Non-Technical Summary of the Seafood Development Programme (SDP) 2021 -2027

Department of Agriculture, Food and Marine

Introduction

The Department of Agriculture, Food and Marine (DAFM) as the competent authority, have developed the Seafood Development Programme (SDP) 2021 -2027. In accordance with the requirements of EU and national legislation on the assessment of the effects of certain plans and programmes on the environment a Strategic Environmental Assessment (SEA) has been prepared. This is the Non-Technical summary of the SEA Environmental Report. The purpose of this environmental report is to:

- Inform the development of the draft Seafood Development Programme;
- Identify, describe and evaluate the likely significant effects of the draft SDP 2021-2027 and its reasonable alternatives; and
- Provide an early opportunity for the Statutory Authorities and the public to offer views through consultation on any aspect of this environmental report and accompanying SDP Plan documentation. This Environmental Report complies with the requirements of Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the SEA Directive), as implemented in Ireland through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations (S.I. No. 435 of 2004), as amended, and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004), as amended.

Summary of the SDP 2021-2027

An overview of the plan is presented below and is accompanied by a summary of the relevant sections of the plan that are identified for inclusion in the applicable environmental assessments.

Table 1: Overview

Section	Outline	Outline Included in SEA Assessment
1	Programme strategy: main development challenges and policy responses. This includes Priority Justification and SWOT Analysis	No, this is context for the SDP 2021-2027 No, this has provided background information and has been referenced as appropriate for issues in Ch 5 Baseline and Ch 7 Consideration of Alternatives.
2	Priorities, separated into Priorities other than technical assistance comprising the following 4 Priorities:	Yes, this section provides for support and interventions including those that could give rise to environmental effects.

Section	Outline	Outline Included in SEA Assessment
	Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union; Enabling a sustainable blue economy in coastal, island and inland areas, and fostering the development of fishing and aquaculture communities; Strengthening international ocean governance and enabling seas and oceans to be safe, secure, clean, and sustainably managed.	Therefore this section has been commented upon and assessed in the SEA and AA
	Technical assistance priorities. Note: technical assistance priorities covers the costs of DAFM and implementing agencies in administering the programme and does not support investments or schemes.	No, where relevant this information has been used to inform the SEA Monitoring
3	Financing Plan This comprises allocation	No, where relevant, this information has been used to inform the SEA Monitoring
4	Enabling Conditions	No, where relevant, this information has been used to inform the SEA Monitoring
5	Programme Authorities	No, where relevant, this information has been used to inform the SEA Monitoring
6	Partnership	No, where relevant, this information has been used to inform the SEA Monitoring
7	Communication and Visibility	No
8	Use of costs, lump sums, flat rates, and financing not linked to costs	No

SEA Scoping

The steps involved in SEA are as follows:

- Screening (determining whether or not SEA is required).
- Scoping (determining the range of environmental issues to be covered by the SEA).
- The preparation of an Environmental Report (***current stage***)
- The carrying out of consultations.
- The integration of environmental considerations into the Plan or Programme.
- The publication of information on the decision (SEA Statement).

Consultation as part of SEA Scoping was carried out with the statutory consultees for SEA in Ireland, including statutory consultees in Northern Ireland; this also included the development of a Scoping Report. All of the environmental topics listed in the SEA Directive were scoped in for the assessment of the plan. Based on the requirements of the legislation and guidance, the information provided in the Environmental Report is outlined below in Table 2.

TABLE 1: REQUIREMENTS OF THE SEA DIRECTIVE AND RELEVANT SECTION IN ENVIRONMENTAL REPORT

Schedule 2B of Statutory Instrument 435 of 2004	Addressed in this SEA ER
a) an outline of the contents and main objectives of the plan and its relationship with other relevant plans	Chapter One Introduction and Chapter Three: Methodology outlines contents and main objectives. Chapter Four details the relationship with other relevant plans
b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan	Chapter Five Baseline Environment provides this information
c) the environmental characteristics of areas likely to be significantly affected	Chapter Five Baseline Environment provides this information
d) any Issues and Threats problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to the Birds Directive or Habitats Directive	Chapter Five Baseline Environment provides this information
e) the environmental protection objectives, established at international, European Union or national level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation	Chapter Six SEA Objectives provides this information
f) the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural	Chapter Eight Significant Effects on the Environment provides this information

heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors	
g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan	Chapter Nine Mitigation Measures provides this information
h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information	Chapter Seven Alternatives Considered provides this information and difficulties encountered are listed at the end of Chapter Two, Baseline Environment.
i) a description of the measures envisaged concerning monitoring the significant environmental effects of the implementation of the plan	Chapter Eleven Monitoring provides this information
j) a non-technical summary of the information provided under the above headings	This is provided as a separate document to this Environmental Report and is also available as part of Public Consultation.

Appropriate Assessment

In parallel to the SEA, an Appropriate Assessment (AA) is being carried out to inform decisions surrounding likely significant effects on habitats and species listed in the EU Habitats Directive. Screening for Appropriate Assessment was carried out by the DAFM as the competent authority, and a decision was made to carry out a full AA on the draft SDP 2021-2027; this is presented under a separate report -a Natura Impact Statement (NIS).

Relationship to other plans, programmes and policies.

The approach taken is to review the environmental protection objectives and environmental policy commitments from relevant key plans, programmes, and policies as they apply to the SDP 2021-2027 The SEA Scoping process further informed and refined the list of relevant plans and programmes. Figure 1 below shows the relevant EU Directives; the following Figure 2 shows the identified relevant National Plans and Programmes.

Figure:1 Relevant EU Directives

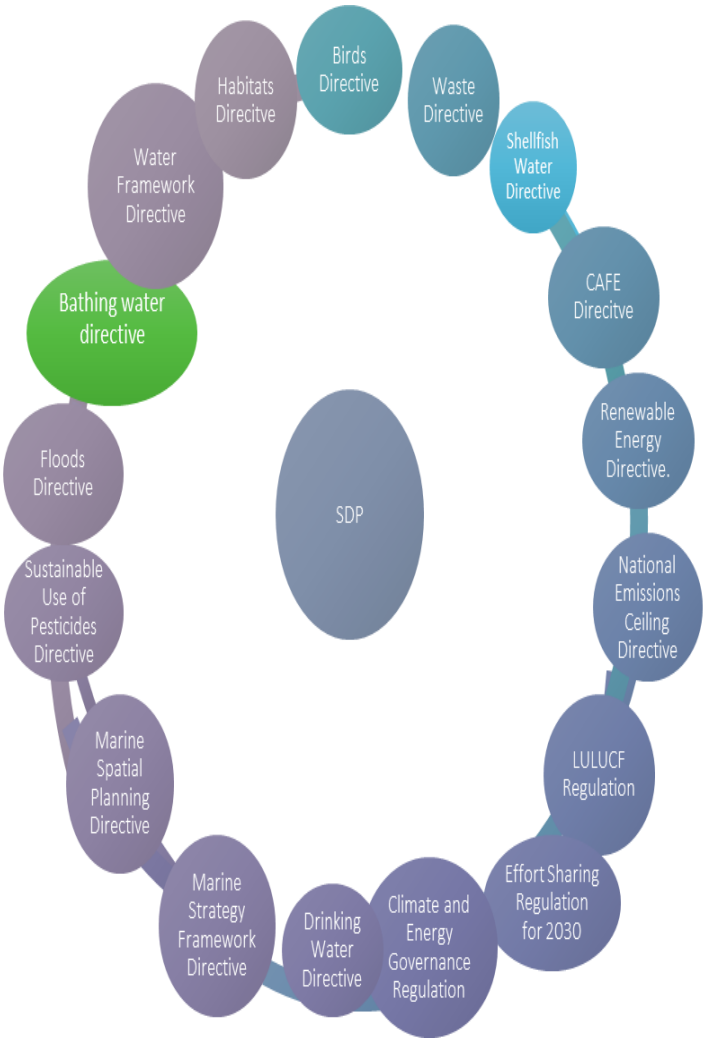
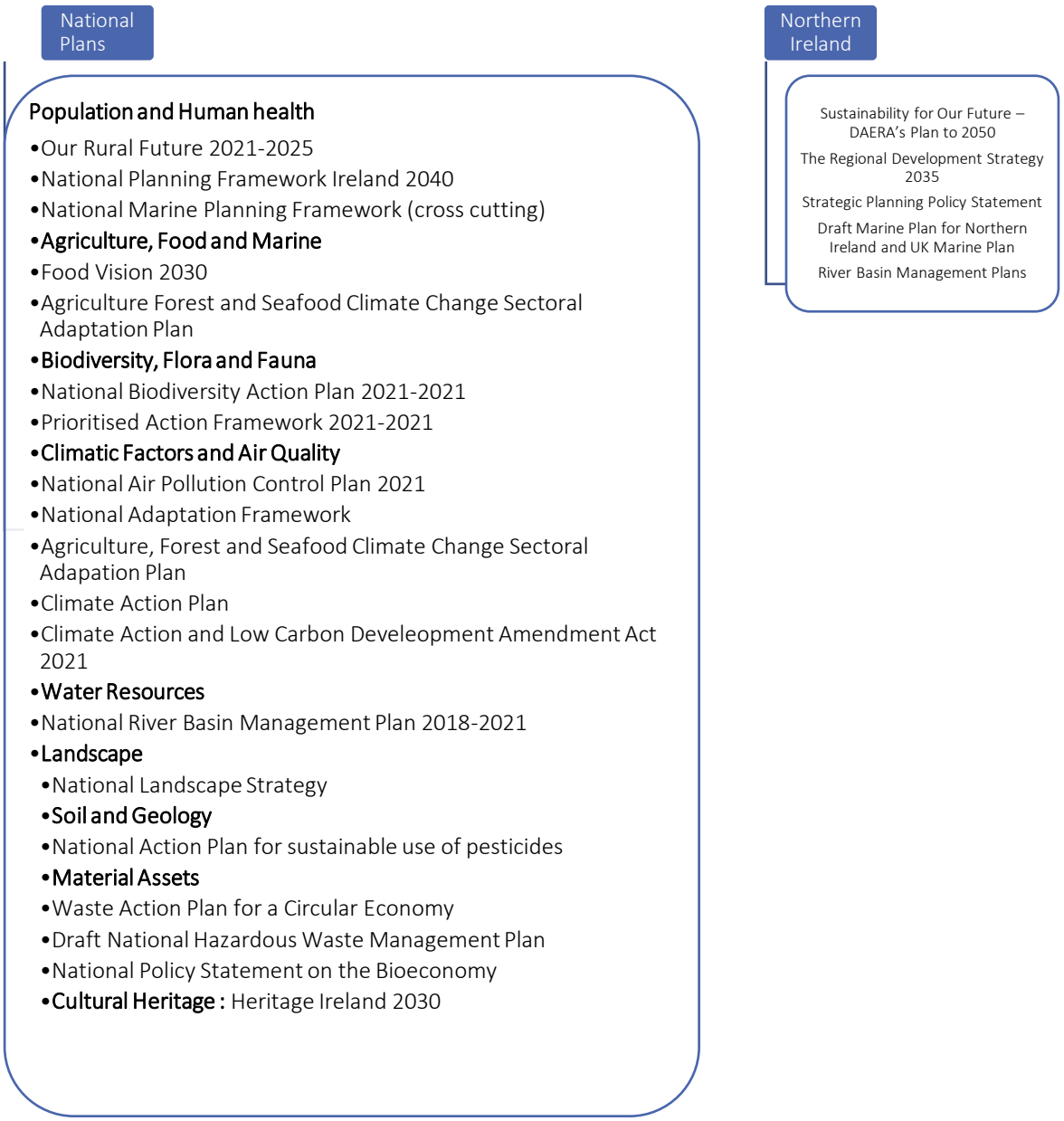


FIGURE 2: NATIONAL PLANS AND PLANS IN NORTHERN IRELAND



Relevant Aspects of Current State of the Environment

The purpose of this section is to present the significant baseline description of the environment and, by highlighting significant environmental problems relevant to the plan area, help inform and refine interventions in the SDP 2021-2027 that can address these problems. For identification of opportunities and strengths identified during the preparation of the Plan, please read the Section 2 of the Plan which presents this information in some detail. This information has been informed by the SEA Scoping process including data identified by consultees, as appropriate and relevant to the Plan. The baseline is structured as follows:

- Population and Human Health
- Biodiversity, Flora and Fauna

- Climatic Factors and Air Quality
- Soil, Geology and Landuse
- Water Resources
- Landscape
- Cultural heritage including archaeological and architectural heritage
- Material Assets
- Inter-relationships of the above.

State of the Environment Overview –Ireland

The EPA review of the Irish Environment (2020) provides key trends across sectoral activities, including those relating to the marine environment.

Chapter 8 specifically addresses the marine environment, and this is summarised below. The full chapter is available on the following link Environmental Protection Agency – Ireland's Environment – An Integrated Assessment 2020 (epa.ie). The key conclusions of this are presented below in **Table 3**.

Table 3: Marine Environment – key messages

Topic	Commentary
Pressures on the Marine Environment	Ensuring that our marine ecosystems are clean, healthy, biologically diverse, and productive requires more than the restriction of nutrient pollution and sustainable fishing and aquaculture levels. A myriad of pressures such as climate change, mechanical destruction, physical disturbance, noise, toxic substances, and litter will impact and interact and threaten the health of such ecosystems. These pressures need to be considered through an integrated approach to ensure the long-term health of both local and global ocean
An Island Nation	Ireland is an island nation with a rich biodiversity, a strong cultural linkage between its people and the sea, and proud coastal communities. As such, there is much to protect. Initiatives such as the Wild Atlantic Way have served to focus on and highlight these attributes. As an island nation with an extensive marine area, we need to ensure that the proper legislative framework supported by sufficient knowledge, is in place to protect our marine ecosystems, as well as the goods and services they provide. Ongoing research and monitoring programmes, many under existing EU and international laws, should provide the evidence to support the legislative process and allow the level of protection required for different parts of our maritime area. This will need to consider not only current conditions but also

Topic	Commentary
	the future implications of climate-driven pressures and alterations to our ecosystems and the communities and species they contain.
Water Quality Overall	Assessments of ecosystem status show that, in terms of eutrophication, our coastal and marine waters are considered to be healthy. However, additional measures and mitigation are required to protect our valuable ecosystems, habitats, and species from anthropogenic pressures. The latest WFD assessment (2013-2018) indicates that only 30 (38%) of the transitional water bodies (estuaries) monitored in Ireland are of good or high ecological status, with 49 (62%) being of moderate, poor, or bad ecological status. The specific factors causing the decline in the ecological status of estuaries should be addressed through the action programmes developed under the WFD.
Environmental Status	The MSFD environmental status for Ireland indicates that five descriptors are fully compatible with Good Environmental Status, while two others are considered to have achieved Good Environmental Status for the primary criteria assessed (marine litter and noise). Three are only partially compatible (biodiversity, commercial fish and shellfish and sea floor integrity). Information on Descriptor 4, food webs, is not sufficient to make an assessment. Overall, the assessment outlines the gaps in knowledge for some descriptors and the improvements required to bring them to Good Environmental Status.
Marine Habitats	A substantial proportion of the State's protected marine habitats are underpinned by Ireland's Natura 2000 network but have not yet achieved favourable conservation status, as required under the Habitats Directive. This is particularly evident in habitats such as lagoons, large shallow inlets and bays and fixed dunes. The expansion of a network of MPAs underpinned by legislation to protect these areas may act as a key conservation measure to enable the achievement of favourable conservation status, Good Environmental Status and other environmental commitments such as those for the OSPAR's list of threatened and/or declining species and habitats.
Climate Change	Climate-induced changes in sea temperature and pH have been recorded in Irish marine waters. Continuous monitoring, assessment, and modelling of the impacts of climate change are essential to ensure proper adaptation to future scenarios.
Fish Stocks	Fish Stocks of the commercial fish and shellfish stocks assessed (34) are considered to be compatible with Good Environmental Status, while 44 are not. The compatibility of 99 stocks with Good Environmental Status is

Topic	Commentary
	unknown. Overall, the status of commercial fish and shellfish stocks is not fully compatible with Good Environmental Status. However, of the main stocks assessed in recent years, there has been an 80 per cent improvement in the number harvested sustainably. Ensuring that Ireland implements a transition to sustainable fisheries, and heeds scientific advice and catch limits is crucial to ensure not only the continued availability of this resource but also the health of the associated food webs.
Endangered and Threatened Species	A number of non-commercial fish species (e.g., sea lamprey, twaite shad, angel shark) are threatened due to habitat loss/disruption and by-catch. Several elasmobranch species, including the sharks, rays, and skates, are listed as critically endangered under Ireland's Red List, while other comparatively long-lived protected species remain vulnerable to environmental degradation from human activities in Ireland's maritime area (e.g., some marine bird species and other top predators, migratory baleen whales, deep-diving cetaceans).
Marine and Coastal Areas	Our marine and coastal areas are impacted by several human-induced pressures, including fishing, eutrophication, climate change and litter. While independently, these issues continue to put pressure on our fragile marine systems, their combined impact is not fully understood and needs to be assessed through additional research and monitoring. Programmes of measures for the marine environment rely heavily on existing measures under the WFD and Common Fisheries Policy. While the integration of measures under instruments and Marine Strategy Framework, Birds and Habitats Directives are important, measures that directly protect the marine water column and wider seabed habitats need to be implemented.

The SEA Directive requires that the interrelationship between the SEA environmental topics must be taken into account. All SEA topics interact and influence conditions to a degree.

Likely evolution in the absence of the plan

The SEA legislation requires that consideration is given to the likely evolution of the current baseline where implementation of the SDP 2021-2027 does not occur. Table 4 below summarises the key points.

Table 4: Evolution of the environment in the absence of the SDP 2021-2027

SEA topic	Evolution of same

Biodiversity, Flora and Fauna	Flora and fauna, habitats and ecological connectivity would be protected under existing provisions at legal and policy level. There would be limited considerations of the inter-connections between such issues including water quality, water dependent habitats, species decline and loss. With the absence of focus on Biodiversity and Climate change under the EMAFF and priorities under the SDP 2021 -2027, the opportunity to embed and action responses to these issues would be lost. Research into fish stocks, gear and a suite of other measures around the Natura 2000 network and Marine Protected Areas would not be maximised and implemented.
Population, Human health	Core issues including diversification, a sustainable fishing sector and fleet, younger entrants and capacity and training would not be addressed in the absence of the plan. The measures around diversification, and niche tourism could not be integrated into the overall SDP 2021-2027 with the accompanying measures addressing rural diversification, etc. In combination, effects relating to human health and air quality, water quality and climate change would not be availed of.
Air Quality and Climate	In the absence of the SDP 2021-2027, there may be fewer opportunities to support GHG emissions associated with actions given the focus on climate change in the priorities of the SDP 2021-2027. The ongoing research to underpin responses and promotion of energy efficiency and renewable energy for the sector would be omitted.
Water Resources including flood risk	Supporting softer interventions may not be supported. Research and innovation to support a high quality aquatic environment would be missed. Potential effects across a number of other topics such as biodiversity and flora and fauna, human health.
Soil and Geology	Legislation relating to marine activities such as dredging would apply. There would be less opportunity to strategically plan for coastal geology through research and the potential interactions between terrestrial and water resources.
Material Assets	Existing objectives that relate to this parameter would apply. The current legislation which provides for the protection and enhancement of the water resources and quality at the European, National, Regional and County level will protect and maintain existing water bodies in the Plan area.
Landscape & Seascape	In combination effects would continue relating to the interaction of landuse, agricultural activities and parameters such as soil, water and biodiversity.
Cultural Heritage	Legislation and guidance from international and national level afford both the architectural and archaeological elements a high level of protection. However, intangible cultural heritage and vernacular features which are not protected could continue to be lost through loss of piers, slipways etc. The potential setting of archaeological sites may in combination be adversely affected.
Inter-relationships	The potential for in combination effects arising due to the absence of the plan would be potentially significant. Evolution of the environment in the absence of the plan could generate effects in terms of loss of ecological connectivity and non-designated habitats.

	Disturbance and significant ongoing negative effects on biodiversity, flora and fauna through absence of controls, monitoring, data gathering and support for actions such as Marine Protected Areas that can provide multiple benefits. The support for coastal and fishing communities as well. Effects of climate change on the seafood sector, combined with loss of opportunity to adapt to climate change and provide for restoration of natura 2000 sites and evidence based decision making would be minimised. Potential adverse effects on water quality for estuarine, freshwater and groundwater with accompanying interactions across all SEA parameters.

Strategic Environmental Objectives

The purpose of the SEA Objectives (SEOs) is to ensure that the assessment process is transparent, robust and that the draft Plan considers, identifies, and addresses potential significant environmental effects. Table 5 below presents the SEOS that have been developed to test and assess the potential environmental effects of the draft Plan. Following the SEA Scoping consultation process the SEOS were amended to reflect submissions by consultees as appropriate to the scope of the SEA and a footnote below each amendment shows where and what was amended.

TABLE -5 STRATEGIC ENVIRONMENTAL OBJECTIVES

SEA Topic	SEA Issues	Objectives
Population and Human Health	Demographics, sustainable communities and incomes, knowledge and upskilling, diversification.	To support the continued development of a safe, healthy and sustainable seafood sector[1]
Biodiversity, Flora, and Fauna	Protection/ enhancement of protected habitats and species; Conservation of marine and freshwater ecosystems; Ecosystem service Control of invasive alien species.	To support the protection and restoration of the conservation of European sites, other nature conservation sites, ecological networks, and protected species[2]. To support sustainable fishing and aquaculture, fishing practices to avoid or minimise impacts to marine, coastal and terrestrial biodiversity, flora and fauna[3]

[1] SEO revised on following SEA Scoping Submission by EPA

[2] SEO revised following feedback by BIM

[3] SEO revised on following SEA Scoping Submission by EPA and BIM

SEA Topic	SEA Issues	Objectives
Land and Soil	Avoid exacerbating erosion; Maintain integrity of hydro-dynamic processes. Maintain character and integrity of sea bed.	Maintain the integrity of hydro-dynamic processes for the protection of aquatic habitats. Maintain character and integrity of the seabed. Avoid exacerbating erosion.
Water Resources	Reduce pollution; Maintain/restore water quality; Achieve MSFD / WFD objectives; Improve ecological status.	Contribute to achieving the objectives under the MSFD and the WFD, i.e., achievement or maintenance of at least Good Environmental Status (GES) and Good Ecological Status (GEcS). Avoid pollution of the marine, freshwater, or coastal environment. Reduce litter resulting from fishing and aquaculture activities throughout the life cycle.
Climate Change	Control emissions of greenhouse gasses; climate adaptation.	Minimise greenhouse gas emissions from production import/export activity. To reduce the environmental, social, and economic risks of climate change by reducing (net) vulnerability and/or improving resilience to climate change.
Air Quality	To avoid, prevent or reduce harmful effects on human health and the environment resulting from emissions to air.	Avoid adversely impacting air quality. Reduce noise and odour associated with fisheries and aquaculture activities
Landscape	Diversity of character, the scenic value of coastal seascape.	Support the protection of designated landscape (and seascape) character areas
Cultural Heritage	Protecting the historic environment; Increasing understanding and awareness of its value; Coastal and offshore designated and undesignated buildings, archaeology, and wrecks	Protect conserve and where appropriate enhance places, features, buildings, and landscapes of natural, cultural, archaeological, or architectural heritage[4].

[4] SEO revised following SEA Scoping submissions by EPA and Historic Environment Division, DAERA

SEA Topic	SEA Issues	Objectives
Material Assets	Support the development of a marine economy; Safeguard jobs/ employment for coastal communities; protect environmental assets.	Support sustainable activities in the fisheries and aquaculture sector without conflicting with other environmental protection objectives[5]. Achieve transition to a competitive, low-carbon, climate resilient and environmentally sustainable aquaculture sector by 2050. Support development of sustainable fishing and aquaculture.
Inter-relationships	Interactions between environmental parameters	Support the integrated assessment of actions and embed ecosystem services approach

Consideration of Alternatives

The approach to the consideration of alternatives in the SEA has followed the *Developing and Assessing Alternatives in Strategic Environmental Assessment*[6].

A combination of the 4 Priorities (see box below) that frame the SDP were assessed strategically as follows:

Priority 1: Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
Priority 2: Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
Priority 3: Enabling a sustainable blue economy in coastal, island and inland areas, and fostering the development of fishing and aquaculture communities
Priority 4: Strengthening international ocean governance and enabling seas and oceans to be safe, secure, clean, and sustainably managed

- Strategic Alternative 1: combination of Priorities 2 & 3: This would focus on aquaculture, blue economy (marine renewable energy, tourism and sustainable (functional, well serviced, viable, within carrying capacity) coastal communities, islands and (inland =freshwater) communities.
- Strategic Alternative 2: Combination of Priorities 1 & 4. This would provide for a stronger focus on restoration and conservation of aquatic resources, via stronger international governance of the oceans and an increased research budget, increased enforcement of oceans
- Strategic Alternative 3: Do minimum: continuation of current measures under the SDP 2021-2027 with updates as required under national policy and legislation.

[5] SEO revised following submission by BIM
[6] Guidance on Developing and Assessing Alternatives in Strategic Environmental Assessment (EPA 2015[6]).

- Strategic Alternative 4: Balanced support for the four priorities.

Strategic Alternative 4 was assessed as meeting the environmental challenges and supporting the seafood sector. This was refined further through testing capacity presented below:

Strategic Alternative 4a: Stay within existing capacity in terms of seafood outputs and resources. Measures under the SDP that would support this would include actions such as Actions to develop skills (e.g.; digital literacy) and capacity within the sector to engage with critical issues. Actions to improve health, safety and working conditions on board fishing vessels would be included, alongside the focus on biodiversity and climate change.

Strategic Alternative 4b: Reduce capacity and outputs. This would envisage actions in relation to the adjustment of fishing capacity to fishing opportunities in cases of permanent cessation of fishing activities and contributing to a fair standard of living in cases of temporary cessation of fishing activities; further supported by actions that support high value, niche production such as promoting marketing, quality and added value of fishery and aquaculture products, as well as processing of those products. Again, key environmental actions would relate to biodiversity and climate change under this scenario.

Strategic Alternative 4c: Increase capacity and outputs. The Common Fisheries Policy and reduced fishing quotas post Brexit does not facilitate increasing total allowable catches from the EEZ. However, in this scenario, increased capacity is taken to mean increased value of seafood as well as increasing research capacity in relation to the marine environment and ecosystem. There is also the potential to sustainably grow aquaculture production.

These were assessed and the preferred National strategic level alternative as identified through the SEA process is a combination of all of the following

- Strategic Alternative 4 – all four EMFAF priorities and Strategic Alternative 4c increase seafood production capacity and outputs

The reasons for selecting this combination include that the Strategic Alternative 4 provides for the delivery of the four Priority Areas that combines supporting for the seafood sector, as well as research, data gathering and training/capacity building in terms of fisheries management, marine habitats and species and conservation and protective measures. The combined preferred alternative Strategic alternative 4 and 4c seeks to address key environmental challenges facing the seafood sector including water supply, climate change, support for achievement of targets under the 2030 Biodiversity Strategy and the Good Ecological Status targets in the Marine Strategy Framework Directive.

The reduction in fishing quotas and the focus on locally produced food and food security are significant challenges, and a sustainable aquaculture model that supports high value products, underpinned by robust scientific evidence base can help address these issues, and in turn support communities that are employed through the seafood sector.

Summary of Assessment

Each of the Priorities, the accompanying specific objectives and actions for each were evaluated against the SEOs.

Overall, many were assessed positively from an environmental assessment, in particular measures around sustainable production, scientific research to support fisheries, reduce by catch and restoration of marine habitats and addressing marine litter as well as support for Marine Protected Areas.

Other measures are also positive such as support for energy efficiency and resource measures and support for heritage and niche tourism in coastal and island communities. No action has a specific spatial element, therefore for potential project levels these are more appropriately assessed through the planning and consenting process.

Mitigation Measures

A recommendation for oversight and monitoring of the plan is recommended. Thereafter, given the very strategic nature of the plan, the environmental protection and other relevant measures from the National Marine Plan have been included as mitigation.

Monitoring

A monitoring programme for the SDP has been developed. This is derived from the National Marine Planning Framework SEA ER Monitoring Regime. The Programme of Measures (POM) for the Marine Strategy Framework Directive is currently being prepared and has been published in draft form (March 2022). These programme of measures will deliver the Good Environmental Status required under the Marine Strategy Framework Directive. The EMFAF will be aligned to support the implementation of these POM. In addition, a monitoring approach for the National Marine Planning Framework is in development and again it is recommended that the proposed monitoring table overleaf be aligned with these measures once finalised to ensure data gathering and sharing is co-ordinated to sufficiently address monitoring requirements. These are particularly important for Priority 4. The integration and reuse of marine data for both is key.

Next Steps:

There is some important work to be done before the SDP 2021-2027 can be approved and this includes the approval by the EU Commission.