Greener UK response to Defra's White Paper on Sustainable fisheries for future generations

Please find to follow on behalf of Greener UK, a coalition of UK based environmental NGOs, and partners, our response to Defra's White Paper on Sustainable fisheries for future generations. Our organisations are working together to promote sustainable fisheries within a healthy marine environment.

We welcome this opportunity to comment on Defra's proposals and are united in the belief that as the UK leaves the EU it must take the opportunity to restore and enhance the UK's marine environment. We welcome many of the stated objectives within the White Paper including the strong commitment to delivering gold standard sustainable fisheries and the aim to build a vibrant and sustainable fishing industry. However, we feel the proposals lack the required ambition in places and fall short of delivering the detail needed to achieve this in others. Greener UK and partners believe that the development of new domestic fisheries legislation is an opportunity to establish the UK and devolved nations as world leaders in sustainable fisheries management, an aspiration behind which all stakeholders including the fisheries sector are united.[1] Thriving fish and shellfish stocks and a healthy marine environment are critical for a profitable and prosperous industry and we believe that ultimately, fisheries are a common public resource and should be managed for the public benefit.[2]

We welcome the acknowledgement to strengthen Defra's partnership with the Devolved Administrations given the devolved nature of fisheries management. This will be vital as the four nations of the UK must work together in a transparent way to co-develop and co-design arrangements for environmental governance and collaborate to develop a shared approach to ensuring the shared environmental principles are applied to achieve recovered and biodiverse seas.

Greener UK and partners believe that the new fisheries regime across the UK should be aiming to deliver the following outcomes:

- An ecosystem-based approach: managing fish and shellfish as an integral part of healthy ocean ecosystems, and taking account of the cumulative impact of human activities on the environment.
- All fish stocks restored and maintained above biomass levels capable of producing the Maximum Sustainable Yield (MSY).

[1] B D Stewart and B C O'Leary, 2017, Post-Brexit policy in the UK: a new dawn? Fisheries, seafood and the marine environment, University of York. DOI: 10.13140/RG.2.2.35329.76641

[2] As discussed in *Attorney General for the Province of British Columbia v Attorney General for Canada* [1914] AC 153, 168–170 (PC), affirmed in *The United Kingdom Association of Fish Producer Organisations v Secretary of State for Environment, Food and Rural Affairs v Marine Management Organisation, New Under Ten Fishermen's Association*, [2013] EWHC 1959 (Admin), at [9] and [100].

- Fisheries management decisions based on the best available science.
- Fully transparent and accountable fisheries where catches, both target and non-target, are fully documented, infringements are properly enforced and fisheries are effectively controlled.
- Fishing opportunities are allocated on the basis of transparent and objective environmental, social and economic criteria, in a way that incentivises the most sustainable fishing.

In the interests of delivering this we believe that an important element will be that the forthcoming Fisheries Bill include a duty on any public authority having any function relating to fishing activities or fisheries management to exercise its functions in accordance with certain general objectives. These objectives should include: stocks being restored and maintained above biomass levels capable of delivering MSY by ensuring that, by 2020 at the latest, fishing mortality is below levels that will deliver MSY; decisions are made according to the best available science; application of the precautionary approach and ecosystem-based approach to management; fishing activities being sustainable in the long term.

The inclusion of a clause setting out these objectives is not a novel approach in the UK as a number of existing laws adopt a similar method. Greener UK's suggested drafting for an objectives clause is included in Annex 1. This proposed clause reflects the key elements that we believe are central to the delivery of sustainable fisheries management, namely:

- Sustainability at the heart
- Clear objectives and principles
- High environmental standards apply to all vessels in UK waters and for UK vessels fishing anywhere
- Scientific and transparent processes for setting total allowable catch and quotas
- International and intra-UK co-operation to manage shared stocks
- Eliminating discards and bycatch
- Accountability and enforcement
- Restoring and protecting the marine environment
- Inclusive and robust governance

We provide more detail on these elements and how they should be delivered in our response to the questions posed in the White Paper below. If delivered effectively there is a real opportunity to set a gold standard for sustainable fishing around the world as envisaged by the Secretary of State in his Foreword to the White Paper.

We look forward to engaging further as part of the process to deliver sustainable UK fisheries. Should you require more information please contact: Rhona Kent, Fisheries Policy Officer, WWF-UK, email: rkent@wwf.org.uk

RESPONSE

Section 1.6 Setting our course

Q1: Do you agree with the proposed powers in the Fisheries Bill?
General:
Legal underpinning for sustainability: We welcome the overall pledge that the Bill will "restate the UK's commitment to sustainable fisheries" and recommend that the government ensures this commitment is imbued with legal meaning by including it as an objective of the Bill which will frame, guide and restrict relevant actions, including the use of powers contained in the Bill.

An overarching objective of this type would help achieve the Secretary of State's ambition of "setting a gold standard for sustainable fishing around the world". Our suggested drafting for an objectives clause was provided to Defra in June 2018 and is enclosed at Annex 1.

Cross referencing new and existing legislation: It will be important to carefully determine the relationship between the Fisheries Bill and other legislation, including the Environment Bill which will, amongst other things and pursuant to the European Union (Withdrawal) Act 2018 (the Withdrawal Act), set out key environmental principles and provide for the establishment of a new environmental governance body (the remit of which we recommend must extend to the oversight and enforcement of law and policy related to fisheries and the marine environment).

Our understanding is that the Fisheries Bill will generally apply across the UK including to the devolved nations on reserved matters, with certain aspects applying to England only, such as the extension of powers under the Marine and Coastal Access Act 2009. In its consultation paper, '*Environmental Principles and Governance after the United Kingdom leaves the European Union*', Defra envisaged that the new environmental principles and governance body "should cover England and environmental matters that are not devolved". Given their potentially different scopes and, in some instances, similar content (including objectives and principles), it will be important to carefully calibrate the Fisheries Bill with the Environment Bill (and other forthcoming legislation, including in the devolved nations) as well as with existing legislation such as the Well-being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016.

This calibration must ensure that the highest environmental standards are retained at all times. It is critical that such calibration exercises are carried out across all government departments when developing new legislation and policy in order to ensure that the Fisheries Bill does not conflict with existing environmental law.

Comments on the nine proposed provisions:

i) Control of access and ii) equal access

The White Paper states that the intention for the Fisheries Bill is to enable the UK to "take back control of access to the UK's fishing waters" by allowing the UK to decide which countries' vessels may fish in these areas and to preserve equal access for UK vessels through UK waters.

In establishing control of access to the UK's fishing waters, the Bill must require that all access to UK waters is conditional on compliance with the same rules applicable to UK vessels. We welcome the White Papers assurance that the UK "will project our commitment to sustainable fisheries and marine conservation in negotiations [with the EU and other countries] and would require compliance with sustainable practices for any access granted to fish in UK waters". This requirement is consistent with international law[3] and should be reflected in primary legislation.

The provisions for control of access to UK waters must also ensure that appropriate monitoring and enforcement procedures are in place to ensure that foreign vessels meet the same requirements as UK fleets across all UK fishing zones, including adherence to sustainable practices. Any infringements should be treated seriously and equally, whether by a UK or foreign vessel.

Similarly, the Bill must include a clause requiring that UK fishing vessels operating overseas must comply with the standards which would be required of them when fishing in UK waters.

The Bill should also clarify the roles and powers allocated to the UK Government and each of the Devolved Administrations in relation to negotiating access to waters.

iii) Setting and allocation of fishing opportunities

The White Paper recognises that provisions relating to the setting and allocation of fishing opportunities within the UK will be a key part of the Fisheries Bill, including in order to implement the international total allowable catch (TAC) agreements made between the UK, the EU and other coastal states.

As explored further in response to question 2, it is critical for the future of our fisheries and the health of the marine environment that the UK sets domestic catch limits designed to maintain or restore stocks above levels capable of producing MSY, as required by Article 61 of the UN Convention on the Law of the Sea (UNCLOS).

The UK must also cooperate and agree shared stock TACs with the EU and other coastal states which ensure that all stocks are restored and maintained

[3] *Request for an Advisory Opinion submitted by the Sub-Regional Fisheries Commission (SRFC) (SRFC Advisory Opinion)*, ITLOS Case No 21, 2 April 2015, [123]).

above biomass levels capable of delivering MSY in line with Article 63 UNCLOS and Articles 2 and 5 of the UN Straddling Fish Stocks Agreement.

Setting catch limits should take into account the precautionary approach, especially in relation to stocks which may have limited available data.

The White Paper notes that fishing opportunities could be allocated within the UK according to either a quota-based or an effort-based system. As discussed further in response to question 10, we have serious concerns about the adoption of an effort-based system and disagree with both the trial and use of this method.

Fisheries are a public resource, and fishing opportunities must be managed in a way that maximises public benefit, which includes provision of environmental protection as well as social and economic benefits. Fishing opportunities should be allocated on the basis of transparent and objective environmental, social and economic criteria in a way that incentivises the most sustainable fishing practices. As explored further in response to question 8, this will not happen if the existing methodology which uses Fixed Quota Allocations (FQAs) remains in place, as the White Paper envisages. Instead, the UK should reflect Article 17 of the Common Fisheries Policy (CFP) and ensure that “transparent and objective criteria including those of an environmental, social and economic nature” are employed in the allocation of fishing opportunities.

To achieve this, the Bill should clarify the criteria on which the allocation of quota will be based. These overarching criteria for quota allocation should be co-designed and agreed with the Devolved Administrations and put on the face of the Bill to ensure a common approach.

The specific detailed criteria should be developed through broad consultation and should be reliant on analyses of existing quota systems where the use of environmental and socio-economic criteria have resulted in sustainable management and benefits (both environmental and socio-economic) for specific fisheries, regions or socio-economic groups. We support the application of an approach which incentivises the most sustainable fishing practices and have reflected this in our suggested Fisheries Bill drafting.

While the overarching criteria should be set at a UK-wide level, there should be scope for each administration to distribute its own quota in line with the overarching criteria as befits the fleets under their administration.

This is an opportunity for the UK Government to introduce a new quota allocation system which will manage fishing opportunities as a public asset, which we have discussed further in the response to question 8.

iv) Introduction of sustainability principles and objectives

We note the statement that "For fisheries, retained EU law will include around 100 pieces of legislation that make up the CFP, and set out the CFP's high-level objectives". Whilst we acknowledge and expect that this law will initially be retained, given the UK Government's position that it will leave the CFP, it is critical that sustainability commitments are included on the face of a new Fisheries Bill in order to guide and frame new law and policy as well as old.

The White Paper notes that the Fisheries Bill will require the Secretary of State to develop a fisheries policy statement, with Devolved Administration ministers, on how to apply specified sustainability principles and objectives in fisheries management. Greener UK believes that sustainability principles and objectives should be included on the face of the Bill and that a fisheries policy statement could then be used to provide guidance on how they would operate. Greener UK has produced a suggested clause for the sustainability principles and objectives that we believe needs to sit on the face of the Bill, which was provided to Defra in June 2018 and enclosed at Annex 1. This clause is modelled on Article 2 of the CFP. The principles and objectives suggested in the proposed drafting sit together and are intended to operate in concert to support sustainable fisheries management.

In addition to setting out clear principles and objectives in the Fisheries Bill, the Bill must also establish a strong duty on all public authorities which have functions relating to fishing activities or fisheries management. We have suggested a duty which requires relevant authorities to **act in accordance** with the principles and objectives. This will ensure that they have a meaningful status in decision-making and that failure to adequately adhere to them can be challenged.

We expect that the sustainability commitments will be presented appropriately as either principles or objectives. While both principles and objectives serve valuable roles in law, they have a different legal character and there are meaningful differences between how they operate. Whereas objectives indicate a goal to be aimed at or achieved, principles help decision-makers reach decisions by guiding the approach to be taken.

Their legal treatment in the Fisheries Bill must be appropriate, and must calibrate and correspond with objectives and principles contained in the forthcoming Environment Bill as well as existing legislation such as the Well-being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016.

Greener UK advocate that the Environment Bill should contain new objectives and principles (as well as a Principles Policy Statement), accompanied by appropriate legal duties. For more detail, see the Greener UK response to Defra's consultation on Principles and Governance.[4]

[4] Greener UK, Environmental principles and governance after the UK leaves the EU (31 July 2018), available at http://greeneruk.org/resources/Greener_UK_response_to_Defra_EPG_consultation_310718.docx.pdf.

v) Amendment of retained EU law

It is proposed that the Fisheries Bill will create powers enabling retained EU law to be amended by secondary legislation. As recognised in the White Paper, this power must be "as tightly constrained as possible". Unless agreement is reached with the devolved legislatures, these powers should only be exercisable to modify reserved matters or those affecting England only.

Any future amendments to retained EU law should be guided by the environmental principles and objectives we expect to see included on the face of the Fisheries Bill and Environment Bill.

Whilst we acknowledge the need for these powers, any powers, particularly those that enable the creation or amendment of legislation with substantive policy content or which establish technical requirements, must be accompanied by transparent formal stakeholder consultation procedures and robust Parliamentary scrutiny and approval procedures. The Bill must make provision for the application of these procedures alongside the granting of powers for such legislation to be developed or maintained. This would require the use of an enhanced scrutiny procedure at times and for a specialised parliamentary committee to be established.

vi) Management of exploitation of sea fisheries resources to ensure we can protect our marine environment including regulation of fishing outside MPAs

As explored further in response to question 14, we welcome the proposal to extend powers in the Marine and Coastal Access Act 2009 to allow for the regulation of fishing activity in order to protect the marine environment both in inshore and offshore zones outside Marine Protected Areas. There should also be an accompanying duty to use these powers to protect the marine environment, and the powers should be extended to also include the regulation of gear and fishing methods as well as the prohibition of fishing activity.

We support the introduction of a more responsive management regime for the protection of the marine environment, allowing the relevant authorities to readily adopt appropriate measures. Relevant authorities should be empowered to adopt management strategies that take into account changes to fish stock distribution and abundance. These changes include those caused as a result of climate change as well as temporary aggregations of endangered species and spawning fish.

It is worth noting that in the case of Northern Ireland and Wales, there is no equivalent to the Marine Management Organisation or Marine Scotland thus there is a gap in an independent management structure.

vii) Improvement of the Marine Management Organisation's cost-recovery powers and viii) modernisation of grant making powers

Greener UK supports the development of a cost recovery mechanism for the Marine Management Organisation to help finance sustainable fisheries management in England.

As we leave the EU, it is essential that fishers contribute towards the increasing costs of management of our public resource. The costs of managing UK fisheries are substantial, covering aspects from enforcement to fisheries science. These fisheries management costs are publicly financed, but the financial benefits accrue largely to those within the fishing industry (and to a lesser extent ancillary industries and consumers). The 'resource rent' generated from the fishery is limited as licences are capped. This cap on commercial fishing licences is a crucial protection for sustainability, but it prevents new entry into the fishing industry and generates economic benefits for those fishers already holding licences by limiting competition.

Other countries, other industries, and changes to UK fisheries management related to EU exit, all point to the unavoidable conclusion that cost recovery for fisheries management is necessary and timely. Several cost recovery mechanisms are available and should be reviewed for their ability not only to raise funds but also to encourage sustainable behaviour within the fishing industry.

ix) Powers which allow for the introduction of schemes to tender or auction quota

As explored further in response to question 9, Greener UK believes that any additional quota should be allocated according to transparent social, economic and environmental criteria in a way that incentivises the most sustainable fishing practices, as set out in Greener UK's suggested objectives drafting.

Cooperation with Devolved Administrations

The White Paper notes that the extent of the different provisions proposed for the new Fisheries Bill will vary depending on what powers already exist in different areas and what is agreed between the Devolved Administrations.

As acknowledged in the White Paper, there are certain aspects of fisheries management, such as those relating to international relations, regarding access to waters and setting quotas which require a consistent approach across the entirety of the UK.

We welcome the commitment in the White Paper to establish common frameworks which respect the devolution settlements and the democratic accountability of the devolved legislatures. These frameworks must be transparently co-designed and co-managed by the four nations.

The frameworks must be able to, inter alia: appropriately respond to transboundary environmental matters; enable the functioning of the UK market; ensure compliance with international obligations; ensure the UK can negotiate, enter into and implement new trade agreements and international treaties; enable the management of common resources; administer and provide access to justice in cases with a cross-border element and safeguard the security of the UK.

However, there is a need for increased meaningful collaboration and co-operation to co-design marine and fisheries law and policy, and to co-manage its implementation. We are concerned there has been insufficient cross-administration collaboration on this to date.

The existing Concordat on Management Arrangements for Fishing Opportunities and Fishing Vessel Licensing in the United Kingdom provides a starting point for the development of future policy on co-operation between the UK Government and the Devolved Administrations.

Q2: What are your priorities for UK negotiations with the EU on fisheries?

Effective negotiations for sustainable outcomes

As acknowledged in the White Paper, it is "vital for sustainable exploitation" that the UK works closely with the EU and other coastal states to manage transboundary stocks including through agreeing TACs, access and shares of fishing opportunities. To ensure sustainable use, TACs must be set at sustainable levels in line with best available scientific advice as currently required by Article 3(c) of the CFP.

As set out in the White Paper, the ability to rebuild and maintain stocks requires "close cooperation with our European partners with whom we share these precious resources". TACs must continue to be set in accordance with the objectives outlined in Article 2 of the CFP, in particular the Article 2(2) objective of restoring and maintaining populations of fish stocks above biomass levels capable of producing MSY. Our recommendation is that all stocks are restored and maintained above biomass levels capable of delivering MSY (or the best proxy for MSY). To achieve this fishing mortality should be below levels that will deliver MSY by 2020 at the latest. This approach will help to build crucial resilience within shared stocks.

As recognised in the White Paper, Article 56(1)(a) of UNCLOS provides that coastal states have the sovereign right to exploit, develop, manage and conserve all the natural resources (including fish) found in the waters of its Exclusive Economic Zone (EEZ). However, as also acknowledged in the White Paper, international law requires that states cooperate in relation to shared stocks, for instance:

- Article 63(1) of UNCLOS requires that where the same stock or stocks of associated species occur within the EEZ of two or more coastal states,

states should agree upon the measures necessary to coordinate and ensure the conservation and development of such stocks;

- Article 118 of UNCLOS requires that coastal states cooperate with each other in the conservation and management of living resources including with a view to taking the measures necessary for the conservation of the living resources concerned;
- Article 5 of United Nations Fish Stock Agreements requires, inter alia, that coastal states and states fishing on the high seas shall adopt measures to ensure the long-term sustainability of straddling fish stocks and highly migratory fish stocks, ensuring that such measures are based on the best available scientific evidence and designed to maintain or restore stocks at levels capable of producing MSY; and
- Article 8 of UNFSA requires that coastal states and states fishing on the high seas pursue cooperation in relation to straddling and highly migratory fish stocks to ensure effective conservation and management of such stocks.

If the UK Government is to achieve a world leading fisheries management regime, it is critical that it negotiates effectively with the EU and other neighbouring coastal states in order to ensure that shared stocks are managed in a sustainable manner and in line with best available science.

Negotiations should be based on the premise that no state should be permitted to unilaterally set its own catch limits in relation to shared stocks. The Fisheries Bill should include an overarching provision to the effect that access to shared stocks in UK waters and by UK vessels is contingent on all parties reaching agreement on TACs for those stocks, consistent with MSY as advised by the most reliable scientific body.

Content of agreements with EU and other coastal states

Maximum Sustainable Yield (MSY)

As discussed above TACs agreed by the UK with the EU and other coastal states must be set in line with the best available scientific advice and at levels that provide for all stocks to be restored and maintained above biomass levels capable of delivering MSY (or the best proxy for MSY). To achieve this, the UK must ensure that, by 2020 at the latest, fishing mortality is below levels that will deliver MSY. This approach will help to build crucial resilience within shared stocks.

Zonal attachment

We acknowledge the UK Government's intention for the future allocation of fishing opportunities for quota stocks within the UK's EEZ to better reflect the quantity of fish found and caught in the UK's EEZ by potentially moving away from the principle of relative stability to zonal attachment.

It is crucial that any changes to the basis for allocating fishing opportunities are performed transparently and equitably. In addition, it is important that the system

for allocation is in line with environmental objectives and principles in order to prevent the creation of an environmentally damaging system.

Changes to the methodology for the allocation of fishing opportunities must not increase TACs above MSY and recommended by the best available independent scientific advice.

CFP wording
Agreements made by the UK with the EU and other coastal states should use the CFP as their starting point and then improve upon those set standards.

For instance, the objectives outlined in Article 2 of the CFP objectives must be retained and improved in the UK's domestic statute books after exit to ensure that the UK continues to deliver on and achieve above and beyond important commitments relating to sustainable fishing.

These should then be reflected internationally by requiring compliance with these commitments in agreements with the EU and other coastal states. In this way, the UK can influence the actions of third countries, helping to ensure that the development and maintenance of sustainable fisheries are a global priority.

Equivalent standards
As reflected in the White Paper, "as an independent coastal state, [the UK] will decide who can access [its] waters after 2020 and on what terms". These terms are crucial. Access to UK waters by vessels from the EU and other coastal states must be conditional on compliance with the same sustainability rules, standards and practices applicable to UK vessels. Defra states in the White Paper that the UK "will project our commitment to sustainable fisheries and marine conservation in negotiations [with the EU and other countries] and would require compliance with sustainable practices for any access granted to fish in UK waters". This requirement must be enshrined in primary legislation.

The Bill must also include a clause requiring that UK fishing vessels operating overseas must comply with the standards which would be required of them when fishing in UK waters.

The UK must also produce detailed management plans and supply adequate resourcing for the control and enforcement of environmental standards in relation to both foreign and UK vessels in UK waters and UK vessels globally. This is necessary if the UK Government really wants to prioritise a healthy marine environment and "pursue an ecosystem approach...that aims for more sustainable management and accounts for, and seeks to minimise, impacts on non-commercial species and the marine environment generally".

Dispute resolution
We would welcome clarity around the dispute resolution mechanisms and enforcement powers that the UK will seek in its agreements with third parties.

Whilst dispute resolution mechanisms under international law (in particular UNCLOS) are available, it is apparent that these procedures have not been frequently exercised and instead independent adjudication procedures have been employed.

Cooperation with Devolved Administrations
As recognised in the White Paper, there must be close cooperation between the UK Government and the Devolved Administrations in relation to international negotiations. It is important that the UK Government does not act on behalf of the Devolved Administrations without their prior authorisation and that it acts with due transparency. There should be meaningful collaboration between, and active participation and co-management by, each of the four nations in arriving at common positions where appropriate.

Q3. What are your priorities for controlling our waters after exit?
The long-term social and economic sustainability of the UK's fishing industry as a whole is dependent on a productive and biologically diverse marine environment that supports healthy fish stocks. New laws must have a strong focus on the UK's domestic and international commitments to rebuild healthy fish stocks and recover, restore and protect marine habitats and species, enabling the sustainable management of shared resources in cooperation with international partners.

To be effective, these new laws must also be underpinned and supported by effective monitoring, control and enforcement that are sufficiently resourced.

In order to ensure that stocks are being harvested sustainably and to minimise, and where possible eliminate, negative impacts of fisheries on the wider marine environment, fisheries must operate in a fully transparent and accountable manner with fully documented catches. Records of all catches should be publicly available.

To help achieve this, Remote Electronic Monitoring with CCTV (REM) should be introduced as standard for all over 10m vessels. There is also a case for REM on selected under 10m vessels based on criteria that determine the risk of non-compliance with either the discard ban and/or measures to tackle bycatch of non-target species or for protected species bycatch monitoring.

CCTV coverage should be required for all over 10m and selected under 10m vessels fishing in UK waters, regardless of origin, and also UK vessels fishing elsewhere. This technology will not only increase vessel accountability and improve compliance but will have the additional benefits of contributing to important and much needed scientific data collection, increasing consumer confidence, and boosting the UK's sustainability reputation globally. Making the carriage of REM with cameras a condition of fishing in UK waters will send a clear signal that the UK is serious about its sustainability credentials.

This technology will also contribute in general to the monitoring and control of vessels operating in UK waters as REM systems have inbuilt GPS allowing effective vessel tracking. We propose this technology is introduced to all ships in this category. Introducing this technology in a piecemeal fashion could undermine the achievement of the objectives of transparency and accountability across the fleet, as well as disadvantaging those not subject to it, likely reducing their market access.

Importantly, REM will also contribute to an ecosystem-based approach to fisheries management as it will generate information on non-target and protected species captured by fishing gear. Knowledge of this is very much lacking at present. Only by understanding the true extent of incidental capture can we develop and deliver effective mitigation measures. The use of this technology will also improve understanding of the spatial and temporal extent of fishing activities in and around MPAs.

The UK Government and the Devolved Administrations should also ensure that effective enforcement policies are in place. Recent studies and reports have shown that the UK fisheries enforcement policy does not currently guarantee that infringements attract penalties high enough to be dissuasive or effective. For example, a 2017 report from the European Court of Auditors highlighted that, in Scotland, “most of the action taken following infringements involved advisory letters and verbal and written warnings. These ’soft measures’ were applied even in cases of serious infringements (e.g. catching fish after the closure of the respective fishery) and the measures did not seem to prevent recurrence. Even though the inspection efforts and coverage were higher than in other Member States, the recurrence was greater, which indicates that the sanctions were less dissuasive”.[5]

The new UK fisheries policy should ensure that, in the future, all infringements to fisheries law are effectively sanctioned by penalties set at a level high enough to be dissuasive and to act as a deterrent.

Q4: What are your priorities for the UK’s international role in fisheries (beyond the EU)?

During the implementation period, the existing body of EU law will continue to apply and the UK will continue to be bound by the CFP. In line with this, during this period, the UK will continue to be bound by international agreements consistent with the position at the EU level. Once the implementation period has ended, the UK should continue to take a leading role in ensuring the sustainability of international fisheries and fishing activities. We support the White Paper’s position that the government remains “fully committed to meeting [its] obligations under UNCLOS, UNFSA, FAO and relevant RFMOs, [including the North East Atlantic Fisheries Commission], [and] multilateral environmental agreements, such as the Convention on Biological Diversity (CBD) and

[5] European Court of Auditors (2017), Special Report N°08/2017, EU Fisheries controls: more efforts needed, p.49.

Convention on International Trade in Endangered Species (CITES)" and its commitment to "reinvigorate [the UK's] role within these organisations".

Compliance with these agreements (and all other multilateral environmental agreements not listed, such as OSPAR and the Bern Convention) and membership of these organisations is essential to the UK's credibility on the international stage and is necessary to allow the UK the opportunity to advocate for, and champion the development and maintenance of, sustainable fisheries at the international level.

On RFMOs in particular the UK will retain current membership of some Organisations such as the Indian Ocean Tuna Commission (IOTC) and the International Commission for the Conservation of Atlantic Tunas (ICCAT) and others by virtue of its Overseas Territories. We support the UK Government's intention to apply to be an independent member of the North-East Atlantic Fisheries Commission and would also encourage an application be made to the Western and Central Pacific Fisheries Commission, and the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) so as to champion and promote legal, sustainable and fair governance of international fisheries.

It is crucial that the UK continues to support and participate in international efforts to end damaging fisheries subsidies in line with meeting United Nations Sustainable Development Goal (SDG) 14,.[6]One of the targets of SDG 14 is the prohibition of certain forms of fisheries subsidies that contribute to overcapacity and overfishing and the elimination of subsidies that contribute to Illegal Unreported and Unregulated (IUU) fishing by 2020 at the latest.

The EU has agreed to contribute to the achievement of the UN SDGs and continues to defend the position that harmful fisheries subsidies should be banned. Since the Doha Ministerial Conference in 2001, at the World Trade Organization (WTO), the EU has been negotiating for a prohibition on using subsidies that contribute to overfishing and overcapacity. At the 2017 Buenos Aires Ministerial Conference, WTO members agreed to adopt an agreement on fisheries subsidies at the 2019 Ministerial Conference and the EU subsequently submitted a proposal for this new agreement.[7] The UK must adopt an approach consistent with the EU's by continuing to support efforts to end harmful fisheries subsidies including by securing a strong agreement on fisheries subsidies at the 2019 Ministerial Conference.

Greener UK support the development of an International Oceans Strategy as announced by the former Foreign Secretary in June 2018. This strategy, led by the Foreign & Commonwealth Office, provides an opportunity to bring together all of the UK Government's oceans work in a single strategy and to ensure the restoration and maintenance of our marine environment.

[6] https://www.un.org/sustainabledevelopment/oceans/

[7] https://www.wto.org/english/tratop_e/rulesneg_e/fish_e/fish_intro_e.htm

The UK should seek to play a role in ongoing UN intergovernmental conferences convened to develop a new instrument under UNCLOS on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction. The high seas, and the species they sustain, must be protected. Accounting for two-thirds of the world's ocean,[8], these ecosystems are critical to the functioning of our planet. As part of the ongoing discussions, the UK must endeavour to ensure that the eventual instrument is legally binding, ambitious, and grounded in the best available scientific evidence.

Finally, the UK must continue its membership of OSPAR in order to ensure its continued role in the important protection of the marine environment in the North-East Atlantic.

Q5: What are the fisheries policy areas where a common legislative or non-legislative approach (framework) across the UK is necessary?
Greener UK agrees that common frameworks will be needed in some areas. These should be co-developed, co-managed and mutually agreed with the Devolved Administrations. They must respect the devolution settlements and democratic accountability of the devolved legislatures and have environmental principles at their heart.

The following areas for common frameworks are identified in the White Paper:

- to enable the functioning of the UK market, while acknowledging policy divergence;
- to ensure compliance with international obligations;
- to ensure the UK can negotiate, enter into and implement new trade agreements and international treaties;
- to enable the management of common resources;
- to administer and provide access to justice in cases with a cross-border element; and
- to safeguard the security of the UK.

A common UK framework is also critical for the following additional areas:

- management of transboundary environmental processes and impacts ensuring that conditions attached to access are consistent across UK waters; and
- consistent implementation and enforcement of laws, including the landing obligation which will come into force in January 2019

In order to ensure the health of our marine environment and to avoid the overexploitation of fish stocks, it is crucial that these frameworks are environmentally sound. They should be based on the best scientific advice and take an ecosystem-based approach.

[8] http://www.pewtrusts.org/en/research-and-analysis/articles/2018/06/07/5-surprising-stats-show-why-high-seas-need-protection

The White Paper acknowledges the need for an ecosystem-based approach to fisheries management. This requires that fisheries are not managed in a silo separately from wider marine environmental considerations but rather that management must take account of the impacts of fishing practices on the wider marine environment. These impacts are inevitably transboundary, and so the lack of a UK-wide common framework would significantly hinder the adoption of an effective ecosystem-based approach to management for cross-border activities and stocks.

Common frameworks should be mutually developed with the aim of supporting effective marine environmental management throughout the UK, incorporating the management of fish stocks, whilst respecting the devolution settlements and existing progressive country-specific measures.

A starting point for implementing an ecosystem-based approach across the UK is provided by the current UK Marine Strategy, which sets out how the UK will achieve and maintain Good Environmental Status (GES) in UK waters by 2020 and beyond. It brings the conservation and sustainable use of commercial and non-commercial fish together under the framework of an ecosystem-based approach to restoring and maintaining healthy seas.

Legal advice for WWF and the RSPB shows that the Marine Strategy Regulations 2010 contain the most detailed requirements in current UK law to implement an ecosystem-based approach in the marine environment. These requirements, including taking those measures necessary to reach GES, should be built on in future UK legislation.

UK GES targets were developed in 2012 before the Common Fisheries Policy was reformed. As such the UK Government and Devolved Administrations must take this opportunity to be more ambitious in their plans both for future legislation and for the UK Marine Strategy. We note that there is a requirement for the UK Government and Devolved Administrations to review these targets later in 2018 and we trust that this is seen as an opportunity to help deliver this increased ambition.

The UK Marine Strategy includes commercial fish targets co-developed by all four administrations, who each have the responsibility to take the necessary management measures to achieve the targets in their waters. This is a good example of joined-up policy-making that should be built on as new frameworks develop. The targets set out in the Marine Strategy not only incorporate the principles of the CFP, but go further in setting targets for ecosystem structure and ensuring pelagic habitats are healthy and well managed.
Cross border engagement will be important. A lack of compatibility has the potential to create management, monitoring and enforcement gaps which could be damaging particularly for shared stocks.

The common frameworks must ensure consistency in funding mechanisms across the Devolved Administrations, including regarding industry-based levies.

Section 2.8: Pursuing sustainable management

Q7: Do you agree with the measures proposed to ensure fishing at sustainable levels?

We welcome the commitment to sustainable management using the best available scientific advice. Funding must be made available for the science needed to provide this advice - in particular supporting comprehensive assessments for all harvested stocks (with a focus on reducing the large number of data deficient stocks), and improving our knowledge of stocks which may be indirectly impacted or at risk from fishing.

We are encouraged to see the continued ambition of setting exploitation of all stocks at levels consistent with MSY in line with international objectives in UNCLOS (1982), the Johannesburg World Summit on Sustainable Development (2002) and SDG14.[9]Sustainable fishing is vital for healthy seas, as well as for the existence of the commercial and recreational fishing sectors.

In addition, a precautionary approach is needed to help provide resilience and a buffer against external factors which may affect a stock's viability, such as climate change. Catch limits should generally be set below the level of fishing mortality associated with MSY (F_{MSY}). The White Paper recognises that achieving MSY may involve short term costs to some sectors - such as reductions in catches - to ensure long-term benefits. However, stocks being restored to productive and healthy levels can result in subsequent increases in catch limits, as seen for example with plaice in the North Sea.[10] This can in turn lead to increased profits and more consistent catches over time.

Stock Biomass

It is encouraging to see a commitment to work with the EU and other coastal states to "set harvest rates that restore and maintain fish stocks at least to levels that can produce MSY". However, the wording of the White Paper could be stronger. As it stands this wording is weaker in ambition than the current CFP, which aims to have biomass levels which are **above** those that can produce MSY. Additionally, there remains no defined deadline for reaching these levels.

Simply setting a direction of travel for stock improvement does not ensure that ambition will be met – there needs to be firm targets and appropriate ways to measure progress against them (e.g. X percentage of stocks with MSY assessments and X percentage above B_{MSY}). There must also be sufficient incentives to reach these targets and appropriate sanctions if they are not met.

9 FAO, 2018. Sustainable Development Goals: 14.4.1. Webpage available at http://www.fao.org/sustainable-development-goals/indicators/14.4.1/en/ [Accessed 20/8/2018].

10 GUK, 2018. The case for sustainable fishing limits. Greener UK briefing. Available at http://greeneruk.org/resources/The_Fisheries_Bill_The_case_for_sustainable_fishing_limits [Accessed 16/8/2018].

The White Paper states that “success will ultimately be measured by our ability to rebuild and maintain stocks, while improving the health of our marine ecosystems”. This success can only be achieved if there are appropriate monitoring measures and targets in place. The planned annual statement on the state of stocks of interest to the UK will form a key part of the monitoring process but will only be a useful tool if referenced against the recommended scientific (ICES) advice on fishing limits, and used to guide improved management measures if these are found to be failing in delivery.

The use of fishing mortality ranges for fisheries management has the potential to allow fishing above levels consistent with MSY. The existing safeguards are based around maintaining a stock biomass above Blim (stock size below which the stock is in serious danger of collapse) with 95% probability. However, the use of Blim is flawed and has the potential to be detrimental to the recovery of a stock to healthy levels, as stock levels between Blim and MSYBtrigger (Value of spawning stock biomass (SSB) that triggers a specific management action) and/or Bpa (Precautionary reference point for SSB) are considered **at risk** of being outside Safe Biological Limits.[11] To meet the ambitions for sustainable, healthy stocks management should always aim to recover and maintain stocks above levels which maintain its long term reproductive capacity, by keeping the Spawning Stock Biomass (SSB) **above** the biomass reference points MSYBtrigger and/or Bpa – **not Blim**. Setting ranges which purely aim to prevent the stock from falling below Blim is not consistent with long-term recovery and maintenance of a healthy stock, or to reaching the 25YEP and White Paper objective of “Ensuring that all fish stocks are recovered to and maintained at levels that can produce their maximum sustainable yield.” If ranges are to be used they should be restricted to the maintenance of a stock biomass at levels above MSYBtrigger and/or Bpa.

Ecosystem considerations

Assessment of fisheries impacts on the wider ecosystem should be included as a measure of sustainability in fisheries management. At a minimum, the existing GES status indicators should be retained. The White Paper states an ambition to account for ecosystem based impacts under the umbrella of an ecosystem-based approach to management.

To allow for wider ecosystem impacts to be included in future management there must also be assessment of the impacts on the wider ecosystem of fisheries, including sufficient monitoring of the effects of fishing activity in marine protected areas.

This provides an important opportunity to allow us to monitor the long-term health of our seas and the stocks which rely on them. To do this effectively we will require much greater scientific data collection and investment. Criteria must

[11] Seafish. RASS Glossary. Available at http://www.seafish.org/rass/wp-content/uploads/2014/09/Glossary_2014.pdf [Last accessed 15/8/2018].

be developed for identifying and protecting essential habitats, the protection of which can be hugely beneficial for the health of stocks (e.g. habitat used for spawning fish) and the protection of the wider ecosystem.

These criteria should then be published in the proposed annual statement on fish stocks, so the public can track progress towards achieving healthy marine ecosystems.

Spatial and temporal management of fisheries has been proposed as an alternative and more appropriate method in some cases including for the management of skates and rays (e.g. ICES, 2014[12]). This approach will require sufficient and appropriate data to make scientifically robust recommendations for management.

Greener UK welcomes the recognition of the threat to non-target species (marine mammals, seabirds, sharks and rays, turtles) through fisheries bycatch. Such bycatch has been dramatically reduced or even eliminated by applying simple but effective technical adaptations of fishing gear or by other changes in fishing practice (mitigation measures). With the UK leaving the EU, a demonstrable act of global leadership would be to draw up a robust and adequately resourced bycatch strategy that applies best practice and caters for all endangered, threatened and protected (ETP) species. Please see question 14 for further consideration.

An increase in data collection (including through investment in technology such as REM and wider application of a Vessel Monitoring System (VMS)) and increased analysis is essential to better understand wider ecosystem impacts and to monitor the long-term health of our seas and stocks.

Vessel monitoring

If fisheries are to be sustainably managed, fishing activities of individual vessels must be effectively monitored. There is a strong case for the adoption of REM given its ability to contribute to an ecosystem based approach to fisheries management through the generation of information on non-target and protected species captured by fishing gears.

This is something that we are very much lacking at present. Only by understanding the true extent of incidental capture can we develop and deliver effective mitigation measures. VMS currently remains the first port of call for the monitoring of vessel location over 12m in length, but it will be important to broaden out this coverage to all vessels, such as through iVMS which can be achieved with relatively little disruption to the industry.

In the future an integrated REM system which includes cameras and GPS could allow for live vessel tracking and monitoring. This would mean that in addition to

[12] ICES (2014). Cuckoo ray (Leucoraja naevus) in Subarea IV and Division IIIa (North Sea and Skagerrak and Kattegat): Advice for 2015. Available at http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2014/2014/rjn-34.pdf [Accessed 8/8/2018].

collecting environmental, species and catch information, an integrated REM system could also provide location information which in turn would make a separate VMS unnecessary.

Impacts of negotiating shares

Our final concern with regards to "ensuring fishing at sustainable levels" is reflected in the Ecologist article written by Griffin Carpenter (NEF).[13] Here Carpenter highlights the issues around negotiating or renegotiating with the EU the share of fishing opportunities the UK will receive for stocks in which it has interest. The White Paper outlines new ways of agreeing shares based on elements such as zonal attachment. However, the reality of the situation is that however the shares are distributed, the total amount able to be sustainably removed (as advised by ICES) must not be exceeded.

Q8: Do you agree that existing quota should continue to be allocated on an FQA basis?

The FQA system should not remain in place for all existing quota. Fixed allocations are at odds with sustainability criteria where performance is inherently variable and behavioural change must be incentivised.

The White Paper sets out the laudable principle that "the fish in our seas, like our wider marine assets, are a public resource and therefore the rights to catch them are a public asset." According to the White Paper, "our aim is to ensure that UK communities derive maximum benefit from UK quota." The White Paper thus commits to "developing with stakeholders new allocation criteria for any additional quota" available to the UK after Brexit - which may take into account factors such as "Producer Organisations' (POs) plans for sustainable fisheries".

However, sustainability criteria should be extended to existing quota the UK already controls. To limit sustainability criteria only to additional quota would be problematic for two reasons.

First, the time scale on which new quota could be expected, if at all, is highly uncertain. There will not be additional quota during the transition period, and there are widely held expectations that the transition period could last far beyond January 2021.

In fact, there is no guarantee there will be any additional quota for the UK post-Brexit. As the White Paper explains: "we do not yet know the outcome of the UK's negotiations to withdraw from the EU or on a future economic partnership". The government has accepted that the Common Fisheries Policy will remain in place throughout the transition period, and the EU has made it clear that a post-transition Free Trade Agreement would be contingent on maintenance of "existing reciprocal access to fishing waters and resources." The consequence

[13] Carpenter, G. (2018). Why brexit could lead to overfishing - to the detriment of everyone. Article in Ecologist. Available at https://theecologist.org/2018/mar/09/why-brexit-could-lead-overfishing-detriment-everyone [Accessed 16/8/2018].

then is that under some post-Brexit scenarios there would be no quota for which sustainability criteria is in use.

Second, it may be the case that gains in quota are much larger for some species than others. There is also a possibility that there will be reductions for some stocks (if zonal attachment is used, for example). This could result in sustainability criteria not being considered for some species at all depending on how much additional quota has been negotiated. But there is no ecological justification for this differentiation.

If the government wants to manage fishing opportunities as a public asset, then it follows that opportunities - existing and new - should be allocated according to public interest criteria. This means allocating fishing opportunities according to transparent and objective environmental, social and economic criteria in a way that incentivises the most sustainable fishing practices. This criteria-based approach would also go some way towards addressing the concerns of fishers, particularly in the small-scale coastal fleet, with historical grievances related to current FQA shares. Such criteria should be identified transparently and via engaging with experts and public consultation.

Q9: How should any additional quota that we negotiate as an independent coastal state be allocated?
Any additional quota should be allocated on the basis of transparent social, economic and environmental criteria in a way that incentivises the most sustainable fishing practices, as set out in Greener UK's suggested objectives drafting in Annex 1.

Selectivity improvements: Selectivity improvements, both in gear and behaviour, are vital for reducing discarding of unwanted species and improving target catch. While the landing obligation has resulted in some movement towards greater selectivity of the fleet, there is still some lethargy in how new technologies and innovations can be tested and importantly applied to realise success. Quota allocation could form a part of an incentivisation programme for improving selectivity further.

Selectivity is not limited to gear innovations but also includes avoidance measures, or fishing behavioural adjustments which might include fishing at different depths, switching gears, temporal changes, and real time, temporary spatial closures. These conditions should also be considered when using quota as an incentive to drive behaviour change on the water.

On a small scale, additional allocation of quota is an excellent driver to stimulate new thinking and design at the community or individual level. On a larger scale, innovations at fleet level require collaboration between fishermen as well as willingness to share information. Also important is the ability for fishery managers to help align incentives for the fishing fleets, and government have a

role in developing these incentives through proposals such as the quota reserve option.

Risk pools: this type of collectively managed quota holding could be particularly useful as responsibilities for fisheries management and quota allocation are devolved to a more local level. In particular, risk pools can be used to good effect when dealing with choke species and quota could be allocated to communities demonstrating they are abiding by the terms and condition of the pool. Members of the pool can in turn combine their quota to be managed collectively and collaboratively. Individual vessels pay in money, quota, or a combination, to be part of a quota pool in exchange for access to additional choke species quota, should their vessel exceed its allocated amount. This essentially allows fishermen to spread risk across the collective. Typically, joining a quota pool requires members to adhere to additional discard avoidance measures set out by the group. These features provide a 'safety net' for vessels while providing an incentive for innovation in avoiding choke species.

Adherence to spatial management controls: Real time temporary spatial closures are an example of a type of spatial restriction that could be used in conjunction with receiving more quota. Fishermen are typically resistant to the implementation of closures, which limit their freedom to fish where they choose. However, today there are a number of fisheries in which fishermen have shown their willingness to embrace self-imposed closures due to the benefits that can accrue. For discard avoidance, voluntary, short-lived closures can be essential for avoiding areas with high juvenile catch rates or a 'hotspot' of choke species (i.e. where choke species have congregated). Closures could also be used as a bycatch reduction tool. Due to the sharing of sensitive information between fishing participants, a certain level of trust and/or third-party data collection will be required for successful implementation.

Q10: Do you agree that Defra should run a targeted scientific trial of an effort system in English inshore waters?

No. Greener UK do not support the running of any scientific trial examining the utility of effort based controls in English inshore waters. Disbanding quotas for the inshore fleet in exchange for an alternative system, such as a system supporting a move towards Days at Sea (DAS), will not deliver sustainability benefits; nor would it aid the UK as it strives to become a world leading fishing nation. DAS is a 'blunt instrument' and nations have moved away from this approach as they have seen that it fails to deliver conservation or economic results. It would also be at odds with the rest of Europe, making harmonised management of shared fish stocks far more difficult.

There are several well-cited examples of where effort has not worked. These include the Faroes, where spawning stock biomass reduced by 20% under a DAS system, and the New England groundfish fishery, where an effort-based system led to a race to fish in which fishermen used their ingenuity to catch more and more fish with each effort day. This led to derby fishing and fishermen often

targeting high value species, which subsequently led to more restrictions to cap their daily catch. This inevitably ends up in fewer days available for active fishing, lower profits, poorer safety and less autonomy for fishermen.

Fortunately, there are solutions. Instead of adopting a DAS approach, design features can be built into quota management systems to aid fishermen - particularly small scale, inshore fleets – so that they can make the most of their fishing opportunities. Doing so would improve on the current system. For example:

- Peer-to-peer quota trading can be used to align catch with quota
- 'Risk pools' can be used to help fishermen pool their quota for high-risk species they are trying to avoid using the pool as an insurance policy should fishermen overshoot their quota
- Community quota schemes can enable a fishing community to sort out their individual fishing preferences amongst members of the community scheme, with greater control over their fishing activities and preferences

If, as we believe, the heart of the problem is the share of fish allocated to small scale fishermen (versus the larger commercial operators), switching to DAS would only mask and cannot solve *that* problem. Evidence suggests that effort-based systems can lead to overfishing and reduced biomass levels. What is needed is a national conversation and evaluation of how to allocate a shared resource in order to tackle the embedded quota allocation issues in the system. This could include an evaluation of the current PO structure and whether some of the tools listed above could be incorporated by the POs at the most appropriate level. This is important for the non-sector and under 10m fleet who see effort as a solution because there are no tangible quota solutions on the table for them. Engaging in a dialogue and trials of community quota schemes, cooperatives, and an 'inshore' function of existing POs is a more pragmatic way to think about a quota system that will work for this disenfranchised sector.

Additionally, moving away from periodic catch limits for the under 10m and non-sector vessels towards longer time periods would help fishermen to better plan their business and respond to stock fluctuations so they may conduct their activities safely and according to the season. Further, there needs to be greater transparency in the system through technologies that create a more open exchange of quota on the market with safeguards so quota does not aggregate to the highest bidder. As part of this, the government may also consider a design feature that limits the ability for leasing to occur from the under 10m to the large-scale sector. More specifically, creating a 'one-way valve' will help protect the interests of the under 10m fleet by ensuring the under 10m sector can acquire quota from the large-scale sector but the reverse cannot take place. This would ensure that the FQA units or bundles ring-fenced for the under 10m sector does not leak out of the system. This would help manage quota more effectively for the under 10m fleet while at the same time enabling government to meet important social objectives.

Careful design, based on best practice, is therefore important to ensure there is buy-in from fishermen, government and other stakeholders. This could be achieved by the establishment of a website that documents quota prices, leases and exchanges, as well as helps connect buyers with sellers. A quota register might also be managed by the POs or at a community level with appropriate caps in place to limit trading between certain segments of the fleet.

Q11: Do you agree with our proposals to explore alternative management systems for certain shellfisheries in England?

Greener UK welcomes the government's proposals to develop an effective method for sustainable management of certain non-quota shellfish stocks in the western waters. As per our response to question 10, we do not believe that effort management systems provide sufficient safeguards to sustainably manage fisheries. Whilst we are encouraged by a number of Fishery Improvement Projects (FIPs) underway in this region to improve management,[14] it will be important for these to be underpinned by a more effective management and regulatory framework in the future.

There are several non-quota species in this region, but we have focussed on scallops as a case study of the need for better management below.

Defining stocks and catch limits

One of the areas of most concern for management of shellfish fisheries, particularly scallops, is the lack of stock specific measures, largely owing to a lack of understanding of stock definition and status.[15] Whilst there is generally some information regarding stock structure, this is rarely sufficient to define stocks or to evaluate biomass or fishing mortality in relation to reference points. This makes it difficult for management to be developed in relation to the size and health (including, density and age structure) of a population and to establish sustainable harvest rates. Scallops are relatively sessile and easy to catch and they have variable recruitment patterns which makes them very vulnerable to overfishing and has led to 'boom and bust' fisheries.[16]

Greener UK therefore believes greater investment in independent science is required. Science is needed to better define scallop stocks and recruitment dynamics which would then enable sustainable catch limits to be developed. Once such limits are established, specific measures (e.g. site-specific harvest control rules) need to be put in place to ensure fishing pressure matches the advised catch levels and habitat type of specific areas (see spatial management approach discussed below).

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[14] Seafish (2016). Project UK fisheries improvements. Leaflet. Available at http://www.seafish.org/media/1671744/project_uk_a4_leaflet_oct_16.pdf.

[15] ICES (2016). Report of the ICES Scallop Assessment Working Group (WGScallop), 3-7 October 2016,Aberdeen, UK.ICES CM 2016/ACOM: 24. 39 pp.

[16] Duncan, P.F., Brand, A.R., Strand, Ø.,Foucher, E. (2016). The European Scallop Fisheries for Pecten maximus, Aequipecten opercularis, Chlamys islandica, and Mimachlamys varia. In: Developments in Aquaculture and Fisheries Science. Vol 40. Editor(s): Sandra E. Shumway, G. Jay Parsons. Elsevier. Pages 781-858. Available at http://www.sciencedirect.com/science/article/pii/B9780444627100000195.

Habitat impacts and a spatial management approach

Mobile, bottom-contact fishing gear, such as mechanical dredges and demersal trawls, can have considerable negative impact on benthic habitats and species, reducing the biodiversity of sea floor communities. Negative impacts have also been observed to other commercial species such as brown crab.[17] Impacts depend on how much mortality is caused by the fishing method and the recovery rate of the biota effected. The impact can be highly site specific and varies depending on seabed types, historical exploitation and natural disturbance.[18]

It is important to protect vulnerable marine ecosystems (VMEs) such as reefs, maerl beds, seagrass beds and horse mussel beds from scallop dredging. Destroying maerl beds for example, substantially reduces biodiversity, seabed stability, local nursery areas and therefore impacts on commercial fisheries.[19] There is a partial 'strategy' across the EU and within the UK to protect some important habitats (e.g. through SPAs, SACs and MCZs), but we are concerned about the ongoing use of bottom towed fishing gear on sensitive marine habitats both outside and inside Marine Protected Areas (MPAs) - especially in sites designated to protect seabed features or where an appropriate impact or risk assessment has not been undertaken to demonstrate that the activity has no significant effect to the site.

Owing to the important habitats that scallop populations can be located in (and help to create), catch limits alone will not be sufficient to ensure sustainability and integrity and health of the seafloor needed to achieve GES (see response to question 2).

To overcome this, a regional spatial approach to scallop management is recommended.[20] A spatial management approach would involve combinations of permanent and rotational closures to different sites based on the composition and vulnerability of the various habitats – including importance of certain areas for scallop recruitment - and status of species present. Such an approach supplemented with technical measures and stock specific catch limits would be the best way to ensure sea floor integrity, recovery and maintenance of biodiversity, healthy scallop populations and sustainable fishing.[21]

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[17] Ondes, F., Kaiser, M. and Murray, L. (2016). Quantification of the indirect effects of scallop dredge fisheries on a brown crab fishery. Marine Environmental Research, 119, pp.136-143.

[18] van Denderen, P. D., Bolam, S. G., Hiddink, J. G., Jennings, S., Kenny, A., Rijnsdorp, A. D., & van Kooten, T. (2015). Similar effects of bottom trawling and natural disturbance on composition and function of benthic communities across habitats. Marine Ecology - Progress Series, 541, 31-43. DOI: 10.3354/meps11550.

[19] Hall-Spencer, J.M., Moore., P.G. (2000). Scallop dredging has profound, long-term impacts on maerl habitats. ICES J Mar Sci 57: 1407−1415.

[20] Howarth, L. M. & Stewart, B. D. (2014). The dredge fishery for scallops in the United Kingdom (UK): effects on marine ecosystems and proposals for future management. Report to the Sustainable Inshore Fisheries Trust. Marine Ecosystem Management Report no. 5, University of York, 54 pp.

[21] See Howarth & Stewart (2014), above.

Control and enforcement

Greener UK is very supportive that the government's plans are to be "backed up by appropriate control and enforcement including the use of modern technology such as vessel monitoring systems and cameras". Effective control and enforcement are vital management tools and deterrents to illegal fishing, and in moving to a more responsive and dynamic regime, vessels should play a more important role in the provision of data for management purposes. We believe it essential for all vessels to be monitored through VMS or iVMS, or, as per response to consultation question 13, REM with CCTV and/or observer coverage for all vessels over 10m in length and on certain under 10m vessels (in accordance with risk for non-compliance, high incidental capture of non-target species etc). To accompany this, there must also be an effective framework for the provision and analysis of data to ensure fisheries data better informs our understanding of our seas.

Other non-quota species

As mentioned, there are many other non-quota species beyond scallops in the western waters (and in the rest of the UK) which do not have effective controls on fishing pressure in relation to stock status. Greener UK believes proposals such as those mentioned above regarding scallops should be developed to guarantee effective management for these species and ensure their sustainable exploitation. The below species are some examples of non-quota species in western waters in need of more effective management:

- European lobster – some restrictions are in place, but there are no measures in relation to stock size. Overfished and subject to overfishing in the South West.[22]
- Grey mullet – no quota or other specific management measures, stock is data limited and status unknown.[23]
- Skates & rays – no species or stock specific quota or other specific management measures, several stocks data limited or unknown, and several overexploited.[24] Status also threatened for some species. Also these are not easy to identify from video monitoring therefore training in ID and tagging could provide more species specific information to feed into data collection and decision making.
- Turbot - non-quota or other specific management measures, stock status is unknown.[25]
- Squid & cuttlefish - no quota or other specific management measures, stocks are data limited and status unknown, with some stocks showing declining trends in biomass.[26]

[22] CEFAS (2018). Lobster stock status report 2017. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/722748/2017_Lobster_assessments.pdf.

[23] MCS (2018). Good fish guide: grey mullet. Available at https://www.mcsuk.org/goodfishguide/search?name=grey+mullet

[24] ICES (2016). Skates and rays advice for 2015. Various. Available at http://www.ices.dk/community/advisory-process/Pages/Latest-advice.aspx.

[25] CWT (2018). Cornwall good seafood guide: turbot. Available at http://www.cornwallgoodseafoodguide.org.uk/fish-guide/turbot.php.

- Intertidal fisheries and unregulated and unreported fishing including bait collection for commercial fisheries.

To meet our domestic and international obligations (see response to questions 4 and 5), it is important for all harvested species to be effectively managed at sustainable levels, not just the most valuable commercial species.

Q12: Do you agree that there is a case for further integrating recreational angling into fisheries management?

Greener UK believes there is a strong case for furthering such integration proportionate to the additional pressure recreational sea angling (RSA) exerts on the stocks of particular target species. The definition of angling should include other forms of recreational angling such as fishing with hook and line, nets, pots or spear guns, also for non-commercial purposes.

RSA by individuals does not require a licence in the UK, although some IFCAs have recreational permit schemes.[27] Most recreational fisheries operate under a 'regulated open access management' regime, whereby individuals must follow fishing gear and catch restrictions (such as the EU Minimum Conservation Reference Sizes) as well as national and local regulations.[28]

The contribution to the economy, as well as to the wellbeing of those taking part in the activity, is internationally recognised (OECD)[29] and according to Defra's *Sea Angling 2012* report,[30] sea angling in England supported £2.1 billion of total spending (considering indirect and induced effects), provided a total of over 23,600 jobs, and added almost £980 million of GVA to the UK economy. Sea anglers support around 19,000 jobs in the supply sector, and the estimated benefit to suppliers is around £71 million; boat anglers are considered to have the largest impact.[31]

Recreational angling includes both individuals fishing from shore and those in private or chartered vessels and is considered to have a relatively small impact on the environment and on target fish stocks, compared to commercial fisheries.[28]

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[26] Alemany, J., Rivot, E., Foucher, E., Vigneau, J., Robin, J. (2017). A Bayesian two-stage biomass model for stock assessment of data-limited species: An application to cuttlefish (Sepia officinalis) in the English Channel. *Fisheries Research*. Volume 191. Pp 131-143.

[27] https://permits.devonandsevernifca.gov.uk/Permits/Recreational-potting-permit

[28] Tinch, R., Mathieu, L., Shannon, A. & Radford, A. (2015). *Comparing Industry Sector Values, with a Case Study of Commercial Fishing and Recreational Sea Angling*. Eftec for the UK Fisheries Economists Network, supported by Seafish, Defra, Marine Scotland. http://www.seafish.org/media/publications/eftec_comparing_industry_sector_values_FINAL_Aug_2015.pdf

[29] OECD introduction to recreational fisheries http://www.oecd.org/tad/fisheries/recreational-fisheries.htm

[30] Armstrong, M., Brown, A., Hargreaves, J., Hyder, K., Pilgrim-Morrison, S., Munday, M., Proctor, S., Roberts, A. & Williamson, K. (2013) *Sea Angling 2012: A survey of recreational sea angling activity and economic value in England*. Defra. Crown copyright. http://webarchive.nationalarchives.gov.uk/20140305120543/http://www.marinemanagement.org.uk/seaangling/documents/finalreport.pdf

[31] Cappell, R. & Lawrence, K. (2005). *Invest in Fish South West: The Motivation, Demographics and Views of South West Recreational Sea Anglers and their Socio-economic Impact on the Region.* Report on recreational sea angling in the South West. http://resources.anglingresearch.org.uk/sites/resources.anglingresearch.org.uk/files/The_Motivation,_Demographics_&_Views_of_SW_Recreational_Sea_Anglers.pdf

However, for certain species (notably sea bass and cod) recreational fisheries contribute significantly to fishing mortality for those stocks and there is a clear case to include recreational fishing in the share of TAC or quota for certain key species. In the case of sea bass, early estimates from SA2012 put the total recreational take at up to 690 tonnes. [30] Since then, EU measures for bass have restricted the right of anglers to take any bass (following one season where one bass per angler per day was permitted).[32] As these measures are believed to have been at least partially effective. Recent ICES advice (2018) points towards a lower total take by recreational fishers which therefore suggests they should be granted some access to the resource in the future. Nevertheless, this case study makes it clear that recreational fisheries for certain species need to be regulated as they can contribute significantly to mortality.[33]

Three crucial factors need to be considered for any RSA management:

- **Enforcement:** anglers are dispersed along the coastline and recreational angling is very difficult to control and regulate (hence the need to include angling bodies in management decisions for key stocks);
- **Data collection:** incentivising voluntary contribution of data such as through the recent substance-led sea angling diary scheme[34] will be essential as there is no equivalent mechanism to capture the cumulative take (as for example there is in the RBS for commercial fisheries). The potential of RSA to contribute to cost recovery for improved data collection could be considered and trials conducted to evaluate feasibility of implementation; and:
- **Funding:** The current local authority levy system which raises funds for IFCA activities is financially constrained in the current economic climate. These bodies could conduct efficient expanded operations if some element of an industry based levy could be directed at their work. A distribution system to fund local socio-economic sustainability and controls on fishing would be required.

Around England many IFCAs (e.g. Sussex) are developing recreational angling strategies[35] and many IFCAs have significant representation of anglers and the RSA industry on their committees. IFCA committees are clearly a local and appropriate forum for including recreational fishers and charter boat skippers in fisheries management. As such, they provide an opportunity to develop best-practice and also promote the correct regulation of a lucrative and sustainable recreational activity. Developing local angling strategies and regulating angling (MCRS, bag limits, closed seasons etc) are essential if the UK is to develop a world-leading fisheries management system. For freshwater and course angling in the UK a rod licence is purchased from the Environment Agency. A feasibility

[32] EC (2016) How is the EU protecting sea bass? https://ec.europa.eu/fisheries/cfp/fishing_rules/sea-bass_en
[33] ICES (2018) *ICES Advice on fishing opportunities, catch, and effort Published 29 June 2018 bss.27.4bc7ad–h http://ices.dk/sites/pub/Publication%20Reports/Advice/2018/2018/bss.27.4bc7ad-h.pdf*
[34] Substance http://www.seaangling.org/
[35] Sussex IFCA (2016) RSA strategy https://www.sussex-ifca.gov.uk/recreational-fishing

study for sea angling would be worth investing in to determine the viability and possible benefits of applying a similar approach to RSA.

In Northern Ireland there are no IFCAs, therefore alternative strategies would have to be put in place to replicate the above or contribute to a common framework for recreational angling. Similarly, fisheries in Wales and Scotland are managed by the Welsh and Scottish Governments. The Welsh and Scottish Governments should consider strategies for delivering new local fisheries management measures such as this.

We believe the IFCA co-management model, which includes anglers and charter skippers on the committee, is an equitable and transparent way to ensure buy-in and contributions from all sectors who wish to access a fishery.

A recent example from Belgium is the introduction of a legal national measure (beyond CFP requirements) which aims to improve data collection and the ability to regulate recreational fisheries.[36] There is also much to be learned from the USA striped bass fishery, which nearly collapsed under commercial pressure and has since included both commercial and recreational exploitation in the management of the fishery, where current management measures include: size limits, seasonal closures, recreational daily bag limits and annual commercial catch quotas.[37] Further lessons can be learned from Australia, where numerous recreational fisheries management strategies have been adopted.[38]

In conclusion, Greener UK urges the UK Government to develop an RSA / recreational fisheries strategy and regulatory framework, co-managed via IFCAs to ensure that for key stocks the positives of RSA can be harnessed while negative impacts (from illegal sales of fish caught, through to accidental mortality) can be minimised. A comparable approach could be adopted by the Devolved Administrations.

Q13: Do you agree with the proposed package of measures and initiatives to reduce wasteful discards?

Greener UK welcomes the fact that the UK remains fully committed to ending the wasteful discarding of fish and welcome some of the proposed initiatives such as the introduction of REM on vessels to promote compliance and strengthen data. However, there are other elements such as the introduction of charging for over-quota catch that we remain less convinced about and where further detail on the implementation will be needed in order to take a further view should this be taken forward.

Minimising and avoiding unwanted catches is a crucial element of sustainable and ecosystem-based fisheries management. We believe that not enough has

[36] Report from the Commission to the European Parliament and the Council assessing Member States' programmes of measures under the Marine Strategy Framework Directive (2018) {SWD(2018) 393 final}

[37] NOAA Status of Fishery Resources off the Northeastern US. NEFSC - Resource Evaluation and Assessment Division https://www.nefsc.noaa.gov/sos/spsyn/af/sbass/

[38] Australian Government http://pir.sa.gov.au/fishing/fishing_limits

been done throughout the EU over the last five years since the landing obligation was enshrined in the reformed CFP to result in behaviour change towards more selective fishing. Discard rates remain at levels similar to those before the landing obligation and while some operators have adopted more sustainable practices, many others continue to operate in a 'business as usual' fashion. Future fisheries management across the UK must address this effectively.

Examples of where this has been done successfully elsewhere include the Canadian groundfish fishery, which went through industry-led reform in 2002, and has made a great success of their fisheries management regime (including a discard ban) and now every species is recovering – including former 'choke' species.[39] The main reason for the success of the fishery is accountability. Each vessel must account for everything it catches and e-log book data is verified through video footage and at port inspections of landings. The verified data can also be used in science and management studies, because the data provides information on total catch mortality– retained and released.

As demonstrated by the Canadian example, 100% at-sea coverage is required to ensure the discard ban is effective and provides reliable data.

The White Paper suggests introducing charges for landings in excess of quota as a way to deal with 'choke' species. It is unclear how this scheme would work in practice to dis-incentivise discarding, especially of non-target species, or overfishing and we would welcome greater detail and further consultation on this.

Whatever system is taken forward, Greener UK believes that all over 10m vessels and selected under 10m vessels (based on criteria that determine risk of non-compliance with either the discard ban and/or rules for bycatch of non-target species, including protected species bycatch monitoring), fishing in the UK EEZ must be required to have 100% monitoring - either by REM with cameras or observers, or in some cases a combination of both.

Should the scheme go ahead we are supportive of the use of income generated from charges to be recycled back into the industry to promote more sustainable fishing behaviours ultimately reducing the need for the charging scheme.

There is a clear opportunity for any quota 'uplift' to be assigned using criteria which favours the vessels that can prove they are fishing in the most sustainable manner with the most selective gears. REM footage could be used to verify and support these decisions.

We believe high survivability exemptions must be applied with caution and only as a last resort and on the basis of robust independent scientific advice. Furthermore, if the exemption is applied, strict catch and release protocols must

[39] Doing it for the Halibut: 'How a discard ban saved my fishery' http://blogs.edf.org/edfish/2014/05/20/doing-it-for-the-halibut-how-a-discard-ban-saved-my-fishery/ [07/08/2018]

be followed to increase the chance of survival. In addition, the percentage of the catch discarded under such an exemption which does not survive should be recorded and accounted for in TAC setting to ensure fishing at sustainable levels.

Greener UK does not agree with the removal of stocks from TAC limits as we believe this would be a step in the wrong direction with respect to sustainable management. Removing a TAC would remove a clear limit on fishing mortality and substantially shifts the situation to one where there is potential for catches to be unlimited. This would clearly undermine the requirement to limit exploitation rates to levels consistent with MSY and could create unintended consequences by incentivising fishing in a non-TAC fishery. Importantly, removal of TACs for non-target or less commercially valuable fish stocks (which could also remove the obligation to land catches of these species) will neither solve the discard problem, nor reduce the waste in fisheries or foster further selectivity improvements intended by the introduction of the discard ban.

The proposals set out in the White Paper are being considered as future management tools but fail to acknowledge that full implementation of the landing obligation comes into force in January 2019. We have significant concerns that mechanisms are not being put in place to ensure this deadline will be met, meaning any vessels still discarding commercial species after this date will be landing illegally caught produce into the supply chains and onto consumer plates. The UK Government and Devolved Administrations must act urgently to ensure the legality and the sustainability of our stocks by January 2019 and beyond.

Q14: Do you agree with the proposed approach to protecting our marine environment in relation to fisheries including the powers proposed in the Fisheries Bill (see section 1.2)?

Fish are wildlife, essential elements of the marine environment that require healthy and well-functioning ecosystems in order to flourish. Yet the impacts of fishing go far beyond pressure on fish stocks themselves, including damage to seabed habitats, bycatch of non-target, non-quota protected species (such as endangered sharks, whales, dolphins and seabirds), and changes to food webs and ecological functioning resulting from over-exploitation.

For too long, fisheries management has been carried out in isolation from other marine management, without consideration of its wider ecological impacts. Greener UK believes that future fisheries legislation (whether developed by the UK or Devolved Administrations) should fit within a framework of wider marine law and policy that aims for recovered and biodiverse seas.

Greener UK strongly supports the high-level aspirations for better integration of fisheries and marine conservation as set out in the current White Paper and welcomes the strong links with other marine management legislation and

frameworks. We believe that these reflect a firm intention from government to better integrate fisheries and marine conservation management.

However, the White Paper does not provide details of how all the government's aspirations can be met. The future implementation of fisheries and marine conservation management measures therefore requires significant development with key stakeholders.

In the following paragraphs we provide comments on additional measures to protect our marine environment and relevant proposals for the Fisheries Bill.

Protecting our marine environment

Greener UK welcomes the Government's recognition that sustainable and responsible fishing requires consideration of its wider ecosystem impacts; that the marine environment is a shared public asset; and that fisheries impacts must be considered alongside and in combination with those of other sea users. We agree that an essential aim of fisheries management is to avoid and reduce fishing activities that negatively impact on the marine environment and that this will benefit the fishing industry through supporting the ecosystems on which it depends.

However, rather than simply 'maintaining marine ecosystems' in their current state, as suggested in the White Paper, there is an urgent need to reverse declines and restore many habitats, species and ecosystems. The "current state" fails to recognise the issues and deprived state of much of our marine environment. This is acknowledged by the commitments in the **25 Year Environment Plan, Scotland's National Marine Plan 2015,[40] Environment (Wales) Act (2016)** and the **UK Marine Policy Statement** to reverse losses and restore marine biodiversity.

Good Environmental Status

Greener UK believes that a key aim of fisheries and marine conservation management must be to at least achieve Good Environmental Status (GES) as set out in the **Marine Strategy Regulations (2010)**, committing all UK administrations to achieving GES by 31 December 2020. Although all eleven descriptors of GES have implications for fisheries management, the following are particularly relevant:

- Descriptor 1 – Biological diversity is maintained. The quality and occurrence of habitats and the distribution and abundance of species are in line with prevailing physiographic, geographic and climatic conditions.
- Descriptor 3 – Populations of commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock.
- Descriptor 4 – All elements of the marine food webs, to the extent that they are known, occur at normal abundance and diversity and levels

[40] Scotland's national marine plan, 2015, General Policies, https://www.gov.scot/Publications/2015/03/6517/5

capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity.

- Descriptor 6 – Sea-floor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected.

We welcome the ongoing commitment to achieving GES by the end of 2020. However, we share significant concerns regarding progress towards this overall goal and believe that it is unlikely to be achieved.[41] We also note the proposal to '...update the targets used to characterise GES' and insist that this cannot result in any weakening of definitions. Indeed, as current UK targets were developed before 2012 (and so before the reform of the Common Fisheries Policy) we believe that there is considerable scope for setting more ambitious targets. We look forward to future engagement on ways in which both the rate of progress and level of ambition can be increased.

Bycatch

Greener UK welcomes the recognition of the threat to non-target species (marine mammals, seabirds, sharks and rays, turtles) through fisheries bycatch**,** not least as requirements of the Habitats and Birds Directives and ASCOBANS are not currently being met. UK-wide, it is estimated that around 1,500 small cetaceans (mainly common dolphins and harbour porpoises) die annually as bycatch, and many others suffer traumatic injury. For seabirds, coastal gill-nets and the baited hooks of longlines pose the greatest hazard, as recognised by Defra's risk assessment.[12] Elsewhere in the world, however, such bycatch has been dramatically reduced or even eliminated by applying simple but effective technical adaptations of fishing gear or by other changes in fishing practice (mitigation measures).

We welcome the statement that 'We are working closely with stakeholders to develop approaches to tackling the issue of bycatch of marine species such as cetaceans and seabirds, with the aim of identifying and implementing practical and effective risk-based mitigation'. However, this intent can only be as rigorous as the overall objective which should be to eliminate bycatch, avoiding its occurrence as far as practicable. There should also be systems in place to monitor bycatch levels effectively. In this regard, the only mention in the White Paper of an objective is 'minimisation of bycatch' which, in falling short of endeavouring to eliminate, is not ambitious enough, especially when measured against current requirements and/or developing best practice in the EU.[42]

The level of observer coverage of UK-registered vessels is less than 1% (figure provided by the Sea Mammal Research Unit based at St Andrews University). This falls well short of global best practice and is inadequate to provide a robust assessment of levels of bycatch of protected species. As stated in response to

[41] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018SC0393&from=EN

[42] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52012DC0665&from=LV [see page 8] https://eur-lex.europa.eu/resource.html?uri=cellar:41312a57-e771-11e5-8a50-01aa75ed71a1.0024.02/DOC_1&format=PDF [see Art 3.2(b)]

question 13 we believe that all over 10m vessels and selected under 10m vessels (based on criteria that determine risk of non-compliance with either the discard ban and/or rules for bycatch of non-target species, including protected species bycatch monitoring), fishing in the UK EEZ must be required to have 100% monitoring - by REM with cameras, observers or in some cases a combination of both.

With the UK leaving the EU, a demonstrable act of global leadership would be to draw up a robust and adequately resourced bycatch strategy that applies best practice and caters for all endangered, threatened and protected (ETP) species. Greener UK considers that fundamental to this strategy are the following requirements:

- ensuring that bycatch is effectively monitored and reported across all relevant fleets, both in domestic waters and the UK's Overseas Territories;
- a strong objective to minimise and, where possible, eliminate bycatch;
- requiring vessels to adopt the mitigation measures needed to achieve this goal, regardless of vessel size;
- ensuring adequate funding for research to develop and tailor measures to the needs of the fleets;
- application of all measures to both UK and non-UK fleets when fishing in UK waters; and
- an effective enforcement regime.

The bycatch strategy should be evaluated for effectiveness on a 5-yearly basis, and future-proofed with consideration given to the entanglement of marine mammals in static creel fisheries and other potential threats.

We have frustrations about the slow rate of progress in developing a UK cross-taxa bycatch strategy and urge priority be given to how this can be improved and the goal to eliminate bycatch achieved.

Marine Protected Areas

Greener UK believes that **Marine Protected Areas** (MPAs), and the effective management of fishing and other activities within them, have a vital role in protecting and restoring marine habitats and species. Accordingly, we welcome the UK Government's ongoing commitment to creating a well-managed, ecologically coherent network of MPAs in English waters, as demonstrated by the recent consultation on the third tranche of Marine Conservation Zones (MCZs) in English waters. We look forward to continuing discussions to ensure that all impacts of fishing activities in MPAs are assessed and managed and remaining gaps in the ecologically coherent network are met and consideration of highly protected areas.

We recognise the Scottish Government has made welcome progress in developing the Scottish MPA network, with 31 new sites since 2014, fisheries

management measures for the most vulnerable inshore sites, proposed management measures for offshore sites awaiting member state sign-off, and consultations on management measures for remaining inshore sites and four more sites for designation anticipated.

We understand that Welsh Government shall look to designate new Marine Conservation Zones in the next few years. We look forward to hearing more from the Welsh Government about their plans for site designation, which will also play a vital role in ensuring the ecological coherence of the UK MPA network.

We note that there has only been one tranche of MCZs designated in Northern Irish waters and there are still gaps in the network according to a recent report on ecological coherence from JNCC.[43] In addition the assessment of the network does not take into account the management of the sites and according to DAERA's statistics for 2018 only 4.48% of the MPA sites in Northern Irish waters are well managed.[44]

Fisheries within MPAs in UK offshore waters (beyond 12 nautical miles) are currently managed by the Common Fisheries Policy (CFP) regulations. It is important that leaving the EU does not create a legal vacuum in which these sites cannot be managed. Currently, management measures for any offshore MPA must be agreed by all EU member states with a fisheries management interest in the area before final adoption by the European Commission. This has led to a weakening of management proposals in several sites due to strong lobbying from foreign fishing organisations who fish in the UK's MPAs.

New legislation must enable MPAs in UK offshore waters to continue to be managed after Brexit and to ensure that the UK government and the Devolved Administrations take the lead in protecting these important sites (see also below).

Governance Gap and Environmental Principles

Greener UK shares the concerns of others regarding the potential **'governance gap'** as discussed in the White Paper. Our exit from the European Union will have profound implications for our environmental regulations, including through the loss of governance functions currently provided for under our membership of the EU. This loss is outlined in the Greener UK briefing: "The governance gap: why Brexit could weaken environmental protections",[45] which highlights the loss of the robust enforcement mechanisms that we currently have through EU institutions such as the European Commission and the European Court of Justice. These mechanisms include binding judgements which can lead to significant lump sum payments and daily fines for non-compliance.

[43] https://www.daera-ni.gov.uk/publications/assessing-progress-towards-ecologically-coherent-network-marine-protected-areas-northern-ireland

[44] https://www.daera-ni.gov.uk/sites/default/files/publications/daera/ni-environmental-statistics-report-2018_1.pdf

[45] http://greeneruk.org/resources/Greener_UK_response_to_Defra_EPG_consultation_310718.docx.pdf

Furthermore, without acting to secure important environmental principles currently found in the EU treaties (including the precautionary and polluter pays principles), the important role that these principles play in shaping environmental law, guiding policy making, implementation and interpretation of legislation and decision-making risks being lost or weakened.

The White Paper acknowledges Defra's consultation on environmental governance and principles. As detailed in Greener UK's response to this consultation[46] we have a number of concerns with the proposals[47], including:

- as they currently stand, the proposals will leave serious governance and enforcement gaps. The new Environment Bill must provide for the establishment of a new environmental watchdog which is able to take meaningful enforcement and dissuasive action where it considers that any public body is not complying with environmental law. This must include powers over relevant marine bodies and powers to issue sanctions, such as fines.
- environmental principles risk being watered down. In the government's proposals, the principles may only relate weakly to the development of policies by Ministers of the Crown. Instead, all public bodies should be required to **apply** the principles set out in the new Environment Bill and to **act in accordance** with the policy statement in all policy development and decision-making which intersects with the environment;
- the proposals listed in the governance and principles consultation are for England and reserved matters only. However, our exit from the EU creates a UK-wide governance gap and risks losing the full application of our principles across all four nations of the UK. The Scottish Government have stated that they will consult in the autumn on plans to address the governance gap and the Welsh Government have stated that they will address both issues around principles and governance at the first legislative opportunity. However, there is little evidence that any of the governments are exploring the objective of genuine co-design, rather we are seeing the development of separate but parallel thinking in the different jurisdictions. We would urge four-country collaboration to ensure an approach is co-designed that also works for each country.

As reflected above, with regard to the remit of the UK Government's proposed watchdog, it should cover all public bodies operating in England and on reserved matters, including those agencies that operate in the marine environment, such as IFCAs, the MMO and JNCC to ensure that they are fulfilling their statutory remit. The new watchdog has an important role to play in ensuring that management of all marine activities, including fishing, is compliant with the law and therefore must have vital oversight over all of the agencies whose activities potentially affect fisheries and marine environments.

[46] http://greeneruk.org/resources/Greener_UK_response_to_Defra_EPG_consultation_310718.docx.pdf

[47] As set out in the Government consultation https://consult.defra.gov.uk/eu/environmental-principles-and-governance/supporting_documents/Environmental%20Principles%20and%20Governance%20after%20EU%20Exit%20%20Consultation%20Document.pdf

Greener UK believes that the principles currently enshrined in EU law (e.g. the precautionary and polluter pays principles) should have a role to play across all environmental policy and decision-making, including in relation to fisheries activities. It is therefore vital that the Fisheries Bill does not include any measures that might run contrary to the achievement of these principles (see also below). The proposed Fisheries Policy Statement could provide further guidance on how they would operate.

Fisheries Bill
Several proposed provisions within the Fisheries Bill are of direct relevance to the protection of the marine environment.

While welcoming proposed discussions between the Secretary of State and Devolved Administration Ministers on the **application of sustainability principles and objectives**, Greener UK believes that the results need to be put on a firmer legal footing than the simple development of a policy statement. As reflected in response to question 1 above, sustainability commitments (in the form of principles and/or objectives) must appear on the face of the Fisheries Bill, providing a statutory basis for sustainable fisheries management.

Greener UK welcomes proposals to extend the **powers of the Marine Management Organisation** to allow for the regulation of fishing in inshore and offshore areas beyond Marine Protected Areas (MPAs) in England. We look forward to future discussions with the MMO and other stakeholders to investigate the opportunities that these new powers will provide.

We believe that it is essential that future fisheries management is properly designed and assigned adequate resources to enable the effective management of **Marine Protected Areas** (MPAs) in UK offshore waters (see above). Legislation must allow for:

- the retention of all existing management measures to ensure that existing levels of protection are not lost;
- the ability to put new fisheries management measures in place to ensure that all MPAs are properly protected, including those already designated or which may be designated in the future; and
- removal of the effective veto that other member states currently have over fisheries management in UK waters.

Similar powers should be created for all Devolved Administrations to ensure that offshore MPAs can be effectively managed in all UK waters.

Q15. What opportunities are there for the sector to become more involved in both the provision and direction of science and evidence development needed for fisheries management?
To ensure “flexible, efficient and effective fisheries management”, as stated in the White Paper, scientific data and evidence gathering must be an inclusive and robust process including industry and stakeholder engagement. Buy-in to any scientific assessment is essential and this can only be achieved if stakeholders

feel included and effective. In addition to this the data that is collected by stakeholders must be usable: there needs to be scientific rigour and the importance of this must be made clear to all stakeholders. Whilst ensuring a precautionary approach and using best available evidence.

The use of REM, which is discussed in more detail under Question 13, is an important and unbiased method of data collection and an important part of fully documented fisheries. The video data gathered from REM on boats can provide information on a huge number of areas where scientific data is currently lacking such as volumes of by-catch, estimates of non-target species being discarded, tracking invasive non-native species, identifying threatened, endangered and protected species interactions and much more. Australia has been using cameras in its federal longline fisheries for a number of years,[48] as have many other countries. New Zealand is in the process of introducing an integrated electronic monitoring and reporting system (IEMRS) on commercial fishing vessels with the understanding that this will enable a substantial improvement in several areas including: the monitoring of catch effort reporting; supporting the integrity of the Quota Management System (QMS); management of protected species; providing more accurate information for decision-making by the commercial sector and government; and providing improved information to support sustainability certification and traceability for market development. The amount of information that can be gathered through this method is impressive and as technology advances, information will be assessed even more efficiently.

This must be supplemented by other data collection methods such as observers, genetic analysis, egg surveys and catch data – all of which can benefit from the experience and knowledge provided by stakeholder science partnerships.

There are a number of successful examples of fisheries science partnerships with demonstrated benefits for both the fishing industry and the conservation of stocks. A recent example is the long-term management plan for herring on the west coast of Scotland. There have been recent studies examining stock structure in both the North Sea and on the west coast with substantial industry input. These used a broad suite of techniques with the intention of informing future developments in sampling and have even suggested that there needs to be revisions to the assessment of the west coast stock.[49] There are also successful examples of other industries providing scientific data and assessments to help with the management of our seas including Seasearch – which can provide data on the distribution of different seabed types in shallower waters, important for the designation and management of MPAs.[50]

[48] AFMA. E-monitoring requirements. Webpage. Available at http://www.afma.gov.au/fisheries-services/e-monitoring-requirements/ [Accessed 15/8/18].
[49] Marine Scotland. Responsible sourcing: scientific developments in Scotland. Webpage. Available at http://www.seafoodscotland.org/en/responsible-sourcing/top-species/herring.html#scientific-developments-in-scotland [Accessed 16/8/2018].
[50] Seasearch. Webpage. Available at http://www.seasearch.org.uk/ [Accessed 16/8/2018].

The more we learn about the links between species and habitats the more refined and specialised the data we collect can be and the more information we can gather to address specific issues which can help support conservation of stocks and sustainable fisheries management. It is therefore important to start the process of stakeholder engagement in fisheries science as early as possible. Stakeholder consultation at an early stage can help to focus research into areas which are not only data deficient but are actually useful for practical management going forward.

Q16. Do you have any further comments relating to the issues addressed in this section?

Failure to link marine to terrestrial and freshwater system: An historic and persistent failure of management in the UK is the lack of recognition that the marine ecosystem is not a separate entity, but rather is fully linked to both terrestrial and freshwater systems. This has been damaging to the interests of migratory species, such as salmon and eels with a lack of acknowledgement that these migratory species require special management.

Recent evidence indicates that the optimal nursery grounds for the early life stages of important marine species such as sea bass, grey mullets and to lesser extent common sole, lie within areas of low salinity (estuaries and saltmarshes). Some estuaries support critically important marine nursery grounds at a regional level and are designated as transitional waters under the Water Framework Directive (WFD). The criteria defining chemical pollution the WFD are applied out to 200 nautical miles and therefore the MSFD relies upon the WFD to address chemical pollution. However, the obligation to achieve GES under the MSFD does not apply in relation to the transitional water bodies. Instead, transitional water bodies must achieve good ecological status as required by the WFD.

Sustainable management of all species that move across these human defined boundaries, such as salmon which move between rivers and sea, can only be achieved with effective linkage between these two drivers (the legal requirements under the WFD and MSFD) and by an overhaul of management controls and funding mechanisms. This underlines the need for future sustainable management to take a much more holistic approach.

Sandeel management: The future management of the offshore North Sea fishery for sandeel, conducted almost exclusively by Denmark, is an issue of relevance to Q7 (measures for sustainable fishing) and Q 14 (protection of the marine environment).

The lesser sandeel is a key prey species for maintaining the productivity and population status of many seabird species including terns, kittiwakes, and puffins. Sandeels are also consumed in large numbers by harbour porpoise, other sea mammals, and piscivorous fish such as cod, whiting and mackerel. As

such, the sandeel plays a pivotal role in the foodweb between primary productivity (plankton) and top predators. However, diminishing productivity of sandeels (along with other species of forage fish in the case of the North Sea[51]), in combination with other pressures in the marine environment, has driven a major decline of the UK's seabird population. In Scotland, 12 indicator seabird species were 50% less numerous in 2015 than in 1986[52]. Scientific evidence is mounting that sea warming is responsible for reduced sandeel recruitment in the North Sea[53], that this is a key factor in the decline of seabird populations, and critically that commercial sandeel fishing can aggravate this[54].

To address this impact, in 2000 the EU created a closed area of 20,000km^2 extending offshore from the coast of NE Scotland to Northumberland, a 'box' which still keeps the Danish sandeel fishing fleet at bay from the foraging ranges of sensitive seabird colonies. This industrial sandeel fishery continues elsewhere in the North Sea, mainly nowadays on the Dogger Bank, of which the UK part is a key focal area of the fleet. RSPB research[55] indicates that the Dogger Bank fishery could be having a detrimental impact on kittiwake productivity on the adjacent Yorkshire coast.

Moreover, whereas the stock assessment model used by ICES includes estimates of the quantity of sandeels consumed by seabirds and other predators in order to estimate the natural mortality of the stock, this does not involve any consideration of the biomass of sandeels that dependent predators need to be present in the sea in order to be able to find the amount that they consume. In other words, the predators' *ecological* as opposed to their *physiological* requirements are not used in setting catch limits for the sandeel fishery. In failing to cater adequately for the needs of seabirds and other marine wildlife (effectively not providing sufficient sandeel 'set-aside' for them), the management of the fishery therefore falls short of meeting the objective of an ecosystem-based approach committed to in the White Paper and is an issue that the UK should address if it is to deliver ecologically sustainable fisheries.

Apart from a very modest UK quota for scientific monitoring of the sandeel closed area off E Scotland/ NE England (established in 2000 in response to regionally declining kittiwake populations), the UK has no commercial interest in the sandeel fishery, has no sandeel trawlers, and no bespoke processing facilities for sandeel. Scotland's salmon-farming industry may benefit to some extent from Danish sandeel-derived aquafeed but, given that this product draws on global sources, notably Peruvian anchovy, and that algae-based substitutes

[51] Clausen, L.W., Rindorf, A., van Deurs, M., Dickey-Collias, M. & Hintzen, N.T. (2017) Shifts in North Sea forage fish productivity and potential fisheries yield. J. Appl. Ecol. 55, 1092-1101. https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2664.13038

[52] Scottish Biodiversity Indicator: The numbers and breeding success of seabirds – Dec 2016

[53] http://www.int-res.com/articles/meps2002/238/m238p199.pdf

[54] http://www.mccip.org.uk/impacts-report-cards/full-report-cards/2006/healthy-and-biologically-diverse-marine-ecosystem/seabirds/ceh-evidence/

[55] http://onlinelibrary.wiley.com/doi/10.1002/aqc.2780/full

for fish oil are increasingly incorporated in aquafeed, North Sea sandeels are unlikely to prove indispensable to the UK economy. In addition, many UK fishermen are known to be opposed to fishing for sandeels as a key prey for whitefish and pelagic species. While the focus here is on sandeels (as the biggest single-species fishery in the North Sea) similar arguments apply to other low trophic level species (or 'forage fish'), notably sprat.

In conclusion, although management of the North Sea sandeel fishery has improved in recent years (closed area, management units, in-year assessment of recruitment), further measures are required in UK waters and - while not necessarily dependent on it - leaving the EU may facilitate this.

Options include:
1**)** Close the sandeel fishery in UK waters
The UK could justify and champion this option, as an exemplar of an ecosystem-based approach. In support of this option, Furness et al. (2013)[56] state that '*Closure of all sandeel and sprat fisheries in UK waters would bring the UK into the same management position as exists in the USA, where fishing small pelagic fish such as sandeels that are keystone species for marine food webs (including large predatory fish of high commercial value) is prohibited.'*
2) Reduce fishing mortality to leave at least one-third of the stock for predators
Scientists have suggested that, as a general global rule ('One-Third for the Birds'), a third of the peak long term maximum stock size of forage fish should be left for birds each year to ensure seabird populations remain stable[57]. Consequently, it has been argued that a minimum of one-third of the long-term biomass of sandeels should be left by the fishery to support sustainable North Sea seabird populations[58].
3) Extend the existing closed area south to Yorkshire and the Humber
The current sandeel closure, whose southerly limit is Northumberland, could be extended further south to afford protection to the Yorkshire coast which now holds the UK's biggest mainland seabird assemblage including its largest mainland kittiwake colony. In 1998, the then UK Government, acting on advice from ICES, proposed to the European Commission a closed area from Orkney to the Humber but the compromise reached was the smaller closure established in 2000.

3.4. Resourcing the new approach

Q17: What would be your priorities for any future funding for the sector or coastal communities?
It is clear that in the absence of European Maritime and Fisheries Fund (EMFF) funding a significant gap will exist for scientific research and management

[56] http://randd.defra.gov.uk/Document.aspx?Document=13483_MB0138MacArthurGreenFinalReport.pdf
[57] Cury, P; Boyd, I; Bonhommeau, S; Anker-Nilssen, T; Crawford, R; Furness, R; Mills, J; Murphy, E; Österblom, H; Paleczny, M; Piatt, J; Roux, J; Shannon, L; Sydeman, W (2011). Global Seabird Response to Forage Fish Depletion--One-Third for the Birds. Science 334. 1703-6. 10.1126/science.1212928
[58] Cook, ASCP, Dadam, D, Mitchell, I, Ross-Smith, VH & Robinson, RA (2014) *Indicators of seabird reproductive performance demonstrate the impact of commercial fisheries on seabird populations in the North Sea*. Ecological Indicators 38, 1-11.

infrastructure and implementation. It will be vital to ensure that adequate funding is forthcoming to deliver sustainable marine and fisheries management. Public funding should support delivery of a sustainable management regime, including financing for science filling of gaps in stock assessment, data collection and fisheries monitoring, effective control and enforcement and support for a marketing strategy for sustainable seafood, protecting and managing MPAs and achieving GES.

National picture

The 2011 UK Marine Policy Statement set out a vision for the UK to deliver "clean, healthy, safe, productive and biologically diverse oceans and seas".

In 2012, the UK government's Coastal Communities Fund (CCF) was launched to support "*coastal communities that are able to use their assets (physical, natural, social, economic and cultural) to promote sustainable economic growth and jobs*". The initiative, administered by the Big Lottery Fund, reinvests some of the profits made from coastal and marine assets, managed by the Crown Estate, back into the communities closest to them. Since 2012, it has awarded grants to 218 organisations across the UK to the value of £125million. This funding is forecast to deliver over 18,000 jobs UK-wide, and help attract over £240 million of additional funds to coastal areas. In 2015, the government announced that the CCF would be extended to 2021 with at least £90 million of new funding available. Also in 2015, the UK Government supported the creation of 118 Coastal Community Teams in England – bringing together local residents, business, and councils. The teams have been tasked with coordinating regeneration projects in their area and helping to shape bids for the Coastal Communities Fund. We support the continuation of this fund post Brexit.

In recent years, several national policies and government initiatives have been developed, thanks to the efforts of a range of groups on the coast and government agencies. More sustainable and innovative approaches are already happening, but they are still far too few to deliver the transformation that is needed.

Policies still have not been able to address the problem that many coastal communities lack the scale of power and resources needed to address their complex and many unique challenges. Now they face an increasingly uncertain economic future.

Therefore:

- The UK Government should treat the coast as a unique case in its national approach to both industrial strategy and infrastructure development and how these are supported by grant funding. There should be a coastal industrial strategy and targeted public investment to build the capabilities of places, people and communities on the coast. Shoreline management plans must also be developed to ensure marine protection and enhancement is considered alongside the coastal industrial strategy.

- Local projects need better access to finance than the big banks are able or willing to provide. Government should encourage a more diverse network of local and regional banks to channel investment into sound local businesses.
- Government should ensure that, post-Brexit, the UK matches or exceeds EU funding streams that would have paid for research and innovation, including Horizon 2020 funding towards Low Carbon Technologies.[59]

Shared prosperity fund
The shared prosperity fund[60] which was announced will have an immense gap to fill. From Universities through to small scale fishers the demand for grant support will be substantial.

Ensuring that the fund reaches those sectors which are most in need but have the least capacity to access the funds will be a significant challenge, hence the equitable design will need to be built in from the outset.

For fisheries and aquaculture, whatever replaces the EMFF should learn lessons from both the EFF and EMFF funding rounds, consider feedback and consider the following:

Fisheries
Community Led Local Development (CLLD) and Fisheries Local Action Groups (FLAGs) – FLAGs have been one of the most important changes in how fisheries financial support mechanisms are structured, focussed on community led local development, rather than top down or individual based financial support. This approach has been welcomed and largely successful throughout the EU. After leaving the CFP and therefore the EMFF the UK Government should not lose this approach to funding.

- The UK Government should adopt a Community Economic Development (CED) approach [61] for a proportion of funding available for fisheries support. Co-developing a strategy which has strong grassroots support and input is likely to make schemes more democratic, resilient and therefore effective.
- Not all sustainable fisheries are certified. This often happens when smaller, or less profitable, fishing businesses can't afford the cost of certification by a third party, or because their fishery lacks the data needed for certification.

[59] Blue New Deal Action plan https://neweconomics.org/uploads/files/NEF-Blue-New-Deal-AP-HighRes.pdf

[60] https://www.gov.uk/government/publications/cross-government-prosperity-fund-programme/cross-government-prosperity-fund-update

[61] Community Economic Development https://mycommunity.org.uk/take-action/community-economic-development/

- Government should work with industry and others to ensure that smaller businesses, which are fishing sustainably, are able to benefit from seafood labelling schemes.

Aquaculture

Aquaculture innovators need government support and commitment to run sustainable aquaculture businesses, including funding to support innovation focused on raising environmental standards. Inshore fisheries and conservation authorities (IFCAs) in England are already developing their own aquaculture strategy to help address competition for space. They need government to provide the appropriate funding and resources to continue to develop this work. Investment should be directed towards activities the UK has a natural advantage in, and which can support a healthier marine environment (e.g. shellfish aquaculture). For example, trialling restocking and restoring native oyster beds, increasing carrying capacity for existing shellfish sites in appropriate areas, further exploring seaweed production, and supporting innovation in finfish aquaculture that addresses issues of environmental concern such as sea lice management, feed formulations and wider/long term impacts on habitats and species (with special attention to salmon farming).[62]

- Government must set out a clear, long-term strategy and funding commitment to support more innovative and sustainable approaches to coastal management.
- Access to funding will be a crucial issue given the gap that will be created by exiting from the EMFF. It is important that the new funding and mechanisms created are available to all Devolved Administrations and that the resource available matches the environmental and socio-economic need. Unbalanced funding will create gaps within future fisheries management, jeopardising any common frameworks developed.

Finally, Greener UK supports the modernising of grant making powers in England. While not achieving its full potential, the EMFF has enabled the development and delivery of a range of environmental projects. We believe that the ability to support such projects, especially those which deliver environmental and social benefits, should continue in the future and we look forward to discussions with all relevant decision makers around effective new financial measures.

4.1. Partnership working

Q19: How far do you agree with our future vision to pursue a partnership approach with industry and others for sustainably managing fisheries?

[62] Blue New Deal Action plan https://neweconomics.org/uploads/files/NEF-Blue-New-Deal-AP-HighRes.pdf

As detailed in the response to question 15 we believe that partnership working should play a significant role in the future of sustainable management of fisheries, particularly when developing policy, management plans and data collection. Annex D of the White Paper outlines the wide-range of stakeholder engagement that Defra has carried out since the EU referendum. However, while the White Paper highlights the Seafood Industry Expert Working Group as an example of the government's commitment to work with the wider industry, this group is composed of a very narrow range of industry experts and **does not** sufficiently represent all stakeholders with a commitment to sustainable fisheries. This does not echo the White Paper's stated aim to "remain fully committed to working with a wide range of partners to introduce a management regime that works for the catching sector, coastal communities, the seafood sector, consumers, NGOs and the wider public".

Increased stakeholder engagement must be a priority, particularly to include under-represented stakeholders such as recreational anglers, processors and members of the general public, to facilitate wider engagement with coastal communities beyond the fishing industry and to further include the wider public during consultations. However, we do support more focused stakeholder groups to help with the more detailed and adaptive future management of our seas going forward, which may be on a more regional level.

There must be broad stakeholder engagement and inclusion in the development of any new stakeholder bodies developed to replace existing bodies or any new engagement with existing bodies e.g. the EU Advisory Councils. Additionally, to improve transparency in the industry it will also be important for any new governance frameworks to have significant stakeholder input.

Annex 1: Greener UK suggested drafting for an objectives clause in the UK Fisheries Bill.

General objectives

(1) This section applies to any public authority having any function relating to fishing activities or fisheries management.
(2) Every public authority to which this section applies must exercise its functions in accordance with the objectives stated in subsection (3).
(3) This Act has the following general objectives:

(a) Fishing activities are environmentally sustainable in the long-term;
(b) Fisheries management decisions are based on the best available scientific advice;
(c) A precautionary approach is applied to fisheries management;
(d) The populations of all harvested species are restored and maintained above levels which can produce the maximum sustainable yield;
(e) Catch limits for all harvested species are set below F_{MSY} or, where F_{MSY} is not known, according to the best available proxy, by 2020;
(f) An ecosystem-based approach to fisheries management is applied so as to ensure that negative impacts of fishing activities on marine ecosystems are avoided or, where avoidance is not possible, minimised and remediated and to ensure that the interdependence of fish stocks with the marine environment is accounted for;
(g) Fishing activities are managed in a manner that is consistent with the UK's international law obligations and in compliance with other applicable domestic environmental legislation, in particular, legislation relating to the marine environment; and
(h) Fishing opportunities are allocated on the basis of transparent and objective environmental, social and economic criteria in a way that incentivises the most sustainable fishing practices.

Greener UK is a coalition of 13 major environmental organisations united in the belief that leaving the EU is a pivotal moment to restore and enhance the UK's environment.

Greener UK is working in partnership with Wildlife and Countryside Link, Scottish Environment Link, Northern Ireland Environment Link, New Economics Foundation, Environmental Defence League, Sustain, Oceana and the Marine Conservation Society.

Together, their members have the support of over eight million people.

GREENER UK

Working in partnership with:

Wildlife and Countryside LINK