



MSC UK and Ireland State of the Water Report 2023

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Preface

The MSC's vision is of the world's oceans teeming with life and seafood supplies safeguarded for this and future generations. We use our blue MSC ecolabel, and fishery and supply chain certification programmes, to support the health of the world's oceans, by recognising and rewarding sustainable fishing practices.

Our goal is to have more than one third of global marine catch certified or engaged with the MSC programme by 2030, supporting productivity and resilience in the world's oceans. Achievement of this goal is ambitious but essential, as it will make a significant contribution to the delivery of the United Nations Sustainable Development Goal 14 – Life Below Water - target. In the UK and Ireland our aim is to increase the number of fisheries engaged in MSC's programme and have at least one third of the UK and Ireland's catch certified, in assessment, or transitioning into the programme by 2030.

As a mission-driven organisation, it is vitally important that certification leads to change on the water. People buying seafood products with the [blue MSC ecolabel](#), as well as the seafood businesses that use it, are then confident that their choices are directly helping to transform the seafood market to a sustainable one, and have a direct, positive impact on our oceans.

In this first State of the Water report for the United Kingdom and Ireland, we provide a detailed analysis on the positive effect that certification is having on the fisheries that have chosen to be assessed against the [MSC Fisheries Standard](#). You will see evidence of how certification provides a credible and robust measure of the health of certified fisheries stocks, how these fisheries minimise their impact on the marine environment, and how the management measures they use ensure that this good practice is maintained.

The report demonstrates how MSC certification has not only recognised sustainable practice at the point of initial assessment, but also how maintaining it is driving a fishery's commitment to continuously improving performance and meet best practice, validated through annual MSC audits. Analysis of these improvements profile how the United Kingdom and Ireland's MSC certified fisheries are demonstrating their world leading position for sustainability, to seafood markets and consumers around the world.

Policy makers, NGOs and academics are increasingly recognising that scaling up the production of sustainable food from oceans, rivers and lakes, known as blue foods, is one of the most effective ways to feed a growing global population while reducing the environmental impacts of food production. MSC certified fisheries in the UK and Ireland have a vital role to play in this 'Blue Foods' revolution.

Not only do blue, aquatic foods have, on average, greater nutritional benefits than meat from terrestrial animals, seafood production usually has fewer environmentally harmful impacts than the production of land-based proteins. Generally, carbon emissions from seafood production are significantly lower than red meat production. Wild caught

small pelagic fish like sardines, mackerel and herring, have among the lowest environmental impacts, while bivalves – shellfish such as mussels, clams and oysters – generate fewer greenhouse-gas emissions and are more nutrient dense than beef, pork or chicken¹.

Certification is a transparent process that depends upon the engagement of a wide array of relevant stakeholders, who actively contribute to fishery's MSC assessment journey. This ensures that fisheries achieving certification have willingly opened their day-to-day practices and data to external scrutiny and continue to do so as a requirement of maintaining certification. The MSC process actively requires that stakeholders are invited to participate in assessments, and in this report, we detail the positive influence that these stakeholders make to ensure the process remains credible and trusted.

The MSC's mission is designed to tap into the positive influence of market forces, utilising seafood consumption and consumer demand for sustainable products to incentivise increasing participation. We call this virtuous circle our 'Theory of Change'. As more certified seafood enters the market, consumers are given a greater choice of MSC products. This increases demand, led by businesses putting certification at the heart of their sustainable sourcing policies. Suppliers to those businesses translate that demand by sending stronger signals back to their source fisheries on the business case for certification. MSC's [UK and Ireland Market Report](#) outlines the power of consumer choice in achieving sustainable outcomes for our ocean. As more leading fisheries seek certification to demonstrate their sustainable practices, the environmental performance on the water is driven up, reflecting consumer preference for our oceans to be sustainably managed.

Seeing the number and range of fisheries engage in the MSC programme is the strongest indication of our Theory of Change in action. The fisheries presented within this report and their retention of certification, are testament to the dedication of the UK and Irish fishing industry's commitment to sustainability, and their desire to demonstrate that they are world leading and operating at the MSC's high bar of best practice. Through the recognition and reward of the blue MSC ecolabel being placed on products sourced from these fisheries, we hope that more will attain that same acknowledgment and realise the opportunity for UK and Ireland fisheries management to become truly world leading.

We passionately believe that the MSC, as a solutions-orientated programme, is a force for good, helping to secure livelihoods that depend on a sustainable fishing industry, sustainable food for a growing global population, and maintaining healthy oceans, around the UK and Ireland and all over the globe.

Thank you for taking the time to read our report.

George Clark, UK and Ireland Programme Director

¹Source: Coleman, J., [Eat more fish: when switching to seafood helps — and when it doesn't](#) (2022)

Introduction

This State of the Water report outlines the positive change in UK and Irish fisheries that has been driven by the MSC programme, and the impacts that this has had on the water. Its scope covers the 19 UK and Irish fisheries that are currently MSC certified (a detailed list of the fisheries analysed in this report can be found in the Annex).

The MSC's journey in the UK and Ireland has lasted over 23 years: the first fishery in the UK to gain certification—and one of the first fisheries in the MSC's programme globally—was the Thames Blackwater herring drift-net fishery, in the year 2000. Although no longer certified, this certification marked the beginning of fisheries in the UK and Ireland entering and succeeding becoming MSC certified. The Burry Inlet cockle fishery was the first fishery within the scope of this report to become certified, in 2001, and has maintained certification ever since. During these past 23 years, UK and Irish fisheries have made significant progress in demonstrating their sustainability, through gaining MSC certification. One quarter (25%) of the UK's national landings now come from MSC certified fisheries, as do 8% of the Republic of Ireland's (both combined amounts to 20%). The waters around the British Isles contain biodiverse yet sensitive ecosystems, and the incentives provided by the MSC programme have encouraged UK and Irish fisheries into not only taking greater care in how they operate, but also better observing and studying their impacts, enabling a deeper understanding of how fisheries can reduce their effect on the surrounding environment.

The MSC performance indicators scored during their assessments demonstrate that these fisheries have actively reduced their impact on the surrounding environment and managed their stocks to ensure their health, helping secure productive and sustainable fisheries for future generations. Furthermore, 146 improvements towards demonstrating best practice on the water have been made across this 20-year period,

through the closing of conditions and improvements that are required as part of participation in the programme. Finally, through the open and inclusive stakeholder consultation process, the growth of MSC in the UK and Ireland has brought more stakeholders into the sustainable fishing conversation. Stakeholder input has not only been vital in assuring that the Fisheries Standard is applied correctly when assessing fisheries during the auditing process, but also in helping ensure careful attention is paid to every detail, no matter how small, in the assessment reports.

In October 2022, after significant stakeholder engagement, the [MSC published the newest version of the Fisheries Standard \(version 3\)](#), in line with current best practice. The increased requirements to demonstrate mitigation of environmental impacts are intended to further encourage fisheries to improve their sustainability. In recognition of the importance of improving access and providing assurance to fisheries working on sustainability improvements globally, the MSC expanded the scope of its [In Transition to MSC \(ITM\) programme](#) in May 2023. ITM is intended to support fisheries in making measurable, independently verified progress towards best practice, and enable fisheries to demonstrate the credibility of their commitment to improving their sustainability. The [MSC's improvement tools](#) help fisheries identify where changes are needed, develop an action plan, and monitor progress in a transparent, structured way that empowers more fisheries to make the improvements necessary to secure their fishing operations into the future.

The MSC UK & Ireland team's hope is that this report and its insights on the progress that UK and Irish fisheries have made towards demonstrating best practice in sustainable fishing, while continuing to harvest and sell their catch, will inspire others to follow their lead.



UK and Ireland Fisheries Landscape

The UK and Ireland wild capture fishing sectors target a diverse variety of species: shellfish (e.g. mussels and lobster), demersal species (e.g. haddock and plaice), and pelagic species (e.g. sardines and herring). The volume of UK and Irish wild catch commercial landings combined was 868,578 metric tons in 2021², which came from 7776 UK and Irish commercial fishing vessels. Approximately 29,000 people are employed in the UK fish and seafood sector³ (including fishers and processors), with 15,300 employed in the Irish fishing industry⁴.

In 2023, there were 579 certified UK and Irish vessels listed as operating across 19 MSC certificates, which constitute approximately 7.5% of the combined national fleet of these two countries. Total landings from UK and Irish MSC certified fisheries are 174,744 metric tonnes (mt), which amounts to 20% of the national catch of these two nations and have grown steadily since the first fishery became certified. Across the decade preceding 2021, the volume of MSC certified catch within scope of this report grew by 300%, from 43,672 mt in 2011, to the 174,744 mt in 2021.

UK AND IRISH FISHERY LANDINGS BY SPECIES GROUP: MSC CERTIFIED VS. TOTAL (MT)

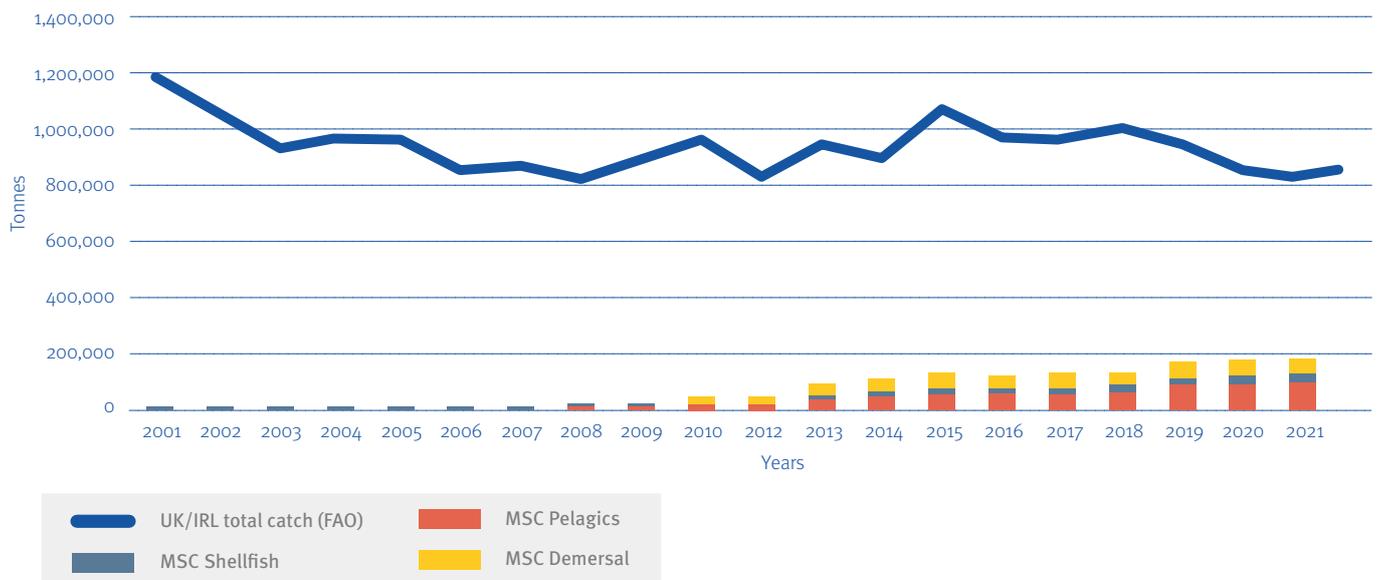


Figure 1: Historical UK and Irish landings by species group (MSC vs. total)

²Source: FAO, [FishStatj](#) (2023)

³Source: House of Commons Library, [UK Fisheries Statistics](#) (2022)

⁴Source: BIM, [Facts and Figures: A Seafood Snapshot](#) (2022)

UK AND IRISH FISHERY LANDINGS: MSC CERTIFIED PROPORTION OF TOTAL CATCH

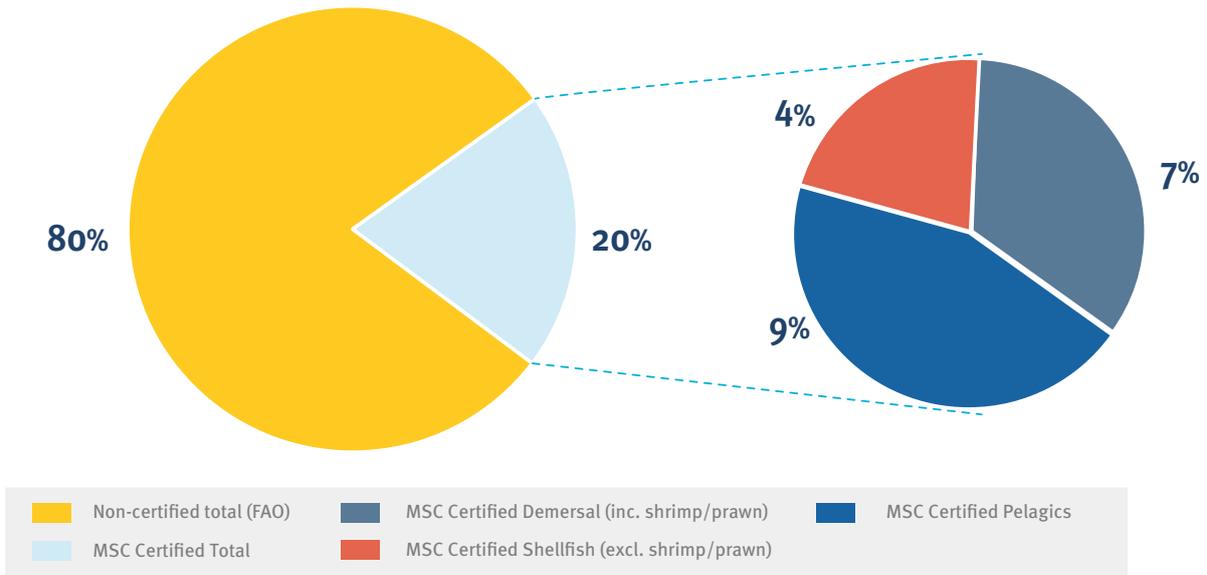
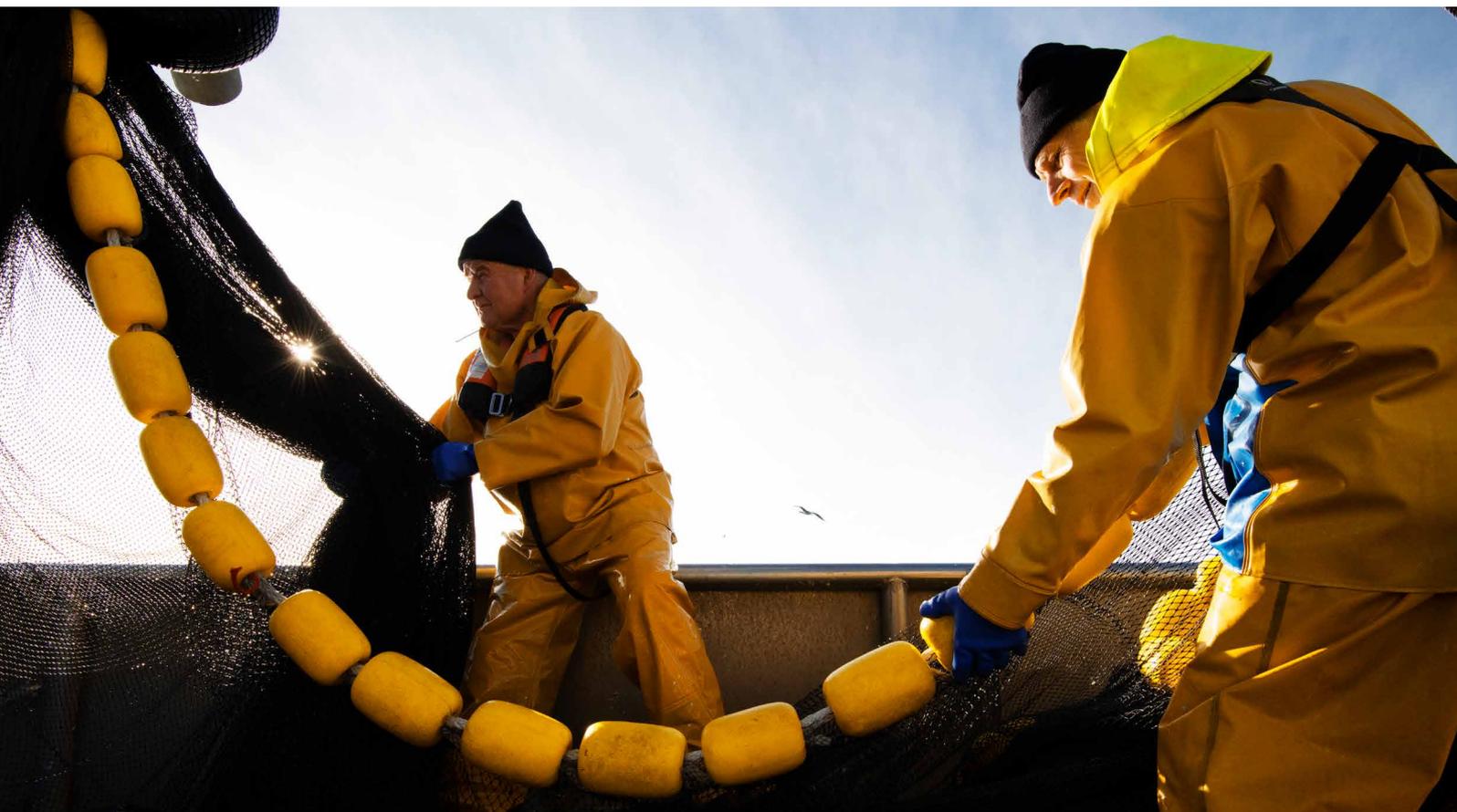


Figure 2: 2022 proportion of UK and Ireland certified landings by species group

It is important to note that whilst the current volume of MSC certified catch in the UK and Ireland is currently 20% of the total overall catch, key fisheries have lost their certification that would have, if they remained certified and thus in scope of this report, contributed towards a much greater proportion of the UK and Irish catch being certified sustainable. Northeast Atlantic mackerel lost its MSC status in 2019, owing to the [failure of the relevant Coastal States and Fishing Parties on that stock to agree fishing quota allocations within the scientific recommended limits](#). North Sea cod lost its MSC certification, also in 2019, after the [stock fell below the safe biological level](#). Both fisheries have since entered Fishery Improvement Projects (FIPs) which aim to directly resolve or advocate for resolution of the issues these fisheries face. Had both fisheries remained certified and in the MSC programme, the figure for the proportion of certified MSC catch vs. the total for the UK and Ireland, would have been close to 58%.



Political Developments: EU Exit

On June 23, 2016, the British public voted in favour of becoming the first member state to leave the European Union (EU). The implications of this decision are broad and wide-ranging, impacting many sectors and industries, but the impact of EU Exit on fisheries is of particular interest. This is because EU centralisation of fisheries policy was a frequently cited argument in favour of leaving the EU. UK fishers overwhelmingly supported leaving the EU, with one poll in the run-up to the referendum showing 92% of fishers in favour of leaving the EU⁵.

Following the confirmed departure from the Union, the resulting EU–UK Trade and Cooperation Agreement (TCA) came into force in 2021 and provides a basis for the overarching relationship between the EU and the United Kingdom⁶. This includes trade agreements and fisheries management. Through the TCA, the UK and EU have committed to ensuring that fishing for shared stocks is sustainable in the long term, by restoring populations of harvested species above biomass levels that can produce the maximum sustainable yield (MSY). The UK and EU will follow several principles aimed at ensuring long-term environmental sustainability, such as applying the precautionary approach to fisheries management, basing decisions on the best available scientific advice, and taking measures to ensure selectivity and avoidance of bycatch.

The TCA also sets out the allocation of quota between the EU and UK. Initial Brexit negotiations considered allocating quota based on zonal attachment, which would significantly increase the UK portion of shared stocks. However, by the time an agreement was reached, the actual increase represented a transfer of 25% (by value) of the EU's fishing rights back to the UK by June 2026, the equivalent of about £145 million per year⁷. Some species saw very large quota increases, such as Atlantic mackerel, North Sea herring, and Norway pout. The new quota shares, which are phased in from 2021 to 2025, increase the UK share for 63 of the 105 quotas in the agreement (and decrease for one quota, Celtic Sea saithe). The quota shares achieved for the UK through the TCA fall far short of zonal attachment estimates, (achieving 68% by weight and by value - a potential shortfall of 229,000 tonnes / £281 million)⁸. National Federation of Fisherman's Organisation (NFFO) analysis, published in September 2021, argues that £58 million is "paper fish" due to a lack of full quota uptake, and that much of the UK fleet incur losses as a result, rather than gains⁹.

Since the UK left the EU, there has been a decline in exports¹⁰ due to, amongst other effects, new trade barriers resulting from leaving the EU trade zone, resulting in a substantial impact on prices (up to 80% for some species), because of being unable to deliver to the EU market. There have been regular reports of increased administrative requirements, such as food safety checks, catch certificates, and veterinary checks for exports, leading to costly delays¹¹.

To support the fishing industry and wider sector, the UK Government launched the UK Seafood Fund in 2019¹². The UK Seafood Fund is a £100 million fund set up to support the long term future and sustainability of the UK fisheries and seafood sector. The fund is managed by the Department for Environment, Food and Rural Affairs (Defra) and split into four areas of funding: science and innovation, infrastructure, skills and training and exports support. The Fisheries and Seafood Scheme (FASS)¹³ provides financial assistance for projects that support the development of the catching, processing and aquaculture sectors, and for projects that enhance the marine environment and is available to applicants whose organisation and/or vessels are registered in England. The scheme provides funding for a range of projects that deliver the following high-level outcomes: creating a more sustainable and resilient sector, boosting the demand for English seafood and accessing new markets, improving participation through co-design and co-management, achieving good environmental status through the conservation and restoration of the marine environment and supporting net zero through reducing emissions within the industry.



In 2020 the new Fisheries Act¹⁴ gained Royal Assent, establishing a new regulatory framework that gives the UK full control of its fishing waters for the first time since 1973. The Fisheries Act provides a legally binding structure to protect and recover fish stocks, support a sustainable fishing industry, and safeguard the environment. In 2022 the UK devolved administrations published a Joint Fisheries Statement (JFS)¹⁵, which arises from a legal requirement in the Fisheries Act.

The JFS sets out the policies for achieving the eight fisheries objectives set out in the Fisheries Act. It sets out the ambition of the UK to continue delivering world class, sustainable management of fisheries in line with those objectives, and how it will do so. This includes the delivery of Fishery Management Plans (FMP) to set out the policies to secure the long-term sustainability of our fish stocks for current and future generations. Six frontrunner FMPs are underway for priority fisheries and have been drafted through co-management groups. These FMPs are out to public consultation in summer 2023, ready for publication by the end of 2023. A suite of Scottish FMPs are also expected to be published for consultation in 2024. FMPs provide a unique opportunity to deliver best practice fisheries management across UK fisheries.

⁵Source: University of Aberdeen, [Survey finds 92 per cent of UK fishermen will vote to leave the EU](#) (2016)

⁶Source: Foreign, Commonwealth and Development Office, [Trade and Cooperation Agreement](#) (2021)

⁷Source: APPG, [The Brexit Deal: How it affects fisheries](#) (2021)

⁸Source: [Maritime Studies, The Brexit deal and UK fisheries—has reality matched the rhetoric?](#) (2022)

⁹Source: NFFO, [Brexit Balance Sheet](#) (2021)

¹⁰Source: MMO, [UK Sea Fisheries Statistics](#) (2021)

¹¹Source: BBC, [EU shellfish import ban indefinite, UK fishing industry told](#) (2021)

¹²Source: Defra, [UK Seafood Fund](#) (2021)

¹³Source: UK Government, [Fisheries and Seafood Scheme](#) (2022)

¹⁴Source: UK Parliament, [Fisheries Act](#) (2020)

¹⁵Source: UK Devolved Administrations, [Joint Fisheries Statement](#) (2022)



What is a 'Fishery' at MSC?

To determine whether a fish has been caught sustainably, it is necessary to look not only at the species being targeted, but also at where and how it was caught. A certified 'fishery' is therefore always a combination of those factors, which means that, for example, herring is not itself certified as a whole species, but can only carry the blue MSC ecolabel if it is fished in the defined location and with the approved gear, by a vessel belonging to an MSC certificate. A fishery can consist of a small group of local fishers, or be a large international collaboration, as long as there is joint management of the fishery.

Being part of an MSC certificate means that the fishery may land MSC certified fish, so long as it has been caught according to the rules of that certificate. Once landed, [MSC's Chain of Custody Standard](#) ensures that there is no mixing of certified and non-certified catches throughout the supply chain.

For the purpose of this report, a fishery is defined by the certificate scope of the UK or Irish fishery, and so may contain multiple species or gear types. Only those fisheries that are currently certified have been considered in the analysis of progress, so any fisheries that were previously certified and are either currently suspended, in assessment, or are now withdrawn from the programme altogether, are out of scope.

When a fishery is assessed against the standard it is considered as a unit, that is comprised of these factors that define the fishery. Should the unit, or fishery, pass its MSC assessment, it then becomes a Unit of Certification, or UoC.

THE UNIT OF ASSESSMENT

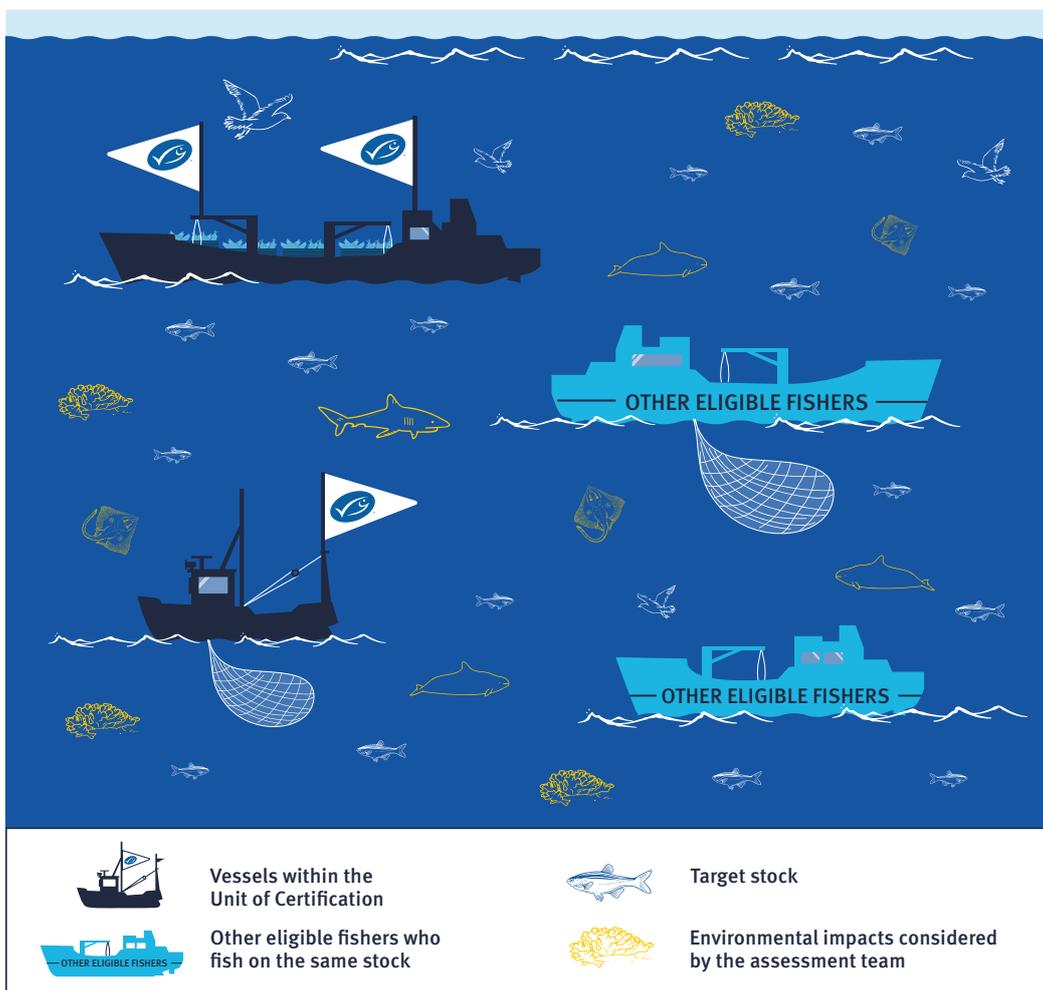


Figure 3: The Marine Stewardship Council's 'Unit of Assessment'

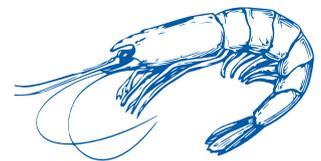
MSC Certified UK and Irish Fisheries

The following page lists the 19 MSC certified UK and Irish fisheries included within the scope of this report, as of May 2023, which target 18 different species. The annex contains more information on each fishery certificate. Full details, including their certification reports, can be found on the [MSC's Track-a-Fishery page](#), along with other relevant information (e.g. vessel lists) provided by the independent auditors. The [MSC UK & Irish Fisheries Spotlight](#) pages also provide further relevant information on the fisheries.

The updated version of the MSC Standard became mandatory for new fisheries entering the programme in May 2023, but at the point of writing this report, all UK and Irish fisheries were certified against Version 2.0 of the standard or earlier versions.

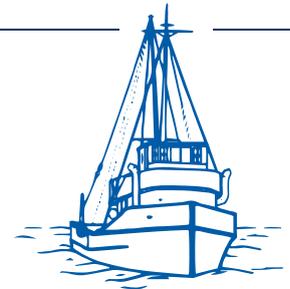
MSC DEMERSAL (incl. shrimp/prawn)

- Cornish hake gill net
- SFSAG Northern Demersal Stocks
- UK Fisheries Ltd/DFFU/Doggerbank Northeast Arctic cod, haddock and saithe
- UK Fisheries/DFFU/Doggerbank Group saithe
- Wash Brown Shrimp
- Scottish Fisheries Sustainable Accreditation Group (SFSAG) Rockall haddock



MSC Pelagics

- Cornwall sardine, UK
- Northern Ireland Pelagic Sustainability Group (NIPSG) Irish Sea herring
- Northern Ireland Pelagic Sustainability Group (NIPSG) North Sea herring
- PFA, SPSG, SPFPO, DFPO and DPPO North Sea Herring



MSC Shellfish (excl. shrimp/prawn)

- Dee Estuary and Burry Inlet cockles
- Normandy and Jersey lobster
- Shetland & Scottish Mainland Rope Grown mussel Enhanced Fishery
- SSMO Shetland inshore brown crab and scallop
- Thames cockle dredge
- The Poole Harbour Clam & Cockle Fishery
- Ireland Bottom Grown mussel
- Ireland Rope Grown mussel
- Northern Ireland Bottom Grown mussel



Fishing Grounds and Marine Life

UK and Irish fisheries operate in some highly biodiverse marine environments, making sustainable fishing practices absolutely critical. Principle 2 of the MSC Standard requires fisheries to demonstrate that they are minimising their environmental impacts. Fishing operations should be managed to maintain the structure, productivity, function, and diversity of the ecosystem on which the fishery depends, including other species and habitats.

Version 2.0 of the MSC Standard contains five components in Principle 2, which are intended to cover the range of potential ecosystem elements that may be impacted by a fishery. These are: *Primary species*, *Secondary species*, *Endangered Threatened and Protected species*, *Habitats*, and *Ecosystems*.

Each Principle 2 component is scored using three Performance Indicators (PIs): outcome, management, and information. The outcome PIs assess the current status of each component and whether the fishery is posing a risk of serious or irreversible harm to the component or hindering its recovery. The management PIs assess the arrangements in place to manage the impact that the Unit of Assessment (UoA) has on the Principle 2 components (or, in the case of ETP, that the UoA complies with any national or international requirements for protection of the species). The information PIs assess the adequacy of information available to support the management strategy.

Spatial management is a common approach to mitigating the impact of fisheries on the environment. The UK government has committed to protect at least 30% of the global ocean by 2030, known as '30by30'. The UK's comprehensive network of 374 MPAs protecting over 38% of UK waters will be a valuable contribution to this global target¹⁶. The Marine Management Organisation (MMO) is the government's principal regulator for most activities in English waters, and the Fisheries Act 2020 introduced new powers for the MMO to make byelaws to manage fishing for the conservation of marine flora, fauna, and habitats. The MMO is using these new powers to introduce fisheries management to protect 41 offshore MPAs and 10 inshore Marine Protected Areas (MPAs) by the end of 2024¹⁷.

The map below illustrates the network of MPAs, Special Protection Areas (SPAs), and Special Areas of Conservation (SACs) that protect many of these areas, as well as noteworthy ecological features. MSC certified fisheries operating in the UK and Ireland have taken many steps to ensure they are not harming these ecosystems, some examples of which are mentioned in this report. The section below details some of the important species and habitats of the region but is by no means a comprehensive list.

In addition to the legislative process for MPAs, MSC certified fisheries in the UK have also introduced voluntary closed areas. For example, the Scottish Fisheries Sustainable Accreditation Group (SFSAG) implemented a voluntary closure to protect all known records of *Funiculina* (a tall, narrow sea pen) in the Fladen Ground area. This closure was announced in May 2017 and continues to be monitored by Marine Scotland using Vessel Monitoring System (VMS) data and alerts. Another example is the West Shetland Shelf area (aka 'Windsock'), where there are no legislated management measures in place. A voluntary agreement has been actioned between the mobile gear sector and their counterparts in the static gear sector. This voluntary agreement comprises: areas of exclusive use for both mobile and static gears, an area of shared access subject to communication at the vessel level, increased VMS pings from vessels operating within close proximity to the MPA (10 miles) and ring-fenced monitoring by Marine Scotland Compliance of the area currently designated as creel only.

¹⁶Source: Defra, [UK takes further action to protect vital marine habitats](#) (2023)

¹⁷Source: MMO, [Managing fishing in marine protected areas](#) (2014)

UK AND IRISH MSC CERTIFIED FISHERY LOCATIONS

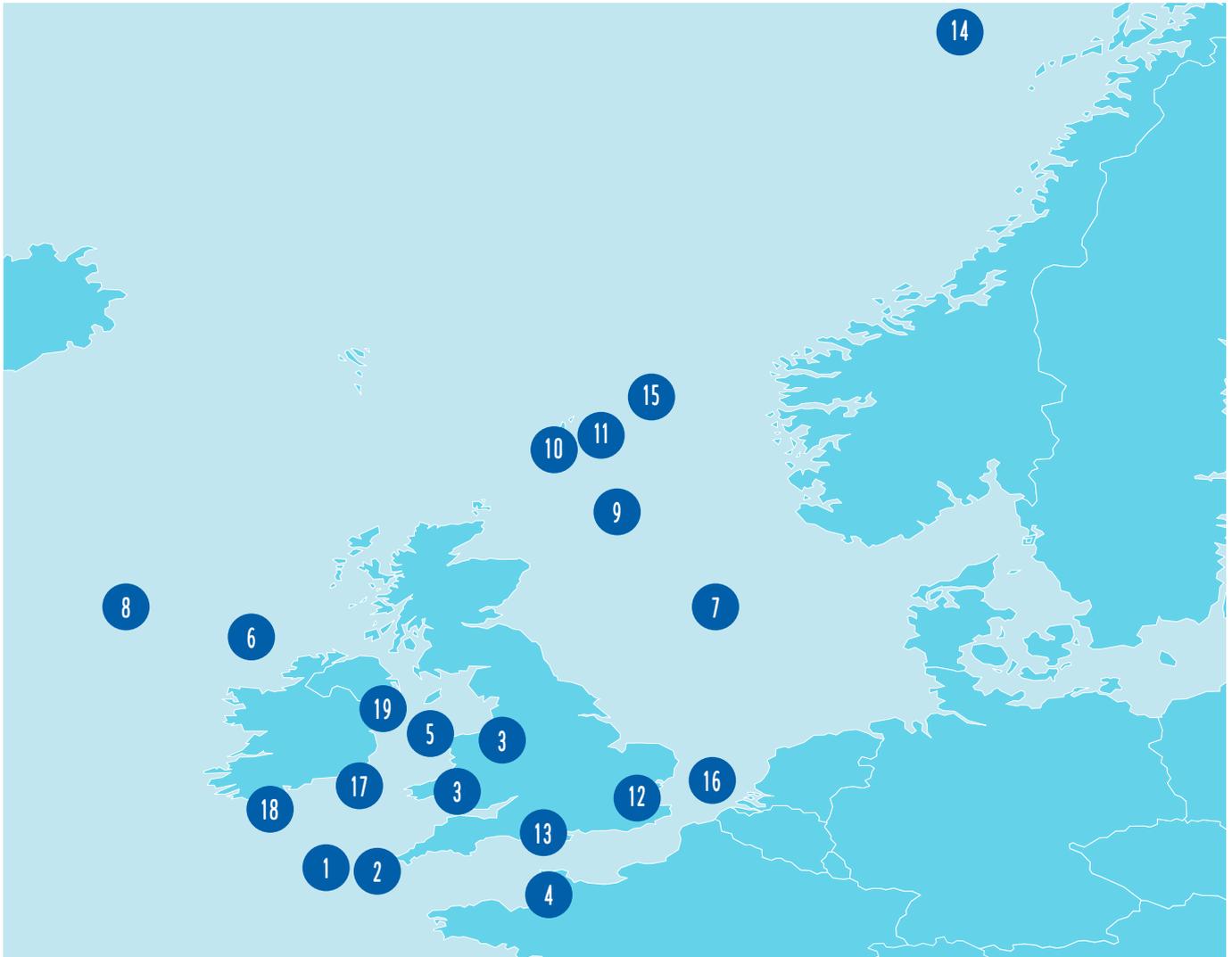


Figure 4: Map of MSC fisheries in the UK and Ireland

● Approximate location of MSC certified fisheries

- | | |
|--|--|
| 1. Cornish hake gill net | mussel enhanced fishery |
| 2. Cornwall sardine, UK | 11. SSMO Shetland inshore brown crab and scallop |
| 3. Dee Estuary and Burry Inlet cockles | 12. Thames cockle dredge |
| 4. Normandy and Jersey lobster | 13. The Poole Harbour clam & cockle fishery |
| 5. Northern Ireland Pelagic Sustainability Group (NIPSG) Irish Sea herring | 14. UK Fisheries Ltd/DFFU/Doggerbank Northeast Artic cod, haddock and saithe |
| 6. Northern Ireland Pelagic Sustainability Group (NIPSG) North Sea herring | 15. UK Fisheries/DFFU/Doggerbank Group saithe |
| 7. PFA, SPSG, SPFPO, DFPO and DPPO North Sea herring | 16. Wash brown shrimp |
| 8. SFSAG Rockall haddock | 17. Ireland bottom grown mussel |
| 9. SFSAG Northern demersal stocks | 18. Ireland rope grown mussel |
| 10. Shetland & Scottish mainland rope grown | 19. Northern Ireland bottom grown mussel |

AREAS OF ECOLOGICAL INTEREST IN THE UK AND IRELAND

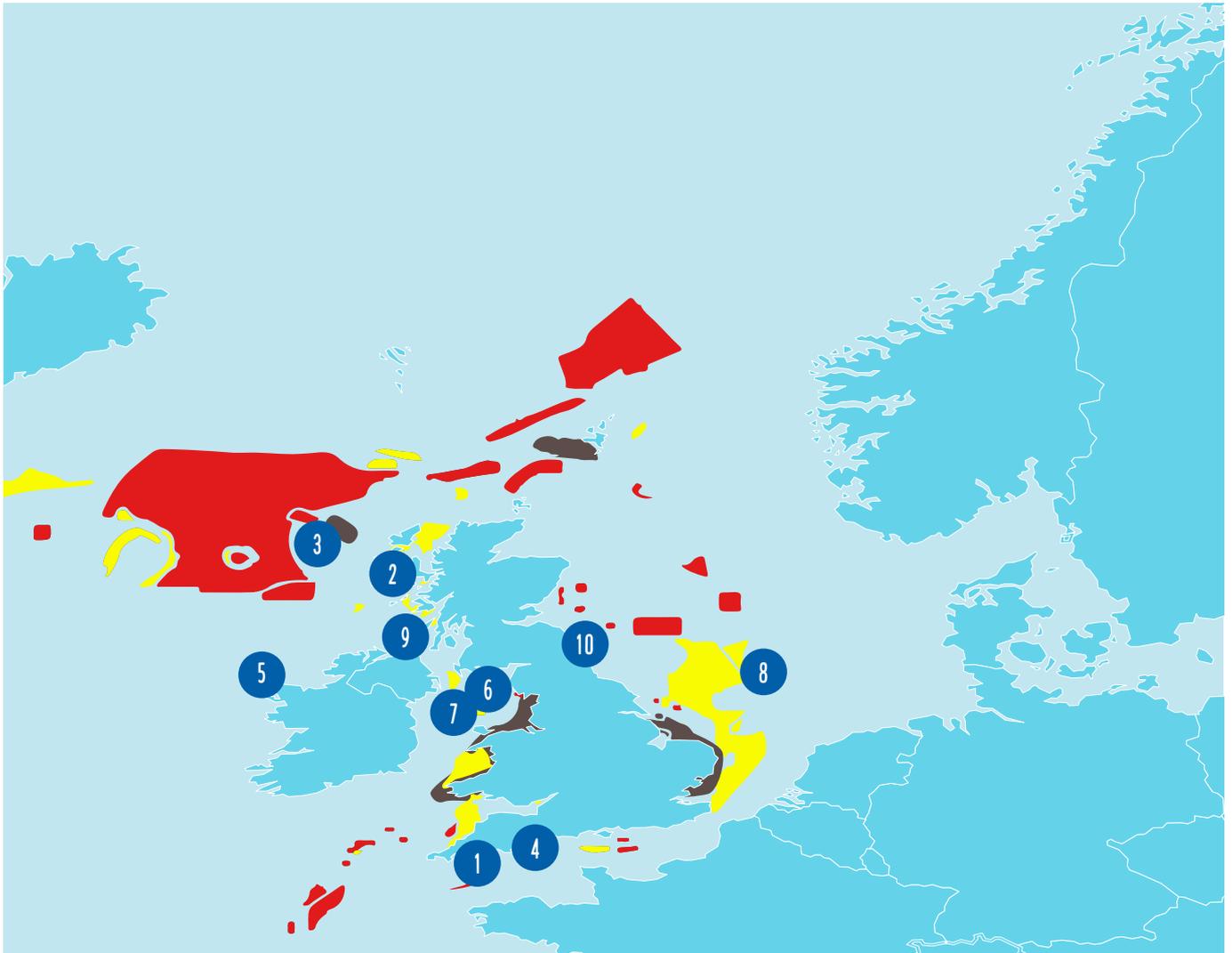


Figure 5: Map of ecological places of interest

<ul style="list-style-type: none"> ● Approximate location of places of ecological interest ■ UK/IRL (Special Protected Areas) SPAs ■ UK/IRL Special Areas of Conservation (SACs) ■ UK Marine Protected Areas (MPAs) 	<ol style="list-style-type: none"> 1. Plymouth Sound National Marine Park 2. The Sound of Canna (the largest aggregation of fan mussels in the UK) 3. St. Kilda 4. Lyme Bay 5. Broadhaven Bay 6. The Ramsey Marine Nature Reserve 7. Port Erin Closed Area 8. Dogger Bank 9. Rathlin Island 10. Farne Island (Northumberland coast’s grey seal colony)
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1. The Plymouth Sound National Marine Park plans to be the UK's first marine park; a declaration of intent has been signed and a £75,000 grant awarded by the MMO for a feasibility study. It will not result in new restrictions for water users, however, as the area already contains designations for SAC, SPA, Marine Conservation Zones (MSZ), as well as Sites of Special Scientific Interest and three Areas of Outstanding Natural Beauty. It is a natural harbour home to over 1000 unique marine species¹⁸.
2. The Sound of Canna is home to the largest aggregation of fan mussels in the UK. The fan mussel is the rarest species of marine mollusc in Britain and Northern Europe and the only species of the family Pinnidae found in British waters. It's also one of the largest species of bivalve molluscs in Europe, ranging from 30 to 48 cm wide¹⁹.
3. St. Kilda is the name of a Scottish island archipelago that became Scotland's first UNESCO World Heritage Site in 1986. In 2004, the site was expanded to include much of the surrounding marine features, and it's a National Nature Reserve and lies within a Special Protected Area. It's also perhaps Europe's most important seabird colony, home to nearly one million seabirds and Britain's most important Atlantic puffin colony.
4. Lyme Bay, which is partly in Dorset, partly in Devon, is part of one of Britain's only natural World Heritage Sites, the Jurassic Coast. Below the tide mark, Lyme Bay reefs are the country's largest marine protected area, which covers over 310 sq km of seabed. The MPA supports over 500 different marine species and protects places like rocky and stony reefs as well as vast fields of seafans, rare corals and abundant fish and shellfish populations²⁰.
5. Ireland's Broadhaven Bay was designated as a Special Area of Conservation in 2000 by the National Parks and Wildlife Service. It provides an important habitat to many different species, including breeding grounds for many bird species, and five species listed on Annex II of the Habitats Directive are known to visit its waters: the common bottlenose dolphin, the harbour porpoise, the grey seal, the harbour/common seal, and the European otter.
6. The Ramsey Marine Nature Reserve was the Isle of Man's first Marine Natural Reserve. It protects horse mussel reefs, seagrass beds, and maerl beds²¹, which provide the habitat for many marine species of ecological importance.
7. The Port Erin Closed Area was the first of the Isle of Man's Restricted Areas, having been established in 1989. It has been recognized worldwide for its success, as far greater numbers of scallops are found there than in other parts of the island and the area saw a large increase in the size of scallops as well²².
8. The Dogger Bank is the largest sandbank in UK waters and extends into both Dutch and German waters. It is home to a variety of species which live both on and within the sandy sediment. The Dogger Bank MPA overlaps with a SAC that has been identified for the protection of harbour porpoise – the Southern North Sea SAC. In June 2022, a byelaw came into force to protect the area from the impacts of bottom towed fishing gear²³.
9. Rathlin Island is Northern Ireland's northernmost point and a SAC and home to tens of thousands of seabirds. Many new species of anemones were discovered there²⁴, and the fan mussel, the rarest of European mollusc species, was found as well.
10. The Farne Islands are home to one of the UK's largest grey seal breeding colonies, with 2.5% of British pup production coming from this beautiful area off the Northumberland Coast.

In May 2023, The UK Government announced three newly designated Highly Protected Marine Area sites²⁵: Allonby Bay, North East of Farnes Deep and Dolphin Head. These designations in English waters came into force on 5 July 2023.

In line with the UK Government's 25 Environment Plan, Highly Protected Marine Areas (HPMAs) 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, HPMAs allow nature to fully recover to a more natural state, allowing the ecosystem to thrive.

¹⁸Source: Plymouth Council, [Plymouth Sound National Marine Park](#) (2023)

¹⁹Source: The Marlin Life Information Network, [Fan mussel \(*Atrina fragilis*\)](#) (2022)

²⁰Source: Dorset MPAs, [Lyme Bay Reefs](#) (2023)

²¹Source: National Parks & Wildlife Service, [Blacksod Bay/Broad Haven Special Protection Area](#) (2014)

²²Source: Beukers-Stewart et al., [Benefits of closed area protection for a population of scallops](#) (2005)

²³Source: MMO, [The Dogger Bank Special Area of Conservation \(Specified Area\) Bottom Towed Fishing Gear Byelaw](#) (2022)

²⁴Source: JNCC, [Rathlin Island](#) (2023)

²⁵Source: UK Government, [Highly Protected Marine Areas \(HPMAs\)](#) (2023)

MSC Fisheries Standard v2.0

The MSC Fisheries Standard was developed based on the United Nations Food and Agriculture Organization (FAO) Code of Conduct for Responsible Fisheries. It was developed in consultation with a range of stakeholders across the globe, including government, academics, researchers, fishing industry, NGOs, and the private and fishing sectors. The Fisheries Standard is made up of three principles:

- **Principle 1 Sustainability of the stock:** Fisheries must operate in a way that allows fishing to continue indefinitely, without overexploiting the resource
- **Principle 2 Ecosystem impacts:** Fishing operations need to be managed to maintain the structure, productivity, function and diversity of the ecosystem upon which the fishery depends, including other species and habitats
- **Principle 3 Effective management:** All fisheries need to meet all local, national and international laws and have an effective management system in place

THE MSC PRINCIPLES

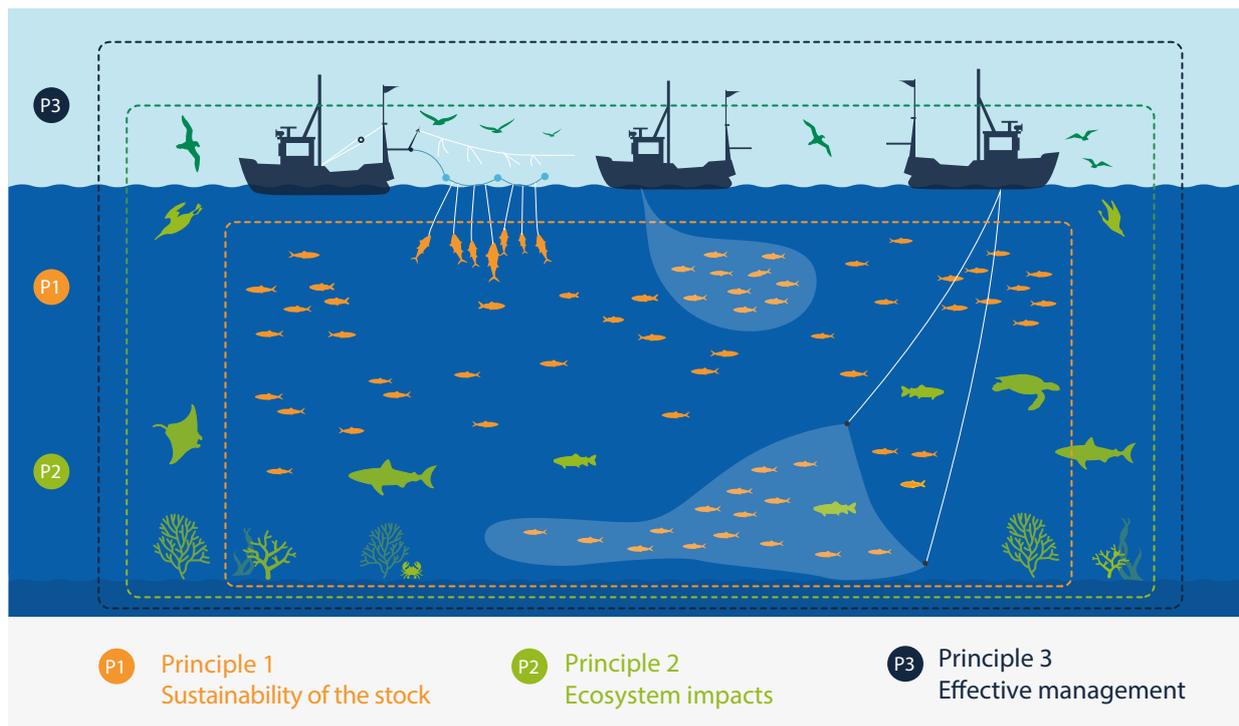


Figure 6: The three Principles of the MSC Fisheries Standard

Each principle is further broken down into a set of Performance Indicators (PIs). Fisheries are assessed and scored against each of these PIs by an independent auditor (also known as Conformity and Assessment Bodies, or CABs) to determine how the fishery performs overall against the MSC Fisheries Standard.

To guide independent auditors in scoring fisheries, each PI is further broken down into one or more scoring issues. The performance required to reach a score of 60 (minimum acceptable level), 80 (global best practice) or 100 (near perfect performance) is defined in a set of scoring guideposts. CABs will determine the performance of a fishery against the MSC Fisheries Standard based on whether or not they meet each of the numeric Performance Indicator scoring guideposts, with clear rationales being provided at each point.

Each principle is further broken down into a set of Performance Indicators (PIs). Fisheries are assessed and scored against each of these PIs by an independent auditor (also known as Conformity and Assessment Bodies, or CABs) to determine how the fishery performs overall against the MSC Fisheries Standard. There are 28 performance indicators that sit under the three principles of the MSC Fisheries Standard (Version 2.0).

MSC PRINCIPLES AND PERFORMANCE INDICATORS

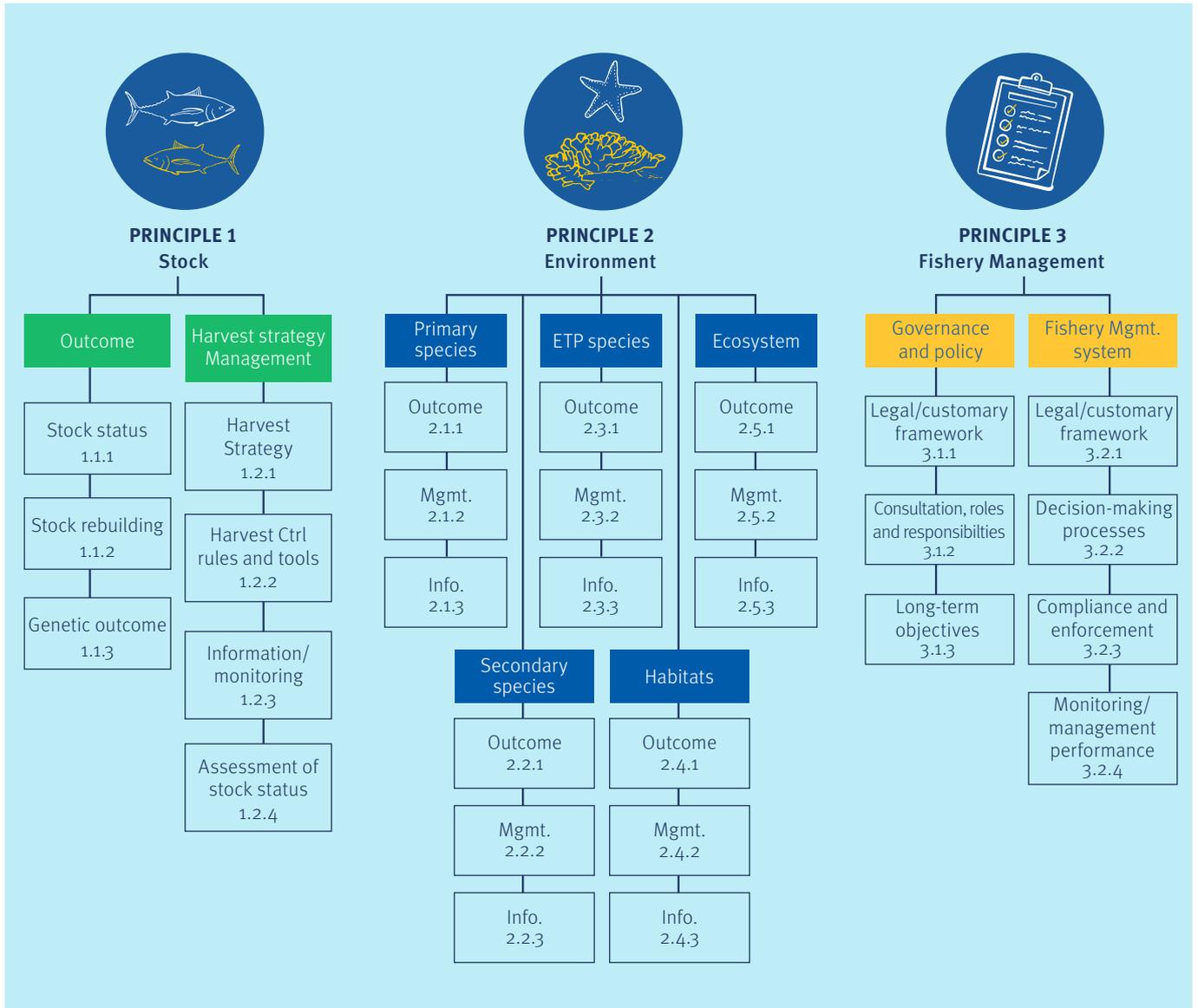


Figure 7: The three Principles and 28 Performance Indicators of the MSC Fisheries Standard

A fishery will be assigned a score for each performance indicator, where 60 is the minimum acceptable level, 80 is global best practice and 100 is near perfect performance.

To become certified, a fishery must score at least 60 for each of the 28 performance indicators and achieve an average of at least 80 for each of the three principles. If the fishery scores between 60 and 79 for any performance indicator, they will be required to take appropriate action as a condition of certification. This action needs to improve the performance of the fishery so that it scores 80 or above for that indicator. The timeframe to make these improvements is typically five years or less.

SCORING OF MSC PERFORMANCE INDICATORS (PIS)

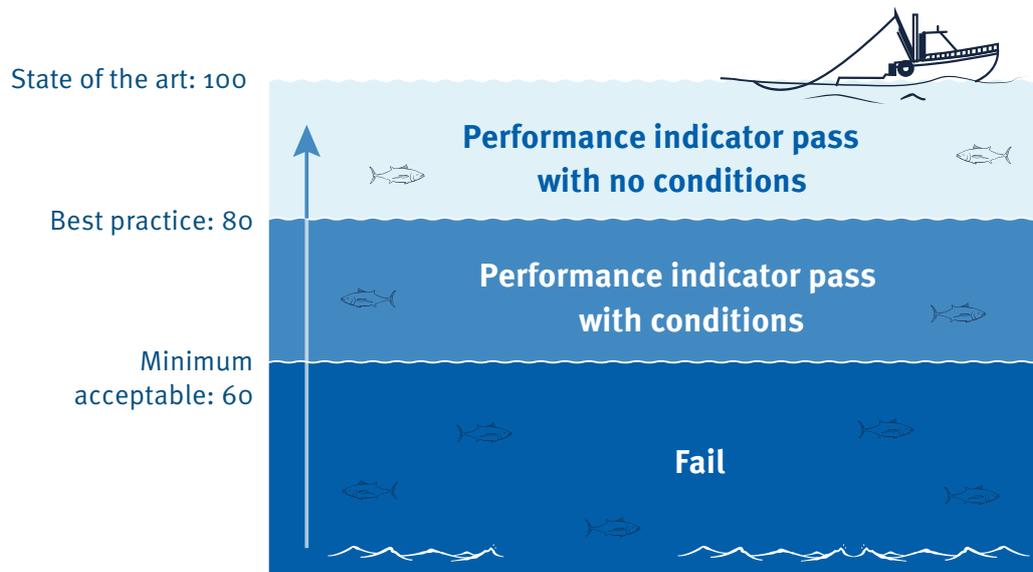


Figure 8: Marine Stewardship Council approach to scoring performance

For example, if more research/evidence is needed on the status of a specific species, impacts of a gear type or fished habitat range, a condition may be applied. Such conditions mean that the fishery is conditionally certified and is required to draw up an action plan to be implemented in the following years, which address these conditions. Progress is checked every year in a 'surveillance audit'. These conditions are what drive further improvements and direct impacts on the water.

All assessments and checks are carried out by independent, accredited parties called Conformity Assessment Bodies (CAB). This means that MSC is not involved in the audits and decision making. MSC does have the option of performing Technical Oversight, to ensure that the auditors have correctly interpreted and applied the Standard. You can read more about this in the section: Stakeholder input.

The MSC Assessment Process

All MSC certified fisheries must be audited every year after their initial assessment, this is known as ‘surveillance auditing’. At the end of the five-year certification cycle, if the fishery wishes to stay in the programme for another five-year cycle, it must go through the reassessment process. The assessment’s results are posted on the [MSC’s Track-a-Fishery page](#).

THE MSC ASSESSMENT PROCESS

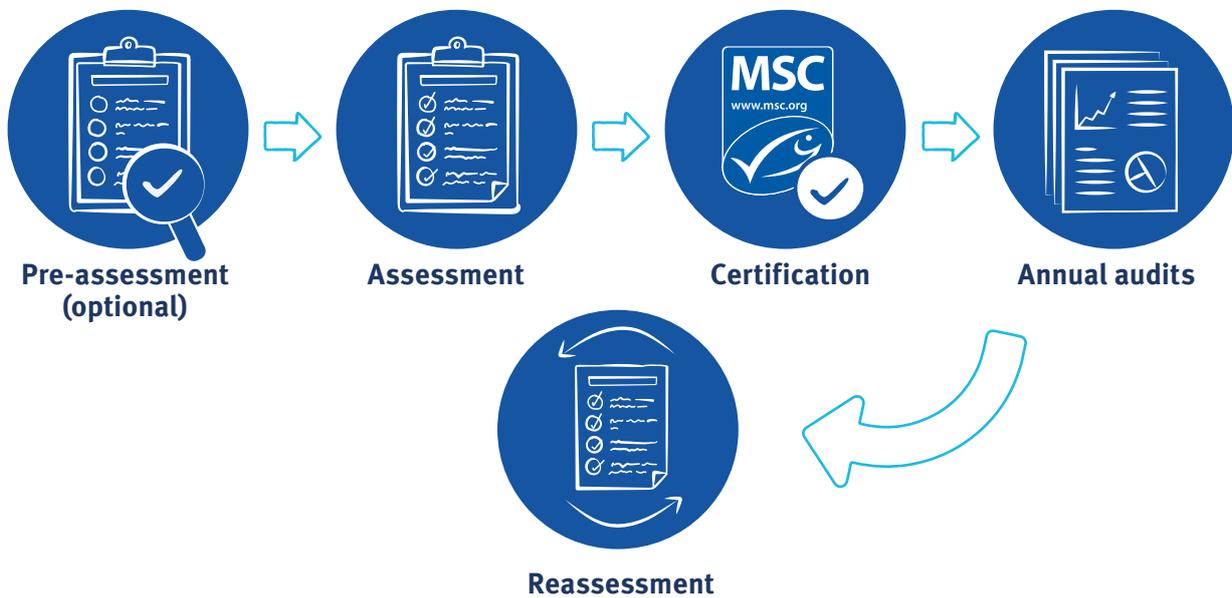


Figure 9: The MSC fisheries assessment and reassessment process

Since the Burry Inlet cockle fishery became certified in 2001, 139 reports have been published on the UK and Irish fisheries included within the scope of this State of the Water Report (fisheries that are currently certified). These consist of:



With thousands of pages of resulting audit reporting, data, and evidence, this constitutes an overwhelming amount of data and information on UK and Irish fisheries performance and improvement that would otherwise unlikely be documented, without engagement with the MSC programme.



Improving High Performance

Of the currently certified fisheries in the UK and Ireland, nine have completed two full assessment cycles and have, as a result, been in the MSC programme for over ten years. Since joining the programme, these fisheries have taken actions that have resulted in a markedly improved performance.

The figure below displays a comparison of average Principle scores for these nine long standing fisheries. The average scores for Principles 1 and 3 were both comfortably above 90 by the end of the second assessment cycle, and the Principle 2 average was very close (88.9). While the performance of these fisheries with regards to sustainability was already commendable, over time, they have improved to a higher level altogether. The increase of average Principle 2 scores by 2.4% is a particularly welcome development, because most of the conditions (as well as most of the stakeholder comments) are in relation to Principle 2 Performance Indicators, demonstrating that improvements are being made in areas identified through the MSC process. This is encouraging when considering the 27 Principle 2 conditions currently open on all UK/IRL fisheries. While assigning causality would be difficult, it is reassuring to see that where conditions are identified through the MSC process, progress towards improving the sustainability of the fishery is documented throughout the MSC reports published on MSC’s Track-a-Fishery site. In short, these fisheries have much to be proud of regarding the significant progress they have made over the course of their MSC journeys so far.

SCORING: INITIAL ASSESSMENT VS. 1ST RE-ASSESSMENT

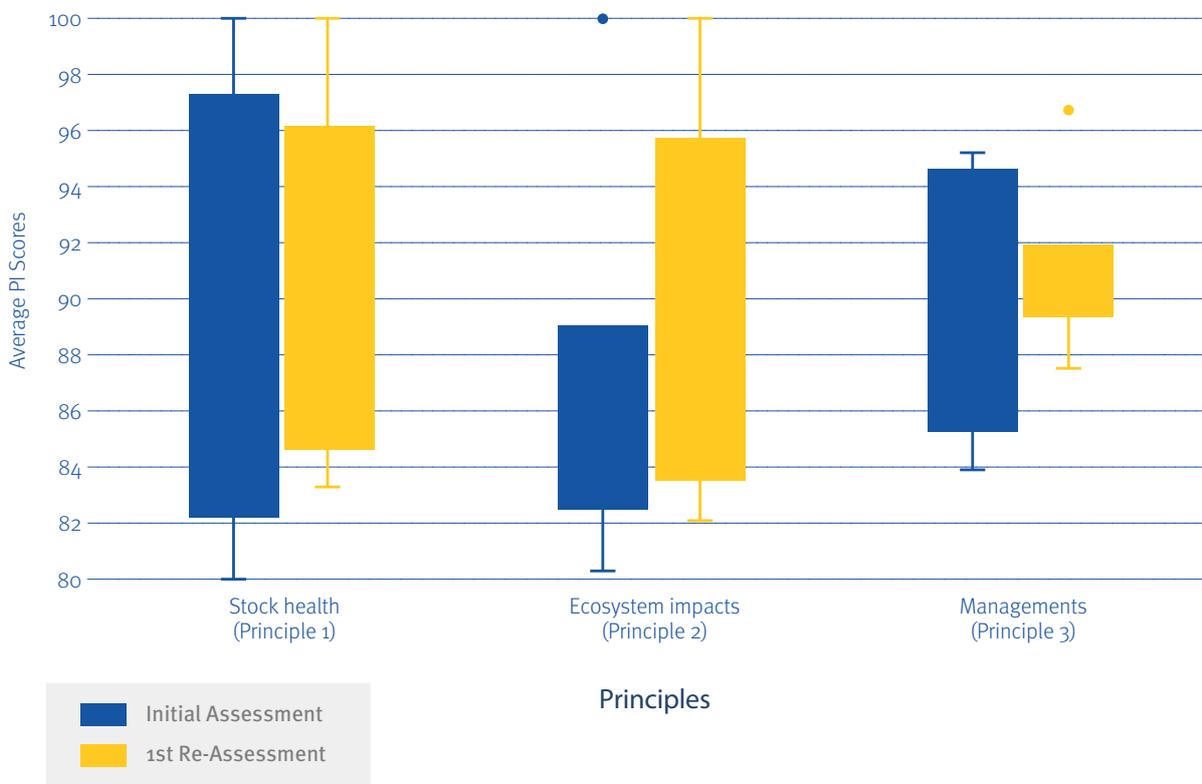


Figure 10: Changes in Principle scores between assessment cycles

*During the 1st re-assessment cycle of the Shetland & Scottish Mainland Rope Grown Mussel Enhanced Fishery, the assessors determined the fishery did not need to be scored according to Principle 1; thus, P1 was scored here as 100.

Conditions in UK and Irish Fisheries

A fishery that achieves MSC certification is sustainable. However, no fishery is perfect, and there are very often individual performance indicators in which a fishery can and is required to, improve. Provided the fishery has an overall high level of sustainability and meets minimum requirements in all areas, it can be certified with conditions. These are time-bound actions for the fishery to deliver to improve its sustainability. In this way, certified fisheries are required to constantly improve to reach global best practice levels of sustainability (see text box on pg. 19).

MSC certified fisheries in the UK and Ireland have closed many conditions over the past years; however, because the structure of the MSC scoring system has changed since fisheries first achieved certification, it is not possible to undertake a like-for-like comparison between the earliest conditions given and those assigned in recent years. The following graphs and charts do not, therefore, include any conditions closed prior to the release of Version 2.0 of the MSC Standard. Prior to this however, 26 unique conditions were closed, and 3 were re-written to align with the new version of the MSC Standard. Since then, 186 unique conditions have been issued to UK and Irish fisheries in the programme, that are featured in this report. While eight of those conditions were either withdrawn, rewritten, or waived due to exceptional circumstances, 120 of these conditions have since been closed (71% if the aforementioned eight conditions are excluded).

NUMBER OF CLOSED CONDITIONS PER YEAR

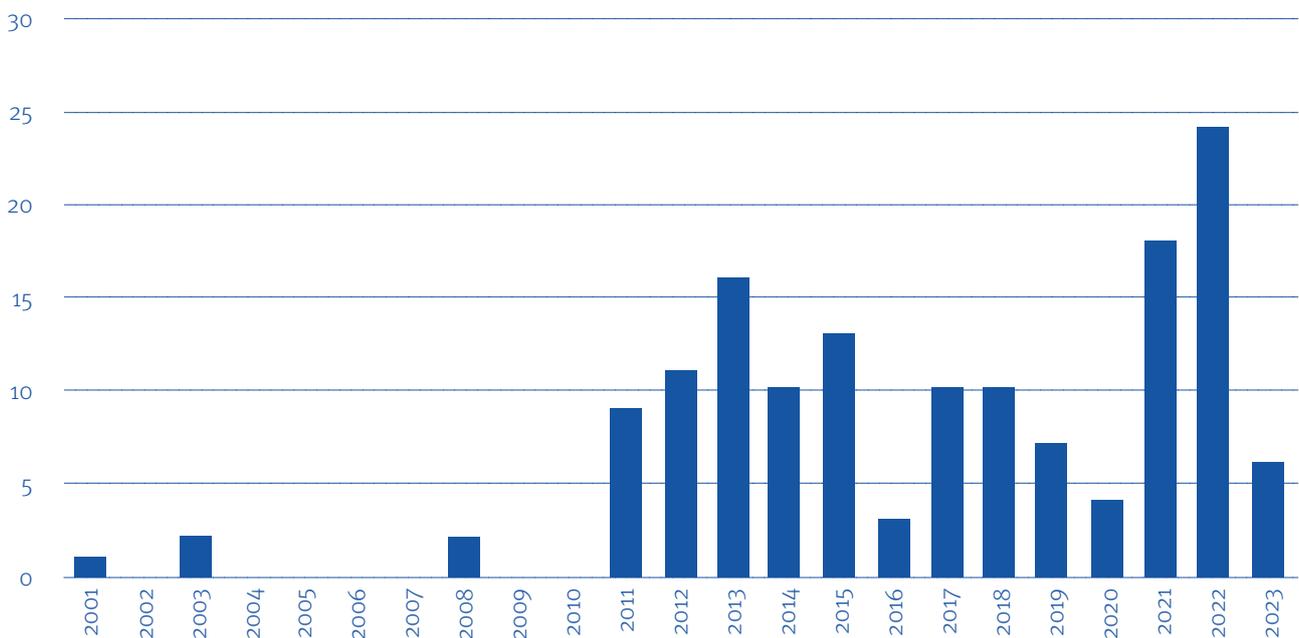


Figure 11: Closed conditions over time in MSC certified fisheries in the UK and Ireland



NUMBER OF CLOSED CONDITIONS PER FISHERY

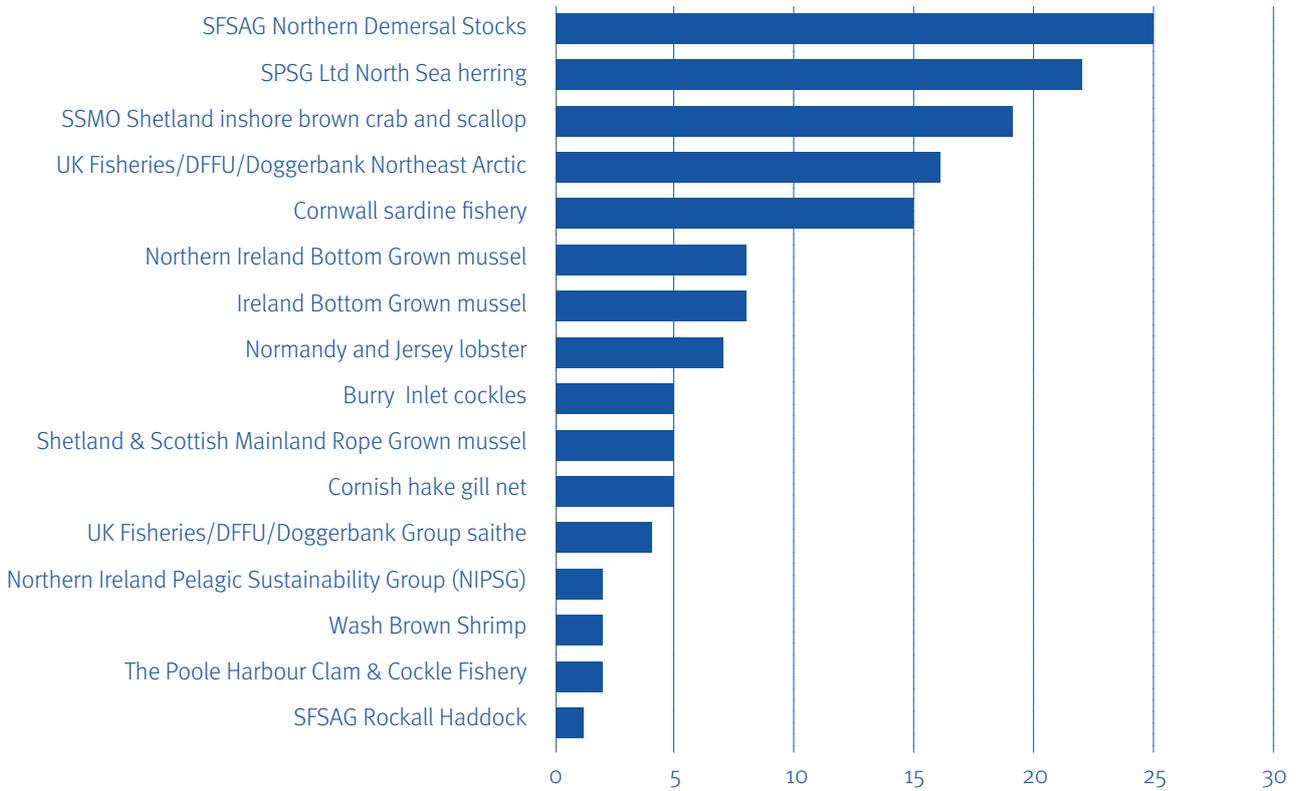


Figure 12: Closed conditions per fishery

The figure below shows the number of closed conditions for currently certified fisheries since they gained MSC certification. This demonstrates that the requirement to improve Performance Indicator scores (that are between 60-79) in the MSC Standard has led to significant improvements in the sustainability of fisheries across the UK, and thus the knock-on effect of delivering positive environmental impacts through certification. This report will go on to break down how these gaps in performance have been identified and how fisheries have made the required improvements, including examples of how UK MSC certified fisheries are demonstrating best practice. Below the graph shows the distribution of closed conditions according to species breakdown.

NUMBER OF CLOSED CONDITIONS PER SPECIES

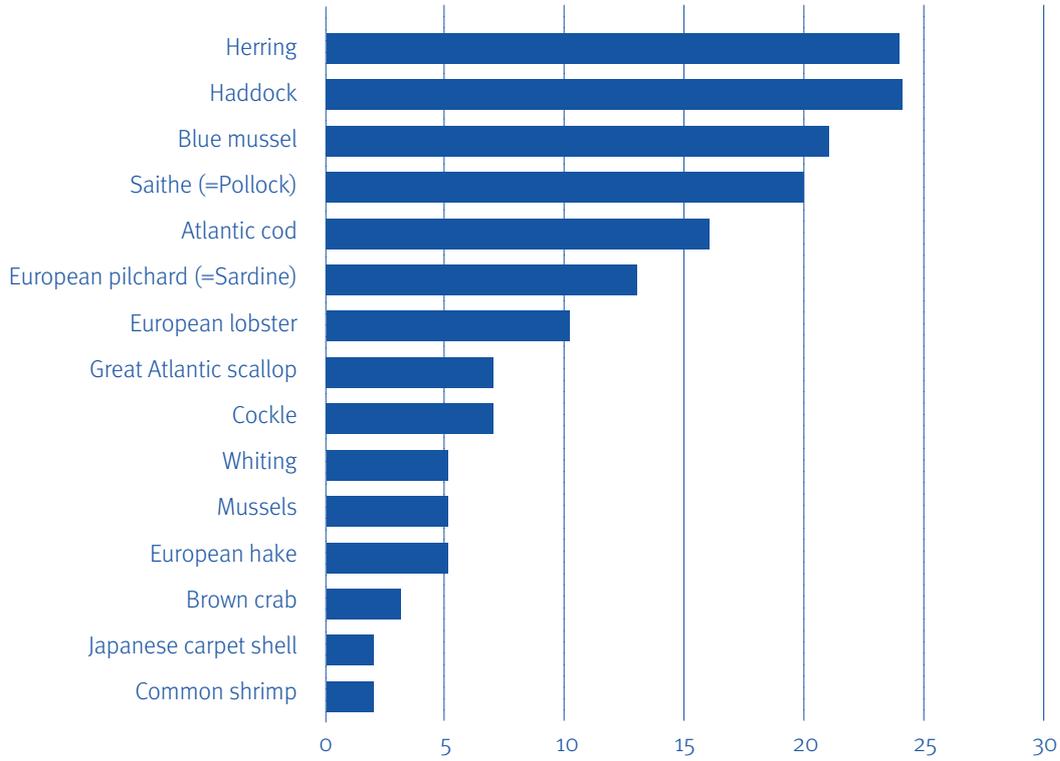


Figure 13: Closed conditions per species

It should be noted that the cataloguing and counting of conditions for the purposes of this report captures multiple conditions across any relevant Units of Assessment within a single certified fishery. Therefore, a single certificate may close more than one condition as a result of one successful completed action, should the condition apply to multiple UoAs within that certificate.

CLOSED CONDITIONS BY GEAR TYPE

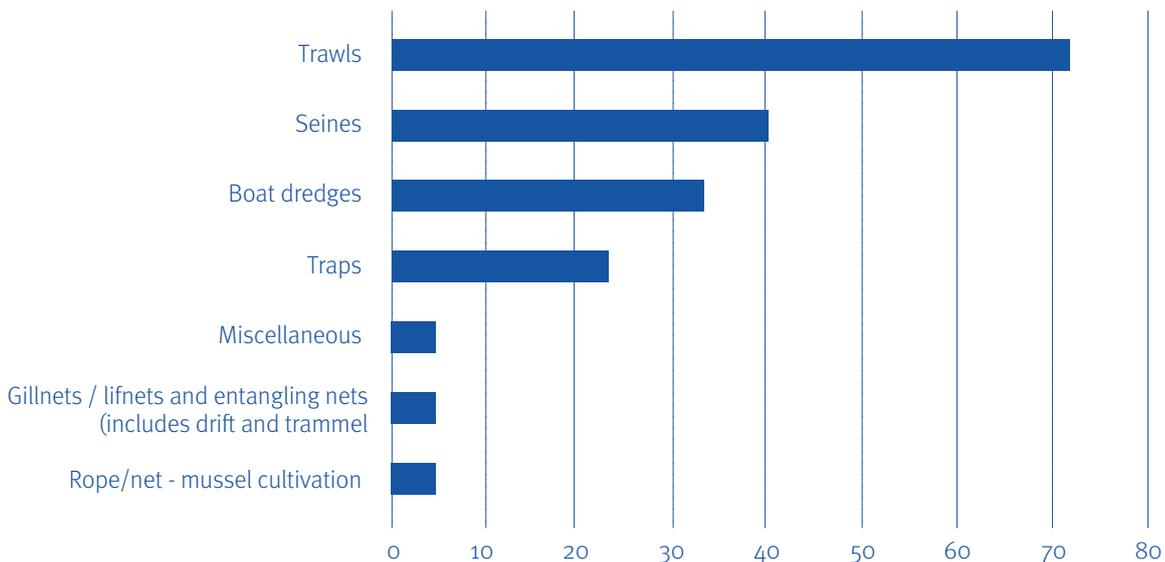


Figure 14: Closed conditions by gear type

The UK and Irish fisheries that still possess the remaining 58 conditions are currently working on implementing their action plans, to maintain their MSC certificates into the next assessment cycle. The following graph shows the distribution of these conditions per Principle including those that have already been closed.

NUMBER OF OPEN/CLOSED CONDITIONS PER MSC PRINCIPLE

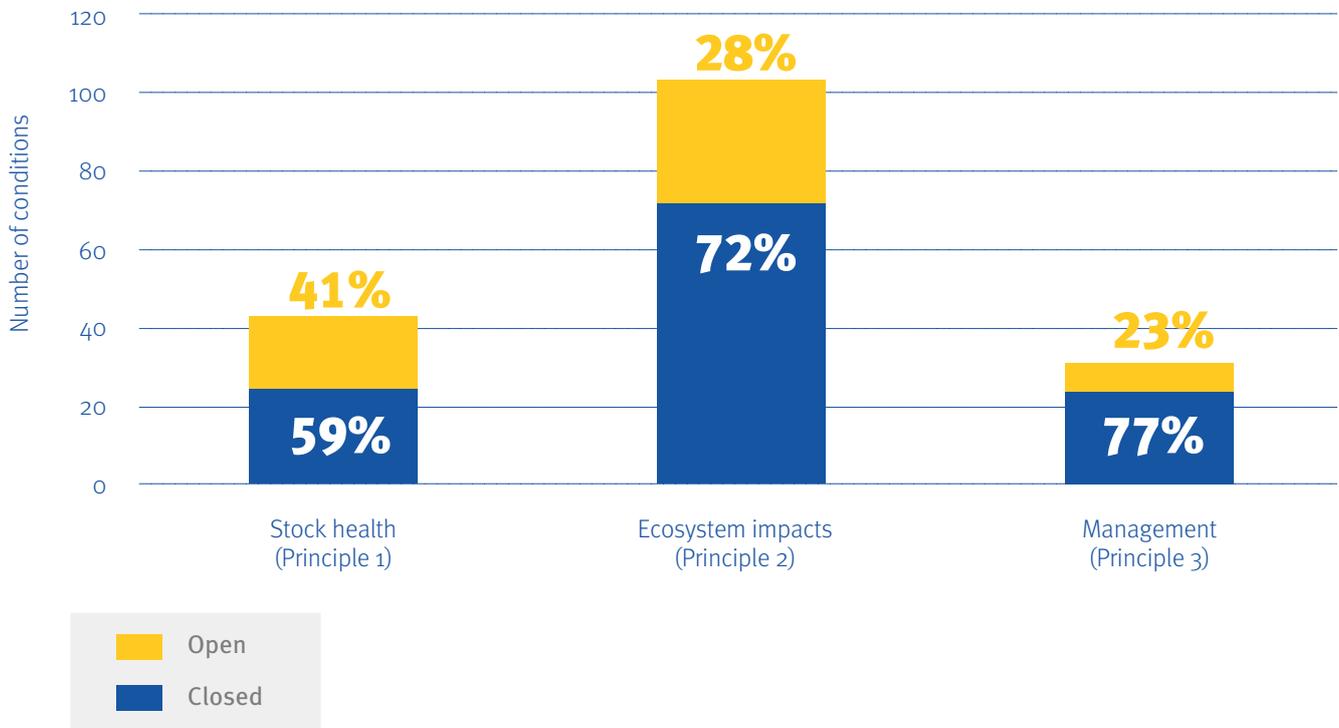


Figure 15: Number of open and closed conditions in MSC certified UK and Irish Fisheries

Of the 178 conditions identified (excluding the eight that were either withdrawn, rewritten, or waived), 58% have been placed against Principle 2 Performance Indicators (environmental impacts). 70% of these have now been closed. This means that the UK and Irish fisheries in the MSC programme have made many improvements (72) to mitigate their impact on the environment (Principle 2). The remaining conditions have been shared somewhat evenly between Principle 1 (stock status) and Principle 3 (management) (24% and 18%, respectively).

Conditions to improve stock status (Principle 1)

To maintain healthy fish stocks and productivity, fish populations need to be carefully managed and harvested. Principle 1 of the MSC Standard considers the state of the target (the species being fished) stock, as well as the approach taken to controlling fishing pressure and ensure that no individual part of the stock becomes depleted. This requires a significant amount of data to inform stock assessments and monitor fishing pressure, as well as a commitment from fisheries managers to design and implement rules that protect the stock if the biomass begins to fall. There have been a total of 43 conditions raised on Principle 1 performance indicators:

Stock status: two closed conditions

Stock rebuilding: two closed and five open conditions on 1.1.2, (one open condition on 1.1.4 pre V2.0)

Harvest strategy: three closed conditions, three open, and one rewritten

Harvest control rules: 12 closed conditions, six open, two rewritten, and one withdrawn condition

Information and monitoring: one closed condition

Assessment of stocks: two open and four closed conditions

NUMBER OF CONDITIONS PER PRINCIPLE 1 - PERFORMANCE INDICATOR

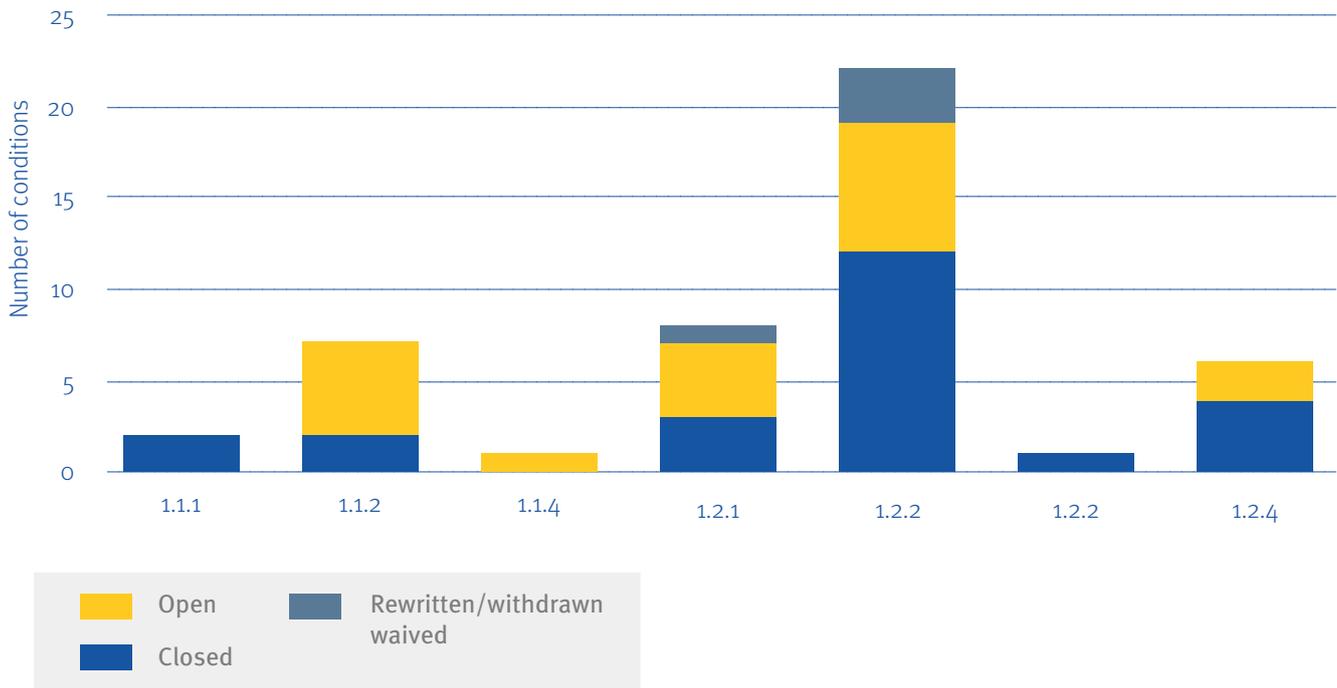


Figure 16: Number of closed, open, and rewritten/withdrawn/waived Principle 1 conditions

This demonstrates how the MSC process has identified gaps in target stock data and management, and enabled fisheries to set out a plan to improve these aspects and further secure the sustainability of the fishery into the future. Not only has data on the fisheries increased, but it enables fishery managers to determine the best approach to manage the stock, that balances the socioeconomic interests of the fishing community with the health of the stock itself.

The MSC Standard aims to be accessible to all fisheries, and so the [MSC's Risk Based Framework \(RBF\)](#) was designed to support data limited fisheries to enter the programme and commit to improve data on the stocks. The RBF toolkit takes a precautionary approach to scoring the stock status, based on the life history and available catch and landings data. The fishery must still score >80 on average for Principle 1, but will attract a condition to ensure they implement a data collection programme and work towards delivering a full stock assessment during the five year duration of the certificate. An example of this is the Cornish sardine fishery, which entered the MSC programme in 2010 using RBF due to the small scale of the fishery and the lack of information on stock status. The fishery has maintained its certification since initially entering the programme, using the structure of the MSC Standard to support the development of an appropriate stock assessment to inform the use of harvest control rules that are responsive to stock status.

If a fishery does not score >80 on stock status then it triggers the use of an additional performance indicator on stock rebuilding. Fisheries with a condition for stock rebuilding must demonstrate that they have a plan in place that will increase the biomass of the fishery to a point where it fluctuates around Maximum Sustainable Yield.

There are several examples of MSC certified fisheries that have experienced stock related issues and decline in the past, including Cornish hake in the 1980s and 90s, North Sea Herring in the 1970s and the Cornish Sardine Fishery in the 1990s also. Through addressing the problem of overfishing, rebuilding fish stocks and implementing effective management measures, these fisheries are now thriving and excellent examples of the miraculous turnaround that can be achieved through managing fish stocks sustainably. Aiming for, gaining and maintaining MSC certification, and continuing to manage the stock sustainably, enables a secure and safeguarded future for the health and productivity of UK and Irish fisheries.

Conditions to improve environmental impacts (Principle 2)

The graph below examines the distribution of Principle 2 conditions across three categories:

- **Habitats and ecosystem** (conditions related to the impact of the fishery on the benthic habitat or wider ecosystem)
- **Bycatch caught in the fishery** (conditions related to efforts to reduce the non-targeted or unwanted component of the catch, including primary species, secondary species and species caught and used for bait)
- **Endangered Threatened and Protected (ETP) species** (conditions related to reducing interactions with ETP species, such as the harbour porpoise)

NUMBER OF CONDITIONS PER PRINCIPLE 2 - PERFORMANCE INDICATOR

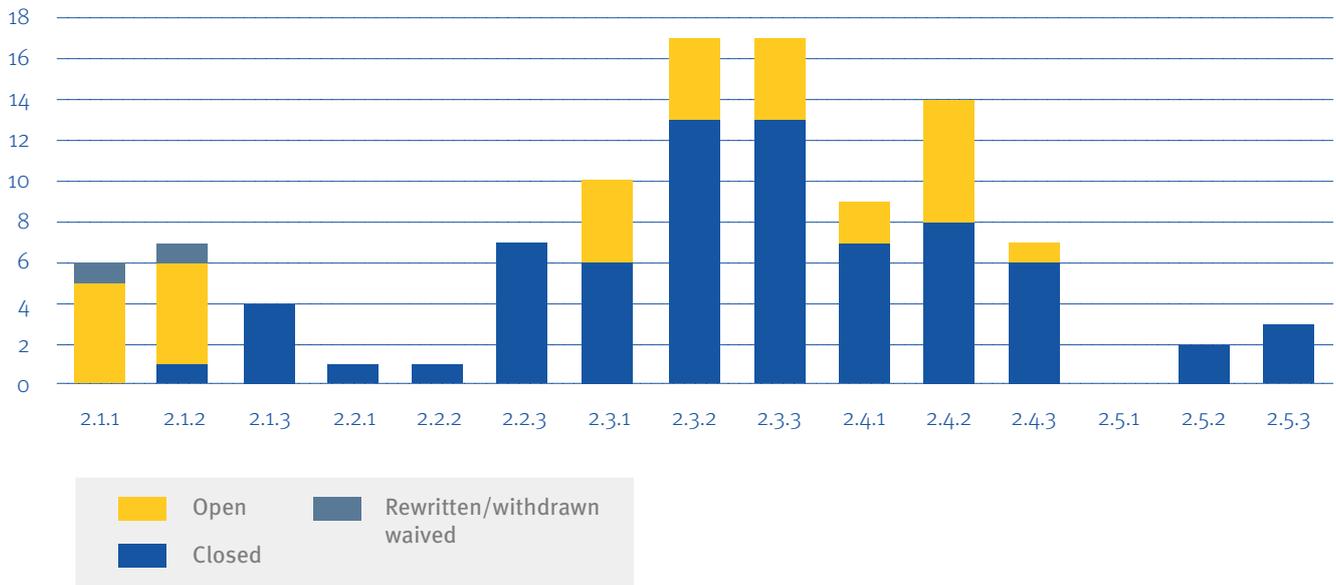


Figure 17: Number of closed, open, and rewritten/withdrawn/waived Principle 2 conditions

Looking at the broad categorisation of condition, there is a higher concentration of conditions related to endangered, threatened and protected species (ETP), with 43%. Just over a third were allocated against habitats and ecosystems, with under a quarter focussed on bycatch and other species.

FOCUS OF ECOSYSTEM IMPACT (P2) CONDITIONS

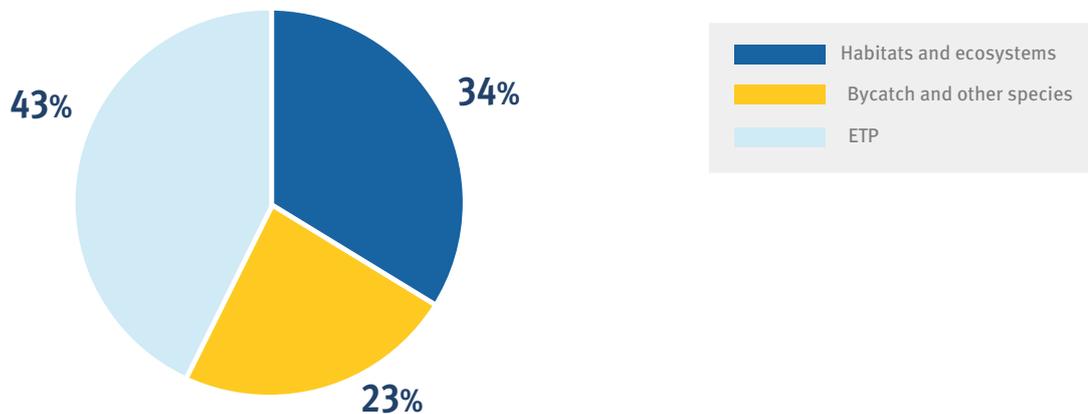


Figure 18: Breakdown of conditions against Principle 2 (environmental impacts) performance indicators

When these broad categories are examined more closely by component (Primary, Secondary, ETP, habitat, ecosystem), higher concentrations are found in some more than others, especially within ETP and habitats:

- **Primary species:** 15 conditions (species in the catch that are within the scope of the programme but not covered within Principle 1 because they are not included within the UoA)
- **Secondary species:** 9 conditions (species in the catch that are within the scope of the programme but not covered within Principle 1 because they are not included within the UoA and do not have management tools and measures in place—including reference points—or species that are outside of the programme but not designated as ETP)
- **ETP:** 44 conditions
- **Habitats:** 30 conditions
- **Ecosystem:** 5 conditions

NUMBER OF CONDITIONS AGAINST EACH PRINCIPLE 2 - COMPONENTS

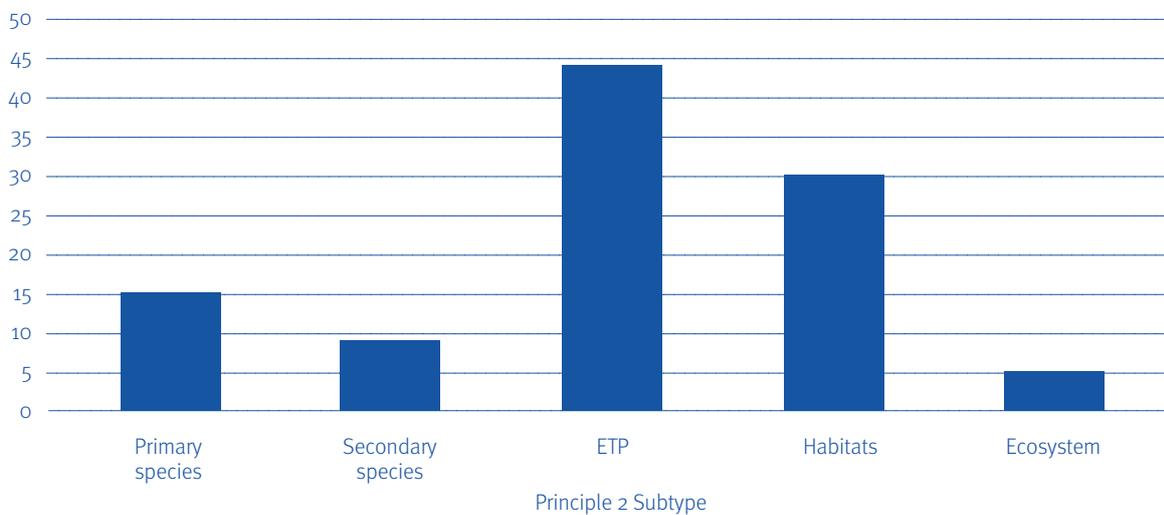


Figure 19: Number of conditions against each Principle 2 component

When the conditions are analysed by gear type, trawl gear fisheries attract the largest number of conditions. In the UK and Ireland, many certified fisheries operate trawl gear, which is partly responsible for the higher number of conditions. There are currently 11 open conditions for trawl gear, and 62 closed conditions. Of these closed conditions, 39 are related to Principle 2 improvements. Given the concerns raised in the media recently about the impact of trawl fisheries on the environment, it is encouraging to see that trawl fisheries engaged in the MSC programme continue to mitigate their environmental impacts and are committed to improving their wider sustainability performance. The chart below shows the total number of closed conditions by gear type, and how many of these relate to Principle 2.

PRINCIPLE 2 - CONDITIONS BY GEAR TYPE

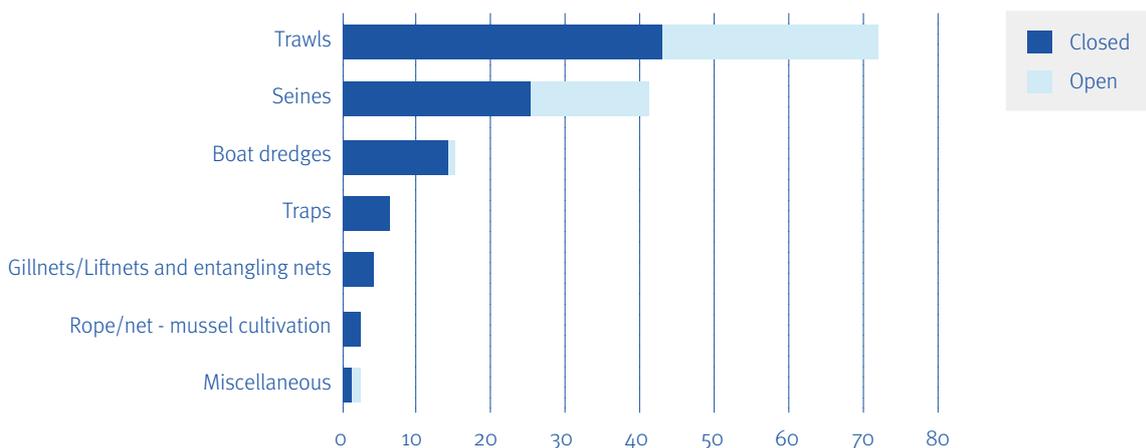


Figure 20: Principle 2 conditions per gear type

Conditions to improve fisheries management (Principle 3)

The third pillar of the MSC Standard considers whether there is effective management in place across all aspects of the fishery to ensure improvements towards sustainability last into the future. A total of 32 conditions have been raised against Principle 3 performance indicators:

- **Legal and customary framework:** One condition withdrawn, and one not addressed
- **Consultation, roles and responsibilities:** one closed condition
- **Fishery specific objectives:** five closed conditions and one open
- **Decision making processes:** eight closed conditions and one open
- **Compliance and enforcement:** four open conditions (including one behind target)
- **Management performance evaluation:** six closed conditions and one open and one open and four closed on 3.2.5.

NUMBER OF CONDITIONS PER PRINCIPLE 3 - PERFORMANCE INDICATOR

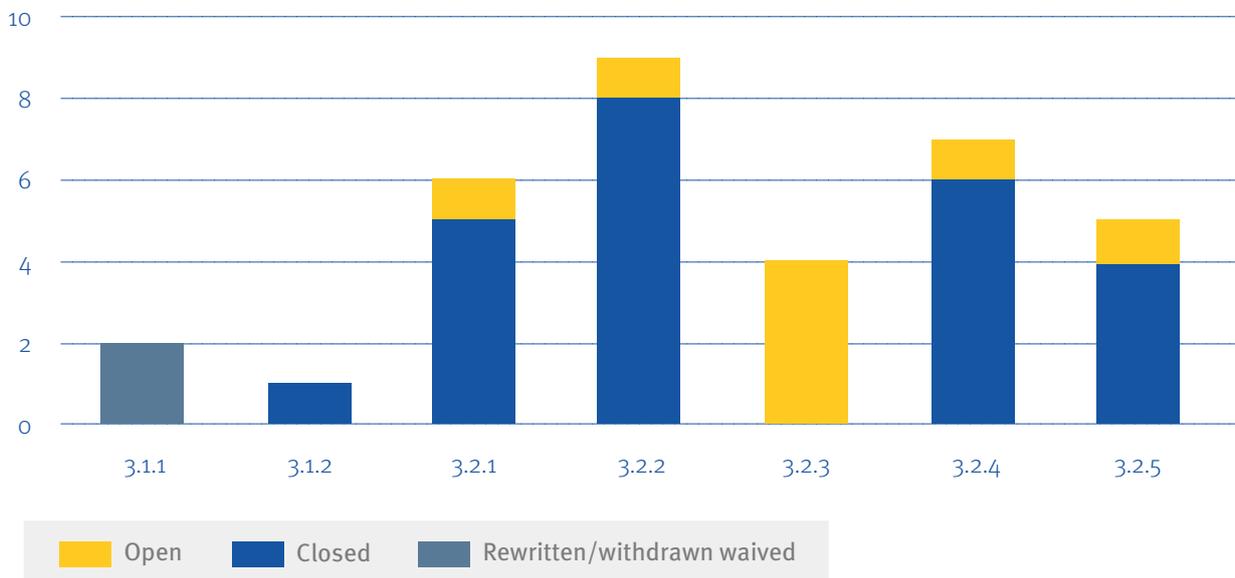


Figure 21: Number of closed, open, and rewritten/withdrawn/waived Principle 3 conditions

Given the current legislative landscape in the UK, and the development of new Fishery Management Plans (FMPs) in line with the Joint Fisheries Statement (JFS) and the Fisheries Act, it will be interesting to see how these policy processes impact the scores and conditions against Principle 3 of the MSC Standard for UK fisheries. The development of FMPs through co-management provides a unique opportunity to underwrite best practice in fisheries management across the UK. Robust FMPs will enable UK fisheries to demonstrate state of the art management and to be considered globally as leaders in sustainable fisheries management.

Case Studies: How Conditions Lead to Change in, on and Around the Water

Discard monitoring

The UK Fisheries/DFFU/Doggerbank Group saithe fishery was first certified in 2011 but with a condition placed on PI 2.3.1 (ETP species outcome) and PI 2.3.3 (ETP species information) for both the UK and DFFU (Deutsche Fischfang-Union GmbH & Co. KG) members of the certificate. The common skate (*Dipturus batis*) has been listed as critically endangered by the IUCN Red List since 2006. The independent auditors conducting this MSC assessment determined that more information was required for the fishery to demonstrate that it was not negatively impacting the common skate population. The fishery acted promptly, with the Farnella, the UK Fisheries Ltd vessel operating in this fishery, undergoing a trial with the Centre for Environment, Fisheries and Aquaculture Science (CEFAS) and the Marine Management Organisation (MMO). The vessel was fitted with digital cameras, as was the factory where the fish is sorted and processed, to record all species caught by the vessel and to monitor potential common skate landings. The recordings were then saved to a hard drive, which was collected and reviewed by CEFAS. The camera's images were also displayed to the skipper on the bridge so that they could identify which species were being caught, enabling them to inform the crew of any species that were still alive and that should be returned to sea. Data sheets were kept that recorded the date, time, hauling position, catch retained onboard and the discarded catch. The condition on these PIs was closed by the fourth surveillance audit in 2015.

Acoustic deterrents

The Cornish hake gill net fishery was first certified in 2015, and had a condition placed on PI 2.3.2 (ETP species management). European Commission Regulation 812/2004 set out timelines for specific fisheries to take measures deterring cetaceans from fishing nets, as well as the monitoring of the catch by observers. Part of this regulation mandated the use of acoustic “pingers” to deter cetaceans from fishing nets. However, full implementation of this regulation had not yet occurred. This gap in implementation and the limited records of interactions meant that a study conducted by the Sea Mammal Research Unit (SMRU) at the University of St. Andrews on the effectiveness of the pingers led to inconclusive results. The fishery acted swiftly to ensure that every one of its vessels was fitted with a Dolphin Deterrent Device (DDD) (acoustic deterrent), to address their MSC condition. Its open-door policy for cetacean observers also ensured a high level of monitoring, which consequently determined that cetacean bycatch levels in the fishery were minimal. Due to the uptake of pingers, subsequent SMRU research determined that acoustic deterrents could reduce the bycatch level of the harbour porpoise by over 80% when used in hake gill nets. The condition was thus deemed closed, and the fishery scored at best practice level against the MSC Standard, demonstrating how the certification and condition process delivers improvement for the marine environment through credible research and implementation of management.

Spatial management plan

When what was initially called the Shetland Shellfish Management Organisation (SSMO) Shetland inshore brown and velvet crab, lobster and scallop fishery was first certified in 2012, it was assigned conditions on PIs 2.4.1 and 2.4.2 (habitats outcome and management). If poorly managed, scallop dredging can cause harm to sensitive seabed habitats and benthic ecosystems. The independent auditor determined that the habitats upon which this fishery operates are not homogenous, and vulnerable habitats possibly remained unprotected. In addition, the results of the SSMO's research plan into this area hadn't been incorporated into its management plan. Because of these factors, the auditors determined that the closed areas implemented by SSMO did not sufficiently constitute a “partial strategy” nor a “robust, cohesive strategy,” and the condition was placed on the fishery.

SSMO implemented a host of measures to close this condition. The recording in logbooks was improved, and Vessel Monitoring Systems (VMS) coverage among the fleet was expanded through a grant (regulation only required vessels above 12m in length to have VMS systems, but SSMO had VMS installed on smaller vessels too). A review of closed areas was performed through a new acoustic-based survey and, along with new information from surveys conducted by Herriot-Watt University, the spatial boundary of the closed areas was refined. By the third surveillance audit, SSMO had presented evidence of how fishermen were avoiding an additional site to protect horse mussels and maerl, pending

further survey and an expected closure of the area. Finally, VMS data was presented demonstrating that fishermen had avoided the closed areas, proving that Spatial Management Plan was effective. The audit team then considered the condition closed.

Spurdog avoidance programme

Within EU waters spurdog have been protected from fishing activity as a “prohibited species” since 2015 and must be returned to the sea promptly if accidentally caught. Vessels in the Cornish hake fishery have been participating in a spurdog bycatch avoidance programme, where retention of dead spurdog in the catch is permitted under a derogation from the EU prohibition on landing this species, to obtain information about the status of the spurdog stock. A report on the findings of the spurdog bycatch avoidance programme has been published (Hetherington et al. 2018). This study has demonstrated that the use of real-time spurdog catch data from the fishery, to identify areas where there is a high risk of spurdog bycatch, coupled with a derogation to allow a limited quantity of dead bycatch to be landed, provides a viable management option and an alternative to the prohibition set out in the annual Total Allowable Catch (TAC) regulation. The scope of this programme has also included studies of spurdog movements and distribution using data storage tags; analysis of post-capture vitality of spurdog using different fishing métiers; and improved communication between scientists, managers and fishers that has developed a better understanding of fishing practices and has helped to ensure that the handling of live spurdog which are returned to the sea optimises their survival.

A new code of conduct has been developed and implemented to promote best practice in the return of live spurdog to the sea. One of the objectives of this study was to determine whether the self-reporting of spurdog bycatch by fishing vessels was likely to accurately reflect their actual catch, by comparing data gathered on observer trips with data reported by the vessel as well as with unobserved trips. The CEFAS conclusion was that there was good concurrence between the data provided by observers and by fishing vessels. This programme has been so successful that spurdog stocks have rebounded and it has been removed from the prohibited species list.

ETP reporting

In 2018, the Poole Harbour Clam and Cockle fishery was the first fishery in Dorset to receive MSC certification. Certification was achieved through building positive relationships between fisheries and conservation stakeholders, and in 2021 the ‘Poole Harbour Clam and Cockle Fishery Partnership Project’ was formed to deliver the fishery’s conditions of certification. As a recipient of the MSC’s Ocean Stewardship Fund (OSF) grant, the project pioneered innovative work to improve the endangered, threatened and protected (ETP) management outcomes of the fishery, by increasing awareness of ETP species, and creating a model of best practice for MSC fisheries in managing ETP interactions.

Completed in 2022, the project successfully delivered training and educational materials to fishers and the wider public on identifying ETP species and demonstrated a co-management model of fisheries and conservation within a Marine Protected Area (MPA). Outputs of the project include a waterproof identification guide for ETP species, supporting an observer programme to provide quality assurance to fishery-dependent data and producing a Risk Management Strategy for ETP species management. Interpretation boards with photos of the ETP species were put up at the main port, so awareness was also raised within the public. These resources are directly relevant to other fisheries striving to improve their sustainability outcomes, and the findings are already being shared with the MSC certified Wash Brown shrimp fishery to support them in progressing their ETP conditions, as well as with other [Inshore Fisheries and Conservation Authorities \(IFCAs\)](#) who might benefit from implementing similar initiatives in their own regions.



Continued Improvement Built In

Through the condition-setting mechanism, the MSC programme is designed to deliver continuous improvement within fisheries. Scores can change and conditions can be added or closed out during annual surveillance audits, according to scoring and performance against actions plans. Fisheries can also be subject to 'expedited audits', triggered when new information or research shows a previously unknown or revised impact within an MSC fishery which is likely to significantly affect scoring outcomes.

MSC's programme criteria (such as the Fisheries Standard) are regularly modified and where appropriate, improved. In accordance with [ISEAL](#) (who define credible practice for sustainability systems) procedures, a thorough review of MSC's Fisheries Standard takes place every five years, to ensure that the standard remains reflective of the latest scientific, policy developments and widely adopted best practice in fishing (read more about the most recent Fisheries Standard Review [here](#)). Each revision consists of multiple rounds of public consultations with engaged stakeholders: fishing industry, retail and supply chain companies, scientists, NGOs, governments and other interested parties. Through this process, ambiguity in the requirements can be removed, and where appropriate, performance indicators redefined against changes in global best practice. As a result of an evolution of criteria within the MSC Fisheries Standard, certified fisheries will need to maintain pace with the evolution of global best practice.

One of the challenges is to keep the MSC programme accessible to fisheries around the world, not just to large scale fisheries. In May 2023, in addition to the provision of many [pre-MSC assessment tools and support initiatives](#), MSC expanded the scope of its [In Transition to MSC \(ITM\) programme](#), providing added encouragement and assurance to fisheries improving their practices to meet the MSC Standard. The MSC has also launched its own Ocean Stewardship Fund (OSF), designed to further those fisheries aspiring to align to MSC's performance values.



The Ocean Stewardship Fund:

Supporting fisheries at all stages of their sustainability journey

In 2018, the MSC launched the [Ocean Stewardship Fund \(OSF\)](#) to support fisheries on their pathway to sustainability and to invest in new scientific research. Five percent of annual royalties from MSC certified product sales are allocated to the fund, which has continued to expand in scope and scale every year since its inception. In 2022, the fund opened to third-party donations and in April 2023, MSC announced it was aiming to raise US\$100 million in the next decade to accelerate progress in sustainable fishing globally.

[Five strands of funding](#) are available under the MSC's Ocean Stewardship Fund, including Student Research Grants, a Science and Research Fund, Innovation Fund, Recertification Assistance Fund, and Transition Assistance Fund. Since its inception in 2018, the OSF has provided over £3.9 million to 106 fisheries and projects around the world. Of that, nearly £275,000 has been awarded to UK fisheries and UK-based institutions.

The Poole Harbour clam and cockle fishery was the first in the UK to receive support from the OSF. In the Fund's inaugural year, it was awarded £21,056 for a project developed in conjunction with the Southern Inshore Fisheries and Conservation Authority and the Dorset Wildlife Trust to widen fishers' skills in identifying protected species. An illustrated, waterproof wheelhouse guide was designed alongside survey forms for fishers to submit recordings of interactions with other species and habitats. The data collected from this project and ongoing ETP species monitoring has continued to inform good management in the fishery and demonstrate that the fishery can operate sustainably within a Marine Protected Area (MPA).

In 2022, a Master's student from the University of Exeter received £4,475 as part OSF's [Student Research Grant](#) for a project that would use GIS (Geographical Information Systems) technology mapping to assess any potential impact on ETP species that the MSC certified Wash Brown Shrimp Fishery encounters in the North Sea. The outcomes of this work are helping the fishery to implement best practice ETP species management measures and could be used to inform other fisheries using similar gear methods or in the same region.

In 2023, UK fisheries received just over £100,000 in OSF funding (nearly 14% of the total awarded to all projects that year). In recognition for their long-term commitment to sustainability, the Cornish sardine fishery and SFSAG Northern Demersal fishery were awarded grants under OSF's [Recertification Assistance Fund](#). These funds support fisheries with long standing commitments to sustainability and contributed to the audit costs of the fishery's second recertifications. The Cornish sardine fishery will benefit from funds received under OSF's [Science and Research Fund](#) to support a knowledge-sharing exchange between MSC certified fisheries. Cornish fishermen will travel to the MSC certified South Australian sardine fishery, following a visit from the Australian fishery this year. They will share examples of best practices to mitigate against interactions with marine mammals, including e-monitoring techniques and the use of acoustic deterrents, which may be able to further reduce bycatch impacts in similar fisheries.

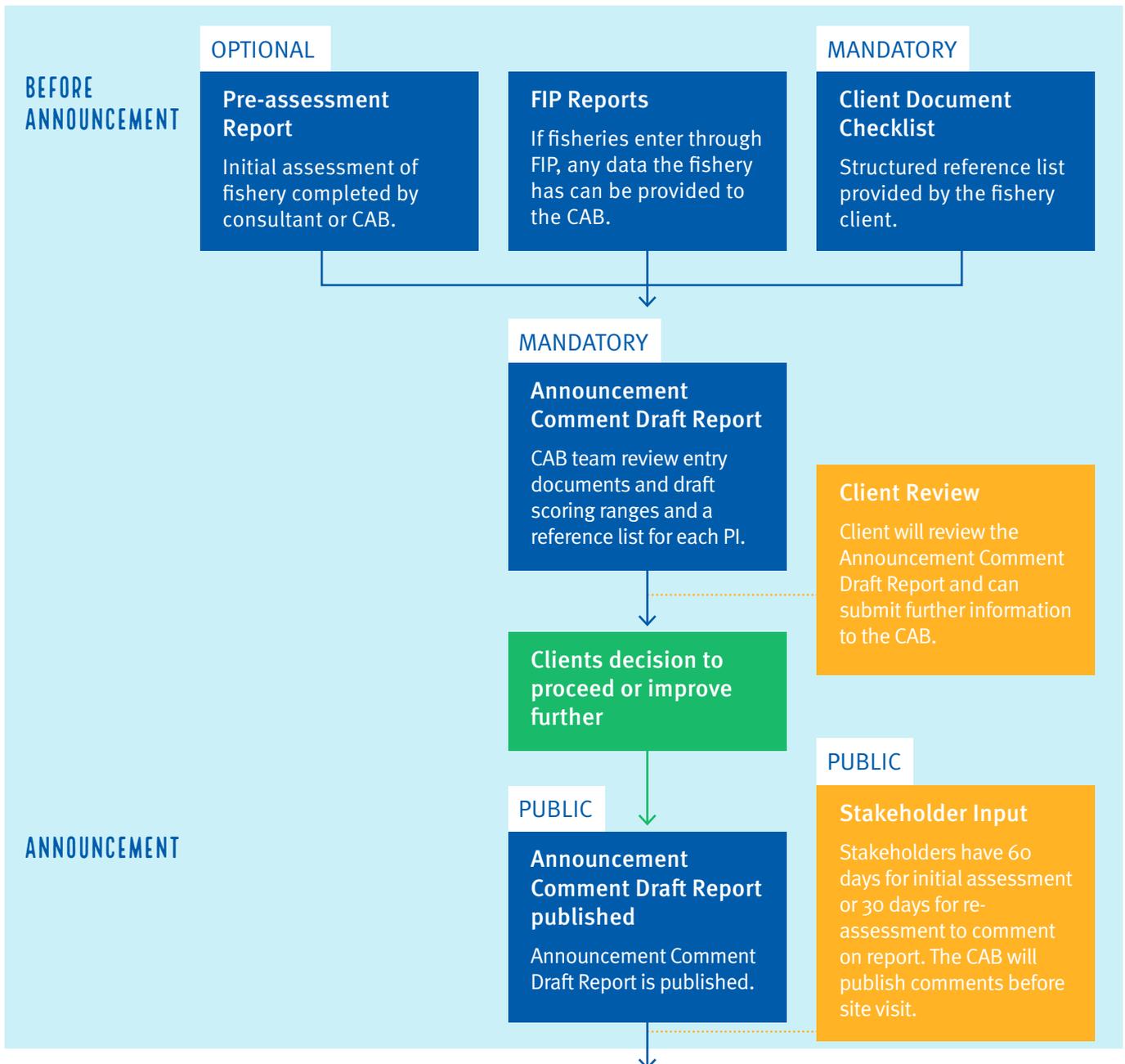
The Science and Research Fund has also supported the work of other UK-based conservation organisations to further the sustainability of fisheries outside of the country. The Zoological Society of London (ZSL) received two grants of just under £50,000 each to identify vulnerable marine habitats in the deep-sea around West Greenland. The research was used to help the Greenland halibut and coldwater prawn fisheries avoid these habitats and provide recommendations to the Greenland government on managing fishing impacts, which ultimately helped to close outstanding conditions relating to the fishery's MSC certification.

The Royal Society for the Protection of Birds (RSPB) also received funding in 2021 to test a device developed with Fishtek Marine called the "looming-eyes buoy" (LEB), aimed at reducing unwanted bycatch of seabirds in the ISF Iceland lumpfish fishery. As a condition of its certification, the fishery was required to develop a bycatch strategy that does not hinder the recovery of endangered, threatened or protected seabirds. This means minimising bycatch and proving that it is not having an impact on populations of endangered species such as black guillemots. The effectiveness of the device could be a significant breakthrough both for the fishery and for other gillnet fisheries around the globe, as bycatch has been recognised as one of the top three threats affecting seabird species globally.

Stakeholder Input: Embedded in the MSC Assessment Process

An important component of the MSC certification process is the opportunity for stakeholders to input at critical stages of a fishery’s assessment. Stakeholder engagement helps ensure that the high bar for sustainability is credible, transparent, and subject to the rigor of external input. Any stakeholder, including members of the public, can challenge the scoring of a fishery or any other structural part of the report, and the independent auditor is obligated to respond. If the stakeholder brings forward a credible case, the auditor could amend the report outcomes and/or change the fishery’s scoring. If a stakeholder remains unsatisfied that their input has not been reflected in the determination of the fishery performance against MSC requirements, the objection can be taken to an independent adjudication process. This is a further, independent, legal review on the performance of both the auditor’s application of the MSC requirements on the fishery, and the performance of the fishery itself.

MSC ASSESSMENT PROCESS



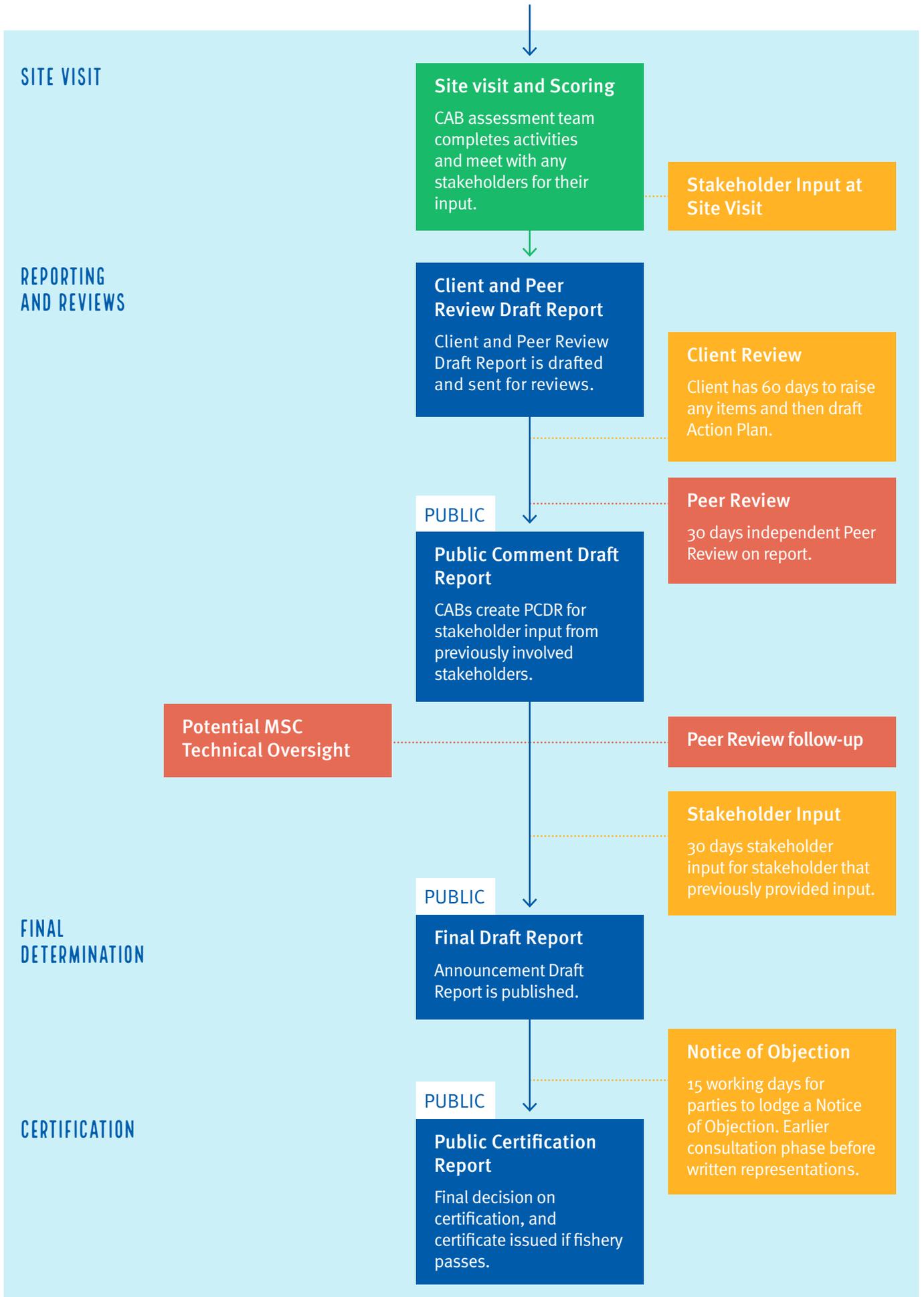


Figure 22: The Marine Stewardship Council Assessment Process, including stakeholder input

A variety of stakeholders have participated in UK and Irish fishery assessment processes, including conservation organisations, scientists, government bodies, and industry groups. Stakeholder participation in MSC fishery assessments has been regular, thorough and detailed, demonstrating a high degree of buy-in to the assessment process by external stakeholders. Assessors proactively reach out to stakeholders at the beginning of the certification process to invite their participation, and a review of the 144 assessment documents considered in this report show anywhere between one and 292 stakeholders being contacted, with an average of 55.

While counting the number of stakeholder comments is fluid, this report calculates that 123 written stakeholder comments were made on 20 of the 144 assessment reports. It should be noted that this is not the only form of stakeholder participation—a significant number of stakeholders participate in site visits and interviews as well—but written stakeholder comments are the only aspect of stakeholder participation within the scope of this report. These comments originated from 27 different organisations or individuals. Stakeholders can comment on specific performance or scoring indicators, the assessors, any facts, data points, language, graphics used or the process itself, among other issues. Most of the comments (59%) were made by conservation organisations and eNGOs: 73 written comments made in eight distinct reports, five of which were at the initial assessments or reassessments stage. Other stakeholder types who left significant number of comments included government bodies (18), industry (12), individuals (10), and scientists (8). The Open Seas Trust and Natural England have been the most active stakeholders, having submitted 23 comments on two separate reports, and 15 comments on four separate reports, respectively. The following pie chart depicts the amount of comments per stakeholder type:

NUMBERS OF COMMENTS LOGGED BY EACH STAKEHOLDER TYPE

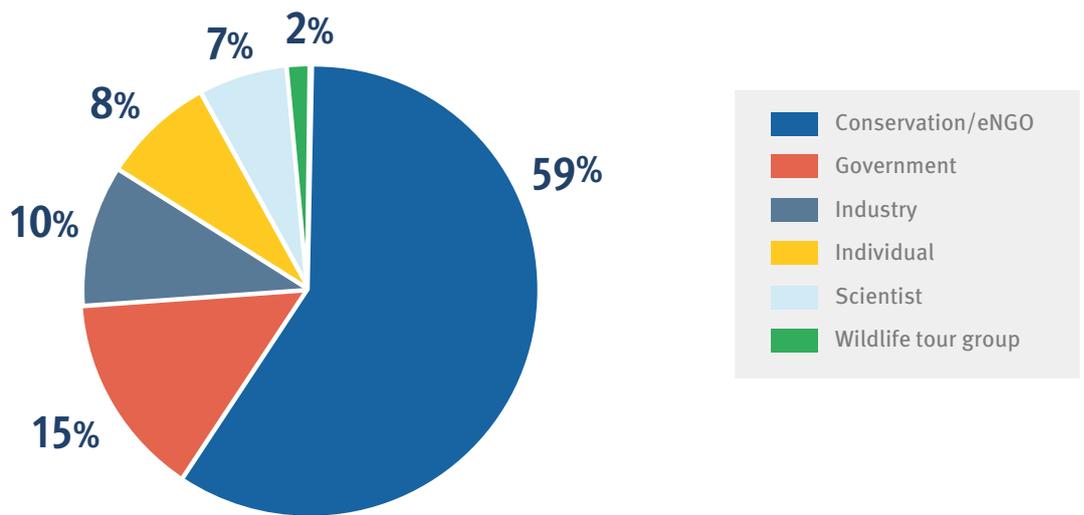


Figure 23: Comments by stakeholder type

Besides the Open Seas Trust, the top stakeholders participating in UK and Irish MSC assessments submitted a similar number of comments, demonstrating the wide interest throughout the UK and Irish stakeholder network generated through the MSC certification process.

NUMBERS OF COMMENTS PER STAKEHOLDER

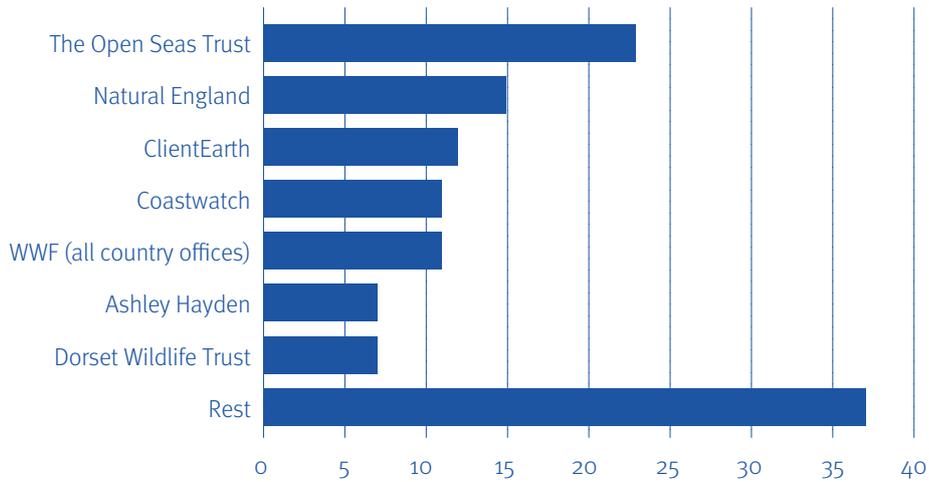


Figure 24: Number of comments received by all types of stakeholder

NUMBER OF REPORTS COMMENTED ON BY STAKEHOLDERS

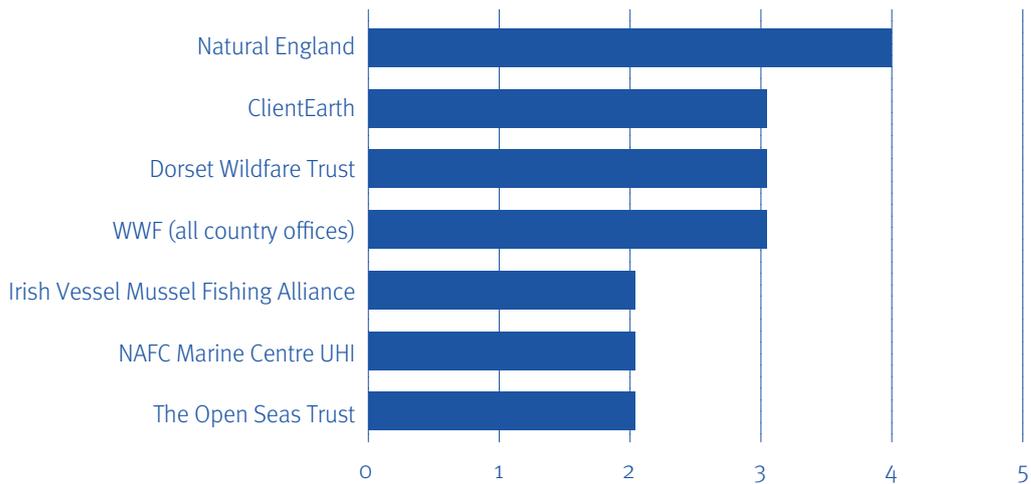


Figure 25: Number of reports commented on per stakeholder who contributed to more than one report

CONSERVATION ORGANISATIONS AND ENGO COMMENTS PER PRINCIPLE

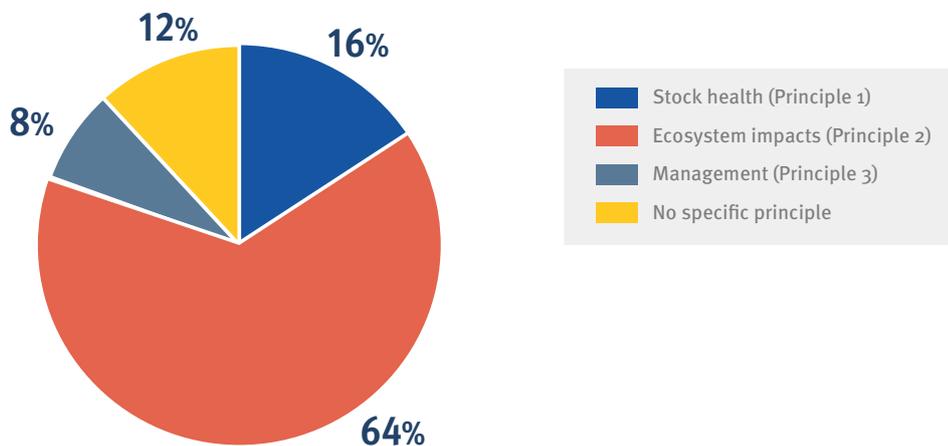


Figure 26: Conservations organisations and eNGO comments by Principle

The 73 comments received from conservation organisations and eNGOs mostly focused on Principle 2. Within Principle 2 the focus has been on the *Habitats* component of the Fisheries Standard, with the fewest comments made on *Secondary species* and *Ecosystem*.

CONSERVATION ORGANISATIONS AND ENGO PRINCIPLE 2 INPUT BY COMPONENT

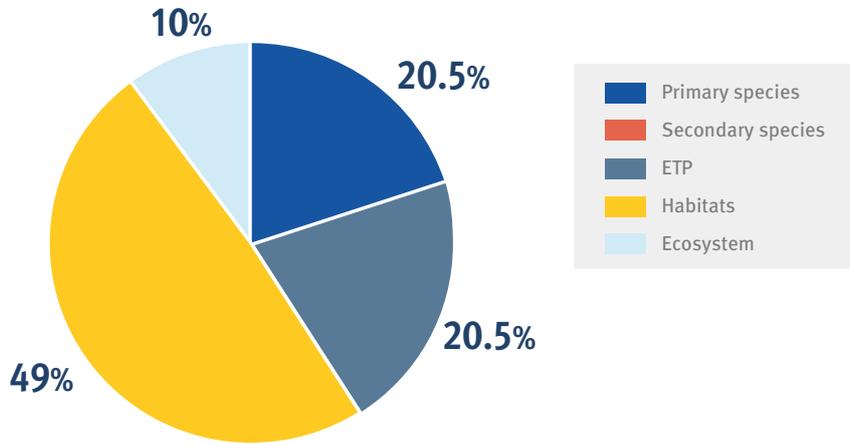
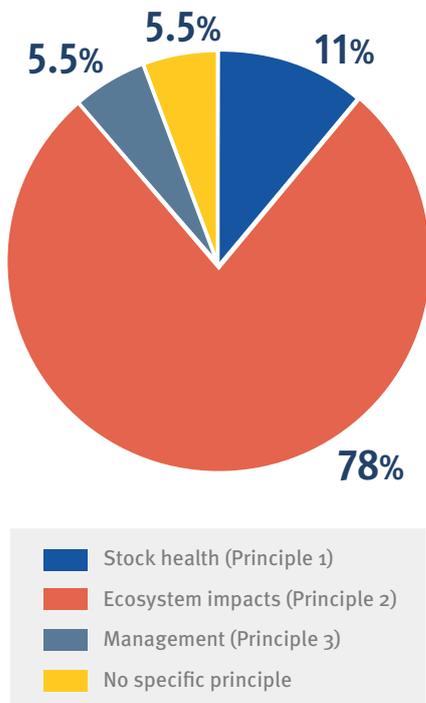


Figure 27: Principle 2 comments received by conservations organisations and eNGO, by MSC Standard component

The results of the analysis for other stakeholder groups were equally striking. Government (including government agencies) comments also heavily focused on Principle 2. There were very few comments relating to Principle 3 (management) and no comments on *Primary species* or *Secondary species*. Half of all comments from government stakeholders were related to the *Habitats* component.

GOVERNMENT STAKEHOLDER'S INPUT PER PRINCIPLE



GOVERNMENT STAKEHOLDER'S PRINCIPLE 2 INPUT PER TOPIC

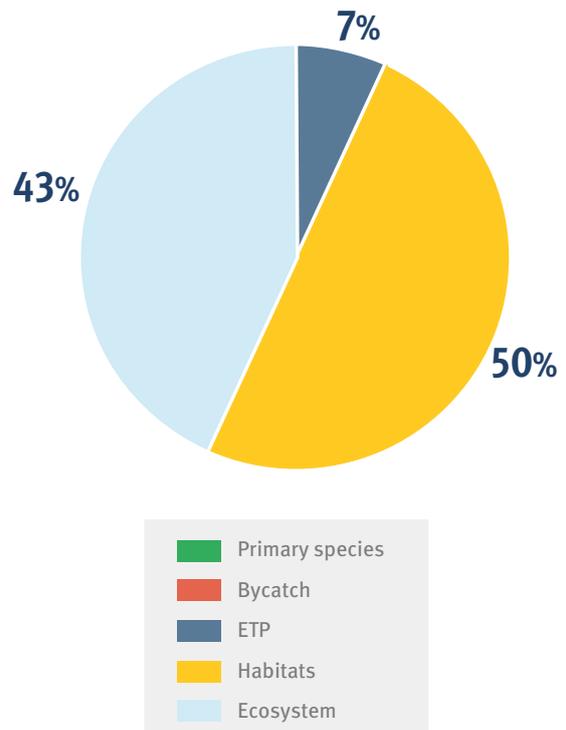


Figure 28: Government comments by MSC Principle

Figure 29: Government Principle 2 comments by component

Industry, on the other hand, left no comments related to Principle 2, and focused on Principle 1 (stock status) and Principle 3 (management). These comments generally came from catching sector representatives operating in overlapping fisheries or using alternative gear types to those listed in the assessment process. Some of the comments dealt with topics such as the client group or the process of stakeholder comments and thus did not fall under any Principle in particular.

INDUSTRY INPUT PER PRINCIPLE

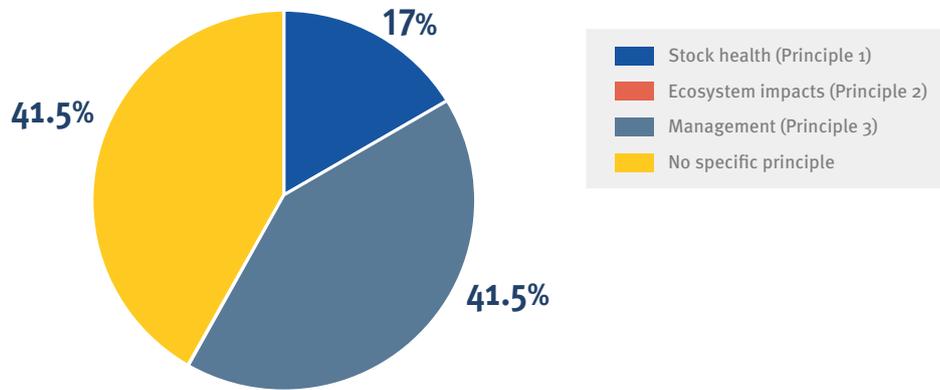


Figure 30: Catching sector comments by principle

The distribution of the comments of individuals (non-affiliated), on the other hand, was similar to that of the conservation organisations and NGOs, and government: heavily skewed towards Principle 2, with habitats being the primary focus. Not displayed are the comments left by scientists, which followed a similar pattern: half of their comments dealt with Principle 1 and the other half Principle 2, with all the Principle 2 comments being related to habitats.

NON-AFFILIATED STAKEHOLDER INPUT PER PRINCIPLE

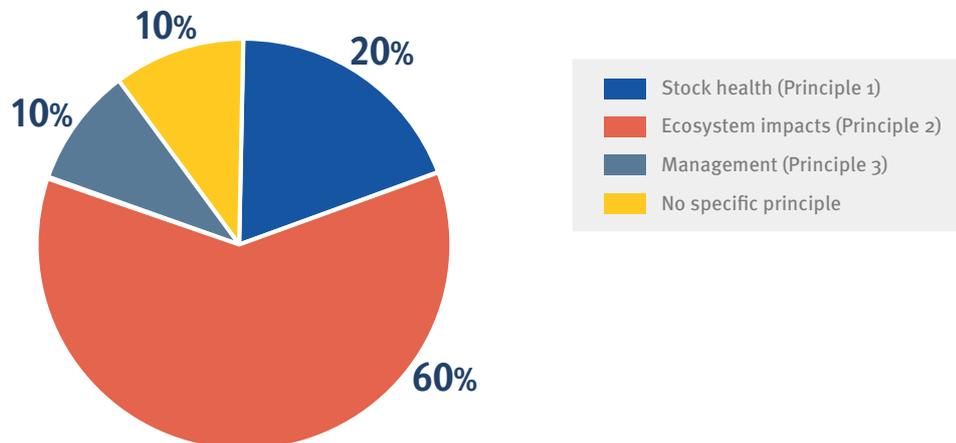


Figure 31: Non-affiliated stakeholder comments by principle

The recurring theme in analysing the stakeholder comments on MSC assessment, is that UK and Irish stakeholders, across most categories of stakeholder type, are most concerned about the impact fishing has on the surrounding environment, especially regarding habitats.

It may be that the comments were disproportionately directed to a few fisheries, which tended to have a certain gear type or target a certain species. However, such an analysis is beyond the scope of this report.



Climate Change and UK and Irish Fisheries

News of an unprecedented marine heatwave in the waters around the UK and Ireland hit the headlines this summer²⁶, with scientists warning that these abrupt heat shocks, together with other ongoing effects of climate change, could cause mass mortalities of fish and other sea life, if they persist²⁷. With the number of marine heatwaves affecting the planet's oceans increasing sharply, this poses a significant threat to global biodiversity and the provision of ecosystem services²⁸.

The Met Office reported global sea surface temperatures in April and May at an all-time high and analysis from the European Space Agency and the Met Office found water temperatures as much as 3° C to 4° C higher than the average for the time of year with the trend expected to continue.

The Met Office also said this was partly down to human caused climate change²⁹. The sea was particularly warm off the UK's east coast from Durham to Aberdeen and off north-west Ireland.

The Earth has already warmed by about 1.1° C since pre-industrial times³⁰, and the northernmost parts of the globe are experiencing temperature increases more pronounced than elsewhere. This includes the North Sea, which has been identified as a 'hot spot' for climate change and is expected to see an increase in sea surface temperatures of 2.3–3.7° C by 2100, compared to a global average of 0.6–2.0° C³¹. The effects are already being felt in UK and Irish fisheries. The Earth's warming means warmer temperatures in the oceans, less sea ice, lower levels of oxygen, lower pH levels (i.e. more acidic, due to the increasing concentration of carbon in the atmosphere)³², and shifting currents³³. This has caused changes in populations: some species have declined, while others have become more abundant, yet others have simply shifted geographically, and some species have shifted geographically while having had population increases or decreases. One study demonstrated that over 70% of species in the North Atlantic have responded to warming with changes in distribution and abundance from 1980 to 2008⁷. Another showed that centres of distribution have shifted between 50 and 400 km⁵, while yet another showed North Sea demersal species distribution getting approximately 3.6m deeper per decade between 1980 and 2004⁵. Specifically in this region, warmer-water species are predicted to become more common in the waters of the British Isles, such as red mullet, Dover sole, John Dory, and squid³⁴. On the other hand, cold-water species are expected to see a decrease in abundance; these species include Atlantic cod, monkfish, and megrim sole⁸.

Stocks of Atlantic mackerel have moved northward as sea temperatures have risen, which has resulted in disputes between coastal states, including the United Kingdom, over how to share fishery resources³⁵. With no agreement for quota allocations within the scientific recommended limits, MSC certification for North East Atlantic mackerel was suspended in March 2019, and is no longer in MSC's programme.

Recent declines in North Sea cod populations have been attributed in part to changing climate, with this change resulting in fewer juvenile cod surviving to adulthood³⁶. Having fewer adult fish has made sustainable fishing of the cod stock more difficult. Because of this problem, MSC certification of North Sea cod fisheries were suspended in September 2019, and a stock rebuilding plan is currently underway³⁷.

There is evidence that warming temperatures also leads to smaller fish, with one study showing body size reductions leading to a 23% decline in potential yields across stocks including whiting, herring, and haddock⁷. Increased sea temperatures have also been observed to have decreased North Sea phytoplankton productivity, but while these microorganisms form the foundation of the food web, there are too many factors involved to predict the outcome this would have on fisheries.

Sustainable seafood has a central role to play in climate change policy, both in reducing carbon emissions and ensuring sustainable livelihoods and food security. Sustainable fisheries that meet the MSC's standard for sustainable fishing are well-managed and more prepared for climate change. Given their importance to the planet, it's vital we manage the oceans in a sustainable way. Changes to the ocean mean changes to fish stocks and managing fishing sustainably requires adapting to whatever issues climate change brings.

MSC certified fisheries, including those in the UK & Ireland, have effective monitoring and management in place to reduce their impacts on the environment. They also follow the current best scientific advice to ensure they catch fish sustainably. Certified fisheries show that it is possible to balance economic and environmental priorities to safeguard our oceans, the wider environment and seafood supplies for the future, whilst adapting and becoming more resilient to the threats posed by climate change.

Additional good news is that fishing has less impact on climate than the harvesting of other proteins, another reason why the United Nations Food and Agriculture Organization (FAO) are calling for a 'Blue Foods Transformation'. A study of greenhouse gas emissions of wild fisheries³⁸ found that each kg of fish caught produces between one and five kg of carbon. By comparison, red meat production is estimated to range from 50 to 750 kg of carbon per kg of meat.

There is also evidence that sustainable fishing helps to reduce carbon emissions by increasing efficiency. For example, increased catches within Icelandic fisheries³⁹ mean that fishing vessels now make shorter fishing trips, reducing their fuel use and carbon emissions as a result.

²⁶Source: BBC, [Climate change: Sudden heat increase in seas around UK and Ireland](#) (2023)

²⁷Source: The Guardian, [‘Unheard of’ marine heatwave off UK and Irish coasts poses serious threat](#) (2023)

²⁸Source: Smale et al., [Marine heatwaves threaten global biodiversity and the provision of ecosystem services](#) (2019)

²⁹Source: Met Office, [Sea surface temperatures breaking records](#) (2023)

³⁰Source: NASA, [World of Change: Global Temperatures](#) (2023)

³¹Source: MCCIP, [Climate Change and UK Fisheries – perceptions of risk and possible adaptation options](#) (2015)

³²Source: Houses of Parliament, [Climate Change and Fisheries](#) (2019)

³³Source: IUCN, [Explaining Ocean Warming: Causes, scale, effects and consequences](#) (2016)

³⁴Source: University of Bristol, [How fish stocks will change in warming seas](#) (2020)

³⁵Source: MSC, [North East Atlantic pelagic fisheries: Report](#) (2023)

³⁶Source: Copernicus Service, [Climate change linked with declining North Sea cod populations](#) (2019)

³⁷Source: MSC, [North Sea cod to lose sustainability certification](#) (2019)

³⁸Source: Parker, et al., [Fuel use and greenhouse gas emissions of world fisheries](#) (2018)

³⁹Kristofersson, et al., [Factors affecting greenhouse gas emissions in fisheries: evidence from Iceland’s demersal fisheries](#) (2021)

Discussion

UK and Irish fisheries have made significant progress against MSC requirements since the Burry Inlet cockle fishery first obtained certification in 2001. MSC certified landings have increased from approximately 500 metric tons (less than 1% of total UK and Irish landings) to approximately 174,744 metric tons, a total which now represents 20% of the landings of the two countries.

Not included in the scope of this report are fisheries currently suspended or withdrawn from the MSC programme, including: Thames Blackwater herring drift-net fisheries, South West handline mackerel, SPSG West of Scotland herring Pelagic Trawl, SPSG, DPPO, PFA, SPFPO & KFO Atlanto-Scandian purse seine and pelagic trawl herring, PPO, KFO, SPSG & Compagnie des Pêches St Malo Northeast Atlantic blue whiting Pelagic Trawl, MINSA North East Atlantic mackerel and Scottish Fisheries Sustainable Accreditation Group (SFSAG) North Sea cod, which have withdrawn. Meeting the MSC's rigorous Fisheries Standard is no easy task, and, during the period in which this report focusses, there have been suspensions of key fisheries in the UK and Ireland fishery landscape, such as the North East Atlantic mackerel and North Sea cod fisheries. Fisheries that cannot continue to meet the Standard or do not close out their conditions will lose certification, ensuring that consumers can be assured that the seafood they purchase with the blue MSC ecolabel on comes from fisheries that continue to operate at best practice. If suspended fisheries like mackerel and North Sea cod can resolve their issues, and there are significant efforts underway to address them, through completing their action plans and enable them to re-enter the programme, the MSC certified share of the national catch could grow even further, to close to 60% of all UK and Irish landings (mt). It is the MSC's hope that the UK and Ireland establishes and maintains global leadership in certified sustainable fisheries.

Substantial progress has been realised throughout MSC's journey in the UK and Ireland, with certified landings of the fisheries within scope of this report increasing by 300% between 2011 and 2021, and a commitment by much of the catching sector to continue to improve their fishery performance to meet the level required to successfully achieve MSC certification. MSC's ambition is that more UK and Irish consumers will have greater access to more sustainably caught seafood,

including that caught and landed on the shores of the UK and Ireland. The region's thoroughly rich biodiversity makes it vital that the percentage of MSC certified landings continue to increase, so that we all can be assured that overfishing and other unsustainable practices are not harming these vital stocks and the habitats and ecosystems that secure essential blue foods, biodiversity, and other environmental services.

Moreover, the threat of climate change to this rich biodiversity highlights the need to secure robust, adaptable fisheries that can survive the impact of these large-scale environmental changes. If we do not make progress in achieving our COP21 Paris Agreement goals of limiting the global average temperature increase to 1.5 degrees Celsius above pre-industrial levels, UK and Irish fisheries may become less productive and be at higher risk of damaging shocks. Considering how much progress has been required since the 2018 IPCC report, and that greenhouse gas emissions from energy rose 6% in 2021 to a record high, re-doubling of efforts and measures are needed. We hope that political and business leaders across the world offer bolder solutions, because this is what will be necessary to keep warming to 1.5 degrees Celsius. Eating a wide variety of MSC certified seafood species instead of red meat, and harnessing blue or aquatic foods better in our diets where UK consumers currently eat a little over half the recommended amount, is probably the simplest place the reader can start to reduce one's food-associated carbon footprint.

The UK and Irish MSC certified fisheries covered in this report have made many improvements over the years, through aiming to enter the MSC programme and then maintaining their certification. Their time, effort, and financial investment in the programme has led to very positive changes on the water, that have ensured healthy stocks, reduced damage to ecosystems and habitats, and better protections for many ETP species, among other benefits. These fisheries have had to keep their environmental performance at a very extremely high level over the years, to retain the blue label used to proudly promote their sustainability. Not only must they maintain an average score of 80 (demonstrating best practice) across all three MSC principles and not allow any score to dip below 60, but they must also reach a score of 80 for all Performance Indicators by the end of their five year certification period.



Furthermore, the MSC Fisheries Standard evolves over time along with best practice, requiring the fisheries already in the programme to boost their performance even further. The UK and Irish fisheries that have been in the programme for two certification cycles have increased their performance dramatically—to the point where they are truly exemplary, world-leading, sustainable fisheries. The average scores for Principle 1 and Principle 3 are comfortably in the 90's, and average Principle 2 scores are just below 90. Clearly, being a part of the MSC programme for the long term has brought these fisheries to a higher bar of performance.

Much of the recorded improvement has been achieved through the closing of conditions. Due to the commitment of remaining certified, UK and Irish fisheries have made 146 concrete improvements to their fishing practices, which notably does not include any improved scores that were already above 80 (i.e. do not have conditions). The fact that there are only seven open conditions related to governance (Principle 3) is a remarkable feat for a collection of 19 fisheries and shows the commitment to sustainability that the fishing authorities of these two countries have made over the past several years.

Closing these conditions spurred innovations that will have reached beyond the concrete improvements to the fisheries themselves—they have also provided examples and benchmarks of best practices in sustainable fishing that can be followed by other fisheries. The discard monitoring systems put in place in the UK Fisheries/DFFU/Doggerbank Group saithe fishery demonstrates how a fishery can prove that it is not harming ETP species. The success of acoustic deterrents (“pingers”) as demonstrated by the Cornish hake gill net fishery and the study by SMRU have proven the effectiveness of this technology in preventing cetacean interaction to fisheries managers around the world. The SSMO Shetland inshore brown and velvet crab, lobster and scallop's Spatial Management Plan has also provided a great example of how a dredge fishery can voluntarily limit its impacts on the areas in which it operates, through closing vulnerable areas to fishing and protecting species and habitats.

But it is not just the fisheries themselves that have helped fishing practices become more sustainable. The UK and Ireland's actively engaged stakeholders continue to provide valuable contributions through comments received on the CABs' assessments, of these fisheries' performance against the MSC Standard, ensuring that assessments are held up to external scrutiny. The results of stakeholder engagement in assessments has led to score changes by CABs and resulted in new conditions of certification for fisheries. For example, new conditions on harvest control rules and secondary species were added on the Cornwall sardine fishery thanks to

stakeholder input. Not only have stakeholder comments led to improvements on the water, but they have also ensured that the surveillance reports published by the auditors are of the highest quality.

It is undeniable that the growth of the MSC programme in the UK and Ireland has brought many positive changes to the fisheries in this region and to their surrounding environments. However, there are still challenges ahead. Currently, there are 58 open conditions on MSC fisheries in the UK and Ireland, including 31 conditions on Principle 2, 21 of which are against the ETP and Habitats components. This means that the certified UK and Irish fisheries must continue to take significant steps to reduce interactions with ETP species, and to ensure that fishing activity does not cause serious or irreversible harm to the surrounding habitat.

In 2023 the MSC released an updated version of the MSC Standard, Version 3, which contains significant additional requirements addressing ETP species, habitats and ghost gear, as well as more stringent level of evidence needed to demonstrate how fisheries are meeting this new standard. With a deadline of November 2028 for all fisheries to be audited against the new Version 3, the performance of certified UK and Irish fisheries will hopefully be demonstrated to be even higher, as they aim to meet these new requirements. The MSC Science and Standards team, through extensive consultation, have also clarified language, refined existing tools and developed new guidance to ensure the Standard can be applied efficiently and is increasingly accessible to all fisheries around the world.

The hope for MSC is that other UK and Irish fisheries will be encouraged to learn from those that have come before them and follow their lead soon, by entering MSC assessment, and in the years ahead gain recognition for their performance. In 2022, to support fisheries in delivering on this ambition, the MSC opened its In Transition to MSC (ITM) programme to all fisheries globally. Through providing a structured and independently audited approach to fishery improving programmes, MSC aims to add better assurance and credibility to this space, and ultimately support more fisheries in their journey to meet the MSC Fisheries Standard.

For MSC in the UK and Ireland, our facilitation of [Project UK](#) has provided a platform for supporting fisheries aiming for improvement and ultimately certification, from Peterhead to Newlyn. This model, a pre-competitive partnership between the fishing industry, NGOs, supply chain, retailers, foodservice and science, as well as government and their agencies, has paved the way for a commitment to become world leading, and collectively push forward together. Our hope is that through



demonstrating the successful implementation and delivery of these Fishery Improvement Projects (FIPs), and capitalising on the opportunity that a new political landscape has provided in allowing a refreshed approach to fisheries management to take place, that we can further the sustainability of more UK and Irish fisheries, and enable their recognition, through certification, and reward of proudly promoting their blue MSC ecolabel in the market, in the years ahead.

With a once in a generation opportunity to reimagine our approach to sustainable management of our fisheries in the UK following EU Exit, it is imperative the government, policy makers and agencies deliver on their commitments to implement a world leading approach. Utilising the skills, demand and expertise of the stakeholder network in the UK and supporting this through appropriate and ambitious funding for science, research and initiatives aiming to improve fisheries sustainability, will all aide in turning this great opportunity into a reality.

MSC's vision is of oceans teeming with life, and this is delivered through a theory of change that requires consumers to identify and purchase seafood from fisheries that can demonstrate they are performing at best practice. This model means that fisheries aspire to meet a level that is encouraged through market demand and drives them to make innovative changes to increase sustainability. Through gaining market recognition for their sustainability, and as a result demand for their catch, some MSC certified fisheries in the UK have been analysed to assess the socio-economic impact of certification. Analysis has shown a clear price premium,

in the case of Cornish hake, while most exhibit trends of improved market access, reputation and sometimes catches.

While this report documents the details of these changes, it is important to consider them in the wider context of the current global political landscape. Climate change, increasing populations and shifts in global politics are significant challenges facing the fishing industry, and the MSC's goal to have over one third of global catch engaged in the MSC programme by 2030 provides a structured roadmap for delivering socio-economic security of coastal communities and providing access to low carbon protein. Our hope is that the improvements discussed in this report, along with the introduction of ITM and the new version of the MSC Standard will continue to encourage fisheries to perform at best practice and secure the sustainability of fisheries for the future. The Ocean Stewardship Fund (OSF), with the ambition to grow this fund to \$100 million by 2032, will help the MSC's global programme and network of committed partners to support, enable and drive forward further impacts and improvements within the global seafood landscape.

We hope you have enjoyed reading this report, and please do get in touch if you would like to discuss how we can achieve these ambitious goals, together.



Glossary

Announcement Comment Draft Report (ACDR): The public announcement of an assessment takes place with the posting on the MSC website of the Announcement Comment Draft Report (ACDR). The ACDR is an almost full version of the assessment report, but with indicative scoring ranges rather than specific scores.

Annual audit: An official, independent, and documented inspection which obtains evidence within an organisation and uses it to determine the extent to which the audit criteria is fulfilled. Audits are typically conducted by an auditor.

Bycatch species: Organisms that have been taken incidentally and are not retained (usually because they have no commercial value).

Conformity Assessment Body (CAB): CABs are third-party auditors who independently assess fisheries against the MSC Fisheries Standard. When a fishery is assessed and certified to the Fisheries Standard, its catch can be sold with the blue MSC label. Note: Whenever the word CAB is used in the text, it applies to both the applicant and accredited CABs, unless otherwise stated.

Condition: A requirement to achieve outcomes in order to achieve a score of 80 or above.

Ecosystem: Referred to as the fisheries impact on the wider ecosystem structure and function, including consideration of the removal of the target stock, the impacts of the fishery on both the ecosystem's inherent health and balance (e.g. structure, trophic relationships and biodiversity) and the impact on the services provided by the ecosystem.

Endangered, Threatened or Protected (ETP): ETP species are 'in scope' species that are recognised by national threatened species legislation or species that are listed in binding international agreements such as the Convention on International Trade in Endangered Species (CITES). Species classified as 'out-of scope' (amphibians, reptiles, birds and mammals) that are listed in the IUCN Redlist as vulnerable (VU), endangered (EN) or critically endangered (CE) are recognised as ETP species.

Expedited audit: For Chain of Custody: An irregularly timed, unannounced or short notice audit. Advance notice to be given to the Certificate Holder no more than one calendar day in advance. For Fisheries: An audit which happens outside the normal surveillance schedule, provoked by changes in the fishery.

Fish stock: The living resources in the community or population from which catches are taken in a fishery. Use of the term fish stock implies that the particular population is a biologically distinct unit. In a particular fishery, the fish stock may be one or several species of fish or other aquatic organisms.

Fisheries Improvement Project (FIP): Multi-stakeholder initiatives that aim to help fisheries work towards sustainability.

Habitat: The chemical and bio-physical environment, including biogenic (made by organisms) structure, where fishing takes place.

Harvest Control Rule (HCR): A set of well-defined pre-agreed rules or actions used for determining a management action in response to changes in indicators of stock status with respect to reference points.

Harvest Strategy (HS): The combination of monitoring, stock assessment, harvest control rules and management actions, which may include a management plan.

Main primary or secondary species: Species that form a significant part of the total catch weight, accounting for more than 5% of the total catch weight, or 2% of the total catch weight if they are deemed a less resilient species.

Marine Conservation Zones (MCZs): A type of marine protected area that can be designated in English, Welsh and Northern Irish territorial and offshore waters. MCZs protect a range of nationally important habitats and species such as cold-water coral reefs which thrive in the UK's deeper waters, sedimentary seabed habitats vital for a range of marine processes and other species, and the slow-growing ocean quahog identified as an OSPAR Threatened and/or Declining species.

Marine Protected Area (MPA): A protected marine intertidal or subtidal area, within territorial waters, Exclusive Economic Zones (EEZ) or in the high seas, set aside by law or other effective means, together with its overlying water and associated flora, fauna, historical and cultural features.

Maximum Sustainable Yield (MSY): The highest theoretical equilibrium yield that can be continuously taken (on average) from a stock under existing (average) environmental conditions without significantly affecting the reproduction process.

Minor primary or secondary species: Applies to both primary and secondary species, these are species that are more rarely caught in the fishery accounting for less than 5% of the total catch weight, or 2% of the total catch weight if they are deemed a less-resilient species.

Primary species: Species caught in the fishery that are not the targeted stock (not covered by Principle 1) or ETP but are managed by tools and measures that are intended to achieve stock management objectives.

Priority Marine Feature (PMF): A variety of habitats and species that are a priority for conservation in Scotland's seas, which were developed by Marine Scotland, the Joint Nature Conservation Committee (JNCC) and Scottish Natural Heritage (SNH).

Productivity and Susceptibility Analysis (PSA): Used as the 'Level 2' analysis in the Risk Based Framework. This semi-quantitative approach examines several attributes of each species that contribute to or reflect its productivity or susceptibility, in order to provide a relative measure of the risk to the scoring element from fishing activities.

Public Certification Report (PCR): A report published by a Conformity Assessment Body at the end of an assessment against the MSC Fisheries Standard.

Public Comment Draft Report (PCDR): The draft report of the assessment of the fishery prepared by the team and the Conformity Assessment Body released for public comment. Follows peer review draft report. Precedes final report.

Reference points: Biological reference points; stock status reference points used to define management action in response to stock status.

Risk Based Framework (RBF): Used for assessing data-poor fisheries – this is a framework of assessment tools for scoring 'outcome' performance indicators in cases where insufficient information is available to score a fishery using the default Scoring Guideposts. See PSA and SICA for examples of tools.

Scale Intensity Consequence Analysis (SICA): Scale Intensity Consequence Analysis (in relation to using the RBF) – used as the 'Level 1' analysis in the RBF. This qualitative approach identifies the activities mostly likely to be associated with 'worst case' impacts on any species, habitat or ecosystem. A SICA is best conducted with the participation of a diverse group of stakeholders who are able to provide a range of knowledge about the fishery under assessment.

Scope extension: A process for Conformity Assessment Bodies (CABs) to follow if a fishery client wants to extend its MSC certificate to include other fishery operations such as adding a new gear type, targeting a new species or adding new vessels to the certificate.

Secondary species: Species caught in the fishery that are not the targeted stock (not covered by Principle 1) or ETP. Are not considered 'primary' as they are not managed to achieve stock management objectives; or are species that are out of scope of the programme, but where the definition of ETP species is not applicable.

Spawning stock biomass (SSB): Total weight of all sexually mature fish in the stock.

Special Areas of Conservation (SACs): Are protected areas in the UK designated under the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters); the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland; the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; the Conservation of Offshore Marine Habitats and Species Regulations 2017 in the UK offshore area.

Special Protection Area (SPA): The land classified under Directive 79/409 on the Conservation of Wild Birds. SPAs are strictly protected sites classified in accordance with Article 4 of the EC Birds Directive, which came into force in April 1979.

Unit of Assessment (UoA): The target stock(s) combined with the fishing method/gear and practice (including vessel type/s) pursuing that stock, and any fleets, or groups of vessels, or individual fishing operators or other eligible fishers that are included in an MSC fishery assessment. In some fisheries, the UoA may be further defined based on the specific fishing seasons and/or areas that are included.

Unit of Certification (UoC): The target stock(s) combined with the fishing method/gear and practice (including vessel/s) pursuing that stock. When the term "unit of certification" is used for fisheries that are in assessment, it refers to the "unit of assessment" or "unit of potential certification". Note that other eligible fishers may be included in some units of certification but not initially certified (until covered by a certificate sharing arrangement).

Vulnerable Marine Ecosystem (VME): These are ecosystems that are classified as vulnerable due to their respective characteristics and processes, such as rarity, fragility, life history dependency by various species, structure complexity and the functional significance of the ecosystem. See FAO guidelines for more information. www.fao.org/in-action/vulnerablemarine-ecosystems/en

Annex

Specification of page 8: MSC status of UK and Irish fisheries

The following pages show, for each target species, the MSC certificates of UK and Irish fisheries. This does not mean that all catches for that species have been assessed and certified, as explained in the text box on p6.

All these fisheries, their current status and the reports of the independent auditors are publicly accessible through our online database called “Track a Fishery.” <https://fisheries.msc.org/en/fisheries/>.

Different fishing methods are also mentioned; more explanations can be found on this website: <https://www.msc.org/what-we-are-doing/our-approach/fishing-methods-and-gear-types>.

COCKLE

Certificate:	Burry Inlet cockles This fishery was combined into the Dee Estuary and Burry Inlet cockles fishery
Certified since:	April 2001
Target species:	Cockle (<i>Cerastoderma edule</i>)
Location:	FAO Area 27 (Atlantic, Northeast); Burry Inlet, Carmarthenshire and Swansea, South Wales
Method:	Trap

HERRING

Certificate:	SPSG Ltd North Sea herring This fishery was combined into the PFA, SPSG, SPFPO, DFPO and DPPO North Sea Herring fishery
Certified since:	July 2008
Target species:	Herring (<i>Clupea harengus</i>)
Location:	FAO Area 27 (Atlantic, Northeast); ICES divisions IV and VIId
Method:	Midwater trawl

SARDINE

Certificate:	Cornwall sardine, UK
Certified since:	June 2010
Target species:	European pilchard(=Sardine) (<i>Sardina pilchardus</i>)
Location:	FAO Area 27 (Atlantic, Northeast); ICES Divisions VIIe and VIIf
Method:	Purse seine

MIXED SPECIES: HAKE, PLAICE, HADDOCK, SAITHE, WHITING

Certificate:	SFSAG Northern Demersal Stocks
Certified since:	October 2010
Target species:	European hake (<i>Merluccius merluccius</i>), European plaice (<i>Pleuronectes platessa</i>), Haddock (<i>Melanogrammus aeglefinus</i>), Saithe(=Pollock) (<i>Pollachius virens</i>), Whiting (<i>Merlangius merlangus</i>)
Location:	FAO Area 27 (Atlantic, Northeast); ICES Divisions Iva & IVb, VI, and VII
Method:	Danish seine, Pair seine, Bottom trawl, Nephrops trawl, Pair trawl, Demersal trawl

SAITHE

Certificate:	UK Fisheries/DFFU/Doggerbank Group saithe This is a multinational fishery with joint agreements between the EU, the UK, Norway, and Russia. The EU has come up with an multiannual management plan that has not been adopted by Norway.
Certified since:	January 2011
Target species:	Saithe(=Pollock) (<i>Pollachius virens</i>)
Location:	FAO Area 27 (Atlantic, Northeast); ICES Sub Areas IIIa, IV, and VI
Method:	Bottom trawl

LOBSTER

Certificate:	Normandy and Jersey lobster
Certified since:	June 2011
Target species:	European lobster (<i>Homarus gammarus</i>)
Location:	FAO Area 27 (Atlantic, Northeast); Jersey (UK Crown Dependency) and Granville Bay (shared fishery between Basse Normandie and Jersey)
Method:	Pot

MIXED FISHERY: CRAB, SCALLOP

Certificate:	SSMO Shetland inshore brown crab and scallop
Certified since:	March 2012
Target species:	Brown crab (<i>Cancer pagurus</i>), Great Atlantic scallop (<i>Pecten maximus</i>)
Location:	FAO Area 27 (Atlantic, Northeast); ICES Area Iva
Method:	Dredge, Pot

MIXED FISHERY: COD, HADDOCK, SAITHE

Certificate:	UK Fisheries Ltd/DFFU/Doggerbank Northeast Arctic cod, haddock and saithe This is a multinational fishery with joint agreements between the EU, the UK, Norway, and Russia.
Certified since:	May 2012
Target species:	Atlantic cod (<i>Gadus morhua</i>), Haddock (<i>Melanogrammus aeglefinus</i>), Saithe (<i>Pol-lachius virens</i>)
Location:	FAO Area 27 (Atlantic, Northeast); ICES Sub Areas I, IIa, IIb
Method:	Otter trawl

MUSSEL

Certificate:	Shetland & Scottish Mainland Rope Grown mussel Enhanced Fishery
Certified since:	June 2012
Target species:	Mussels (<i>Mytilus spp</i>)
Location:	FAO Area 27 (Atlantic, Northeast); ICES Area Iva and Via
Method:	Miscellaneous

COCKLE

Certificate:	Dee Estuary and Burry Inlet cockles
Certified since:	July 2012
Target species:	Cockle (<i>Cerastoderma edule</i>)
Location:	FAO Area 27 (Atlantic, Northeast); Dee Estuary
Method:	Miscellaneous

MUSSEL

Certificate:	Ireland Bottom Grown mussel
Certified since:	July 2013
Target species:	Mussels (<i>Mytilus spp</i>)
Location:	FAO Area 27 (Atlantic, Northeast); ICES Areas VIa, VIIa, VIIg, VIIj, and VIIb
Method:	Dredge

MUSSEL

Certificate:	Northern Ireland Bottom Grown mussel
Certified since:	July 2013
Target species:	Blue mussel (<i>Mytilus edulis</i>)
Location:	FAO Area 27 (Atlantic, Northeast); ICES Areas VIa, VIIa, VIIg, VIIj, and VIIb
Method:	Dredge

HERRING

Certificate:	Northern Ireland Pelagic Sustainability Group (NIPSG) Irish Sea herring
Certified since:	August 2014
Target species:	Herring (<i>Clupea harengus</i>)
Location:	FAO Area 27 (Atlantic, Northeast); ICES Division 7a (Irish Sea)
Method:	Pelagic trawl

HAKE

Certificate:	Cornish hake gill net
Certified since:	June 2015
Target species:	European hake (<i>Merluccius merluccius</i>)
Location:	FAO Area 27 (Atlantic, Northeast); ICES Divisions VIIe, VIIf, VIIg, VIIh, VIIj2, VIIk2
Method:	Gillnet

MIXED SPECIES: HERRING, MACKEREL

Certificate:	Northern Ireland Pelagic Sustainability Group (NIPSG) North Sea herring
Certified since:	December 2016
Target species:	Herring (<i>Clupea harengus</i>), Mackerel (<i>Scomber scombrus</i>)
Location:	FAO Area 27 (Atlantic, Northeast); ICES divisions IV and VIId
Method:	Midwater trawl

HERRING

Certificate:	PFA, SPSG, SPFPO, DFPO and DPPO North Sea Herring
Certified since:	April 2017
Target species:	Herring (<i>Clupea harengus</i>)
Location:	FAO Area 27 (Atlantic, Northeast); ICES divisions IV and VIId
Method:	Midwater trawl

MIXED SPECIES: COCKLE, CLAM

Certificate:	The Poole Harbour Clam & Cockle Fishery
Certified since:	March 2018
Target species:	Cockle (<i>Cerastoderma edule</i>), Japanese carpet shell (<i>Ruditapes philippinarum</i>)
Location:	FAO Area 27 (Atlantic, Northeast); Poole Harbour
Method:	Dredge

HADDOCK

Certificate:	Scottish Fisheries Sustainable Accreditation Group (SFSAG) Rockall haddock
Certified since:	July 2018
Target species:	Haddock (<i>Melanogrammus aeglefinus</i>)
Location:	FAO Area 27 (Atlantic, Northeast); ICES Subarea 4, Division 6.a, (North Sea, West of Scotland) and UK waters of 2a
Method:	Single Nephrops trawl, Twin Nephrops trawl, Demersal trawl, Twin demersal trawl, Danish seine, Pair seine–trawl, Pair trawl

MUSSEL

Certificate:	Ireland rope grown mussel
Certified since:	July 2019
Target species:	Blue mussel (<i>Mytilus edulis</i>), Mediterranean mussel (<i>Mytilus galloprovincialis</i>), Northern blue mussel (<i>Mytilus trossulus</i>)
Location:	FAO Area 27 (Atlantic, Northeast); ICES Areas 6.a, 7.a, 7.b, 7.g, and 7.j
Method:	Miscellaneous

COCKLE

Certificate:	Thames cockle dredge
Certified since:	December 2019
Target species:	Cockle (<i>Cerastoderma edule</i>)
Location:	FAO Area 27 (Atlantic, Northeast); Thames Estuary Cockle Fishery Order 1994 Area
Method:	Dredge

SHRIMP

Certificate:	Wash Brown Shrimp
Certified since:	January 2020
Target species:	Common shrimp (<i>Crangon crangon</i>)
Location:	FAO Area 27 (Atlantic, Northeast); ICES Area IVc, FAO Area 27 – ICES statistical rectangles 36E9, 36Fo, 35Fo, 35F1, 34Fo, 34F1, 33F1
Method:	Beam trawl

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All MSC fisheries data in this report is correct as of 1st May 2023.

Find out more:

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