritage, supporting delivery of these policies in the Region. This policy will have a positive effect on biodiversity, flora and fauna; population and human health; and sediments, marine geology, coastal processes and water quality. The policy also promotes the achievement of GEnvS and GEcS under the Marine Strategy Regulations (2010) and Water Environment and Water Services (Scotland) Act 2003.
Population and human health	++			
Sediments, marine geology and coastal processes	++			
Water	+			
Air	0			No impact is identified.
Climatic factors	+	Se		This policy encompasses protection of habitats and Priority Marine Features which act as carbon sinks (e.g. seagrasses, kelp and some seabed sediments). This will have a positive contribution to climate change mitigation. Ensuring the protection and enhancement of natural heritage in the marine environment can also improve its resilience and capacity to adapt in the face of climate change impacts.
Material assets	+	Se		There may be indirect positive impacts on material assets, as a result to the benefits achieved through this objective to services such as natural flood protection, as the natural heritage features which support this service are protected/ enhanced which in turn can offer improved protection to some material assets located at the coast.
Cultural heritage	+	Se		There may be an indirect positive impact on cultural heritage assets, whereby protection and enhancement measures can support species and habitats which can offer secondary protection to assets, for example by reducing the likelihood of coastal erosion or flooding.

Policy NH 1: Proposals for development and/or use should **a) consider, where appropriate the potential for cumulative impacts affecting the marine and coastal environment; and** **b) not result in significant adverse impacts on the national status of Priority Marine Features.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Landscape/ seascape	0			No impact is identified.
SA topics				
Marine economy	+ -			This policy supports existing policy and legislation, supporting its implementation at a regional level and therefore will have a limited negative impact on the marine economy as does not introduce additional constraints and/or considerations for marine enterprises operating within the Region, except for the requirement to consider birds that have been identified as declining. Depending on circumstances, this consideration may also already be covered by existing legislation. It is not clear how this policy will safeguard and/or create jobs that support the development of a sustainable marine economy across new or existing sectors, except within the environmental sector depending on funding. For example, since the introduction of Marine Protected Areas in the CMR, the local fishing industry have reported that a number of boats and jobs have been lost as a result of these protections, with a loss of income to the Clyde marine economy. More analysis of this is expected through a Marine Directorate Report. The policy does not introduce additional requirements which are not already in place, apart from the use of appropriate tools and this is not anticipated as being significantly onerous and as having a significant negative effect. The SA for the NMP states that the related policy within the NMP will have a positive effect on supporting the development of a sustainable marine economy, as it encourages the incorporation of broader environmental impacts into planning and decision-making. The impact of the policy will also be positive as it seeks to ensure the long-term sustainability of the Region's resources and assets, and this in turn promotes the longevity of marine enterprises that rely on the Region's resources for continued productivity.
Society	+ 0			There is no impact identified on the accessibility and connectivity of island and coastal communities or promoting access to coastal and marine resource for tourism and recreation. This policy is not expected to have any effect on supporting the reduction of the magnitude of poverty and coastal exclusion and equality for all communities. This policy can have a positive effect on a community's sense of place, including protection of and access to marine-related heritage. It can also have a positive benefit in terms of improving or maintaining the experiences of recreational users of the marine and coastal environment.

Policy NH 2: Proposals for development and/or use should demonstrate, where appropriate, that they have considered: **a) relevant conservation objectives[55] and status of relevant Marine Protected Area network sites (Map NH 1 and Table 1), and other coastal designated sites (Map NH 2 and Table 1) and European sites;** **b) the actions identified in the Scottish Biodiversity Strategy[56].**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L		The policy supports enhancement and/or restoration of various aspects of the marine and coastal environment where possible, and it requires development(s) and/or activities to consider what measures they can contribute to, so therefore is considered to be positive, where enhancement measures can be carried out. The policy asks proposals to consider how they can actively contribute to the conservation objectives of designated sites, which goes further than other policies and existing legislation which requires the protection measures to be adhered to. Consideration of supporting delivery of actions identified in the Scottish biodiversity strategy contributes to and aligns with existing legislation. It also asks where possible for data to be shared which can contribute to better knowledge of the marine environment and inform on the best locations for particular proposals. Measures e-g brings in wider consideration of potential impact of proposals to non-designated areas that can support PMFs and protected species and sharing data to central data bases can contribute to our overall knowledge of the environment and support protection and enhancement work in the future. Overall the policy supports wider consideration of habitats and the environment as a whole and contribute to the SEA objectives for biodiversity, flora and fauna.
Population and human health				The policy is positive, as where it is possible for proposals to support the measures set out within the policy, this will deliver positive outcomes for biodiversity, flora and fauna, ensuring healthy ecosystems, which is ultimately a positive outcome for human health and wellbeing.
Sediments, marine geology and coastal processes				The policy is positive for this SEA topic as it can contribute to ensuring ecosystems and their associated benefits are maintained and enhanced through sustainable geodiversity and associated sediments, seabed and the natural processes supported by these features. The policy can also contribute to avoiding exacerbating coastal erosion and to maintain the integrity of coastal processes and the benefits they provide and ensure that the inherent capacity of the natural environment to cope with flooding is not detrimentally affected (e.g. through measures d) and f).
Water	+			Enhancement of certain species and habitats can contribute to improved water quality and in maintaining clean and safe waters for swimming and other recreational activities and economic activities, such as aquaculture, therefore the policy is positive for this SEA topic.
Air	0			No impact is identified.

[55] This information for each of the designated sites is available on SiteLink (https://bit.ly/37v12eZ). Note there is no specific management advice/guidance for the Inner Clyde RAMSAR site, however the boundaries of the Inner Clyde SPA and SSSI are coincident and the SPA Conservation Objectives and SSSI Citation and Operations Requiring Consent should be used.

[56] Scottish Biodiversity Strategy (https://bit.ly/38KmkWc).

Policy NH 2: Proposals for development and/or use should demonstrate, where appropriate, that they have considered: **a) relevant conservation objectives[55] and status of relevant Marine Protected Area network sites (Map NH 1 and Table 1), and other coastal designated sites (Map NH 2 and Table 1) and European sites;** **b) the actions identified in the Scottish Biodiversity Strategy[56].**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Climatic factors	+			The policy can have a positive impact if it leads to the enhancement of species which act as carbon stores (e.g. seagrass habitats) and can provide mitigation for climate change and it contributes to the enhancement of habitats and species which contribute to adaptation (e.g. kelp forests which can buffer coastal areas for storminess and act as a buffer against wave action).
Material assets	+			There may be indirect benefits if the enhancements noted above in climatic factors are realised, as these can contribute to protection of material assets.
Cultural heritage	+	Se		There may be indirect benefits to cultural heritage assets, afforded by protection arising as a result of enhancement to habitats which can protect cultural and historic assets from adverse environmental conditions, for example those set out in climactic factors.
Landscape/seascape	0			No impact is identified.
SA topics				
Marine economy	- + ?	S/T P/L		The policy may have a negative impact in terms of the additional constraints and/or considerations that need to be taken into account when developing proposals. Consideration of these additional factors may result in additional operational costs, depending on the type and location of the development and/or activity and which enhancement activity it is able to contribute to. This policy may limit where certain activities can take place, for example if they are detrimental to any identified buffer zones. This policy could prevent barriers to new marine enterprise opportunities, though this is not clear and would dependant on the type and location of activity and enhancement measures the proposal would demonstrate. In the long term this policy supports the development of a sustainable marine economy in the Region across a range of sectors, and ensures the sustainable use of the Region's resources. It is not clear what impact this policy has on protection of marine assets or on safeguarding and/or creating jobs that support the development of a sustainable marine economy.
Society	+ 0	P/L		This policy can contribute to a communities' sense of place, including protection of and access to marine related heritage which may be a consequence of enhancement of the natural environment. No impact is identified on maintaining or improving accessibility and connectivity of coastal and island communities or in supporting a reduction in the magnitude of poverty and social exclusion and promote equality for all communities.

Policy NH 3: Proposals for biodiversity and/or ecosystem enhancement will be encouraged where they align with the other policies within this Plan, demonstrate consideration of the effects of the proposal on the wider ecosystem and take potential climate change impacts on the proposal into account.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L		As for NH 2 as both policies deal with enhancement measures being delivered, however this policy is broader and applies to all/any enhancement measures that could be carried out by proposals.
Population and human health				
Sediments, marine geology and coastal processes				
Water	+			
Air	0			
Climatic factors	+			
Material assets				
Cultural heritage	+	Se		
Landscape/seascape	0			
SA topics				
Marine economy	+ ?	P/L		The impacts on the marine economy from this policy are similar to that explained for policy NH 2, except this policy is voluntary and only encourages ecosystem enhancement, therefore it is anticipated that the negative impact will be negated, as businesses and proposals will be allowed to carry out enhancement at their own discretion, having judged the potential negative impact.
Society	+ 0	P/L		As for policy NH 2

Policy NH 4: Proposals for development and/or use that may limit the ability of diadromous fish species and other mobile species to migrate safely through the Clyde Marine Region should demonstrate that they have considered if suitable mitigation measures are in place.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	Mitigation: No mitigation is required as impacts are identified as positive or neutral.	The policy is positive as it ensures that where developments/activities may impact wild salmon and diadromous fish, they are taken into account and mitigation measures are put in place to ensure there are minimal negative impacts on these species' ability to migrate.
Population and human health	+			The policy is positive for population and human health as it generally prevents the migration of wild salmon and diadromous fish from being impeded, supporting the delivery of healthy ecosystems and ensuring benefits can continue to be delivered to support human health and wellbeing.
Sediments, marine geology and coastal processes	0			No impact is identified.

Policy NH 4: Proposals for development and/or use that may limit the ability of diadromous fish species and other mobile species to migrate safely through the Clyde Marine Region should demonstrate that they have considered if suitable mitigation measures are in place.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Water Air Climatic factors Material assets Cultural heritage Landscape/seascape				
SA topics				
Marine economy	+ 0	P/L		This policy supports and aligns with existing legislation and therefore is not introducing additional measures. The policy is positive as it supports the development of a sustainable marine economy, it also ensures sustainable use of the Region's resources to support the long-term viability of marine sectors. It is not anticipated that the policy will have any impact on safeguarding and/or creating jobs that support the development of a sustainable marine economy across new or existing sectors, although there may be a marginal increase in economic activity relating to angling.
Society	+ 0	P/L		This policy can have a positive effect on a community's sense of place, including protection of and access to marine-related heritage. It can also have a positive benefit in terms of improving or maintaining the experiences of recreational users (i.e. anglers) of the marine and coastal environment. There is no effect identified on the accessibility and connectivity of island and coastal communities or promoting access to coastal and marine resource for tourism and recreation. This policy is not expected to support a reduction in the magnitude of poverty and coastal exclusion and equality for all communities.

Recommendation rNH 1: Where a licence is not required, users carrying out small-scale hand cutting and/or gathering of seaweed are encouraged to consider the potential ecological cumulative impacts of multiple harvesting activities within proximity to each other. Communication between users carrying out seaweed harvesting operations within proximity to each other is encouraged.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive or neutral.	The extent of small-scale hand cutting and/or gathering of seaweed in the Region is limited, however this recommendation is positive as, although voluntary it encourages those carrying out these activities to consider the wider impact of their activities, where it may be happening in close proximity to other small-scale hand harvesting activities. Multiple small-scale activities taking place in close proximity can have a negative impact and reduce the integrity of the ecosystems which the

Recommendation rNH 1: Where a licence is not required, users carrying out small-scale hand cutting and/or gathering of seaweed are encouraged to consider the potential ecological cumulative impacts of multiple harvesting activities within proximity to each other. Communication between users carrying out seaweed harvesting operations within proximity to each other is encouraged.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				harvested seaweeds are part of. This recommendation encourages the wider consideration of the impact of these activities on the marine and coastal environment. Seaweed forms an important part of ecosystem functioning and can provide a range of services, such as acting as a climate sink, nursery habitat or buffer against severe wave action during storm events. Ensuring it is harvested in a sustainable and responsible manner will protect associated biodiversity, flora and fauna which rely on this component of the ecosystem.
Population and human health	+	P/L		The recommendation is positive for population and human health as ensuring the sustainable gathering of wild seaweed protects the wider habitats and species that rely on seaweed. It supports the delivery of healthy ecosystems and biodiversity, ensuring benefits can continue to be delivered to support human health and wellbeing.
Sediments, marine geology and coastal processes	+	P/L		This recommendation can have a minor positive impact as, depending on the potential cumulative impact of multiple seaweed gathering operations and the location, it can act as a buffer against severe wave action during storm events, reducing the risk of coastal erosion. Ensuring wild seaweed is gathering sustainably can also reduce the risk of increasing sedimentation which affects turbidity in the water column and can have secondary/indirect negative impacts on other biodiversity.
Water	+	Se		The recommendation will have a minor indirect positive impact on water. Ensuring wild seaweed is gathered sustainably can also reduce the risk of increasing sedimentation which affects turbidity in the water column and can have secondary/indirect negative impacts on other biodiversity.
Air	0			No impact is identified.
Climatic factors	+	Se		The recommendation may have indirect benefits for climate change mitigation as it may result in the protection and enhancement of species and habitats which act as carbon sinks.
Material assets	+ 0	Se		There may be positive impacts on material assets, as a result to benefits achieved through this objective to services such as natural flood protection, as the natural heritage features which support this service are protected/enhanced which in turn can offer improved protection to some material assets located at the coast.
Cultural heritage	0			No impact is identified.
Landscape/seascape				
SA topics				
Marine economy	+	P/L		This recommendation is positive as it promotes development of a sustainable marine economy in the Region, it also ensures sustainable use of the Region's wild seaweed resources to support the long-term viability of marine sectors. This policy supports the development of businesses related to seaweed gathering that are also in line with appropriate guidance, and where this is the case this can also safeguard and/or create jobs that support the development of a sustainable marine

Recommendation rNH 1: Where a licence is not required, users carrying out small-scale hand cutting and/or gathering of seaweed are encouraged to consider the potential ecological cumulative impacts of multiple harvesting activities within proximity to each other. Communication between users carrying out seaweed harvesting operations within proximity to each other is encouraged.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				economy across new or existing sectors and that support/provide benefits to coastal communities within the CMR.
Society	+ 0	P/L		There is no effect identified on the accessibility and connectivity of island and coastal communities or promoting access to coastal and marine resource for tourism and recreation. This recommendation is not expected to have any impact on supporting a reduction in the magnitude of poverty and coastal exclusion and equality for all communities. This recommendation can have indirect positive effect on a community's sense of place, including protection of and access to marine-related heritage. It can also have a positive benefit in terms of improving or maintaining the experiences of recreational users of the marine and coastal environment, especially in areas where seaweed has a role in mitigating the impacts of climate change.

Non-Native Species

Objective NNS 1: The risk of introduction and spread of non-native species is reduced in the Clyde Marine Region through improved management of the known pathways. The impacts of non-native species on both the ecosystem and the economy are minimised.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive or neutral.	The objective is positive and provides benefits to species and habitats that are vulnerable or sensitive to non-native species. More broadly, this objective can contribute to the conservation and enhancement of the integrity of the ecosystem (if there is less risk of non-native species being present in the environment then this presents less risk to the integrity of ecosystems) and their interactions. Preventing the spread of non-native species can also prevent damage occurring to important biological sites and protected species, and the benefits they provide. This objective can also contribute to meeting the requirements of the Water Environment and Water Services (Scotland) Act 2003 and the Marine Strategy Regulations (2010) (particularly descriptor 1&2[57]). Non-native species can impact on the integrity of the water environment and on sediments, marine geology and coastal processes; this objective is positive as it reduces the risk of non-native species entering the Region. The benefits derived to biodiversity, flora and fauna will ensure that people can continue to enjoy biodiversity into the future and it can continue to support human health and wellbeing.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			No impact is identified.
Climatic factors				
Material assets	+	P/L		Non-native species have the potential to become invasive and can be very destructive to both the natural and man-made environment. This objective is positive for material assets as it can prevent potential damage to material assets (e.g. waste water infrastructure, aquaculture assets, flood protection, machinery and recreational infrastructure).

[57] Descriptor 1: Biodiversity is maintained. Descriptor 2: Non-indigenous species do not adversely alter the ecosystem.

Objective NNS 1: The risk of introduction and spread of non-native species is reduced in the Clyde Marine Region through improved management of the known pathways. The impacts of non-native species on both the ecosystem and the economy are minimised.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Cultural heritage	+			Non-native species could present a threat to cultural heritage if they become established on cultural heritage features. There is potential for this objective to be positive for cultural heritage as it can prevent this from happening and thus prevents damage or adverse impacts from occurring to the character and setting of historic sites, archaeology, other features and the benefits they provide.
Landscape/seascape	0			No impact is identified.
SA topics				
Marine economy	+ -	P/L S/T		The impacts are mixed for the marine economy. Implementing improved management of known pathways to reduce the risk of non-native species being introduced and spreading throughout the Region may present additional operating costs to some businesses (and therefore could increase barriers to new marine enterprises). However, the potential benefits in reducing the spread of non-native species into the Region prevent adverse impacts on important and sensitive habitats and species, which some businesses may be reliant on. In addition, invasive non-native species can present significant cost to some businesses through the damage they can generate (clogging, smothering and disabling machinery, water intakes and other structures such as lock gates, pontoons, boat hulls and other underwater structures). These impacts would have implications on the safeguarding and/or creation of jobs that support the development of a sustainable marine economy. This objective can overall support the development of a sustainable marine economy in the CMR.
Society	+ 0			Reducing the risk of introduction and spread of non-native species can contribute to improving access to coastal and marine resources for tourism and recreation, contributing to communities' sense of place, including protection of and access to marine-related heritage, and can maintain or improve the experiences of recreational users of the marine and coastal environment, both in terms of access (e.g. non-native species can negatively impact the functionality of infrastructure if it becomes covered or damaged by non-native species) and quality of experience as it reduces the risk of non-native species from having a detrimental impact on the coastal and marine environment. No impact is identified on maintaining or improving the accessibility and connectivity of coastal and island communities, on promoting access to coastal and marine resource for tourism and recreation, on supporting the reduction of the magnitude of poverty and social exclusion or on promoting equality for all communities.

Policy NNS 1: Proposals for development and/or use should demonstrate that they have considered that they have minimised the risk of introducing or spreading non-native species affecting seabirds and/or the ecological or recreational value of coastal habitats. Proposals should refer to the Scottish Government's Non-Native Species: Code of Practice. Where relevant, a site- or operation-based biosecurity plan should be developed in line with best practice Marine Biosecurity Planning guidance.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna Population and human health	+	P/L	No mitigation is required as impacts are identified as	The measures within this policy support policy GEN 10 of the NMP and support its implementation at a Regional level, particularly as this policy makes references to specific regional guidance and provides additional detail on measures to consider to reduce the introduction and spread of non-native species. The policy is positive and provides benefits to species and habitats that are vulnerable or sensitive to non-native species. More broadly, this policy can contribute to the

Policy NNS 1: Proposals for development and/or use should demonstrate that they have considered that they have minimised the risk of introducing or spreading non-native species affecting seabirds and/or the ecological or recreational value of coastal habitats. Proposals should refer to the Scottish Government's Non-Native Species: Code of Practice. Where relevant, a site- or operation-based biosecurity plan should be developed in line with best practice Marine Biosecurity Planning guidance.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Sediments, marine geology and coastal processes Water			positive or neutral.	conservation and enhancement of the integrity of the ecosystem (if there is less risk of non-native species being present in the environment then this reduces the threat to the integrity of ecosystems caused by non-native species) and their interactions. Preventing the spread of non-native species can also prevent damage occurring to important biological sites and protected species, and the benefits they provide. This policy can also contribute to meeting the requirements of the Water Environment and Water Services (Scotland) Act 2003 and the Marine Strategy Regulations (2010) (particularly descriptor 1&2). Non-native species can impact on the integrity of the water environment and on sediments, marine geology and coastal processes; this policy is positive as it reduces the risk of non-native species entering and/or spreading the Region. The benefits derived from biodiversity, flora and fauna will ensure that people can continue to enjoy biodiversity into the future and it can continue to support human health and wellbeing.
Air Climatic factors	0			No impact is identified.
Material assets	+	P/L		Non-native species have the potential to become invasive and can be very destructive to both the natural and man-made environment. This policy is positive for material assets as it can prevent potential damage to material assets (e.g. waste water infrastructure, aquaculture assets, flood protection, machinery and recreational infrastructure).
Cultural heritage				Non-native species could present a threat to cultural heritage if they become established on or around cultural heritage features. This policy is positive for cultural heritage as it can prevent this from happening and thus prevents damage or adverse impacts from occurring to the character and setting of historic sites, archaeology, other features and the benefits they provide.
Landscape/seascape	0			No impact is identified.
SA topics				
Marine economy	+ -	P/L S/T		The impacts are mixed for the marine economy. Although the measures within this policy are already in place through existing legislation and good practice guidelines including policy GEN 10 of the NMP, implementing improved management of main pathways to reduce the risk of non-native species being introduced and spreading throughout the Region may present additional operating costs to some businesses (and therefore could increase barriers to new marine enterprises), particularly as this policy requires the consideration of specific regional guidance. However, the benefits in reducing the spread of non-native species into the Region may outweigh negative impacts, such as increased costs, as they prevent adverse impacts on important and sensitive habitats, which some businesses may rely on. In addition, invasive non-native species can present significant costs to some businesses through the damage they can generate (clogging, smothering and disabling machinery, water intakes and other structures such as lock gates, pontoons, boat hulls and other underwater structures). These impacts would have implications on the safeguarding and/or creation of jobs that support the development of a sustainable marine economy. Overall, this policy can support the development of a sustainable marine economy in the CMR.
Society	+ 0			Reducing the risk of introduction and spread of non-native species can contribute to improving access to coastal and marine resource for tourism and recreation, contributing to communities' sense of place including protection of and access to marine-related heritage (e.g. non-native species can negatively impact the functionality of infrastructure if it becomes covered or damaged by non-native species) and can maintain or improve the experiences of recreational users of the marine and coastal

Policy NNS 1: Proposals for development and/or use should demonstrate that they have considered that they have minimised the risk of introducing or spreading non-native species affecting seabirds and/or the ecological or recreational value of coastal habitats. Proposals should refer to the Scottish Government's Non-Native Species: Code of Practice. Where relevant, a site- or operation-based biosecurity plan should be developed in line with best practice Marine Biosecurity Planning guidance.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				environment, both in terms of access and quality of experience as it reduces the risk of non-native species having a detrimental impact on the coastal and marine environment. No impact is identified on maintaining or improving the accessibility and connectivity of coastal and island communities, on supporting a reduction in the magnitude of poverty and social exclusion or on promoting equality for all communities.

Recommendation rNNS 1: Initiatives are encouraged to research, eradicate and/or prevent the spread of non-native species.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive or neutral.	Furthering research, eradication or schemes which aid prevention of non-native species will have wide ranging benefits across the SA objectives for these topics (see comments for Objective NNS 1 and Policy NNS 1). These initiatives will ultimately have the impact of contributing to the achievement of the objectives, through conserving and enhancing the integrity of ecosystems, their interactions and the benefits they provide.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			No impact is identified.
Climatic factors				
Material assets	+	P/L		As above for the first four SEA Topics.
Cultural heritage				
Landscape/seascape	0			No impact is identified.
SA topics				
Marine economy	+ 0	P/L		The marine economy can benefit from further research, eradication or schemes which aid prevention of non-native species. Such initiatives can further support the development of a sustainable marine economy and prevent damage to the marine environment which may impact on the operation and efficient running of marine businesses. In addition, these initiatives may not involve any costs to marine businesses, but they can still benefit from the outcomes and findings. This recommendation may safeguard and/or create jobs within the environmental sector, depending on funding. No impact is identified on removing or avoiding barriers to new marine enterprise opportunities or safeguarding and/or creating jobs.
Society	+ 0	P/L		Society can also benefit from such initiatives, as they ultimately may impact on maintaining access (e.g. non-native species can negatively impact the functionality of infrastructure if it becomes covered or damaged by non-native species) to coastal and marine resource for tourism and recreation, protection of and access to marine-related heritage and maintain

Recommendation rNNS 1: Initiatives are encouraged to research, eradicate and/or prevent the spread of non-native species.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				or improve the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience. No impact is identified on maintaining or improving the accessibility and connectivity of coastal and island communities nor on supporting a reduction in the magnitude of poverty and social exclusion, and promoting equality for all communities.

Recommendation rNNS 2: All marine users in the Clyde Marine Region should:

a) conform to the Scottish Government Code of Practice on Non-native species, the voluntary Clyde Marine Region Biosecurity Plan and, where relevant, the voluntary Loch Fyne Community Biosecurity Plan,
b) proactively consider the risk of introducing or spreading non-native species,
c) put in place biosecurity management measures to minimise the risk of introducing or spreading non-native species, and
d) where relevant, develop a site-, event- or operation-based biosecurity plan in line with best practice Marine Biosecurity Planning guidance.

SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive or neutral.	The recommendation is positive, as it reinforces best practice measures which can ultimately provide benefits to species and habitats that are vulnerable or sensitive to non-native species. This recommendation can contribute to the conservation and enhancement of the integrity of the ecosystem (if there is less risk of non-native species being present in the environment then this presents less risk to the integrity of ecosystems) and their interactions. Preventing the spread of non-native species can also prevent damage occurring to important biological sites and protected species, and the benefits they provide. This recommendation can also contribute to meeting the requirements of the Water Environment and Water Services (Scotland) Act 2003 and the Marine Strategy Regulations (2010) (particularly descriptor 1&2). Non-native species can impact on the integrity of the water environment and on sediments, marine geology and coastal processes; this policy is positive as it reduces the risk of introducing or spreading non-native species around the Region. The benefits derived from biodiversity, flora and fauna will ensure that people can continue to enjoy biodiversity into the future and it can continue to support human health and wellbeing.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			No impact is identified.
Climatic factors				
Material assets	+			Non-native species have the potential to become invasive and can be very destructive to both the natural and man-made environment. This recommendation is positive for material assets as putting biosecurity management measures in place can minimise the risk of potential damage to material assets (e.g. waste water infrastructure, flood protection, machinery and recreational infrastructure).
Cultural heritage	+			Non-native species could present a threat to cultural heritage if they become established on or around cultural heritage features. This recommendation is positive for cultural heritage as it can prevent this from happening and thus prevent damage or adverse impacts from occurring to the character and setting of historic sites, archaeology, other features and the benefits they provide to local communities and society as a whole.

Recommendation rNNS 2: All marine users in the Clyde Marine Region should: **a) conform to the Scottish Government Code of Practice on Non-native species, the voluntary Clyde Marine Region Biosecurity Plan and, where relevant, the voluntary Loch Fyne Community Biosecurity Plan,** **b) proactively consider the risk of introducing or spreading non-native species,** **c) put in place biosecurity management measures to minimise the risk of introducing or spreading non-native species, and** **d) where relevant, develop a site-, event- or operation-based biosecurity plan in line with best practice Marine Biosecurity Planning guidance.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Landscape/seascape	0			No impact is identified.
SA topics				
Marine economy	- +	S/T P/L		This recommendation can support the overall development of a sustainable marine economy in the Region, and although it is a voluntary recommendation, if applied the results are mixed for their impact on the marine economy. Implementing biosecurity management measures to reduce the risk of non-native species being introduced and spreading throughout the Region may present additional operating costs to some businesses (and therefore could present a small increase in barriers to new marine enterprises). However, the benefits in reducing the spread of non-native species into the Region may outweigh the negative impact of additional costs as they prevent adverse impacts on important and sensitive habitats and species, which some businesses may rely on. In addition, invasive non-native species can present a significant cost to some businesses through the damage they can generate (clogging, smothering and disabling machinery, water intakes and other structures such as lock gates, pontoons, boat hulls and other underwater structures). These impacts would have implications on the safeguarding and/or creation of jobs.
Society	+ 0			Reducing the risk of introduction and spread of non-native species can contribute to improving access (e.g. non-native species can negatively impact the functionality of infrastructure if it becomes covered or damaged by non-native species) to coastal and marine resources for tourism and recreation as it reduces the risk of non-native species having a detrimental impact on the coastal and marine environment. Improved access can contribute to communities' sense of place including protection of and access to marine-related heritage and can maintain or improve the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience. No impact is identified on maintaining or improving the accessibility and connectivity of coastal and island communities, on promoting access to coastal and marine resource for tourism and recreation, on supporting the reduction in the magnitude of poverty and social exclusion or on promoting equality for all communities.

Marine Litter

Objective ML 1: Development(s) and/or use does not contribute to marine litter in the Clyde Marine Region (SD2).				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna Population and human health	+	P/L	No mitigation is required as impacts are	The objective is positive as it aims to reduce the contribution of marine litter entering the environment, which promotes the conservation and enhancement of the integrity of ecosystems and it can reduce damage to important biological sites and protected species, including the benefits they provide. This objective can also help contribute to the achievement of GEnvS under the Marine Strategy Regulations (2010), particularly for descriptor 10: Marine Litter does not cause harm. Marine litter

Objective ML 1: Development(s) and/or use does not contribute to marine litter in the Clyde Marine Region (SD2).				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Sediments, marine geology and coastal processes	+ 0	P/L	identified as positive or neutral.	can have adverse effects on biodiversity. Marine wildlife can ingest or become entangled in marine litter, causing death or false satiation effects, leading to increased mortality. Marine litter can also act as a vector for invasive and non-native species. Microplastics are pervasive throughout the marine and coastal environment and present additional risks, as they are difficult to remove completely from the environment. Nurdles are also present on beaches within the Region. The objective is also positive for population and human health, as it ensures healthy ecosystems can continue to support human health and wellbeing. In particular, sewage related debris and other marine litter accumulating on beaches and any accessible coastline present a public health issue, as well as a deterrent to recreation and tourism. Marine litter often becomes entangled in the strandline, to the degree that manual litter picking presents an onerous task. This can lead to the use of tractors and mechanical methods of seaweed removal, resulting in the loss or degrading of this important feature on the shore. Litter can also become incorporated into seabed and intertidal sediments. This can impact on the sustainable management of geodiversity. No impact is identified on coastal processes, geological sites, coastal erosion or the inherent capacity of the natural environment to cope with flooding. Although litter is not a consideration of water quality under the Water Environment and Water Services (Scotland) Act 2003, marine litter can be present in the water column and adversely affect the general cleanliness of water bodies. No impact is identified on exacerbating flooding. Contributing to the circular economy can have a positive impact across all these topics. A circular economic system is based on reducing waste and pollution, keeping products and materials in use and regenerating natural systems. This can provide benefits across all topics and provide wider, positive benefits across society. Although the majority of marine litter entering the marine environment comes from terrestrial sources, this objective can contribute to a reduction in marine litter and forms part of a suite of objectives which consider different sources of marine litter.
Water	+	P/L		
Air	0			No impact is identified.
Climatic factors	+ 0	P/L		This objective is positive as moving towards the circular economy can contribute to climate change mitigation. A circular economy promotes less production, which can result in reduced greenhouse gas emissions, and therefore contributes to climate change mitigation efforts in the Region. There is no impact identified on adaptation activities.
Material assets	0			No impact is identified on material assets. However, this objective ensures that future developments, which may be contributing to material assets within the Clyde (e.g. energy infrastructure, waste water management, flood management structures), do not contribute to marine litter in the Region.
Cultural heritage	+ 0	P/L		This objective can have a positive impact. Marine litter can have a negative aesthetic effect on cultural heritage features and impact on the character of historic sites and the benefits they provide to society and communities. No impact is identified on damage to known and unknown coastal and marine archaeology or the benefits it provides.
Landscape/seascape	0			No impact is identified.
SA topics				
Marine economy	- +	Negative impact – depends on the nature		Marine litter can present various threats/risks to a number of marine industries. It can be a threat to fisheries operations as gear can snag on large objects on the seabed, damaging gear and increasing the risk of capsizing. Objects caught in nets cost time to remove, resulting in lost fishing time and potentially damaged gear. Floating marine litter can present a hazard to recreational craft, both through collision and through entanglement of ropes and other floating debris in propellers.

Objective ML 1: Development(s) and/or use does not contribute to marine litter in the Clyde Marine Region (SD2).				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
		of the development or structure, could be S/T or ongoing. P/L		The objective is positive as it can reduce these risks to various sectors and ultimately reduce operational costs or time lost. Promoting contribution to a circular economy supports the development of a sustainable marine economy in the Region, across a range of sectors. The objective has mixed impacts and can be negative for some sectors undertaking marine and coastal related development. Ensuring that structures and developments do not contribute to marine litter may lead to additional construction and maintenance costs. It is not clear if this will create barriers for new marine enterprise opportunities or have an impact on safeguarding and/or creating jobs.
Society	+ 0			The objective is positive as it can contribute to communities' sense of place, including protection and access to marine-related heritage. It can also maintain or improve the experiences of recreational users of the marine environment, in terms of quality of experience. No impact is identified on the accessibility or connectivity of coastal and island communities, access to coastal and marine resources for tourism and recreation or on poverty, social exclusion or equality for all communities.

Objective ML 2: Development(s) and/or use seek to contribute to the circular economy (SD3).				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	Mitigation: No mitigation is required as impacts are identified as positive or neutral.	The objective is positive as it aims to reduce the contribution of marine litter entering the environment, which promotes the conservation and enhancement of the integrity of ecosystems and it can reduce damage to important biological sites and protected species, including the benefits they provide. This objective can also help contribute to the achievement of GEnvS under the Marine Strategy Regulations (2010), particularly for descriptor 10: Marine Litter does not cause harm. Marine litter can have a variety of negative impacts on these SEA Topics, as noted under the explanatory text for Objective ML 1. The majority of marine litter enters the marine environment from terrestrial sources, therefore seeking to reduce riverine inputs can have a positive impact on reducing the amount of litter which enters the marine environment this way.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			No impact is identified.
Climatic factors				
Material assets				
Cultural heritage	+	P/L		This objective can have a positive impact. Marine litter can have a negative aesthetic effect on cultural heritage features and impact on the character of historic sites and the benefits they provide to society and communities. No impact is identified on damage to known and unknown coastal and marine archaeology or the benefits it provides.
Landscape/seascape	0			No impact is identified.
SA topics				

Objective ML 2: Development(s) and/or use seek to contribute to the circular economy (SD3).				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Marine economy	0			It is unlikely this objective will have any impact on the marine economy or on safeguarding and/or creating jobs. This objective may present additional costs for terrestrial businesses, where they contribute to litter entering the marine environment.
Society	+ 0	P/L		The objective is positive as it can maintain or improve the experiences of recreational users of the marine environment, in terms of quality of experience. It may also have a positive impact on improving a communities' sense of place, through protection of marine related heritage. No impact is identified on the accessibility or connectivity of coastal and island communities, access to coastal and marine resources for tourism and recreation, access to marine related heritage or poverty, social exclusion or equality for all communities.

Objective ML 3: An increase in beach and riverine cleaning activities and data collected through such activities which contribute to the evidence base on marine litter (SD1&4) within the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive or neutral.	The objective is positive as it aims to reduce the contribution of marine litter in the environment, which promotes the conservation and enhancement of the integrity of ecosystems and it can reduce damage to important biological sites and protected species, including the benefits they provide. This objective can also help contribute to the achievement of GEnvS under the Marine Strategy Regulations (2010), particularly for descriptor 10: Marine Litter does not cause harm. Marine litter can have a variety of negative impacts on these SEA Topics, as noted under the explanatory text for Objective ML 1. Increasing data collected thorough such activities helps to identify sources of litter, among other things, which helps to targets action on litter reduction, further alleviating the problem. The majority of marine litter enters the marine environment from terrestrial sources, therefore including riverine inputs in cleaning activities is important.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			No impact is identified.
Climatic factors				
Material assets				
Cultural heritage	+	P/L		This objective is positive for cultural heritage. Marine litter can have a negative aesthetic effect on cultural heritage features and impact on the character of historic sites and the benefits they provide to society and communities. No impact is identified on damage to known and unknown coastal and marine archaeology or the benefits it provides.
Landscape/seascape	0			No impact is identified.
SA topics				
Marine economy	+ 0	P/L		Some industries may benefit from litter cleaning activities, as it improves the environment which many rely on to support their industry. Data collected and contributed to the evidence base on marine litter can also benefit these industries, as this may lead to further activities and outputs which ultimately reduce marine litter in the marine and coastal environment.

Objective ML 3: An increase in beach and riverine cleaning activities and data collected through such activities which contribute to the evidence base on marine litter (SD1&4) within the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				No impact is identified for the other objectives under this SA Topic area as it is assumed that the majority of work would be of a voluntary nature.
Society	+ 0	P/L		The objective is positive as it can contribute to communities' sense of place, including protection and access to marine-related heritage. It can also maintain or improve the experiences of recreational users of the marine environment, in terms of quality of experience. No impact is identified on the accessibility or connectivity of coastal and island communities, access to coastal and marine resources for tourism and recreation or poverty, social exclusion or equality for all communities.

Policy ML 1: Proposals for development and/or use should consider the inclusion of a litter minimisation and management plan for its lifespan of the proposal, having regard to the following elements where appropriate: construction, active use and any decommissioning/remediation required. Where a plan is not included, proposals should demonstrate proportionate measures to avoid release of litter throughout the lifespan of the proposal.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna Population and human health Sediments, marine geology and coastal processes Water	+	P/L	No mitigation is required as impacts are identified as positive or neutral.	This policy supports the delivery of NMP GEN 11 at a Regional level. The policy is positive for these SEA topics as it aims to reduce the contribution of marine litter entering the environment from marine and coastal developments and the accidental loss of Nurdles, flakes or powder. This supports biodiversity, flora and fauna, promotes the conservation and enhancement of the integrity of ecosystems as it can reduce damage to important biological sites and protected species, (including the benefits they provide) that may arise from exposure to marine litter and plastic nurdles, flakes or powder. This policy can also help contribute to the achievement of GEnvS under the Marine Strategy Regulations (2010), particularly for Descriptor 10: Marine Litter does not cause harm. Marine litter can have adverse effects on biodiversity, population and human health, sediments and waters – these are listed under Objective ML 1. The policy is also positive for population and human health, as it ensures healthy ecosystems can continue to support human health and wellbeing. Marine litter, plastic nurdles, flakes or power can become entangled in the strandline, to the degree that manual litter picking presents an onerous task. This can lead to the use of tractors and mechanical methods of seaweed removal, resulting in the loss or degrading of this important feature on the shore. Litter, plastic nurdles, flakes or powder can also become incorporated into seabed and intertidal sediments. This can impact on the sustainable management of geodiversity. No impact is identified on coastal processes, geological sites, coastal erosion or the inherent capacity of the natural environment to cope with flooding. Although litter, plastic nurdles, flakes and powder is not a consideration of water quality under the Water Environment and Water Services (Scotland) Act 2003, marine litter/plastics can be present in the water column and adversely affect the general cleanliness of water bodies. Therefore, this policy contributes towards achieving GEnvS under the Marine Strategy Regulations (2010), particularly descriptor 10. No impact is identified on exacerbating flooding.

Policy ML 1: Proposals for development and/or use should consider the inclusion of a litter minimisation and management plan for its lifespan of the proposal, having regard to the following elements where appropriate: construction, active use and any decommissioning/remediation required. Where a plan is not included, proposals should demonstrate proportionate measures to avoid release of litter throughout the lifespan of the proposal.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				Contributing to a circular economy can have a positive impact across all these topics. A circular economic system is based on reducing waste and pollution, keeping products and materials in use and regenerating natural systems. This can provide benefits across all topics and provide wider, positive benefits across society. Although the majority of marine litter, plastic nurdles, flakes or powder entering the marine environment comes from terrestrial sources, this policy can contribute to a reduction in marine litter and forms part of a suite of policies which consider different sources of marine litter and their contribution to the overall problem.
Air	0			No impact is identified.
Climatic factors	+	P/L		This policy is positive as moving towards the circular economy can contribute to climate change mitigation. A circular economy promotes less production, which can result in reduced greenhouse gas emissions, therefore contributing to climate change mitigation efforts in the CMR. There is no impact identified on adaptation activities.
Material assets	0			No impact is identified on material assets. However, this policy ensures that future developments, which may be contributing to material assets within the Clyde (e.g. energy infrastructure, waste water management, flood management structures), do not contribute to marine litter in the Region.
Cultural heritage	+	P/L		This policy can have a positive impact. Marine litter, plastic nurdles, flakes and powder can have a negative aesthetic effect on cultural heritage features and impact on the character of historic sites and the benefits they provide to society and communities. No impact is identified on damage to known and unknown coastal and marine archaeology or the benefits it provides.
Landscape/seascape	0			No impact is identified.
SA topics				
Marine economy	+ - ?	P/L S/T		Marine litter can present various threats/risks to a number of marine industries. It can be a threat to fisheries operations as gear can snag on large objects on the seabed, damaging gear and increasing the risk of capsizing. Objects caught in nets cost time to remove, resulting in lost fishing time and potentially damaged gear. Floating marine litter can present a hazard to recreational craft, both through collision and through entanglement of ropes and other floating debris in propellers. The policy is positive as it can reduce these risks to various sectors and ultimately reduce operational costs or lost time. Promoting contribution to a circular economy also supports the development of a sustainable marine economy in the Region, across a range of sectors. However, the policy has mixed impacts and can be negative in terms of the additional costs associated with developing a litter minimisation and management plan. Ensuring that structures and developments do not contribute to marine litter for the lifespan of the proposal may lead to additional construction and maintenance costs, however this policy supports GEN 11 of the NMP and the Marine Litter Strategy for Scotland. Additional costs may also occur where measures are put in place to avoid the accidental release of plastic nurdles, flakes or powder. It is not clear if this will create barriers for new marine enterprise opportunities of have an impact on safeguarding and/or creating jobs.
Society	+ 0	P/L		The policy is positive as it can contribute to communities' sense of place, including protection and access to marine-related heritage. It can also maintain or improve the experiences of recreational users of the marine environment, in terms of quality of experience.

Policy ML 1: Proposals for development and/or use should consider the inclusion of a litter minimisation and management plan for its lifespan of the proposal, having regard to the following elements where appropriate: construction, active use and any decommissioning/remediation required. Where a plan is not included, proposals should demonstrate proportionate measures to avoid release of litter throughout the lifespan of the proposal.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				No impact is identified on the accessibility or connectivity of coastal and island communities, access to coastal and marine resources for tourism and recreation or poverty, social exclusion or equality for all communities.

Policy ML 2: Waste water infrastructure should be designed, wherever practicable, to reduce the risk of litter entering the marine environment through watercourses or any other pathway.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive or neutral.	The policy is positive for these SEA topics as it aims to reduce the contribution of litter entering the environment through waste water infrastructure. A reduction in marine litter supports biodiversity, flora and fauna as it promotes the conservation and enhancement of the integrity of ecosystems and it can reduce damage to important biological sites and protected species, including the benefits they provide. This policy can also help contribute towards achieving GEnvS under the Marine Strategy Regulations (2010), particularly for descriptor 10: Marine Litter does not cause harm. Marine litter can have adverse effects on biodiversity, population and human health, sediments and waters – these are listed under Objective ML 1. The policy is also positive for population and human health, as it ensures healthy ecosystems can continue to support human health and wellbeing. Sewage related debris which may enter the marine and coastal environment through the waste water treatment system can be a risk to public health. Marine litter often becomes entangled in the strandline, to the degree that manual litter picking presents an onerous task. This can lead to the use of tractors and mechanical methods of seaweed removal, resulting in the loss or degrading of this important feature on the shore. Litter can also become incorporated into seabed and intertidal sediments. This can impact on the sustainable management of geodiversity. No impact is identified on coastal processes, geological sites, coastal erosion or the inherent capacity of the natural environment to cope with flooding. Although litter is not a consideration of water quality under the Water Environment and Water Services (Scotland) Act 2003, marine litter can be present in the water column and adversely affect the general cleanliness of water bodies. Therefore, this policy contributes towards achieving GEnvS under the Marine Strategy Regulations (2010), particularly descriptor 10. No impact is identified on exacerbating flooding.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			No impact is identified.
Climatic factors				
Material assets	+ 0	P/L		This policy is positive for waste water infrastructure, as incorrect disposal of terrestrial litter (e.g. flushing wet wipes and cotton buds) causes damage to the waste water treatment system and overflows not to function properly. An improved design in waste water infrastructure would improve the overall functioning of this material asset. No impact is identified on other material assets.

Policy ML 2: Waste water infrastructure should be designed, wherever practicable, to reduce the risk of litter entering the marine environment through watercourses or any other pathway.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Cultural heritage	+	P/L		This policy can have a positive impact. Marine litter can have a negative aesthetic effect on cultural heritage features and impact on the character of historic sites and the benefits they provide to society and communities. No impact is identified on damage to known and unknown coastal and marine archaeology or the benefits it provides.
Landscape/seascape	0			No impact is identified.
SA topics				
Marine economy	+ 0 -	P/L S/T		The type of marine litter released into the marine and coastal environment via waste water infrastructure can present a threat in particular to industries that rely on good water quality, such as aquaculture and sport, recreation and tourism. . The policy is positive as it can reduce these risks to these sectors and potentially prevent loss of business and operational costs or lost time. This policy supports the development of a sustainable marine economy in the region and ensures the sustainable use of the Region's resources to support the long-term viability of marine assets (high level of marine litter can also lead to maintenance coasts of waste water infrastructure). There is no impact identified on creating barriers for new marine enterprise opportunities nor on safeguarding and/or creating jobs that support new or existing sectors While not a marine economy, improvements in waste water infrastructure would lead to additional cost to the owner.
Society	+, 0	P/L		The policy is positive as it can contribute to communities' sense of place, including protection and access to marine-related heritage. It can also maintain or improve the experiences of recreational users of the marine environment, in terms of quality of experience. No impact is identified on the accessibility or connectivity of coastal and island communities, access to coastal and marine resources for tourism and recreation or poverty, social exclusion or equality for all communities.

Recommendation rML 1: Through the Fishing for Litter scheme, or other similar schemes, port or harbour operators are encouraged to provide facilities to fishing vessels to dispose of any litter collected.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive or neutral.	The recommendation is positive for these SEA topics as it aims to reduce the amount of marine litter found in the sea and on the sea bed by facilitating its removal from the marine environment through increasing opportunities to participate in the Fishing for Litter scheme and it supports the circular economy through other schemes, such as those which encourage recycling of old gear. A reduction in marine litter supports biodiversity, flora and fauna as it promotes the conservation and enhancement of the integrity of ecosystems and it can reduce damage to important biological sites and protected species, including the benefits they provide. This recommendation can also help contribute to the achievement of GEnvS under the Marine Strategy Regulations (2010), particularly for descriptor 10: Marine Litter does not cause harm. Marine litter can have adverse effects on biodiversity, population and human health, sediments and waters – these are listed under Objective ML 1. The recommendation is also positive for population and human health, as it ensures healthy ecosystems can continue to support human health and wellbeing. Marine litter often becomes entangled in the strandline, to the degree that manual litter picking presents an onerous task. This can lead to the use of tractors and mechanical methods of seaweed removal, resulting in the loss or degrading of this important
Population and human health	+			
Sediments, marine geology and coastal processes	+			
Water				

Recommendation rML 1: Through the Fishing for Litter scheme, or other similar schemes, port or harbour operators are encouraged to provide facilities to fishing vessels to dispose of any litter collected.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				feature on the shore. Litter can also become incorporated into seabed and intertidal sediments. This can impact on the sustainable management of geodiversity. No impact is identified on coastal processes, geological sites, coastal erosion or the inherent capacity of the natural environment to cope with flooding. Although litter is not a consideration of water quality under the Water Environment and Water Services (Scotland) Act 2003, marine litter can be present in the water column and adversely affect the general cleanliness of water bodies. This policy contributes towards achieving GEnvS under the Marine Strategy Regulations (2010), particularly descriptor 10. No impact is identified on exacerbating flooding.
Air Climatic factors Material assets	0			No impact is identified.
Cultural heritage	+	P/L		This recommendation can have a positive impact. Marine litter can have a negative aesthetic effect on cultural heritage features and impact on the character of historic sites and the benefits they provide to society and communities. No impact is identified on damage to known and unknown coastal and marine archaeology or the benefits it provides.
Landscape/seascape	0			No impact is identified.
SA topics				
Marine economy	+ 0	P/L		Marine litter can present various threats/risks to a number of marine industries. It can be a threat to fisheries operations as gear can snag on large objects on the seabed, damaging gear and increasing the risk of capsizing. Objects caught in nets cost time to remove, resulting in lost fishing time and potentially damaged gear. Floating marine litter can present a hazard to recreational craft, both through collision and through entanglement of ropes and other floating debris in propellers. The recommendation is positive as it can reduce these risks to various sectors and ultimately reduce operational costs or lost time. Fishing For Litter is a voluntary scheme which is fully funded, so there is no cost to port/harbour operators in providing facilities to fishing vessels to take part. There may be operational considerations related to the storage and emptying of skips. There is no impact identified on barriers for new marine enterprise opportunities or any impact on safeguarding and/or creating jobs.
Society	+ 0	P/L		The recommendation is positive as it can contribute to communities' sense of place, including protection and access to marine-related heritage. It can also maintain or improve the experiences of recreational users of the marine environment, in terms of quality of experience. No impact is identified on the accessibility or connectivity of coastal and island communities, access to coastal and marine resource for tourism and recreation or poverty, social exclusion or equality for all communities.

Recommendation rML 2: Businesses and organisations managing or handling plastic pellets, flakes or powders (nurdles), including shippers, transporters and recyclers, should adopt best practice guidance to prevent these plastics from entering waste water treatment systems and/or the marine environment.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive or neutral.	The recommendation is positive for these SEA topics as it aims to reduce the amount of marine litter in particular plastic nurdles, flakes or powders. This type of plastic litter in particular can become highly pervasive throughout a whole ecosystem, breaking down into smaller pieces. When ingested by marine animals, plastic nurdles, flakes or powders can cause false satiation effects, leading to reduced fitness or increased mortality. Overall, a reduction in marine litter supports biodiversity, flora and fauna as it promotes the conservation and enhancement of the integrity of ecosystems and it can reduce damage to important biological sites and protected species, including the benefits they provide. This recommendation can also help contribute to the achievement of GEnvS under the Marine Strategy Regulations (2010), particularly for descriptor 10: Marine Litter does not cause harm. Marine litter can have adverse effects on biodiversity, population and human health, sediments and waters – these are listed under Objective ML 1. The recommendation is also positive for population and human health, as it ensures healthy ecosystems can continue to support human health and wellbeing. Marine litter often becomes entangled in the strandline, to the degree that manual litter picking presents an onerous task. This can lead to the use of tractors and mechanical methods of seaweed removal, resulting in the loss or degrading of this important feature on the shore. Litter can also become incorporated into seabed and intertidal sediments. This can impact on the sustainable management of geodiversity. No impact is identified on coastal processes, geological sites, coastal erosion or the inherent capacity of the natural environment to cope with flooding. Although litter is not a consideration of water quality under the Water Environment and Water Services (Scotland) Act 2003, marine litter can be present in the water column and adversely affect the general cleanliness of water bodies. This recommendation contributes towards achieving GEnvS under the Marine Strategy Regulations (2010), particularly descriptor 10. No impact is identified on exacerbating flooding.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			No impact is identified.
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	0			Additional costs may occur where measures are put in place to avoid the accidental release of plastic nurdles, flakes or powder, however this recommendation is voluntary and so businesses will be able to implement this at their own discretion so that it does not have an overly burdensome negative impact.
Society	+ 0	P/L		The recommendation is positive as it can contribute to communities' sense of place, including protection and access to marine-related heritage. It can also maintain or improve the experiences of recreational users of the marine environment, in terms of quality of experience. No impact is identified on the accessibility or connectivity of coastal and island communities, access to coastal and marine resource for tourism and recreation or poverty, social exclusion or equality for all communities.

Recommendation rML 3: Development(s) and/or use in the marine and coastal environment should take measures to address marine litter entering the marine environment and should consider opportunities to contribute to the circular economy, for example by recycling old equipment. Initiatives which facilitate this are supported.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive or neutral.	The recommendation is positive for these SEA topics as it aims to reduce the contribution of marine litter entering the environment from existing marine and coastal developments and supports the circular economy, which promotes sustainability. This can reduce marine litter from structures and developments in place and support Policy ML 1 in ensuring existing marine and coastal development does not add to the level of marine litter in the marine environment. This supports biodiversity, flora and fauna as it promotes the conservation and enhancement of the integrity of ecosystems and it can reduce damage to important biological sites and protected species, including the benefits they provide. This recommendation can also help contribute to the achievement of GEnvS under the Marine Strategy Regulations (2010), particularly for descriptor 10: Marine Litter does not cause harm. Marine litter can have adverse effects on biodiversity, population and human health, sediments and waters – these are listed under Objective ML 1. The recommendation is also positive for population and human health, as it ensures healthy ecosystems can continue to support human health and wellbeing. Marine litter often becomes entangled in the strandline, to the degree that manual litter picking presents an onerous task. This can lead to the use of tractors and mechanical methods of seaweed removal, resulting in the loss or degradation of this important feature on the shore. Litter can also become incorporated into seabed and intertidal sediments. This can impact on the sustainable management of geodiversity. No impact is identified on coastal processes, geological sites, coastal erosion or the inherent capacity of the natural environment to cope with flooding. Although litter is not a consideration of water quality under the Water Environment and Water Services (Scotland) Act 2003, marine litter can be present in the water column and adversely affect the general cleanliness of water bodies. Therefore, this policy contributes towards achieving GEnvS under the Marine Strategy Regulations (2010), particularly descriptor 10. No impact is identified on exacerbating flooding. Although the majority of marine litter entering the marine environment comes from terrestrial sources, this recommendation can contribute to a reduction in marine litter and forms part of a suite of policies which consider different sources of marine litter and how to reduce their contribution to the overall problem.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			No impact is identified.
Climatic factors				
Material assets				No impact is identified on material assets. However, this policy ensures existing developments and structures, which may be contributing to material assets within the Clyde (e.g. energy infrastructure, waste water management, flood management structures), do not contribute to marine litter in the Region.
Cultural heritage	+	P/L		This recommendation can have a positive impact. Marine litter can have a negative aesthetic effect on cultural heritage features and impact on the character of historic sites and the benefits they provide to society and communities. No impact is identified on damage to known and unknown coastal and marine archaeology or the benefits it provides.
Landscape/seascape	0			No impact is identified.
SA topics				
Marine economy	+ - ?	P/L S/T		Marine litter can present various threats/risks to a number of marine industries. It can be a threat to fisheries operations as gear can snag on large objects on the seabed, damaging gear and increasing the risk of capsizing. Objects caught in nets cost

Recommendation rML 3: Development(s) and/or use in the marine and coastal environment should take measures to address marine litter entering the marine environment and should consider opportunities to contribute to the circular economy, for example by recycling old equipment. Initiatives which facilitate this are supported.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				time to remove, resulting in lost fishing time and potentially damaged gear. Floating marine litter can present a hazard to all vessels, both through collision and through entanglement of ropes and other floating debris in propellers. The policy is positive as it can reduce these risks to various sectors and ultimately reduce operational costs or lost time. The policy also supports the development of a sustainable marine economy in the Region and can protect marine assets in the Region. The recommendation can be negative for some sectors where development (s) and structures require maintenance to ensure that they do not contribute to marine litter. This may lead to additional construction and maintenance costs. It is not clear if this will create barriers for new marine enterprise opportunities or have an impact on safeguarding and/or creating jobs.
Society	+ 0	P/L		The recommendation is positive as it can contribute to communities' sense of place, including protection and access to marine-related heritage. It can also maintain or improve the experiences of recreational users of the marine environment, in terms of quality of experience. No impact is identified on the accessibility or connectivity of coastal and island communities, access to coastal and marine resources for tourism and recreation or poverty, social exclusion or equality for all communities.

Recommendation rML 4: The Coastal Litter Management Guidelines for Duty Bodies should be followed in carrying out beach cleaning operations. The support by public authorities of local community beach cleaning is encouraged where appropriate.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive or neutral.	The recommendation is positive for these SEA topics as it aims to reduce the contribution of marine litter entering the environment from existing marine and coastal developments. This can reduce marine litter from structures and developments in place and support Policy ML 1 in ensuring existing marine and coastal development does not add to the level of marine litter in the marine environment. This supports biodiversity, flora and fauna as it promotes the conservation and enhancement of the integrity of ecosystems and it can reduce damage to important biological sites and protected species, including the benefits they provide. This recommendation can also help contribute to the achievement of GEnvS under the Marine Strategy Regulations (2010), particularly for descriptor 10: Marine Litter does not cause harm. Marine litter can have adverse effects on biodiversity, population and human health, sediments and waters – these are listed under Objective ML 1. The recommendation is also positive for population and human health, as it ensures healthy ecosystems can continue to support human health and wellbeing. Marine litter often becomes entangled in the strandline, to the degree that manual litter picking presents an onerous task. However, community beach cleaning can reduce the use of tractors and mechanical methods of seaweed removal which would result in the loss or degradation of this important feature on the shore. Litter can also become incorporated into seabed and intertidal sediments. This can impact on the sustainable management of geodiversity. No impact is identified on coastal processes, geological sites, coastal erosion or the inherent capacity of the natural environment to cope with flooding.
Population and human health				
Sediments, marine geology and coastal processes				
Water				

Recommendation rML 4: The Coastal Litter Management Guidelines for Duty Bodies should be followed in carrying out beach cleaning operations. The support by public authorities of local community beach cleaning is encouraged where appropriate.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				Although litter is not a consideration of water quality under the Water Environment and Water Services (Scotland) Act 2003, marine litter can be present in the water column and adversely affect the general cleanliness of water bodies. Therefore, this policy contributes towards achieving GEnvS under the Marine Strategy Regulations (2010), particularly descriptor 10. No impact is identified on exacerbating flooding. Although the majority of marine litter entering the marine environment comes from terrestrial sources, this recommendation can contribute to a reduction in marine litter and forms part of a suite of policies which consider different sources of marine litter and how to reduce their contribution to the overall problem.
Air	0			No impact is identified.
Climatic factors				
Material assets				No impact is identified on material assets. However, this policy ensures existing developments and structures, which may be contributing to material assets within the Clyde (e.g. energy infrastructure, waste water management, flood management structures), do not contribute to marine litter in the Region.
Cultural heritage	+	P/L		This recommendation can have a positive impact. Marine litter can have a negative aesthetic effect on cultural heritage features and impact on the character of historic sites and the benefits they provide to society and communities. No impact is identified on damage to known and unknown coastal and marine archaeology or the benefits it provides.
Landscape/seascape	0			No impact is identified.
SA topics				
Marine economy	+ - ?	P/L S/T		Marine litter can present various threats/risks to a number of marine industries. It can be a threat to fisheries operations as gear can snag on large objects on the seabed, damaging gear and increasing the risk of capsizing. Objects caught in nets cost time to remove, resulting in lost fishing time and potentially damaged gear. Floating marine litter can present a hazard to all vessels, both through collision and through entanglement of ropes and other floating debris in propellers. The policy is positive as it can reduce these risks to various sectors and ultimately reduce operational costs or lost time. The policy also supports the development of a sustainable marine economy in the Region and can protect marine assets in the Region. The recommendation can be negative for some sectors where development (s) and structures require maintenance to ensure that they do not contribute to marine litter. This may lead to additional construction and maintenance costs. It is not clear if this will create barriers for new marine enterprise opportunities or have an impact on safeguarding and/or creating jobs.
Society	+ 0	P/L		The recommendation is positive as it can contribute to communities' sense of place, including protection and access to marine-related heritage. It can also maintain or improve the experiences of recreational users of the marine environment, in terms of quality of experience. No impact is identified on the accessibility or connectivity of coastal and island communities, access to coastal and marine resources for tourism and recreation or poverty, social exclusion or equality for all communities.

Connecting people to the Clyde Marine Region

Objective CONNECT 1: Local communities and marine users are meaningfully engaged in the decision-making process for proposals in the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna Population and human health Sediments, marine geology and coastal processes Water Air Climatic factors Material assets Cultural heritage Landscape/seascape	+	P/L	No mitigation is required as impacts are identified as positive.	This objective supports current planning requirements to carry out consultation and in particular supports the regional applications of NMP policy GEN 18. The impact of this assessment is found to be positive, as meaningful engagement of local communities and marine users who have knowledge of and access to contribute to consultations can improve the nature of developments and activities. For the majority of proposals within the Region there has been good opportunity for engagement, however support for this principle, especially for large proposals or those suggested for sensitive areas supports existing engagement processes. This approach supports consideration of a wide range of local knowledge, information and potential additional expertise from within the Region. There is potential for positive impacts across the whole range of SEA Topics, as an inclusive consultation process could result in positive impacts to all areas, depending on feedback received.
SA topics				
Marine economy	0 +			This objective supports current planning requirements to carry out consultation and in particular supports the regional applications of NMP policy GEN 18. It does not introduce any new measures and so there is no impact identified that this objective will remove or avoid barriers to new marine enterprise opportunities. No impact is identified on safeguarding and/or creating jobs that support the development of a sustainable marine economy. The objective is positive as it supports a more informed and inclusive consultation process which can in turn improve the nature of developments and activities. This could support the development of a sustainable marine economy in the Region, across a range of sectors and business sizes, protect marine assets in the Region and ensure the sustainable use of the Region's resources to support the long-term viability of marine sectors.
Society	+ 0			This objective is positive as it contributes to a communities' sense of place, including protection of and access to marine-related heritage. Increased involvement in consultation processes can also help communities develop a greater sense of ownership and involvement in developments and activities. It can also improve the accessibility and connectivity of coastal and island communities by flagging up issues which may affect this and have not been considered earlier in the process. No impact is identified on the other objectives for this topic.

Objective CONNECT 2: People's knowledge and enjoyment of the Clyde Marine Region is improved through sustainable and responsible use and/or experience of the natural environment, its historical and cultural assets and locally farmed or sourced products. This leads to an improvement in people's ocean literacy, sense of place, health & wellbeing and supports the local economy.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive.	The impact is positive, as improvements in people's experiences and knowledge of the coastal and marine environment and overall ocean literacy can drive behavioural changes and improvements by individuals and also drive wider community support for specific measures to protect and enhance the natural environment including marine assets, reducing carbon emissions and increased support for adaptation activities and recognition, protection and enhancement for cultural heritage and landscape/seascape characteristics. This can then also have a positive effect on human health and wellbeing; as the natural environment improves, so do the benefits people can derive from it. It supports improved spiritual and cultural wellbeing as well as a variety of provisioning and regulating services as the objective is wide ranging. No impact is identified on Air.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			
Climatic factors	+	P/L		
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+	Direct and Secondary		This objective could result in a direct positive impact on the Regional fishing, aquaculture and seafood industries as it can promote consumption of local products. There may be a secondary positive impact as people's knowledge and enjoyment increases, the desire to take part in marine sport, recreation and tourism could increase and support related industries.
Society	+ 0	P/L		The objective can have a positive effect as improved awareness of the natural environment can contribute to a community's sense of place. It can also have a positive effect on maintaining or improving the experiences of recreational users of the marine and coastal environment. No effect is identified for the other objectives for this topic.

Objective CONNECT 3: Responsible public access to the marine and coastal environment is improved in the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0		No mitigation is required as impacts are identified as positive.	The objective stipulates responsible public access so no negative impacts are identified on the SEA topics that may result from increased used, or inappropriately sited access pathways/routes (and this can be measured through the measurements identified with this objective and enforced through policies below).
Population and human health				

Objective CONNECT 3: Responsible public access to the marine and coastal environment is improved in the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+ 0	P/L (for certain sectors)		There may be benefits to industries associated with sport, recreation and tourism as this objective supports increased access to the marine and coastal area, and these industries can facilitate this access. No other impacts are identified.
Society	+ 0	P/L		This objective is positive for promoting and enabling access to coastal and marine resources for tourism and recreation and contributes to communities' sense of place, including protection of and access to marine related heritage. It is also positive in terms of maintaining or improving the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience. No other impacts are identified.

Policy CONNECT 1: Proposals for development and/or use should demonstrate that they have considered taking a proportionate approach to the following: **a) engagement with stakeholders from relevant sectors, especially where there might be direct interactions between different uses and/or developments; and** b) **where relevant, the general public has been informed and consulted during development of the proposal, particularly if the proposal could significantly impact local communities.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive.	As for Objective CONNECT 1
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				

Policy CONNECT 1: Proposals for development and/or use should demonstrate that they have considered taking a proportionate approach to the following: **a) engagement with stakeholders from relevant sectors, especially where there might be direct interactions between different uses and/or developments; and** b) **where relevant, the general public has been informed and consulted during development of the proposal, particularly if the proposal could significantly impact local communities.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	0			As for Objective CONNECT 1
Society	+			

Policy CONNECT 2: Proposals for development and/or use which create and/or maintain coastal trails, paths and walkways, particularly those which connect coastal sites of local importance, are encouraged. These should be designed to prevent impacts on sensitive natural and cultural heritage.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive.	The policy notes that trail, paths and walkways must be designed to prevent impacts on sensitive natural heritage, this can contribute to its protection. In addition the maintenance or creation of paths can prevent unintentional damage (e.g. walking through bird nesting sites) to natural heritage by those using trails, paths and walkways, as it creates a designated space. No impact identified on the other SEA objectives for this topic.
Population and human health				
Sediments, marine geology and coastal processes	0			No impact identified. Proposals should consider the risk of erosion of coastal trails, paths and walkways due to sea-level rise/coastal processes according to the policies set out in the Coastal Processes chapter of the CRMP.
Water				
Air				
Climatic factors				
Material assets	+	P/L		This policy can support improvements and developments to paths at the coastal zone, delivering multiple benefits to those who use them and working in partnership with nature to ensure there is not detrimental impact.
Cultural heritage	+			The policy specifies that impacts on cultural and historical heritage and assets should be avoided, preventing a negative impact, which can contribute to their protection. There may also be an indirect positive effect if trails, paths, and walkways are created or maintain which facilitate better enjoyment of cultural heritage (e.g. if there is more knowledge/appreciation of these it may generate more resources or willingness to protect and enhance these assets) and promote spiritual and aesthetic benefits derived from time spent enjoying cultural heritage assets.

Policy CONNECT 2: Proposals for development and/or use which create and/or maintain coastal trails, paths and walkways, particularly those which connect coastal sites of local importance, are encouraged. These should be designed to prevent impacts on sensitive natural and cultural heritage.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Landscape/seascape	+	Se		This policy promotes the Region's landscape/seascapes and the benefits that people derive from these, such as sense of place, recreation and spiritual wellbeing, thorough encouraging creation or maintenance of paths, trails and walkways.
SA topics				
Marine economy	+ 0	P/L (for certain sectors)		There may be benefits to industries associated with sport, recreation and tourism as this objective supports increased access to the marine and coastal area, and these industries can facilitate this access. No other impacts are identified.
Society	+ 0	P/L		This objective is positive for promoting access to coastal and marine resources for tourism and recreation and contributes to communities' sense of place, including protection of and access to marine related heritage. It is also positive in terms of maintaining or improving the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience. No other impacts are identified.

Policy CONNECT 3: Proposals for development and/or use should demonstrate that they have considered, where applicable, that: **a) access rights to the marine environment are retained and improved, and** **b) access to the shore and water is optimised for sport, recreation and tourism, and safety issues have been addressed.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0		No mitigation is required as impacts are identified as positive.	No impact is identified.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets	+	P/L		This policy can support improvements and developments to paths at the coastal zone, delivering multiple benefits to those who use them and working in partnership with nature to ensure there is not detrimental impact.
Cultural heritage	0			No impact is identified
Landscape/seascape				

Policy CONNECT 3: Proposals for development and/or use should demonstrate that they have considered, where applicable, that: a) access rights to the marine environment are retained and improved, and b) access to the shore and water is optimised for sport, recreation and tourism, and safety issues have been addressed.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
SA topics				
Marine economy	? 0 +			The impact on the marine economy is unclear and will be dependent on the type and location of the development and/or activity. Ensuring continued public access and optimising access for sport recreation and tourism may not avoid barriers to new marine enterprises or safeguard jobs that support the development of a sustainable marine economy. The policy can protect built material assets, in the Region, maintaining the potential to use then in the future. There may be benefits to industries associated with sport, recreation and tourism as this objective supports increased access to the marine and coastal area, and these industries can facilitate this access. No other impacts are identified.
Society	+ 0			This objective is positive for promoting access to coastal and marine resources for tourism and recreation and contributes to communities' sense of place, including protection of and access to marine related heritage. It is also positive in terms of maintaining or improving the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience. No other impacts are identified.

Recommendation rCONNECT 1: All marine users and the general public are encouraged to engage with formal consultation processes in public authority decision-making about development(s) and/or use in the Clyde Marine Region. This can be achieved individually or as a member of a community, interest or sports groups.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive.	As for objective CONNECT 1
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				

Recommendation rCONNECT 1: All marine users and the general public are encouraged to engage with formal consultation processes in public authority decision-making about development(s) and/or use in the Clyde Marine Region. This can be achieved individually or as a member of a community, interest or sports groups.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Landscape/seascape				
SA topics				
Marine economy	0			As for Objective CONNECT 1
Society	+			

Recommendation rCONNECT 2: All users of the Clyde Marine Region should follow guidance set out in relevant codes and best practice guidelines, which include but are not limited to:

Natural Heritage

- **Scottish Marine Wildlife Watching Code**
- **A Guide to Best Practice for Watching Marine Wildlife**
- **Scottish Outdoor Access Code**
- **Scottish Entanglement Alliance Best Practice Guide for Fishermen**

Non-Native Species

- **Scottish Government Code of Practice on Non-Native Species**
- **'Check Clean Dry' Guidance**

Sport, Recreation and Tourism

- **Clyde Leisure Navigation Guide**
- **The Green Guide to Coastal Boating**
- **Catch and Release: A Guide to Best Practice**
- **Outdoor events in Scotland – Guidance for organisers and land managers**

SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+			If applied the recommendation can offer a positive impact for biodiversity, flora and fauna, as many of the best practice guidelines provide guidance which can contribute to the conservation and enhancement of the integrity of ecosystems, their interactions and the benefits they provide. They can prevent damage to important biological sites and species. Where these benefits are delivered for ecosystems there will also be benefits for human health and wellbeing.
Population and human health				
Sediments, marine geology and coastal processes	0			No impact identified.
Water				
Air				

Recommendation rCONNECT 2: All users of the Clyde Marine Region should follow guidance set out in relevant codes and best practice guidelines, which include but are not limited to:

Natural Heritage

- **Scottish Marine Wildlife Watching Code**
- **A Guide to Best Practice for Watching Marine Wildlife**
- **Scottish Outdoor Access Code**
- **Scottish Entanglement Alliance Best Practice Guide for Fishermen**

Non-Native Species

- **Scottish Government Code of Practice on Non-Native Species**
- **'Check Clean Dry' Guidance**

Sport, Recreation and Tourism

- **Clyde Leisure Navigation Guide**
- **The Green Guide to Coastal Boating**
- **Catch and Release: A Guide to Best Practice**
- **Outdoor events in Scotland – Guidance for organisers and land managers**

SEA topics	Impact	Nature of impact	Mitigation	Explanatory text
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+ 0			A number of the best practice guidelines can contribute to reduced operational costs to businesses within various sectors, and can contribute to reduced negative interactions with other sectors. As this is a recommendation and promotes best practice guidance it is voluntary whether businesses apply the recommendation, so no negative impacts are identified. The recommendation supports that sustainable use of the Region's resources, and supports the development of a sustainable marine economy. No impact is identified for the other SA objectives.
Society	+ 0			This recommendation can contribute to communities' sense of place, including protection of and access to marine related heritage, due to the positive benefits that may be realised as noted under the explanatory text for biodiversity, flora and fauna. No other impact is identified.

Recommendation rCONNECT 3: Activities are encouraged which give opportunities to marine users, including the general public, to collect data (e.g. through citizen science projects).				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L		As for Objective CONNECT 2
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			
Climatic factors	+	P/L		
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+	Se		As for Objective Connect 2, excluding specific benefits noted for the aquaculture, fisheries and seafood industries as a result of promoted consumption of the Region's seafood.
Society	+ 0	P/L		

Recommendation rCONNECT 4: Activities and experiences are encouraged which engage with those people living in and/or visiting the Clyde Marine Region to improve their interest, awareness and/or knowledge of the Regions natural heritage, historic environment and cultural heritage including the Gaelic language, and/or marine sport and recreation opportunities. Activities and experiences should be accessible to all, including those with protected characteristics, should help overcome physical, cultural and economic barriers to participation and encourage independent living.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L		As for Objective CONNECT 2
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			
Climatic factors	+	P/L		
Material assets				

Recommendation rCONNECT 4: Activities and experiences are encouraged which engage with those people living in and/or visiting the Clyde Marine Region to improve their interest, awareness and/or knowledge of the Regions natural heritage, historic environment and cultural heritage including the Gaelic language, and/or marine sport and recreation opportunities. Activities and experiences should be accessible to all, including those with protected characteristics, should help overcome physical, cultural and economic barriers to participation and encourage independent living.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Cultural heritage Landscape/seascape				
SA topics				
Marine economy	+	Se		As for Objective Connect 2, excluding specific benefits noted for the aquaculture, fisheries and seafood industries as a result of promoted consumption of the Region's seafood.
Society	+ 0	P/L		

Recommendation rCONNECT 5: Activities are encouraged which engage local communities in identifying areas of marine litter accumulation, carrying out beach cleans, and/or communicating issues relating to marine litter. Beach clean organisers are encouraged to contribute to data collecting initiatives. This includes but is not limited to: the Marine Conservation Society's Beachwatch campaign, Fidra's 'Great Nurdle Hunt' data collection project and Keep Scotland Beautiful initiatives such as Upstream Battle.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna Population and human health Sediments, marine geology and coastal processes Water	+	P/L		Where the recommendation is applied it will have a positive impact as it aims to reduce the contribution of marine litter in the environment, through encouragement of organisation, community and voluntary groups engaged in tackling marine litter and it's causes, which promotes the conservation and enhancement of the integrity of ecosystems and it can reduce damage to important biological sites and protected species, including the benefits they provide. This recommendation can also help contribute to the achievement of GEnvS under the Marine Strategy Regulations (2010), particularly for descriptor 10: Marine Litter does not cause harm. Marine litter can have a variety of negative impacts on these SEA Topics, as noted under the explanatory text for Objective ML 1. Increasing data collected thorough such activities helps to identify sources of litter, among other things, which helps to target actions on litter reduction (e.g. identifying sources of litter and commonly littered items to help inform policy and legislation to support reduction), further alleviating the problem.
Air Climatic factors Material assets	0			No impact is identified.
Cultural heritage	+	P/L		This recommendation is positive for cultural heritage. Marine litter can have a negative aesthetic effect on cultural heritage features and impact on the character of historic sites and the benefits they provide to society and communities. No impact is identified on damage to known and unknown coastal and marine archaeology or the benefits it provides.

Recommendation rCONNECT 5: Activities are encouraged which engage local communities in identifying areas of marine litter accumulation, carrying out beach cleans, and/or communicating issues relating to marine litter. Beach clean organisers are encouraged to contribute to data collecting initiatives. This includes but is not limited to: the Marine Conservation Society's Beachwatch campaign, Fidra's 'Great Nurdle Hunt' data collection project and Keep Scotland Beautiful initiatives such as Upstream Battle.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Landscape/seascape	0			The impact is positive as in some cases (e.g. litter sinks) marine litter can have a very negative impact on the seascape/landscape character of parts of the Region. Promoting litter and beach cleaning activities can reduce this negative impact.
SA topics				
Marine economy	+ 0			Some industries may benefit from litter cleaning activities, as they improve the environment which many rely on to support their industry. Data collected and contributed to the evidence base on marine litter can also benefit these industries, as this may lead to further activities and outputs which ultimately reduce marine litter in the marine and coastal environment. No impact is identified for the other objectives under this SA Topic area.
Society	+ 0			The policy is positive as it can contribute to communities' sense of place, including protection and access to marine-related heritage. It can also maintain or improve the experiences of recreational users of the marine environment, in terms of quality of experience. No impact is identified on the accessibility or connectivity of coastal and island communities, access to coastal and marine resources for tourism and recreation or poverty, social exclusion or equality for all communities.

Recommendation rCONNECT 6: Initiatives are encouraged to supply sustainable aquaculture and fisheries products from the Clyde Marine Region to local shops and restaurants to promote the 'Clyde brand' and enhance experiences for local people and visitors to the Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0			No impact is identified where the recommendation may be applied as it states that the products should be sustainable which should ensure there is no significant negative impact on these SEA topics.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				

Recommendation rCONNECT 6: Initiatives are encouraged to supply sustainable aquaculture and fisheries products from the Clyde Marine Region to local shops and restaurants to promote the 'Clyde brand' and enhance experiences for local people and visitors to the Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Marine economy	+	P/L		Where initiatives go forward to support this recommendation this can lead to a positive impact on the fisheries and aquaculture sector as well as related sectors such as processors and the hospitality industry. The recommendation can have a positive impact on supporting the development of a sustainable marine economy, ensure the sustainable use of the Region's resources to support the long-term viability of marine sectors and can remove barriers to new marine enterprise opportunities and can safeguard jobs that support the development of a sustainable marine economy. No impact is identified on protecting marine assets.
Society				Where applied the recommendation can be positive for society as can promote access to coastal and marine resource for tourism and recreation. It can indirectly support a reduction in the magnitude of poverty through potential creation of jobs in aquaculture, fisheries, local shops and restaurants and can contribute to communities' sense of place. This recommendation can also maintain or contribute to the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience.

Section 2 – Sectoral Policies

All Sectors

Objective SEC 1: Encourage the safe and appropriate multiple use of infrastructure and the marine spatial area between sectors in the Clyde Marine Region, including local collaboration across and within sectors.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	Many of the impacts noted within the explanatory text are mitigated by policies within the General Policies chapter of the CRMP which must be adhered to in advance of sectoral policies. Policies from the NMP must also be adhered to. Existing consenting processes for coastal and marine developments are in place and these are likely to be supported by underlying assessments	This objective could provide a positive impact for these SEA Topics. Multiple use of infrastructure could reduce the need (though not rule out) for constructing new facilities, and thus reduce the potential negative impacts (e.g. disruption, noise pollution, potential damage to important sites or species, coastal erosion, impact the integrity of coastal processes) on these SEA Topics.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			It is unclear what the impact on air quality would be. For example, where multiple use of infrastructure causes more vessels to gather in one area, this could have an adverse impact on local air quality. However, existing regulations and legislation must be taken into account around protecting air quality, which would mitigate any negative impact, so the impact is identified as neutral.

Objective SEC 1: Encourage the safe and appropriate multiple use of infrastructure and the marine spatial area between sectors in the Clyde Marine Region, including local collaboration across and within sectors.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Climatic factors	0		(e.g. EIA, flood-risk) which can ensure adverse effects can be avoided. Air quality is monitored by SEPA through mechanisms such as the Scottish Air Quality Database Annual Report. Cruise ship operators must identify measures to avoid any detrimental impact to air quality. Operators must also ensure that suitable mitigation measures to abate air quality degradation are identified and implemented. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions.	It is unclear what the impact on climatic factors would be. This objective could lead to positive impacts and reduce greenhouse gas emissions if less infrastructure is newly constructed. This is dependent on the type of infrastructure however, as some new developments (depending on type and materials used) can be more energy efficient, contributing to climate change mitigation. It is anticipated that the majority of the negative impacts generated by such activity are mitigated through the environmental protection policies within the NMP and the policies within the General Policies chapter of this CRMP, and therefore the impact is likely to be neutral or positive.
Material assets	+	P/L		The objective is positive as it generally encourages less infrastructure and may have a positive impact on the efficient and sustainable use of natural and other resources. The use of 'appropriate' can act as a safeguard to ensure there is not overuse of infrastructure, which in the long term could lead to negative effects on material assets.
Cultural heritage	+ 0	P/L		This objective is positive for cultural heritage as it aims to reduce the need for constructing new facilities as construction can damage known and unknown marine and coastal archaeology. It could also avoid adversely impacting on the character and setting of historic sites and buildings and the benefits they provide. No impact is identified on how this objective will enhance the historic marine environment and the benefits it provides.
Landscape/seascape	+			This objective is positive for landscapes/seascapes as it seeks opportunities to reduce the need for constructing new facilities. Construction could impact on the quality of some landscape/seascape areas.
SA topics				
Marine economy	+ -	P/L		This objective supports the efficient use of existing infrastructure, which may reduce costs to some marine businesses that would have otherwise had to invest and construct new infrastructure. It may remove barriers to new marine enterprise opportunities. It also supports the development of a sustainable marine economy in the Region across a range of sectors and business sizes and ensures the sustainable use of the Region's resources to support the long-term viability of marine sectors. This objective could result in some minor negative impacts to the marine economy; for example, if certain infrastructure was in high demand there could be operational delays and lost operational time. For these reasons, there may also be mixed impacts on safeguarding and/or creating jobs.
Society	+ 0	P/L		This objective can maintain or improve the accessibility and connectivity of coastal and island communities, where there is joint public and private use of infrastructure. It can promote access to coastal and marine resources for tourism and recreation. This objective has no impact on supporting a reduction in the magnitude of poverty and social exclusion and will promote equality for all communities. There could be maintenance and improvement to the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience. This

Objective SEC 1: Encourage the safe and appropriate multiple use of infrastructure and the marine spatial area between sectors in the Clyde Marine Region, including local collaboration across and within sectors.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				objective may also be positive in terms of contributing to a communities' sense of place, including protection of access to marine-related heritage.

Objective SEC 2: Ensure infrastructure, such as ports and harbours and those related to supply chain, adequately support sectors operating in the Clyde Marine Region, including onward links to the transport network outwith the region. Any development aligns with the integrated transport objectives in Local Development Plans.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna Population and human health Sediments, marine geology and coastal processes Water Air	0		Many of these impacts are mitigated by policies within the General Policies chapter of the CRMP which must be adhered to in advance of sectoral policies. Policies from the NMP must also be adhered to. Existing consenting processes for coastal and marine developments are in place and these are likely to be supported by underlying assessments (e.g. EIA, flood-risk) which can ensure adverse effects can be avoided.	It is unclear what the impact of this objective will be on biodiversity, flora and fauna as it depends on what modifications or construction needs to be carried out to ensure infrastructure can adequately support the sectors operating in the Region. There is scope for there to be negative impacts on this topic where construction of new infrastructure developments is undertaken. This could include noise pollution, affecting cetaceans and other marine and coastal mammals, damage and/or loss of habitats and displacement or loss of species. Where this is the case, mitigation strategies would need to be employed to reduce any negative impacts. Where maintenance is required to ensure infrastructure can support sectors, this may cause little or no negative impacts. The impact of this objective on population and human health is unclear. There is potential for negative impacts where new infrastructure needs to be constructed to ensure infrastructure adequately supports sectors. This can negatively impact upon ecosystems thereby impacting on human health and wellbeing. Construction can also cause water pollution, noise pollution or other types of disruption which can impact upon population and human health. The impact on sediments, marine geology and coastal processes is also unclear. Maintenance of existing infrastructure may cause little or no significant impact whereas construction of new infrastructure has the potential to have a much bigger impact and would require more consideration of mitigation strategies to reduce these negative impacts. As above for sediments, marine geology and coastal processes. Negative impacts could include siltation that temporarily affects water quality and localised negative impacts on air quality associated with the construction of new infrastructure or increased road and marine vessel movements. The SA-SEA assumes that as this policy exists within the context of the NMP, the policies within the General Policies chapter of the Plan and existing licensing and consenting processes, any negative impacts will be mitigated by these policies and the impact is neutral.
Climatic factors	+ 0	P/L	Air quality is monitored by SEPA through mechanisms such as the Scottish Air Quality Database Annual	There is potential for this objective to have positive or negative impacts depending on the nature of work/activity required to ensure infrastructure adequately supports sectors. The construction of new infrastructure has the potential to contribute to greenhouse gas emissions; however, infrastructure could be built to be resilient to climate change impacts and therefore contribute to the Region's adaptation activities. This could also be the case for infrastructure modifications/updates. It is anticipated that the majority of the negative impacts generated by such

Objective SEC 2: Ensure infrastructure, such as ports and harbours and those related to supply chain, adequately support sectors operating in the Clyde Marine Region, including onward links to the transport network outwith the region. Any development aligns with the integrated transport objectives in Local Development Plans.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
			Report. Cruise ship operators must identify measures to avoid any detrimental impact to air quality. Operators must also ensure that suitable mitigation measures to abate air quality degradation are identified and implemented. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions.	activity are mitigated through the environmental protection policies within the NMP and the policies within the General Policies chapter of this Plan, and therefore the impact is likely to be neutral or positive.
Material assets	+ ?	P/L		The objective is positive for material assets, as it seeks to ensure infrastructure adequately supports sectors operating in the Region.
Cultural heritage	0			It is unclear what the impact of this objective will be on cultural heritage as it depends on what modifications or construction needs to be carried out to ensure infrastructure adequately supports the sectors operating in the Region. There is scope for there to be negative impacts on cultural heritage where new infrastructure developments are undertaken. Where this is the case, mitigation strategies would need to be employed to reduce any negative impacts. Where maintenance is required to ensure infrastructure can support sectors, this may cause little or no negative impacts.
Landscape/seascape	0			There may be an impact on landscapes/seascapes where construction of new infrastructure is undertaken. However, this policy is set within the context of the General policies chapter of this CRMP, the relevant policies in the NMP and existing consenting processes which may apply/require additional assessments as part of their processes. These processes would consider any potential impacts and mitigate any adverse impacts of this policy on landscapes/seascapes.
SA topics				
Marine economy	+ ?			This objective is positive for the marine economy as it promotes efficient operations (which could result in cost savings) within some sectors that rely on marine and coastal infrastructure. This objective supports the development of a sustainable marine economy. It can also protect marine assets and maintain the potential to utilise them in the future. This objective may also remove barriers to new marine enterprise opportunities and may also safeguard or create jobs – though this is unclear. This objective could generate additional overheads for some businesses where a cost is involved in developing or improving infrastructure so that infrastructure adequately supports sectors operation in the Region. In the long term, this could support operations and be viewed as a worthwhile investment.
Society	+ 0			This objective can maintain or improve the accessibility and connectivity of coastal and island communities where there is joint public and private use of infrastructure. It can promote access to coastal and marine resources for tourism and recreation. This objective has no impact on supporting a reduction in the magnitude of poverty or social exclusion for all communities. There could be maintenance and improvement to the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience.

Objective SEC 2: Ensure infrastructure, such as ports and harbours and those related to supply chain, adequately support sectors operating in the Clyde Marine Region, including onward links to the transport network outwith the region. Any development aligns with the integrated transport objectives in Local Development Plans.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				No impact is anticipated on contributing to a community's sense of place, including protection of and access to marine-related heritage.

Objective SEC 3: The availability of and access to knowledge and data which inform sustainable development, identify opportunities for protection and enhancement and strengthen our understanding of cumulative impacts and mitigation measures are improved in the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna Population and human health Sediments, marine geology and coastal processes Water Air Climatic factors Material assets Cultural heritage Landscape/seascape	+	P/L		This objective is positive for the SEA topics (the objective applies to all areas which inform sustainable development, and so could have an impact on all SEA topics). As well as contributing to general knowledge, the objective specifies strengthening our understanding of cumulative impacts and mitigation measures, which will be especially beneficial to developing understanding of how to improve sustainable developments. Increased knowledge and data on marine and coastal features will contribute to conserving and enhancing the integrity of ecosystems, their interactions and the benefits they provide. It will also contribute to the prevention of damage to important biological sites and protected species, including the benefits they provide. It can also contribute to the achievement of GEnvS and GEcS, meeting the requirements of the Marine Strategy Regulations (2010) and the Water Environment and Water Services (Scotland) Act 2003and sustaining the benefits of natural processes and resources. Similarly, the objective can ensure the ecosystems and their associated benefits are maintained and enhanced through sustainable management of geodiversity and their natural processes. Improved data and knowledge can prevent damage to important geological sites, including the benefits they provide. Improved knowledge and data can contribute to avoid exacerbating coastal erosion and maintain the integrity of coastal processes and the benefits they provide. These impacts contribute to healthy ecosystems, both biodiversity and geodiversity and this in turn has a positive impact on population and human health, ensuring that humans can continue to derive benefits from enhancements to the marine and coastal environment. It also reduces the risk to human health that may arise from a degraded environment, water pollution, flood risk, coastal erosion, etc. Improved knowledge and data on the water environment will have a positive impact on water, and can contribute to achieving and maintaining GEnvS and GEcS, meeting the requirements of the Marine Strategy Regulations (2010) and Water Environment and Water Services (Scotland) Act 2003. No effect is identified. This objective encompasses improved knowledge and data on marine and coastal features which act as carbon sinks (e.g. seagrasses, kelp and some seabed sediments). This will have a positive contribution to climate change mitigation and the Region's contribution to climate change mitigation in a timely and commensurate way. Ensuring the protection and enhancement of natural heritage in the marine environment can also improve its resilience and

Objective SEC 3: The availability of and access to knowledge and data which inform sustainable development, identify opportunities for protection and enhancement and strengthen our understanding of cumulative impacts and mitigation measures are improved in the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				capacity to adapt in the face of climate change impacts. The objective also specifies the identification of adaptation options, further contributing to adaptation measures. This objective seeks to improve knowledge and data of marine and coastal natural features to inform sustainable development. This can inform best suited and appropriate placement of material assets such as energy and telecommunications infrastructure. Improved knowledge and data of marine and coastal natural features could provide indirect benefits to the protection and enhancement of the historic marine environment by contributing data and knowledge on cultural heritage. In particular, it may enhance our knowledge of unknown coastal and marine archaeology. As the objective specifies strengthening understanding of cumulative impacts, this can contribute to avoiding adverse impacts on the character and setting of historic sites and the benefits they provide and on the impacts to landscape/seascape.
SA topics				
Marine economy	+	P/L		This objective can support the development of a sustainable marine economy by contributing to the knowledge base across a range of areas and in particular for cumulative impacts and mitigation measures, which could ultimately reduce the costs of development for some marine industries as the objective will help to further guide and inform appropriate placements of marine and coastal developments and activities, ensuring they take place in the most appropriate locations and their potential negative and cumulative impacts are mitigated. This supports operations in the long term and ensures that growth of the marine economy is undertaken in a sustainable way. The objective does not affect barriers to new marine enterprises and no effect is identified on safeguarding and/or creating jobs, except within the environmental sector depending on funding.
Society	+	P/L		The objective has a positive effect on society as it can contribute to a community's sense of place through better knowledge of the Region and it can maintain or improve the experiences of recreational users. No impact is identified on supporting a reduction of the magnitude of poverty and social exclusion and promoting equality for all communities.

Objective SEC 4: Cumulative impacts of development(s) and activities in the Clyde Marine Region are mitigated.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+			Where this objective can be delivered, this will have a positive impact on the SEA topics as it contributes to lessening the impact of cumulative impacts. In combination developments(s) and/or activities around the Region can have cumulative impacts on one or more of the SEA topics. Ensuring that these are mitigated will have a positive impact.
Population and human health				

Objective SEC 4: Cumulative impacts of development(s) and activities in the Clyde Marine Region are mitigated.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+ 0			The objective is positive as it supports the development of a sustainable marine economy in the Region, ensures the sustainable use of the Region's resources to support the long-term viability of marine sectors, can protect marine assets in the Region maintaining the potential to use them in future, can remove or avoid barriers to new marine enterprise opportunities (e.g. if it enables development(s) activities to go ahead where it was previously identified that the impact of cumulative impacts was too great). This can lead to safeguarding and/or creating jobs that support the development of a sustainable marine economy. This objective may also lead to additional work required by businesses to ensure that they are not causing cumulative effects and also to consider mitigation.
Society	?			The impact is unclear, but the objective may contribute to the SA objectives for society if it facilitates sustainable development which can contribute to the objectives and would therefore be positive, or the impact could be neutral. This is dependent on the type of cumulative impact which may be mitigated.

Policy SEC 1: Proposals for development and/or use should demonstrate that they have considered:

a) Any adverse impacts on the efficient and safe movement or navigation of vessels around the Region, to and from strategic freight hubs, ports, harbours, marinas, moorings and anchorages, including ferry operations are avoided or appropriately mitigated;

b) demonstrating operational and/or technical mitigation where a proposals' benefits may outweigh navigational interference;

c) the cumulative impacts of the proposal, both within and between sectors where possible;

d) alignment with any future sectoral spatial management plans developed by the Scottish Government, the Scottish Environment Protection Agency, Planning Authorities and/or the Clyde Marine Planning Partnership for the relevant sector;

e) potential synergies and partnerships with other sectors;

f) avoiding, minimising or mitigating any negative impact on other marine users; and

g) **avoiding any unacceptable burdens on existing infrastructure and services that cannot be resolved.**

SEA topics	Impact	Nature of impact	Mitigation & monitoring	Explanatory text
Biodiversity, flora and fauna	0 +	P/L	No mitigation is required as impacts are identified as neutral.	This policy is broad and could apply to developments and activities related to any sector and/or activity. There is potential for any activity to have a negative impact on these SEA Topics. Generally speaking, these could include: disruption to, displacement or loss of marine and coastal species, damage to or loss of habitats from dredging, anchoring or piling, water pollution from increased siltation, localised air pollution from increased vessel movements, etc. The SA-SEA assumes that as this policy exists within the context of the NMP, the policies within the General Policies chapter of the CRMP and existing licensing and consenting processes, any negative impacts will be mitigated by these policies and the impact is neutral. Outside the specific SEA objectives used for this assessment, the policy is positive in the sense that it promotes a wider consideration of various processes and factors, facilitating awareness of the wider environment and the impacts developments and activities can have on communities; such as cumulative impacts
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+ ?			The policy is positive for marine enterprises as it specifically states that any negative impact on other marine users must be mitigated and an unacceptable burden on infrastructure that cannot be resolved, which may create conflict, is not created. It also promotes the shared use of infrastructure and seeks to prevent adverse impacts on the movement of shipping, ports, harbours and ferries. Therefore, the policy seeks to support the development of a sustainable marine economy across a range of sectors and business sizes, and in the process safeguarding and/or creating jobs that support the development of a sustainable marine economy. The policy specifies that development(s) and activities do not create an unacceptable burden on existing infrastructure and (a marine asset), maintaining the potential to utilise them in the future. The policy may introduce barriers to new marine enterprise opportunities, but this is unclear. Overall, the policy promotes shared use of the marine environment and considers other users, which is positive.

Policy SEC 1: Proposals for development and/or use should demonstrate that they have considered:

a) Any adverse impacts on the efficient and safe movement or navigation of vessels around the Region, to and from strategic freight hubs, ports, harbours, marinas, moorings and anchorages, including ferry operations are avoided or appropriately mitigated;

b) demonstrating operational and/or technical mitigation where a proposals' benefits may outweigh navigational interference;

c) the cumulative impacts of the proposal, both within and between sectors where possible;

d) alignment with any future sectoral spatial management plans developed by the Scottish Government, the Scottish Environment Protection Agency, Planning Authorities and/or the Clyde Marine Planning Partnership for the relevant sector;

e) potential synergies and partnerships with other sectors;

f) avoiding, minimising or mitigating any negative impact on other marine users; and

g) **avoiding any unacceptable burdens on existing infrastructure and services that cannot be resolved.**

SEA topics	Impact	Nature of impact	Mitigation & monitoring	Explanatory text
Society	+ 0			The policy is positive as it considers the overall connectivity of the Region, supporting maintenance or improvement of accessibility and connectivity of coastal and island communities and access to coastal and marine resource for tourism and recreation and maintaining or improving the experience of recreational users of the marine and coastal environment, both in terms of access and quality of experience. The policy promotes well planned development(s) and activities that are considerate of other users of the marine and coastal environment and so can have a positive impact on communities' sense of place. No impact is identified on supporting a reduction in the magnitude of poverty and social exclusion and promote equality for all communities'.

Policy SEC 2: Proposals for development and/or use are encouraged where they:

a) provide important supply chain services for marine sectors,
b) promote any opportunities for shared use of infrastructure and/or marine spatial area and collaboration between and within sectors,
c) improve connectivity around the Clyde Marine Region, for example through multi-modal journey planning and active travel, taking into account different types of activity as well as different types of transport and links to other marine regions, or
d) provide social, health & wellbeing and economic benefits to local communities and/or more widely, for example through the regeneration of coastal areas, particularly brownfield sites, and/or the diversification of the rural marine economy.

SEA topics	Impact	Nature of impact	Mitigation & monitoring	Explanatory text
Biodiversity, flora and fauna	0		No mitigation is required as impacts are identified as neutral.	This policy is broad and could apply to developments and activities related to any sector and/or activity. There is potential for any activity to have a negative impact on these SEA Topics. Generally speaking, these could include: disruption to, displacement or loss of marine and coastal species, damage to or loss of habitats from dredging, anchoring or piling, water pollution from increased siltation, localised air pollution from increased vessel movements, etc. The SA-
Population and human health				

Policy SEC 2: Proposals for development and/or use are encouraged where they:

- **a) provide important supply chain services for marine sectors,**
- **b) promote any opportunities for shared use of infrastructure and/or marine spatial area and collaboration between and within sectors,**
- **c) improve connectivity around the Clyde Marine Region, for example through multi-modal journey planning and active travel, taking into account different types of activity as well as different types of transport and links to other marine regions, or**
- **d) provide social, health & wellbeing and economic benefits to local communities and/or more widely, for example through the regeneration of coastal areas, particularly brownfield sites, and/or the diversification of the rural marine economy.**

SEA topics	Impact	Nature of impact	Mitigation & monitoring	Explanatory text
Sediments, marine geology and coastal processes				SEA assumes that as this policy exists within the context of the NMP, the policies within the General Policies chapter of the CRMP and existing licensing and consenting processes, any negative impacts will be mitigated by these policies and the impact is neutral. Outside the specific SEA objectives used for this assessment, the policy is positive in the sense that it promotes a wider consideration of various processes and factors, facilitating awareness of the wider environment and the impacts developments and activities can have on communities.
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+			Where the policy is applied, it is positive for the marine economy. Measures a)-c) can all support more efficient operations for businesses (e.g. improved supply chains, shared infrastructure, improved connectivity), and contribute to the development of a sustainable marine economy and ensure the sustainable use of the Region's resources (shared infrastructure requires less new infrastructure to be built). These measures can also remove barriers to new marine enterprises and safeguard jobs that support the development of a sustainable marine economy. As the measures within the policy are encouraged, there are no negative impacts.
Society	+ 0			Where the policy is applied it is positive as it broadens consideration of the impact developments and activities can have and requires developments to demonstrate that they provide social, health and wellbeing and economic benefits to local communities and/or more widely. This will have a positive impact on maintaining or improving social, health and wellbeing and economic factors for local communities and can in turn have a positive impact on supporting a reduction in the magnitude of poverty, social exclusion and promoting equalities for all communities. This policy also contributes to a community's sense of place, including protection of and access to marine-related heritage, and can improve the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience. These factors can also contribute to promoting equality for all communities. Measure c) supports maintaining or improving accessibility and connectivity of coastal and island communities.

Recommendation rSEC 1: Organisations and marine users should share data, which is not commercially sensitive, related to their activities in the marine and coastal environment to central databases and support open data initiatives to facilitate partnership working and increase knowledge of the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L		As for Objective SEC 4
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+	P/L		As for Objective SEC 4
Society				

Recommendation rSEC 2: Organisations should communicate with other relevant marine users where possible when they are planning to undertake works, including emergency works, in the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0			No impact is identified on any of these SEA topics, as the recommendation is focussed on communication between sectors and other marine users.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				

Recommendation rSEC 2: Organisations should communicate with other relevant marine users where possible when they are planning to undertake works, including emergency works, in the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Landscape/seascape				
SA topics				
Marine economy	+ 0	P/L		There may be some additional resources required to communicate with other relevant marine users within the Region, but overall this could improve outcomes from the works if it supports a reduction in conflict and other users are aided by having advance notice. No other impact is identified.
Society	+ 0	P/L		Where works may impact on accessibility or connectivity of coastal and island communities and where it can impact on the experience of recreational users this recommendation can have a positive impact. No other impact is identified.

Recommendation rSEC 3: Efforts should be made by public authorities to work with sectoral interests and infrastructure owners to ensure that infrastructure is in place at ports and harbours, piers and slipways to support future sectoral requirements, including onward links to transport networks.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0			As for Objective SEC 1.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+ 0	P/L		There may be some additional resources required to communicate with other relevant marine users within the Region, but overall this could improve outcomes from the works if it supports a reduction in conflict and other users are aided by having advance notice. No other impact is identified.
Society	+ 0	P/L		Where works may impact on accessibility or connectivity of coastal and island communities and where it can impact on the experience of recreational users this recommendation can have a positive impact.

Recommendation rSEC 3: Efforts should be made by public authorities to work with sectoral interests and infrastructure owners to ensure that infrastructure is in place at ports and harbours, piers and slipways to support future sectoral requirements, including onward links to transport networks.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				No other impact is identified.

Sea Fisheries

Objective FISH 1: A sustainable, diverse and resilient marine ecosystem which enables a wide range of long-term environmentally sustainable fishing opportunities in the Clyde Marine Region, supplying both local and other markets.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	++	P/L	No mitigation is required as impacts are identified as positive.	The objective is positive in the long term and will conserve and enhance the integrity of marine ecosystems, particularly seabed habitats and abundance/diversity indicators for fish stock profiles, their interactions and the wider benefits they provide to the marine and coastal environment. The objective prevents damage to important biological sites and protected species, safeguarding the benefits they provide. The objective also contributes to ensuring the achievement of GEnvS across several Marine Strategy Regulations (2010) descriptors.
Population and human health	+	P/L		The objective is positive in the long term for the conservation and enhancement of marine ecosystems and biodiversity, and ensures that these can continue to support human health and wellbeing in the future.
Sediments, marine geology and coastal processes	+ 0	P/L		The objective is positive as it supports sustainable, diverse and resilient ecosystems. Methods which deliver a local, sustainable fishing industry can also provide benefits for seabed habitats and the overall integrity of the seabed. No impact is identified on exacerbating coastal erosion or on the capacity of the natural environment to cope with flooding.
Water	0			No impact is identified.
Air				
Climatic factors	+	P/L		The objective is positive for climate change mitigation, as generating opportunities to supply local markets can reduce greenhouse gas emissions. No impact is identified on adaptation. A diverse and resilient ecosystem can support and strengthen the natural capacity of systems to adapt to climate change impacts.
Material assets	0			No impact is identified.
Cultural heritage	+	P/L		A revival of a local, sustainable fishing industry can maintain and improve some local communities' links to cultural heritage relating to fisheries, where the industry was historically larger/more active.
Landscape/seascape	0			No impact is identified.
SA topics				
Marine economy	- +	S/T (only for parts of the sector) P/L		Stock assessments for Norway lobster show that the current amount being fished is appropriate to ensure sustainable future catches. Brown crab, velvet crab and European lobster are currently fished close to or above FMSY (fishing at Maximum Sustainable Yield) in the Clyde and more data is needed to assess the state of king scallop stocks. The objective may have a negative effect in the short term for these fisheries, as there may be a need for them to reduce their fishing effort to ensure sustainable fishing opportunities. This could also apply to future fisheries harvested in the Region.

Objective FISH 1: A sustainable, diverse and resilient marine ecosystem which enables a wide range of long-term environmentally sustainable fishing opportunities in the Clyde Marine Region, supplying both local and other markets.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				The objective is positive in the long term for fisheries (and potentially other enterprises, including those related to sea angling, due to wider ecosystem benefits that may come about as a result of this policy) as it supports the sustainability of the fishing industry. The objective can also safeguard and/or create jobs that support the development of a sustainable marine economy across new or existing sectors and that support/provide benefits to coastal communities with the Clyde Marine Region.
Society	+ - 0	P/L, S/T (only for parts of the sector)		The objective is positive as it supports the fishing industry into the future and therefore the local communities which rely on it. Supporting the fishing industry can have a positive impact on society, by improving a community's sense of place; this in turn can indirectly result in positive impacts to tourism in such areas. Promoting opportunities to supply local and other markets can develop people's awareness of the resources and benefits available from the local marine environment, and this factor can also improve a sense of place and provide benefits to tourism. The objective can help to support a reduction in poverty and social exclusion in rural areas where livelihood options can be limited. There are likely to be some short-term negative impacts as noted above (under marine economy) for some fisheries. The objective may maintain or improve the experiences of recreational users of the marine and coastal environment, particularly recreational anglers, in terms of quality of experience. No impact is identified on the maintaining or improving accessibility and connectivity of coastal and island communities.

Objective FISH 2: Fisheries operate and are managed to achieve economic, social and employment benefits and contribute to the availability of food supplies.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	++	P/L	No mitigation is required as impacts are identified as positive.	The objective is positive in the long term and will conserve and enhance the integrity of marine ecosystems including fish populations, particularly seabed habitats and abundance/diversity indicators for fish stock profiles, their interactions and the wider benefits they provide to the marine and coastal environment.
Population and human health	+	P/L		The objective is positive in the long term for the conservation and enhancement of marine ecosystems and biodiversity, and ensures that these can continue to support human health and wellbeing in the future.
Sediments, marine geology and coastal processes	+ 0	P/L		The objective is positive as it supports sustainable, diverse and resilient ecosystems. Methods which deliver a local, sustainable fishing industry can also provide benefits for seabed habitats and the overall integrity of the seabed. No impact is identified on exacerbating coastal erosion or on the capacity of the natural environment to cope with flooding.
Water	0			No impact is identified.
Air				
Climatic factors	+	P/L		The objective is positive for climate change mitigation, as generating opportunities to contribute to the availability of food supplies can reduce greenhouse gas emissions. No impact is identified on adaptation. Managed fisheries can support and strengthen the natural capacity of systems to adapt to climate change impacts.
Material assets	0			No impact is identified.

Objective FISH 2: Fisheries operate and are managed to achieve economic, social and employment benefits and contribute to the availability of food supplies.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Cultural heritage	+	P/L		A revival of a local, sustainable fishing industry can maintain and improve some local communities' links to cultural heritage relating to fisheries, where the industry was historically larger/more active.
Landscape/seascape	0			No impact is identified.
SA topics				
Marine economy	- +	S/T (only for parts of the sector) P/L		Stock assessments for Norway lobster show that the current amount being fished is appropriate to ensure sustainable future catches. Brown crab, velvet crab and European lobster are currently fished close to or above FMSY (fishing at Maximum Sustainable Yield) in the Clyde and more data is needed to assess the state of king scallop stocks. The objective may have a negative effect in the short term for these fisheries, as there may be a need for them to reduce their fishing effort to ensure sustainable fishing opportunities. This could also apply to future fisheries harvested in the Region. The objective is positive in the long term for fisheries (and potentially other enterprises, including those related to sea angling, due to wider ecosystem benefits that may come about as a result of this policy) as it supports the sustainability of the fishing industry. The objective can also safeguard and/or create jobs that support the development of a sustainable marine economy across new or existing sectors and that support/provide benefits to coastal communities with the Clyde Marine Region.
Society	+ - 0	P/L, S/T (only for parts of the sector)		The objective is positive as it supports the fishing industry into the future and therefore the local communities which rely on it. Supporting the fishing industry can have a positive impact on society, by improving a community's sense of place; this in turn can indirectly result in positive impacts to tourism in such areas. Promoting opportunities to supply local and other markets can develop people's awareness of the resources and benefits available from the local marine environment, and this factor can also improve a sense of place and provide benefits to tourism. The objective can help to support a reduction in poverty and social exclusion in rural areas where livelihood options can be limited. There are likely to be some short-term negative impacts as noted above (under marine economy) for some fisheries. The objective may maintain or improve the experiences of recreational users of the marine and coastal environment, particularly recreational anglers, in terms of quality of experience. No impact is identified on the maintaining or improving accessibility and connectivity of coastal and island communities.

Objective FISH 3: All fisheries in the Clyde Marine Region are managed to restore and maintain populations of harvested species above biomass levels capable of producing Maximum Sustainable Yield, based on the best available scientific advice. Fisheries operate at an appropriate level with respect to stock and environmental considerations and do not overexploit stocks.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	++	P/L	No mitigation is required as impacts	The objective is positive in the long term and will conserve and enhance the integrity of marine ecosystems, particularly seabed habitats and abundance/diversity indicators for fish stock profiles, their interactions and the wider benefits they provide to the marine and coastal environment. Sustainable harvesting of fish stocks would also support

Objective FISH 3: All fisheries in the Clyde Marine Region are managed to restore and maintain populations of harvested species above biomass levels capable of producing Maximum Sustainable Yield, based on the best available scientific advice. Fisheries operate at an appropriate level with respect to stock and environmental considerations and do not overexploit stocks.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
			are identified as positive.	maintenance of existing marine ecosystems. The objective prevents damage to important biological sites and protected species, safeguarding the benefits they provide. The objective also contributes to ensuring the achievement of GEnvS across several Marine Strategy Regulations (2010) descriptors.
Population and human health	+	P/L		The objective is positive in the long term for the conservation and enhancement of marine ecosystems and biodiversity, and ensures that these can continue to support human health and wellbeing in the future.
Sediments, marine geology and coastal processes	+ 0	P/L		The objective is positive as it can facilitate to measures which ensure that ecosystems and their associated benefits are maintained and enhanced through sustainable management of sediments, seabed and the natural processes supported by these features. Methods which deliver a local, sustainable fishing industry can also provide benefits for seabed habitats and the overall integrity of the seabed. No impact is identified on preventing damage to important geological sites including the benefits they provide, exacerbating coastal erosion or on the capacity of the natural environment to cope with flooding.
Water Air	0			No impact is identified.
Climatic factors	+ 0	P/L		The objective is positive for climate change mitigation, as generating opportunities to supply local markets can reduce greenhouse gas emissions and contribute to climate change mitigation. The objective can also facilitate measures which maintain and enhance populations of harvested species; this can increase their resilience to climate change impacts and contribute to the Region's adaptation activity.
Material assets	0			No impact is identified.
Cultural heritage	+	P/L		A revival of a local, sustainable fishing industry can maintain and improve some local communities' links to cultural heritage relating to fisheries, where the industry was historically larger/more active.
Landscape/seascape	0			No impact is identified.
SA topics				
Marine economy	+ -	P/L, S/T (only for parts of the sector)		Stock assessments for Norway lobster show that the current amount being fished is appropriate to ensure sustainable future catches. Brown crab, velvet crab and European lobster are currently fished close to or above FMSY (fishing at Maximum Sustainable Yield) in the Clyde and more data is needed to assess the state of king scallop stocks. The objective may have a negative effect in the short term for these fisheries, as there may be a need for them to reduce their fishing effort to ensure sustainable fishing opportunities. This could also apply to future fisheries harvested in the Region. The objective is positive in the long term for fisheries (and potentially other enterprises, including those related to sea angling, due to wider ecosystem benefits that may come about as a result of this policy) as it supports the sustainability of the fishing industry. The objective can also safeguard and/or create jobs that support the development of a sustainable marine economy across new or existing sectors and that support/provide benefits to coastal communities with the Clyde Marine Region.
Society	+ -	P/L,		The objective is positive as it supports the fishing industry into the future and therefore the local communities which rely on it. Supporting the fishing industry can have a positive impact on society, by improving a community's sense of

Objective FISH 3: All fisheries in the Clyde Marine Region are managed to restore and maintain populations of harvested species above biomass levels capable of producing Maximum Sustainable Yield, based on the best available scientific advice. Fisheries operate at an appropriate level with respect to stock and environmental considerations and do not overexploit stocks.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
		S/T (only for parts of the sector)		place; this in turn can indirectly result in positive impacts to tourism in such areas. Promoting opportunities to supply local and other markets can develop people's awareness of the resources and benefits available from the local marine environment, and this factor can also improve a sense of place and provide benefits to tourism. The objective can help to support a reduction in poverty and social exclusion in rural areas where livelihood options can be limited. There are likely to be some short-term negative impacts as noted above (under marine economy) for some fisheries. The objective may maintain or improve the experiences of recreational users of the marine and coastal environment, particularly recreational anglers, in terms of quality of experience. No impact is identified on maintaining or improving accessibility and connectivity of coastal and island communities.

Objective FISH 4: Fisheries adapt to changes in species distribution and abundance due to climate change in the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0		No mitigation is required as impacts are identified as positive.	Whilst fisheries may target a new species as a result of this policy, it is assumed that this will be undertaken in line with NMP and FISH 1, such that this will be done in a sustainable way, supporting biodiversity, flora and fauna.
Population and human health	+	P/L		This objective may result in positive effects on population and human health where it leads to produce being supplied to local markets, contributing to overall nutrition. These markets may also be more resilient to the impacts of climate change as they are local and so ensure continuity of supply (assuming the fisheries themselves are not disrupted by the impact of climate change effects).
Sediments, marine geology and coastal processes	0			No impact is identified.
Water				
Air				
Climatic factors	+ 0			The objective ensures that adaptation to climate change impacts is considered in activities. No impact is identified on mitigation or in ensuring that adaptation actions are taken into account to support the natural adaptive capacity of systems in order to sustain the benefits of natural processes and resources.
Material assets	0			No impact is identified.
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+			The objective is positive for the fishing industry as it is seeking to ensure that the sector is resilient to the impacts of climate change which could cause fish stocks to move and change. Consideration and adaptation to this in advance of major change to the fishery will enable the sector to better withstand species distribution and abundance changes that may arise as a

Objective FISH 4: Fisheries adapt to changes in species distribution and abundance due to climate change in the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				result of climate change impacts. The objective supports the development of a sustainable marine economy in the Region for the sector, ensures that sustainable use of the Region's and it can safeguard jobs that support the development of a sustainable marine economy across the sector. No impact is identified on protecting marine assets or on removing barriers to marine enterprise opportunities.
Society	+ 0	Se		There may be an indirect positive impact on supporting a reduction in the magnitude of poverty. No other impacts are identified.

Objective FISH 5: Bycatch of non-target species in the Clyde Marine Region is avoided or reduced.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+			This objective is positive for non-target species caught as bycatch as it will ultimately reduce the impact of fishing on them. This can contribute to the conservation and enhancement of ecosystems, their interactions and the benefits they provide, it can prevent damage to protected species including the benefits they provide and can contribute to achieving Good Environmental Status under Descriptor 1. Biodiversity is maintained; Descriptor 3. The population of commercial fish species is healthy; and Descriptor 4. Elements of food webs ensure long-term abundance and reproduction.
Population and human health				Due to the positive impact on biodiversity, flora and fauna, this supports population, human health and wellbeing.
Sediments, marine geology and coastal processes	0			No impact is identified.
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+ -			The objective is positive in the long-term as it drives a reduction in the removal of non-target species, which supports the development of a sustainable marine economy for the sector, it ensures that sustainable use of the Region's resources to support the long term viability of this sector, and others such as wildlife tourism and recreation. This objective is also in line with new regulations related to the discard ban.

Objective FISH 5: Bycatch of non-target species in the Clyde Marine Region is avoided or reduced.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				There may be associated costs with adopting new gear or other technology which may add to operational costs. It is not clear whether this will create barriers to new marine enterprise opportunities such as new entrants joining the sector or it will have an impact on creating new jobs.
Society	0 +			No impact is identified from this objectives ability to maintain or improve accessibility and connectivity of coastal communities, promote access to coastal and marine resources for tourism and recreation. The positive impact of the objective is not deemed strong enough to support a reduction in the magnitude of poverty and social exclusion or to promote equality for all communities. It may contribute to maintaining or improving the experiences of recreational users of the marine and coastal environment in terms of quality of experience if the objective leads to a boost in biodiversity which supports wildlife tourism and recreation opportunities such as angling.

Objective FISH 6: Fisheries spatial management protects and enhances areas of importance to fisheries activities, including fish habitats such as nursery areas and spawning grounds.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive.	This objective is positive as spatial management can contribute to more sustainable use and protection of fisheries resources, including habitats relating to lifecycle stages of commercially important fish and shellfish species. This can also contribute to the conservation and enhancement of the integrity of ecosystems, their interactions and the benefits they provide. It can prevent damage to important biological sites and protected species, including the benefits they provide. The objective can also support the achievement of GEnvS under the Marine Strategy Regulations (2010) for a number of descriptors – 1, 3, 4[58], and 6. This assessment assumes that the policy will deliver an improvement in the marine ecosystem.
Population and human health	+	P/L		This objective is positive as it supports healthy ecosystems with high biodiversity and geodiversity which are an essential part of supporting human health and wellbeing.
Sediments, marine geology and coastal processes	+	P/L		The objective is positive as improving spatial management can help fisheries target activities more directly, thereby reducing the impact of fisheries on sensitive areas of the seabed and improving the conservation and enhancement of seabed's integrity. No impact is identified on the other objectives under this SEA Topic.
Water	0			No impact is identified.
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+ -	P/L S/T		Spatial management of fisheries can support healthy and resilient ecosystems (as indicated above) and so support the development of a sustainable marine economy, for the fishing sector, but also for other sectors through wider ecosystem

[58] Descriptor 3: that population of commercial fish species is healthy. Descriptor 4: Elements of food webs ensure long-term abundance and reproduction

Objective FISH 6: Fisheries spatial management protects and enhances areas of importance to fisheries activities, including fish habitats such as nursery areas and spawning grounds.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				benefits that can result from this measure. It ensures the sustainable use of the Region's resources to support the long-term viability of marine sectors. This objective may be able to safeguard jobs that support the development of a sustainable marine economy across new or existing sectors and that support/provide benefits to coastal communities within the CMR. It is not clear what impact this policy will have on removing or avoiding barriers to new marine enterprise opportunities. There may be a negative impact to the fisheries industry in the short-term related to the cost of implementing tracking technology on vessels.
Society	+ 0	P/L		This objective can have a positive impact. Spatial management can maintain or improve the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience. This objective can have an impact on contributing to a community's sense of place, including protection of and access to marine-related heritage – the impacts noted under marine economy above will also impact on coastal communities. No impact is identified on maintaining or improving the accessibility and connectivity of coastal and island communities, promoting access to coastal and marine resources for tourism and recreation. This objective can support a reduction in the magnitude of poverty and social exclusion or on promoting equality.

Objective FISH 7: Knowledge and data on fish stocks and areas of importance to fisheries activities are improved within the Clyde Marine Region to inform sustainable fisheries and to ensure that interactions with other marine users are well managed.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+		No mitigation is required as impacts are identified as positive.	This objective is positive as improved knowledge can contribute to more sustainable use and protection of fisheries resources, including habitats relating to lifecycle stages of commercially important fish and shellfish species. This can also contribute to the conservation and enhancement of the integrity of ecosystems, their interactions and the benefits they provide. It can prevent damage to important biological sites and protected species, including the benefits they provide. The objective can also support the achievement of GEnvS under the Marine Strategy Regulations (2010) for a number of descriptors – 1, 3, 4[59], and 6. This assessment assumes that the Objective will deliver an improvement in the marine ecosystem.
Population and human health				
Sediments, marine geology and coastal processes				
Water	0			No impact identified.
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				

[59] Descriptor 3: that population of commercial fish species is healthy. Descriptor 4: Elements of food webs ensure long-term abundance and reproduction

Objective FISH 7: Knowledge and data on fish stocks and areas of importance to fisheries activities are improved within the Clyde Marine Region to inform sustainable fisheries and to ensure that interactions with other marine users are well managed.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Marine economy	+			The objective is positive for the fishing sector. Improved knowledge and data on fish stocks and areas of importance to fishing activities will support the sustainable development of the fishing sector in the Region and ensure that sustainable use of the Region's resources to support its long-term viability. As improved knowledge and data improves and contributes to sustainable fisheries management measures, this could remove barriers to new marine enterprise opportunities and support new entrants to the sector. Furthermore, it could also safeguard and create jobs that support the development of a sustainable marine economy across the fishing sector, that will support and provide benefits to coastal communities within the Region. The objective is also positive for other sectors, where it can contribute to improved interactions with other users and there may be indirect benefits resulting from enhancement to the environment, that this objective promotes, which can benefit other sectors.
Society	?/+ + 0	Potential positive Indirect		There may be some positive to society in terms of supporting a reduction in the magnitude of poverty and social exclusion and promote equality for all communities, where this objective can support the growth of the fishing sector. This can also be positive in terms of contributing to a communities' sense of place, as it supports continuation of fishing activity, which is part of marine related heritage. There may be an indirect positive impact on improvement to people's recreational experiences of the marine and coastal environment. No impact is identified on maintaining or improving accessibility and connectivity of coastal and island communities or on promoting access to coastal and marine resources to tourism and recreation.

Policy FISH 1: Proposals for development and/or use should avoid, minimise and/or appropriately mitigate significant adverse impacts: **a) on commercial fishing opportunities, taking into account seasonality and the year-round operation of the affected fishery; and** **b) on nursery, spawning and feeding areas for commercially fished species, and associated habitats and species.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive.	This policy is positive for commercially harvested fish populations as it supports a sustainable management of the fisheries through supporting measures which enable population levels to support producing Maximum Sustainable Yield. These measures can have knock-on benefits for other species and the wider ecosystem, for instance through supporting the food-web interactions. Mitigation hierarchy measures introduced to protect important areas for fisheries and to protect seabed habitats and species, which this policy supports, also contribute to conserving and enhancing the integrity of ecosystems, their interactions and the benefits they provide. Furthermore, it can prevent damage to important biological sites and protected species, including the benefits they provide. This policy can also support achieving GEnvS and GEcS under the Marine Strategy Regulations (2010) (in particular descriptors 3, 4 & 6) and the Water Environment and Water Services (Scotland) Act 2003.

Policy FISH 1: Proposals for development and/or use should avoid, minimise and/or appropriately mitigate significant adverse impacts: **a) on commercial fishing opportunities, taking into account seasonality and the year-round operation of the affected fishery; and** **b) on nursery, spawning and feeding areas for commercially fished species, and associated habitats and species.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Population and human health	+			The impact of this policy is positive as it supports measures which ensure healthy ecosystems and that these can continue to support human health and wellbeing.
Sediments, marine geology and coastal processes				This policy contains a measure focussed on protecting associated habitats which can lead to further spatial management as appropriate. This is positive as it supports sustainable management of geodiversity which can ensure ecosystems and their associated benefits are maintained and enhanced. No impact is identified on the other SEA objectives for this topic.
Water	0			No impact is identified.
Air				
Climatic factors	+	P/L		The policy is positive as an improved understanding of fisheries and habitats can lead to a better understanding of climate change impacts on fisheries, thus improving adaptation activities. No impact is identified on mitigation.
Material assets	0			No impact is identified.
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+	P/L		This policy is positive – collaborative working with developers, as supported here, can provide a range of benefits such as an improvement in sharing information and in working relationships which can deliver progress faster and build better working relationships between users of the marine environment. In the long term, this policy seeks to further knowledge through appropriate management to inform the sustainable management of the ecosystem, including its species and habitats that the fisheries industry relies on. This can have a positive impact on the long-term viability of the sector and can deliver sustainable use of the Region's resources. This in turn can safeguard or create jobs in this sector, and potentially (through wider ecosystem benefits) support new or existing businesses (e.g. supply chain) that support the sustainable development of the marine economy, reduce barriers to new entrants and support/provide benefits to coastal communities within the region.
Society	+	P/L		This policy is positive as it can support the fishing industry and therefore the coastal communities which rely on this sector. The policy can support a reduction in the magnitude of poverty and social exclusion and will promote equality for all communities. The policy can also contribute to communities' sense of place, including the protection of and access to marine-related heritage. No impact is identified on the other objectives under this topic.

Policy FISH 2: Proposals for development and/or use should consider, where appropriate, the potential for significant adverse impacts on the social, cultural and economic importance of fishing, in particular to fragile communities.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive.	The policy is positive for the objectives for these topics. The measures support better knowledge and understanding of the impacts of human activities on the importance of fishing and the species on which it depends (ecosystem-based approach). This in itself is beneficial for these SEA topics, however the policy encourages the measures to be taken forward to enable fisheries management to contribute to the protection and enhancement of marine ecosystems, which is also beneficial. In considering a wide range of factors through the measures, the policy can have a positive impact on a range of ecosystem services derived from the marine and coastal ecosystem; including, food production, carbon stores, wildlife habitat and shelter, and human health and wellbeing provided by the sea, healthy functioning ecosystems and non-use values derived from protection measures.
Population and human health				
Sediments, marine geology and coastal processes				
Water	0			No impact is identified.
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+ 0	P/L		The impact is positive for the marine economy both directly for the fisheries sector and more widely for other industries that will also derive benefits from the improved health and functioning of the marine environment, such as wildlife tourism and recreational activities. The policy supports sustainable development and use of the Region's resources. In the long-term improvements derived through improved fisheries management could remove barriers to new marine opportunities and can safeguard and/or create jobs that support the development of a sustainable marine economy (e.g. if there is diversity in the types of fish stocks that can be harvested or if there are increased stocks). No impact is identified on protecting marine assets. No negative impacts are identified as the policy supports these measures and they are not a requirement.
Society	0 +	Secondary		No impact is identified on maintaining or improving accessibility and connectivity of coastal and island communities, on promoting access to coastal and marine resource for tourism and recreation or on maintaining or improving the experiences of recreational users of the marine and coastal environment. In the support the outcomes can generate for the fishing sector, this policy may be able to provide a minor reduction in the magnitude of poverty and contribute to a communities' sense of place, including protection of and access to marine related heritage.

Policy FISH 3: The appropriate fishing agencies, organisation and/or fishers that use an area that could be affected by a proposed development should be consulted at an early stage in the site-selection, design and planning process.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**

Policy FISH 3: The appropriate fishing agencies, organisation and/or fishers that use an area that could be affected by a proposed development should be consulted at an early stage in the site-selection, design and planning process.				
Biodiversity, flora and fauna	0		No mitigation is required as impacts are identified as positive.	No impact is identified.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+ 0	P/L		The policy is positive as it can reduce conflict between fishing and other sectors which is in support of a sustainable marine economy in the Region across a range of sectors. No impact is identified on the use of the Region's resources to support the long-term viability of marine assets, on protecting marine assets, on removing or avoiding barriers to new marine enterprise and on safeguarding and/or creating jobs that support the development of a sustainable marine economy.
Society	+ 0	Se		There may be indirect positive impacts on improving the experiences of users of the marine environment through increased communication, collaboration and co-ordination.

Recommendation rFISH 1: Commercial fisheries in the Clyde Marine Region should aim to ensure that:

a) stock assessments are available for all harvested species, appropriate management measures are in place to work towards a situation where populations of all harvested species are at levels which can produce Maximum Sustainable Yield, particularly through reduced effort/catch of crab and lobster fisheries, and Maximum Sustainable Yield ranges are used where appropriate;

b) appropriate spatial and other management measures are in place to protect the most important areas for fisheries and to protect those seabed habitats and species which are sensitive to fishing activity; and

c) improving technology and fishing practices which will lead to Fully Documented Fisheries with a reduction in bycatch of non-target species, particularly sharks, skates and rays (elasmobranchs).

SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are	This recommendation is positive for commercially harvested fish populations as it supports a sustainable management of the fisheries through firstly ensuring stock assessments are available for all commercial target species (this can help ensure they are not overfished) and supporting measures which enable population levels to support producing Maximum Sustainable Yield. These measures can have knock-on benefits for other species and the wider ecosystem, for instance

Recommendation rFISH 1: Commercial fisheries in the Clyde Marine Region should aim to ensure that: **a) stock assessments are available for all harvested species, appropriate management measures are in place to work towards a situation where populations of all harvested species are at levels which can produce Maximum Sustainable Yield, particularly through reduced effort/catch of crab and lobster fisheries, and Maximum Sustainable Yield ranges are used where appropriate;** **b) appropriate spatial and other management measures are in place to protect the most important areas for fisheries and to protect those seabed habitats and species which are sensitive to fishing activity; and** **c) improving technology and fishing practices which will lead to Fully Documented Fisheries with a reduction in bycatch of non-target species, particularly sharks, skates and rays (elasmobranchs).**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
			identified as positive.	through supporting the food-web interactions. Spatial management measures introduced to protect important areas for fisheries and to protect seabed habitats and species, which this recommendation supports, also contribute to conserving and enhancing the integrity of ecosystems, their interactions and the benefits they provide. Furthermore, it can prevent damage to important biological sites and protected species, including the benefits they provide. This recommendation can also support achieving GEnvS and GEcS under the Marine Strategy Regulations (2010) (particular descriptor 3, 4 & 6) and the Water Environment and Water Services (Scotland) Act 2003. Improving technology used by fisheries, including reducing bycatch, can reduce the impact of the sector on on-target species
Population and human health	+			The impact of this recommendation is positive as it supports measures which ensure healthy ecosystems and that these can continue to support human health and wellbeing.
Sediments, marine geology and coastal processes				This recommendation contains a measure focussed on monitoring seabed habitats which can lead to further spatial management as appropriate. This is positive as it supports sustainable management of geodiversity which can ensure ecosystems and their associated benefits are maintained and enhanced. No impact is identified on the other SEA objectives for this topic.
Water	0			No impact is identified.
Air				
Climatic factors	+	P/L		The recommendation is positive as an improved understanding of fisheries and habitats can lead to a better understanding of climate change impacts on fisheries, thus improving adaptation activities. No impact is identified on mitigation.
Material assets	0			No impact is identified.
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+	P/L		This recommendation is positive – collaborative working, as supported here, can provide a range of benefits such as an improvement in sharing information and in working relationships which can deliver progress faster and build better working relationships between users of the marine environment. In the long term, this recommendation seeks to further knowledge through having stock assessments for all commercial target species and appropriate management to inform the sustainable management of the ecosystem, including its species and habitats that the fisheries industry relies on. This can have a positive impact on the long-term viability of the sector and can deliver sustainable use of the Region's resources. This in turn can safeguard or create jobs in this sector, and potentially (through wider ecosystem benefits)

Recommendation rFISH 1: Commercial fisheries in the Clyde Marine Region should aim to ensure that:

a) stock assessments are available for all harvested species, appropriate management measures are in place to work towards a situation where populations of all harvested species are at levels which can produce Maximum Sustainable Yield, particularly through reduced effort/catch of crab and lobster fisheries, and Maximum Sustainable Yield ranges are used where appropriate;

b) appropriate spatial and other management measures are in place to protect the most important areas for fisheries and to protect those seabed habitats and species which are sensitive to fishing activity; and

c) improving technology and fishing practices which will lead to Fully Documented Fisheries with a reduction in bycatch of non-target species, particularly sharks, skates and rays (elasmobranchs).

SEA topics	Impact	Nature of impact	Mitigation	Explanatory text
				support new or existing businesses (e.g. supply chain) that support the sustainable development of the marine economy, reduce barriers to new entrants and support/provide benefits to coastal communities within the region.
Society	+	P/L		This recommendation is positive as it can support the fishing industry and therefore the coastal communities which rely on this sector. The recommendation can support a reduction in the magnitude of poverty and social exclusion and will promote equality for all communities. The policy can also contribute to communities' sense of place, including the protection of and access to marine-related heritage. No impact is identified on the other objectives under this topic.

Recommendation rFISH 2: Scientific research and practical measures to enable fisheries management to contribute to the protection and enhancement of marine ecosystems are encouraged. This includes, but is not limited to:

a) studies to consider pressures on harvested stocks such as food web interaction and climate change;

b) improved understanding of the habitats and areas that support fisheries including pressure/state relationships and ecosystem role/function; and

c) continued monitoring of seabed habitats and species which are sensitive to fishing activity.

SEA topics	Impact	Nature of impact	Mitigation	Explanatory text
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive.	The recommendation is positive for the objectives for these topics. The measures support better knowledge and understanding of species, their interactions, habitats and the impacts on human activities on species and habitats. This in itself is beneficial for these SEA topics, however the recommendation encourages the measures to be taken forward to enable fisheries management to contribute to the protection and enhancement of marine ecosystems, which is also beneficial. In considering a wide range of factors through the measures, the recommendation can have a positive impact on a range of ecosystem services derived from the marine and coastal ecosystem; including, food production, carbon stores wildlife habitat and shelter, and human health and wellbeing provided by the sea, healthy functioning ecosystems and non-use values derived from protection measures.
Population and human health				
Sediments, marine geology and coastal processes				
Water	0			No impact is identified.
Air				
Climatic factors				
Material assets				
Cultural heritage				

Recommendation rFISH 2: Scientific research and practical measures to enable fisheries management to contribute to the protection and enhancement of marine ecosystems are encouraged. This includes, but is not limited to: **a) studies to consider pressures on harvested stocks such as food web interaction and climate change;** **b) improved understanding of the habitats and areas that support fisheries including pressure/state relationships and ecosystem role/function; and** **c) continued monitoring of seabed habitats and species which are sensitive to fishing activity.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Landscape/seascape				
SA topics				
Marine economy	+ 0	P/L		The impact is positive for the marine economy both directly for the fisheries sector and more widely for other industries that will also derive benefits from the improved health and functioning of the marine environment, such as wildlife tourism and recreational activities. The recommendation supports sustainable development and use of the Region's resources. In the long-term improvements derived through improved fisheries management could remove barriers to new marine opportunities and can safeguard and/or create jobs that support the development of a sustainable marine economy (e.g. if there is diversity in the types of fish stocks that can be harvested or if there are increased stocks). No impact is identified on protecting marine assets. No negative impacts are identified as the policy supports these measure and they are not a requirement.
Society	0 +	Secondary		No impact is identified on maintaining or improving accessibility and connectivity of coastal and island communities, on promoting access to coastal and marine resource for tourism and recreation or on maintaining or improving the experiences of recreational users of the marine and coastal environment. In the support the outcomes can generate for the fishing sector, this recommendation may be able to provide a minor reduction in the magnitude of poverty and contribute to a communities' sense of place, including protection of and access to marine related heritage.

Recommendation rFISH 3: Fishers should follow the Scottish Entanglement Alliance best practice guidelines to reduce the risk of marine animals becoming entangled in fishing gear.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+		No mitigation is required as impacts are identified as positive.	The recommendation is positive as it contributes to reducing the risk of entanglement of marine animals in the Region. This recommendation can prevent damage to protected species including the benefits they provide. This can contribute to the conservation and enhancement of integrity of ecosystems. As the recommendation can deliver a positive impact for marine animals that are at risk of entanglement, this contributes to ensuring healthy ecosystems.
Population and human health				
Sediments, marine geology and coastal processes	0			No impacts are identified.
Water				
Air				
Climatic factors				
Material assets				

Recommendation rFISH 3: Fishers should follow the Scottish Entanglement Alliance best practice guidelines to reduce the risk of marine animals becoming entangled in fishing gear.				
Cultural heritage Landscape/seascape				
SA topics				
Marine economy	+ 0	P/L		The recommendation can support the development of a sustainable marine economy in the Region for the fishing sector. As this is a recommendation and it is not a statutory policy that is required to be followed, People can decide how and when to adopt this recommendation and so there are no negative impacts identified. No impact is identified on ensuring the sustainable use of the Region's resources, protecting marine assets, removing or avoiding barriers to new marine enterprises and safeguarding and/or creating jobs that support the development of a sustainable marine economy across new or existing sectors.
Society	+ 0	Se		There may be an indirect positive impact on maintaining or improving the experiences of recreational users of the marine and coastal environment, in terms of quality of experience related to wildlife tourism. No impact is identified on the other objectives for this topic.

Recommendation rFISH 4: Fishers should follow best practice guidelines in relation to static gear buoy markings in order to reduce the likelihood of adverse interactions with other marine users.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+		No mitigation is required as impacts are identified as positive.	The recommendation is positive as it contributes to reducing the risk of entanglement of marine animals in the Region. This recommendation can prevent damage to protected species including the benefits they provide. This can contribute to the conservation and enhancement of integrity of ecosystems.
Population and human health				As the recommendation can deliver a positive impact for marine animals that are at risk of entanglement, this contributes to ensuring healthy ecosystems.
Sediments, marine geology and coastal processes	0			No impacts are identified.
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+ 0	P/L		The recommendation can support the development of a sustainable marine economy in the Region for the fishing sector. As this is a recommendation and it is not a statutory policy that is required to be followed, People can decide how and when to adopt this recommendation and so there are no negative impacts identified. No impact is identified on ensuring the sustainable use of the Region's resources, protecting marine assets, removing or avoiding barriers to new marine enterprises and safeguarding and/or creating jobs that support the development of a sustainable marine economy across new or existing sectors.

Recommendation rFISH 4: Fishers should follow best practice guidelines in relation to static gear buoy markings in order to reduce the likelihood of adverse interactions with other marine users.				
Society	+ 0	Se		There may be an indirect positive impact on maintaining or improving the experiences of recreational users of the marine and coastal environment, in terms of quality of experience related to wildlife tourism. No impact is identified on the other objectives for this topic.

Aquaculture

Objective AQUA 1: Sustainable development and diversification of the aquaculture sector in appropriate locations within the environmental carrying capacity of the Clyde Marine Region, providing socio-economic benefits to rural areas and islands and supporting the wider supply chain in Scotland.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna Population and human health Sediments, marine geology and coastal processes Water Air Climatic factors Material assets Cultural heritage Landscape/seascape	0		Many of the negative impacts which could arise from aquaculture activities are mitigated by policies within the General Policies chapter of the CRMP which must be adhered to in advance of sectoral policies. Policies from the NMP must also be adhered to and would need to be considered and applied. Existing consenting processes for coastal and marine developments are in place and these are likely to be supported by underlying assessments (e.g. EIA,) which can ensure adverse effects can be avoided. Furthermore, SEPA are the regulating authority for aquaculture and would review any aquaculture proposals as part of the planning process, ensuring they comply with relevant legislation and guidance and have obtained the required consents, such as a Controlled Activities Regulations licence. The CMPP will consider all marine licence applications in the Region against policies in the Plan and provide input to Marine Directorate to aid any licensing decisions.	Growth in aquaculture has the potential to have negative impacts on: biodiversity; flora and fauna; population and human health; marine sediments; the seabed; and on water quality. These can include: a reduction to the biological carrying capacity; damage or loss to the seabed; loss of foraging habitats; smothering of seabed habitats; attraction of piscivorous birds and mammals to fish cages which can lead to culling; increased risk of introduction of non-native and invasive non-native species; interactions between wild and farmed salmon impacting on genetic integrity or increasing the risk of spreading of sea lice; a reduction in water quality through eutrophication; and damage to the seabed through anchoring. Creation or expansion of aquaculture activities can have an adverse visual impact, resulting from the presence of cages and supporting infrastructure, which can have a negative impact on landscapes/seascapes. In addition, aquaculture activities can impact on the loss or damage of historic environment features, including adverse impacts on their setting through anchoring or construction activities. This objective stipulates that development should be sustainable, sited in appropriate locations within the environmental carrying capacity of the region and also promotes a diversification of the sector. These factors, as well as the requirement to consider the general policies of the CRMP and the NMP, incorporate wider a consideration of the SEA topics and so can mitigate a negative impact on them, therefore this objective is considered to have a neutral impact.
SA topics				
Marine economy	+, -	P/L S/T		This objective could be negative for the sector, as there may be related costs as a result of implementing sustainable development principles and limiting operations to the carrying capacity of the Region (posing barriers, on safeguarding and/or creating jobs). However, in the long term, these measures ensure the sustainable use of the Region's resources to support the long-term viability of this and other marine sectors and would therefore safeguard and potentially create aquaculture jobs as part of the development of a sustainable marine economy. No impact is identified on protecting marine assets (such as mineral assets).

Objective AQUA 1: Sustainable development and diversification of the aquaculture sector in appropriate locations within the environmental carrying capacity of the Clyde Marine Region, providing socio-economic benefits to rural areas and islands and supporting the wider supply chain in Scotland.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Society	+, 0	P/L		The objective specifies that sustainable development of the industry should provide socio-economic benefits to rural areas and islands – this is positive for these communities, and can support a reduction of the magnitude of poverty and social exclusion and promote equality for all communities. No impact is identified on the other objectives for this topic.

Objective AQUA 2: Aquaculture development actively contributes to the protection and enhancement of the marine environment in the Clyde Marine Region by undertaking action and/or research & development initiatives which support sustainable development of the sector, including climate change mitigation and adaptation.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+ 0	P/L	No mitigation is required as impacts are identified as positive.	This objective has a positive impact on these topics where research and development initiatives can deliver protection and enhancement to the marine environment. No impact is identified where these activities may not contribute to this.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			No impact is identified.
Climatic factors	+ 0			This objective has a positive impact on these topics where research and development initiatives include climate change mitigation and adaptation. No impact is identified where these activities may not contribute to this.
Material assets	0			No impact is identified.
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+ 0			This objective is positive as research and development, whilst presenting an initial cost to business, can lead to operational benefits and potentially lead to longer terms efficiencies and cost-saving measures. This objective supports the development of a sustainable marine economy for the aquaculture sector and it ensures the sustainable use of the Region's resources to support the long-term viability of marine sectors No impact is identified on the other objectives under this topic.
Society	0			No impact is identified.

FINFISH POLICIES:

Policy AQUA 1: Proposals for finfish farming development should have regard to: **a) the Technical Standard for open net Finfish Aquaculture and any future Technical Standard for open net, semi-closed or closed systems; and** **b) the requirements outlined in the mandatory control measures for the live capture of Scottish wild wrasse for salmon farms and any future fisheries management or legislation regarding cleaner fish.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation measures are identified as the impacts identified are neutral or positive.	This policy is positive for biodiversity, flora and fauna and population and human health as the measures within the policy will contribute to the conservation and enhancement of the integrity of the ecosystems, their interaction and the benefits they provide – both for wild salmon populations and for wrasse populations. The measures drive practices that will reduce the risk of escapees and reduce the risk of sea lice infection into wild populations, which also protects wild salmon populations. Ensuring the health of these species contributes to wider ecosystem health and is positive for human health and wellbeing.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	?			It is not clear what the impact of this policy is on the marine economy, as the measures set out are likely already implemented to a certain extent (as noted above) amongst aquaculture operators and so will present no additional costs. Where these measures are not adopted, this policy may introduce barriers to marine enterprise opportunities and may impact the creation or safeguarding of jobs. However, these measures can also be positive for the marine economy if adopted as they support the development of a sustainable marine economy in the region and ensure the sustainable use of the region's resources to support the long term viability of the sector.
Society	0			No impact is identified.

Policy AQUA 2: Proposals should demonstrate that they have considered site management actions or initiatives to improve sea lice and disease management, and to reduce the risk of fish escapes.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**

Policy AQUA 2: Proposals should demonstrate that they have considered site management actions or initiatives to improve sea lice and disease management, and to reduce the risk of fish escapes.				
Biodiversity, flora and fauna	+	P/L	No mitigation measures are identified as the impacts identified are neutral or positive.	This policy is positive for biodiversity, flora and fauna and population and human health as the measures within the policy will contribute to the conservation and enhancement of the integrity of the ecosystems, their interaction and the benefits they provide. The measures drive practices that will reduce the risk of escapees and reduce the risk of sea lice infection into wild populations, which also protects wild salmon populations. Ensuring the health of these species contributes to wider ecosystem health and is positive for human health and wellbeing. The policy may result in a reduction in medicine and chemical inputs and therefore be positive for seabed sediments and water quality. No impact is identified on the other SEA topics.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	?			It is not clear what the impact of this policy is on the marine economy, as the measures set out are likely already implemented to a certain extent (as noted above) amongst aquaculture operators and so will present no additional costs. Where these measures are not adopted, this policy may introduce barriers to marine enterprise opportunities and may impact the creation or safeguarding of jobs. However, these measures can also be positive for the marine economy if adopted as they support the development of a sustainable marine economy in the region and ensure the sustainable use of the region's resources to support the long term viability of the sector.
Society	0			No impact is identified.

SHELLFISH POLICIES:

Policy AQUA 3: Proposals for mussel farms should be considered where they support delivery of the policy outcomes of NPF4 through policy 32 on aquaculture, and are in accordance with the other policies within this Plan.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0			No impact identified.

Policy AQUA 3: Proposals for mussel farms should be considered where they support delivery of the policy outcomes of NPF4 through policy 32 on aquaculture, and are in accordance with the other policies within this Plan.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Population and human health			No mitigation is identified as the impact is found to be neutral or positive.	
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+			The rationale of this policy is to ensure mussel farming is carried out in a financially stable way, as it has been identified that mussel farms with production capacity of less than 250 tonnes per year are not financially viable. This policy promotes consideration of factors to promote the financial viability of such enterprises. This approach supports the development of a sustainable marine economy in the region. This can also safeguard jobs.
Society	+ 0	Minor		This policy may have a very minor impact on supporting a reduction in the magnitude of poverty where it enables the sustainability of mussel farms in the Region. No impact is identified on the other objectives for this topic.

SEAWEED CULTVATION POLICY:

Policy AQUA 4: Proposals for seaweed cultivation should have regard to the latest Scottish Government Seaweed Cultivation Policy Statement and any subsequent guidance and/or planning requirements.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0 +		No mitigation is required as impacts are identified as positive or neutral.	No impact is identified from this policy. The assessment assumes that the policy, guidance and/or planning requirements will mitigate any negative impacts on these SEA Topics. These should be adhered to in advance of this CRMP, along with the policies in the General Policies chapter of the CRMP and the policies of the NMP, to ensure environmental protection. This policy is beneficial in a broader sense as it can increase awareness of the requirements for seaweed cultivation.
Population and human health				
Sediments, marine geology and coastal processes				

Policy AQUA 4: Proposals for seaweed cultivation should have regard to the latest Scottish Government Seaweed Cultivation Policy Statement and any subsequent guidance and/or planning requirements.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	0 +			No impact is identified from this policy. Businesses are required to be compliant with policy, guidance and/or planning requirements, which may present operational or cost considerations for these businesses. This policy does not introduce new conditions which could impose additional barriers and will be adhered to in advance of this CRMP. This policy is beneficial as it can increase awareness of the requirements for seaweed cultivation.
Society	0			No impact is identified.

Policy AQUA 5: Proposals should demonstrate that they have considered that there is no artificial nutrient enrichment of the marine environment to aid production.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0 +		No mitigation is required as impacts are identified as positive or neutral.	No impact is identified from this policy. The assessment assumes that the policy, guidance and/or planning requirements will mitigate any negative impacts on these SEA Topics. These should be adhered to in advance of this CRMP, along with the policies in the General Policies chapter of the CRMP and the policies of the NMP, to ensure environmental protection. This policy is beneficial in a broader sense as it can increase awareness of the requirements for seaweed cultivation. The policy is positive for biodiversity, flora and fauna and population and human health as, depending on various factors, artificial enrichment of the marine environment can lead to eutrophication and negative effects such as algal blooms which can be damaging to some marine species and negatively impact on water quality.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	0 +			No impact is identified from this policy. Businesses are required to be compliant with policy, guidance and/or planning requirements, which may present operational or cost considerations for these businesses. This

Policy AQUA 5: Proposals should demonstrate that they have considered that there is no artificial nutrient enrichment of the marine environment to aid production.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				policy does not introduce new conditions which could impose additional barriers and will be adhered to in advance of this CRMP. This policy is beneficial as it can increase awareness of the requirements for seaweed cultivation. As this is an emerging sector no operators are currently carrying out enrichment and so are not losing out as a result of this measure. Furthermore, if operators were to artificially enrich the marine environment, this may provide some short term benefits through an increase in production, however this would not be in line with the long term sustainability of the marine economy of the Region nor would it support the sustainable use of the Region's resources to support the long-term viability of the sector and so artificial enrichment would be unlikely to be supported. No impact is identified.
Society	0			No impact is identified.

Recommendation rAQUA 1: Initiatives are encouraged by land and homeowners and public authorities to reduce diffuse pollution and point source pollution from entering water bodies, which can negatively impact water quality, particularly within Shellfish Water Protected Areas.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+		No mitigation is required as impacts are identified as positive or neutral.	This is a recommendation and not a statutory policy, but where it is voluntarily followed it would likely result in a positive impact as the measure supports improved water quality. This supports water regulation, which in turn supports marine life and therefore biodiversity, flora and fauna and human health.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			No impact is identified.
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+			This is a recommendation and not a statutory policy, but where it is voluntarily followed it would likely result in a positive impact as the measure supports improved water quality, and this can support the development of a sustainable marine economy for this sector and ensure the sustainable use of the Region's resources.

Recommendation rAQUA 1: Initiatives are encouraged by land and homeowners and public authorities to reduce diffuse pollution and point source pollution from entering water bodies, which can negatively impact water quality, particularly within Shellfish Water Protected Areas.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				There may be some small scale, short term negative impacts for any businesses that undertake initiatives to reduce diffuse and point source pollution in line with this recommendation.
Society	+ 0			Where implemented this recommendation could be positive for society as it improves the quality of experience of recreational users, contributing to recreational and spiritual services and in supporting enjoyment of sense of place. No impact on the other SEA objectives is identified.

Sport, Recreation and Tourism

Objective SRT 1: The Clyde Marine Region provides world class sustainable sport, recreation and tourism experiences for local people and visitors. The social benefits, including health and wellbeing, economic benefits and environmental benefits (through protection and enhancement of unique, natural resources which attract visitors and which are relied upon for recreational activities) generated by this sector are protected and spread across residents, local communities and beyond.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna Population and human health Sediments, marine geology and coastal processes Water Air Climatic factors Material assets Cultural heritage Landscape/seascape	0		This policy is subject to the NMP and Policies within the General Policies chapter of the CRMP which must be adhered to in advance of sectoral policies, thereby mitigating adverse impacts that may arise from this policy. Existing consenting processes for coastal and marine developments are in place and these are likely to be supported by underlying assessments (e.g. EIA, flood-risk). These consenting processes are currently the primary mechanisms for the identification, assessment and, where necessary, avoidance and/or mitigation of any identified negative impacts identified in this Assessment. The CMRP is not expected to change these assessments but is instead aimed at providing guidance and support to developers and users when considering potential negative impacts. Where an impact is uncertain, it is expected further determination of this could be made by	There is scope for this objective to have a negative impact on the SEA topics if the objective drives an increase in activities, or the development of facilities or infrastructure. An increase in such activities can increase the likelihood of spreading invasive and non-native species, damaging habitats and species leading to associated localised negative impacts on the seabed, its sediments and processes, water and air quality and could increase greenhouse gas emissions. The specific impacts of this would be determined according to individual developments, projects or activities. However, considering the context of this objective and that users of the Region must adhere to the NMP as well as the General Policies and Chapter 9: All Sectors of the CRMP, the assessment assumes that any potential negative impacts are mitigated by the measures put in place through these policies. In addition, the objective stipulates that experiences provided are sustainable which requires them to be carried out in a way which does not exhaust natural resources or cause severe ecological damage.

Objective SRT 1: The Clyde Marine Region provides world class sustainable sport, recreation and tourism experiences for local people and visitors. The social benefits, including health and wellbeing, economic benefits and environmental benefits (through protection and enhancement of unique, natural resources which attract visitors and which are relied upon for recreational activities) generated by this sector are protected and spread across residents, local communities and beyond.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
			considering the specific details of any proposals. The CMPP will consider all marine licence applications in the Region against policies in the Plan and provide input to Marine Directorate to aid any licensing decisions.	
SA topics				
Marine economy	+	P/L		The objective is positive as it supports the development of a sustainable marine economy in the Region for this sector. The objective states that the 'Region provides world class sustainable sport, recreation and tourism', acknowledging that this sector relies on a healthy and clean marine and coastal environment to support the long-term viability of this sector. The objective seeks to avoid barriers to new marine enterprise opportunities and may safeguard and/or create jobs as part of the development of a sustainable marine economy across new or existing sectors.
Society	+ 0			The objective is positive as it promotes access to coastal and marine resources for tourism and recreation. It can also contribute to a communities' sense of place, including protection of and access to marine-related heritage and can maintain or improve the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience. It can improve health and wellbeing of residents, local communities and visitors to the Region. These impacts can support the reduction of social exclusion and help promote equality for all communities. No impact is identified on the other SA objectives.

Objective SRT 2: Public access to the sea is improved in the Clyde Marine Region, along with supporting infrastructure and facilities.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0		No mitigation is required as impacts are identified as positive or neutral.	There is potential for this objective to have localised negative impacts on these SEA Topics, depending on the location and context of any projects or activities that improve public access points, along with infrastructure and facilities. Existing planning processes will take the potential for negative impacts into account. The NMP and the policies within the General Policies chapter of the CRMP must also be considered in advance of this objective and will mitigate any potential negative impacts.
Population and human health				
Sediments, marine geology and coastal processes				
Water				

Objective SRT 2: Public access to the sea is improved in the Clyde Marine Region, along with supporting infrastructure and facilities.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Air	0			No impact is identified.
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape	0			There is potential for localised negative impacts on landscapes/seascapes; however, it is expected that any negative impact will be mitigated when considering the NMP as well as policies in Chapter 3: Landscape/seascape of the CRMP.
SA topics				
Marine economy	+ 0			The objective is positive as it supports the sustainable development of the sport, recreation and tourism sector. It may contribute to safeguarding and/or creating construction related jobs. No impact is identified on the other SA objectives for this topic.
Society	+ 0			The objective is positive for society as it supports improved public access to the marine environment for sport, recreation and tourism. This contributes to a community's sense of place, by allowing increased use for sport and recreation and can maintain and improve the experiences of recreational users, both in terms of access and quality of experience. No impact is identified on the other objectives.

Policy SRT 1: Proposals for development and/or use relating to sustainable, marine-related sport, recreation and tourism facilities are particularly encouraged where they:

- **a) facilitate multiple use by providing hubs for marine sport, recreation and tourism,**
- **b) diversify the sports, recreation and tourism offering,**
- **c) demonstrate a link to transport networks in line with active and sustainable travel objectives,**
- **d) promote wildlife tourism and/or ecotourism,**
- **e) provide an increase in the number and quality of step ashore facilities in the Region,**
- **f) provide effective pump out, wash down and waste management facilities for boat users; or**
- **g) use mooring systems with low environmental impact, such as Environmentally Friendly Moorings/Advanced Mooring Systems.**

SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	Existing consenting processes for coastal and marine developments are in place and these are likely to be supported by underlying assessments (e.g. EIA, flood-risk). These consenting processes are	There is scope for this policy to have a negative impact on the SEA topics if the policy drives an increase in activities, or the development of facilities or infrastructure. A growth in such activities can increase the likelihood of spreading invasive and non-native species, damage habitats and species and lead to associated localised negative impacts on geodiversity, water and air quality and increase greenhouse gas emissions. An increase in wildlife tourism can lead to detrimental impacts on wildlife, if poor practices are followed and in particular there could be a potential negative cumulative impact on marine mammals if there was too much wildlife tourism activity. However, the recommendation in this chapter encourages all operators to become
Population and human health				
Sediments, marine geology and coastal processes				

Policy SRT 1: Proposals for development and/or use relating to sustainable, marine-related sport, recreation and tourism facilities are particularly encouraged where they:

- **a) facilitate multiple use by providing hubs for marine sport, recreation and tourism,**
- **b) diversify the sports, recreation and tourism offering,**
- **c) demonstrate a link to transport networks in line with active and sustainable travel objectives,**
- **d) promote wildlife tourism and/or ecotourism,**
- **e) provide an increase in the number and quality of step ashore facilities in the Region,**
- **f) provide effective pump out, wash down and waste management facilities for boat users; or**
- **g) use mooring systems with low environmental impact, such as Environmentally Friendly Moorings/Advanced Mooring Systems.**

SEA topics	Impact	Nature of impact	Mitigation	Explanatory text
			currently the primary mechanisms for the identification, assessment and, where necessary, avoidance and/or mitigation of any negative impacts identified in this assessment. The CRMP is not expected to change these assessments but is instead aimed at providing guidance and support to developers and users when considering potential negative impacts. Where an impact is uncertain, it is expected further determination of this could be made by considering the specific details of any proposals. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions. Users of the CRMP must also adhere to the policies of the NMP, as well as all the policies	WiSe scheme certified, which would reduce any potential negative impacts associated with bringing vessels or people to close to wildlife where this recommendation was followed. In addition, potential cumulative impacts should be considered through policy NH 2. The assessment also assumes that operators are following existing legislation which protects many species and habitats, including marine mammals. The specific impacts of this would be determined according to individual developments, projects or activities. However, the policy has a positive impact on these SEA Topics. It primarily stipulates that sustainable developments and/or activities are proposed. Furthermore, several of the measures which are encouraged (a&g) can reduce the use of and impact on natural resources. Specifically, multiple use of facilities and infrastructure can have a reduced impact in comparison to developing new facilities or infrastructure. . Spending time in the marine and coastal environment also provides benefits to both physical and mental health and wellbeing – this is increased when access to sport, recreation and tourism facilities are made more accessible and the offering is increased both in terms of geographical coverage and duration. Providing effective wash down facilities that do not allow non-native species to go back into the water, can reduce the risk of spreading non-native species and introducing non-native species to new areas. This can contribute to the achievement of the Marine Strategy Regulation (2010), in particular Descriptor 2.
Water	+	P/L		The policy is positive as it supports facilities and infrastructure with pump out, wash down and waste management facilities for boat users. These facilities can contribute to a reduction in disposal of waste at sea, which would result in a negative impact on water quality, and maintain clean and safe waters for recreational use and for food production. Wash down facilities can help reduce the spread of non-native and invasive non-native species and the introduction of non-native species. Overall, this can contribute towards achieving GEcS under the Water Environment and Water Services (Scotland) Act 2003.
Air	?			The impact on this SEA topic is unclear as depending on the type of activities taking place at multiple use hubs, there could be a negative impact on air quality. For example, an increased use of motorised vessels could cause increased air pollution in some locations.
Climatic factors	?			The impacts on climatic factors are unclear. Increased sport, recreation and tourism, depending on the specific activity, could lead to increased greenhouse gas emissions. It is unclear what impact this policy would have on adaptation activities. However, other policies within the draft CRMP seek development(s) and/or activities to consider mitigation and adaptation activities; this should be adhered to in conjunction with this policy.

Policy SRT 1: Proposals for development and/or use relating to sustainable, marine-related sport, recreation and tourism facilities are particularly encouraged where they:

- **a) facilitate multiple use by providing hubs for marine sport, recreation and tourism,**
- **b) diversify the sports, recreation and tourism offering,**
- **c) demonstrate a link to transport networks in line with active and sustainable travel objectives,**
- **d) promote wildlife tourism and/or ecotourism,**
- **e) provide an increase in the number and quality of step ashore facilities in the Region,**
- **f) provide effective pump out, wash down and waste management facilities for boat users; or**
- **g) use mooring systems with low environmental impact, such as Environmentally Friendly Moorings/Advanced Mooring Systems.**

SEA topics	Impact	Nature of impact	Mitigation	Explanatory text
Material assets	+	P/L	of Section one and Chapter 9: All Sectors of the CRMP.	Encouraging multiple use hubs for marine sport and recreation can have a positive impact on material assets by ensuring that material assets are used efficiently and sustainably, delivering multiple benefits and working in partnership with nature.
Cultural heritage	0	P/L		No impact is identified
Landscape/seascape	0			Multiple use hubs can reduce any potential impacts on landscapes/seascapes that may arise from developments or the renewal of sport and recreation developments.
SA topics				
Marine economy	+	P/L		This policy is positive as it can support the development of a sustainable marine economy in the Region for this sector. It ensures the sustainable use of the Region's resources to support the long-term viability of marine sectors. This policy can also remove or avoid barriers to new marine enterprises and can safeguard and/or create jobs that support the development of a sustainable marine economy across new or existing sectors through the regeneration of coastal areas, and extend the tourism season and/or diversifying the sports, recreation and tourism offering.
Society	+	P/L		The policy is positive for society as it promotes access to coastal and marine resource for tourism and recreation. This policy can contribute to communities' sense of place, including the protection of and access to marine-related heritage. It can also maintain or improve the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience. This policy, can contribute to maintaining or improving the accessibility and connectivity of coastal and island communities by extending the tourism season and/or diversifying sports, recreation and tourism offerings. This policy may also have a positive impact on improving access to sport and recreation and thus improve this aspect of equality within communities.

Policy SRT 2: Proposals should be supported for the introduction, maintenance and improvement of the network of public slipways[60] and shoreside infrastructure, along with supporting facilities where appropriate and where unacceptable adverse impacts on the environment and amenities are avoided, below the Mean High Water Springs, across the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna Population and human health Sediments, marine geology and coastal processes Water Air Climatic factors Material assets Cultural heritage Landscape/seascape	0	?	Existing consenting processes for coastal and marine developments are in place and these are likely to be supported by underlying assessments (e.g. EIA, flood-risk). These consenting processes are currently the primary mechanisms for the identification, assessment and, where necessary, avoidance and/or mitigation of any negative impacts identified in this assessment. The CRMP is not expected to change these assessments but is instead aimed at providing guidance and support to developers and users by considering any potential negative impacts. Where an impact is uncertain, it is expected further determination of this could be made by considering the specific details of any proposals. The CMPP will consider all marine licence applications in the Region against policies in this CRMP and provide input to Marine Directorate to aid any licensing decisions. Users of the CRMP must also adhere to the policies of the NMP, as well as all the policies of Section one and Chapter 9: All Sectors of the CRMP.	The impact of the development of sport and recreation infrastructure and facilities on these SEA topics is unclear; however, it has the potential to have negative impacts depending on the type and location of infrastructure and facilities. The policy is set within the context of other policies in the CRMP and in the NMP which require environmental issues to be taken into account during decision-making processes, so significant adverse effects can be avoided.
SA topics				
Marine economy	+			The development of sport, recreation and tourism infrastructure and facilities could provide economic and employment benefits to the sector. There is potential for this policy to pose a barrier to opportunities for other marine sectors and enterprises. This would depend on the location and type of infrastructure and facility and is mitigated by policies within Chapter 9: All Sectors, such as exploring options for multiple use, which are also suggested in the policy SRT 1.
Society	+ 0			This policy can have a positive impact for coastal communities as it has the potential to promote access to coastal and marine resources for tourism and recreation. It can also maintain or improve the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience. No impact is identified on the other objectives for this topic.

[60] Public slipways are considered to be slipways where fees and/or permits are not required.

Policy SRT 3: National and international sport, recreational and tourism events for all recreational vessels are supported in the Clyde Marine Region. Organisers of such events: **a) should undertake a risk assessment to identify likely significant impacts on protected areas and species,** **b) should collaborate with and seek advice from relevant authorities, (e.g. NatureScot) to acquire licences where needed and to identify and implement appropriate mitigation measures in a timely manner in advance of any event taking place, and** c) **should inform the relevant Statutory Harbour Authority of the nature and details of the event in a timely manner in advance of the event taking place.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive or neutral.	The policy is positive for biodiversity, flora and fauna as it encourages wider consideration of the potential environmental impacts of marine and coastal events taking place within the Region, such as noise pollution and disturbance to or collision with marine animals. The policy is also positive as it promotes the conservation of the integrity of ecosystems and can prevent damage to important biological sites and protected species, including the benefits they provide. This policy can also contribute to achieving the objectives of the Marine Strategy Regulations (2010), particularly under Descriptors 1, 6 &11[61].
Population and human health	+	P/L		The policy is positive for population and human health as it contributes to the protection of healthy ecosystems, biodiversity and geodiversity and therefore the continued benefits that humans derive from the natural environment that can improve their health and wellbeing.
Sediments, marine geology and coastal processes	0			No impact is identified.
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	- +	S/T P/L		This policy may have short-term/temporary time and cost implications for the marine enterprises involved in running the events associated with undertaking a risk assessment and implementing any mitigation measures as required. This may have been a requirement in some cases regardless, depending on the type and size of event and the existing protections to protected species. Where it is not already a requirement, this may present a barrier to new and existing marine enterprise opportunities. The policy is positive in the long-term as it supports the sustainable development of the marine economy and ensures the sustainable use of the Region's resources to support the long-term viability of all marine sectors, including sport, recreation and tourism, this can in turn have a positive impact on safeguarding and/or creating jobs.
Society	+ 0			The policy is positive as it can contribute to a community's sense of place, including the protection of and access to marine-related heritage. No impact is identified on the other objectives for this topic.

[61] Descriptor 11: Introduction of energy (including underwater noise) does not adversely affect the ecosystem.

Recommendation rSRT 1: All wildlife cruise tour operators operating within the Clyde Marine Region should be WiSe scheme certified.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as the impacts are identified as positive or neutral.	If the recommendation is applied, it will have a positive impact for biodiversity, flora and fauna as it ensures the impact of wildlife cruises on marine animals is minimised, in line with the SEA objectives for this topic. Mitigating the impact of this activity through certification can contribute to wider ecosystem health and so this recommendation can also be positive for population and human health.
Population and human health				
Sediments, marine geology and coastal processes	0			No impact identified.
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+			If the recommendation is applied, it is positive for operators within this sector as it supports the development of a sustainable marine economy and ensures that sustainable use of the regions resources to support the long-term viability of this sector. No negative effect as this is a recommendation.
Society	0			No impact identified.

Shipping, Ports, Harbours and Ferries

Objective SHIP 1: Collaborative efforts to promote the Clyde Marine Region as a tourist destination are continued by supporting sustainable development of the market for cruise ships and smaller cruise vessels, whilst seeking opportunities for related socioeconomic activity.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0		No mitigation is required as impacts are identified as neutral.	This objective is focussed on increasing the cruise ship activity in the Region. There is therefore potential for negative impacts on these SEA Topics, such as increased disturbance on biodiversity (particularly cetaceans), loss of habitat associated with the expansion of ports and harbours, risk of introducing invasive and non-native species, and increased sediment disturbance from increased vessel movement; however, the objective stipulates that the sustainable development of the market is supported which requires developments and activities to be carried out at a level which does not exhaust natural resources or cause severe ecological damage. In addition, many of these effects are mitigated by policies in the General Policies chapter which must be adhered to in advance of the sectoral policies in the CRMP.
Population and human health				
Sediments, marine geology and coastal processes				

Objective SHIP 1: Collaborative efforts to promote the Clyde Marine Region as a tourist destination are continued by supporting sustainable development of the market for cruise ships and smaller cruise vessels, whilst seeking opportunities for related socioeconomic activity.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Water Air Climatic factors Material assets Cultural heritage Landscape/seascape				This objective will also be progressed in the context of the policies in the NMP, which require environmental issues to be taken into account during decision-making processes, so adverse effects can be avoided. Increased vessel movement in specific areas may have a detrimental impact on local air quality. Air quality is monitored by SEPA and through mechanisms such as the Scottish Air Quality Database Annual Report. Cruise ship operators must identify measures to avoid any detrimental impact to air quality. Operators should also ensure that suitable mitigation measures to abate air quality degradation are identified and implemented.
SA topics				
Marine economy	+ ?	P/L		The objective has a positive impact as it supports the development of a sustainable marine economy in the Region. The assessment assumes that this policy will be taken forward within the context of the general policies within the CRMP and the policies of the NMP, and so ensures the sustainable use of the Region's resources. It protects marine assets and maintains the potential to utilise then in the future. It is unclear if it will remove or avoid barriers to new marine enterprise opportunities. It is likely that this objective will be able to safeguard and/or create jobs as part of the development of a sustainable marine economy across new or existing sectors and that support/provide benefits to coastal communities within the CMR. An increase in cruise ship activity in the Region may impact other sectors, for example by introducing restrictions or displacing other activities.
Society	+	P/L		The objective is positive as it promotes access to coastal and marine resources for tourism and recreation. It can also contribute to communities' sense of place by improving access to marine-related heritage and improve the experience of recreational users of the marine and coastal environment in terms of access and quality of experience. The objective supports a reduction in the magnitude of poverty, through the creation of new job opportunities.

Objective SHIP 2: An increase in the use of ports, harbours and other coastal facilities in the Clyde Marine Region for the construction, servicing, decommissioning and recycling of marine structures and vessels, particularly where activities contribute to climate change mitigation and adaptation.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna Population and human health Sediments, marine geology and coastal processes Water Air	0	It is difficult to determine the nature of the impact as it will be affected by any project and the scale at which it is carried out.	Many of these impacts are mitigated by policies within the Section 1 and Chapter 9: All Sectors of the CRMP which must be adhered to in advance of sectoral policies. Policies from the NMP must also be adhered to.	Depending on the nature of work (e.g. project size, type of structures) undertaken, location of construction, and servicing and decommissioning, there could be negative impacts on habitats and species. These impacts could include disturbance, injury or death through collisions with vessels and/or marine structures, and risk of introduction of non-native species. There may also be an increased risk of noise disturbance. This type of activity could lead to siltation, smothering benthic habitats and species. This objective may have a negative impact on human health due to increased levels of noise, visual disturbance and any negative impacts on the surrounding environment which may have secondary impacts on human health, particularly wellbeing. Excessive noise can impact on the quality of life, health, use and enjoyment of areas. Any detrimental impacts on the marine environment can also have

Objective SHIP 2: An increase in the use of ports, harbours and other coastal facilities in the Clyde Marine Region for the construction, servicing, decommissioning and recycling of marine structures and vessels, particularly where activities contribute to climate change mitigation and adaptation.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Climatic factors Material assets Cultural heritage Landscape/seascape			Existing consenting processes for coastal and marine developments are in place and these are likely to be supported by underlying assessments (e.g. EIA, flood-risk) which can ensure adverse effects can be avoided. Air quality is monitored by SEPA and through mechanisms such as the Scottish Air Quality Database Annual Report. Cruise ship operators must identify measures to avoid any detrimental impact to air quality. Operators must also ensure that mitigation measures to abate air quality degradation are identified and implemented. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions. Users of the CRMP must also adhere to the policies of the NMP, as well as all the policies of Section one and Chapter 9: All Sectors of the CRMP.	a negative impact on the health and wellbeing of coastal communities which may derive physical and mental health benefits from spending time at the sea. Increased movement of vessels associated with construction, servicing and decommissioning, and any associated capital or maintenance dredging required, may lead to increased disturbance of sediments affecting their natural processes and their ability to deliver certain services and benefits. Increased movement of vessels carrying marine structures increases disturbance of sediments and turbidity in the water column, negatively impacting water quality. There may be localised negative impacts on air quality as a result of increased vessel movements. The specific impact will depend on the location and amount of movement of marine structures. Development of this kind of activity may have a negative impact on climatic factors as it can result in the increase of greenhouse emissions through increased vessel movement and any associated machinery required for construction, servicing and decommissioning. Conversely, the objective supports activities that can contribute to climate change mitigation and adaptation and in the long term, it is positive to support this. The increase of the use of ports, harbours and coastal facilities could lead to additional stress/overstretch the capacity of these material assets. There may be a negative impact on cultural heritage if ports and harbours need to be expanded/adjusted to accommodate construction, servicing and decommissioning of marine structures. This objective could result in negative impacts on landscapes/seascapes as a result of the visual impact of increased vessel movement and movement of large marine structures and the potential storage of these structures in the region. This impact is dependent on the location, type and size of any works. While there is a wide range of potential negative impacts on these SEA Topics, the assessment assumes that many of these impacts are mitigated by policies within the General Policies and Chapter 9: All Sectors of the CRMP which must be adhered to in advance of sectoral policies. This objective will also be applied in the context of the policies in the NMP, which require environmental issues to be taken into account during decision-making process, so that adverse effects can be mitigated/ minimised. It is likely that licensing and consents will be required as part of the planning process and these processes may be supported by underlying assessments, such as an EIA, which could mitigate any adverse impacts. The overall impacts are unclear as they depend on the location, type and scale of construction, servicing and decommissioning works.
SA topics				
Marine economy	+ ?	It is difficult to determine the		This objective is positive as it supports the development of the marine economy in the Region relating to this industry and the energy sector. It does not set out how the sustainable use of the Region's

Objective SHIP 2: An increase in the use of ports, harbours and other coastal facilities in the Clyde Marine Region for the construction, servicing, decommissioning and recycling of marine structures and vessels, particularly where activities contribute to climate change mitigation and adaptation.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
		nature of the impact as it will be affected by any project and the scale at which it is carried out.		resources is considered to support the long-term viability of marine sectors; however, mitigation measures explained above outline how this objective would work in context of the policies set out in section 1, which support sustainable development. This objective may present opportunities to safeguard and/or create jobs within this sector, or others that provide support to it, as part of the development of a sustainable marine economy across new or existing sectors. The objective does not present any barriers to marine enterprise opportunities for this sector; however, it may create barriers to other sectors or marine enterprises by restricting the scope for development of other activities in areas where they are carried out, e.g. recreational activities.
Society	+ -			There are mixed effects on society. This objective may have a negative effect on promoting access to coastal and marine resources for tourism and recreation, which can negatively affect the access and quality of experience if access is affected by this type of industry. It can also have a negative effect on a community's sense of place, including protection of and access to marine-related heritage where the negative impacts noted above under the SEA topics may occur. Increase in such activity in the area can also lead to positive impacts as it may contribute to regeneration of an area, and support a reduction in poverty through the creation of new jobs.

Objective SHIP 3: Connectivity is improved and sustainable transport by sea and rail is increased within the Clyde Marine Region and beyond.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	Could be T/S if impacts are related to development and expansion or P/L if related to the movement of vessels. Indirect except for climatic factors.	No mitigation is required as impacts are identified as positive.	The objective is identified as having a positive impact on these SEA Topics. The increase in vessels, vessel movements and expansion of ports and harbours associated with this can have a range of negative impacts within the Region. For example, there may be an increased risk of disturbance, collision or strike risk to cetaceans, loss of habitat associated with the expansion of ports and harbours, increased risk of introduction of invasive and non-native species, increased sediment disturbance from increased vessel movement which can cause turbidity in the water and impact water quality; and in specific areas there may be a detrimental impact on local air quality. Expansion of ports and harbours and increased vessel movements may also have a negative impact on material assets, landscapes/seascapes and cultural heritage depending on siting and the specific details of projects related to improved marine connectivity. However, the objective stipulates increasing 'sustainable transport', which requires developments and activities to be carried out at a level which does not exhaust natural resources or cause severe ecological damage. One area in particular where benefits of sustainable transport could be seen is around reducing greenhouse gas emissions of vessels. If increased marine connectivity reduces road traffic this can also have a positive effect in terms of climate change mitigation and improving air quality, which will have a wider positive effect on the other SEA topics.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				

Objective SHIP 3: Connectivity is improved and sustainable transport by sea and rail is increased within the Clyde Marine Region and beyond.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Marine economy	+ ?			This objective is positive as it supports the development of a sustainable marine transport network in the Region and beyond. This can remove barriers to new marine enterprise opportunities and can safeguard and/or create jobs that support new or existing sectors. This policy is likely to deliver operational or cost-related benefits to other sectors. The objective does not make it clear how the sustainable use of the Region's resources are considered; however, the objective does indicate that moving towards more sustainable transport will be supported. Sustainable transport can help the Region contribute to climate change mitigation targets in the long term and can protect marine assets, maintaining the potential to utilise then in the future. It is not clear what impact this objective will have on safeguarding and/or creating jobs as part of the development of a sustainable marine economy.
Society	+			The objective has a clear positive impact on society, as it seeks to on improve the connectivity within the region and beyond, which can be beneficial particularly for coastal and island communities. It can also promote access to coastal and marine resources for tourism and recreation and improve the experience of recreational users of the marine and coastal environment, in terms of both access and quality of experience. The objective can also contribute to a community's sense of place – improving connectivity can mean people are less likely to move away to find work if commuting is easier. This can maintain a community's sense of identity, through reducing depopulation. This objective can support a reduction in the magnitude of poverty and coastal exclusion and may, in fact, contribute to a decrease in these factors as improved connectivity can improve opportunities for local employment and social/recreational activities.

Objective SHIP 4: Opportunities for associated environmental enhancement are explored where capital or maintenance dredging is proposed in the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as neutral.	This Objective relates only to the use of dredged material, and not dredging activity. The impact of this objective is positive. Dredged material can be used to provide benefits to biodiversity, flora and fauna. For example, beach nourishment can maintain the integrity of ecosystems and the flora and fauna that inhabit them. Dredged material can also be used to maintain coastal processes and to mitigate the likelihood or impact of coastal flooding, which will in turn also provide species and habitat benefits by protecting or maintaining these ecosystems from climate change impacts. This objective considers these options through the Best Practicable Environmental Option exercise of the current consenting process. This policy is already implemented through consideration of Best Practice Environmental Options which is part of the marine licensing process for dredging applications, however this objectives promotes the wider consideration of this measure by all stakeholders, which can assist in identifying opportunities for beneficial use. Protecting these features will result in benefits to population and human health, ensuring the continued enjoyment and benefits derived from the marine and coastal environment
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			No impact is identified.
Climatic factors				
Material assets				
Cultural heritage				

Objective SHIP 4: Opportunities for associated environmental enhancement are explored where capital or maintenance dredging is proposed in the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Landscape/seascape				There may be a minimal or insignificant impact on landscapes/seascapes where dredged material is used for environmental enhancement.
SA topics				
Marine economy	+ 0			The objective is positive as it supports the development of a sustainable marine economy in the Region and the sustainable use of the Region's resources which can support the long-term viability of marine sectors. This objective has no impact on removing or avoiding barriers to new marine enterprise opportunities, on marine assets or on jobs in the region.
Society	+ 0			There may be some positive impacts resulting from the beneficial use of dredged material for environmental enhancement which can improve the experiences of recreational users of the marine and coastal environment and contribute to communities' sense of place through protection of marine-related heritage. The objective has no impact on the other SA objectives related to society.

Policy SHIP 1: Development(s) and/or activities will be supported that encourage the sustainable growth of the cruise market for ships of around 150 m at appropriate locations, in particular at Dunoon, Rothesay, Helensburgh, Inveraray, Troon, Brodick, Fairlie, Holy Loch, Irvine, Greenock, Ayr, Ardrossan and Hunterston, and where the proposal demonstrates strong links to supporting sustainable tourism, including wildlife tourism, in the local area.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0		No mitigation is required as impacts are identified as neutral.	There is potential for negative impacts on these SEA Topics, such as: increased disturbance for biodiversity; loss of habitat associated with the expansion of ports and harbours; risk of introduction of invasive and non-native species; increased sediment disturbance from increased vessel movement; and increased greenhouse gas emissions. Increased vessel movement in specific areas may have a detrimental impact on local air quality. Expansion of ports and harbours and increased vessel movements may also have a negative impact on material assets and cultural heritage. However, the policy specifies that the growth of the cruise market should be sustainable, and many of the impacts noted above are mitigated by policies within the NMP and the General Policies chapter of the CRMP which must be adhered to in advance of sectoral policies. Development which encourages the growth of the cruise market for boats of around 150 m would be subject to existing consenting processes supported by environmental assessments where applicable (e.g. EIA, HRA) to identify the potential for these adverse effects and where appropriate, to mitigate them. Any future marine developments would be in accordance with these requirements.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	+ ?	P/L		The policy is positive for the growth of the cruise market for boats of around 150 m. Growth of the industry in the locations noted can bring benefits, such as increased employment opportunities, and there is potential for improved facilities and infrastructure which could become multiple use facilities. In this way the policy can remove barriers to new marine enterprise opportunities (e.g. around links to sustainable tourism including wildlife tourism) and safeguard and/or create jobs as part of the development of a sustainable marine economy across new or existing sectors. While the policy specifies

Policy SHIP 1: Development(s) and/or activities will be supported that encourage the sustainable growth of the cruise market for ships of around 150 m at appropriate locations, in particular at Dunoon, Rothesay, Helensburgh, Inveraray, Troon, Brodick, Fairlie, Holy Loch, Irvine, Greenock, Ayr, Ardrossan and Hunterston, and where the proposal demonstrates strong links to supporting sustainable tourism, including wildlife tourism, in the local area.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				the cruise market for smaller cruise vessels, and this supports the growth of this sub-sector, there could also be potential for this to exclude or restrict other activities in some areas, and the policy does not necessarily support the development of a sustainable marine economy for other sectors, the impacts around this are unknown but could be judged on the location and scale of any proposal.
Society	+	P/L		The policy is positive as it also promotes access to coastal and marine resources for tourism and recreation. The policy can support a reduction in the magnitude of poverty and social exclusion and furthermore can contribute to economic regeneration and the wellbeing of communities in some areas through the creation of employment opportunities. The policy contributes to improving the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience.

Policy SHIP 2: Development(s) and/or activities will be supported for the construction, servicing, decommissioning and recycling of large marine structures and vessels at appropriate locations, in particular at Campbeltown, Greenock, Hunterston, Troon, and Ayr, and where the proposal demonstrates a positive impact on the regeneration of local areas.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	?		Existing consenting processes for coastal and marine developments are in place and these are likely to be supported by underlying assessments (e.g. EIA, flood-risk). These consenting processes are currently the primary mechanisms for the identification, assessment and, where necessary, avoidance and/or mitigation of any negative impacts identified in this assessment. The CRMP is not expected to change these assessments but is instead aimed at	Depending on the nature of work (e.g. project size, type of structures) undertaken, location of construction, servicing or decommissioning and any associated capital or maintenance dredging required, there is potential for negative impacts on habitats and species that could include disturbance, injury or death through collision with vessels or marine structures and risk of introduction of non-native species. There may also be an increased risk of noise disturbance. This type of activity could lead to siltation and smothering benthic habitats and species. Any subtidal construction or works could lead to alteration or destruction of some habitats, impacting the species that live there and overall impacting the integrity of ecosystems.
Population and human health				This policy may have a negative impact on human health due to increased levels of noise, visual disturbance and other negative impacts. Excessive noise can impact on the quality of life, health, use and enjoyment of areas. Any detrimental impacts on the marine environment can also have a negative impact on the health and wellbeing of coastal communities who may derive physical and mental health benefits from spending time at the sea.
Sediments, marine geology and coastal processes				Increased movement of vessels associated with construction, servicing and decommissioning and/or movement of vessels carrying marine structures may lead to increased disturbance of sediments affecting their natural processes and their ability to deliver certain services and benefits, and turbidity in the water column, negatively impacting water quality.
Water				There may be localised negative impacts on air quality as a result of increased vessel movements. The specific impacts of this will depend on the location and amount of movement of marine structures such as oil rigs. As the objective that this policy is associated with particularly supports activities contributing to climate change mitigation and adaptation, there may be a positive impact on climactic factors.
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				

Policy SHIP 2: Development(s) and/or activities will be supported for the construction, servicing, decommissioning and recycling of large marine structures and vessels at appropriate locations, in particular at Campbeltown, Greenock, Hunterston, Troon, and Ayr, and where the proposal demonstrates a positive impact on the regeneration of local areas.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
			providing guidance and support to developers and users by considering any potential negative impacts. Where an impact is uncertain, it is expected further determination of this could be made by considering the specific details of any proposals. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions. Users of the CRMP must also adhere to the policies of the NMP, as well as all the policies of Section one and Chapter 9: All Sectors of the CRMP.	This policy could result in negative impacts to material assets if ports and harbours need to be expanded/adjusted to accommodate construction, servicing and decommissioning of marine structures. There may be a negative impact on cultural heritage if ports and harbours need to be expanded/adjusted to accommodate construction, servicing and decommissioning of marine structures, or if the surrounding marine and coastal area undergoes an alteration, e.g. dredging or pile driving. This policy could result in negative impacts on landscapes/seascapes as a result of the visual impact of increased vessel movement and movement of large marine structures and the potential storage of these structures in the Region. This impact is dependent on the location, type and size of any works and so the impact is uncertain. While there is a wide range of potential negative impacts on these SEA Topics, the assessment assumes that many of these impacts are mitigated by policies within Section 1 and Chapter 9: All Sectors of the CRMP which must be adhered to in advance of sectoral policies. This policy will also be applied in the context of the policies in the NMP, which are relevant to the SEA topics and must be taken into account during decision-making processes, so that adverse effects can be mitigated/ minimised. This policy provides a regional context for policy TRANSPORT 2 in the NMP. It is likely that licensing and consents will be required as part of the planning process and these processes may be supported by underlying assessments, such as an EIA, which could mitigate any adverse impacts. The overall impacts are unclear as they depend on the location, type and scale of construction, servicing and decommissioning works.
SA topics				
Marine economy	+			This policy is positive as it supports the development of the marine economy in the Region for this sector and any supporting sectors. It does not present barriers to marine enterprise for these businesses and can safeguard and/or create jobs as part of the development of a sustainable marine economy across new or existing sectors. The policy is not clear how it will support other sectors outside of these (and therefore it is not clear that it will remove barriers to these enterprises or safeguard and/or create jobs). The objective does not present any barriers to marine enterprise opportunities. In addition, the policy does not set out how the sustainable use of the Region's resources are considered to support the long-term viability of marine sectors; however, mitigation measures explained above outline that this objective would work in context of the policies set out in section 1 and within the

Policy SHIP 2: Development(s) and/or activities will be supported for the construction, servicing, decommissioning and recycling of large marine structures and vessels at appropriate locations, in particular at Campbeltown, Greenock, Hunterston, Troon, and Ayr, and where the proposal demonstrates a positive impact on the regeneration of local areas.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				NMP, which support sustainable development. This policy also provides regional context for NMP policy TRANSPORT 2.
Society	+ -			There are mixed effects on society. This objective may have a negative effect on promoting access to coastal and marine resources for tourism and recreation, negatively affecting access and quality of experience. There can be mixed impacts on a community's sense of place, including the protection of and access to marine-related heritage, as some communities may feel an increase in cruise vessels to be a positive addition to the activity of a place while other may feel it has a negative effect. Increase in such activity in the area can also lead to positive impacts as it may contribute to regeneration of an area and support a reduction in poverty through the creation of new jobs. All of the locations noted in the policy are nearby communities that fall into the most deprived 20% (2020) and so the economic activity created could have a positive impact, in terms of regenerating local areas.

Policy SHIP 3: Proposals for development and/or use will be supported, particularly where they deliver more sustainable transport, in relation to: **a) ferry or related shoreside infrastructure initiatives that improve connectivity to the Kintyre peninsula, the Cowal peninsula and islands of Arran, Bute or the Cumbraes,** **b) ferry or related shoreside infrastructure initiatives that improve connectivity between the Kintyre peninsula and Northern Ireland,** **c) infrastructure relating to supporting bulk freight by sea; and/or** **d) movement connections along, to and across the Clyde estuary.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna Population and human health Sediments, marine geology and coastal processes Water Air Climatic factors Material assets Cultural heritage Landscape/seascape	0	Could be T/S if they are related to developments and expansions or P/L if related to the movement of vessels.	Many of these impacts are mitigated by existing regulations and legislation. In addition, policies within the NMP, section 1 and Chapter 9: All Sectors of the CRMP must be adhered to in advance of sectoral policies and. Developments are subject to existing consenting processes which are supported by environmental assessments where applicable (e.g. EIA, HRA). These existing processes can identify the potential for adverse effects and, where appropriate, mitigate them. It is expected that any future marine developments would be in accordance with these requirements.	This policy could result in an increase in vessels, vessel movements and the expansion of ports and harbours associated with this can have a range of negative impacts within the Region. There may be an increased risk of disturbance; collision or strike risk to cetaceans; loss of habitat associated with the expansion of ports and harbours; increased risk of introduction of invasive and non-native species; increased sediment disturbance from increased vessel movement which can cause turbidity in the water and impact water quality; increased greenhouse gas emissions (however, if increased marine connectivity reduces road traffic this can have a positive effect in terms of mitigation); and in specific areas there may be a detrimental impact on local air quality. Expansion of ports and harbours and increased vessel movements may also have a negative impact on material assets, landscapes/seascapes and cultural heritage depending on the siting and specific details of projects related to improving marine connectivity. This policy may have a negative impact on human health due to increased levels of noise, visual disturbance and any negative impacts. Excessive noise can impact on the quality of life, health, use and enjoyment of areas. Any detrimental impacts on the marine environment can

Policy SHIP 3: Proposals for development and/or use will be supported, particularly where they deliver more sustainable transport, in relation to: **a) ferry or related shoreside infrastructure initiatives that improve connectivity to the Kintyre peninsula, the Cowal peninsula and islands of Arran, Bute or the Cumbraes,** **b) ferry or related shoreside infrastructure initiatives that improve connectivity between the Kintyre peninsula and Northern Ireland,** **c) infrastructure relating to supporting bulk freight by sea; and/or** **d) movement connections along, to and across the Clyde estuary.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
			Air quality is monitored by SEPA and through mechanisms such as the Scottish Air Quality Database Annual Report. Ferry operators must identify measures to avoid any detrimental impact to air quality. Operators must also ensure that suitable mitigation measures to abate air quality degradation are identified and implemented. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions.	also have a negative impact on the health and wellbeing of coastal communities who may derive physical and mental health benefits from spending time at the sea. However, the policy supports the delivery of NMP policy TRANSPORT 3 which identified no impact on these topics. In addition, it stipulates moving towards 'more sustainable transport', which requires developments and activities to be carried out at a level which does not exhaust natural resources or cause severe ecological damage. One area in particular where benefits of sustainable transport could be seen is around reducing greenhouse gas emissions of vessels. If increased marine connectivity reduces road traffic this can also have a positive effect in terms of climate change mitigation and improving air quality.
SA topics				
Marine economy	+ ?			This policy is positive as it supports the development of a sustainable marine economy in the Region. It does not set out how the sustainable use of the Region's resources are considered; however, it does indicate that moving towards more sustainable transport will be supported, indicating that environmental impacts will be considered as part of this policy. This can also have a positive implication for the protection of marine assets and the potential to utilise them in the future. Delivering more sustainable transport, particularly around the initiatives noted, could safeguard and/or create jobs as part of the development of a sustainable marine economy across new or existing sectors, and that support/provide benefits to coastal communities within the CMR. The policy does not present any barriers to marine enterprise opportunities within this sector, but could require the multiple use of facilities/infrastructure between different sectors/users, when taken in combination with Policy SEC 1.
Society	+			The policy has a clear positive impact on improving the accessibility and connectivity of coastal and island communities. It can also promote access to coastal and marine resources for tourism and recreation and improve the experience of recreational users of the marine and coastal environment, in terms of both access and quality of experience. The policy can also contribute to a community's sense of place. Improving connectivity can mean people are less likely to move away to find work if commuting is easier and can help maintain a community's sense of identity. This policy can support a reduction in the magnitude of

Policy SHIP 3: Proposals for development and/or use will be supported, particularly where they deliver more sustainable transport, in relation to: **a) ferry or related shoreside infrastructure initiatives that improve connectivity to the Kintyre peninsula, the Cowal peninsula and islands of Arran, Bute or the Cumbraes,** **b) ferry or related shoreside infrastructure initiatives that improve connectivity between the Kintyre peninsula and Northern Ireland,** **c) infrastructure relating to supporting bulk freight by sea; and/or** **d) movement connections along, to and across the Clyde estuary.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				poverty and social exclusion as improved connectivity can improve opportunities for employment and social/recreational activities.

Policy SHIP 4: Proposals for capital and/or maintenance dredging activities should demonstrate that they have considered practicable and cost-effective environmental enhancement measures, such as beneficial use of dredged material or dredging methods that retain sediment in the natural system, and how these measures will be delivered, where this is practicable.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive or neutral.	The impacts of the policy are positive, the positive impact of utilising dredged material are noted above in Objective SHIP 5. Furthermore, the policy focuses on delivering environmental enhancement where practical. This can help improve biodiversity and improve or support coastal processes such as flood protection.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air	0			No impact is identified.
Climatic factors				
Material assets				No impact is identified.
Cultural heritage				No impact is identified.
Landscape/seascape				There may be a limited impact on landscapes/seascapes where dredged material is used for environmental enhancement.
SA topics				
Marine economy	+ 0	P/L		The policy is positive as it supports the development of a sustainable marine economy in the Region and the sustainable use of the Region's resources to support the long-term viability of marine sectors. Although there may be short-term costs for operators to utilise environmental enhancement measures, consideration of the Best Practicable Environmental Option is already part of existing processes and includes a cost-benefit analysis that shows environmental enhancement measures may mitigate some of these costs. In addition, utilising environmental enhancement measures will likely provide long-term benefits to marine industries. No impact is identified on removing or avoiding barriers to new marine enterprise opportunities, or safeguarding and/or creating jobs that support the development of a sustainable marine economy across new or existing sectors.

Policy SHIP 4: Proposals for capital and/or maintenance dredging activities should demonstrate that they have considered practicable and cost-effective environmental enhancement measures, such as beneficial use of dredged material or dredging methods that retain sediment in the natural system, and how these measures will be delivered, where this is practicable.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Society	+ 0	P/L		This policy is positive, for society as the resulting effects of environmental enhancement can improve the experiences of recreational users of the marine and coastal environment and contribute to communities' sense of place through the protection of marine-related heritage. The policy has no impact on the other SA objectives related to society.

Policy SHIP 5: Proposals for new or upgraded infrastructure related to the powering of vessels, such as shoreside power facilities, or treatment of waste from closed loop exhaust gas cleaning systems or similar, will be supported where the infrastructure proposal demonstrates a long-term contribution to the reduction in greenhouse gas emissions and/or a reduction in pollution from wastewater in the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna Population and human health Sediments, marine geology and coastal processes Water Air	+ ?	Secondary	Many of these impacts are mitigated by existing regulations and legislation. In addition, policies within the NMP and Section 1 Chapter 9: All Sectors of the CRMP which must be adhered to in advance of sectoral policies and policies within the General – Sectors section. Capital and maintenance dredging are subject to existing consenting processes which are supported by environmental assessments, where applicable (e.g. EIA, HRA). These processes can identify the potential for these adverse effects and where appropriate, mitigate them. It is expected that any future marine developments would be in accordance with these requirements. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions.	This policy can result in a positive impact for these SEA topics by contributing to climate change mitigation activities and improving resilience, which will reduce the impacts of climate change on these SEA Topics. Shoreside power facilities can have a positive impact on localised air which can reduce vessels running their engines while in port and this policy can provide additional benefits in terms of reducing carbon emissions. There is little likelihood of causing significant negative impacts where power infrastructure upgrades applies to existing infrastructure that only requires maintenance or upgrading. Where it applies to the construction or development of new facilities, there could be a number of negative impacts. This would be dependent on the infrastructure upgrade but negative impacts could include: noise disturbance from piling or other construction work; displacement or disturbance of marine and coastal species; damage or loss of habitat; and disturbance of marine sediments leading to siltation of the water column. The nature of the impact is uncertain as it is dependent on the type and nature of infrastructure upgrades.
Climatic factors	+	P/L		The policy is positive for climate change mitigation and can contribute to the Region's mitigation activities. No impact is identified from this policy on adaptation, however all policies need to adhere with Policy CC1, which requires adaptation activities to be considered.
Material assets Cultural heritage Landscape/seascape	?			The policy is quite broad in nature, and infrastructure upgrades within the shipping, ports, harbours and ferries could incorporate a number of activities. Where this policy applies to existing infrastructure that only requires maintenance or upgrading, there is little likelihood of causing significant negative impacts. Where it applies to construction or development of new facilities, there could be a number of negative impacts. This would be dependent on the infrastructure upgrade but negative impacts could include: disturbance to unknown cultural heritage or detrimental impacts on the landscape/seascape from the construction of new infrastructure.
SA topics				

Policy SHIP 5: Proposals for new or upgraded infrastructure related to the powering of vessels, such as shoreside power facilities, or treatment of waste from closed loop exhaust gas cleaning systems or similar, will be supported where the infrastructure proposal demonstrates a long-term contribution to the reduction in greenhouse gas emissions and/or a reduction in pollution from wastewater in the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Marine economy	+	P/L		This policy supports the development of a sustainable marine economy within the region. Improvement to infrastructure can have a positive impact on marine related enterprises within the Region, providing more efficient or modern infrastructure leading to operational efficiencies. Improvements can also remove barriers to new marine enterprise opportunities and safeguard and/or create jobs that support the development of a sustainable marine economy across new or existing sectors.
Society	+	P/L		The impact of this policy depends on the type and location of infrastructure upgrade, but in general could support all the SA objectives for this topic. Infrastructure upgrades could maintain or improve the accessibility and connectivity of coastal and island communities, promote access to coastal and marine resources for tourism and recreation as well as maintain or improve the experiences of recreational users of the marine environment and contribute to communities' sense of place. Improving the contribution to climate change mitigation activity is positive for society.

Recommendation rSHIP1: The use of compliant fuel is encouraged in the Clyde Marine Region. If an exhaust gas cleaning system is fitted, it should be used in closed loop mode. Large parts of the navigable Clyde are dredged; therefore, until there is sufficient evidence to be confident that the use of open loop scrubbers will not impact negatively on sediment quality (and hence on the ability to dispose of dredged sediment to sea), open loop scrubbers or hybrid scrubbers in open loop mode should not be used in the Clyde Marine Region. This applies in transit, at berth and at anchorage. The waste from the exhaust gas cleaning system should only be disposed at ports where appropriate reception facilities are available.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	+	P/L	No mitigation is required as impacts are identified as positive or neutral.	The measures outlined in the recommendation are part of international legislation and will provide a positive impact on air quality and human health. Therefore the element of the recommendation that encourages use of low-sulphur compliant fuel does not introduce anything additional to what is in place and is identified as having no impact on these SEA topics. The recommendation promotes the use of closed loop scrubbers, where low sulphur compliant fuel is not being used, in order to prevent sulphur accumulating in marine sediments. Therefore, this recommendation is identified as having a positive impact on sediments, marine geology and coastal processes. Accumulation of sulphur in marine sediments can negatively affect its ability to deliver ecosystem services, such as its ability to breakdown waste. The accumulation of sulphur in marine sediments can have a secondary negative impact on some marine biodiversity, human health and water, if the sediments are disturbed through dredging for example, and therefore the recommendation is identified as having a positive impact on these SEA topics too. No impact is identified on the other SEA topics.
Population and human health	0 +			
Sediments, marine geology and coastal processes	+			
Water	+			
Air	0			
Climatic factors	0			
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				

Recommendation rSHIP1: The use of compliant fuel is encouraged in the Clyde Marine Region. If an exhaust gas cleaning system is fitted, it should be used in closed loop mode. Large parts of the navigable Clyde are dredged; therefore, until there is sufficient evidence to be confident that the use of open loop scrubbers will not impact negatively on sediment quality (and hence on the ability to dispose of dredged sediment to sea), open loop scrubbers or hybrid scrubbers in open loop mode should not be used in the Clyde Marine Region. This applies in transit, at berth and at anchorage. The waste from the exhaust gas cleaning system should only be disposed at ports where appropriate reception facilities are available.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Marine economy	0 +			No impact is identified in relation to the measures already in place through international legislation. The recommendation can support the development of a sustainable marine economy in Region for this sector and ensure the sustainable use of the Region's resources, through the reduction of emissions and waste water. No impact is identified on protecting marine assets, removing or avoiding barriers to new enterprise opportunities or on safeguarding and/or creating jobs.
Society	0			No impact is identified on any of the SEA objectives.

Energy, Subsea Cables and Pipelines

Objective ENCA 1: The Clyde Marine Region plays its part in the transition to a decarbonised Scottish Economy while ensuring energy security. Offshore energy generation is essential to securing long term benefits and jobs for local communities and contributing to energy security. This includes the use of marine wind, wave and tidal renewable energy sources in the Clyde Marine Region.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna Population and human health Sediments, marine geology and coastal processes Water Air Climatic factors Material assets Cultural heritage Landscape/seascape	+	P/L Secondary except for climactic factors	No mitigation is required as impacts are identified as positive or neutral.	The objective will have a positive impact, as reducing reliance on fossil fuels can enable and improve climate change mitigation activities. The objective supports the application of National climate change objectives at the regional level. This will increase the Region's contribution to national greenhouse gas emissions targets and can reduce the impact of climate change in the Region. Climate change impacts are cross-cutting and varied across the range of SEA Topics, therefore any effort to reduce the impact of climate change can have a positive impact across all the SEA Topics. However, an increased use of renewable energy can have a significant negative impact on habitats and species and can result in loss of and/or damage to the seabed and its habitats through anchoring structures; create collision risk with seabirds and cetaceans; and can create changes in sediment transport through changes in energy levels in the water. The objective notes that renewable energy sources in the Region are increased and these negative effects will have already been considered as part of that process and been subject to the assessment and consultation of those Plans. Construction of marine wind, wave and tidal renewable energy sources are subject to consent and licensing processes which would include public consultation and assessments as appropriate – such as an EIA and/or HRA and consideration of cultural heritage and landscapes/seascapes. These processes will mitigate any adverse impacts to these SEA Topics. In addition, this objective is proposed in the context of NMP and the policies within the General Policies chapter of the CRMP, further ensuring there is no detrimental impact to these topics.
SA topics				
Marine economy		P/T		Enabling a reduction in the reliance on fossil fuels can have a short-term negative impact where placement of marine wind, wave and tidal renewable energy structures may exclude, displace or reduce capacity for some marine enterprises to operate in some areas. This can result in job losses and present barriers to new or existing marine enterprises. This impact can be minimised through the consideration of Objective SEC 2 and Policy SEC 1 which

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SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
	+			promotes the multiple use of infrastructure and the marine spatial area. However, the objective notes that renewable energy sources in the Region are increased in line with Sectoral Marine Plans and this negative impact will have already been considered as part of that process and been subject to the assessment and consultation of those Plans. In the long term, reducing reliance on fossil fuels and increasing the means of producing renewable energy can support the development of a sustainable marine economy, in the CMR, across a range of sectors and business sizes. This objective can also reduce marine businesses' vulnerability to climate change impacts. The objective also ensures the sustainable use of the Region's resources to support the long-term viability of marine sectors and can protect marine assets in the Region, maintaining the potential to utilise them in the future. Growth of the renewable energy sector within the Region can remove barriers to new marine enterprise opportunities and can create jobs to support the renewable energy generation sector.
Society	+	P/T		There is potential for this objective to have a negative impact on the experiences of recreational users where activities may be limited or displaced, but as noted above this will have been taken into account and assessed through the development of the Sectoral Marine Plans. No impact on the other SA objectives is identified; however, there will be societal benefits from climate change mitigation and any potential jobs generated through an increase in activity of this sector within the Region. Where there can be community involvement in wind farm developments, this can have positive impacts on coastal communities/society, and greater benefits can be expected if they are community owned developments.[62]

Objective ENCA 2: The laying, replacement and maintenance of important subsea cables and pipelines in the Clyde Marine Region is undertaken with due consideration of all marine users.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0 0		Existing consenting processes for coastal and marine developments are in place and these are likely to be supported by underlying assessments (e.g. EIA, flood-risk). These consenting processes are currently the primary mechanisms for the identification, assessment and, where necessary, avoidance and/or mitigation of any negative impacts identified in this assessment. The CRMP is not expected to change these assessments but is instead aimed at providing guidance and support	Laying, replacing and maintaining important subsea cables and pipelines has the potential to have a range of negative impacts on these SEA topics including: loss of and/or damage to coastal and benthic habitats and species; electromagnetic field effects on species sensitive to this; benthic smothering from sediments generated during installation; a reduction in water quality from increased turbidity; and a reduction in ecological status through loss of and/or damage to benthic habitats and species through the processes noted above. These activities can also impact on cultural heritage resulting in the loss and/or damage to coastal and/or underwater historic environment features or archaeology.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				

[62] https://www.sciencedirect.com/science/article/abs/pii/S0264837709000039

Objective ENCA 2: The laying, replacement and maintenance of important subsea cables and pipelines in the Clyde Marine Region is undertaken with due consideration of all marine users.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Material assets Cultural heritage Landscape/seascape			to developers and users by considering any potential negative impacts. Where an impact is uncertain, it is expected further determination of this could be made by considering the specific details of any proposals. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions. Users of the CRMP must also adhere to the policies of the NMP, as well as all the policies of Section 1 and Chapter 9: All Sectors of the CRMP.	Depending on the type and location of activity, cable and/or pipeline laying, replacement and/or maintenance, there may be a reduction in landscape quality through landfall. A potential negative impact on marine geology and coastal processes could also occur as a result of these activities. While there is a wide range of potential negative impacts on these SEA Topics, the assessment assumes that many of these impacts are mitigated by policies within the Section 1and Chapter 9: All Sectors of the CRMP which must be adhered to in advance of sectoral policies. This objective will also be applied in the context of the policies in the NMP, which require environmental issues to be taken into account during decision-making processes, so adverse effects can be mitigated/ minimised. This objective is also in support of objective 1 of the submarine cables chapter of the NMP. It is likely that licensing and consents will be required as part of the planning process and these processes may be supported by underlying assessments, such as an EIA, which could mitigate any adverse impacts. The overall impact is therefore noted as neutral.
SA topics				
Marine economy	0			The objective is in support of existing objective 1 in the submarine cables chapter of the NMP and does not introduce any new measures, so the impact is considered neutral. The objective is positive as it encourages operators undertaking laying, replacement and maintenance to have wider consideration of other users of the marine environment and the potential implications of their activities. This can contribute to conflict resolution and reduce any potential detrimental impacts on other industries that are affected by cable and pipeline laying, replacement and maintenance. This objective may increase operating costs for the industry, which could increase barriers to new marine enterprise opportunities and have an impact on safeguarding and/or creating jobs. However, the benefits derived to other industries/sectors could reduce such barriers and safeguard and/or create jobs.
Society	0			The objective is in support of existing objective 1 in the submarine cables chapter of the NMP and does not introduce any new measures, so the impact is considered neutral. The objective can maintain or improve the experiences of recreational users of the marine and coastal environment, both in terms of access and quality of experience. Laying, replacing and maintaining cables and pipelines can maintain or improve the connectivity of coastal and island communities. No impact is identified on the other objectives for this SA Topic.

Policy ENCA 1: Proposals for development and/or use relating to offshore wind and marine renewable energy, including test facilities, should demonstrate that they have considered that:

a) proposals for commercial-scale developments are sited in draft Plan Option areas identified through the Sectoral Marine Plan process (see Map ENCA 1 and further information section below);

b) due regard has been paid to relevant factors in the Sectoral Marine Plans and supporting documentation/assessments (as appropriate);

c) proposals for small-scale offshore wind developments undertake early and proactive engagement with relevant public authorities and relevant stakeholders; and

d) where applicable, detailed infrastructure restoration and maintenance plans are included for the full lifespan of any proposal, including any decommissioning/remediation required.

SEA topics	Impact	Nature of impact	Mitigation	Explanatory text
Biodiversity, flora and fauna Population and human health Sediments, marine geology and coastal processes Water Air Climatic factors Material assets Cultural heritage Landscape/seascape	0		Construction of marine wind, wave and tidal renewable energy sources are subject to consent and licensing processes which include public consultation and assessments as appropriate (e.g. EIA and/or HRA and consideration of cultural heritage and landscapes/seascapes). These consenting processes will mitigate any adverse impacts to these SEA Topics. In addition, this policy is proposed in the context of the NMP and the policies within Section 1 and Chapter 9 All Sectors of this CRMP, further ensuring that adverse effects are mitigated/ minimised. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions.	The potential negative impacts on these SEA topics are varied and can include; loss of and/or damage to the seabed and its habitats through anchoring structure; create collision risk with seabirds and cetaceans; changes in sediment transport through changes in energy levels in the water; and damage to unknown cultural heritage. The policy supports proposals being sited according to existing spatial guidance identified through national processes which identify suitable draft plan option areas, such as the draft Sectoral Marine Plan for offshore wind and relevant Regional Locational Guidance, thereby supporting existing processes, which may have already considered the impacts on the SEA topics. In addition to this, construction of marine wind, wave and tidal renewable energy sources are subject to consent and licensing processes which would include public consultation and assessments as appropriate – such as an EIA and/or HRA and consideration of cultural heritage and landscapes/seascapes. These processes will mitigate any adverse impacts to these SEA Topics. In addition, this policy is proposed in the context of the NMP and the policies within the General Policies chapter of the CRMP, further ensuring there is no detrimental impact to these topics.
SA topics				
Marine economy	0			The impact on the marine economy is considered through national processes which identify suitable draft plan option areas and so overall the impact of this policy is identified as neutral. Enabling reduction in reliance on fossil fuels can have a short-term negative impact on some marine enterprises as a result of any operational costs associated with the transition. Placement of marine wind, wave and tidal renewable energy structures may also exclude, displace or reduce capacity for some marine enterprises to operate in some areas which can result in job losses. However, the likelihood of this impact is considered through other processes, as the policy states that developments and activities will be

Policy ENCA 1: Proposals for development and/or use relating to offshore wind and marine renewable energy, including test facilities, should demonstrate that they have considered that:

a) proposals for commercial-scale developments are sited in draft Plan Option areas identified through the Sectoral Marine Plan process (see Map ENCA 1 and further information section below);

b) due regard has been paid to relevant factors in the Sectoral Marine Plans and supporting documentation/assessments (as appropriate);

c) proposals for small-scale offshore wind developments undertake early and proactive engagement with relevant public authorities and relevant stakeholders; and

d) where applicable, detailed infrastructure restoration and maintenance plans are included for the full lifespan of any proposal, including any decommissioning/remediation required.

SEA topics	Impact	Nature of impact	Mitigation	Explanatory text
				supported where the Sectoral Marine Plan Process and Regional Locational Guidance has been taken into account. In the long term, reducing reliance on fossil fuels and increasing the means of producing renewable energy can support the development of a sustainable marine economy, in the CMR, across a range of sectors and businesses sizes. This policy can reduce marine businesses' vulnerability to climate change impacts. The policy also ensures the sustainable use of the Region's resources to support the long-term viability of marine sectors and can protect marine assets in the Region, maintaining the potential to utilise them in the future. This policy can remove barriers to new marine enterprise opportunities and can create jobs to support the renewable energy generation sector.
Society	0			The impact on the marine economy is considered through national processes which identify suitable draft plan option areas so the overall impact of this policy is neutral. The assessment acknowledged that what implemented at a Regional level, there is potential for this policy to have a negative impact on the experiences of recreational users where activities may be limited or displaced. No impacts on the other SA objectives are identified; however, there will be societal benefits from climate change mitigation and any potential jobs generated through an increase in activity of this sector in the Region.

Policy ENCA 2: Proposals for developments will only be supported where it can be demonstrated that they contribute to a sustainable, secure and inclusive energy transition, taking account of our Climate Change Policies and in line with statutory marine and land use planning policy, environmental regulations and industry best practice.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna Population and human health Sediments, marine geology and coastal processes Water Air Climatic factors Material assets Cultural heritage Landscape/seascape	0		Proposals for oil and gas exploration are subject to consent and licensing processes which include public consultation and assessments as appropriate (e.g. EIA and/or HRA and consideration of cultural heritage and landscapes/seascapes). These processes will consider the negative impacts on the SEA topics and mitigate adverse impacts where necessary. In addition, this policy is proposed in the context of the NMP and the policies within Section 1 and Chapter 9 All Sectors of the CRMP, further ensuring that adverse effects are mitigated/ minimised. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions.	The potential negative impacts on these SEA topics are varied and can include; loss of and/or damage to the seabed and its habitats through drilling, piling and/or anchoring structures; creating a collision risk with seabirds and cetaceans; impact of noise on cetaceans, risk of spillage and pollution events; and damage to unknown cultural heritage. The policy is assessed to have a neutral impact as it does not introduce any new conditions/measures but supports existing national legislation which sets the regulatory framework around considering the impacts on the SEA topics. In addition to this, proposals for oil and gas exploration are subject to consent which would include public consultation and assessments as appropriate – such as an EIA and/or HRA and consideration of cultural heritage and landscapes/seascapes. These processes will mitigate any adverse impacts to these SEA Topics, or identify justification for these proposals in line with public interest. In addition, this policy is proposed in the context of the NMP and the policies within the General Policies chapter of the CRMP, further ensuring there is no detrimental impact to these topics.
SA topics				
Marine economy Society	0			As above.

Recommendation rENCA 1: The laying, replacement and maintenance of communication and power cables and any oil and gas pipelines is encouraged where: **a) existing routes and landing points are used where practicable, and/or** **b) the required mitigation and monitoring plans are produced.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna Population and human health Sediments, marine geology and coastal processes	0		Mitigation: No mitigation is required as impacts are identified as positive or neutral.	The assessment assumes that any negative impacts on these SEA topics will be mitigated through the licensing and consent process for cable and pipeline laying, replacement and maintenance and policies within the NMP and within the General Policies chapter of the CRMP as the policy does not introduce any new measures. Consideration of using existing routes and landing points can also mitigate any negative impacts to material assets.

Recommendation rENCA 1: The laying, replacement and maintenance of communication and power cables and any oil and gas pipelines is encouraged where: **a) existing routes and landing points are used where practicable, and/or** **b) the required mitigation and monitoring plans are produced.**				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Water Air Climatic factors Material assets Cultural heritage Landscape/seascape				
SA topics				
Marine economy Society	0			The policy supports existing policies within the NMP and so is considered to have a neutral impact for both marine economy and society as it does not introduce any new measures. Overall, the policy is positive as it encourages operators undertaking laying, replacement and maintenance to have wider consideration for other users of the marine environment and the potential implications on their activities. This can contribute to conflict resolution and reduce any potential detrimental impacts on other industries or communities that are affected by cable and pipeline laying, replacement and maintenance.

Defence

Objective DEF 1: Operations of His Majesty's Naval Base Clyde as the UK Single Submarine Operating Base are undertaken in the Clyde Marine Region, with due consideration of other marine users and the marine environment.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna Population and human health Sediments, marine geology and coastal processes Water Air Climatic factors Material assets Cultural heritage	0		Mitigation: No mitigation is required as impacts are identified as positive or neutral.	No impact is identified from this objective on these SEA topics as the objective stipulates consideration of the marine environment, including the requirements of existing legislation in place for the protection of habitats, species, water and air quality, cultural heritage and landscapes/seascapes. Any potential detrimental effect to the SEA topics will be covered under these requirements. It also does not introduce any new measures and is in line with current practice by the Ministry of Defence There may be impacts on climatic factors, with regard to climate change mitigation and adaptation; however, as the policies in the General Policies chapter of the CRMP and in the NMP need to be adhered to in advance of this policy, the impact on climatic factors will already be considered. Therefore, there should be no adverse impacts on these SEA Topics.

Objective DEF 1: Operations of His Majesty's Naval Base Clyde as the UK Single Submarine Operating Base are undertaken in the Clyde Marine Region, with due consideration of other marine users and the marine environment.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Landscape/seascape				
SA topics				
Marine economy	0			This objective can support the development of a sustainable marine economy in the Region, ensure the sustainable use of the Region's resources and protect the Region's assets and the potential to utilise them in the future. There is the potential for some negative impacts if other marine activities are excluded or restricted from areas where the Ministry of Defence is operating, however there may be no change from the current situation and the CRMP will likely not be able to influence this activity. As such, defence activities may impose barriers to new marine enterprise activities, though this is unclear. Nonetheless, other activities have coexisted alongside defence activities for a long time (e.g. agreements between the Ministry of Defence and some marine sectors like the fishing sector).
Society	0			No effect is identified on the connectivity and accessibility of communities; access to marine resources; magnitude of poverty, social exclusion or equality; or contribution to people's sense of place. The Ministry of Defence activities in Region maintain jobs which support some coastal communities. The assessment assumes these jobs would be maintained regardless of this policy.

Recommendation rDEF 1: His Majesty's Naval Base Clyde is encouraged to integrate any increased levels of Ministry of Defence marine activity in the Clyde Marine Region in accordance with this Plan, ensuring wide engagement with other marine users.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	?	P/L	No mitigation is required as impacts are identified as positive or neutral.	Integrating Ministry of Defence activity in line with the CRMP is a positive ambition, and will promote compliance with the rest of the CRMP, and protection or enhancement of the marine and coastal environment. Overall, the effect is unclear on these topics, as environmental protection or enhancement does not fall within the scope or range of work that the Ministry of Defence undertakes, nor is it bound by existing consenting processes to follow the CRMP. However some of the policies of the General Policies section may be applied by the Ministry of Defence, which follows a dis-application process that replicates the marine licensing process.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	?			There is potential for some negative impacts if other marine activities are excluded or restricted from using areas where the Ministry of Defence is operating (there may be no change from the current situation). As such, defence activities may impose barriers to new marine enterprise activities. Nonetheless, other activities

Recommendation rDEF 1: His Majesty's Naval Base Clyde is encouraged to integrate any increased levels of Ministry of Defence marine activity in the Clyde Marine Region in accordance with this Plan, ensuring wide engagement with other marine users.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
				have coexisted alongside defence activities for a long time (e.g. agreements between the Ministry of Defence and some marine sectors like the fishing sector).
Society	0			No effect is identified on the connectivity and accessibility of communities; access to marine resources; magnitude of poverty, social exclusion or equality; or contribution to people's sense of place. The Ministry of Defence activities maintain jobs in the Region which support some coastal communities. The assessment assumes these jobs would be maintained regardless of this policy.

Marine Aggregates

Objective AGG 1: Marine aggregate resources are safeguarded in the Clyde Marine Region and any future exploitation is in line with regulations, in particular regarding potential environmental impact.				
SEA topics	**Impact**	**Nature of impact**	**Mitigation**	**Explanatory text**
Biodiversity, flora and fauna	0		Consideration of licensing and consent processes, the NMP policies and policies within the General Policies chapter of the CRMP will help mitigate any negative impacts of this policy. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions.	Extraction of marine aggregate resources has the potential to have many negative impacts on the marine and coastal environment. One of the locations of manganese nodules in the Clyde is coincident with the Upper Loch Goil and Loch Fyne Nature Conservation MPA. The other two are coincident with burrowed mud, a PMF, although not all PMFs are necessarily protected outside MPAs. The objective stipulates that any extraction must have particular regard to the potential environmental impacts and must also be in line with regulations. In addition to this, any users undertaking exploitation of marine aggregates must follow existing licensing and consent processes, take into account the NMP and the policies within the Section 1: General policies of the CRMP, ensuring that adverse impacts on these SEA topics are taken into consideration.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	0			The objective supports the development of a sustainable marine economy in the Region and ensures the sustainable use of the Region's resources to support the long-term viability of marine sectors as it stipulates that those carrying out extraction should have particular regard to the potential environmental impacts. The objective emphasises that operators must follow existing regulations. The objective does not propose new measures which may impose additional costs on developers or which may increase barriers to new marine enterprise opportunities.
Society	0			No impact is identified.

Policy AGG 1: Proposals for the extraction of marine aggregates should demonstrate that they have considered:

a) providing a description of the alternatives that have been considered, such as alternative sources or materials, including dredged material; and

b) demonstrating that marine aggregate extraction is an essential part of the proposed project.

Where an Environmental Impact Assessment is required, the proposal should demonstrate that it has considered an assessment of the physical effects of the operation, including any implications for coastal sediment dynamics.

SEA topics	Impact	Nature of impact	Mitigation	Explanatory text
Biodiversity, flora and fauna	0		Consideration of licensing and consent processes, the NMP policies and policies with the General Policies chapter of the CRMP will help mitigate the any negative impacts of this policy. The CMPP will consider all marine licence applications in the Region against policies in the CRMP and provide input to Marine Directorate to aid any licensing decisions.	This policy is written in context of the policies included within the NMP, existing licensing processes and in the General Policies chapter of the CRMP (i.e. those related to environmental, cultural, landscape/seascape and water and air quality protections) and these mitigate any adverse impacts on these SEA Topics.
Population and human health				
Sediments, marine geology and coastal processes				
Water				
Air				
Climatic factors				
Material assets				
Cultural heritage				
Landscape/seascape				
SA topics				
Marine economy	0			The policy facilitates extraction of aggregates where appropriate in line with existing NMP policy AGGREGATES 2 and the requirements of the Best Practice Environmental Options and supports the implementation of these requirements at the Regional level, no impact is identified,
Society	0			The policy does not introduce any new measures and so the effect is found to be neutral.

Appendix 4 - Assessment of Reasonable Alternatives

Option 1 – No change/business as usual			
Explanatory text: This alternative considers the impact if the CRMP is not put in place and regional/local decisions are based on the NMP and other current legislation and regulations. **Assumptions:** Under this option the CRMP would not be developed or adopted. Instead, the existing policy framework governing the Region would remain in place. This includes the NMP, other environmental legislation such as the Marine Strategy Regulations (2010) and the Water Environment and Water Services (Scotland) Act 2003 as well as Marine Protected Areas and consideration of Priority Marine Features. Consideration and protections of designated species and habitats would apply. Existing decision-making bodies, such as Local Authorities, Marine Directorate, the Scottish Environment Protection Agency, NatureScot and Crown Estate Scotland would continue to carry out their functions.			
SEA topics			
	Objective No.	**Assessment**	**Implications**
Biodiversity, flora and fauna	1	+/0	The existing policy framework provides protection, and where appropriate, enhancement of protected species and habitats, the water environment, air quality and delivers climate change mitigation and adaptation activity, protection of historic and cultural heritage and seascape/landscape. The assessment indicates that this option would result in a positive impact, provided by the existing policy framework which delivers habitat and species protection and enhancement. A neutral impact is also noted as an outcome, as a RMP can contribute to delivering these benefits more effectively for the region than the existing legislative framework alone. Regional marine planning focusses on a much smaller area, working with local stakeholders and so can take account of a smaller ecosystem scale, regional needs and issues. A RMP, and the process of developing the draft CRMP, can act as a driver, or catalyst for action on specific local issues. Regional Marine Planning also has an important role in communicating and engaging with local stakeholders, and is better placed than National mechanisms, or high-level National policy to embed and increase awareness of marine planning at the local scale.
	2	+/0	
	3	+/0	
Population and human health	4	+/0	
Sediments, marine geology and coastal processes	5	+/0	
	6	+/0	
	7	+/0	
	8	+/0	
Water	9	+/0	
Air	10	+/0	
Climatic factors	11	+/0	
	12	+/0	
	13	+/0	
Material assets	14	+/0	

Cultural heritage	15	+/0	
	16	+/0	
	17	+/0	
Landscape/Seascape	18	+/0	
SA topics			
Marine economy	19	+/0	The NMP provides a framework which seeks to manage activities and developments to ensure the sustainable development of the marine economy. Both the sector specific policies and the general policies of the NMP seek to ensure balance between the different marine sectors/industries. In addition, policies promote co-existence between developments and activities and mechanisms to reduce conflict. The NMP also considers and promotes the use and development of the marine and coastal environment which provides social benefits, including: improved quality of life and community regeneration through increased job opportunities, benefits to health and wellbeing associated with the natural and historic environment and access to marine and coastal areas for recreation. Therefore, a positive impact is indicated. However the NMP may not necessarily deliver these objectives for the region (although the NMP should be taken into account in decision making, policies are high level and not area specific) and so a neutral impact is also noted. A RMP can deliver these benefits more effectively that the existing legislative framework alone. Regional marine planning focusses on a much smaller area, working with local stakeholders and so can take account of the specific activities taking place within the region, regional needs and issues. A RMP can also act as a driver, or catalyst for regional action on specific local issues. Therefore, the assessment found that there would either be a positive or a neutral impact. A neutral impact is noted for objective no. 23, as it is regionally specific and the NMP would not necessarily address this directly.
	20	+/0	
	21	+/0	
	22	+/0	
	23	0	
Society	24	+/0	
	25	+/0	
	26	+/0	
	27	+/0	
	28	+/0	

Summary

The assessment indicates that this alternative would result in a positive or neutral impact on the SA-SEA topics. The existing planning and legislative framework provides protection and where possible enhancement for the environment and a framework which seeks to manage activities and/or developments to ensure the sustainable development of the marine economy. The existing legislative framework would not necessarily deliver as strong an impact at a regional level as a RMP. The NMP puts forward a number of considerations for the development of regional policy. Without the development of a RMP, there is no mechanism for implementing these and this may hinder delivery of or progress towards delivering regional considerations within the NMP. As a result of not having a RMP, the gap between national and regional decision-making processes represented by the RMP would not be filled. This could lead to less engagement of and coordination and discussion between regional stakeholders. The process of developing a RMP entails taking into account regional stakeholders' knowledge, views and experiences and regional policies would be developed on this local knowledge, which can help identify and address local issues and importantly opportunities for positive impacts, particularly for society and the marine economy. Public engagement opportunities in regional

marine planning may also increase the public's understanding of coastal and marine issues in the Region, and enables their involvement and contribution to the planning process and input into the final RMP. It also facilitates their engagement increasing the likelihood of compliance amongst informal users of the marine and coastal environment. Although the NMP does not prevent considerations of regional and local issues, the process of regional marine planning allows for them to be fully incorporated and considered through the development of regionally relevant policies.

The RMP can tackle issues and problems through policy that aids and contributes to decision making and recommendations which can help guide informal users of the marine and coastal environment and so can promote awareness of existing best practice guidelines. Marine planning is required to work with terrestrial planning authorities, and where possible align policies. Regional Marine Planning involves all relevant local Planning Authorities in the development of RMP's, ensuring better linkage between terrestrial and marine planning and decision making at the regional level. The RMP could therefore lead to a more informed site selection process and reduced planning risk and uncertainty. This benefit is supplemented by the fact that a RMP allows consideration of issues to happen at a smaller ecosystem scale and regional/local operational scale for businesses, developments and activities.

Option 2 – CRMP targets action on the issues identified which contribute to delivery of the collective vision and aims of regional stakeholders. This is done through the combined use of policy relating to authorisations and consents, and non-statutory recommendations which guide and inform the use of the marine and coastal environment.

Explanatory text:
This alternative targets action on identified issues and contributes to delivery of the collective vision and aims of regional stakeholders through policy focussed on supporting the regional implementation of existing legislation and policies which introduce new measures to address the needs and opportunities of the Region and regional stakeholders. It also includes non-statutory recommendations to support action in areas where there are particular issues. Whilst certain developments and activities within the Region require official consent (e.g. marine licensing, planning consent) and decision making around these will be informed by policies, many activities are carried out on an informal basis and not are not within the regulatory framework established by policies. This alternative takes into account the issues and opportunities identified from the CMRA and throughout the stakeholder discussion process to form polices and also to guide best practices through the use of recommendations. This approach aims to better contribute to achieving the aims and objectives for the Region.

Assumptions:
The approach will inform and guide all users of the Regions' marine and coastal environment, tackle issues identified in the Region and is developed with local stakeholders. It recognises that the recommendations are non-statutory, but that they will drive more considered use of the marine and coastal environment from all users.

SEA topics

	Objective No.	Assessment	Implications
	1	+	

Biodiversity, flora and fauna	2	+	The existing policy framework provides protection and, where appropriate, enhancement of protected species and habitats, the water environment, air quality, climate change mitigation and adaptation activity, protection of historic and cultural heritage and seascapes/landscapes. The Assessment indicates that this alternative would have a further positive impact on these SEA topics by targeting policy around particular regional issues, supporting implementation of existing regulations and encouraging all marine users to contribute to delivery of the aims and objectives. Recommendations proposed through this alternative will contribute to protection and enhancement of these features. The assessment also indicates a positive impact as a result of the issues driven approach taking place at a local level and working with local stakeholders. This alternative for a RMP can contribute to the more effective and targeted delivery of the aims and objectives of the NMP. Whilst the overall impact is assessed as positive, there is an element of capacity building amongst all users of the Region required in order to ensure implementation/consideration of the CRMP across developments/activities. It should also be noted that there would be no formal mechanism to ensure that recommendations are carried out by all users. Implementation of the CRMP will be measured through its objectives.
	3	+	
Population and human health	4	+	
Sediments, marine geology and coastal processes	5	+	
	6	+	
	7	+	
	8	+	
Water	9	+	
Air	10	+	
Climatic factors	11	+	
	12	+	
	13	+	
Material assets	14	+	
Cultural heritage	15	+	
	16	+	
	17	+	
Landscape/Seascape	18	+	
SA topics			
Marine economy	19	+/-	The existing legislative framework seeks to support the development of a sustainable marine economy, and support coastal communities. This alternative approach adds value to the national approach and has a further positive effect on the marine economy and society through the introduction of policies targeted to the needs of the region. These policies have been developed in consultation with local stakeholders and will aid the decision-making process by providing consistency both within the marine licence application process and to decisions taken by Planning Authorities across the land-sea interface. The recommendations that this approach introduces also contribute to this and fill the gap between regulated activities and development and informal use and activities within the region. This dual approach contributes to achieving the aims and objectives on the NMP, and also the aims and objectives of the RMP. A negative outcome is also noted as some policies may introduce new areas of consideration for sectors, which may have a negative impact in the short term, but ultimately contribute to the sustainable development of the Region and will likely lead to long-term benefits.
	20	+/-	
	21	+/-	
	22	+/-	
	23	+/-	
Society	24	+/-	
	25	+/-	
	26	+/-	
	27	+/-	
	28	+/-	
Summary			

Overall, the process of developing a RMP, can contribute positively to the delivery of the aims of the NMP and can act as a driver for resolving particular issues within the region. Regional Marine Planning works at a smaller ecosystem scale, taking into account localised issues and working with local stakeholders. Regional Marine Planning also has an important role in communicating and engaging with local stakeholders, and is better placed than national mechanisms, or high-level national policy to embed and increase awareness of marine planning at the local scale.

The assessment shows that this alternative approach will result in positive impacts for all the SA-SEA topics, as the main factors for consideration in this alternative are the consideration of regional issues and contributing to the delivery of the collective vision and aims of local stakeholders within the framework of the NMP. Bringing together existing legislation and regulations, and introducing new measures to support decision making for areas where there are particular issues serves to target action in an effective way, and contributes to delivery of the aims and objectives of the NMP and the CRMP. In combination the recommendations, which contribute to tackling issues through providing best practice information, and the objectives and policies of the CRMP address regional issues, ultimately furthering protection and enhancement of protected features and contributing to the sustainable development of the marine economy.

Having both approaches (policy related to licensing and consents and recommendations) enables a 'top down, bottom up' approach to dealing with, and resolving over time, issues being faced within the region. Whilst the overall impact is assessed as positive, there is an element of capacity building amongst all users of the Region required in order to ensure the CRMP is considered effectively by marine licence applicants and decision makers.

In summary, this approach can improve the efficiency of licence applications and consents processes, aid in decision-making to help address regional issues and provide guidance and a practical approach for all users. The approach seeks to add value to the existing framework created by the NMP and is built around the needs of the region. For these reasons, it is the preferred approach.

Appendix 5 – Changes to objectives and policies of the draft CRMP as a result of the SA-SEA assessment process

The assessment of polices as part of the SA-SEA process identified changes to some objectives and policies for the pre-consultation stage as identified in the table below.

Initial Objective/Policy	Suggested change and reasoning
Objective CC2 - Irreversible Damage to significant natural carbon sinks in the Clyde Marine Region is avoided.	Remove 'Irreversible'. There is potential for carbon sinks to be restored after sustaining damage; however the benefits they provide as a result of damage may be lost/more difficult to restore.
Objective HE1 - Cultural and heritage assets, whether visible, buried or submerged, are preserved in situ where possible.	Add consideration for enhancement to objective, so that this CRMP objective can more clearly meet the objectives of the SA-SEA and to reflect the NMP
Policy HE 1 - …… Preservation in situ will always be the preferred form of mitigation….	Add consideration for enhancement to objective, so that this CRMP objective can more clearly meet the objectives of the SA-SEA and to reflect the NMP
Objective SHIP 2: Promote the use of Clyde Marine Region ports and harbours to undertake the construction, servicing and decommissioning of marine structures, in particular for marine renewables	Replace 'marine renewables' with wording promoting consideration of climate change adaptation and mitigation to allow for wider variety of marine structures, (i.e. not limited to marine renewables) that can contribute to climate change mitigation and adaptation.
Policy SHIP 4 - Licence applications to support the maintenance and improvement of the timber network from Argyll and the islands of the Clyde Marine Region will be supported.	Change in wording to clarify that expansion of the network is included within 'improvement'
Policy SHIP 6 – Licence applications for infrastructure upgrade, such as shoreside power facilities, will be supported where the infrastructure can clearly demonstrate a long-term contribution to the reduction in carbon emissions from the Clyde Marine Region.	Change in wording to clarify that this policy only refers to infrastructure upgrades specifically related to the powering of vessels.
Objective DEF 1: Support development operations of HMNB Clyde as the UK Single Submarine Operating Base (SSOB), with due consideration of other marine users.	Include wording on consideration of the marine environment to make overt the need for consideration of this aspect.
Policy ENCA 3: The laying, replacement and maintenance of communication and power cables and any future oil and gas pipelines is supported where: • proposed land fall is in line with the relevant Local Development Plan(s), • existing routes and landing points are used where practicable,	Policy contradicts Objective ENCA 1 which seeks to promote reduction in reliance on fossil fuels. Suggest removing 'future', which acknowledges the need to replace and maintain existing pipelines, while reliance on fossil fuels is reduced.

Initial Objective/Policy	Suggested change and reasoning
• consideration has been given to the use of a fisheries observer during cable laying operations.	

As a result of pre-consultation responses, specific workshops on fisheries, aquaculture and natural heritage, a public dialogue process, a usability workshop, and further dialogue with CMPP members and the Marine Directorate, further changes have been made resulting in the draft CRMP. The SA-SEA assessment process did not itself identify any specific required changes to the draft CRMP at this later stage.

Appendix 6 - Other relevant plans, programmes and strategies that will influence CRMP development

A number of relevant plans, programmes and strategies that will influence the draft CRMP are listed in the table below. The draft CRMP is also influenced by the Plan, Programmes and strategies listed in Appendix 2 (excluding those only relating to beyond UK territorial waters, i.e. outside 12nm) and Environmental Protection Objectives of the NMP Sustainability Appraisal Report, which have not been listed here. A number of the Plans, Programmes and Strategies listed below are sectoral based, and so will have socio-economic objectives which should be considered as well as objectives related to the SEA topics they are organised by.

Plan, programme or strategy	Key objectives
Overarching	
Marine Directorate Act (2010)	The Marine (Scotland) Act provides a framework which will help balance competing demands on Scotland's seas. It introduces a duty to protect and enhance the marine environment and includes measures to help boost economic investment and growth in areas such as marine renewables.
National Marine Plan (2015)	The National Marine Plan covers the management of both Scottish inshore waters (out to 12 nautical miles) and offshore waters (12 to 200 nautical miles).The Plan provides a comprehensive overarching framework for all marine activity in our waters. It will enable sustainable development and use of the marine area in a way which will protect and enhance the marine environment whilst promoting both existing and emerging industries.
Scottish Marine Regions Order (2015)	The Scottish Marine Regions Order 2015, covers the Region known as the 'Scottish Inshore Region' as defined in the Marine and Coastal Access Act 2009, and establishes the boundaries which identify the areas for preparing and adopting regional marine plans.
Planning Circular 1/2015: relationship between the statutory land use planning system and marine planning and licencing	The circular explains the relationship between the marine and terrestrial planning systems, including related regimes such as marine licencing and consenting for offshore energy generation, ports and harbours development and aquaculture.
National Planning Framework 4 (2023)	The national spatial strategy for Scotland, setting out spatial principles, regional priorities, national developments and national planning policy.
Biodiversity	
Scotland's Marine Nature Conservation Strategy (2011)	Focuses on protecting, managing, and restoring marine biodiversity across 37% of its seas through a robust Marine Protected Area (MPA) network, aiming for a nature-positive, sustainable, and climate-resilient future by 2045.
Scottish Biodiversity Strategy to 2045 (2024)	The final updated version of the Scottish Government's biodiversity strategy which sets out a clear ambition for Scotland to be Nature Positive by 2030, and to have restored and regenerated biodiversity across the country by 2045.
2020 Challenge for Scotland's Biodiversity (2013)	The 2020 Challenge document focuses on the Scottish Government's desired outcomes for 2020 and is Scotland's response to the European Biodiversity Strategy for 2020 and the UN 'Aichi' targets. It shows how the Scottish Government, its public agencies, Scottish businesses and others can contribute to the Strategy's aims as well as supporting sustainable development In Scotland.
The Great Britain Invasive Non-Native Species Strategy 2023 – 2030 (2023)	An updated version of the 2008 and 2015 strategies, which provides a framework on how to minimise the risks posed by invasive non-native species.
Local Biodiversity Action Plans (LBAPs)	LBAPS and their Partnerships operate at a local level to conserve and enhance biodiversity and deliver action for national priorities identified in the UK Biodiversity Action Plan (UKBAP), as well as for species and habitats which are particularly cherished or valued in local areas of Scotland.

Plan, programme or strategy	Key objectives
Scottish Marine Wildlife Watching Code (2017)	The Scottish Marine Wildlife Watching Code is designed for all those who watch marine wildlife around Scotland both recreationally or commercially. It was developed by NatureScot in conjunction with recreational users, general public, charter boat and land based tour operators to whom it applies.
Code of Practice on Non-native Species for Scotland (2012)	The Code sets out guidance on how a wide range of individuals, businesses and public bodies should act responsibly within the law to ensure that non-native species under their ownership, care and management do not cause harm to our environment.
Voluntary Clyde Marine Region Biosecurity Plan (2012)	The purpose of the Biosecurity Plan is to establish a guiding framework to reduce the risk of the Introduction of new invasive non-native species (INNS) to the Firth of Clyde and to effectively manage existing INNS.
Managing Invasive Species in Scotland's Water Environment: A Supplementary Plan to the River Basin Management Plans. (2013)	Developed by SEPA to support the work of the Water Environment and Water Services (Scotland) Act 2003 for water bodies which aims to improve the ecological quality of water bodies. This Plan provides guidance on a co-ordinated approach for organisations with a role in risk assessment, monitoring, classification, data collection and prevention and control mechanisms. This Plan also helps reduce the risk posed by non-native species on the ecological quality of water bodies.
Voluntary Loch Fyne Marine Biosecurity Plan (2020)	This plan was developed in partnership with stakeholders in Loch Fyne and provides best practice guidance on identifying threats and mitigating actions against carpet sea squirt (*Didemnum vexillum*), which is present in the Loch. The actions listed in the Plan are also useful against other marine invasive species.
Climatic Factors	
Climate change: Scottish National Adaptation Plan 2024-2029 (2024)	Sets out the actions that the Scottish Government and partners will take to respond to the impacts of climate change.
The Scottish Government's Climate Change Plan, Third Report on Proposals and Policies 2018-2032 (RPP3)	The Climate Change Plan, along with the Scottish Government's Energy Strategy, provides the strategic framework for the transition to a low carbon Scotland. It includes proposals and policies to reduce emissions from electricity generation, housing, transport, services, industry, forestry, peatlands, waste and agriculture. This Plan sets out how Scottish Government will continue to drive down emissions over the specified period, 2018 to 2032.
Climate Ready Clyde Climate Risk and Opportunity Assessment (2018)	Glasgow City Region's first Climate Change Risk and Opportunity Assessment sets out the risks and opportunities posed by climate change to the end of this century, and highlights areas where more action is needed in the next five years. The findings and recommendations in the assessment will be used to guide the development of the first Adaptation Strategy and Action Plan for the Glasgow City Region.
Cultural Heritage	
Our Past, Our Future - Historic Environment Strategy for Scotland (2023)	This is Scotland's current strategy for the Historic environment. It sets out a vision for how Scotland's heritage can be valued, cared for and enjoyed. It sets out a national mission to sustain and enhance the benefits of Scotland's historic environment, for people and communities now and into the future. Like its predecessor Our Place in Time (2014), Our Past, Our Future has been developed collaboratively and is collectively owned.
UNESCO Convention on Protection of Underwater Cultural Heritage (2001)	This Convention aims to ensure and strengthen the protection of Underwater Cultural Heritage (UCH) over 100 years old, promoting *in situ* protection and preventing commercial exploitation. Responsible non-intrusive access to observe or document in situ UCH is encouraged to create public awareness, appreciation and protection of the heritage.
International Council on Monuments and Sites (ICOMOS) Charter on the Protection and Management of Underwater Cultural Heritage	The Charter is intended to encourage the protection and management of Underwater Cultural Heritage (UCH) in inland and inshore waters, shallow seas and in the deep oceans. It includes submerged sites and structures, wreck sites and wreckage and their archaeological and natural context. It acts as a supplement to the ICOMOS Charter for the Protection and Management of Archaeological Heritage.

Plan, programme or strategy	Key objectives
European Convention on the Protection of the Archaeological Heritage (revised) Valletta	The Convention includes provisions for the identification and protection of archaeological heritage, its conservation, control of excavations and the prevention of illicit circulation of archaeological objects.
Marine (Scotland) Act 2010	This legislation aims to protect and enhance the marine environment. It introduces: • a marine planning system, and • marine licensing for a wide range of developments and licensable activities in the marine environment. The legislation also makes it possible to create Historic Marine Protected Areas. These can be used to protect marine historic assets of national importance.
Marine Protected Areas in the Seas around Scotland Guidelines on the selection, designation and management of Historic Marine Protected Areas	This guidance note sets out how Historic Environment Scotland will work with the Scottish Government to apply powers under the Marine (Scotland) Act 2010 to select, designate, and manage Historic Marine Protected Areas (HMPAs), a new designation to help celebrate and protect evidence of the outstanding marine cultural heritage that survives in the coasts and seas around Scotland.
The Planning (Listed Buildings and Conservation Areas) (Scotland) Act (1997)	An Act to consolidate certain enactments relating to special controls in respect of buildings and areas of special architectural or historic interest. This includes buildings such as lighthouses but can only be applied to those parts of the structure or building above the Mean Low Water mark.
Historic Environment Policy for Scotland (2019)	A non-statutory policy statement directing all decision-making that affects the historic environment.
Landscapes, seascapes, marine geology and coastal processes	
NatureScot Landscape Character Assessments	NatureScot Landscape Character Assessments (LCAs) map and describe the landscapes/seascapes of the whole of Scotland, highlighting the variety in our landscapes. The LCAs also provide baseline information that can be used to guide landscape change, such as through the development planning process, proposed developments or land management plans.
Council of Europe, European Landscape Convention (2000) (The Florence Convention)	The European Landscape Convention is part of the Council of Europe's work on natural and cultural heritage, spatial planning and the environment. It applies to natural, urban and sub-urban areas whether on land, water or sea. The Convention establishes the general legal principles which should serve as a basis for adopting national landscape policies and promoting interaction between local, regional and national authorities as well as establishing international co-operation in such matters.
Scotland's Landscape Charter	Produced by Scotland's Landscape Alliance and NatureScot, the Charter sets an agenda for landscape planning and management. The Charter: • reflects the key principles of the European Landscape Convention; • emphasises the need to maintain distinctiveness and sense of place within Scotland; • calls on public bodies to recognise the importance of landscape in decision making; • encourage the involvement of communities in managing landscape change; • recognise the need for landscape expertise within planning; and • raise awareness of the role of local and national designations in safeguarding landscapes.
Scotland's National Coastal Change Assessment (Dynamic Coast)	The National Coastal Change Assessment aims to create an evidence base to support more sustainable coastal and terrestrial planning decisions, in light of climate change. It aims to inform existing strategic planning and to identify areas which may remain susceptible in the coming decades and require supplementary support.

Plan, programme or strategy	Key objectives
Seascape/Landscape Assessment of the Firth of Clyde (2013)	This assessment identifies key coastal characteristics and their sensitivities to development or change; it also identifies different types of coastline around the Firth of Clyde.
Local Flood Risk Management Plans	Local Flood Risk Management Plans are developed from Flood Risk Management Strategies to create a local delivery plan for action. Within the Region, Clyde and Loch Lomond and Ayrshire FRMPs are in place.
Population and Health	
Community Empowerment (Scotland) Act 2015	The Community Empowerment Act aims to empower community bodies through the ownership of land and buildings and by strengthening their voices in decision-making. The Act does a number of things including: extending the community right to buy, making it simpler for communities to take over public sector land and buildings, and strengthening the statutory base for community planning. The Act can help empower community bodies through the ownership of land and buildings and strengthen their voices in the decisions and services that matter to them.
The Giant Opportunities (2026–2030) framework	The Giant Opportunities (2026–2030) framework, launched by British Marine Directorate and funded by Crown Estate Scotland, is the current Scottish Marine Tourism Strategy aimed at growing the sector by £100 million over five years. It succeeds "Giant Strides" (2020–2025) and "Awakening the Giant" (2015), focusing on sustainability, nature-based tourism, and community partnership.
Scottish Outdoor Access Code (2005)	The Scottish Outdoor Access Code gives detailed information on the rights and responsibilities of visiting Scotland's outdoors, under three main rules: • respecting the interests of other people • caring for the environment • taking responsibility for your own actions
Water	
The River Basin Management Plan for Scotland (2021-2027)	The third River Basin Management Plan has been informed through lessons learned from delivering previous cycle objectives and will target improvements where the greatest environmental benefit will be achieved.
The Water Environment (Shellfish Water Protected Areas: Designation) (Scotland) Order 2016	This legislation designates protected areas for shellfish production to ensure a good quality product which is safe for human consumption.
Marine and coastal environment	
Ballast Water Management Convention (2004)	Following the UN Conference on Environment and Development (UNCED), held in Rio de Janeiro in 1992, the International Maritime Organisation initiated negotiations to consider the possibilities of developing an internationally binding instrument to address the transfer of harmful aquatic organisms and pathogens in ships' ballast water. From 1999 onwards, the Ballast Water Working Group, established by the Marine Environment Protection Committee in 1994, focused on the preparation of a free-standing Convention on the control and management of ships' ballast water and sediments. This convention entered into force in September 2017.
West Coast Regional Inshore Fisheries Group (WCRIFG) Management Plan (2021)	This plan defines the current aims and objectives of the WCRIFG. It is a live document and is updated as objectives are achieved and new objectives are set.
Locational Guidelines: Marine Fish Farms in Scottish Waters (updated June 2024)	These guidelines identify Category 1, 2 and 3 areas, designated on the basis of Marine Directorate Science's predictive models to estimate environmental sensitivity of sea lochs.
Aquaculture Growth to 2030 – a Strategic Plan for farming Scotland's seas (2016)	This provides a strategic plan for farming Scotland's seas. It notes the priorities for the sector, including: • industry leadership and ambition; • enabling and proportionate regulation; • accelerating innovation;

Plan, programme or strategy	Key objectives
	• skills development; • finance; and • infrastructure.
A Technical Standard for Scottish Finfish Aquaculture (2015)	The Standard determines technical requirements for fish farm equipment in Scotland and applies to all species of finfish. It should be used alongside operational procedures and training of staff to ensure equipment is used and maintained appropriately and procedures followed correctly.
Salmon Scotland Code of Good Practice (2006)	The Code of Good Practice for Scottish Finfish Aquaculture (CoGP), established in 2006 and managed by Salmon Scotland, sets world-class standards for salmon farming. It is an independently audited, >500-point standard covering fish welfare, sea lice management, and environmental protection, exceeding basic regulations.
Marine Directorate: Scottish Inshore Sea Fisheries Strategy (2015)	Sets out a vision to support the development of a more sustainable, profitable and well-managed inshore fisheries sector in Scotland. The 2015 inshore strategy will therefore focus on: • improving the evidence base on which fisheries management decisions are made • streamlining fisheries governance, and promoting stakeholder participation • embedding inshore fisheries management into wider marine planning
Future Fisheries Management Strategy 2020-2030	Development of 21 Scottish-led Fisheries Management Plans (FMPs), with a further FMP under joint development with Defra, for key demersal, pelagic and *Nephrops* stocks, along with feeding into a wider cross-UK programme of work for delivery of the full suite of FMPs as required under the UK Joint Fisheries Statement. Work to extend the deadline for delivering the Scottish-led plans was completed in 2024, and the FMPs will now be in place by the end of 2026. Also working with Seafish on a scoping exercise to determine key non quota species that should be considered for FMPs.
Scottish Environment Protection Agency: Finfish Aquaculture Sector Plan (2019)	This sectoral plan covers all aspects of fish farming in Scotland, including: supply chain; feed; hatcheries; freshwater fish pens; marine pen fish farms and processing facilities.
Crown Estate Scotland: Shellfish Critical Mass Development Plan Pilot Report – Clyde (2019)	This report considers opportunities and ways to support commercial-scale shellfish farming. It considers the scale needed for sites to be commercially viable; the type of locations which could support sites; and some considerations in relation to consenting.
Scotland Outlook 2030 (2020)	Scotland Outlook 2030 is Scotland's future tourism strategy to support Scotland in becoming the world leader in sustainable tourism.
The Giant Opportunities (2026–2030) framework	The Giant Opportunities (2026–2030) framework, launched by British Marine Directorate and funded by Crown Estate Scotland, is the current Scottish Marine Tourism Strategy aimed at growing the sector by £100 million over five years. It succeeds "Giant Strides" (2020–2025) and "Awakening the Giant" (2015), focusing on sustainability, nature-based tourism, and community partnership.
Material assets – Energy Infrastructure	
Scotland's Energy Strategy and Just Transition Plan (2023)	The strategy sets out the Scottish Government's vision for the future energy system in Scotland. The strategy aims to strengthen the development of local energy, protect and empower consumers and support Scotland's climate change ambitions while tackling poor energy provision.
Draft updated Sectoral Marine Plan for Offshore Wind Energy (2025)	Provides the spatial planning framework for the ScotWind and INTOG leasing rounds.
Carbon Assessment of the Infrastructure Investment Plan for Scotland 2021-22 to 2025-26	The Scottish Government's Infrastructure Investment Plan for Scotland 2021-22 to 2025-26 was published in February 2021. The Infrastructure Investment Plan (IIP) sets out the Scottish Government plan to deliver the National Infrastructure Mission and details their long-term vision of

Plan, programme or strategy	Key objectives
	infrastructure supporting an inclusive, net zero carbon economy in Scotland. It provides a pipeline of public sector infrastructure delivery, giving confidence to the construction sector and setting out our approach to infrastructure across three key themes: • Enabling the transition to net zero emissions and environmental sustainability; • Driving inclusive economic growth; and • Building resilient and sustainable place.
Material Assets – Transport	
Scottish Maritime Strategy	The Scottish Maritime Strategy centres on the National Marine Plan (NMP), which guides sustainable development of inshore and offshore waters, currently being updated (NMP2) to address climate and nature crises. Key initiatives include boosting offshore wind, blue economy growth, a £1.1 billion shipbuilding investment (BAE Systems), and a 2026-2030 marine tourism framework.
Draft Islands Connectivity Plan (2024)	The Islands Connectivity Plan (ICP) sets out how ferry services, supported by other transport modes, will be delivered, and strengthened, working towards a long-term vision, and supported by clear priorities and defined outcomes for people and places. It is being developed within the context of the National Transport Strategy and the National Islands Plan and informed by the outcomes of the Strategic Transport Projects Review. It will replace the Ferries Plan 2013-2022.
Material Assets – Waste	
Marine Litter Strategy for Scotland (updated 2022)	The Marine Litter Strategy for Scotland aims to protect the marine environment and support a circular economy by preventing litter from entering the sea and facilitating its removal. Refreshed in 2022, it aligns with the National Litter and Flytipping Strategy, targeting key sources like plastics and fishing gear to achieve good environmental status.
Scotland's Zero Waste Plan (2010)	This Plan sets the strategic direction for waste policy for Scotland, informed by improved understanding of the environmental consequences of how we use and dispose of resources, and by the requirements of European legislation.

There are also a number of Local and Strategic Development Plans and associated socio-economic strategies or plans to be considered in the SA-SEA. The CMPP will keep up to date on the development of these, considering any relevant matters for the CRMP Process. The Regional Spatial Strategy, Local Development Plans and related Supplementary Guidance relevant to the Clyde Marine Region can be found on the relevant Planning Authority's website:

- Glasgow City Region Place – Regional Spatial Strategy. The Regional Spatial Strategy (RSS) will set out the vision and spatial planning strategy for key strategic land uses and development issues in the Glasgow City Region. It will consider cross boundary matters and Local Development Plans will have regard to the RSS. (http://bit.ly/3SQe1kU)
- Argyll and Bute (https://bit.ly/42M0a3P)
- Glasgow City (https://bit.ly/40oPBDL)
- Inverclyde (https://bit.ly/4f2SoXJ)
- Loch Lomond and the Trossachs National Park (https://bit.ly/2sTWIXI)
- North Ayrshire (https://bit.ly/4hA341Y)
- Renfrewshire (https://bit.ly/4ngoO6b)
- South Ayrshire (https://bit.ly/4e8GPNz)

- South Lanarkshire (https://bit.ly/4n9ITLc)
- West Dunbartonshire (https://bit.ly/3YnHcOy)