



Department
for Environment,
Food & Rural Affairs



Llywodraeth Cymru
Welsh Government

Proposed Celtic Sea and Western Channel Pelagic Fisheries Management Plan

Strategic Environmental Assessment Environmental Report

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Non-technical Summary

The draft Celtic Sea and Western Channel pelagic Fisheries Management Plan (FMP) has been prepared to meet the requirements of the [the Fisheries Act 2020](#). The plan covers five species: anchovy (*Engraulis encrasicolus*), greater silver smelt (*Argentina silus*), herring (*Clupea harengus*), horse mackerel (*Trachurus trachurus*), and pilchard, hereafter referred to by its common name, sardine (*Sardina pilchardus*). It sets out the policies and proposed actions Defra and Welsh government will use to manage fishing activity, so stocks are harvested within sustainable levels. Alongside these actions, the draft Celtic Sea and Western Channel pelagic FMP also sets out management to help support wider social, economic and environmental aspects of the fishery.

This Environmental Report has been produced in accordance with the Environmental Assessment of Plans and Programmes Regulations 2004 (SEA Regulations 2004 and the Environmental Assessment of Plans and Programmes (Wales) Regulations 2004). The following issues (from Schedule 2, paragraph 6 of the SEA Regulations 2004) were scoped into the assessment:

- biodiversity
- fauna
- flora
- geology and sediments (soil)
- water
- climatic factors
- cultural heritage

This assessment focuses on how the policies and actions in the FMP are likely to give rise to both significant positive and negative environmental effects. The findings of this assessment have been used to inform the development of the FMP.

The assessment was conducted against a baseline that primarily used existing evidence on the state of the marine environment set out in [updated UK Marine Strategy Part 1](#), published in 2019. Additional sources of evidence were used to establish the status of the environment in relation to issues not covered by the UK Marine Strategy, such as climatic factors and cultural heritage. The historical impact of fishing activity on the marine environment has been considered part of the baseline. Our assessment used the best available evidence to reach a suitable judgement on the environmental effects of the draft Celtic Sea and Western Channel pelagic FMP.

This report sets out those plans, programmes and environmental protection objectives, both international and domestic that Defra and Welsh Government consider relevant to the FMP.

This report considers and acknowledges the existing environmental effects of targeted anchovy, greater silver smelt, herring, horse mackerel and sardine fishing. Fishing methods for these stocks vary between stock and country (details provided in the stock-specific sections in the FMP). The following gear types are considered within this FMP: pelagic trawls, ring-nets, purse seines, drift nets and static nets. It is important to note that while some of the stocks in the FMP are occasionally caught as bycatch in demersal trawls this gear type isn't considered part of the target fishery, so have not been scoped into the FMP and supporting assessments. These gears have been scoped into this assessment, in relation to Marine Protected Areas (MPAs), the UK Marine Strategy descriptors and the wider environment. The potential positive and negative environmental effects of the draft Celtic Sea and Western Channel pelagic FMP policies and proposed actions alone and in-combination have also been assessed.

This report concluded that beyond the direct impact on the five target stocks, the fishery has an impact on the marine environment in two specific areas:

- through bycatch of unwanted species, this includes species with various levels of protection like cetaceans and seabirds
- through reducing food availability by impacting on prey species on these protected species

The contribution of fishing related litter, often related to the loss of fishing gear, is also identified as a potential impact associated with pelagic fishing. Demersal trawls also land non-target pelagic species. While not part of this assessment these demersal trawls pose a risk to seafloor integrity.

The draft Celtic Sea and Western Channel pelagic FMP has considered these impacts and sets out proposals to monitor, and where required, introduce mitigation to address these impacts.

The assessment of likely negative effects identified as low risk of significant adverse effects on the environment from implementing individual policies and actions. The policies and actions, will, where appropriate, be developed to avoid any potential negative effects identified by the assessment progress. The environmental effects of implementing the draft Celtic Sea and Western Channel pelagic FMP policies and actions will also be monitored to identify unforeseen adverse effects at an early stage, so appropriate remedial action can be undertaken.

This assessment recommends the draft Celtic Sea and Western Channel pelagic FMP should consider the following additional points:

1. Future iterations of the draft Celtic Sea and Western Channel pelagic FMP should consider how to develop the cultural heritage of each fishery and how

fisheries management can contribute to reducing potential negative interactions with marine heritage assets.

1. Introduction

Fisheries Management Plans – context and background

Marine fish stocks are a public resource, a valuable natural asset, and important components of marine ecosystems. Managing fishing activity so that we harvest our stocks within sustainable limits will ensure our fishing communities, the seafood supply chain and wider society continue to benefit from our natural assets, now and into the future.

[The Fisheries Act 2020](#) requires the fisheries policy authorities¹ in the UK to publish Fisheries Management Plans (FMPs) as set out in the [Joint Fisheries Statement](#), to manage fishing activity so the harvesting of fish stocks remains within sustainable levels.

Sustainable fisheries protect stocks and the wider environment whilst delivering social and economic benefits for present and future generations. Delivering sustainable fisheries will involve balancing the environmental, social, and economic aspects of fisheries. Both the short-term and the long-term impacts of decisions to manage fishing activity to protect stocks, the marine environment and on the fishing industry will be considered. Any short-term decisions to favour social or economic benefit should not significantly compromise the long-term health of the stocks and marine environment that underpin these societal and cultural benefits of fishing. These decisions should recognise the cultural importance of fishing through maintaining and, where possible, strengthening coastal communities and livelihoods alongside the requirement for fish stocks to reach and maintain sustainable levels.

UK fisheries policy authorities identified 43 FMPs in the JFS. A timetable for the preparation and publication of the FMPs can be found in Annex A of [the JFS](#) and summarised on Gov.UK: please read [the List of FMPs](#).

All FMPs must contain the information set out in Section 6 of the Fisheries Act 2020. In summary, an FMP must specify the relevant authority; stock or stocks, type of fishing and geographical area to which the plan relates; the status of the stocks; policies and actions to harvest within sustainable limits; and the indicators to be used to monitor the effectiveness of the plan.

FMPs must specify whether there is sufficient evidence to assess a stock's Maximum Sustainable Yield (MSY). Where there is insufficient evidence, the FMP must specify

¹ Fisheries policy authorities: As defined by section 52 of the Fisheries Act 2020, "fisheries policy authorities" means (a) the Secretary of State, (b) the Scottish Ministers, (c) the Welsh Ministers, and (d) the Northern Ireland department.

policies for maintaining or increasing levels of the stock, and the steps (if any) that the relevant authority or authorities propose to take to obtain the scientific evidence necessary to enable an assessment of a stock's MSY. If no steps are proposed, the FMP will explain the reasons for that, and how the precautionary approach to fisheries management will be applied so fish are harvested within sustainable limits.

Through managing fishing activity within sustainable limits, FMPs will contribute to the fisheries objectives set out in section 1 of the Fisheries Act 2020. The scope of a FMP may be extended to consider wider fisheries management issues related to environmental, social or economic matters. How FMPs consider wider fisheries management issues will be determined at the individual FMP level, appropriate to the stock(s), fishery and geographic area within the remit of the FMP.

The Fisheries Act 2020 required FMPs to report their effectiveness every three years and be reviewed at least every six years. FMPs will evolve as our understanding and evidence base develops through their implementation. Some FMPs will progressively address a wider range of fisheries management issues as they evolve through an iterative approach over time.

FMPs will contain a range of policies and fisheries management measures/ interventions whose detail will vary depending on the evidence available to support their implementation. Some policies and actions may only indicate future action and will develop over time as the plan's evidence progresses through each iteration.

FMPs will adopt an ecosystem-based approach to fisheries management to help deliver environmental, social, and economic benefits beyond those accrued from just achieving the sustainable harvesting of stocks.

The policies and actions proposed by an FMP will apply to all vessels (UK and non-UK vessels) fishing in the area covered by the plan.

Delivering Sustainable Management of Fisheries & FMPs

Fisheries rely on the ecosystems in which they operate to support healthy stocks. These ecosystems can be compromised by human-induced pressures, including pollution, marine litter and unsustainable exploitation of marine resources. This pressure includes the impact of fish population levels on the processes and functioning of the wider ecosystem - for example, the removal of prey species impacts the status of top predators.

Long-term, sustainable, and profitable fisheries require active management to avoid, reduce or mitigate any adverse impacts of fishing activity on ecosystem functioning, ecosystem resilience, or environmental threats such as climate change.

Available fishery data and advice will help determine the targets and catch limits applied to each stock. Where possible, these limits would include the MSY for data-rich stocks where biomass fluctuations can be tracked. Alternative proxies for harvest limits, the precautionary approach, or a combination of both are required for more data-limited stocks, where it is only possible to detect biomass fluctuations.

Not all stocks currently have sufficient evidence to establish MSY, reference points and limits. It is not scientifically feasible or economically viable to collect such evidence for some species. In these cases, FMPs must include the steps, or reasons for not taking steps, national fisheries authorities will take to ensure stocks are harvested within sustainable limits.

FMPs will recognise the importance of the sustainable use and conservation of our marine natural assets and the ecosystem services they provide when setting out policies to manage fishing activity. FMPs will make use of the best available scientific advice, be subject to scientific evaluation, and consider the environmental risks associated with the fishing activity. The plans will use a risk-based approach to identifying appropriate and proportionate mitigation for its environmental impact.

FMPs will contribute to achieving Good Environmental Status (GES) under the UK Marine Strategy. In addition to improving or maintaining the status of commercial stocks, plans can include actions focused on reducing the risks and/or pressures from fishing activity to other ecosystem components that may prevent achieving GES.

Managing fishing activity within sustainable limits through FMPs will directly contribute to securing the continued availability of seafood products as an important food source within the UK food supply chain.

Scope of the FMP

This draft Celtic Sea and Western Channel pelagic FMP is a joint plan between Defra and the Welsh government due for publication in 2025. It covers the following species:

- anchovy (*Engraulis encrasicolus*)
- greater silver smelt (*Argentina silus*)
- herring (*Clupea harengus*)
- horse mackerel (*Trachurus trachurus*)
- sardine (*Sardina pilchardus*)

This FMP has been developed by the Marine Natural Capital and Ecosystem Assessment Programme (mNCEA) in collaboration with a wide range of stakeholders including (but not limited to) representatives from the fishing industry, environmental non-governmental organisations (eNGOs), UK scientists, and statutory nature conservation bodies. This was part of a wider 3 year Natural Capital and Ecosystem

Assessment Programme and in collaboration with the Welsh Government. The programme finished at the beginning of 2025.

The five target pelagic fisheries covered by this FMP occur in International Council for the Exploration of the Sea (ICES) areas 4b & 4c (North Sea) and 7d (Eastern Channel).

The draft Celtic Sea and Western Channel pelagic FMP applies to English² and Welsh waters³, covering inshore and offshore areas where fishing activity for the five target pelagic species takes place.

Celtic Sea & Western Channel Pelagic FMP Goals and Actions

The vision for the FMP is that fisheries for sardine, anchovy, herring, horse mackerel and greater silver smelt in the Celtic Sea and Western Channel (English and Welsh waters) will be managed to achieve environmental, social and economic sustainability, for the benefit of coastal communities and wider society, based on the best available evidence.

Using this vision the FMP seeks to create a roadmap for the effective management for the five relevant pelagic stocks in English and Welsh waters over the next six years, to allow this valuable natural resource to benefit a diverse range of environmental, commercial, recreational and social interests while ensuring the five stocks remain sustainable. By using a natural capital approach, the draft Celtic Sea and Western Channel pelagic FMP looks to include a wider set of viewpoints and experiences allowing the plan to consider the social and economic potential of the fisheries and aim to contribute to social and economic sustainability within fishing communities.

Eight Goals, set out below, have been identified using the natural capital approach to help further achieve the overall vision stated in the FMP and link to the Fisheries Act objectives

Each goal includes a rationale alongside short term (one to two years) and medium-long term (two years and onwards) actions to deliver the goals. Some of the goals recognise actions that are current and would like to see them continue with an ongoing action rather than short or long term.

² English waters refer to the English inshore and English offshore regions as set out in Section 322 of the [Marine and Coastal Access Act 2009](#).

³ Welsh waters refer to the Welsh inshore and Welsh offshore regions as set out in Section 322 of the [Marine and Coastal Access Act 2009](#).

The FMP's goals and proposed actions may change following the public consultation. Any changes will be subject to assessment and reflected in the final Environment Report.

Policy Goal 1: Harvest sardine, anchovy and Western Channel and Bristol Channel herring stocks sustainably, with the overall aim of maintaining or increasing levels of the stocks.

Rationale

For stocks where the evidence is currently insufficient to assess MSY (sardine, anchovy, Western Channel and Bristol Channel herring), Section 6 of the Fisheries Act 2020 requires the FMP to set out policies for maintaining or increasing the level of these stocks. These policies must be developed using the precautionary approach as defined in the Section 1(10) of this Act. This goal aims to address these requirements by considering the following:

For sardine and anchovy (which are NQS), evidence suggests that the current scale of fishing for both stocks and the current voluntary measures in place for the Cornish sardine fishery is enabling sustainable harvesting of the stocks at the local scale. However, across the whole FMP area, the evidence has highlighted concerns around the extent to which fishing mortality is managed particularly as stock distributions shift with climate change, which could lead to changing interest and fishing effort. Two actions in the medium to long-term are proposed to address this.

There is no MSY level assessment for the Western Channel and Bristol Channel herring stock, but TAC has decreased in recent years and there is very little fishing pressure on this stock, using the best available advice to determine fishing opportunities, as outlined in the actions below, will contribute to increasing levels of this stock (along with wider ecosystem-based management actions considered under Goal 4 – such as those that consider avenues to protect key herring spawning habitats).

In all cases, feasibility and impacts on any beneficiaries will be considered when looking at proposed management measure actions before proposing for implementation. Any recommendations for implementation from these medium to long term Goal 1 actions will also need to be considerate of priorities across all FMPs, in terms of the most pressing needs to implement any new measures for FMP stocks

Actions to help achieve this policy goal: short term (1–2 years)

- for Western Channel and Bristol Channel herring, continue to determine fishing opportunities informed by the best available scientific advice

- for Western Channel and Bristol Channel herring, continue to work with Coastal State partners through international negotiations with the aim of restoring or increasing the sustainable harvesting of this stock

Actions to help achieve this policy goal: medium to long term (3+ years)

- consider whether to expand the geographic range of any of the current local-scale technical measures used for non-quota species to the scale of the FMP area. This could include the voluntary measures used by the CSMA and any relevant local technical measures implemented by the Welsh Government, MMO or IFCA
- consider whether to move to managing sardine (and possibly later, anchovy) through quota allocation, alongside the existing voluntary measures in place for these stocks
- consider a broader review of effectiveness of the management in place for each stock, in terms of how it contributes to achieving the wider FMP goals

Policy Goal 2: Harvest Celtic Sea herring, horse mackerel and greater silver smelt stocks sustainably, with the overall aim of maintaining or restoring biomass of the stocks above the level capable of producing MSY or a suitable proxy.

Rationale

For stocks where there is sufficient available evidence to assess MSY (Celtic Sea herring, Western horse mackerel, and greater silver smelt), Section 6 of the Fisheries Act 2020 requires the FMP to specify the policies which at least contribute to restoring or maintaining the stock at MSY. This goal aims to address these requirements.

The aim for Celtic Sea herring and Western horse mackerel is to restore the biomass of these stocks to levels capable of producing MSY. As the fishing opportunities for these stocks are determined through international negotiations, and the EU holds the majority of the quota allocation, measures to restore the biomass of these stocks will likely be determined through international negotiations. Actions under Goal 4 of the FMP that consider ecosystem-based management approaches and potential avenues to protect key habitats for these species will also contribute to the restoration of these stocks.

For greater silver smelt evidence gathered suggests the current management is considered to be sufficient for sustainable management for this stock within the FMP area. The marine ecosystem, is however, a dynamic environment and future changes may be required for this stock. This will be considered as this FMP is monitored and reviewed.

Actions to help achieve this policy goal: short term (1–2 years)

- for each stock outlined in this goal, continue to determine fishing opportunities informed by the best available scientific advice
- for each stock outlined in this goal, continue to work with Coastal State partners through international negotiations with the aim of restoring or maintaining the biomass of stocks

Policy Goal 3: Seek to improve the evidence base for all stocks, including to allow for an assessment of MSY or a suitable proxy where necessary

Rationale

Section 6 (3) of the Fisheries Act 2020 outlines that FMPs must specify whether the available scientific evidence is sufficient to enable the relevant authority or authorities to make an assessment of the stock's MSY. If the evidence is not sufficient, the FMP must specify the steps (if any) that the relevant authority or authorities propose to take to obtain the scientific evidence necessary to enable an assessment of the stock's maximum sustainable yield to be made.

This goal aims to strengthen the evidence base for stock assessments and fishing advice, moving towards obtaining an assessment of MSY or a suitable proxy for those stocks that do not currently have such an assessment (sardine, anchovy, and Bristol Channel and western Channel herring). There is a specific short-term action relating to stock assessment methods for sardine, which would make use of currently available data to feed into a Management Strategy Evaluation to enable an MSY-approach assessment of the stock. While the primary aim is to improve the scientific basis for management decisions, this action may also help maintain MSC certification for the Cornish sardine fishery, which is an outcome that contributes to the broader economic viability and stability of the sector. This goal also covers the collection and use of further evidence and historical data, where appropriate, to improve the quality of assessments for anchovy and Western Channel and Bristol Channel herring stocks, which could contribute to working towards an assessment of MSY in the future (although for each of these stocks, reaching an assessment of MSY is unlikely to be achieved within the timeframe of this FMP due to the lack of data currently available). This medium to long term action also covers stocks that already have an MSY assessment or suitable proxy but where significant evidence gaps remain (Celtic Sea herring, Western horse mackerel and greater silver smelt). For example, better understanding of stock mixing and life-history will lead to increased accuracy in assessments and advice, especially considering uncertainties around stock boundaries.

To do this, collaborative work is needed to understand what data is already being/could be gathered by government agencies, industry and/or academia, to support these actions. For example, it is likely that existing workstreams within Defra (the development of the FMP Evidence Strategy, which is being developed at the FMP programme level) will contribute to the completion of these actions. It is important to note that these ambitions will be prioritised across the whole FMP delivery package, and that these suggestions are considerations of how to enhance existing management to meet the vision of this FMP.

Actions to help achieve this policy goal: short term (1–2 years)

- for all stocks consider outlining research needs for producing or improving stock assessments where needed
- consider development of the current harvest control rule for sardine into the constant harvest rate method to enable an MSY-approach assessment of the stock

Actions to help achieve this policy goal: medium to long term (3+ years)

- continue to support evidence collection for improving stock assessments and ensure that available data is provided to the relevant assessment working groups

Specifically, this action could consider:

- developing stock assessment methods and fishing advice using the existing PELTIC survey in English and Welsh waters and industry collected data to move towards an MSY-approach assessment of the stock (anchovy)
- the use of egg data from surveys within stock assessments (for sardine and anchovy)
- Improved evidence to inform stock delineation and mixing (particularly for herring in the Bristol and Western Channel, sardine and horse mackerel)
- developing a better understanding of climate change risks, impacts and opportunities (to all stocks)
- the use of historical fisheries data, where appropriate

Policy Goal 4: Identify and support implementation of ecosystem-based fisheries management approaches appropriate for pelagic fisheries in the Celtic Sea and Western Channel.

Rationale

Section 10(1) of the Fisheries Act 2020 requires national fisheries authorities to exercise its functions relating to fisheries and fishing in accordance with the policies contained in the JFS. The JFS outlines that the fisheries policy authorities and national

fisheries authorities will take an ecosystem-based approach to managing our fisheries. This will also support the achievement of Good Environmental Status and the wider environmental, economic and social considerations of the FMP.

This goal considers wider ecological, environmental, social and economic factors, including both fishing and non-fishing pressures on stocks in this FMP, and recognises the changes these factors may cause to the health of stocks. The focus for this goal is around developing an understanding of the most suitable ecosystem-based fisheries management approaches for these fisheries and building a plan for future implementation of these approaches, where possible. Ecosystem models developed during the evidence gathering phase of this FMP could help clarify the most relevant ecosystem-based management strategies to consider (see Evidence Statement for details).

Actions to help achieve this policy goal: short term (1–2 years)

- incorporate evidence collection to support ecosystem-based approaches into the research needs (as outlined in Goal 3). This will help support the incorporation of broader ecological, environmental, social and economic factors into stock assessments, fishing advice and reducing environmental impacts of fishing
- explore avenues to protect and enable recovery of habitats that have been identified as important for herring from the pressures that pose risks to them

Actions to help achieve this policy goal: medium to long term (3+ years)

- support work to undertake Management Strategy Evaluations for stocks in this FMP that consider ecosystem interactions and work to implement the management strategy that best meets goals of the FMP
- improve understanding of interactions between FMP stocks and adjacent stocks, particularly where mixing occurs (e.g., between western and North Sea horse mackerel), or where mixing is uncertain (e.g., between Irish Sea herring and herring stocks covered by this FMP)
- where possible, improve evidence base on the ecosystem role and function of FMP species to support an improved understanding of the most appropriate ecosystem-based management approach for these stocks
- where appropriate, work to identify further important fish habitats for FMP stocks and the key pressures that pose risks to them
- continue to update the established evidence base on key pressures and opportunities to FMP stocks and the wider ecosystem they function within, from outside of fishing activity

- work closely with relevant overlapping FMPs to better understand and reduce the threats of other fishing gears to the important fish habitats of this FMP's species

Policy Goal 5: Understand and reduce the impacts of FMP fisheries on non-target species, including by minimising and where possible eliminating sensitive species bycatch

Rationale

The Fisheries Act 2020 and JFS commits the UK Government to account for, and seek to minimise, impacts on non-commercial species. This includes minimising potential harm due to bycatch and discarding as well as entanglement and ghost fishing. This will also support the achievement of Good Environmental Status.

SNCB advice, stakeholder expertise, and evidence collected during FMP development highlight potential impacts from these pelagic fisheries, including bycatch (of seabirds, marine mammals and non-target fish), discarding, and indirect impacts on the wider food-webs. However, evidence gaps and data limitations prevent a comprehensive understanding of the extent of these impacts and uncertainty around the most appropriate route to address the issues. For example, Partners raised concerns about a lack of robust bycatch data for seabirds, cetaceans, seals, sharks, tuna, salmonids, and other commercial and sensitive fish species. This goal aims to support and ensure the fisheries for pelagic species are considered within existing monitoring and mitigation initiatives and increase understanding of these issues enabling a long-term strategy to minimise, and where possible prevent, wider impacts.

Short-term actions under this goal recognise and support ongoing efforts to monitor and mitigate bycatch, including by the national Bycatch Mitigation Initiative and Clean Catch programmes as well as recognising and using data collected by smaller-scale voluntary initiatives such as those undertaken by the CSMA. The actions highlight the need to consider the findings of these initiatives for the FMP fisheries specifically, because the appropriateness of different bycatch monitoring and mitigation methods will vary between and within fisheries. This context-specific understanding is needed to inform the development of policies or measures aiming to improve bycatch monitoring and mitigation. Relevant methods for bycatch monitoring may include self-reporting, observers, and use of REM, while deterrent/mitigation methods such as acoustic deterrent devices, passive acoustic devices, visually detectable nets, gear switching, time-specific spatial controls, and the voluntary measures currently used by the CSMA, could be considered. Work to understand the appropriateness of these measures could consider factors such as appropriateness for vessel size, gear type, and fishing location (for example, within MPAs, overlap with sensitive species' distribution).

Actions in the medium to long-term could help to prioritise where measures would be most effective in reducing bycatch.

Actions to help achieve this policy goal: short term (1–2 years)

- continue to support, and ensure these fisheries are considered within, existing bycatch monitoring and mitigation programmes and initiatives
- consider an assessment of different bycatch monitoring methods and how they apply to the gears prevalent in these fisheries
- consider an assessment of the appropriateness of methods for deterring or mitigating bycatch of sensitive mobile species for FMP fisheries

Actions to help achieve this policy goal: medium to long term (3+ years)

- improve the understanding of bycatch for pelagic fisheries, including by making use of existing data where possible

Policy Goal 6: Reduce the impact of fishing on climate change and support the fishing industry to adapt to the impacts of climate change

Rationale

This policy goal is in accordance with section 4.1 ('Delivering Sustainable Management of Fisheries - Our approach to Fisheries Management') of the JFS.

The evidence base underpinning climate change and fisheries is developing, and more work is needed to fully understand a) how carbon emissions can be reduced in a sustainable way, b) the most appropriate methods for incorporating information on predicted climate change impacts on stocks into stock assessments and advice on fishing opportunities, and, c) the likely impacts of climate change on fish stocks and fishing communities and the scale / nature of change required to adapt.

We know that there will be changes to the distribution and size composition of the stocks within this FMP as a result of climate change, but the overall impacts are not yet fully understood. The actions below consider how we can build and use an improved evidence base in order to make informed decisions on management action for the future.

Actions to help achieve this policy goal: medium to long term (3+ years)

- collaborate across the UK and internationally on further evidence and analysis to understand the impact of climate change on the stocks in this FMP and develop options for how these fisheries may adapt to climate change impacts in the future

- consider the most appropriate mechanism for integrating information on the impacts of climate change and climate variability on stocks and fisheries into fisheries management, including stock assessments and fishing advice
- improve understanding of how fishing for FMP species contributes to climate change and reduce or prevent impacts on the climate where possible

Policy Goal 7: Improve understanding of, and help realise the economic, social and cultural benefits of, pelagic fisheries included in this FMP

Rationale

As set out in the JFS and the Fisheries Act 2020, the UK and Welsh Governments hold an ambition to support a modern, resilient, and environmentally responsible fishing industry and to enable fisheries to continue to deliver social and economic benefit to coastal communities to benefit present and future generations. This includes sustainable fisheries management that balances environmental, economic, and social factors, ensuring economic viability without overexploiting stocks. The JFS notes the scope of an FMP may be extended as appropriate, to consider wider fisheries management issues covering environmental, social, and economic concerns.

Given this FMP could lead to regulatory change in the future, it is necessary to consider the capacity of fishers to adapt alongside other economic and environmental factors. This is particularly relevant for the inshore fleet, where evidence suggests impacts of fisheries management are often felt more greatly. The short-term action under this goal focusses on working with stakeholders to better understand and capture these challenges.

Fishing of the stocks within this FMP supports livelihoods holds cultural significance. These fisheries have the potential to generate substantial benefits for future generations of local, rural communities. The medium to long-term actions under this goal aim to improve understanding and support the realisation of the social, economic and cultural benefits of these fisheries, particularly for culturally important, small-scale traditional herring fisheries in the Bristol Channel and the inshore sardine fishery in Cornwall. Evidence suggests that these fisheries are deeply rooted in history, heritage, and tradition and are important for local identity and way of life, leading to the second of these actions under this goal.

Actions also include identifying, and where possible, addressing barriers (regulatory or otherwise) to fishing opportunities for current and future generations. These include declining or consistently low quotas due to declining stock health, access to fishing grounds, operational and processing capacity, and potential constraints from other marine activities. Other existing and developing data sources such as the Commercial Fishing Social Survey should be built on here, where possible.

Finally, a broader value chain perspective is encouraged to explore safe and sustainable growth opportunities, where appropriate. Economic viability depends on factors like consumer demand, availability and retention of labour, and access to processing infrastructure and markets. UK consumer demand for species like horse mackerel is low. Even with consumer demand (such as for sardine), access to suitable ports and the capacity of the processing industry can act as a bottleneck. Understanding these barriers will be the first step to addressing them where possible.

Actions to help achieve this policy goal: short term (1–2 years)

- continue to work with the inshore fleet targeting FMP stocks to better understand and capture the challenges they face and their needs in relation to fishing opportunities for FMP stocks

Actions to help achieve this policy goal: medium to long term (3+ years)

- where possible, gather additional evidence of the social, economic and cultural benefits of the fisheries associated with the FMP, accounting for the wide range of beneficiaries
- collaborate with stakeholders to help preserve cultural identity and traditional practices in FMP fisheries, particularly in relation to traditional small-scale herring fisheries in the Bristol Channel and inshore sardine fisheries in Cornwall
- support the sustainability of the industry by collaboratively exploring ways to ensure equitable access to fishing opportunities for current and future generations
- explore ways in which capacity could be increased in the industry through supporting safe and sustainable growth in these fisheries and associated value chains, where appropriate

Policy Goal 8: Facilitate a collaborative and adaptive management approach to support fair, effective, and transparent decision-making for sustainable and resilient pelagic fisheries

Rationale

The use of best available evidence and scientific advice, transparent decision making and partnership working, are listed in the JFS as core principles that will underpin delivery of the JFS. This FMP reflects these principles through taking a natural capital approach, which included the establishment of the Partnership and has encouraged transparency throughout the process by facilitating discussions about evidence and decision-making processes. This was well received by stakeholders across government, industry and NGOs.

To evaluate the effectiveness of this approach, a developmental process evaluation was established. The first action under this goal is to share its findings with stakeholders and the wider FMP programme to inform future FMP development and highlight opportunities and challenges in applying this approach more widely.

Working collaboratively ensures ecological, social, and economic factors are reflected in decision-making. Actions under this goal aim to strengthen transparency and integrate FMP delivery with broader marine policy, including planning, licensing, and conservation. This will support knowledge sharing and adaptability, with collaboration embedded across implementation, monitoring, and review. This may be through continuation and expansion of the Partnership, or through other forums potentially coordinated across multiple FMPs in a regional context, or focused on pelagic fisheries in the area, and other policy areas that affect them.

Actions to help achieve this policy goal: short term (1–2 years)

- share key lessons learnt from the evaluation of the approach taken to develop this FMP with stakeholders including the wider FMP programme
- consider how a collaborative approach can continue to be taken in implementing, monitoring and reviewing the FMP
- consider how best to ensure that any impacts on FMP stocks and fisheries are considered in wider policy delivery

2. Approach to Strategic Environmental Assessment

Screening

[SEA Regulations 2004](#) requires that qualifying public plans, programmes, and strategies undergo screening for SEA during their preparation and prior to adoption. Fisheries Management Plans are plans that fall within the definition in regulation 2.

Defra and the Welsh Government consider that Regulation 3(2)(b) of the SEA Regulations 2004 applies to the draft Celtic Sea and Western Channel pelagic FMP as the plan relates to England and Wales.

In accordance with the SEA Regulations 2004 Defra and the Welsh Government carried out a screening exercise which determined that the proposed policies in the draft Celtic Sea and Western Channel pelagic FMP may have likely significant effect (either positive or negative) on a Special Area of Conservation, Special Protection Area and they are not directly connected with or necessary to the management of such

sites. Therefore, Defra and the Welsh Government have carried out an SEA of the draft Celtic Sea and Western Channel pelagic FMP.

The screening exercise used [Defra's Magic Map Application](#) to identify whether the geographical scope of the FMP overlaps with any Special Areas of Conservation or Special Protection Areas. Table 3, page 35 of [The updated UK Marine Strategy Part 1](#) sets out the pressures on the marine environment resulting from anthropogenic activity, which includes fishing. This information was used to identify whether fishing activity for the five pelagic species has the potential to impact these sites and interest features. For example, sardine harvesting has the potential to result in the extraction of, or mortality/injury to wild species.

The screening concluded that the proposed polices in the draft Celtic Sea and Western Channel pelagic FMP have the potential to affect multiple Special Areas of Conservation or Special Protection Areas but could have impacts on species of interest through the extraction of wild species through by-catch, or the reduction on prey abundance in the wider marine environment.

Based on the outcome of the screening, Defra and the Welsh Government concluded the FMP, falls within the description of a plan in regulation 5(3) of the SEA Regulations 2004, and so as a result of regulation 5(1) must be subject to SEA in accordance with Part 3 of the SEA Regulations 2004 during its preparation and prior to its adoption (publication).

Completing this SEA does not remove any other statutory obligation on competent authorities to assess the possible environment impact of a policy or measure ahead of its implementation.

Scoping Process

Defra and the Welsh Government carried out a scoping exercise to identify the scope and level of detail of the assessment that will be documented in the Environmental Report. Regulation 12(5) requires that when deciding on the scope and level of detail of the information in the Environmental Report, the responsible authorities must seek the views of the Consultation Bodies.

A Scoping Report identifying the scope and level of detail of the assessment of the Celtic Sea & Western Channel pelagic FMP was provided to the following Consultation Bodies:

- Historic England
- Natural England
- Environment Agency
- Cadw (Welsh Historic Monuments)
- Natural Resources Wales (NRW)

- Joint Nature Conservation Committee (JNCC)

See [Appendix F](#) for Consultation Body responses and how consideration was given to the points raised in each response.

Regulation 12(3) of the SEA Regulations 2004 requires that the Environment Report include the information referred to in [Schedule 2](#), in so far as it is reasonably required. Which section of this report corresponds to the relevant paragraphs of Schedule 2 is set out below:

Sections: 1 and 4

- paragraph 1: An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes

Section: 3 and 7

- paragraph 2: The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme

Section: 3

- paragraph 3: The environmental characteristics of areas likely to be significantly affected
- paragraph 4: Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, [such as a European site (within the meaning of regulation 8 of the Conservation of Habitats and Species Regulations 2017)]

Section 4

- paragraph 5: The environmental protection objectives, established at international, [European Union] or national level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation

Section 5

- paragraph 6: The likely significant effects on the environment, including short, medium and long term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects, on issues such as– (a) biodiversity; (b) population; (c) human health; (d) fauna; (e) flora; (f) soil; (g) water; (h) air; (i) climatic factors; (j) material assets; (k) cultural heritage, including architectural and archaeological heritage; (l) landscape; and (m) the inter-relationship between the issues referred to in sub-paragraphs (a) to (l)

Section 6

- paragraph 7: The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme

Section 7

- paragraph 8: 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

Section 8

- paragraph 9: A description of the measures envisaged concerning monitoring in accordance with regulation 17

Non-technical summary

- paragraph 10: A non-technical summary of the information provided under paragraphs 1 to 9

Scope of the Assessment

Schedule 2 paragraph 6 to the SEA Regulations 2004 lists the issues that must be considered for an assessment of likely significant effect in relation to the FMP. Based on its initial evaluation of likely significant effects and taking into account the results of the scoping consultation carried out (see scoping above and Appendix F), the following conclusions were reached regarding the content of the Environmental Report.

Defra and the Welsh Government propose that the Environmental Report will address the effects on the following issues:

- biodiversity, fauna and flora: including the following sub-sections: cetaceans, seals, birds, fish, benthic habitats, commercially exploited fish and shellfish, food webs
- geology and sediments: including the following sub-section: benthic habitats
- water: including the following sub-sections: marine litter and underwater noise
- climatic factors: including the following sub-sections: vessel emission, blue carbon
- cultural heritage: including the following sub-section: interactions between fishing gear and marine heritage assets

Defra and the Welsh Government scoped the following issues out of the assessment, and therefore they will not be covered in the Environmental Report:

- population (human)
- human health
- air

- material assets
- landscape/seascape

Fishing activity being managed through the FMP has the potential to have some level of interaction with all the issues from Schedule 2 paragraph 6, however the scoping exercise considered and scoped in those environmental issues that would be significantly affected by the draft Celtic Sea and Western Channel pelagic FMP.

Issues such as Population, Human Health, Air, Material Assets and Landscape Seascape were scoped out of this assessment as it was considered that they would not be significantly affected by the draft Celtic Sea and Western Channel pelagic FMP. We provide the justification behind this decision and additional rationale behind why sub-sections were considered below.

To link the issues (from Schedule 2 paragraph 6) that will be addressed by this Environmental Report with the environmental baseline (see section 3), we have attributed a UK Marine Strategy (UK MS) descriptor of Good Environmental Status (GES) to the appropriate corresponding issue(s); see Appendix A for the list of the 11 UK MS descriptors. Achieving GES is about protecting the natural marine environment, preventing its deterioration and restoring it where practical, while allowing sustainable use of marine resources.

Assessing the status of these descriptors identifies where improvements are required to achieve GES. Knowing the current status will help direct efforts to reduce the impacts of certain human activities. The [UK Marine Strategy assessment tool](#) provides further information.

Under the UK Marine Strategy, Descriptor 1 – Biodiversity has been split into the following sub-sections, cetaceans, seals, birds, fish, benthic habitats. These sub-sections are all relevant to the biodiversity issue from Schedule 2 paragraph 6 and therefore have been included in this assessment.

Marine Litter and Underwater Noise have been included as the most relevant sub-sections assessed by UK Marine Strategy under the Water issue heading. Fishing activity was considered not to contribute on Eutrophication, Changes in Hydrographical Conditions and Contaminants. There is a potential for marine litter through the loss of fishing equipment and other activities associated with commercial fishing.

Climatic factors are not considered under the UK Marine Strategy assessment process; therefore, no predetermined sub-sections are available. Vessel emissions and blue carbon were identified as the two most relevant issues related to fishing activity that are associated with climate change.

Cultural heritage is also not considered under the UK Marine Strategy assessment process; therefore, no predetermined sub-sections are available. The interaction between fishing gear and marine heritage assets was identified as the most relevant impact related to fishing activity that is associated this issue heading.

Results of the scoping exercise to determine those environmental issues likely to be significantly affected by the draft Celtic Sea and Western Channel pelagic FMP and thus scoped into the SEA

Environmental issues with the potential to be impacted by the FMP

- **biodiversity, fauna and flora (UK MS descriptors D1, D3, D4, D6)** - Fishing activity for pelagic species has the potential to result in the extraction of, or mortality/injury to/disturbance to, both target and non-target wild species. These issues are within the scope of this SEA
- **geology and sediments (soil) (UK MS descriptor D6)** - Fishing activity for pelagic species does not interact with the seabed as it uses pelagic gear targeting species well above the seabed. However, fixed nets and the possibility of marine litter/ghost nets have the potential to result in physical disturbance to the seabed and substrates. These issues are within the scope of this SEA
- **water (UK MS descriptors D10, D11)** - Fishing activity has the potential to input litter (solid waste matter, including micro-sized litter) and anthropogenic sound into the marine environment. The FMP aims to make fishing practices more environmentally sustainable so there is scope to reduce the impact of fisheries on water quality. This issue is within the scope of this SEA
- **climatic factors** – The FMP will make an appropriate contribution to the climate change objective of the Fisheries Act 2020, seeking to ensure it develops relevant policies to both mitigate impact on and adapt to climate change. This issue is within the scope of this SEA
- **cultural heritage** - Fishing activity using nets has the potential to interact with marine heritage assets. While the FMP is not intended to focus on mitigating the impacts of fishing on the marine historic environment, there is potential for fisheries management to have a positive effect on safeguarding cultural heritage features. This issue is within the scope of this SEA

Environmental issues not likely to be significantly affected by the FMP

- **population** - The FMP would not result in significant increases, decreases or both in human population numbers, or changes to in-migration or out-migration. This issue is beyond the scope of this SEA
- **human health** – The FMP would not result in any significant human health issues. Whilst fishing remains a dangerous vocation and the FMP will promote safe operations, the regulation of the safety of fishing operations falls elsewhere. This issue is beyond the scope of this SEA

- **air** – The FMP is unlikely to result in significant additional vessel emissions and associated air pollution. Reducing vessel emissions from a carbon footprint perspective will be considered by the Climatic factors issue. This issue is beyond the scope of SEA
- **material assets** - The FMP will not intrinsically impact material assets related to; ports and shipping; fisheries and aquaculture; leisure or recreation; tourism; marine manufacturing; defence; aggregate extraction; energy generation and infrastructure development; seabed assets. This issue is beyond the scope of this SEA
- **landscape seascape** - The FMP is unlikely to significantly alter the current effects of fishing practices on the landscape and or seascape in the UK. While there are some pelagic species caught using demersal trawls (as bycatch) this isn't part of the target fishery and physical disturbance to the seabed and substrates should be considered as part of those fisheries that target demersal species. This issue is beyond the scope of this SEA

Assessment Methodology

This SEA reflects the geographical scope (section 1) and type of fishing covered by the FMP. It considers the goals of the draft Celtic Sea and Western Channel pelagic FMP and the actions (section 1) it sets out to achieve these goals.

The assessment reviewed existing evidence on the current state of the marine environment, which included the impact of fishing within the baseline state (section 3).

It assessed the nature and extent of likely effects of the draft Celtic Sea and Western Channel pelagic FMP (including its policies and actions) on those environmental issues scoped into the assessment and where applicable their associated UK Marine Strategy descriptors identified in the above section.

As the FMP is a strategic programme of work, the SEA will consider the potential positive and negative environmental effects of management options in the context of the UK Marine Strategy descriptors. This SEA will also consider the in-combination effects and interactions of this FMP with other plans and projects, including Marine Plans and other FMPs.

More detailed fisheries assessments which consider current activity are already in progress or have been completed. These assessments may be used to inform the FMP actions as they are delivered, and include:

- Defra's Revised Approach to fisheries management programme (IFCA 0-6 nautical miles, MMO 6-12 nautical miles)
- the Marine Management Organisation's (MMO) ongoing Fishery Assessment programme (outside 12 nautical miles) in England

- the Welsh Government's [‘Assessing Welsh fishing activities’](#) and [‘Assessing Welsh Fishing activities in Marine Protected Areas’](#)

Future delivery of the goals, actions and measures specified in the FMP programme may give rise to management changes such as new legislation to regulate pelagic fishing. Such changes may have the potential to impact MPAs and their features and will be subject to more detailed assessment before being implemented.

Nevertheless, this Environment Report acknowledges the likely significant effects associated with fishing activity being managed through the draft Celtic Sea and Western Channel pelagic FMP and sets out in broad terms how the FMP will seek to avoid, reduce, or at least mitigate significant negative effects.

During the development of the draft Celtic Sea and Western Channel pelagic FMP advice from Statutory Nature Conservation Bodies (Natural England, NRW and JNCC) on the impacts of fishing activity in relation to MPAs and UK Marine Strategy descriptors was considered. This Environment Report reviews how this advice has been reflected in the FMP, and how the proposed policies and actions could change the baseline.

It is important to note the draft Celtic Sea and Western Channel pelagic FMP contains a range of policies and fisheries management measures that vary in their stage of development depending upon the evidence available to support their implementation. The level of detail possible for our environmental assessment depends upon the stage of development of the policies and actions of the FMP at the present time.

This assessment acknowledges the draft Celtic Sea and Western Channel pelagic FMP sets out objectives to develop the evidence base for the five pelagic fish species within the plan. Our assessment used the best available evidence at the present time to reach a judgement on the environmental effects of this plan.

The detail of the environmental assessment is covered in section 5.

3. Environmental Baseline

Summary of the Current State of the UK Marine Environment

Section 3 provides a summary of the current state of the UK marine environment for each of the environmental issues screened into this SEA, and where applicable their associated UK Marine Strategy descriptors (above). The SEA has been conducted against the environmental baseline set out in these sources of existing information. We acknowledge that there are some uncertainties and evidence gaps in the environmental baseline. However, we consider that this environmental baseline provides a comprehensive level of information to undertake an effective assessment

and provide informed evidence-based recommendations. Where required, further detailed assessments using additional evidence will be completed ahead of the implementation of FMP actions.

It is likely that without the FMP, those issues which are contributing to the current state of the marine environment will likely continue to have an influence. The FMP seeks to promote the management of the pelagic fisheries in the Celtic Sea and Western Channel in a more coherent and coordinated manner that considers wider environmental issues. The FMP has the potential to improve the current state of the environment set out below, both where no improvement has been observed, and where positive trends have been identified. Section 6 considers how the implementation of the FMP's proposed policies and actions could change the baseline.

Biodiversity, Flora, Fauna and Geodiversity⁴ (Geology and sediments⁵)

The primary source of information on the current state of the UK marine environment came from the UK Marine Strategy descriptor status assessments: [The updated UK Marine Strategy Part 1](#), published in 2019. The impact of fishing has been considered as part of the assessment on the UK Marine Strategy descriptors, therefore information on the impact of fishing activity on the marine environment has been included in the sections below as part of the baseline. For further information on the baseline related to UK Marine Strategy descriptors see [Appendix B](#).

D1 and D4 – Cetaceans

Cetaceans (whales and dolphins) are an important marine ecosystem component that contributes to overall levels of biodiversity (D1). In addition, as top predators, the abundance of cetaceans can also provide some understanding on how the food web is functioning (D4).

The current status of cetaceans for both the North Sea and Celtic Sea is mixed. While there are some aspects that are in line with the achievement of GES, much of the picture is unclear. The impact of various net fisheries is leading to bycatch that, in places, might be impacting long term population viability of harbour porpoise.

4 Geodiversity is defined as the natural range of rocks, minerals, fossils, landforms, topography, sediments, and soils together with the natural processes which form and alter them

5 Geodiversity (Geology and sediments) issue has been combined with the Biodiversity, Flora, and Fauna section as benthic habitats is relevant to these issues

Other than for a limited number of coastal bottlenose dolphin populations, it is unclear whether the abundance and range of most cetacean species can be considered in line with GES. Fisheries and the removal of prey species is one of several activities/ pressures that have the potential to result in changes in cetacean abundance and distribution. For more information, read UK Marine Strategy [Cetaceans assessment](#).

D1 and D4 – Seals

Seals are an important marine ecosystem component that contributes to overall levels of biodiversity (D1). In addition, as top predators, seal productivity can also provide some understanding and insight as to how the food web is functioning (D4).

Grey seals populations and productivity continues to increase, and targets are being met. Bycatch (largely in tangle/ trammel nets) is occurring but not at levels that threaten population viability. For harbour seals, the status is not in line with GES where population declines have occurred in some areas. The cause is unknown. It is not thought to be linked to bycatch as occurrences are rare and there is no indication that it is linked to other pressures associated with fishing. For more information, read [UK Marine Strategy seal biodiversity assessment](#).

D1 and D4 – Birds

Seabirds are well monitored species that are an important marine ecosystem component that contributes to overall biodiversity (D1). In addition, as top predators, the abundance of birds can also provide some understanding and insight as to how the wider food web is functioning (D4).

Seabird populations are currently below the level that is considered to meet GES and the situation is deteriorating. Some declines in breeding success have been linked to prey availability caused by climate change and/ or past and present fisheries. Invasive predatory mammals are also known to impact breeding success on island colonies. The impact of bycatch will be included in future assessments and current evidence suggests that some longline and static net fisheries could be having possible population level impacts on certain species. For more information, read [UK Marine Strategy marine bird biodiversity assessment](#).

D1 and D4 – Fish and D3 – Commercially exploited fish and shellfish

Fish are an important ecosystem component that contributes to overall levels of biodiversity (D1). In addition, fish of different species have a significant role in marine food webs (D4), acting as both predators and prey. Some fish species are commercially exploited, and only a proportion of these have managed quotas. Over exploitation can lead to a decline in stocks (D3) which can reduce both future commercial opportunities and have wider ecological impacts.

The current status of [fish communities](#) in the UK is primarily shaped by historical over-exploitation by fisheries, while ongoing over-exploitation continues to be a notable contributing factor. Improved fisheries management since the 1990s has resulted in more stocks being fished at or below MSY levels so, although the target is not yet met, there is a positive trend. Improved fisheries management has also resulted in some positive trends in fish communities beyond the targeted stocks. For more information, read, [UK Marine Strategy fish biodiversity assessment](#) and [UK Marine Strategy commercial fish and shellfish assessment](#).

D4 – Food webs

Food webs (D4) are the network of predator-prey relationships that occur in the marine environment, from phytoplankton to top predators such as birds or seals. Fish communities are a key component of food webs. Knowledge of food webs allow understanding of how changes at one trophic level can impact those above and below it.

Historic fishing activity which has contributed to the current environmental baseline, has had a large impact on fish community structure which is a key component of marine food webs. With improved fisheries management focusing on stocks, some recovery is occurring. However, the management of fish stocks solely to safeguard future fisheries will not necessarily lead to all food web targets being met. Changes in plankton are likely driven by prevailing environmental conditions, but other impacts cannot be ruled out. For more information, read [UK Marine Strategy food webs assessment](#).

Water Quality

D10 – Marine Litter

Marine litter, including from fishing activities, is a significant pressure on marine ecosystems and water quality. The UK has not yet achieved its aim of GES for litter. Beach litter levels in the Celtic Seas have remained largely stable since the assessment in 2012, whilst beach litter levels in the Greater North Sea have slightly increased. Waste fishing material is a component of beach litter. Both floating litter and seafloor litter remain an issue, with plastic the predominant material. Achieving GES for marine litter requires improved waste management practices, the reduction of lost or discarded fishing gear, and increased awareness and monitoring of the issue. For more information, read [UK Marine Strategy litter assessment](#).

D11 – Underwater noise

Underwater noise from fisheries, while not the primary source, can still contribute to the overall noise pollution in the marine environment. Fishing vessels will contribute to

underwater noise through sonar, engine noise, gear interacting with seabed and deploying and retrieving gear.

The achievement of GES for underwater noise in the UK is uncertain. Research and monitoring programmes established since 2012 have provided an improved understanding of the impacts of sound on marine ecosystems. However, achieving GES for underwater noise will require better understanding and monitoring of the issue, as well as the development and implementation of strategies to manage noise pollution from various sources. For more information, read [UK Marine Strategy underwater noise assessment](#).

Climatic Factors

Climate change impacts are not part of the UK Marine Strategy, therefore evidence from other sources were used to provide baseline information in relation to this issue. Statistics from the Department for Business, Energy & Industrial Strategy, Department for Transport and Engelhard et al (2022) report on Carbon emissions in UK fisheries, were used to identify the contribution UK fishing fleets have to the total carbon emissions at sea each year.

Vessel Emissions

For 2019, estimated emissions by the UK fishing fleet (802 kt CO₂e) would have represented 0.18% of the UK's total territorial emissions (455 Mt CO₂e)⁶, or 0.66% of the UK's domestic transport emissions (122 Mt CO₂e)⁷. To put this into context, estimated emissions by the UK fishing fleet would have been equivalent to 1.7% of total agricultural emissions in 2019 (46.3 Mt CO₂e).

Recent analysis has shown that the total UK pelagic trawl fleet segment (which comprises of 26 active vessels) produced 15.7% (132kt CO₂e) of the total at sea carbon emissions annually across the UK's fishing fleets⁸. Note that the majority of pelagic fishing is conducted by large vessels targeting mackerel. The Celtic Sea and Western Channel directed pelagic fishery is conducted by a low number of small

6 Department for Business, Energy & Industrial Strategy (2021b) [2019 UK Greenhouse Gas Emissions: Final Figures – Statistical Summary](#).

7 [Department for Transport \(2021\) Statistical Release: Transport and Environment Statistics 2021 Annual Report, 11 May 2021](#)

8 Engelhard, G.H., Harrod, O.L., Pinnegar, J.K. (2022) Carbon emissions in UK fisheries: recent trends, current levels, and pathways to Net Zero Final report for Defra project C8118. Centre for Environment, Fisheries & Aquaculture Science (Cefas), Lowestoft, UK

vessels. Data available from Seafish show that, in 2019, the five pelagic species in the plan make a small contribution to the overall pelagic fleet uptake.

Climate change impacts on pelagic stocks and fisheries

Under future climate change, modification of temperature and salinity are expected to result in shifts to distributions of marine organisms, including commercial fish species⁹. In an analysis of 50 abundant species in the waters around the United Kingdom and Ireland, 72% of the fish species were shown to have responded to warming in the region already, by changing distribution and abundance¹⁰. Specifically, warm-water species have increased in abundance while cold-water species have decreased, with these trends expected to continue in the future. For the five species that make up the basket of species in this plan it will result in a mix of change. Some species like herring and greater silver smelt have a preference for colder spawning temperatures and are likely to have reduced reproduction in the plan area, while anchovy has a warmer water tolerance and may move to spawn further north and further into the plan area. The observed increasing presence of warm water pelagic fish in the area is predicted to continue.

Cultural Heritage

The definition of the 'marine and aquatic environment' in the Fisheries Act 2020 (section 52) includes features of 'archaeological or historic interest in marine or coastal areas. These features should be regarded as part of the wider marine environment.

Cultural heritage impacts are not part of the UK Marine Strategy, therefore evidence from other sources were used to provide baseline information in relation to this issue.

The [Fishing and the Historic Environment](#) report produced by Historic England was used as the primary source of information on the interactions between commercial fishing and the marine historic environment in English and Welsh waters.

The report identifies that positive and negative interactions can arise when archaeological material present on the foreshore and seabed, is encountered during commercial fishing.

9 Townhill, B., Couce, E., Rutterford., L., & Pinnegar, J. (2018). Future projections of commercial fish distribution and habitat suitability around the British Isles. Report of BX006 work package: Long-term distribution shifts and zonal attachment. CEFAS, Lowestoft.

10 Simpson, S.D., Jennings, S., Johnson, M.P., Blanchard, J.L., Schön, P.J., Sims, D.W. and Genner, M.J., 2011. Continental shelf-wide response of a fish assemblage to rapid warming of the sea. *Current Biology*, 21(18), pp.1565-1570.

The following interactions between fishing gear and marine heritage assets can occur¹¹:

- pelagic towed gear, mid-water trawls and purse seines are unlikely to encounter marine heritage assets and therefore interactions are not anticipated, except for incidental gear loss
- interactions with drift nets and pelagic long lines have a low significance resulting from entanglement and snagging on marine heritage assets

The report identifies several potential and evidenced interactions between commercial fishing and marine heritage assets. However, given the anecdotal nature of many of these interactions a comprehensive assessment of the extent of interactions and their impacts, is currently not available for English and Welsh waters.

Existing Environmental Effects of Pelagic Fishing

FMPs are subject to legal and environmental obligations arising from legislation such as Habitats Regulations, [UK Marine Strategy](#), and the [UK Marine Policy Statement](#), the Environment Act 2021, Marine and Coastal Access Act 2009, and the [Environmental Principles Policy Statement](#). These policies are aimed at ensuring the health of our seas for future generations, and our ambitions to restore biodiversity and address climate change.

The draft Celtic Sea and Western Channel pelagic FMP focuses on achieving the sustainable harvesting of five pelagic stocks. This focus reduces the environmental risks linked to over-fishing these stocks, thereby giving positive benefit to environmental status over the long term.

Nevertheless, fishing within sustainable limits for the target stocks (MSY or appropriate proxies) may reduce but will not eliminate some of the negative impacts of that fishing activity on the wider marine environment. These impacts are identified in the sections below.

As described in Section 2, this Environmental Report focuses on assessing how the policies and actions in the draft Celtic Sea and Western Channel pelagic FMP are likely to give rise to both significant positive and negative environmental effects. More detailed fisheries assessments which consider current activity are already in progress or have been completed. These assessments may be used to inform the FMP actions as they are delivered, and include:

- Defra's Revised Approach to fisheries management programme (IFCA 0-6 nautical miles, MMO 6-12 nautical miles).

¹¹ Information derived from [Fishing and the Historic Environment](#), page 44.

- the Marine Management Organisation's (MMO) ongoing Fishery Assessment programme (outside 12 nautical miles) in England
- the Assessing Welsh Fishing Activities Project (AWFA) in Wales

Nevertheless, this Environment Report acknowledges the potential significant effects associated with fishing activity being managed through the draft Celtic Sea and Western Channel pelagic FMP and sets out in broad terms how the FMP will seek to avoid, reduce, or at least mitigate significant negative effects.

Biodiversity, Flora, Fauna and Geodiversity, Water quality

Environmental Effects Associated with MPAs

Advice provided to Defra and the Welsh Government by our statutory consultees including the Statutory Nature Conservation Bodies, gives more detail on the risks associated with targeting pelagic species in relation to the designated features of MPAs in English and Welsh waters.

In England the assessments of the impact of fishing activities for the five pelagic species inside MPAs are undertaken by the IFCA's within 6 nautical miles and the MMO outside 6 nautical miles. Figure 1 (below) shows the distribution of English MPAs. Stakeholders have worked closely with regulators to help develop measures to mitigate impacts within inshore and offshore MPAs. Appropriate management being in place to ensure any fishing within MPAs is compatible with the MPA's conservation objectives. Current management measures already in place related to the use of the interaction between gear and features, including for bottom towed gear is detailed on the [Association of IFCA's](#) and [MMO](#) websites.

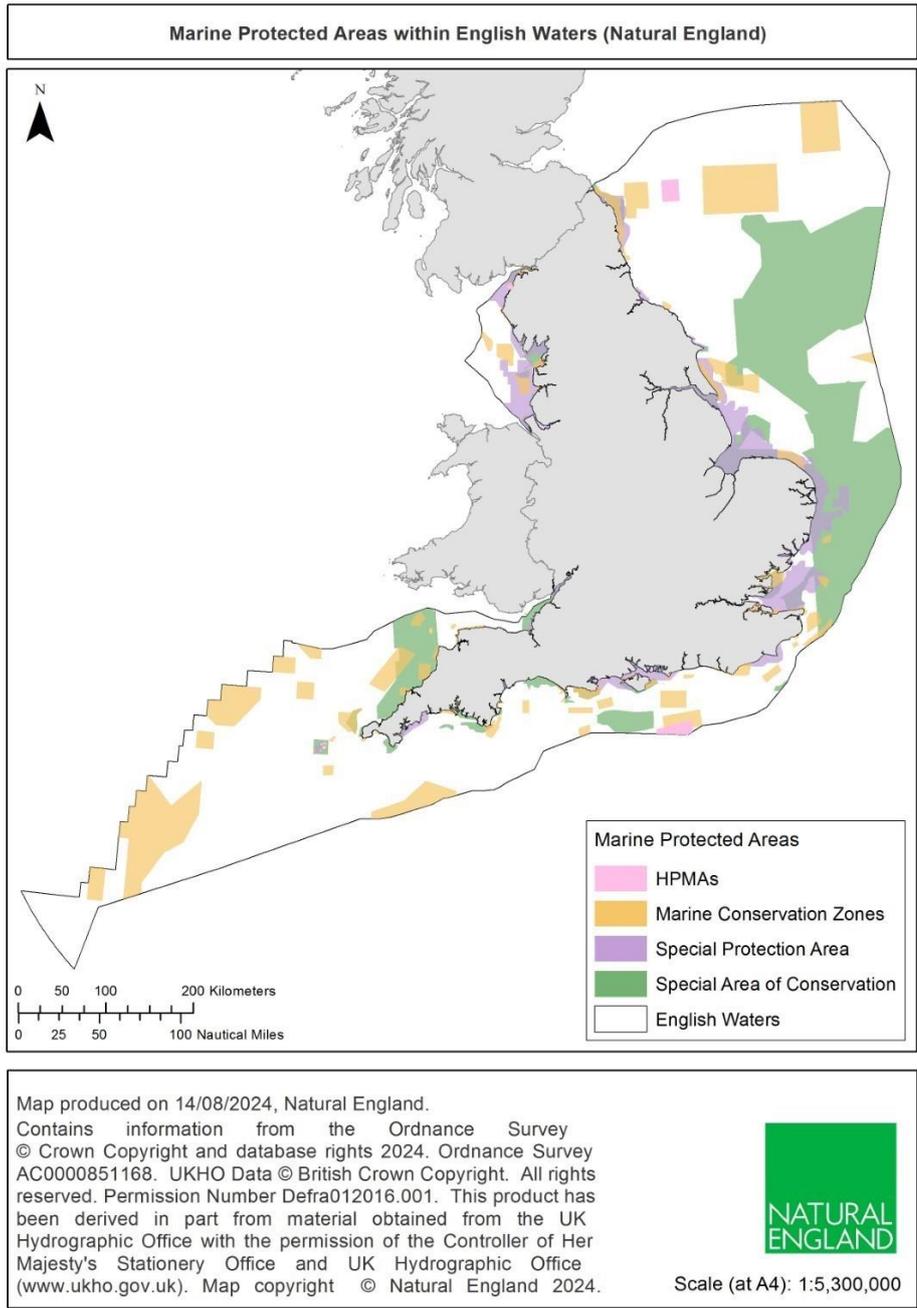


Figure 1. England's MPA network

Figure 1 description: a map showing the location of marine protected areas within English. The map includes marine conservation zones, special areas of conservation and special protection areas.

In Wales, the assessments of the impact of fishing activities for the five pelagic species inside MPAs are undertaken in-house and reviewed by Natural Resources Wales.

Figure 2 shows the distribution of Welsh MPAs relevant to the draft Celtic Sea and Western Channel pelagic FMP. Officials work closely with stakeholders through established working groups to co-develop measures which mitigate impacts from fishing activities. Appropriate management measures are in place to ensure any pelagic fishing within MPAs is compatible with the MPA's conservation objectives.

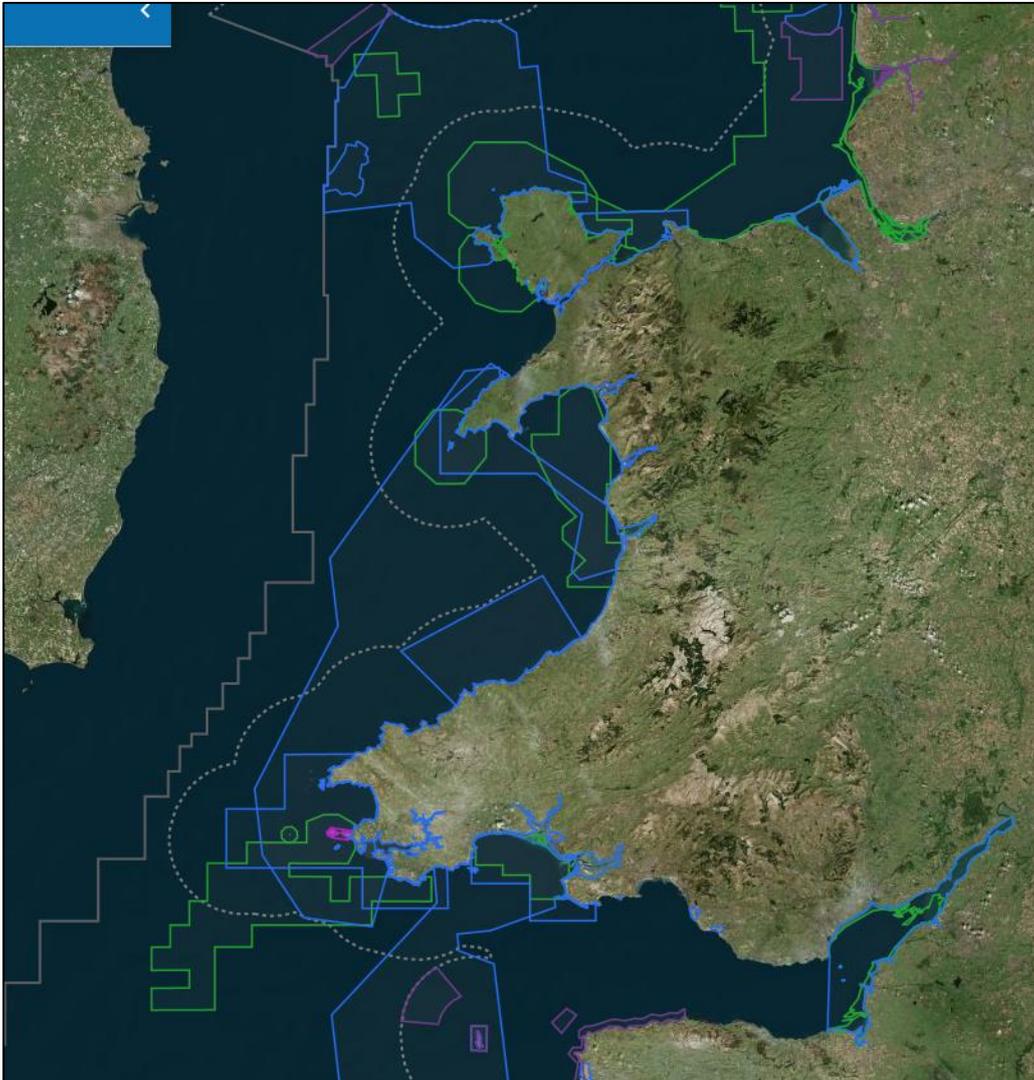


Figure 2. Welsh MPA network showing Special Areas of Conservation (SACs) in blue, Special Protected Areas (SPAs) in green and Marine Conservation Zones in pink. The solid line showing the UK EEZ median line and the dashed line showing inshore Welsh waters out to 12 nm.

Figure 2 description: a map showing the location of marine protected areas within Welsh waters. The map includes marine conservation zones, special areas of conservation and special protection areas.

Whilst existing MPA site management considers fishing activity that occurs within the site's boundaries, there remains the potential for fishing activity outside MPAs to have

impacts on the features protected within the MPA. These impacts can occur when either the pressure exerted by the fishery impacts protected features beyond the spatial footprint of a particular fishing activity (e.g. noise or prey depletion) or when the feature of an MPA is mobile and travels outside the site.

Advice provided to Defra by the Statutory Nature Conservation Bodies on the impact of fishing activity outside the boundary of MPAs on MPA features concluded that in English waters:

- there is a moderate risk of bycatch of mobile species that are designated features of MPAs in pelagic trawls, ringnets, purse seines and drift/gill nets
- there is a high risk of bycatch of mobile species that are designated features of MPAs in static netting
- there is a moderate risk to the designated species of MPAs from reductions in their prey through the targeted pelagic fisheries This includes [MMO work](#) on assessments for harbour porpoise in the Bristol Channel

Advice provided to the Welsh Government by the Statutory Nature Conservation Bodies on the impact of fishing activity outside the boundary of MPAs on MPA features concluded that in Welsh waters:

Pelagic trawls

- there is a medium risk inside and outside MPAs from harbour porpoise bycatch

Pelagic fixed nets

- there is a high risk inside MPAs from abrasion and penetration to high MarESA sensitivity habitats
- there is a high risk inside and outside MPAs from harbour porpoise bycatch

Pelagic drift nets

- there is a high risk inside and outside MPAs from harbour porpoise bycatch

All gear types

- there is a high risk inside and outside MPAs from Annex II fish species bycatch
- there is a high risk inside and outside MPAs from targeting herring in 7e and f affecting harbour porpoise prey availability
- there is a high risk inside and outside MPAs from the bycatch of herring in 7e, f, g and h affecting harbour porpoise prey availability
- there is a medium risk inside and outside MPAs from diving seabird bycatch
- there is a medium risk inside and outside MPAs to the Severn Estuary SAC from targeting and bycatch of the estuaries feature's fish assemblage
- there is a medium risk inside the Carmarthen Bay SAC for the common scoter
- feature from visual and above water noise disturbance from fishing vessels

Environmental effects associated with UK Marine Strategy Descriptors

Advice provided to Defra and the Welsh Government by the Statutory Nature Conservation Bodies gives more detail on the key risks to UK Marine Strategy descriptors arising from target pelagic species e.g. sardine fishing and their likely impact on achieving Good Environmental Status (GES) (See appendix A).

The following potential issues and their associated risk level¹² have been identified for pelagic fishing on UK Marine Strategy descriptors:

- **the impact of bycatch of species on D1 biodiversity** - The risk to other fish species and in particular sensitive bycatch species such as birds and mammals was highlighted in Statutory Nature Conservation advice. To better understanding of the actual risk posed by the pelagic fishery will require a further information which includes understanding the geographic scope and scale of fishing effort within the Celtic Sea and Western Channel, and the bycatch associated with this activity. Note that as well as being relevant to GES, the Fisheries Act ecosystem objective requires that ‘incidental catches of sensitive species are minimised and, where possible, eliminated’. The risk to commercial fish species is also relevant to the bycatch objective of the Fisheries Act, and management brought in to meet this objective should contribute to achieving GES targets for D3 commercial fish and D4 food webs. As well as presenting a risk to species associated with MPAs (considered earlier in this document), pelagic gear such as pelagic trawls (English waters); ring nets, purse seines and drift nets (English waters) and static nets (English waters) poses a bycatch risk to other sensitive species. The risk to sensitive fish/seabird/mammal species is moderate for pelagic trawls, ring nets, purse seines and drift nets. There is a moderate risk to seals through bycatch in static netting, while there is a high risk to cetaceans and seabirds through bycatch in static netting though the incidence of static netting is confined in England. Wales advice raises additional concerns about pelagic drift nets and the risk for harbour porpoise and more widely concerns about Annex II fish species (Salmon and Shad species). This will require consideration. Note that as well as being relevant to GES, the Fisheries Act 2020 ecosystem objective requires that ‘incidental catches of sensitive species are minimised and, where possible, eliminated’.

¹² **Draft GES rapid risk assessment categories:** Low risk = some risk does exist but impact may not be of a scale to impact upon GES descriptors. Moderate risk = clear link between fishing activity and GES indicator but other activities also significantly contribute to current indicator status. Or where high-risk activity only makes up a small proportion of fishery. High risk = recognised link between fishing activity within FMP and failure of GES indicator. ‘Risk unclear’ used where situation is complex, and more work is required to understand true nature of risk.

- **relation to D4 food webs:** There is a moderate risk to UK Marine Strategy D1, D4 cetaceans, D1, D4 seals, D1, D4 seabirds through targeted removal of the five pelagic species, some of which form important prey species for these descriptors. These risks are also relevant to the bycatch objective of the Fisheries Act 2020, and any management brought in to meet this objective could contribute to achieving GES targets for D3 commercial fish and D4 food webs
- **D1, D6 seafloor integrity:** There is a high risk from demersal trawls. However, given that only a relatively small proportion of the landings are taken by demersal mobile gears as bycatch when targeting other species as part of separate fisheries, this risk should be considered as part of managing those target fisheries. Whilst the anchors of nets do have the ability to cause localised impacts, it is not currently thought to be at a scale likely to affect achievement of GES for this descriptor
- **the contribution to fishing related litter (D10):** Loss of gear such as pelagic trawls and drift nets will add to overall levels of fishing related litter within the sea and can have unintended consequences such as ghost fishing. Consideration of how best to avoid or minimise loss and achieve sustainable end of life disposal is important. This risk is considered moderate

Climatic Factors

Vessels fishing for pelagic species contribute to the total carbon emissions at sea each year by the UK's fishing fleets. While the estimated emissions by the UK fishing fleet represents a small proportion of the overall emissions in the UK, decarbonising the fleet and moving towards net zero will help reduce the contribution of fisheries activities to climate change.

No conclusive evidence is currently available on the impact of pelagic fishing activity on organic carbon stocks, and the impacts will depend on the gears used to target pelagic species now and in the future. Much of this information on towed gear is focused on seabed disturbance associated with demersal activity – as highlighted above (this is outside the scope of this FMP). Pelagic towed gear has little to no interaction with the sea floor.

Cultural Heritage

Fishing activity can have both positive and negative effects on marine heritage assets. The positive effects relate to the discovery of marine heritage assets during fishing activity, with both past and future discoveries or findspots often reliant on fishing gear interactions. Negative effects can be caused by physical disturbance to cultural heritage on and within the seabed. Specific effects include: impeded access and interpretation of assets by fishing gear (e.g. nets, lines and ropes) collecting around physical structures; direct damage of assets by gear, usually towed gear, causing

irreparable alteration to physical structures; burial of archaeological material by sediment during fishing practices; removal of the archaeological material from the seabed during fishing practices; and transferal of archaeological material from its original place on the seabed during fishing practices. Avoiding negative interactions with marine heritage assets will help conserve them for their enjoyment by future generations.

The marine historic environment also plays an important role in providing ecosystem services in relation to nature conservation, sea angling, recreational diving and commercial fishing. Marine heritage assets, particularly ship and plane wrecks can provide habitats for marine life, with fish often aggregating around them for refuge or to feed. Avoiding negative interactions with marine heritage assets that act as habitats can positively contribute to the conservation of the wider marine environment.

4. Relevant Plans, Programmes and Environmental Protection Objectives

The draft Celtic Sea and Western Channel pelagic FMP has broad application since it covers an activity that occurs across English and Welsh waters. Consequently, the plan will interact with a range of established national legislation, plans and programmes, and international agreements and declarations signed by the UK.

The sections below set out those plans, programmes, and environmental protection objectives that Defra and the Welsh Government consider relevant to the implementation of the draft Celtic Sea and Western Channel pelagic FMP. This FMP could interact with other relevant plans and projects. Any cumulative impacts will also be considered in any future assessments ahead of implementing measures.

International

The draft Celtic Sea and Western Channel pelagic FMP has had regard to the commitments the UK has made under the following international agreements and declarations during its preparation:

- [Convention for the Protection of the Marine Environment of the North East Atlantic \(OSPAR\)](#): is the legal framework for international cooperation to protect the marine environment of the North-East Atlantic, of which the UK is a party.
 - the OSPAR Quality Status Report is a key resource when looking at the environmental impact of fisheries in the North East Atlantic

- [Convention on International Trade in Endangered Species of Wild Fauna and Flora \(CITES\)](#): is a global agreement that regulates international trade in wildlife to ensure it does not threaten the survival of species, of which the UK is a party, of which the UK is a party.
- [Convention on the Conservation of Migratory Species of Wild Animals \(CMS\)](#): An international treaty aimed at conserving migratory species across their entire range, of which the UK is a party.
- [Council of Europe Landscape Convention](#): promotes the protection, management, and planning of European landscapes to enhance their quality and ensure sustainable development.
- [European Convention on the Protection of the Archaeological Heritage](#): aims to safeguard the archaeological heritage as a source of European collective memory and a resource for historical and scientific study.
- [NEAFC – Northeast Atlantic Fisheries Commission](#): A regional fisheries management organization responsible for the conservation and management of fishery resources in the North-East Atlantic, of which the UK is a Contracting Party. NEAFC manages many of the species also covered within the remit of this FMP.
- [Ramsar Convention](#): An international treaty for the conservation and sustainable use of wetlands, of which the UK is a party.
- [UN Convention on Biological Diversity \(CBD\)](#): An international legal instrument for the conservation of biological diversity, sustainable use of its components, and fair and equitable sharing of benefits arising from genetic resources. Particularly relevant is Target 10 (including the sustainable management of fisheries and aquaculture) of the Kunming-Montreal Global Biodiversity Framework.
- [UN Convention on the Law of the Sea \(UNCLOS\)](#): An international treaty that establishes a legal framework for all marine and maritime activities.
- [UN Fish Stocks Agreement 1995](#): The United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA) is an international agreement that regulates key fisheries that, because of their transboundary nature, require international cooperation for their conservation and management.

- [UN Sustainable Development Goals](#): The UK has committed to working towards the 17 SDGs by 2030. Relevant goals include SDG 14 protecting life in the oceans, as well as SDG 8 decent work and economic growth, SDG 12 sustainable consumption and production and SDG 13 climate action.
- [2003 UNESCO Convention for Safeguarding of the Intangible Cultural Heritage](#): fishing is a rich source of intangible cultural heritage that could actively contribute to delivering FMPs, as well as FMPs having a role in safeguarding the intangible heritage of each fishery.

The draft Celtic Sea and Western Channel pelagic FMP has had regard to the commitments the UK has made under the following bilateral agreements and declarations during its preparation:

- [Trade and Cooperation Agreement \(TCA\) between the EU and the UK](#): sets out the conditions in which EU and UK vessels can access each other's waters.
- [UK-Faroe Islands Framework Agreement](#): sets conditions for the exchange of fishing quotas and includes provisions for control and enforcement to ensure sustainable fisheries management across UK and Faroese waters.
- [UK-Norway Framework Agreement](#): sets conditions for the exchange of fishing quotas and includes provisions for control and enforcement to ensure sustainable fisheries management across UK and Norwegian waters, negotiated on an annual basis.

Domestic

The Celtic Sea and Western Channel pelagic FMP has had regard to the following UK and Welsh legislation, plans and programmes during its preparation:

Marine Protected Areas

FMPs are required by law to consider the implications of the fishing activity they manage for designated sites, primarily Marine Protected Areas (MPAs). Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are protected under the Conservation of Habitats and Species Regulations 2017, known as the Habitats Regulations. Marine Conservation Zones are protected by the Marine and Coastal Access Act 2009. The MPA network [covers 38% of UK waters](#), in [England this number is closer to 40%](#) and in [Wales it is closer to 69%](#). Relevant or public authorities (including fisheries regulators) assess human activities that could interact with the designated features of MPAs, seek the advice of the SNCBs and introduce management where required. The draft Celtic Sea and Western Channel pelagic FMP

will support the management of fishing activity in MPAs. When implementing any actions arising from the FMP that overlap with SACs and SPAs and Marine Conservation Zones or their designated features, an assessment will be undertaken prior to implementation, to assess the likely effects of the action on the conservation objectives of the site.

Marine regulators also have responsibilities relating to Sites of Special Scientific Interest under the Wildlife & Countryside Act 1981 and Natural Environment & Rural Communities Act 2006. Ramsar sites (wetlands of international importance), designated under the Ramsar Convention, are often underpinned by Sites of Special Scientific Interest but are afforded the same protection at a policy level as SACs and SPAs. Appendix C lists the different types of MPA and relevant designations in the UK.

The Welsh Assessing Welsh Fishing Activities programme is also undertaking structured evaluations of fishing activity interactions with features protected within Welsh MPAs. Welsh Government are delivering the work through NRW, its statutory nature conservation advisor. To date, the work has delivered evaluations for a variety of gears including towed dredges, entangling nets, trammel nets, gill nets, demersal trawls, pots and traps, beach seines, drift nets, and longlines. Management of MPAs in Welsh waters is set out in the [Marine Protected Area network management framework for Wales 2018](#).

Highly Protected Marine Areas

Highly Protected Marine Areas are areas of the sea (including the shoreline) that allow the protection and full recovery of marine ecosystems. By setting aside some areas of sea with high levels of protection, Highly Protected Marine Areas will allow nature to fully recover to a more natural state, allowing the ecosystem to thrive.

Highly Protected Marine Areas protect all species and habitats and associated ecosystem processes within the site boundary, including the seabed and water column. For large Highly Protected Marine Areas, resultant displacement may lead to the intensification of fisheries pressure that will require assessing and potentially addressing if unduly exacerbating existing pressures.

The first three Highly Protected Marine Area designations in English waters came into force on 5 July 2023.

The three sites are:

- Allonby Bay
- Northeast of Farnes Deep
- Dolphin Head

Wales does not yet have any Highly Protected Marine Areas. Any actions arising from the FMP that overlap with Highly Protected Marine Areas will comply with the conservation objectives for designated features.

UK Fisheries Legislation (including retained EU legislation)

Since the UK's exit from the European Union, the foundation of UK fisheries legislation has been established through several key pieces of legislation. The [Fisheries Act 2020](#) has replaced the Common Fisheries Policy, granting the UK full control over its fishing waters and enabling the regulation of access and the promotion of sustainable fishing practices.

The UK has retained certain EU laws, including [Council Regulation \(EC\) No 1224/2009](#), which establishes a system for control, inspection, and enforcement to ensure compliance with fisheries rules, and [Regulation \(EU\) 2019/1241 of the European Parliament and of the Council](#), which sets out rules for the conservation of fisheries resources and the protection of marine ecosystems through technical measures.

Commission Regulation (EC) No 494/2002 (recovery of hake) establishes additional technical measures to aid the recovery of hake stocks in specified ICES sub-areas and divisions. It applies to vessels operation in ICES sub-areas 5 and 6 and ICES divisions 7 b, c, f, g, h, j, k and ICES divisions VIII a, b, d, e. It is worth noting that while Hake is not a species within this FMP, it is a large mixed fishery that will have implications on its species.

Furthermore, Regulation (EU) 2016/2336 of the European Parliament and of the Council establishes specific conditions for fishing for deep-sea stocks in the north-east Atlantic and provisions for fishing in international waters of the north-east Atlantic.

The draft Celtic Sea and Western Channel pelagic FMP will comply with these legislative frameworks to ensure effective management and conservation of the FMP's species populations and fisheries.

Conservation of Habitats and Species Regulations 2017 and Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

The [Conservation of Habitats and Species Regulations 2017](#) include provisions for: protecting sites that are internationally important for threatened habitats and species (European marine sites) and provide a legal framework for species requiring protection (European protected species). [The Conservation of Habitats and Species \(Amendment\) \(EU Exit\) Regulations 2019](#) sets out changes to made to the 2017

Regulations to ensure the regulations operate effectively in English and Welsh waters. The draft Celtic Sea and Western Channel pelagic FMP will support the protection of protected sites and species.

The Conservation of Offshore Marine Habitats and Species Regulations 2017

[The Conservation of Offshore Marine Habitats and Species Regulations 2017](#) include provisions for the designation and protection of areas that host important habitats and species in the offshore marine area. The draft Celtic Sea and Western Channel pelagic FMP will support the protection of offshore marine habitats and species.

Marine Strategy Regulations 2010 – UK wide

The [Marine Strategy Regulations 2010](#) requires Administrations in the UK to take action to achieve or maintain Good Environmental Status (GES) in UK waters. The UK Marine Strategy is a key pillar of marine policy in the UK. There is a clear link between the UK Marine Strategy and the ‘ecosystem objective’ of the Fisheries Act 2020 – sections 1(4) and 1(10).

The [Marine strategy part one: UK initial assessment and good environmental status](#) outlines an initial assessment of our seas and characteristics, targets and indicators of GES in UK seas.

The [Marine strategy part two: UK marine monitoring programmes](#) outlines the monitoring programmes for measuring progress towards GES in UK seas.

The [UK Marine Strategy Part Three: Programme of Measures](#) identifies FMPs as a tool to support the delivery of GES for commercial fisheries (Descriptor 3). It also recognises FMPs could, where appropriate include ‘measures to mitigate the impact of fishing activity on the wider environment, including the seabed’ to support the delivery of GES for other descriptors.

Marine Plans – UK wide

The [Marine and Coastal Access Act 2009 \(MCAA\)](#) makes provision for the [UK Marine Policy Statement \(MPS\)](#), published 2011, and requires (together with the [Marine Act \(Northern Ireland\) 2013](#), [The Marine \(Scotland\) Act 2010](#)) the production of marine plans where the MPS is in place. The MPS provides the framework for marine plans around the UK and sets the high-level policy context for marine planning, including setting high-level marine objectives. Under MCAA s.58, decisions relating to the marine area should be taken in line with the Marine Plan. The draft CSWCD FMP considers the relationship between marine spatial planning and fishing activity being

managed through FMPs, and how these policies can work in a joined-up way to ensure more effective use of the marine space and resources.

The following legislation have been identified as relevant to this FMP:

- UK Marine Policy Statement (MPS): the framework for preparing Marine Plans and taking decisions affecting the marine environment
- Marine Plans – (Southwest Marine Plan): provides a policy framework which will be used to help inform decision-making on what activities take place in the marine environment and how the marine environment is developed, protected and improved in the next 20 years. UK Marine Policy Statement (MPS): the framework for preparing Marine Plans and taking decisions affecting the marine environment

Further information on the marine plans is provided in Appendix D.

The Environment Act 2021

The [Environment Act 2021](#) sets out England's commitment to protect and enhance our environment for future generations. The act seeks to improve air and water quality, protect wildlife, increase recycling and reduce plastic waste. A central pillar is an obligation for policy makers to have due regard to five environmental principles (integration principle, prevention principle, rectification at source principle, polluter pays principle, precautionary principle) during the development of policy. Policies developed through the draft Celtic Sea and Western Channel pelagic FMP will have due regard to these principles. Further details of the environmental principles can be found at [Environmental Principles Gov.uk page](#).

The Environment Act 2021 also requires the government to publish an [Environmental Improvement Plan \(EIP\) 2025 - GOV.UK](#) for England. The EIP published in 2023 and updated in 2025, builds on the 25 Year Environment Plan by setting out how the government in England will work with landowners, communities and businesses to deliver goals for improving the environment. FMP policy supports the EIP by enabling the development of fisheries management tools that will contribute to securing clean, healthy, productive and biologically diverse oceans and seas. Through implementing a sustainable domestic fisheries policy, the draft Celtic Sea and Western Channel pelagic FMP will deliver measures to secure healthy stocks that will be fished in an environmentally sustainable manner.

The Environment Act 2021 also makes provision for legally binding targets of which the targets for biodiversity and Marine Protected Areas will relate to FMPs. In addition, public authorities who operate in England must consider what actions they can take to conserve and enhance biodiversity in England. This obligation is the strengthened

[‘biodiversity duty’](#) that the Environment Act 2021 introduced. The draft Celtic Sea and Western Channel pelagic FMP will comply with the biodiversity duty.

The Environmental Targets (Biodiversity) Regulations 2023 - England

[The Environmental Targets \(Biodiversity\) Regulations 2023](#) set long-term targets in respect of three matters within the priority area of biodiversity under section 1 of the [Environment Act 2021 \(c. 30\)](#). These Regulations also set a target in relation to the abundance of species in accordance with section 3 of the Environment Act 2021. The Regulations specify the standard to be achieved in respect of each target and the date by which it must be achieved. The draft Celtic Sea and Western Channel pelagic FMP will support achieving the targets set out in the regulations as appropriate.

The Environmental Targets (Marine Protected Areas) Regulations 2022 – England

[The Environmental Targets \(Marine Protected Areas\) Regulations 2022](#) set a long-term environmental target under section 1 of the [Environment Act 2021 \(c. 30\)](#). The target set by regulation 3 is in respect of the condition of protected features in marine protected areas. These Regulations specify the standard to be achieved in respect of the target and the date by which it must be achieved. The draft Celtic Sea and Western Channel pelagic FMP will support achieving the targets set out in the regulations.

Climate Change Act 2008 – UK Wide

The [Climate Change Act 2008](#) is the basis for the UK’s approach to tackling and responding to climate change. It requires that emissions of carbon dioxide and other greenhouse gases are reduced and that climate change risks are adapted to. The Act also establishes the framework to deliver on these requirements. The draft Celtic Sea and Western Channel pelagic FMP will support policies to meet targets to achieve net zero by 2050 as set out in the legislation.

Marine wildlife bycatch mitigation initiative – UK Wide

The [Marine wildlife bycatch mitigation initiative](#) outlines how the UK will achieve its ambitions to minimise and, where possible, eliminate the bycatch of sensitive marine species. This initiative brings together, and builds on, existing work such as the UK Bycatch Monitoring Programme and [Clean Catch UK](#), recognising that further actions need to be taken if we are to achieve our objectives. The draft Celtic Sea and Western Channel pelagic FMP will support this initiative by contributing to mitigating the negative impacts of fishing activity as appropriate.

Water Environment Regulations (Water Framework Directive)

The Water Environment (Water Framework Directive) (England & Wales) Regulations 2017 (referred to as the WFD Regulations) provide a framework for assessing and managing the water environment, which includes estuaries and coastal waters in England. The draft Celtic Sea and Western Channel pelagic FMP will support achieving the targets for water quality set out in the regulations.

[River Basin Management Plans \(RBMPs\)](#) produced under the Water Environment Regulations provide the overarching framework for to help protect and improve our water environment. RBMPs extend out to 1 nautical mile from the baseline into the marine environment and seek to maintain or restore Good Ecological Status¹³. The draft Celtic Sea and Western Channel pelagic FMP will support the objectives in the relevant RBMPs to meet Good Ecological Status.

Well-being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016

All activities undertaken as part of the development of the draft Celtic Sea and Western Channel pelagic FMP will be in line with the Well-being of Future Generations (Wales) Act 2015. Welsh Ministers, as a public body, have a duty to work to improve the social, economic, environmental and cultural well-being of Wales, by taking action in accordance with the sustainable development principle.

Wales has a legal framework that provides for the sustainable management of natural resources and requires public bodies to carry out sustainable development to meet well-being goals. This framework includes some of, but is not limited to, the five environmental principles such as integration, precautionary and prevention. These are defined in the [Well-being of Future Generations \(Wales\) Act 2015](#) with accompanying [statutory guidance](#) and the [Environment \(Wales\) Act 2016](#).

Environment (Wales) Act 2016

All activities undertaken as part of the development of the draft Celtic Sea and Western Channel pelagic FMP will be in line with the [Environment \(Wales\) Act 2016](#). Welsh Ministers, as a public body, have a duty to work to improve the social,

13 Good ecological status (GES) is a metric for assessing the health of the water environment. It is assigned using various water flow, habitat, and biological quality tests. Failure to meet any one individual test means that the whole water body fails to achieve good ecological status. Source: Department for Environment, Food and Rural Affairs (DEFRA) ([WQR0028](#))

economic, environmental and cultural well-being of Wales, by taking action in accordance with the sustainable development principle.

Section 6 of the Environment (Wales) Act 2016 requires that public authorities must seek to maintain and enhance biodiversity [of the Section 7 habitats and species] so far as consistent with the proper exercise of their functions and in so doing promote the resilience of ecosystems. The draft Celtic Sea and Western Channel pelagic FMP will support the requirements of the Act.

Welsh National Marine plan 2019

Welsh National Marine plan 2019 provides a statutory policy framework to help guide the development of the Welsh Marine area includes cross-cutting socio-economic environmental policies under specific areas of the Marine and Coastal Access Act.

Other FMPs

Defra and the Welsh government and their delivery partners considered the interactions between the draft Celtic Sea and Western Channel pelagic FMP, published FMPs and those plans in preparation while drafting this FMP.

Published

- [Sea bass in English and Welsh waters FMP 2023](#)
- [King Scallop in English and Welsh waters FMP 2023](#)
- [Crab and lobster in English Waters 2023](#)

In preparation

- Irish Sea pelagic FMP 2025
- Irish Sea demersal FMP 2025
- Celtic Sea and Western Channel pelagic FMP 2025
- Celtic Sea and Western Channel demersal FMP 2025
- North Sea and Eastern Channel sprat FMP

The interaction between FMPs will be considered when monitoring the effectiveness of plans. Any necessary adaptations would be built into the plan's ongoing implementation and adjusted in future revisions of the FMP.

Other Localised Plans

[Explore Marine Plans \(EMP\)](#) is an online interactive tool developed by the Marine Management Organisation (MMO) to allow a user find and view spatial marine activity data for the English marine area, information on marine planning licences relating to a specific area, and marine plan policy information.

The draft Celtic Sea and Western Channel pelagic FMP will use this tool to identify where the plan could interact with other relevant marine activities, plans or projects. Any necessary adaptations would be built into the plan's ongoing implementation and contribute to future revisions of the FMP.

Other relevant plans, programmes and environmental objectives, including those at local level

- **ongoing Remote Electronic Monitoring (REM) consultations:**
Defra continues to work to expand the REM programme to five priority fisheries over the next five years, refining its approach with each phase. Once fully implemented, REM systems will be mandatory for vessels in these fisheries, including non-UK vessels

5. Assessment of Environmental Effects

The environmental baseline information (section 3) shows that the marine environment is subject to a range of pressures from human activities. Fishing-related activities form only part of the contribution of these pressures to the current state of our marine environment.

The present assessment acknowledges the evidence that shows those pressures that are largely derived from fishing activity and can impact the marine environment directly. Fishing can also contribute to other environmental effects when considered in combination with other processes and activities.

Section 5 assesses the environmental effects of the policies and actions of the draft Celtic Sea and Western Channel pelagic FMP in relation to the environmental issues screened into this SEA, and where applicable their associated UK Marine Strategy descriptors.

Overview of the Potential Positive and Negative Environmental Effects of the Goals, Actions and Measures of the draft Celtic Sea and Western Channel Pelagic FMP

The potential positive and negative environmental effects of implementing goals (considering the actions that sit under them) and measures of the draft Celtic Sea and Western Channel pelagic FMP have been identified in below.

Policy Goal 1: Harvest sardine, anchovy and Western Channel and Bristol Channel herring stocks sustainably, with the overall aim of maintaining or increasing levels of the stocks.

Positive Effects: Sardine, anchovy and the Western Channel and Bristol Channel herring stocks have insufficient evidence to assess MSY. To do this more information will be needed. Action, while important, will not by itself have a positive effect on the environment. However, it will allow for more informed management decisions. In the future that could result in improvements across a range of receptors and ultimately contribute to the sustainable management of targeted stocks. This may have indirect benefits for wider environment, for example food webs and biodiversity:

Relevant SEA issues: Biodiversity, fauna, flora (UK Marine Strategy D1, D3, D4 and D6)

Negative Effects: The intention of these would be to have a positive impact, but there could be unintended negative effects, resulting from spatial changes in fishing effort. Data collection and processing need to be considered alongside proposed management actions as in isolation it will not prevent the associated fisheries from declining further if overfishing is taking place or reduce environmental impacts associated with fishing activity. Gathering further information about MSY will ensure that these pelagic stocks are fished within recognised limits. Improvement to the stock assessment data and process will reduce uncertainty and inherent risks associated with setting sustainable catch limits. Increased fishing effort may incur additional impacts on the wider environment.

Relevant SEA Issues: Biodiversity, fauna, flora (UK Marine Strategy D1, D3, D4 and D6), Water (UK Marine Strategy descriptor D10, D11)

Policy Goal 2: Harvest Celtic Sea herring, horse mackerel and greater silver smelt stocks sustainability, with the overall aim of maintaining or restoring biomass of these stocks above the level capable of producing MSY.

Positive Effects: Similar to Goal 1 - These stocks have sufficient available information to assess MSY. Committing to ensure that these pelagic stocks are fished within sustainable limits will also have indirect benefits for the wider environment via improvements to food webs and biodiversity. Restoring or maintaining stocks above MSY should reduce uncertainty and inherent risks associated with setting sustainable catch limits.

Relevant SEA Issues: Biodiversity, fauna, flora (UK Marine Strategy - D1, D3, D4, D6)

Negative Effects: Levels of realised fishing effort may fluctuate in response to changes in catch limits. Reducing opportunities could also result in fishers switching to

areas and species not within the scope of this FMP, thus increasing pressure on the environment elsewhere.

Relevant SEA Issues: Biodiversity, fauna, flora (UK Marine Strategy - D1, D3, D4, D6)
Water (UK Marine Strategy descriptors D10, D11)

Policy Goal 3: Seek to improve the evidence base for all stocks, including to allow for an assessment of MSY or a suitable proxy where necessary.

Positive Effects: Building on the positive effects of policy goal one, making sure all stocks have the information for an MSY assessment. In the future this might include further ecological reference points (Feco) in calculating fishing mortality, to meet commitments in the Fisheries Act 2020. This would also support a process to resolve evidence gaps and create plans to fill these gaps. Current ICES advice for pelagic forage fish species may, to varying extents include ecosystem effects on the assessed stocks through both variable predation mortality and qualitative ecosystem considerations. These activities will further develop evidence to inform improvements to stock assessments. The provision of better data will contribute to the sustainable management of pelagic fisheries; enable better evaluations of the impact of fishing on those stocks; and improve the collection of biological and environmental data. This will support monitoring and evaluation of any impacts of the fishery on the wider environment. The policies and actions arising from this objective may contribute to pelagic stocks being sustainably harvested.

Relevant SEA Issues: Biodiversity, fauna, flora (UK MS - D1, D3, D4, D6); Water (UK MS descriptors D10, D11); Climatic factors; Cultural Heritage

Negative Effects: Any resulting new or enhanced dedicated field surveys (for monitoring and data collection) could result in further unwanted effects on the marine environment if environmental impacts are not considered during the development of the data collection programme. There is potential for wider effects as changes/opportunities in the catching sector impact both within and beyond the FMP.

Relevant SEA Issues: Biodiversity, fauna, flora (UK MS - D1, D3, D4, D6)

Policy Goal 4: Identify and support implementation of ecosystem-based fisheries management approaches appropriate for pelagic fisheries in the Celtic Sea and Western channel.

Positive Effects: The aim of this policy goal is the support and deliver the achievement of Good Environmental Status and the wide environmental, economic and social considerations of the FMP. This include supporting everything from food webs (D4) to marine litter (D10). As a result, we will have better understanding of interactions between and across stocks, where to improve the evidence base on the ecosystem roles and the key pressures they face.

Relevant SEA issues: Biodiversity, fauna, flora (UK Marine Strategy D1, D3, D4 and D6)

Negative Effects: The goal is wide and may find it difficult to implement or identify interactions and effects at a level that maybe identified or implemented easily

Relevant SEA Issues: Biodiversity, fauna, flora (UK Marine Strategy D1, D3, D4 and D6), Water (UK Marine Strategy descriptor D10, D11)

Policy Goal 5: Understand and reduce the impacts of FMP fisheries on non-target species, including by minimising and where possible eliminating sensitive species bycatch

Positive Effects: A better understanding of bycatch, interactions with habitat and the impacts of climate change will allow for appropriate mitigation measures to be designed where required. If then implemented, this will have a positive effect on biodiversity and, in some cases, MPA condition.

Relevant SEA Issues: Biodiversity, fauna, flora (UK MS - D1, D3, D4, D6); Water (UK MS descriptors D10, D11); Cultural heritage; Climatic factors

Negative Effects: No immediate negative effects are anticipated. If this eventually leads to management that reduces opportunities, it may lead to spatial changes in fishing effort that increases fishing pressure elsewhere. Data collection needs to be considered alongside proposed management actions as it will not stop the associated fisheries from declining further if overfishing is taking place.

Relevant SEA Issues: Biodiversity, fauna, flora (UK MS - D1, D3, D4, D6); Water (UK MS descriptors D10, D11); Cultural heritage; Climatic factors

Policy Goal 6: Reduce the impact of fishing on climate change and support the fishing industry to adapt to the impacts of climate change

Positive Effects: The evidence underpinning climate change and its intersection with fisheries is developing. Supporting this policy goal will allow and understanding of how

carbon emissions can be reduced, the methods of information sharing for likely impacts and the scale and timing of such change.

Relevant SEA Issues: Biodiversity, fauna, flora (UK MS - D1, D3, D4, D6)

Negative Effects: Activities proposed under this goal will have no immediate negative environmental effect. The proposed reviews will themselves identify potential positive and negative effects of any changes to management measures.

Relevant SEA Issues: Biodiversity, fauna, flora (UK MS - D1, D3, D4, D6)

Policy Goal 7: Improve understanding of, and help realise the economic, social and cultural benefits of, pelagic fisheries included in this FMP.

Positive Effects: This objective will consider how best to enable fisheries to continue to deliver social, economic and cultural benefits of fishing to fishers and coastal communities. We will do this by continuing to support and ensure these fisheries include bycatch monitoring and mitigation. Improving the understanding of bycatch in these pelagic fisheries will allow the development of strategies to avoid, remedy or mitigate these issues. The policies and actions arising from this objective will contribute to pelagic stocks being sustainably harvested with reduced impact on sensitive marine species.

Negative Effects: Activities proposed under this goal will have no immediate negative environmental effect. The proposed reviews will themselves identify potential positive and negative effects of any changes to management measures.

Relevant SEA Issues: Biodiversity, fauna, flora (UK MS - D1, D3, D4, D6)

Policy Goal 8: Facilitate a collaborative and adaptive management approach to support fair, effective, and transparent decision-making for sustainable and resilient pelagic fisheries

Positive Effects: This objective will consider how best to collaborate and institute community engaged and transparent management including the wider fishing/ coastal communities. The policies and actions arising from this objective will contribute to pelagic stocks being sustainably harvested.

Negative Effects: Activities proposed under this goal will have no immediate environmental effect. The proposed reviews will themselves identify potential positive and negative effects of any changes to management measures.

Relevant SEA Issues: Biodiversity, fauna, flora (UK MS - D1, D3, D4, D6)

Overview of Potential Positive Environmental Effects of the FMP

Biodiversity, Flora, Fauna, Geology and Sediments, Water quality, Climatic factors, and Cultural heritage

The overarching aim of the draft Celtic Sea and Western Channel pelagic FMP is to deliver long-term sustainable management of the five pelagic fisheries in the International Council for the Exploration of the Sea (ICES) areas 4b & 4c (North Sea) and 7d (Eastern Channel) over the long-term. The five pelagic stocks covered by this FMP have set out seven goals (section 1) to help achieve this aim.

Securing the long-term sustainable harvesting of the five pelagic stocks across English and Welsh waters, with the long-term aim of fishing within sustainable limits (MSY or appropriate proxies) could:

- help reduce the risk of pelagic stocks being overexploited
- ensure that pelagic fish populations become more resilient to environmental change which could benefit marine ecosystem function and biodiversity
- help to ensure there is sufficient food for ETP species including the designated features of MPAs and UK MS descriptors

The draft Celtic Sea and Western Channel pelagic FMP includes measures to continue existing management. These already contribute to managing the impact of pelagic fishing on pelagic stocks and the wider environment. It also contains a number of actions to improve research which will allow the further development of management with lower environmental impacts over time.

There are already ICES assessments in place for greater silver smelt, sardine, herring, anchovy and horse mackerel. But not all these assessments have high confidence and some advocate for zero catch. The FMP sets a short-term goal in continuing to determine fishing opportunities guided by the best available scientific advice. This will continue to benefit all pelagic stocks and the wider environment.

The FMP acknowledges the impact pelagic fisheries have on achieving UK Marine Strategy descriptors D1 and D4 for seabirds and marine mammals and to designated highly mobile species primarily through bycatch in pelagic nets. The draft Celtic Sea and Western Channel pelagic FMP considers a number of research actions within each of the goals. It also links the FMP to existing initiatives such as the Bycatch Mitigation Initiative and Clean Catch UK.

The draft Celtic Sea and Western Channel pelagic FMP also acknowledges the potential impact to the marine environment by fishing related marine litter. Policy Goal

4 identified actions to ensure progress towards GES for D10 Marine Litter are primarily engagement with collaborative initiatives, which is in line with statutory nature conservation bodies advice.

The draft Celtic Sea and Western Channel pelagic FMP outlines a number of additional actions to consider, consistent with an ecosystem-based approach, including undertaking additional research on what an ecosystem-based approach to pelagic fisheries management could consider. Importantly, social, economic and cultural goals are generally framed within the wider context of stock sustainability, to remove conflict between FMP goals. This will contribute to achieving UK Marine Strategy descriptors D1 and D4 for seabirds and marine mammals in relation to prey reduction.

The FMP supports policy development to reduce the contribution of fisheries activities to climate change and support the adaptation of the fishery to climate change, contributing to achieving the climate change objective in the Fisheries Act 2020. Such policies will help identify opportunities to decarbonise the fleet and move towards net zero, making vessels more fuel efficient and generally less polluting.

The draft Celtic Sea and Western Channel pelagic FMP sets out actions to incorporate new data into management of pelagic fisheries, and to move towards a more flexible and adaptive management approach. This data will also help pelagic fisheries adapt to climate driven changes, contributing to the climate objective in the Fisheries Act 2020.

While the FMP is not intended to focus on mitigating the impacts of fishing on marine heritage assets, fisheries management could contribute to safeguarding these assets and their locations. In addition, there is the potential for positive interactions to arise between fishing and cultural heritage. A degree of fishing disturbance can lead to some heritage assets being revealed and investigated, thereby improving the knowledge base.

Fisheries management that applies the ecosystem-based fisheries management approach to reduce adverse effects on the environment, for example through gear design, spatial management or reducing fishing related marine litter, could indirectly help to conserve both known and unknown marine heritage assets.

Managing stocks so they are harvested in a sustainable way can have environmental, social and economic benefits. Ensuring a fishery is environmentally, socially and economically sustainable over the long term could help promote the cultural importance of fishing and preserve the cultural heritage of fishing itself including wrecks of fishing vessels, historic harbours and infrastructure, and fishing communities.

The SEA process will highlight to fisheries policy authorities how pelagic fisheries management policies and measures could support measures that protect the historic marine environment and improve early reporting of previously unknown sites.

Overview of Potential Negative Environmental Effects of the FMP

Biodiversity, Flora, Fauna, Geology and Sediments, Water quality, Climatic factors, and Cultural heritage

Acknowledging that the proposed policies and actions are at the beginning stages of their development, the assessment of likely negative effects identified a low risk of significant adverse effects on biodiversity, flora, fauna, water quality, and cultural heritage from implementing individual policies and actions. However, there remains uncertainty. In particular, we do not yet know the potential environmental effects of implementing the combination of actions set out in the draft Celtic Sea and Western Channel pelagic FMP

Nevertheless, the fisheries objectives which will guide our actions should deliver improved environmental protection, so although it is difficult at this stage to anticipate all the potential significant negative effects on the environment in the short term, the overall ambition is to have a positive effect on the environment over the long term through the implementation of the ecosystem-based approach to fisheries management. From an MPA perspective, any changes in management will be subject to MPA assessments which will ensure MPA features are protected inside and outside sites.

We recognise that management interventions brought in through FMPs may solve one issue, but unintended and unpredictable issues could arise because of the measures being implemented. Where unintended consequences arise and modifications to the FMP cannot solve the issue, it may be appropriate for other FMPs to consider this issue. Or, if areas beyond English and/or Welsh waters are affected, it may be appropriate for this issue to be considered through wider UK or international fisheries management fora.

This section has identified potential negative effects that could arise from the implementation of the FMP's policies and actions. Due to the policies and actions being at an early stage of development it is difficult to systematically set out their magnitude and significance, without further detail on the nature, timing, duration, scale or location of the proposed actions. Changes to fishing activity resulting from the implementation of the FMP goals and actions should be monitored as part of the process of evaluating the effectiveness of FMPs. Tools such as iVMS and VMS greatly improve, or could improve, our ability to monitor spatial and temporal changes in fishing effort. Such monitoring would help identify any unintended consequences on the environment and indicate whether the implementation of these actions could lead to any significant environmental effects if unmanaged. Mitigating action could then be considered where any significant negative effects are identified, that are related to those issues scoped into this assessment. The development of more adaptive and flexible management approaches developed using natural capital approaches and

proposed within the draft Celtic Sea and Western Channel pelagic FMP should enable management intervention in a timely manner to mitigate any risks.

In-combination Effects

The draft Celtic Sea and Western Channel pelagic FMP could potentially have positive (or negative) in-combination effects with other programmes to deliver sustainable fisheries (see section 4). Whilst these other programmes focus on different topics, there are common themes that positively link them together. For example, FMPs and the Marine Plans share the common principles of managing marine resources sustainably and reducing the impact of anthropogenic pressure on the marine environment. Having due regard to the Environmental Principles during the development of policy will further ensure that the environment will be appropriately considered throughout the FMP process. More broadly, we anticipate the cumulative positive effect of these programmes will result in helping to meet sustainability objectives and achieving long-term improvements to the marine environment.

The assessment of the likely negative effects of the individual policies and actions in section 5 identified a low risk of significant adverse effects on the environment and therefore no amendments are needed ahead of publishing the FMP. When considering the combined effect of other potential policies, we are not aware at this stage that any other regimes/activities are going to change that position.

The FMP could facilitate the in-combination assessment with Marine Plans by providing more specific detail on how the FMP could positively or negatively interact with them. However, a Marine Plan assessment will be undertaken on the finalised FMP goals prior to publication, to assess how they will interact with Marine Plan policies. The assessment will identify whether an FMP policy will be compliant, potentially conflict, or not be compliant with Marine Plan policies. The interaction between FMPs and Marine Plans will be further considered when monitoring the effectiveness of plans. Any necessary adaptations, to ensure FMPs and Marine Plans interact positively, would be built into the plan's ongoing implementation and adjusted in future revisions of the FMP as required.

Marine Plans set out priorities and directions for future development within the plan area, inform sustainable use of marine resources and help marine users understand the best locations for their activities. Marine Plans consider all marine activities, resources and ecosystems and therefore assessing FMP policies against Marine Plan policies represents the most efficient way of determining how FMP policies will broadly interact with other marine activities, ensuring compliance with [Section 58 of the Marine and Coastal Access Act 2009](#).

Before there are any changes to fisheries management as a result of the draft Celtic Sea and Western Channel pelagic FMP, where necessary, all new measures will be subject to Habitats Regulations Assessments, Marine Conservation Zone assessments

or other appropriate MPA assessment. Such assessments will consider the potential in-combination effects with other plans and projects that are occurring or will occur within an MPA. These assessments will also identify where any specific interactions exist.

The combined effect of implementing the policies and measures of all FMPs will be considered through the mandatory FMP monitoring process once the plan is published and could form part of the longer-term JFS or FMP review cycles (section 8).

Conclusions

Pelagic fishing is an ongoing activity that poses some risks to the status of the marine environment. The overarching aim of the draft Celtic Sea and Western Channel pelagic FMP is to benefit a diverse range of environmental, commercial, recreational and social interests. A focus throughout the FMP on stock sustainability is likely to result in positive benefits to the environment.

The Fisheries Objectives (in the Fisheries Act 2020) require FMPs to integrate environmental, social and economic aspects of a fishery when introducing interventions to control fishing activity within sustainable levels. Achieving the balance between these three elements will be a central component of making a positive contribution to the sustainability objective.

The draft Celtic Sea and Western Channel pelagic FMP takes a precautionary approach to fisheries management and adopts a balanced and proportionate approach towards delivering the fisheries objectives.

The draft Celtic Sea and Western Channel pelagic FMP may result in positive and negative effects on the environment in the short term, with the overall ambition to have a positive effect on the environment over the long term through the implementation of the ecosystem-based approach to fisheries management.

The draft Celtic Sea and Western Channel pelagic FMP sets out how the issues of prey reduction, bycatch and litter will be addressed through the FMP.

The draft Celtic Sea and Western Channel pelagic FMP does not specifically consider the impacts of fishing on marine heritage assets. However, fisheries management aimed at reducing wider environmental effects could indirectly help to conserve both known and unknown marine heritage assets.

6. Proposed Measures to Reduce Significant Negative Effects

Existing Negative Effects of pelagic fisheries

This Environment Report has acknowledged the existing negative environmental effects associated with the fishing activity which will be managed through the FMP. The actions proposed by the FMP to reduce negative effects are set out below.

The known impacts of this FMPs fishing activity include bycatch of sensitive, mobile, and/or non-target species, the catch of prey species important to sensitive mobile marine species (both birds and mammals). Also identified as moderate risks were litter/ghost gear affecting habitats and species, vessel emissions on climate, and the impact on cultural heritage sites.

Impacts within MPAs

The MPA network (see Appendix C) is protected through the existing MPA management process by managing human activities such as fishing to avoid likely significant effects on the environment. These activities are mainly controlled through the powers vested in the IFCAs and the MMO to make byelaws

IFCAs, the MMO and Welsh Government were involved in the development of the FMP to ensure measures proposed through the FMP are compatible with existing MPA management.

Before Defra and the Welsh Government implement any new management interventions proposed in the draft Celtic Sea and Western Channel pelagic FMP, those interventions will be screened for likely significant effects on any Special Areas of Conservation or Special Protection Areas that overlap with the geographical scope of the measure and, where necessary, a further appropriate assessment completed in accordance with the Conservation of Habitats and Species Regulations 2017 or the Conservation of Offshore Habitats and Species Regulations 2017. In accordance with the Marine and Coastal Access Act 2009, a Marine Conservation Zone assessments will also be completed before any new management measure is implemented that may significantly hinder the conservation objectives of a Marine Conservation Zone.

The points above will make sure the impacts of pelagic fishing activity and the FMP's policies and actions do not prevent our ability to meet the conservation objectives for MPA features, thereby enabling us to achieve the legally binding target for MPA condition set out in the Environmental Targets (Marine Protected Areas) Regulations 2022.

Impacts outside MPAs

The marine environment outside of MPAs but within the spatial boundaries of this FMP may potentially be negatively impacted by fishing activities. Statutory nature conservation bodies advice highlighted the risk of bycatch of sensitive mobile species (birds, mammals e.g. harbour porpoise and Annex II fish e.g., shad/salmon) that are designated features of MPAs where they occur out with sites. Risk changes depending on method, with high risk for static nets, and moderate risk for other gears. Static pelagic netting is carried out at a scale where the impact is likely low. Information regarding bycatches of endangered and threatened species is sparse but indicates relatively few interactions of such species with the main fishing gears. However, the assessment has a degree of precaution as substantial data gaps exist.

Both NRW and NE/JNCC advice acknowledged the lack of high-quality bycatch data, which severely restricted both the ability to draw firm conclusions on mobile bycatch risks, MPA features beyond site boundaries, and the ability to identify specific mitigation. The focus within the FMP will be on improved data collection on highly mobile species bycatch, including the longer-term actions to incentivise pelagic fisheries to join REM projects. These will support a higher-resolution assessment of risk and the design of appropriate mitigation, where necessary. The draft Celtic Sea and Western Channel pelagic FMP links specific data collection initiatives to wider bycatch monitoring and mitigation programmes such as Clean Catch UK, which has the potential to appropriately mitigate risks associated with highly mobile MPA features.

The statutory nature conservation bodies advice also highlighted the risk of prey reduction, through catching pelagic species which is considered an important prey species. The Celtic Sea and Western Channel pelagic FMP outlines a number of additional actions to consider, which would be considered consistent with a natural capital-based approach used in writing the plan. For example, explore options to move away from single-species models, including extending and where necessary developing multispecies/ecosystem models to incorporate pelagic species and deliver MSY, along with undertaking additional targeted evidence collection to improve estimates of bycatch of marine mammals, seabirds and designated fish for gear types used to target pelagic species (Policy Goal 4 &5).

UK Marine Strategy Descriptors Impacts

Litter: The draft Celtic Sea and Western Channel pelagic FMP will support existing UK policies to protect the marine environment from marine litter, by taking a whole-life cycle approach to prevent and divert material from becoming a source of litter (Policy Goal 4).

The implementation of [OSPAR's second 'Regional Action Plan on Marine Litter'](#), will include actions to tackle marine litter from fishing. The FMP will also support the

continuation of monitoring programmes to assess seafloor litter, surface litter and beach litter and ongoing research initiatives to support the reuse and repurpose of end-of-life fishing gear back into the fishing industry. These proposed measures should help the Celtic Sea and Western Channel pelagic FMP support the achievement of GES for UK Marine Strategy Descriptor 11 – Litter, thereby having a positive effect on the current baseline status.

Bycatch: Reducing bycatch of sensitive and/or non-target species is complex and requires solutions that are tailored to the different fisheries. Statutory nature conservation bodies advice highlighted risks associated with bycatch in nets, this time in relation to where there may be a risk of population-level impacts on some UK Marine Strategy descriptors, including cetaceans (D1, D4), seals (D1, D4) birds (D1, D4) or fish (D1, D4). As discussed in the above, the focus within the draft Celtic Sea and Western Channel pelagic FMP on improved data collection on highly mobile species bycatch, especially the longer-term actions to incentivise pelagic fisheries to join REM projects, will support a higher-resolution assessment of risk and the design of appropriate mitigation, where necessary. The Celtic Sea and Western Channel FMP also links specific data collection initiatives to wider bycatch monitoring and mitigation programmes such as Clean Catch UK, which will ensure a joined-up approach. Such an approach has the potential to have a significant positive effect on the current baseline status where research leads to new or improved mitigation and management.

Prey Reduction: Statutory nature conservation bodies advice highlighted the moderate risk to the UK Marine Strategy descriptors D1, D4 cetaceans, D1, D4 seals, D1, D4 seabirds through targeted removal of pelagic species, as important prey species. The Celtic Sea and Western Channel FMP sets out the goal to continue to determine fishing opportunities in line with the MSY approach and in accordance with the best available scientific advice. Should MSY based advice not be available, fishing opportunities should be determined in accordance with a precautionary approach and the best available scientific advice.

The draft Celtic Sea and Western Channel pelagic FMP seeks to fill evidence and data gaps required for improved stock assessments and the understanding of the role of pelagic species in the wider ecosystem, including by developing multispecies/ecosystem models. Considering pelagic species and their fisheries, including in relation to MPAs, in ecosystem models has the potential to positively contribute towards achieving GES for descriptors D1, D4.

Climate Change

Vessel Emissions

In the short-term, the Celtic Sea and Western Channel FMP will increase the understanding of the carbon footprint of the five pelagic fisheries and identify options

for reductions. In the medium-long term, it will support industry to decarbonise, contributing to UK Government commitments to Net Zero (policy goal 6).

Climate Change Impacts on the five pelagic Stocks and Fisheries

Over the next three to five years, the draft Celtic Sea and Western Channel pelagic FMP will work to understand and address impacts of changing climate conditions as highlighted in the climate change committee's climate risk independent assessment, through mechanisms such as the Marine Climate Change Impacts Partnership. Another component of the FMP will be to support the industry's adaptation to the impacts of climate change in addition to encouraging industry participation in initiatives to reduce CO2 emissions. Future iterations of the FMP will be adapted as research into climate change develops and new methods to address climatic challenges arise.

Cultural Heritage

The draft Celtic Sea and Western Channel pelagic FMP includes discussions, as part of a marine natural capital approach aspects of marine cultural heritage.

Historic England have developed a range of options designed to manage negative interactions between commercial fishing and the historic marine environment. Defra and the Welsh Government will continue to work with agencies such as Historic England and Cadw to consider how measures that could protect the marine historic environment could be incorporated into fisheries management for future iterations. Considering appropriate measures to reduce negative interactions with marine heritage assets could strengthen the positive interactions between FMPs and cultural heritage and has the potential for the FMP to contribute to having a positive effect on the current baseline.

Effects identified by this assessment

The assessment of the likely negative effects of the individual policies and actions in section 5 identified a low risk of significant adverse effects on the environment from implementing individual policies and actions. Therefore, no changes to the proposed goals, policies and actions are needed ahead of publishing the FMP. Where appropriate, the policies and actions will be developed and implemented to mitigate any potential negative effects identified by the current assessment.

The likely negative effects will also be considered when developing monitoring activities as part of the implementation process (see section 8), to ensure that any negative effects of the of the FMP's policies and actions individually or combined can be further reduced. Given the uncertainty as to the negative effects of implementing the individual policies and actions, monitoring changes to fishing activity resulting from the implementation of the FMP will help identify any unintended consequences on the environment that could subsequently lead to significant negative environmental effects.

Where likely unintended environmental consequences are identified, appropriate changes to management or mitigation can be implemented to reduce any negative environmental effects developing.

General

The UK is committed to using marine resources sustainably and reducing the impact of fishing on the marine environment to comply with its international and domestic obligations. The draft Celtic Sea and Western Channel pelagic FMP seeks to support these commitments by providing the tools (FMP policies and actions) to deliver the sustainable harvesting of pelagic stocks.

The range of environmental issues identified through this assessment have been considered by the draft Celtic Sea and Western Channel pelagic FMP. The FMP acknowledges that the evidence base is not sufficiently comprehensive at present to fully address many of the issues and therefore proposes a multi-step, iterative approach to deliver long-term sustainability through improving the evidence base. The FMP should remain flexible to adapt its policies and actions as new evidence on potential impacts of pelagic fishing emerge, particularly in relation to climate change.

This Environment Report considers that the draft Celtic Sea and Western Channel pelagic FMP has proposed all necessary actions to address existing issues and has appropriately considered how it will address potential issues arising from the implementation of the FMP's policies and actions. This Environment Report has therefore not proposed any mitigations in addition to those already set out in the FMP.

7. Reasonable Alternatives

Regulation 12(2)(b) of the SEA Regulations 2004 requires the fisheries policy authorities to consider reasonable alternatives to the Celtic Sea and Western Channel FMP. A reasonable alternative has been defined as 'an activity that could feasibly attain or approximate the FMP's goals at a lower environmental cost or decreased level of environmental degradation'¹⁴.

Section 2 of the Fisheries Act 2020 requires the fisheries policy authorities to publish a JFS setting out how they will use FMPs to achieve, or contribute to achieving, the fisheries objectives. The JFS lists the planned FMPs, including the draft Celtic Sea and Western Channel pelagic FMP. This listing creates a legal requirement to prepare and publish the draft Celtic Sea and Western Channel pelagic FMP and does not allow for a reasonable alternative to producing an FMP unless a 'relevant change of

¹⁴ [Reasonable alternatives definition](#)

circumstances', as set out in section 7 (7)¹⁵ of the Fisheries Act 2020 applies; we are not aware of any information that would invoke these circumstances.

The draft Celtic Sea and Western Channel pelagic FMP, alongside the other 43 FMPs was agreed by the fisheries policy authorities through the JFS publication process. Engagement across administrations took place via the processes outlined in the [Fisheries Framework](#). Regular scrutiny of the emerging list of FMPs was built into every step of the JFS policy formation, and through this process credible alternatives to managing stocks without an FMP were considered. The list of FMPs, which included an FMP for the draft Celtic Sea and Western Channel pelagic species, was part of the public consultation on the Joint Fisheries Statement in early 2022.

The pelagic fisheries are each an ongoing activity and management already exists. Continuing with the current approach without strengthened or new management alongside further evidence collection was judged to increase the likelihood of stocks being overexploited with insufficient protection for the wider marine environment. Therefore, additional and/or amended management was required. The draft Celtic Sea and Western Channel pelagic FMP seeks to promote the management of the fishery in a more coherent and coordinated manner that considers wider environmental issues. On that basis, the FMP will likely deliver greater environmental gain and will have a more significant positive impact on improving the current environmental baseline, compared to a 'business as usual' approach that only continues with existing fisheries management.

The draft Celtic Sea and Western Channel pelagic FMP policies and actions were developed to specifically address those fisheries management issues identified within the pelagic fishery.

The interventions adopt a precautionary approach as required by the Fisheries Act 2020 and are intended to safeguard stocks and the fishery in the short term whilst more information is gathered to inform evidence-based adaptive management in the future.

A range of environmental issues (e.g., through statutory nature conservation bodies advice, evidence relating to climatic change impacts) have been considered during the development of the current proposed policies and actions to ensure they have minimal negative environmental effects and where applicable maximum positive environmental gain. Stakeholder input, including that from the environmental sector has been considered during the development of policies and actions. These processes have been employed to ensure the most appropriate actions have been proposed for this

¹⁵ [Fisheries Act 2020 \(legislation.gov.uk\)](#)

stage in the life cycle of the FMP. An assessment of the potential alternatives to the proposed draft Celtic Sea and Western Channel pelagic FMP goals (considering the actions that sit under them) and measures is provided below.

Assessment of alternatives to proposed Celtic Sea and Western Channel Pelagic FMP goals

Goal Theme: Healthy stocks, sustainable exploitation

Policy Goal 1: Seek to improve datasets for all stocks, including to allow for an assessment of MSY or a suitable proxy where necessary

Alternatives: Continue to base management decisions on data collected from existing programmes e.g., national/ local stock assessments, which would likely inform more precautionary type measures (given more evidence required). Management would be unlikely to be as effective.

Increased use of existing data gathered by fishers. Management would improve but unlikely to be as effective as coverage is not comprehensive.

Goal Theme: Healthy stocks, sustainable exploitation

Policy Goal 2: Seek to harvest FMP stocks sustainably, with the overall aim of maintaining or restoring biomass of FMP stocks above the level capable of producing MSY or a suitable proxy.

Alternatives: Harvesting pelagic stocks in line with MSY/scientific advice would ensure stocks are fished sustainably. No reasonable alternative is available.

Goal Theme: Healthy stocks, sustainable exploitation

Policy Goal 3: Identify ecosystem-based fisheries management approaches appropriate for pelagic fisheries in the Celtic Sea and Western Channel.

Alternatives: Continuing with the current management approach is required to ensure the stocks are fished sustainably and the impact of pelagic fishing activity on the marine environment is managed effectively. No reasonable alternatives have been identified at this stage.

Goal Theme: Minimising fishing impacts

Policy Goal 4: Understand and reduce the impacts of FMP fisheries on non-target species, marine habitats and climate change, including by minimising and where possible eliminating sensitive species bycatch.

Alternatives: We do not currently know the full impact on by-catch with the current management. Further information on the impact of pelagic fishing activity on the marine environment is needed so it can be managed effectively. No reasonable alternatives have been identified at this stage.

Goal Theme: Livelihoods and Social Benefits

Policy Goal 5: Improve our understanding of and help realise the economic, social and cultural benefits of pelagic fisheries.

Alternatives: This is considered a requirement for making the pelagic fisheries economically sustainable and continuing their connection to the community. No reasonable alternatives have been identified at this stage.

Goal Theme: Collaborative and Adaptive management

Policy Goal 6: Facilitate a collaborative and adaptive management approach to support fair, effective, and transparent decision-making for sustainable and resilient pelagic fisheries

Alternatives: The aim is to continually improve the engagement of the community and how to collaborate and engage on decisions. Sharing learnings and continued collaboration is the focus of the goals. This is the first step in continuing collaborative management – it may evolve further in the future.

Goal Theme: Healthy Ecosystem

Policy Goal 7: Better understand the risks and opportunities for FMP stocks from other fisheries and non-fishing pressures and activities, and work to reduce negative impacts where possible

Alternatives: This goal links the wider GES goals as well as stock management. Actions focus on recording important habitat and sharing this information. No reasonable alternatives for this habitat recording.

The policies and actions set out in the FMP are therefore considered to be the most appropriate for this stage in the FMP's development.

The draft Celtic Sea and Western Channel pelagic FMP will develop through future iterations as the evidence base improves. Policies and actions will be adapted to ensure the most appropriate and effective management interventions are used to address contemporary issues. Where appropriate, additional measures will be developed as options for more targeted management become available to tackle a wider range of fisheries management issues over the longer-term.

The public will be consulted on the draft Celtic Sea and Western Channel pelagic FMP, alongside the consultation of this Environment Report. These consultations will provide stakeholders with the opportunity to review proposed actions and present alternatives if available.

8. Monitoring and Review

Monitoring

Regulation 17 of the SEA Regulations 2004 requires Defra and the Welsh Government to monitor the significant environmental effects of the implementation of draft Celtic Sea and Western Channel pelagic FMP policies and actions to identify unforeseen adverse effects at an early stage, ensuring appropriate remedial action can be undertaken. Paragraph 9 of Schedule 2 to the 2004 Regulations requires the Environmental Report to include a description of the measures envisaged concerning monitoring in accordance with regulation 17.

The types of relevant monitoring already undertaken or proposed by the FMP fall into two types:

- monitoring the effectiveness of FMP goals and actions
- environmental impacts monitoring

Monitoring effectiveness of the FMP

Section 6 of the Fisheries Act 2020 requires the FMP to identify appropriate monitoring against specified indicators to assess the effectiveness of the draft Celtic Sea and Western Channel pelagic FMP.

Delivery of the actions and measures for this FMP will be monitored. There is currently sufficient evidence to assess stock status and provide advice in relation to MSY approaches for only one of the five pelagic species in the plan. Increasing the number of stocks with MSY advice and catches at or above this will be monitored.

Maintaining the approach of using the best available scientific evidence to guide management decisions and continuing to work effectively with Coastal State partners to ensure sustainable harvesting will indicate the effectiveness of this plan. This recognises the limitations of the UK in the joint management of a stock where maintaining overall biomass may be beyond our control and also reflects the potential future variation as a result of climate change.

Further reviews may also be required if new opportunities present themselves to improve the effectiveness of the plan.

In addition to the monitoring set out in the FMP, monitoring of the environmental effects of implementing the FMP's policies and actions will be undertaken by fisheries managers. These actions may include;

- monitoring changes in fishing activity e.g. changes in effort or the spatial and/or temporal patterns of fishing, resulting from the implementation of the FMP

If any negative impacts are identified, fisheries managers should consider adjusting the pelagic fisheries management.

Environmental Impacts

MPAs

The conservation status of conservation sites, including SACs, SPAs, and Marine Conservation Zones is monitored by the Statutory Nature Conservation Bodies, and is reported under the Habitats Regulations and Marine and Coastal Access Act. Findings from these monitoring activities could be used to help indicate where potential risks or impacts associated with fishing activity being managed through the FMP are occurring. FMPs could act on this evidence to amend its policies and actions to reduce or avoid these risks or impacts. Findings from these monitoring activities could also be used to indicate where FMP policies and actions are having a positive effect.

UK Marine Strategy

The UK Marine Strategy monitors and assesses the state of the marine environment against 11 descriptors. See section above for details on how monitoring the FMP will link into future assessments under the UK Marine Strategy.

Atmospheric emissions

The Climate Change Committee (CCC) was set up under the Climate Change Act 2008 to support the strategic aims of Defra and the Welsh Government to independently assess how the UK can optimally achieve its emissions reductions goals. The Committee advises on the level of carbon budgets and submits annual reports to Parliament on the UK's progress towards targets and budgets. Evidence on the contribution of the UK pelagic fishing fleet has been considered in this SEA and would continue to be reviewed against the FMP goals as part of monitoring.

Review

The Fisheries Act 2020 requires the draft Celtic Sea and Western Channel pelagic FMP to be reviewed at least every six years; the Act requires a report on the FMP's progress to be included in the report on the JFS every three years. The formal review will assess how the FMP has contributed to the pelagic fishery harvesting within sustainable limits and the Fisheries Act objectives.

The results of monitoring the effectiveness of the draft Celtic Sea and Western Channel pelagic FMP will also contribute to the legally required process to review the JFS. The JFS report will set out the extent to which each FMP has been implemented and has affected stock levels in the UK.

Additional reviews can be conducted at any point within these time scales if relevant evidence, international obligations, or wider events require a change in the policies set out in the FMP.

The findings of these reviews will inform the development of subsequent iterations of the draft Celtic Sea and Western Channel pelagic FMP. As part of the reporting and wider review processes, alternatives to management can be identified to ensure the draft Celtic Sea and Western Channel pelagic FMP delivers on its objectives and wider environmental obligations.

The SEA Environmental Report will be periodically updated to reflect how the implementation of FMP policies and actions affect the environment. Such updating will ensure that the SEA remains up to date throughout the ongoing FMP process into the future.

Appendix A: Eleven Descriptors of the UK Marine Strategy

D1 - Biological diversity (cetaceans, seals, birds, fish, and benthic habitats)

D2 - Non-indigenous species

D3 - Commercially exploited fish and shellfish

D4 - Food webs (cetaceans, seals, birds, and fish)

D5 - Eutrophication

D6 - Sea-floor integrity (benthic habitats)

D7 - Hydrographical conditions

D8 - Contaminants

D9 - Contaminants in fish and other seafood for human consumption

D10 - Litter

D11 - Introduction of energy, including underwater noise

Appendix B: Additional Baseline Information

D1 and D4 – Cetaceans

Cetaceans (whales and dolphins) are an important marine ecosystem component that contributes to overall levels of biodiversity (D1). In addition, as top predators, the abundance of cetaceans can also provide some understanding on how the food web is functioning (D4).

To meet Good Environmental Status, the high-level objective is that 'the population abundance of cetaceans indicates health populations that are not significantly affected by human activities'. However, according to the 2019 updated [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#), the overall status of cetaceans in the North Sea and Celtic Seas is currently uncertain. The baseline environmental condition with respect to cetaceans is therefore one where some degree of recovery is potentially required to meet GES. For more information, read [UK Marine Strategy Cetaceans assessment](#).

A summary of the status is shown in Table A1. When considering the detailed targets and indicators used to make the assessment, the data suggests some are in line with GES in some geographic areas. But for many others, the results are either unclear, or insufficient data is available to make an assessment. It should be noted that the indicators used do not always cover the entire breadth of what is set out in the target. For instance, the bycatch assessment is currently primarily driven by looking at harbour porpoise. The indicators can be developed in the future as more evidence is available.

Table A1. Detail from the 2019 UK Marine Strategy assessment on descriptor [D1: D4: Cetaceans](#). Taken from [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#) and the [UK Marine Strategy Marine Online Assessment Tool](#).

Target	Indicator	North Sea	Celtic Seas
The long-term viability of cetacean populations is not threatened by incidental bycatch	Harbour porpoise bycatch	GES achieved	GES status uncertain

Target	Indicator	North Sea	Celtic Seas
There should be no significant decrease in abundance caused by human activities	Abundance and distribution of coastal bottlenose dolphins	GES achieved	GES status uncertain
There should be no significant decrease in abundance caused by human activities	Abundance and distribution of cetaceans other than coastal bottlenose dolphins	GES partially achieved	GES status uncertain
Population range is not significantly lower than the favourable reference value for the species	Abundance and distribution of coastal bottlenose dolphins	GES achieved	GES status uncertain
Population range is not significantly lower than the favourable reference value for the species	Abundance and distribution of cetaceans other than coastal bottlenose dolphins	GES partially achieved	GES status uncertain

Current impact of fisheries on the baseline condition

Fishing is one of several anthropogenic activities that are considered relevant to this ecosystem component. Other pressures include noise impacts from offshore infrastructure such as renewable energy and pollution from a range of sources. More information on relevant pressures is provided in section 2.6.1 of the [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#).

Cetacean bycatch

There is a specific target associated with the impact of bycatch from fisheries on the viability of cetacean populations. In the 2019 UK Marine Strategy assessment, only data on the bycatch of Harbour Porpoise was used. This estimated that bycatch in the

North Sea was below the precautionary threshold of 1% of the population estimate (and therefore meeting the indicator target), but above this threshold for the Celtic Seas. It was, however, below the less precautionary 1.7% of population estimate. Whether the target was being met in the Celtic Seas was therefore uncertain. For more detail on the assessment, read [UK Marine Strategy harbour porpoise bycatch assessment](#).

More recent analysis for the 2023 OSPAR quality status report (which uses the same indicator as the UK Marine Strategy) shows that bycatch of harbour porpoise in the Greater North Sea and Irish & Celtic seas are exceeding the threshold. Bycatch of common dolphin is also exceeding the threshold. For more details, read [OSPAR Marine Mammal By-catch assessment](#). As this is a common indicator for both OSPAR and UK Marine Strategy, that suggests that an updated UK Marine Strategy assessment would no longer be seen as meeting this target.

Using the latest evidence from the UK Bycatch Monitoring Programme by Kingston et al (2021)¹⁶, it is specifically net fisheries (for example, gill nets, tangle nets etc) that are largely responsible for both harbour porpoise and common dolphin bycatch.

Cetacean abundance and range targets

For coastal bottlenose dolphins, the indicator target of 'no statistically significant decrease in abundance' was met in the Greater North Sea and for the largest group in the Celtic Seas (in the Coastal Wales assessment unit). No assessment has been possible for the other two smaller Celtic Seas Groups (in the West Coast assessment unit and Coastal Southwest assessment unit). For more information, read [UK Marine Strategy Abundance and distribution of coastal bottlenose dolphins assessment](#).

For species other than coastal bottlenose dolphins, the indicator target of 'no significant decline' was met for some species in some areas (minke whale in the Greater North Sea), but for most species and all of the Celtic Seas, there was insufficient evidence to make an assessment. For more information, read [UK Marine Strategy Abundance and distribution of cetaceans other than coastal bottlenose dolphins assessment](#).

Without this information, it is difficult to understand the potential impact fisheries could currently be having (alongside impacts from other industries or factors such as pollution) and if fisheries impacts are a scale of concern. Aside from bycatch (which is considered separately), the mechanism by which certain fisheries could theoretically be impacting on abundance and distribution would be through the removal of prey

16 Kingston, A., Thomas, I. and Northridge, S. (2021) [UK Bycatch Monitoring Programme Report for 2019](#). Sea Mammal Research Unit.

species important to cetacean species. At high levels, this could potentially lead to population-level impacts.

Cetacean summary

The status of cetaceans with both the North Sea and Celtic Sea is mixed. While there are some aspects that are in line with the achievement of GES, much of the picture is unclear. The impact of various net fisheries is leading to bycatch that, in places, might be impacting long term population viability of harbour porpoise.

Other than for a limited number of coastal bottlenose dolphin populations, it is unclear whether the abundance and range of most cetacean species can be considered in line with GES. Fisheries and the removal of prey species is one of several activities / pressures that have the potential to result in changes in cetacean abundance and distribution.

D1 and D4 – Seals

The UK has achieved its aim of GES for grey seals in the Greater North Sea and Celtic Seas. There was a significant increase in the abundance of harbour seals in West Scotland where most harbour seals are located, but their status in other parts of the Celtic Seas is uncertain. Harbour seals in the Greater North Sea have not yet achieved GES.

Seals are an important marine ecosystem component that contributes to overall levels of biodiversity (D1). In addition, as top predators, seal productivity can also provide some understanding and insight as to how the food web is functioning (D4).

To meet Good Environmental Status, the high-level objective is that 'the population abundance and demography of seals indicate healthy populations that are not significantly affected by human activities'. According to the [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#), the UK has achieved its aim for GES for grey seals in the Greater North Sea and Celtic Seas. For harbour seals, there has been a significant increase in abundance in West Scotland where most harbour seals are located but their status is uncertain in other parts of the Celtic Seas and below what is required for GES in the Greater North Seas. For more information, read, [UK Marine Strategy seal biodiversity assessment](#).

A summary of the current status is shown in Table A2. It should be noted that the current indicators used do not always cover the entire breadth of what is set out in the targets. For instance, there was no indicator developed or used as part of the 2019 assessment for bycatch.

Table A2. Detail from the 2019 UK Marine Strategy assessment on descriptor [D1: D4: Seals](#). Taken from [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#) and the [UK Marine Strategy Marine Online Assessment Tool](#).

Table notes:

Note 1: For this indicator, read [OSPAR Marine Mammal By-catch assessment 2023](#).

Target	Indicator	North Sea	Celtic Seas
The long-term viability of seal populations is not threatened by incidental bycatch.	Marine mammal bycatch (OSPAR) ^{Note1}	Not applicable	Not applicable
Population abundance and distribution are consistent with favourable conservation status.	Grey seal abundance and distribution	GES achieved	GES achieved
Population abundance and distribution are consistent with favourable conservation status.	Harbour seal abundance and distribution	GES not achieved	GES status uncertain
Grey seal pup production does not decline substantially in the short or long-term.	Grey seal pup production (OSPAR)	GES achieved	GES achieved

Current impact of fisheries on the baseline condition

Fishing is one of several anthropogenic activities that are considered relevant to marine mammals. Other pressures include noise impacts from offshore infrastructure such as renewable energy and pollution from a range of sources. More information on relevant pressures is provided in section 2.6.1 of the [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#).

Seal bycatch

The 2019 UK Marine Strategy assessment suggests a new target on bycatch mortality will be used in the future. Seal bycatch was not considered within the 2019 assessment. Grey seals are one of the three marine mammal species regularly recorded during the UK Bycatch Monitoring programme. Figures for seals (grey and harbour) are combined but the majority are thought to be greys. In the 2018 report¹⁷ the authors were fairly confident that all seals observed in gillnets were greys. Harbour seals (referred to as common seals in the report) are rarely caught and numbers are too low to generate a useful bycatch estimate separately. The gears that pose the most risk to grey seals appears to be tangle and trammel nets, which was estimated to account for over 90% of seal bycatch in 2019¹⁸.

The most recent OSPAR quality status reports assessment on marine mammal bycatch¹⁹ (which is likely to feed into the next round of UK Marine Strategy assessments), concludes that although grey seal bycatch is high, bycatch in 2020 was below the threshold value set and therefore not thought to be demographically significant. This suggests that in an updated UK Marine Strategy assessment, seal bycatch is not likely to be threatening the long-term viability of the population and the bycatch target will be met.

Seal abundance and production

The 2019 UK Marine Strategy assessment reports that grey seal numbers have continued to increase. Increases in grey seal pup production has slowed since the rapid increase following the end of culling in the 1970s but still shows a positive trend. This is in line with GES. Harbour seal abundance has increased over both the short and long term in the English Channel and along the East Coast of England. But there have been short-term and long-term declines in parts of Scotland. The cause of the declines is not currently known. For more information, read [UK Marine Strategy seal biodiversity assessment](#).

Seals summary

Grey seals populations and productivity continues to increase, and targets are being met. Bycatch (largely in tangle and trammel nets) is occurring but not at levels that threaten population viability. For harbour seals, the status is not in line with GES where population declines have occurred in some areas. The cause is unknown. It is not

17 Northridge, S., Kingston, A. and Thomas, I. (2019) [Annual report on the implementation of Council Regulation \(EC\) No 812/2004 during 2018](#). Sea Mammal Research Unit).

18 Kingston, A., Thomas, I. and Northridge, S. (2021) [UK Bycatch Monitoring Programme Report for 2019](#). Sea Mammal Research Unit.

19 [Marine Mammal By-catch](#)

thought to be linked to bycatch as occurrences are rare and there is no indication that it is linked to other pressures associated with fishing.

D1 and D4 – Birds

The UK has achieved its aim of GES for non-breeding waterbirds in the Greater North Sea but not in the Celtic Seas. Breeding seabirds have not achieved GES.

Seabirds are well monitored species that are an important marine ecosystem component that contributes to overall biodiversity (D1). In addition, as top predators, the abundance of birds can also provide some understanding and insight as to how the wider food web is functioning (D4).

To meet Good Environmental Status, the high-level objective is that ‘the abundance and demography of marine bird species indicate healthy populations that are not significantly affected by human activities. According to the [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#), GES has not been achieved for seabirds in the Greater North Sea and the Celtic Seas and the situation is declining, evidenced by increasing breeding failure rates. The baseline environmental condition with respect to birds is therefore one where some recovery is required to meet GES. For more information, read [UK Marine Strategy marine bird biodiversity assessment](#).

A summary of the current status is shown in Table A3. It should be noted that the current indicators used do not always cover the entire breadth of what is set out in the targets. For instance, although there are plans for target about bycatch, there was no indicator developed or used as part of the 2019 assessment.

Table A3. Detail from the 2019 UK Marine Strategy assessment on descriptor [D1: D4: Birds](#). Taken from [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#) and the [UK Marine Strategy Marine Online Assessment Tool](#).

Table notes:

Note 1: For this indicator, read [OSPAR Pilot Assessment of Marine Bird Bycatch 2023](#).

Target	Indicator	North Sea	Celtic Seas
The long-term viability of marine bird populations is not threatened by deaths caused by incidental bycatch catch in mobile and static fishing gear.	Under development (Note1)	Data not available	Data not available

Target	Indicator	North Sea	Celtic Seas
The population size of species has not declined substantially since 1992 as a result of human activities.	Marine bird abundance	GES not achieved	GES not achieved
Widespread lack of breeding success in marine birds caused by human activities should occur in no more than three years in six.	Marine bird breeding success/failure	GES not achieved	GES partially achieved
Widespread lack of breeding success in marine birds caused by human activities should occur in no more than three years in six.	Kittiwake breeding success²⁰	GES not achieved	Not assessed
There is no significant change or reduction in population distribution caused by human activities.	Distribution of breeding and non-breeding marine birds	Not assessed	Not assessed
There is no significant change or reduction in population distribution caused by human activities.	Invasive mammal presence on island seabird colonies	Not assessed	Not assessed

Current impact of fisheries on the baseline condition

Fishing is one of several anthropogenic activities that are considered relevant to this ecosystem component, including incidental bycatch and competition for resources (for example, sandeel fishing). Other pressures include mortality due to renewables, disturbance from a range of activities, oil pollution, and transfer of non-indigenous species to islands from ships. More information on relevant pressures is provided in

²⁰ Kittiwake breeding success has only been achieved for the English mainland colonies. GES for Kittiwake breeding success has not been achieved for the entire North Sea region due to breeding failures in Orkney and Shetland.

section 2.6.1 of the [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#).

Bird populations size and breeding success

In the 2019 UK Marine Strategy assessment, population targets were met for non-breeding water birds in the Greater North Sea but not in the Celtic Seas. Population targets for breeding seabirds were not met for breeding seabirds in either sub-region. In both sub-regions, a quarter or more species showed frequent and widespread breeding failures. Surface-feeding species that predominantly prey on small fish are often subject to greater ecological pressures compared to others. This would suggest that the surface feeding availability of small forage fish species including lesser sandeel and sprat is limiting the breeding success of surface-feeding species such as black-legged kittiwake. Reductions in food availability could be a result of climate change or due to past and present fisheries, or a combination of both. For more information, read, [UK Marine Strategy marine bird biodiversity assessment](#).

The recent avian influenza outbreak is likely to have had a strong negative effect on seabird population sizes for some species. It is not yet clear what the extent of the impact is, but it has the potential to move the baseline further away from meeting GES targets.

Bird bycatch

The 2019 UK Marine Strategy assessment suggests a new target on bycatch mortality that will be used in the future. It is well recognised that certain fishing gears can pose a high bycatch risk to seabirds. Anderson et al²¹ (2022) identifies the UK offshore demersal longline fishery and the <10m static net fishery as the fleets that pose the highest risk to birds.

Mortality estimates are not produced routinely for birds using data available from the UK Bycatch Monitoring Programme. Preliminary estimates using the available data suggests that UK vessels in longline, gillnet and midwater trawls may account for thousands of seabird mortalities each year covering several species, with fulmar and cormorant being the most affected species in terms of possible population impacts with a further five species (great northern diver, gannet, shag, guillemot and razorbill) having an estimated bycatch mortality that exceeded 1% of total adult mortality

21 Anderson, O.R.J., Thompson, D. & Parsons, M. (2022). [Seabird bycatch mitigation: evidence base for possible UK application and research. JNCC Report No. 717](#), JNCC, Peterborough. ISSN 0963-8091.

(Northridge et al 2020²² and Miles et al 2020²³). However, these estimates have high uncertainty in part because sample sizes are low and possibly unrepresentative of the fleet.

Bird summary

Seabird populations are currently below the level that is considered to meet GES and the situation is deteriorating. Some declines in breeding success have been linked to prey availability caused by climate change and / or past and present fisheries. Invasive predatory mammals are also known to impact breeding success on island colonies. The impact of bycatch will be included in future assessments and current evidence suggests that some longline and static net fisheries could be having possible population level impacts on certain species.

D1 and D4 – Fish and D3 – Commercially exploited fish and shellfish

Demersal fish biodiversity is recovering from a history of over-exploitation, but GES has not yet been achieved in either the Greater North Sea or the Celtic Seas. A partial assessment of pelagic shelf fish status did not provide a clear result.

The UK has achieved its aim of GES for some commercially exploited fish. Most national shellfish stocks have either not yet achieved GES or their status is uncertain. The percentage of quota stocks fished below MSY and the proportion of marine fish spawning stock biomasses capable of producing MSY have increased significantly since 1990.

Fish are an important ecosystem component that contributes to overall levels of biodiversity (D1). In addition, fish of different species have a significant role in marine food webs (D4), acting as both predators and prey. Some fish species are commercially exploited, and only a proportion of these have managed quotas. Over exploitation can lead to a decline in stocks (D3) which can reduce both future commercial opportunities and have wider ecological impacts.

In order to meet Good Environmental Status, the high-level objective for fish is that ‘the abundance and demography of fish indicate healthy populations that are not significantly affected by human activities. For stocks of commercial fish, the high-level

22 Northridge. S., Kinston. A. and Coram. A. (2020). Preliminary estimates of seabird bycatch by UK vessels in UK and adjacent waters. Scottish Ocean Institute, University of St Andrews. Final report to JNCC

23 Miles, J., Parsons, M. and O’Brien, S. (2020). Preliminary assessment of seabird population response to potential bycatch mitigation in the UK-registered fishing fleet. Report prepared for the Department for Environment Food and Rural Affairs (Project Code ME6024).

objective is that 'Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock'.

According to the [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#), neither of these objectives are currently being met, although there are signs of improvement. The baseline environmental condition with respect to fish is therefore one where recovery is required to meet GES. For more information, read, [UK Marine Strategy fish biodiversity assessment](#) and [UK Marine Strategy commercial fish and shellfish assessment](#).

The 2019 assessment used a limited number of indicators. More indicators are being included in future assessments. A summary of the current status and indicators is shown in Table A4a and A4b.

Table A4a. Detail from the 2019 UK Marine Strategy assessment on fish [D1](#); [D4](#): Fish. Taken from [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#) and the [UK Marine Strategy Marine Online Assessment Tool](#).

Target	Indicator	North Sea	Celtic Seas
The size structure of fish communities is indicative of a healthy marine food web.	Size composition in fish communities	GES not achieved	GES not achieved
The size structure of fish communities is indicative of a healthy marine food web.	Proportion of large fish (Large Fish Index)	GES not achieved	GES partially achieved
The size structure of fish communities is indicative of a healthy marine food web.	Mean maximum length of fish.	GES not achieved	GES not achieved
Incidental bycatch is below levels which threaten long-term viability and recovery of fish populations.	Under development	Not assessed	Not assessed

Target	Indicator	North Sea	Celtic Seas
The population abundance of sensitive species is not decreasing due to anthropogenic activities and long-term viability is ensured.	Recovery in the population abundance of sensitive fish species	GES not achieved	GES achieved
For fish species in the Habitats and Birds Directive population abundance and geographic distribution meets established favourable reference values.	UK assessments of listed fish species	Not assessed	Not assessed
For listed fish species, the area and the quality of the habitat is sufficient.	UK assessments of listed fish species	Not assessed	Not assessed

Table A4b. Detail from the 2019 UK Marine Strategy assessment [D3: commercial fish and shellfish](#). Taken from [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#) and the [UK Marine Strategy Marine Online Assessment Tool](#).

Target	Indicator	North Sea	Celtic Seas
The Fishing mortality rate of populations of commercially exploited species is at or below levels which can produce the maximum sustainable yield.	Commercial fishing pressure for stocks of UK interest	GES partially achieved	GES partially achieved

Target	Indicator	North Sea	Celtic Seas
<p>The Spawning Stock Biomass of populations of commercially exploited species are above biomass levels capable of producing the maximum sustainable yield.</p>	<p>Reproductive capacity of commercially exploited stocks of UK interest</p>	<p>GES partially achieved</p>	<p>GES partially achieved</p>

Current impact of fisheries on the baseline condition

The status of commercial fish stocks (D3) primarily relates to exploitation rates so is predominantly influenced by fishing activities. For commercial fish some (53% of quota stocks) were being exploited at or below MSY in 2015, but this was not the case for all stocks. Out of a suite of 79 TACs which can be reported across multiple years, 32 of the 79 baseline TACs were consistent with ICES' advice (40%) in 2023 compared to 27 TACs (34%) in 2022 (Bell et al.2023²⁴). Most non-quota stocks are unassessed, and do not have MSY or a suitable proxy in place despite being a significant proportion of UK landings. Most shellfish stocks have either not met the requirement, or their status is uncertain. For more information, read [UK Marine Strategy commercial fish and shellfish assessment](#).

Fish as part of the ecosystem (D1 and D4) encompasses a much wider range of species, including those not commercially targeted. Both the removal of targeted species and bycatch of non-targeted / non-commercial fish species is relevant. While fishing is considered the main anthropogenic activity that is relevant to this ecosystem component, other pressures such as noise from renewable infrastructure and hydrodynamic changes brought about from coastal defence are also relevant in some instances. More information on relevant pressures is provided in section 2.6.1 of the UK [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#).

Recovery from past over-exploitation by fisheries does appear to be occurring in some areas. Demersal fish biodiversity is recovering from a history of over-exploitation, but GES has not been achieved in either the Greater North Sea or the Celtic Sea. A partial assessment of pelagic shelf fish status did not provide a clear result. For more information, read [UK Marine Strategy fish biodiversity assessment](#).

Fish summary

The current status of fish communities in the UK is primarily shaped by historical over-exploitation by fisheries, while ongoing over-exploitation continues to be a notable contributing factor. Improved fisheries management since the 1990s has resulted in more stocks being fished at or below MSY levels so, although the target is not yet met, there is a positive trend. Improved fisheries management has also resulted in some positive trend in fish communities beyond the targeted stocks.

24 Bell ED, Nash RMD, Garnacho E, De Oliveira J, Hanin M, Gilmour F, O'Brien CM 2023. Assessing the sustainability of negotiated fisheries catch limits by the UK for 2023. Cefas project report for Defra.

D1 and D6 – Benthic Habitats

The levels of physical damage to soft sediment habitats are consistent with the achievement of GES in UK waters to the west of the Celtic Seas, but not in the Celtic Seas or in the Greater North Sea. For sublittoral rock and biogenic habitats GES has not yet been achieved. Descriptor also relevant to Geodiversity (geology and sediments).

Benthic habitats are an important ecosystem component that contributes to overall levels of biodiversity (D1). It is also important to ensure the structure and function of the benthic ecosystems is adequately safeguarded by considering seafloor integrity (D6).

To meet Good Environmental Status, the high-level objective is that 'the health of seabed habitats is not significantly adversely affected by human activities'. However, according to the [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#), GES has not been achieved. This states that the main problem is caused by physical disruption of the seabed from fishing gear (demersal towed gear). The baseline environmental condition with respect to benthic habitats is therefore one which is required to meet GES. For more information, read [UK MS benthic biodiversity and seafloor habitats assessment](#).

A summary of the current status is shown in Table A5. Most indicators focussing on intertidal benthic habitat are consistent with GES (except for saltmarsh in the North Sea), but subtidal habitats are not consistent with GES.

Table A5. Detail from the 2019 UK Marine Strategy assessment on [D1; D6: Benthic habitats](#). Taken from [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#) and the [UK Marine Strategy Marine Online Assessment Tool](#).

Table notes:

Note 1: The benthic communities' indicator (OSPAR BH2) is currently in the pilot stage of development.

Target	Indicator	North Sea	Celtic Seas
The physical loss of each seabed habitat type caused by human activities is minimised and where possible reversed.	Physical loss of predicted habitats	GES not achieved	GES not achieved

Target	Indicator	North Sea	Celtic Seas
The extent of habitat types adversely affected by physical disturbance caused by human activity should be minimised.	Extent of Physical damage indicator to predominant and special habitats	GES not achieved	GES not achieved
The extent of habitat types adversely affected by physical disturbance caused by human activity should be minimised.	Benthic communities' indicator ^{Note1}	Not assessed	Not assessed
Habitat loss of sensitive, fragile, or important habitats caused by human activities is prevented, and where feasible reversed.	Physical loss of predicted habitats indicator	GES not achieved	GES not achieved
The extent of adverse effects caused by human activities on the condition, function and ecosystem processes of habitats is minimised.	Benthic communities' indicator	Not assessed	Not assessed
The extent of adverse effects caused by human activities on the condition, function and ecosystem processes of habitats is minimised.	Aggregated Infaunal Quality Index	GES not achieved	GES partially achieved
The extent of adverse effects caused by human activities on the condition, function and ecosystem processes of habitats is minimised.	Aggregated Saltmarsh Tool	GES not achieved	GES achieved

Target	Indicator	North Sea	Celtic Seas
The extent of adverse effects caused by human activities on the condition, function and ecosystem processes of habitats is minimised.	Aggregated Rocky Shore Macroalgal Index	GES achieved	GES achieved
The extent of adverse effects caused by human activities on the condition, function and ecosystem processes of habitats is minimised.	Aggregated Intertidal Seagrass Tool	GES achieved	GES achieved
The extent of adverse effects caused by human activities on the condition, function and ecosystem processes of habitats is minimised.	Intertidal rock community change indicator (MarClim)	GES status uncertain	GES status uncertain

Current impact of fisheries on the baseline condition

Fishing is one of several anthropogenic activities that are considered relevant to this ecosystem component. Other pressures include physical loss from renewable energy generation and oil extraction, coastal defence and the input and spread on invasive non-native species. But the main barrier to the achievement of GES is caused by physical disruption of the seabed from fishing. More information on relevant pressures is provided in section 2.6.1 of the [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#).

Physical disturbance of seabed

Fishing is considered to be the main driver of physical disturbance and occurs when gear is towed across the seafloor. The degree of disturbance depends on factors such as the size of the gear, the activity level (for example, number of tows per year) how fragile the benthic species present are and how quickly they can recover. The use of demersal towed gears is widely distributed. Using available VMS data and benthic habitat data available, the 2019 UK Marine Strategy assessment concluded that seabed disturbance targets were not being met within the Greater North Sea and Celtic Seas. As the analysis combined the VMS of all towed gear metiers together, it is not yet possible to determine the relative contribution of different gear types to the current levels of seabed disturbance. Other activities, such as aggregate extraction, have yet

to be included within the analysis, but the spatial extents of these are considerably smaller than fishing activity. For more information and detail of the analysis, read [UK Marine Strategy Extent of physical damage to predominant seafloor habitats assessment](#) and [UK Marine Strategy Extent of Physical Damage to Predominant and Special Habitats assessment](#).

Habitat loss

UK Marine Strategy assessments on a limited range of highly sensitive habitats (seagrass beds and horse mussel reefs), suggest that a loss of areas of potential habitat has occurred up to 2016. This was based on modelled data. The main causes were not thought to be due to fishing as these impacts are generally considered reversible. Irreversible loss has been predicted to have come about from aquaculture, navigational dredging and dredge spoil disposal, recreational activity, and coastal development. For more information, read [UK Marine Strategy Potential physical loss of predicted seafloor habitats assessment](#). There are instances where fishing can result in permanent habitat loss (for instance, heavy bottom towed gear over softer, rocky reef habitats), but fishing is generally considered to lead to habitat disturbance and degradation rather than loss.

Benthic habitat summary

There is widespread disturbance of seabed habitats by demersal towed gear that is contributing to the failure to achieve GES. Other impacts from non-fisheries activities may also be having an influence, but to a much lesser degree.

D4 – Food webs

Food webs (D4) are the network of predator-prey relationships that occur in the marine environment, from phytoplankton to top predators such as birds or seals. Fish communities are a key component of food webs. Knowledge of food webs allow understanding of how changes at one trophic level can impact those above and below it.

To meet Good Environmental Status, the high-level objective for food webs is that 'the health of the marine food web is not significantly affected by human activities'. According to the [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#), the extent to which good environmental status has been achieved is uncertain. Plankton communities are changing, some fish communities are recovering from past overexploitation, but others are not, breeding seabirds are in decline, and grey seal numbers are increasing. It is known that the components of the marine food webs are changing but it is not always clear how they are affecting each other. For more information, read [UK Marine Strategy food webs assessment](#).

A summary of the current status is shown in Table A6.

Table A6. Detail from the 2019 UK Marine Strategy assessment on [D4: food webs](#). Taken from [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#) and the [UK Marine Strategy Marine Online Assessment Tool](#).

Target	Indicator	North Sea	Celtic Seas
The species composition and relative abundance of representative feeding guilds are indicative of a healthy marine food web.	Mean maximum length of fish	GES not achieved	GES not achieved
The species composition and relative abundance of representative feeding guilds are indicative of a healthy marine food web.	Selected plankton lifeforms pairs (for example, large vs small zooplankton)	GES status uncertain	GES status uncertain
The species composition and relative abundance of representative feeding guilds are indicative of a healthy marine food web.	Abundance and distribution of coastal bottlenose dolphins	GES achieved	GES status uncertain
The species composition and relative abundance of representative feeding guilds are indicative of a healthy marine food web.	Abundance and distribution of cetaceans other than coastal bottlenose dolphins	GES partially achieved	GES status uncertain

Target	Indicator	North Sea	Celtic Seas
The species composition and relative abundance of representative feeding guilds are indicative of a healthy marine food web.	Marine bird abundance	GES not achieved	GES not achieved
The balance of abundance between representative feeding guilds is indicative of a healthy marine food web.	TBC	Not assessed	Not assessed
The size structure of fish communities is indicative of a healthy marine food web.	Size composition in fish communities	GES not achieved	GES partially achieved
Productivity of the representative feeding guilds, characterised by key species, is indicative of a healthy marine food web.	Grey seal pup production	GES achieved	GES achieved
Productivity of the representative feeding guilds, characterised by key species, is indicative of a healthy marine food web.	Marine bird breeding success/failure	GES not achieved	GES partially achieved

Target	Indicator	North Sea	Celtic Seas
Productivity of the representative feeding guilds, characterised by key species, is indicative of a healthy marine food web.	Kittiwake breeding success²⁵	GES achieved	Not assessed

Current impact of fisheries on the baseline condition

Anthropogenic impacts on the marine food web are multiple and complex. As fish communities are a key component of food webs, pressure from fisheries can have a significant impact. The removal of forage fish (i.e., species at a low trophic level that contribute significantly to the diets of other fish, marine mammals, or seabirds) has the potential to impact higher trophic levels. For instance, reduction in the availability of small forage fish is likely to be contributing to the breeding success of some marine birds. Climatically driven changes in plankton will also have a strong influence on the rest of the food web. More detail is given under the individual faunal group sections. For more information, read [UK Marine Strategy food webs assessment](#).

Food webs summary

Historic fishing activity has had a large impact on fish community structure which is a key component of marine food webs. With improved fisheries management focusing on stocks, some recovery is occurring. However, the management of fish stocks solely to safeguard future fisheries will not necessarily lead to all food web targets being met. Changes in plankton are likely driven by prevailing environmental conditions, but other impacts cannot be ruled out.

D10 – Marine Litter

To achieve Good Environmental Status for marine litter, the high-level objective is that ‘the amount of litter and its degradation products on coastlines and in the marine environment is reducing and levels do not pose a significant risk to the environment and marine life.’ According to the [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#), GES has not been achieved for marine litter, and it

²⁵ Kittiwake breeding success has only been achieved for the English mainland colonies. GES for Kittiwake breeding success has not been achieved for the entire North Sea region due to breeding failures in Orkney and Shetland.

remains a significant pressure on marine ecosystems. The baseline environmental condition with respect to marine litter is therefore one where improvement is required to meet GES. For more information, read [UK Marine Strategy litter assessment](#). A summary of the current status is shown in Table A7.

Table A7. Detail from the 2019 UK Marine Strategy assessment on [D10 Marine Litter](#) Taken from [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#) and the [UK Marine Strategy Marine Online Assessment Tool](#).

Target	Indicator	North Sea	Celtic Seas
A decrease in the total amount of the most common categories of litter found on surveyed beaches.	Presence of litter (beaches)	GES not achieved	GES not achieved
A decrease in the number of items of litter on the seabed.	Presence of litter (seabed)	GES status uncertain	GES status uncertain
A downward trend in the number of northern fulmars with more than 0.1g of plastic particles in their stomach.	Presence of floating litter	GES status uncertain	GES status uncertain
Develop an appropriate indicator to measure micro-litter in the marine environment.	In development	Not assessed	Not assessed

Current impact of fisheries on the baseline condition

Fishing activities can contribute to marine litter through discarded or lost fishing gear, including nets, lines, and traps. This type of litter, also known as "ghost gear", can persist in the environment, entangling marine life, smothering benthic habitats, and introducing microplastics into the marine food chain. In addition, waste generated onboard fishing vessels, such as packaging materials and food waste, can also contribute to marine litter when not disposed of properly.

Marine litter summary

Marine litter, including from fishing activities, is a significant pressure on marine ecosystems and water quality. The UK has not yet achieved its aim of GES for litter. Beach litter levels in the Celtic Seas have remained largely stable since the assessment in 2012, whilst beach litter levels in the Greater North Sea have slightly increased. Waste fishing material is a component of beach litter. Both floating litter and seafloor litter remain an issue, with plastic the predominant material. Achieving GES for marine litter requires improved waste management practices, the reduction of lost or discarded fishing gear, and increased awareness and monitoring of the issue.

D11 – Underwater noise

To achieve Good Environmental Status for underwater noise, the high-level objective is that ‘loud, low and mid frequency impulsive sounds and continuous low frequency sounds introduced into the marine environment through human activities are managed to the extent that they do not have adverse effects on marine ecosystems and animals at the population level.’ [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#), indicates that data on underwater noise is limited, making it difficult to determine whether GES has been achieved. However, increasing awareness of the issue has led to further research and monitoring efforts. For more information, read [UK Marine Strategy underwater noise assessment](#). A summary of the current status is shown in Table A8.

Table A8. Detail from the 2019 UK Marine Strategy assessment on [D11 Underwater noise](#). Taken from [Marine Strategy Part One: UK updated assessment and Good Environmental Status](#) and the [UK Marine Strategy Marine Online Assessment Tool](#).

Target 2019	Indicator	North Sea	Celtic Seas
Levels of anthropogenic impulsive sound sources do not exceed levels that adversely affect populations of marine animals.		GES status uncertain	GES status uncertain

Levels of anthropogenic continuous low-frequency sound do not exceed the levels that adversely affect populations of marine animals	Safe levels of low anthropogenic continuous low frequency sound	GES status uncertain	GES status uncertain
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Current impact of fisheries on the baseline condition

Fishing activities can generate underwater noise through the use of engines, sonar, and other equipment. Although fisheries are not the primary source of anthropogenic underwater noise (shipping, construction, and energy production are major contributors), they can still contribute to the overall noise pollution in the marine environment. This noise can impact marine species that rely on sound for communication, navigation, and foraging, leading to changes in behaviour, stress, and potential displacement from preferred habitats.

Summary

Underwater noise from fisheries, while not the primary source, can still contribute to the overall noise pollution in the marine environment. Fishing vessels will contribute to underwater noise through sonar, engine noise, gear interacting with seabed and deploying and retrieving gear. The achievement of GES for underwater noise in the UK is uncertain. Research and monitoring programmes established since 2012 have provided an improved understanding of the impacts of sound on marine ecosystems. However, achieving GES for underwater noise will require better understanding and monitoring of the issue, as well as the development and implementation of strategies to manage noise pollution from various sources.

Appendix C: UK MPA designations

1. [Conservation of Habitats and Species Regulations 2017](#) and [The Conservation of Offshore Marine Habitats and Species Regulations 2017](#)
 - Special Protection Areas (SPAs) - England, Scotland, Wales
 - Special Areas of Conservation (SACs) - England, Scotland, Wales
2. [Conservation \(Natural Habitats, etc.\) Regulations \(Northern Ireland\) 1995 \(as amended\)](#)
 - A. Special Protection Areas (SPAs) – Northern Ireland
 - B. Special Areas of Conservation (SACs) – Northern Ireland
3. [Marine and Coastal Access Act 2009](#)
 - Marine Conservation Zones (MCZs) – England, Wales
 - Nature Conservation Marine Protected Areas (NCMPAs), offshore waters – Scotland
4. [Marine \(Scotland\) Act 2010](#)
 - Nature Conservation Marine Protected Areas (NCMPAs), inshore waters – Scotland
5. [Marine Act \(Northern Ireland\) 2013](#)
 - Marine Conservation Zones (MCZs) – Northern Ireland
6. [Natural Environment and Rural Communities Act 2006 \(Part 4\)](#)
 - Sites of Special Scientific Interest (SSSI) – England, Scotland, Wales
7. [The Environment \(Northern Ireland\) Order 2002](#)
 - Coastal Areas of Special Scientific Interest (ASSIs) - Northern Ireland
8. [Convention on Wetlands of International Importance](#)
 - Ramsar Sites (Wetland of International Importance under the Convention on Wetlands of International Importance Especially as Waterfowl Habitat)

Appendix D: Marine Plans – Specific detail within the UK

England

Marine plans put into practice the objectives for the marine environment that are identified in the MPS alongside the [National Planning Policy Framework \(NPPF\)](#) and the [Localism Act 2011](#). The MMO is responsible for preparing [marine plans in England](#), and published the [North East](#), [North West](#), [South West](#), [South East](#), [South](#) and [East](#) marine plans. The marine plans include policies to support a sustainable fishing industry and a healthy marine environment.

Wales

The first [Welsh National Marine Plan](#) was introduced in 2019, providing a statutory policy framework to help guide the sustainable development of the Welsh marine area. It was prepared and adopted under the MCAA to conform with the UK MPS. Under the MCAA, the Welsh Ministers are the marine plan authority for the Welsh marine planning area and the Welsh Marine Plan covers both the inshore and offshore areas. The Marine Plan includes specific policies in relation to commercial fisheries alongside cross-cutting environmental and socio-economic policies.

Appendix E: Glossary

Biodiversity: The variety of all life on earth, including the diversity within and between all plant and animal species and the diversity of ecosystems.

Blue carbon: Carbon captured by the world's oceans and coastal ecosystems. Blue carbon habitats are the habitats where it is stored.

Bycatch: Defined in section 52 of the Fisheries Act 2020 means (a) fish that are caught while fishing for fish of a different description, or (b) animals other than fish that are caught in the course of fishing.

Climate change: Referring to human-induced climate change driven by greenhouse gas emissions. It includes global warming, warming oceans, greater risks of flooding, droughts, and heat waves.

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES): CITES is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten the survival of the species.

Convention on the Conservation of Migratory Species of Wild Animals (CMS): The Convention on the Conservation of Migratory Species of Wild Animals, also known as the Convention on Migratory Species (CMS) is an international agreement that aims to conserve migratory species throughout their ranges. The agreement was signed under the auspices of the United Nations Environment Programme and is concerned with conservation of wildlife and habitats on a global scale.

Descriptors (UK Marine Strategy): Descriptors are elements within the environment that provide the means to assess general status or condition of that environment. This can be done through the establishment of indicators or targets for each descriptor.

Ecosystem: A biological community which consists of all the organisms and the physical environment with which they interact.

Ecosystem-based approach: Defined in section 1(10) of the Fisheries Act 2020 as an approach which (a) ensures that the collective pressure of human activities is kept within levels compatible with the achievement of good environmental status (within the meaning of the Marine Strategy Regulations 2010 (S.I. 2010/1627)), and (b) does not compromise the capacity of marine ecosystems to respond to human-induced changes.

Findspots: The place where one or more artefacts have been found. May prove to be associated with a site, other finds, natural features etc., or isolated (no apparent relationship).

Fish: Marine and estuarine finfish and shellfish, including migratory species such as European eel and salmon.

Fisheries: The commercial or recreational capture of wild marine organisms (fish and shellfish); commercial fishing can use a variety of mobile and static gear, vessels and locations.

Fisheries Framework (Fisheries Management and Support Framework): Outlines the legislation and policies for the sustainable management of fisheries and the wider seafood sector. It covers the catching, processing and supply industries, including access to fishing opportunities, licensing, stock recovery, enforcement, data collection, aquaculture, recreational sea angling, and areas of collaboration and common principles. It includes governance structures and ways of working.

Fisheries Management Plan (FMP): A document, prepared and published under the Fisheries Act 2020, that sets out policies designed to restore one or more stocks of sea fish to, or maintain them at, sustainable levels.

Fisheries policy authorities: As defined by section 52 of the Fisheries Act 2020, “fisheries policy authorities” means (a) the Secretary of State, (b) the Scottish Ministers, (c) the Welsh Ministers, and (d) the Northern Ireland department.

Fishermen’s fasteners: Places where fishermen have snagged their fishing gear.

Food webs: The natural interconnection of food chains and a graphical representation of what eats what in an ecological community.

Good Environmental Status (GES): A qualitative description of the state of the seas that the Marine Strategy Regulations 2010 requires authorities to achieve or maintain by the year 2020. Achieving GES is about protecting the marine environment, preventing its deterioration, and restoring it where practical, while allowing sustainable use of marine resources.

Inshore: 0 to 12 nautical miles from the UK’s territorial sea baselines.

Inshore Fisheries and Conservation Authorities (IFCAs): IFCAs are responsible for the management of fishing activities in English coastal waters out to six nautical miles from territorial sea baselines. The 10 IFCAs have a shared 'vision' to lead, champion and manage a sustainable marine environment and inshore fisheries.

International Council for the Exploration of the Sea (ICES): Coordinates and promotes marine research on oceanography, the marine environment, the marine ecosystem, and on living marine resources in the North Atlantic.

Joint Fisheries Statement (JFS): As defined by section 2(1) of the Fisheries Act 2020, a document which sets out the policies of the fisheries policy authorities for achieving, or contributing to the achievement of, the fisheries objectives in the Fisheries Act 2020.

Marine environment: Includes (a) the natural beauty or amenity of marine or coastal areas, or of inland waters or waterside areas, (b) features of archaeological or historic interest in those areas, and c) flora and fauna which are dependent on, or associated with, a marine or coastal, or aquatic or waterside, environment.

Marine litter: Any solid material which has been deliberately discarded or unintentionally lost on beaches, on shores or at sea. It includes any persistent, manufactured or processed solid material.

Marine Management Organisation (MMO): An executive non-departmental public body in the United Kingdom established under the Marine and Coastal Access Act 2009, with responsibility for planning and licensing of activities in **UK waters / English waters / Northern Irish waters / Scottish waters/ Welsh waters** from 0-200 nautical miles, save fisheries activities within 0-6nm which are the responsibility of the IFCAs. The MMO also has some UK responsibilities.

Marine Protected Areas (MPA): Areas of the sea protected by law for nature conservation purposes.

Marine Plans: A marine plan is a document which has been prepared and adopted for a marine plan area by the appropriate marine plan authority in accordance with Schedule 6 of the Marine and Coastal Access Act 2009, and which states the authority's policies for and in connection with the sustainable development of the area.

Maximum Sustainable Yield (MSY): Defined in the Fisheries Act 2020 as the highest theoretical equilibrium yield that can be continuously taken on average from a marine stock under existing environmental conditions without significantly affecting recruitment.

National fisheries authorities: As defined by section 25(4) of the Fisheries Act 2020, these are (a) the Secretary of State, (b) the Marine Management Organisation, (c) the Scottish Ministers, (d) the Welsh Ministers, and (e) the Northern Ireland department. The term 'national fisheries authorities' differs from 'fisheries policies authorities' in including the MMO.

Non-quota stocks (NQS): Species that are not managed through TACs (quota limits). They include some finfish, most commercial shellfish species, and various other species.

Offshore: 12 to 200 nautical miles from the UK's territorial sea baselines.

Precautionary approach to fisheries management: Defined in section 1(10) of the Fisheries Act 2020 as an approach in which the absence of sufficient scientific information is not used to justify postponing or failing to take management measures to conserve target species, associated or dependent species, non-target species or their environment.

Processing: As defined by section 52 of the Fisheries Act 2020: in relation to fish or any other aquatic organism, includes preserving or preparing the organism, or producing any substance or article from it, by any method for human or animal consumption.

RAMSAR Convention: The convention emphasises the special value of wetland, particularly as a key habitat for waterfowl. The Convention resulted in the designation of sites known as Ramsar Sites for management and conservation at an international level.

Recreational sea fishing: An umbrella term for a variety of recreational activities including recreational sea angling recreational netters and charter boats.

Regional Fisheries Management Organisation (RFMO): A multilateral international body or agreement set up to manage and conserve fish stocks in a particular region.

Remote Electronic Monitoring (REM): Integrated on-board systems that may include cameras, gear sensors, video storage, and Global Positioning System units, which capture comprehensive videos and are used to monitor fishing activity with associated sensor and positional information.

Resilience: The ability of an ecosystem, species, habitat, or industry to respond, recover or adapt to either changes or disturbances within a reasonable timeframe without permanent loss or damage.

Sensitive species: As defined in section 52 of the Fisheries Act 2020, sensitive species means: (a) any species of animal or plant listed in Annex II or IV of Directive 92/43/EEC of the Council of the European Communities on the conservation of natural habitats and of wild flora and fauna (as amended from time to time), (b) any other species of animal or plant, other than a species of fish, whose habitat, distribution, population size or population condition is adversely affected by pressures arising from fishing or other human activities, or (c) any species of bird.

Shellfish: As defined in section 52 of the Fisheries Act 2020, shellfish includes molluscs and crustaceans of any kind found in the sea or inland waters.

Statutory Nature Conservation Bodies': The Statutory Nature Conservation Bodies' are Natural England, Natural Resources Wales, NatureScot, the Northern Ireland Environment Agency, the Joint Nature Conservation Committee, and the Department of Agriculture, Environment and Rural Affairs (DAERA) statutory advisory body, the Council for Nature Conservation and the Countryside.

Sustainable Development: As defined by the Brundtland report (1987), sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainable fishing: Sustainable fisheries protect their stocks and the wider environment whilst delivering social and economic prosperity. Fisheries management decisions should balance environmental, economic and social considerations to create sustainable fisheries that benefit present and future generations. It means ensuring that fish stocks can be fished commercially and recreationally, both now and in the future. Both the short-term and the long-term impacts of decisions managing fishing activity to protect stocks and on the fishing industry should be considered, while any short-term decisions to give social or economic benefit should not significantly compromise the long-term health of the marine environment. These decisions should recognise the cultural importance of fishing through maintaining and, where possible, strengthening coastal communities and livelihoods alongside the requirement for fish stocks to reach and maintain sustainable levels.

Territorial sea: The waters under the jurisdiction of a state, defined by UNCLOS as up to 12 nautical miles from the baseline or low-water line along the coast.

The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR): An international agreement for cooperation for the protection of the marine environment of the North-East Atlantic. Work under the Convention is managed by the OSPAR Commission, made up of representatives of the Governments of 15 Contracting Parties and the European Commission, representing the European Union. Work to implement the OSPAR Convention is taken forward through the adoption of decisions, which are legally binding on the Contracting Parties, recommendations, and other agreements.

Total Allowable Catch (TAC): The total allowable catch (TAC) is a catch limit set for a particular fishery or stock, generally for a year or a fishing season. TACs are usually expressed in tonnes of live weight equivalent but are sometimes set in terms of numbers of fish.

Trade and Cooperation Agreement (TCA): The Trade and Cooperation Agreement between the United Kingdom of Great Britain and Northern Ireland, of the one part, and the European Union and the European Atomic Energy Community of the other part. This agreement governs the relationship between the UK and the EU. It was signed in December 2020, applied from 1 January 2021 and was ratified (in a slightly amended form) in April 2021.

UK Marine Policy Statement (UKMPS): The UK policy framework for preparing marine plans and taking decisions that affect the marine environment in the UK.

UK Marine Strategy: The UK Marine Strategy provides the framework for delivering marine policy at the UK level and sets out how we will achieve the vision of clean, healthy, safe, productive, and biologically diverse oceans and seas.

UN Convention on Biological Diversity (CBD): The international legal instrument for the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources.

UN Convention on the Law of the Sea (UNCLOS): A multilateral international agreement that lays down a comprehensive regime of law and order in the world's oceans and seas, establishing rules governing all uses of the oceans and their resources. It was signed in 1982 and came into force in 1994.

UN Sustainable Development Goals: 17 United Nations goals 'to transform our world' and promote prosperity whilst protecting the planet. Goal 14 is to conserve and sustainably use the oceans, seas and marine resources for sustainable development.

Water quality: A measure of the condition of water and its suitability to sustain a range of uses for both biotic and human benefits.

Appendix F: Statutory Consultee Consultation Responses

As required by the 2004 Act, we have sought the views of our statutory consultees on this SEA and associated ER and their responses are detailed below.

Natural England Response



13th December 2024

BY EMAIL ONLY

Re: Strategic Environmental Assessment Scoping Reports – Wrasses Complex Fisheries Management Plan, Seabream Fisheries Management Plan, Celtic Sea and Western Channel Demersal Fisheries Management Plan, draft Celtic Sea and Western Channel Pelagic Fisheries Management Plan.

Thank you for your consultation emails dated the 12th and 18th November 2024 seeking our views as a statutory consultee under The Environmental Assessment of Plans and Programmes Regulations 2004 on whether the proposed scope of the Strategic Environmental Assessments for the above FMPs is appropriate.

We have reviewed the reports provided. In all four documents, Natural England agrees with the outcomes of the screening exercise and welcomes the commitment to progress an environmental assessment of each FMP in line with The Regulations.

Natural England also agrees that each scoping report has correctly identified the issues to be taken forward for further consideration in an Environment Report, with one minor correction suggested in Annex 2. Whilst the details of the proposed assessment methodology provided are very high-level, we agree that it is likely to be fit-for-purpose.

FMP specific comments can be found in Annex 2. There are also some very minor comments in the accompanying email. Please don't hesitate to contact me if you require any further information or clarification.

Annex 2

Celtic Sea Demersal FMP

The Celtic Sea and Western Channel Demersal FMP has largely identified the correct risks to consider. However, in Table 2, whilst bycatch risks to UK MS descriptors for D1 (biodiversity) and D4 (foodwebs) have been correctly identified, the moderate risk to these descriptors from prey depletion has not been scoped in correctly. Cod and whiting can be considered forage fish whilst in their juvenile stages. They may be an important food source for the designated features of MPAs, including harbour porpoise and their depletion also poses a risk to UK MS descriptors D1 and D4 and SNCB advice highlighted risks to these descriptors which require further consideration.

Points from email

1. In the Wrasse and Bream FMP scoping reports the grouping of the legislation doesn't accurately reflect protections for MPAs. We would suggest either including MaCAA 2009 and the habitat regulations (and offshore regs) in this section as well or simply merging sections 4.3 and 4.4.
2. Section 4.7 of the Wrasse Complex FMP scoping report refers to Devon and Severn, Cornwall and Southern IFCA Minimum Conservation Reference Size Byelaw but I don't think D&S IFCA has an MCRS byelaw. The wrasse MCRS forms part of the permit required under the potting byelaw which is correctly referred to later in the section.

How the consultation response was considered

Point #	How point was considered
1. In all four documents, Natural England agrees with the outcomes of the screening exercise and welcomes the commitment to progress an environmental assessment of each FMP in line with The Regulations.	Point noted
2. Natural England also agrees that each scoping report has correctly identified the issues to be taken forward for further consideration in an Environment Report.	Point noted

JNCC Response



17th December
2024 BY EMAIL

ONLY

SUBJECT: Strategic Environmental Assessments (SEA) Statutory Consultee Consultation – Wrasses Complex FMP Scoping Report, Seabream FMP Scoping Report, Celtic Sea and Western Channel Demersal FMP Scoping Report, and draft Celtic Sea and Western Channel Pelagic FMP Scoping Report

Thank you for your consultation emails dated 12th and 18th November 2024 regarding the above scoping reports. We at JNCC acknowledge the importance of these assessments and appreciate the opportunity to provide advice on the proposed scope and level of detail of the assessments. JNCC have reviewed the reports and given the similarities among them we have consolidated our feedback into a single response.

JNCC support the comprehensive approach taken in the scoping reports, particularly the detailed consideration of the environmental baseline and the identification of relevant plans, programmes, and environmental protection objectives.

We agree that the proposed assessment methods are likely to be appropriate, with the following minor amendment:

- The potential environmental effects of the fisheries have been reasonably well defined across the reports, however, for the Celtic Sea and Western Channel Demersal FMP and draft Celtic Sea and Western Channel Pelagic FMP the risk from prey depletion does not appear to have been scoped in for consideration against the UKMS descriptors D1 and D4. These risks were highlighted in the SNCB advice, and we recommend they are considered further in the SEAs.

We hope you find our advice clear and helpful. Should you have any queries regarding our response or require further clarification, please do not hesitate to contact us.

How the consultation response was considered

Point #	How point was considered
1. The potential environmental effects of the fisheries have been reasonably well	The moderate risk to the descriptors for D1 (biodiversity) and D4 (foodwebs) from prey

defined across the reports, however, for the Celtic Sea and Western Channel Demersal FMP and draft Celtic Sea and Western Channel Pelagic FMP the risk from prey depletion does not appear to have been scoped in for consideration against the UKMS descriptors D1 and D4. These risks were highlighted in the SNCB advice, and we recommend they are considered further in the SEAs.

depletion will be scoped into the Environmental report and will be considered as part of the assessment.

Historic England Response

Dear Sir/Madam

Historic England is pleased to offer its comments in response to Defra seeking views on the Scoping Report for Strategic Environmental Assessment (SEA) of the Tranche 4 Fisheries Management Plans (FMPs), dated November 2024. The Tranche 4 FMPs address the following four fisheries:

- Wrasse Complex
- Black Seabream
- Celtic Sea and Western Channel Demersal
- draft Celtic Sea and Western Channel Pelagic

Historic England (HE) is the Government's advisor on all aspects of the historic environment in England. HE's general powers under section 33 of the National Heritage Act 1983 were extended via the National Heritage Act 2002 to modify our functions to include securing the preservation of monuments in, on, or under the seabed within the seaward limits of the UK Territorial Sea adjacent to England. HE also provides advice in relation to English marine plan areas (inshore and offshore) as defined by the Marine and Coastal Access Act (MCAA) 2009.

As our geographical scope encompasses only waters off England, our comments are limited to the Celtic Sea and Western Channel Demersal and Pelagic FMPs only insofar as they relate to fishing activity in English waters. With respect to the application of these FMPs in Welsh waters, we encourage Defra and Welsh Government to obtain the views of our equivalent bodies in Wales: [Cadw](#) and the Royal Commission on the Ancient and Historical Monuments of Wales ([RCAHMW](#)).

We note that the draft Celtic Sea and Western Channel Pelagic FMP acknowledges the Convention for the Protection of the Archaeological Heritage of Europe among the international obligations relevant to the FMP SEA, as have Scoping Reports for previous FMPs. However, we are puzzled as to why this instrument has been omitted from the other three Tranche 4 Scoping Reports? Furthermore, acknowledgement of the European Landscape Convention appears to have slipped from all four Tranche 4 SMPs and should be reinstated. We would also like to draw attention to the UK's ratification in April 2024 of the 2003 UNESCO Convention for Safeguarding of the Intangible Cultural Heritage: fishing is a rich source of intangible cultural heritage that could actively contribute to delivering FMPs, as well as FMPs having a role in safeguarding the intangible heritage of each fishery.

HE is pleased to see that cultural heritage is regarded as being within the scope of each Tranche 4 SEA. We note that fishing activities targeted at each of the Tranche 4 fisheries are likely to cause physical disturbance to the seabed and, therefore, to heritage assets in and on the seabed. We agree that the interaction between fishing gear and marine heritage assets is a potentially significant impact of fishing activity targeting these fisheries.

We would also like to underline the potential of fishing activity targeting these fisheries to cause input of litter. The impact of fishing activity on the environment through marine litter is

less clearly acknowledged in the Tranche 4 FMP Scoping Reports than in previous FMP Scoping Reports. As we have flagged in previous responses, Abandoned, Lost or Discarded Fishing Gear (ALDFG) can snag and accumulate on historic wrecks, adding to the stress on their structures, obscuring them, and creating a risk to visiting divers (including archaeologists, volunteers, and recreational divers). Historic England has funded the removal of ALDFG from several designated heritage assets, which underscores the impact of fishing-derived litter on heritage. SEA of the Tranche 4 Scoping Reports should afford greater prominence to the impacts on cultural heritage of marine litter arising from fishing activity.

HE is pleased to see that landscape/seascape is regarded as being within scope of the Tranche 4 SEAs because of the interaction between fishing gear and seabed formations. The Tranche 4 Scoping Reports variously refer to features such as seagrass beds, eelgrass beds and rocky reefs as warranting particular consideration: to these, the SEAs should add submerged prehistoric land surfaces that often comprise organic deposits (such as peat) and other former terrestrial fine-grained deposits (muds and silts) containing organic material.

Given that organic-rich deposits associated with submerged prehistoric landsurfaces may be impacted by fishing activity targeting all four Tranche 4 fisheries, we would concur that these fisheries have the potential to disturb blue carbon habitats and affect seabed carbon dynamics. Archaeological records and approaches are attuned to identifying organic and other fine-grained deposits, hence there may be scope for heritage to contribute to the assessment of fishing impacts on these key seabed formations and blue carbon. We think that this aspect of the impact of fisheries on landscapes should receive special attention in the SEAs.

We have underlined previously the positive interactions that arise between fishing and cultural heritage, including the importance of the cultural heritage of fishing acknowledged in the opening sentence of the Joint Fisheries Statement (JFS). We note also that section 1.2 of each Scoping Report states that fisheries management decisions should recognise the cultural importance of fishing through maintaining and strengthening coastal communities.

Consequently, we welcome the inclusion in the draft Celtic Sea and Western Channel Pelagic FMP of an express objective on culture: 'Better understand the cultural significance of these fisheries and consider this in developing FMP actions and measures'. This is an important step reflecting comments we have made previously: the cultural significance of these pelagic fisheries is reflected in numerous Listed Buildings along the coasts of south west England (e.g. [Porthmeor Pilchard Cellars and Studios](#); [Former Pilchard Net Fishing Cellars and Winches](#); [Fish Cellars South East of the Old Cellars](#))) and we would welcome further discussion with Defra on how this objective can best be implemented.

We would strongly encourage the inclusion of equivalent objectives on the cultural importance of fishing in the other three Tranche 4 FMPs. These three FMPs have objectives on better understanding, optimising and realising economic and social benefits, which we would expect to encompass cultural benefits: but express objectives on culture would provide greater stimulus to delivery. We would also like to underline the role that greater recognition of the proud history and heritage of fishing would play in delivering objectives on partnerships and collaborative working relationships. We would welcome conversations with Defra about how greater attention to the cultural heritage of fishing could contribute to sustainable fisheries and strengthened coastal communities.

Staying with the objectives of the Tranche 4 FMPs, we would welcome confirmation that express actions on cultural heritage fall within the scope of objectives on understanding the impacts of these fisheries on the marine environment, identifying evidence gaps, and developing research initiatives.

We look forward to the Environmental Reports evaluating the potential effects (negative and positive) of all four Tranche 4 fisheries on cultural heritage and landscape/seascape. In light of comments above, we would expect each Environmental Report to address:

- Interactions between fishing gear and marine heritage assets on the seabed.
- Impacts on heritage arising from physical disturbance to the seabed.
- Impacts on heritage from the input of litter (ALDFG).
- Impacts on landscape/seascape including prehistoric seabed formations, blue carbon habitats, and seabed carbon dynamics.
- Potential to enhance the cultural heritage of these fisheries and the contribution it makes to coastal communities and places.

We note that the SEAs will review existing evidence on the current state of the marine environment. We look forward to discussing with Defra the evidence required to achieve this with respect to cultural heritage and landscape/seascape. It would be helpful to know what evidence has already been collated on fishing, cultural heritage, and landscape/seascape through a) existing and current programmes on MPAs, b) Defra's Revised Approach to fisheries management programme, c) the MMO's Fishery Assessment programme, and d) the UK Marine Strategy (UK MS – and see below).

We appreciate again the acknowledgement that cultural heritage and landscape/seascape are not considered under the UK MS assessment process. We would be very pleased to discuss with Defra how they might be brought within that process, and/or how suitable indicators and monitoring measures can be developed for cultural heritage and landscape/seascape alongside UK MS.

We welcome acknowledgement that harvesting within sustainable limits may not remove all potential negative impacts of the Tranche 4 fisheries on the wider environment – including heritage – and agree that additional measures will be required to address risks and impacts. We note also that the Environmental Report will acknowledge pressures not currently being managed, which we presume will include pressures from fishing on cultural heritage and landscape/seascape.

We look forward to the FMPs proposing new measures and interventions to mitigate negative effects (and enhance positive effects) arising from interactions between the Tranche 4 fisheries and cultural heritage and landscape/seascape. We also look forward to proposals for future monitoring of the effects of the Tranche 4 FMPs on cultural heritage and landscape/seascape. We would, of course, be very pleased to discuss with Defra these new measures, interventions, and monitoring proposals in the course of their development.

In all four Tranche 4 Scoping Reports, interactions between fishing gear, heritage assets and seabed formations are identified as the most relevant impacts under the headings of cultural heritage and landscape/ seascape. Accordingly, we think it would be appropriate to involve

Historic England in the Benthic Impacts Working Group currently in development as part of other FMPs, as noted in the Tranche 4 Scoping Reports. We would also suggest that prior to formal consultation, Defra goes beyond the SNCBs in seeking and considering advice on the impacts of fishing activity, to include ALBs such as Historic England that can provide relevant advice on such impacts. Framing advice from statutory consultees in terms of MPAs and UK MS descriptors – which are acknowledged in the Scoping Reports as not encompassing the full scope of SEA – will clearly allow only partial assessments.

Thank you again for seeking HE’s views on these Scoping Reports. HE would be very pleased to continue conversations with Defra about how cultural heritage can best strengthen the effectiveness of the Tranche 4 FMPs in contributing to sustainable and well managed fisheries.

Any queries regarding this response or further dialogue can be addressed to me via the contact details below. We are happy for this response to be made public.

How the consultation response was considered

Point #	How point was considered
<p>1. We note that the draft Celtic Sea and Western Channel Pelagic FMP acknowledges the Convention for the Protection of the Archaeological Heritage of Europe among the international obligations relevant to the FMP SEA, as have Scoping Reports for previous FMPs. However, we are puzzled as to why this instrument has been omitted from the other three Tranche 4 Scoping Reports?</p>	<p>Reference to the Convention for the Protection of the Archaeological Heritage of Europe will be included in the Environmental Reports for the following FMPs.</p> <ul style="list-style-type: none"> • Wrasse Complex • Black Seabream • Celtic Sea and Western Channel Demersal
<p>2. Furthermore, acknowledgement of the European Landscape Convention appears to have slipped from all four Tranche 4 SMPs and should be reinstated.</p>	<p>Reference to the European Landscape Convention will be made in three of the Environmental Reports.</p> <ul style="list-style-type: none"> • Wrasse Complex • Seabream • Celtic Sea and Western Channel Demersal <p>Landscapes/seascapes have been screened out of Celtic Sea and Western Channel Pelagic FMP ER as pelagic species are bycatch of other demersal</p>

Point #	How point was considered
	fisheries, and this issue will be dealt with by those fisheries.
3. We would also like to draw attention to the UK's ratification in April 2024 of the 2003 UNESCO Convention for Safeguarding of the Intangible Cultural Heritage: fishing is a rich source of intangible cultural heritage that could actively contribute to delivering FMPs, as well as FMPs having a role in safeguarding the intangible heritage of each fishery.	Reference to the 2003 UNESCO Convention for Safeguarding of the Intangible Cultural Heritage will be made in all four Environmental Reports.
4. We would also like to underline the potential of fishing activity targeting these fisheries to cause input of litter. The impact of fishing activity on the environment through marine litter is less clearly acknowledged in the Tranche 4 FMP Scoping Reports than in previous FMP Scoping Reports.	SNCB advice provided to Defra indicated that there is a moderate risk to UK MS D10 marine litter for all fishing gears used in fisheries covering the T4 FMPs. Marine litter will be assessed in the Environmental Reports.
5. The Tranche 4 Scoping Reports variously refer to features such as seagrass beds, eelgrass beds and rocky reefs as warranting particular consideration: to these, the SEAs should add submerged prehistoric landsurfaces that often comprise organic deposits (such as peat) and other former terrestrial fine-grained deposits (muds and silts) containing organic material.	Environmental Reports (except the Celtic Sea and Western Channel Pelagic FMP) will reference submerged prehistoric landsurfaces that often comprise organic deposits (such as peat) and other former terrestrial fine-grained deposits (muds and silts) containing organic material.
6. Consequently, we welcome the inclusion in the draft Celtic Sea and Western Channel Pelagic FMP of an express objective on culture: 'Better understand the cultural significance of these fisheries and consider this in developing FMP actions and measures'. This is an important step reflecting comments we have made	Noted. Defra would welcome further discussions with HE to consider this point.

Point #	How point was considered
<p>previously: the cultural significance of these pelagic fisheries is reflected in numerous Listed Buildings along the coasts of south west England (e.g. https://historicengland.org.uk/listing/the-list/list-entry/1390857; https://historicengland.org.uk/listing/the-list/list-entry/1311695; https://historicengland.org.uk/listing/the-list/list-entry/1328526) and we would welcome further discussion with Defra on how this objective can best be implemented.</p>	
<p>7. We would strongly encourage the inclusion of equivalent objectives on the cultural importance of fishing in the other three Tranche 4 FMPs. These three FMPs have objectives on better understanding, optimising and realising economic and social benefits, which we would expect to encompass cultural benefits: but express objectives on culture would provide greater stimulus to delivery. We would also like to underline the role that greater recognition of the proud history and heritage of fishing would play in delivering objectives on partnerships and collaborative working relationships. We would welcome conversations with Defra about how greater attention to the cultural heritage of fishing could contribute to sustainable fisheries and strengthened coastal communities.</p>	<p>Defra will consider the inclusion of equivalent objectives on the cultural importance of fishing in the other three Tranche 4 FMPs.</p>
<p>8. We look forward to the Environmental Reports evaluating the potential effects (negative and positive) of all four</p>	<p>Defra will consider in the Environmental reports the points raised by HE.</p>

Point #	How point was considered
<p>Tranche 4 fisheries on cultural heritage and landscape/seascape. In light of comments above, we would expect each Environmental Report to address:</p> <ul style="list-style-type: none"> • Interactions between fishing gear and marine heritage assets on the seabed. • Impacts on heritage arising from physical disturbance to the seabed. • Impacts on heritage from the input of litter (ALDFG). • Impacts on landscape/seascape including prehistoric seabed formations, blue carbon habitats, and seabed carbon dynamics. • Potential to enhance the cultural heritage of these fisheries and the contribution it makes to coastal communities and places. 	
<p>9. We look forward to discussing with Defra the evidence required to achieve this with respect to cultural heritage and landscape/seascape. It would be helpful to know what evidence has already been collated on fishing, cultural heritage, and landscape/seascape through a) existing and current programmes on MPAs, b) Defra's Revised Approach to fisheries management programme, c) the MMO's Fishery Assessment programme, and d) the UK Marine Strategy (UK MS – and see below).</p>	<p>Noted. Defra would welcome further discussions with HE to consider this point.</p>
<p>10. We appreciate again the acknowledgement that cultural heritage and landscape/seascape are not considered under the UK MS assessment process. We would be very</p>	<p>Noted. Defra would welcome further discussions with HE to consider this point.</p>

Point #	How point was considered
<p>pleased to discuss with Defra how they might be brought within that process, and/or how suitable indicators and monitoring measures can be developed for cultural heritage and landscape/seascape alongside UK MS.</p>	
<p>11. We look forward to the FMPs proposing new measures and interventions to mitigate negative effects (and enhance positive effects) arising from interactions between the Tranche 4 fisheries and cultural heritage and landscape/seascape. We also look forward to proposals for future monitoring of the effects of the Tranche 4 FMPs on cultural heritage and landscape/seascape. We would, of course, be very pleased to discuss with Defra these new measures, interventions, and monitoring proposals in the course of their development.</p>	<p>Noted. Defra would welcome further discussions with HE to consider this point.</p>
<p>12. We would also suggest that prior to formal consultation, Defra goes beyond the SNCBs in seeking and considering advice on the impacts of fishing activity, to include ALBs such as Historic England that can provide relevant advice on such impacts. Framing advice from statutory consultees in terms of MPAs and UK MS descriptors – which are acknowledged in the Scoping Reports as not encompassing the full scope of SEA – will clearly allow only partial assessments.</p>	<p>The Environmental Reports will include reference to the Fishing and the Historic Environment report produced by Historic England, which will be used as the primary source of information on the interactions between commercial fishing and the marine historic environment in English waters.</p> <p>Defra would welcome discussions with HE to further consider the impacts of fishing activity on the marine historic environment.</p>

Environment Agency Response

No response received.

How the consultation response was considered

Point #	How point was considered
N/A	N/A

Cadw Response

We have read the SEA scoping report and note that cultural heritage is not considered under the UK Marine Strategy assessment process, therefore no predetermined sub-sections are available: However, the interaction between fishing gear and marine heritage assets has been identified as a potentially relevant impact related to fishing activity and therefore this issue has been specifically scoped into the SEA. We concur that this is an issue that should be included in the SEA.

Note: The same response was provided for both the Celtic Sea and Western Channel (CSWC) Demersal and Celtic Sea and Western Channel (CSWC) Pelagic FMPs.

How the consultation response was considered

Point #	How point was considered
However, the interaction between fishing gear and marine heritage assets has been identified as a potentially relevant impact related to fishing activity and therefore this issue has been specifically scoped into the SEA. We concur that this is an issue that should be included in the SEA.	Cultural heritage has been scoped into the Celtic Sea and Western Channel (CSWC) Demersal FMP and Celtic Sea and Western Channel (CSWC) Pelagic ERs.

Natural Resources Wales Response



Natural Resources Wales
Cathays Park
Cardiff CF10 3NQ

17 January 2025

By e-mail

STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) SCOPING REPORT FOR THE CELTIC SEA AND WESTERN CHANNEL PELAGIC FISHERIES MANAGEMENT PLAN (FMP)

Thank you for consulting Natural Resources Wales (NRW) on the SEA Scoping Report for the draft Celtic Sea and Western Channel Pelagic FMP.

We welcome the FMP programme, and the opportunity these FMP SEA Scoping Reports provide to advise on the sustainable development and management of fisheries where relevant to Welsh waters.

The statutory purpose of NRW is set out by the Environment (Wales) Act 2016. In the exercise of its functions NRW must pursue sustainable management of natural resources in relation to all its work in Wales and apply the principles of sustainable management of natural resources as far as that is consistent with the proper exercise of its functions.

NRW's duty (in common with the other public bodies covered by the Well-Being of Future Generation (Wales) Act 2015) is to carry out sustainable development. This means, in general terms, looking after air, land, water, wildlife, plants, and soil to improve Wales' well-being, and provide a better future for everyone. NRW are also advisors to the Welsh Government on the natural heritage and resources of Wales and its coastal waters.

Under the Environmental Assessment of Plans and Programmes Regulations 2004 (as amended) (the SEA Regulations), NRW is a statutory consultee for all plans, programmes & strategies (PPS) within Wales and for those outside Wales whose effects could extend in to and have effects upon the environment of Wales. NRW is also the appropriate nature conservation body (ANCB) for Wales under the Conservation of Habitats and Species Regulations 2017 (as amended) in relation to

sites within twelve nautical miles of the coast. NRW has fisheries management duties under the Salmon and Freshwater Fisheries Act 1975 within six nautical miles of the coast. Our comments are therefore provided in the context of all these responsibilities.

SEA scoping process

The purpose of undertaking an SEA for the FMP is to prevent, reduce and as fully as possible offset any significant adverse impacts on the environment from the proposed objectives, policies and management interventions before the FMP is introduced.

Undertaking an SEA (and also a *plan-level* Habitats Regulations Assessment) is a key step in ensuring the FMP delivers sustainable management of marine natural resources, as it will allow an evidence-based understanding of the effect of implementing the FMP on the environment, and the opportunity to mitigate and manage any negative effects.

It is apparent from the seven FMP SEA Scoping Reports that we have commented upon, including this Scoping Report, that the content is extremely high level and follows a similar pattern of deferring the provision of detail to the Environmental Reports. Unfortunately, no drafts of the relevant FMPs have been provided alongside the Scoping Reports for reference. Without this information it is challenging for consultees to provide meaningful advice on the scope of the SEA or to identify potential effects, mitigation or wider management that may be required in advance of the Environmental Report.

We welcome the intention of the SEA to assess the nature and extent of likely effects of the draft Celtic Sea and Western Channel Pelagic FMP. Including the potential positive and negative environmental effects of its policies, goals, and measures, on the environmental issues scoped into the SEA. Setting out in broad terms how the FMP will seek to avoid, reduce, or at least mitigate significant negative effects.

We also welcome the intention for FMPs to propose new interventions to contribute to the mitigation of negative environmental effects from fishing activities not currently assessed or being managed, for instance those that occur outside MPAs in England and those that occur both within and outside MPAs in Wales. Please see points 1 to 5 in the Annex to this letter.

Plan-level Habitats Regulations Assessment (HRA) under the Conservation of Habitats and Species Regulations 2017 (as amended)

To date, all of the FMP SEA Scoping Reports we have commented upon have clearly relied upon the Test of Likely Significant Effect (TLSE) screening process under Regulation 63 of The Conservation of Habitats and Species Regulations 2017 to determine if an SEA is required. In section 5.1 of the draft Celtic Sea and Western Channel Pelagic FMP, the Fisheries Policy Authorities (FPA's) conclude that:

"It is not possible to rule out actions arising from the draft Celtic Sea and Western Channel Pelagic FMP having a likely significant effect on a European site or a European offshore marine site."

And the FPA's screening exercise for the draft Celtic Sea and Western Channel Pelagic FMP:

"indicated that fishing activities covered by the draft Celtic Sea and Western Channel Pelagic FMP have the potential to affect multiple European marine sites, plus the wider marine environment. Therefore, the UK fisheries policy authorities will need to assess the implications of the FMP for those European site(s) in light of its/their conservation objectives."

So far, all the FMP SEA Scoping Reports we have commented upon have concluded their respective TLSEs have been unable to rule out likely significant effects from the actions arising or activities covered by the FMP concerned on features of European marine sites or European offshore marine sites (collectively referred to as EMS).

As the FMPs are not directly connected with or necessary for the management of any EMS then Regulations 63(1)(a) and 63(3) of the Conservation of Habitats and Species Regulations 2017 apply. The FPAs (as the competent authority) "*must make an appropriate assessment of the implications of the plan or project for that site in view of that site's conservation objectives*" and "*must for the purposes of the assessment consult the appropriate nature conservation body and have regard to any representations made by that body within such reasonable time as the authority specifies*".

We agree with your conclusions and as your ANCB we welcome the provision of the respective plan-level HRAs for statutory consultation.

Similarly to SEA, the assessment of plans under the *Conservation of Habitats and Species Regulations 2017* are a useful strategic assessment of potential impacts. It is worth noting that plan-level HRA is narrower than SEA and focusses on whether there could be adverse effects to the relevant habitat and species features of EMS within scope of the plan area.

Adverse effects on features of EMS could be identified from ongoing activities, from the introduction of the FMPs or from management changes introduced later etc. While it is often appropriate to defer consideration of adverse effects

to a later date when a more specific and detailed 'project-level' HRA is conducted, the usefulness of a plan-level HRA is to provide an opportunity to identify, mitigate or rule out those potential and strategic impacts. This provides FPAs with advance notice of project-level issues before they arise and to develop programmes to fill evidence gaps.

For the purposes of a plan-level HRA, please be advised that programmes of fisheries assessment and management in England including Defra's completed Revised Approach to fisheries management programme (inside 6nm) and the MMO's ongoing Fishery Assessment programme (outside 6nm), cannot be relied upon in Wales. Welsh Government has not instigated a systematic programme of fisheries assessment and management therefore the effects of pelagic fishing should be considered both within and outside of MPAs within a plan-level HRA. Please see points 1 to 5 in the Annex to this letter.

Further advice

We have provided further detailed comments on the draft Celtic Sea and Western Channel Pelagic FMP Scoping Report in an Annex to this letter. In our detailed comments we highlight information that we consider necessary to ensure that the Environmental Report is comprehensive and addresses the effects of implementing the draft Celtic Sea and Western Channel Pelagic FMP.

Annex

This annex provides more detailed comments on the draft Celtic Sea and Western Channel Pelagic FMP SEA Scoping Report. It has been prepared with reference to NRW's internal SEA Scoping Response Guidance. We have highlighted information that we consider necessary to ensure that the Environmental Report is comprehensive and addresses the effects of implementing the draft Celtic Sea and Western Channel Pelagic FMP.

Environmental report content

1. We support the inclusion of assessments mentioned in Section 5.3 of the Scoping Report, which have already been conducted or are ongoing as part of the UK's obligations under legislation relating to MPAs. These assessments include Defra's completed Revised Approach to fisheries management programme (inside 6nm) and the MMO's ongoing Fishery Assessment programme (outside 6nm).
2. However, both these fisheries assessment and management measures programmes are geographically limited to English waters.
3. Unfortunately, there is no equivalent structured programme of assessment and management of fisheries activities (with features of MPAs) in the Welsh Zone to rely

on for the Environmental Report and plan-level HRA. Therefore, Welsh Government will need to consider the potential effects from all relevant fishing activities on the habitat features of MPAs throughout the Welsh Zone and on the species features of MPAs wherever they are within the Welsh Zone.

4. JNCC will provide nature conservation advice to Welsh Government on the impacts to features outside of 12nm of the coast in the Welsh Zone in relation to this SEA Scoping Report, the future FMP Environmental Report, and the plan-level HRA.
5. The NRW [Assessing Welsh Fisheries Activities \(AWFA\) Project](#) provides generic evidence based assessments of fishing gear interactions with protected features of EMS but the project outputs do not assess the impacts from specific Welsh fisheries, or propose, or introduce management measures.
6. The potential effects of the fishery on the Favourable Conservation Status of Annex 1¹ habitats outside of sites at a national level should also be considered in the Environmental Report.
7. SSSIs are intertidal and so are unlikely to be affected by the fishing activities unless they occur on high tides in shallow inshore or intertidal waters.
8. Skomer is currently the only Marine Conservation Zone (MCZ) in Wales. The impacts from the FMP objectives, policies and management interventions will therefore need to be assessed in relation to the MCZ.
9. WFD water bodies in Wales may also be affected by the pelagic fisheries considered as fish species are a quality element of transitional water bodies.
10. Welsh Government should also consider their duties under the Environment Act (Wales) 2016 within the Environmental Report. Section 6 of the Act requires that 'public authorities must seek to maintain and enhance biodiversity [of the Section 7 habitats and species] as far as consistent with the proper exercise of their functions and in so doing promote the resilience of ecosystems.
11. The Environmental Report should consider the impacts on ecosystem resilience through impacts on its four measurable attributes – Diversity, Extent, Condition & Connectivity of Ecosystems Assessment (DECCA)².
12. Section 3.1 scopes in demersal trawls as an activity that targets sardines, anchovy, herring, horse mackerel and greater silver smelt. While these pelagic species may sometimes be taken as a bycatch in demersal trawls they are not targeted by demersal trawls. We advise demersal trawls can be scoped out of the draft Celtic Sea and Western Channel Pelagic FMP.
13. Section 5 refers to horse mackerel being taken in demersal trawls; this is likely to be a bycatch rather than a targeted fishery³.
14. The majority of pelagic gear, if operated effectively, will not cause physical disturbance to the seabed. Benthic impacts should be limited to anchors on fixed pelagic nets.
15. It is important the Environmental Report reflects the two-way nature of links and effects of the PPS considered. The PPS could be affected by the FMP and might also affect it.
16. Irelands marine planning process should be included in the Environmental Report.
17. The Environmental Report should also consider the Welsh Natural Resources Policy, and the relevant marine parts of Welsh Area Statements produced under the Environment (Wales) Act 2016.

18. Welsh Government should be asked for a complete list of relevant Welsh Statutory Instruments that apply to the fishing activities considered under this FMP in the Welsh Zone for inclusion in the Environmental Report.
19. Relevant [North Wales Welsh Government Fisheries Byelaws](#) and [South Wales Welsh Government Fisheries Byelaws](#) should be included in the Environmental Report.
20. 'Securing a Sustainable Future: Environmental Principles, Governance and Biodiversity targets for a Greener Wales' consultation 2024 should be included in the Environmental Report.
21. Section 4 does not make any linkages with PPS associated with other maritime sectors for example offshore energy and Defra's Marine Spatial Prioritisation (MSPri) work programme.
22. The Environmental Report should consider the possibility of in-combination or cumulative impacts of the FMP with other marine sectors such as offshore energy (oil, gas, renewables), cabling, aggregate extraction etc.
23. The Environmental Report should assess the impacts from spatial squeeze caused by MPAs or offshore renewables alongside the potential displacement of fisheries due to any relevant FMP policy, action, or management measures.
24. The Environmental Report should identify any key evidence gaps to be considered when designing future monitoring of the FMP mentioned in Section 7 of the Scoping Report.
25. The final FMP text will need to consider and address any negative effects of the draft FMP assessed through the Environmental Report (and *plan-level* HRA).
26. It is not clear how any additional measures to address risks or impacts mentioned in the Scoping Report will be determined, or how these will be secured and delivered. For example, will mitigation identified in an Environmental Report (and *plan-level* HRA) be written into the final FMP as part of an iterative development process?
27. The Environmental Report should include UK Marine Strategy Descriptor D2, there are risks posed by the introduction and/or spread of marine INNS by fishing boats and gears moving areas.
28. We advise that the assessment of marine litter under UK Marine Strategy Descriptor 10 includes lost fishing gear and vessel flotsam and jetsam.
29. The Environmental report should also include UK Marine Strategy Descriptor D9 'contaminants in fish and other seafood for human consumption' due to the risk of microplastics entering the food chain from degrading fishing gear lost as litter.
30. We agree with the scoping out of contaminants by fishing boats e.g. oil or fuel spills under UK Marine Strategy Descriptor D8 as this impact pathway is managed by other competent authorities such as the Maritime and Coastguard Agency, and legislation such as MARPOL, rather than the FMP.

Environmental baseline

31. No baseline environmental information has been provided within the Scoping Report. This is a missed opportunity to scope this content before producing the Environmental Report.
32. The proposed use of the UKMS descriptors alone to define the baseline

environment condition is likely to be insufficient. The UKMS descriptors are high level and broad. The Environmental Report should describe the environmental baseline, at a scale and level of detail appropriate to identify any existing environmental issues, challenges, or tensions with the proposed baseline.

33. The marine environment is subject to a range of pressures derived from multiple human activities. It is important that the environmental baseline differentiates between the influence of other marine activities and the fishing activities being considered.
34. In addition, the baseline needs to sufficiently reflect regional issues due to the effect of the fishing activity acting on local receptors in those areas. The actual status of the marine environment or baseline in areas where pelagic fishing is occurring (or may occur in the future) may be significantly different to the UK-wide UKMS descriptor assessment generalised summary.
35. The Environmental Report should identify future trends in the environmental baseline in the absence of the FMP.

Receptor advice

36. We welcome the Scoping Report including the assessment of effects upon 'Biodiversity, fauna and flora' in Table 2. However, no detail of the methodologies to be used in the Environmental Report assessment have been provided and therefore it is not possible for us to provide more detailed advice on whether the report will sufficiently assess all the relevant effects of the FMP on the relevant receptors.
37. We advise that ICES assessments have indicated that herring have depleted populations in the Celtic Sea. The Environmental Report should clearly set out how herring will be managed by the FMP to restore them to MSY.
38. The risk assessments in Table 2 'Biodiversity, fauna and flora' do not include impacts to Annex 2⁴ fish (lamprey, shad, salmon) species, these should be included within the Environmental Report
39. The mobile species risk assessment conclusions in Table 2 for 'Biodiversity, fauna and flora' apply to English waters only.
40. We are currently producing equivalent pelagic gear risk assessments for the Welsh Zone for both habitats and mobile species of MPAs. Risk Assessments should be complete by April 2025. These high-level risk assessments can be used to inform the FMP Environmental Report and the plan-level HRA.
41. The Environmental Report should consider the impacts from fishing activities on habitat and mobile species features (birds, mammals and fish) both within and outside of Welsh MPAs as there is no equivalent to Defra's completed Revised Approach to fisheries management programme (inside 6nm) and the MMO's ongoing Fishery Assessment programme (outside 6nm) in the Welsh Zone to rely on. See points 1 to 5 of this Annex.
42. The Environmental Report should fully consider and assesses the positive and negative effects that the FMP could have on relevant protected features in the Welsh Zone, for example, through changes to fishing effort (increased effort, spatial changes in effort, displacement of effort), or changes to fishing methods etc. from implementing the FMP.

43. Information on sensitive habitats and their resilience and recovery rates from impacts resulting from the FMP should be included in the Environmental Report. Potential negative effects resulting from the FMP on marine habitats features in Welsh waters could include, for example, habitat loss, degradation or disturbance and impacts related to the ingress and spread of INNS.
44. Information on sensitive species in the Welsh Zone and how they could be affected by measures proposed in the FMP should be included in the Environmental Report. Potential negative effects resulting from the FMP on species features in Welsh Zone could include, for example, increased bycatch or collisions, increased disturbance, and reduced prey availability.

Additional comments

45. We welcome goal to *'better understand the cultural significance of these fisheries and consider this in developing FMP actions and measures'* to safeguard cultural heritage.
46. In relation to Welsh Government's Well-being of Future Generations Act 2015 responsibilities, Welsh Government should consider the impacts of the FMP on Welsh coastal communities and the Welsh language in the Environmental Report.
47. Table 2 Population – Welsh Government may also want to consider scoping in 'population' as rural coastal fishing/crofting includes economic and societal factors that could affect or change remote coastal populations that rely on fishing and could be impacted by the FMP.
48. The current description of seascapes used within the Scoping Report is not accurate. A seascapes assessment refers to the potential impact of the assessed activity on the visual character of the area. Any interaction between fishing gear and the substrate will be considered in MSFD Descriptor D6 Sea-floor integrity assessment.

How the consultation response was considered

Welsh Government and DEFRA have consulted with statutory nature conservation advisors including Natural Resources Wales (NRW) with regards to the scope and level of detail the Celtic Sea and Western Channel Pelagic SEA environmental report (ER). Some comments provided by NRW, as part of the consultation in preparation of the ER, have already been addressed by the ER. Outstanding comments/advice including the timing of Habitats Regulations Assessments (HRA) are considered below.

The FMP follows a high-level strategic assessment framework using UK Marine Strategy descriptors as benchmarks for environmental assessment.

An assessment of the FMP goals are set out in section 5 of the ER. Many of the FMP goals have the potential to recommend subsequent inshore and offshore management

measures which may change the characteristics of the relevant fisheries in some way and a reasonable summary of positive and negative effects are provided.

Changes to the fishery could be spatial, temporal or effort linked. However, it is important to draw the distinction between the possible effects of high-level strategic objectives being met and any resulting recommended management measure being adopted.

For example, Goal 3. suggests Defra and Welsh Government seek to improve datasets for all stocks. In both statutory and practical terms, until management measures are identified through this process, any effects cannot be reliably identified and assessed. In this example, Goal 3 is to seek rather than to implement the actions. Until these actions have been considered and suitable management actions identified it would not be possible to attempt to assess the type or scale of resultant impacts or effects on relevant MPAs and associated protected habitats and species.

Before any recommended management change is implemented, changes to fishery regulations controlling the existing fishery would be required. This legislative change would provide the appropriate opportunity to fully assess the then known scope and potential impacts or effects of the new management change in line with the Conservation of Habitats and Species Regulations 2017 and address any outstanding advice provided by NRW. Before this point, no real-world changes which may subsequently be caused (and assessed via HRA) as a result of a potential management change could be transmitted through to any protected Welsh MPAs, habitats or species because the FMP itself is not making any management changes or implementing new management measures.

Welsh Government and DEFRA have consulted with statutory nature conservation advisors including Natural Resources Wales (NRW) with regards to the scope and level of detail the Celtic Sea and Western Channel Pelagic SEA environmental report (ER). Some comments provided by NRW, as part of the consultation in preparation of the ER, have already been addressed by the ER. Outstanding comments/advice including the timing of Habitats Regulations Assessments (HRA) are considered below.

The FMP follows a high-level strategic assessment framework using UK Marine Strategy descriptors as benchmarks for environmental assessment.

An assessment of the FMP goals are set out in section 5 of the ER. Many of the FMP goals have the potential to recommend subsequent inshore and offshore management measures which may change the characteristics of the relevant fisheries in some way and a reasonable summary of positive and negative effects are provided.

Changes to the fishery could be spatial, temporal or effort linked. However, it is important to draw the distinction between the possible effects of high-level strategic

objectives being met and any resulting recommended management measure being adopted.

For example, Goal 3 suggests Defra and Welsh Government seek to improve datasets for all stocks. In both statutory and practical terms, until management measures are identified through this process, any effects cannot be reliably identified and assessed. In this example, Goal 3 is to seek rather than to implement the actions. Until these actions have been considered and suitable management actions identified it would not be possible to attempt to assess the type or scale of resultant impacts or effects on relevant MPAs and associated protected habitats and species.

Before any recommended management change is implemented, changes to fishery regulations controlling the existing fishery would be required. This legislative change would provide the appropriate opportunity to fully assess the then known scope and potential impacts or effects of the new management change in line with the Conservation of Habitats and Species Regulations 2017 and address any outstanding advice provided by NRW. Before this point, no real-world changes which may subsequently be caused (and assessed via HRA) as a result of a potential management change could be transmitted through to any protected Welsh MPAs, habitats or species because the FMP itself is not making any management changes or implementing new management measures.