



The Northern Ireland Marine Taskforce (NIMTF) is a coalition of non-government environmental organisations – it includes RSPB, Ulster Wildlife, Wildfowl and Wetlands Trust, National Trust, Friends of the Earth, Marine Conservation Society, Live Here, Love Here, Irish Whale and Dolphin Group, Surfers Against Sewage, Shark Trust, Causeway Coast & Glens Heritage Trust and Northern Ireland Environment Link. The NIMTF has the support of approximately 100,000 local people. We are working towards healthy, productive and resilient seas for Northern Ireland.

Northern Ireland Marine Task Force response to: [Consultation on the development of fisheries management measures for Marine Protected Areas \(MPAs\) in the Northern Ireland offshore region](#)

Submitted: 24th August 2026

NIMTF thanks DAERA for the opportunity to provide evidence in support of a full-closure for the Offshore MPAs within the NI Offshore Region. Having been a core component of the Co-Fish forum, we understand the importance of this consultation in setting the stage for implementing fisheries management within Northern Ireland's offshore areas. This consultation also comes at an appropriate time, as we rapidly approach the statutory commitment to achieve 30by30, which without introducing management measures for these sites - we will not make good progress on.

According to the Environmental Improvement Plan (EIP) Annual Progress Report (2026)¹, 87% of inshore MPA features are in favourable condition as per the Environmental Statistics Report 2024. However, as described below and within the consultation document, all or most of the marine features within the offshore sites remain in an Unfavourable condition alongside the intensity of fishing activity which has been ongoing since designation as a result of the Isle of Man closures amongst other factors. As a result, **DAERA are failing to meet their existing obligations** to the MPA Network, which has been picked up by the Office for Environmental Protection in their own assessment of the EIP Progress Report²; highlighting that further work is needed to implement existing plans and strategies. The EIP¹ also states that:

“The Marine Act (NI) 2013³ required DAERA to establish a network of MPAs in the NI inshore region that, together with other MPAs designated by other UK administrations, contributes to the conservation and improvement of the marine environment in the UK marine area.”

Whilst it is the Marine and Coastal Access Act 2009⁴ which governs the Offshore MPAs, it nevertheless is important that cohesion and coherence between the inshore and offshore function together in tandem to act as a whole NI MPA Network. **These cannot function in isolation of each other.** The priority marine features are unique and vulnerable, but provide immense overall value to the wider ecosystem; providing nursery grounds for commercial fish species, protecting nature and fisheries, carbon storage and developing biodiversity resilience within the wider Irish Sea. As such, they were designated to safeguard from being damaged by bottom-towed fishing gear, yet despite clear evidence of risk, fishing has been allowed to continue for several reporting cycles, highlighting

that there has been a complete lack of commitment from DAERA and the NI Government's statutory duties and obligations. NIMTF will not allow further degradation to the Offshore MPA Network for further reporting cycles and will not accept further delays to progression or actions which will result in achieving 'Favourable' conditions. NIMTF understands that the MPA Network has been set up to support sustainable use - but the fact that there has been no improvement to the majority of MPA features shows that the current extent of use is **not sustainable** and calls for urgent action in the form of management.

Table 1. Summary of DAERA MCZ Assessment Tests in relation to introducing varying levels of fisheries management to achieve conservation objectives for South Rigg and Queenie Corner MCZ⁵

MCZ Assessment for South Rigg and Queenie Corner MCZ	
Test 1 - Based on the evidence received, is the public authority satisfied that there is no significant risk of the activity hindering the achievement of the conservation objectives stated for the MCZ? And Can the public authority exercise its functions in a manner that it considers best furthers, or least hinders, the achievement of the conservation objectives of the MCZ site? (Page 14 and 15)	South Rigg - No Fishing activities detailed above are likely to have a significant adverse effect on the designated features of South Rigg MCZ, based on the result of the vulnerability and risk of damage assessment described above. The Department cannot exercise its function to further the conservation objectives of South Rigg MCZ without introducing fisheries management measures. Queenie Corner MCZ - No The Department is not satisfied that there is no significant risk of demersal mobile fishing gear hindering the achievement of conservation objectives stated for Queenie Corner MCZ. The Department cannot exercise its function to further the conservation objectives of Queenie Corner MCZ without introducing fisheries management measures.
Test 2 - Although the person seeking an authorisation is unable to satisfy the public authority that the activity will not hinder the achievement of the conservation objectives stated for the MCZ, is there an alternative way of proceeding with the proposal which would create a substantially lower risk of hindering the achievement of the conservation objectives stated for the MCZ? This would include proceeding with it: - In another manner or - At another location (Page 19)	No The benefit to the public from permitting the use of mobile demersal fishing gear in the MCZs does not clearly outweigh the risk of damage to the MCZ protected features. The application for the use of mobile fishing gear within MCZs is rejected.

Test 2 - Stage 2 Can the applicant satisfy the public authority that they will undertake, or make arrangements for the undertaking of, measures of equivalent environmental benefit to the damage which the act will or is likely to have in or on the MCZ? (Page 22)	No, the Department is not satisfied that measures of equivalent environmental benefit to the damage which the act will or is likely to have in or on the MCZ can be undertaken. Examples of Measures of equivalent environmental benefit would include the identification and subsequent designation of the same feature type elsewhere within the NI offshore area. However, this is not possible due to the limited area available in the offshore region, and the reduction in availability of associated habitats and features. The application for the use of mobile fishing gear within MCZs is rejected.
--	---

Therefore, from our perspective the “Do nothing” approach **is inapplicable** in these circumstances, particularly for South Rigg and Queenie Corner MCZs. Given the extent of damage and the above statements by the Departments’ own assessment under their own Tests, the only option forward is to implement a **full closure to fishing activity** to allow the sites to fully achieve their conservation objectives.

Action: DAERA to implement a full closure of the three Offshore MPAs to all fishing activity.

Action: DAERA to also look to implement management measures for other identified pressures such as Shipping, Anchorage, Offshore Renewable Energy Developments, etc relevant to the three Offshore MPAs.

It has been acknowledged that fishing pressure here cannot be allowed to continue within the sites to the current extent which it has been and still meet the tests outlined above. Fishing pressure is currently the most significant pressure which is facing benthic species and habitats - physically removing or crushing seabed habitats, destroying slow-growing species that can take decades to recover. There is complete incompatibility with protecting our MPA Network and bottom trawling activity and **our MPA Network does not have decades to recover**. This is DAERA’s opportunity to take a firm stand in implementing robust management measures within sites which are knowingly under significant pressure from fishing activity and can be the beginning of robust management measures for the Offshore sites.

NIMTF notes the lack of buffer zones which have been considered or applied in relation to the development of byelaws. This has been done in England through guidance from Natural England and JNCC and similar buffer zones could be applied to these within NI:

Table A. 1: Buffer size determination table for mobile gear.

Water depth	Ratio warp length: depth	Buffer
Shallow waters (≤ 25 metres (m))	4:1	4 x actual depth
Continental shelf (25-200 m)	3:1	3 x actual depth
Deep waters (200 to over 1000 m)	2:1	2 x actual depth

Where static gear management is proposed Natural England have recommended that a buffer of 100 metres is applied, or the distance calculated by 2 x water depth, whichever is greater.

(Source: MMO Stage 3 MPA Fisheries Assessment Methodology (Annex 2)⁶)

If DAERA are following the above recommendation from the MMO, the buffer zones for the three MPAs would be 3x actual depth of the sites themselves. These buffer zones will be relevant specifically for Questions 1, 4 and 7.

Action: DAERA to implement buffer zones for mobile gear which are “3x actual depth” as part of their management around the three Offshore MPAs.

Horizon Scanning

NIMTF are pleased to note that there are several whole site management measures identified for the MCZs on Page 15 of their MCZ Assessment:

- Mandatory vessel position monitoring for all vessels operating in the MCZ.
- Introduce geo-fencing of MCZs (create a virtual geographic boundary that enables higher resolution VMS tracking when a vessel is within a delineated area).
- Mandatory recording of protected species that are accidentally caught and any entanglement issues; and
- The Department will continue to encourage and support the development and trialling of fishing gear that reduces unintended catch.

The above identified measures are welcomed, but they need to go further - NIMTF understands that DAERA has a monitoring protocol which provides annual monitoring alongside a 6-yearly reporting cycle. These offshore MPAs need to be included now within that existing monitoring framework and forums such as Co-Fish would be the best to demonstrate the effectiveness and eventual spill-over from the implementation of the best course of action: **full closure to fishing activity**.

Action: DAERA to utilise Co-Fish as a communication mechanism for providing updates to overall management effectiveness over time through their annual monitoring protocols.

NIMTF would like to see a timeframe of actions which lead to the proposed whole-site management measures being implemented as part of the EIP target to have Management Plans in place by 2028 and 2029 for Conservation Management Plans for SACs - which would include all offshore MPAs.

There has been a pilot scheme for trialling VMS in vessels <12m and it can be expected that only vessels >10m will be capable of trawling. Therefore, with further dedicated ring-fenced funding and frequent excursions planned by the DAERA Marine & Fisheries Enforcement team, this can be most effective if implemented. NIMTF is aware that the Queen of Ulster enforcement vessel has remained out of commission since 2024 due to certification issues⁷. The costs associated with enforcing a full closure as opposed to a partial closure have been found by the Scottish Government to be around **three times cheaper to the taxpayer** and save on level of time requirements and effort to monitor⁸. Additionally, NIMTF have seen delays in acting upon evidence of damage to MPAs for the Outer Belfast Lough MCZ when implementing a “No Anchorage Zone” based on evidence from 2019, leading to NIMTF sending letters to the AERA Committee and DAERA Minister, requesting urgent action through the implementation of an Emergency Byelaw since it was first brought to our attention by the Department in January 2025. See attachments in the email correspondence. **Urgent action can no longer be delayed.**

Action: DAERA to outlay an updated enforcement and monitoring programme moving forward to ensure compliance with outcome to this consultation.

Enforcement should also ensure VMS pilots for vessels >10m, but <12m then all NI vessels will be monitored through VMS. This must also be supported through Remote Electronic Monitoring (REM) through the role of cameras and sensors to further support enforcement and compliance with implemented regulations. The main argument against management being implemented is that there has been no dedicated examples of MPAs which have led to overspill for the fishing sector - the majority of our MPAs, if not all of them were not designated specifically for quota species, but for the fragile and vulnerable habitats which can support them. New research is coming to light which shows previously designated MPAs which prohibited bottom trawling are now providing that overspill, albeit several years later - **only because they have had the identified pressure removed.**

Given the degree of pressures which will be addressed through a **full closure**, NIMTF would even go so far as to suggest there is possibility that if other pressures were eliminated that this would make a good step towards implementing Highly Protected Marine Areas (HPMAs) - a recommendation from the Benyon Report in 2020⁹, which has led to other areas around the UK being upgraded from their existing MPA designation to HPMA. Whilst these recommendations have not been carried forward in all devolved areas, there are some HPMAs in existence in England¹⁰ - Allonby Bay¹¹, North East of Farnes Deep¹² and Dolphin Head¹³; whilst Scotland has rolled back on their initial commitment of 10% of the total sea area consisting of these areas in 2023¹⁴. NI should not roll-back on the possibility of furthering the MPA Network and the offshore MPAs provide the greatest potential.

The EIP does not make reference to the state of the Offshore MPAs, however only 0.01% of the UK offshore environment is designated as an SPA¹⁵. Nevertheless these are critical in supporting the overall NI MPA Network which can contribute to connection and coherence of the UK MPA Network as a whole. Migratory species will rely on these locations and will require features such as key habitats identified within to be in a favourable condition to guarantee their safety, as well as reproductive success. Without robust protection for these benthic communities, we run the risk of further degrading these sites even after the pressures have been identified - in some cases many years ago.

NIMTF appreciates the focus on the Global Biodiversity Framework targets¹⁶ of Target 1 and 3, however there are equally critical targets which must be brought forward that are relevant to the offshore MPAs:

- Target 2: Restore 30% of all Degraded Ecosystems
- Target 4: Halt Species Extinction, Protect Genetic Diversity, and Manage Human-Wildlife Conflicts
- Target 5: Ensure Sustainable, Safe and Legal Harvesting and Trade of Wild Species
- Target 8: Minimise the Impacts of Climate change on Biodiversity and Build Resilience
- Target 9: Manage Wild Species Sustainably to Benefit People
- Target 10: Enhance Biodiversity and Sustainability in Agriculture, Aquaculture, Fisheries and Forestry
- Target 11: Restore, Maintain and Enhance Nature's Contributions to People
- Target 14: Integrate Biodiversity in Decision-Making at Every Level
- Target 15: Businesses Assess, Disclose and Reduce Biodiversity-Related Risks and Negative Impacts
- Target 16: Enable Sustainable Consumption Choices to Reduce Waste and Overconsumption
- Target 18: Reduce Harmful Incentives by at Least \$500 Billion Per Year, and Scale Up Positive Incentives for Biodiversity
- Target 19: Mobilize \$200 Billion Per Year for Biodiversity From All Sources, Including £30 Billion Through International Finance
- Target 20: Strength Capacity-Building, Technology Transfer, and Scientific and Technical Cooperation for Biodiversity
- Target 21: Ensure That Knowledge Is Available and Accessible to Guide Biodiversity Action
- Target 22: Ensure Participation in Decision-Making and Access to Justice and Information Related to Biodiversity for All
- Target 23: Ensure Gender Equality and a Gender-Responsive Approach for Biodiversity Action

NIMTF also understands that measures brought forward as part of this consultation will need to align with the Fisheries Management Plans (FMPs) in development, in particular those associated with the Irish Sea: Pelagic and Demersal¹⁷ given that the scope of management within said plans overlaps with these areas geographically. NIMTF understands the cumulative pressure that the fishing sector is facing, but without a healthy marine environment, there can be no industry. Current condition assessments have rightly identified that the majority of features are in "Unfavourable" condition. Under the Marine and Coastal Access Act 2009 which governs the responsibilities around MCZs within the NI Offshore Region, the statutory requirement is clear: Return to favourable condition if Unfavourable, or maintain at Favourable condition.

NIMTF would like to ensure that there has been appropriate accounting to the draft Marine Plan¹⁸. Currently the only version available to NIMTF and other stakeholders is the 2018 consultation version, so our information here is in relation to specifics within that as this has become material consideration since the consultation, however much of this is out of date. The following draft Marine Plan objectives are relevant for this consultation:

- Objective 1: To promote the sustainable development of productive activities, while support employment at all skill levels, while fully considering the requirements of other marine interests.
- Objective 2: To help realise the potential of energy resources and energy storage, within the marine area, while fully considering the requirements of other marine interests.
- Objective 3: To promote the development of vibrant, accessible and sustainable coastal communities.
- Objective 4: To promote the marine resource, its recreational value and its wider economic, environmental and social benefits to all.
- Objective 5: To promote the preservation and enjoyment of marine related heritage assets.
- Objective 6: To promote a healthy, resilient and adaptable marine ecosystem and an ecologically coherent network of Marine Protected Areas.
- Objective 7: To contribute towards climate change mitigation and adaptation measures.
- Objective 8: To continue to develop a sound marine evidence base in a co-ordinated manner to increase understanding and to support the development, monitoring and review of Marine Plans.

NIMTF would like to note that a critical component of Objective 8 is “Every effort should be made to facilitate data sharing, where possible.” Like many other stakeholders, NIMTF has requested several times to see an updated version of the draft Marine Plan since the consultation. As yet, this has not been provided, and NIMTF have been informed that the final version will not go to another consultation before being sat before the NI Executive. The draft NI Marine Plan does not highlight within Figure 5b¹⁹ the existing MCZs for the Offshore Region. This has been updated within the NI Marine MapViewer²⁰, but not within the textual framework. There is still reference to the Marine Strategy Framework Directive (MSFD) which has since been transposed into the UK Marine Strategy to achieve Good Environmental Status. These differences since the consultation and not having access to a live version makes it an incredibly difficult tool in its unfinished form for stakeholders to currently use for any form of planning in the marine environment in general. NIMTF would like to remind DAERA that by not having access to this live version, it directly undermines the GBF Targets 21 and 22 for all stakeholders.

Another thing to note is that the MPAs were never designated specifically for the fishing sector quotas, meaning that there are indirect benefits for the fishing sector in preventing them from fishing. This is a challenge when building the case for assessing if an MPA has benefitted the fishing sector - however these offshore sites should be prime case studies for our fishing sector given that the muddy burrows of nephrops are intended to be protected from bottom trawling.

Consultation Questions:

Pisces Reef Complex SAC

1. Do you agree with the recommended option of a full closure?

Yes. Pisces Reef Complex SAC is in Unfavourable condition (2025) and must be returned to Favourable condition to meet its conservation objectives and statutory requirements to meeting 30by30 under the Global Biodiversity Framework¹⁶ and the marine environment indicators of the UK Marine Strategy²¹. Without implementation of management across the full site, Pisces Reef Complex SAC cannot meet these objectives to the fullest extent and will compromise the existing 35.5% of the designated NI MPA Network.

The Conservation Objectives²² highlight:

“There is a significant risk of not achieving the conservation objectives for the qualifying feature Annex I Reef if mobile bottom contact gears are not managed within the site. If the risk of not achieving the site’s conservation objectives is to be reduced to the lowest possible levels, all mobile bottom contact gears would need to be removed from where the qualifying feature is present within the site and from an appropriate distance to reduce the risk of unintended contact.”

NIMTF would inquire why there has not been a buffer put in place to address the “and from an appropriate distance”. This could be twinned with VMS and Remote Electronic Monitoring (REM) records to establish greater enforcement.

Additionally, it highlights that **“No new licensable activities capable of impacting** (either directly or indirectly) the qualifying feature, Annex I Reef or hindering its recovery, **should be permitted.**”²³

Whilst NIMTF respects that this consultation focuses solely on fisheries management, it is worthwhile highlighting additional pressures not only to the natural environment, but also to the fishing sector due to the risk of spatial squeeze with the presence of Offshore Renewable Energy Developments, that ORE will be placed upon this site. It is unfair to the fishing sector if activity is fully closed to them, that another sector should be permitted to carry out their activity either fully or partially. NIMTF would request that this full closure also applies to other licensable activities such as ORE.

JNCC carried out an analysis in 2018 into the existing MPA Network²⁴ and highlighted “low energy circalittoral rock” needed to be replicated. Given that there are faunal communities on deep forms of these at this site, if they are continued to be impacted by identified pressures, then there is a risk that replication will not be achieved and the coherence of the MPA Network will be undermined.

NIMTF notes the lack of buffer zones which have been considered or applied in relation to the development of byelaws. This has been done in England through guidance from Natural England and JNCC and similar buffer zones could be applied to these within NI:

Table A. 1: Buffer size determination table for mobile gear.

Water depth	Ratio warp length: depth	Buffer
Shallow waters (≤ 25 metres (m))	4:1	4 x actual depth
Continental shelf (25-200 m)	3:1	3 x actual depth
Deep waters (200 to over 1000 m)	2:1	2 x actual depth

Where static gear management is proposed Natural England have recommended that a buffer of 100 metres is applied, or the distance calculated by 2 x water depth, whichever is greater.

(Source: MMO Stage 3 MPA Fisheries Assessment Methodology (Annex 2)⁶)

If DAERA are following the above recommendation from the MMO, the buffer zones for the three MPAs would be 3x actual depth of the sites themselves. NIMTF will highlight this again under Questions 4 and 7.

Action: DAERA to implement buffer zones for mobile gear which are “3x actual depth” as part of their management around the three Offshore MPAs.

2. Do you agree with the assessment of the current value of fishing within Pisces Reef Complex SAC?

NIMTF does not have any comments regarding the value of fishing for this site. However it has been noted that the “majority of vessels were over 12m” but says nothing about the scale of vessels which are below 12m. This reflects a requirement to have the <12m fleet equipped with VMS to gain a greater understanding of who is operating, or has been operating within MPAs and to effectively enforce a potential full closure if implemented. Greenpeace produced a report in 2022 using data from the Global Fishing Watch²⁵ found that between January 2020 to January 2025 that supertrawlers were spending nearly 37,000 hours fishing within MPAs, whilst on average there was around 7,380 hours spent within MPAs annually²⁶. Meanwhile a Marine Conservation Society report “Marine UnProtected Areas²⁷” showed that bottom trawling activity was taking place in 98% of the UK’s offshore MPAs between 2015 and 2018, equating to at least 89,894 hours fishing the seabed within these offshore MPAs. Oceana produced a report called “Mission Regeneration: A Roadmap to Ending Overfishing & Restore Life to UK Seas” in 2024²⁸, which detailed the extent to which fishing activity is taking more than it needs, and highlighted time-bound actions for governments to implement by the end of 2025 to secure the resilience of MPAs, including the banning of bottom trawling activity within MPAs. These records should be assessed against the condition of features within those sites which are sensitive to fishing pressure to see if they are in Favourable condition consistently over this duration. Separately, it has been possible for fishing vessels to be banned from fishing within UK waters, such as the case in 2023 when Russian vessels were allowed to fish within UK waters due to a long-standing agreement with the Faroe Islands. Actions such as this, combined with the roll-out of REM should also be included alongside VMS in all vessels to guarantee

enforcement and accuracy when vessels are operating, or have been prohibited from interacting within MPAs.

To ensure alignment with the Seabird Conservation Strategy and Action Plan 2026 - 2035²⁹, the draft NI Elasmobranch Conservation Strategy³⁰ and the Irish Sea Pelagic³¹ and Irish Sea Demersal³² FMPs, of which this particular outcome will be quite relevant to, it is important that there are recommendations to reduce bycatch for both seabirds and elasmobranchs. NIMTF would refer DAERA to our recent report entitled “Reducing Elasmobranch Bycatch in Northern Ireland Waters³³” which highlights 8 recommendations for aligning these conservation strategies with developing FMPs.

3. Is there any evidence that should be considered in terms of values, costs or benefits?

From the Marine unProtected Areas Report by MCS, Figure 14³⁴ shows that there is an approximate value associated with the annual cost of carbon disturbance of between £2million - £4million for Pisces Reef Complex SAC showing that the economic value in going against the Blue Carbon Action Plan 2025 - 2030 is a costly investment. The overall long-term impacts of bottom-trawling within the Irish Sea has shown for the first time that there is disturbance down to 50cm within the seabed. Until now, evidence has only really focused on the first 10cm, but this shows that up to 50cm has disturbance; leading to the dispersal of up to 160 years' worth of stored organic carbon releasing into the surrounding water column³⁵. The Irish Sea Mud Belt is one of the most trawled areas and as a result is facing consistent disturbance, further going against the objectives of the Blue Carbon Action Plan 2025 - 2030³⁶. Further information on the Blue Carbon Action Plan 2025 - 2030 is highlighted within Q6.

Additionally, Pisces Reef Complex SAC overlaps with an Important Shark and Ray Areas (ISRA) specifically designated for Spurdog (spiny dogfish), meeting several ISRA criteria (criterion A - vulnerability and Sub-criterion C1 - Reproductive Areas)³⁷. It is important that the draft NI Elasmobranch Conservation Strategy³⁰ acknowledges the connection to ISRAs, as well as the important link to these identified reproductive areas within the ISRA catalogue. The value of the offshore area cannot be understated given the links to the ECS and their reproductive grounds. Within the Annual Report for data collection in the fisheries and aquaculture sectors 2021 - 2024³⁸, Spurdog reached a total of 13,067 individuals caught over a 3 year period, alongside Tope (62 individuals) which this ISRA is also designated for. Spurdogs are highly vulnerable to overfishing given their long gestation periods, small litter sizes and slow reproductive maturation^{39,40,41,42}, making this figure highly alarming and urgent links to the draft NI Elasmobranch Conservation Strategy³⁰. Given that this location is likely to intersect strongly with the developing Demersal³² and Pelagic³¹ FMPs, better identification⁴³ and reduction of bycatch will be imperative to meet Good Environmental Status (GES) under the UK Marine Strategy²¹, of which bycatch makes up several metrics for different species failing to meet GES. This data was highlighted within NIMTF's report on “Reducing Elasmobranch Bycatch in Northern Ireland” 2026³³ which provides a series of recommendations to reduce these numbers moving forward.

NIMTF sees vast improvements for the fishing sector under the implementation of the Just Transition for the NI Fishing Fleet as a way of upgrading their vessels in the long-term. NIMTF is aware that the draft multi-year budget proposed a large package of funding to support both farmers and fishers to bring about this transition towards net zero. This consultation and the associated outcome should help to further progress this Just Transition to ensure that there is a reduction in pressures, as well as bringing the fleet into modernisation - given that the current fleet is aging and heavily reliant on diesel - and thus, subject to changes in the global stage, rising fuel costs as a result of the war in Iran which closed the Strait of Hormuz⁴⁴.

South Rigg MCZ

4. Do you agree with the recommended option of a full closure? If not, what is your preferred option?

Yes. South Rigg MCZ shows that 4 priority marine features are in Unfavourable condition (2025), whilst 2 priority marine features are within Favourable condition. Those PMFs in Unfavourable condition must be returned to Favourable condition to meet its conservation objectives and statutory requirements of the Marine and Coastal Access Act 2009⁴, meeting 30by30 under the Global Biodiversity Framework² and the marine environment indicators of the UK Marine Strategy²¹. Without implementation of management across the full site, South Rigg MCZ cannot meet these objectives to the fullest extent and will compromise the existing 35.5% of the designated NI MPA Network.

Within Annex B, it highlights a full closure for all features/species aside from 'Subtidal mixed sediment' and 'Moderate energy circalittoral rock' which only requires a change in management. However, when considering the potential that a partial closure would have, the proposed area open to fishing does not represent where this habitat type is found (Figure A2). Instead, it has chosen the deepest section of the mud belt within South Rigg MCZ for the sake of the fishing sector being able to continue fishing nephrops. This is therefore, not representative of the different habitat types which are subject to pressure and currently facing continued pressure to fishing activity.

The Conservation Objectives⁴⁵ highlight:

*"There is a significant risk of not achieving the conservation objectives for the protected features of the site if **mobile bottom contact gears** are not managed within the site. If the risk of not achieving the conservation objectives is to be reduced to the lowest possible levels, all mobile contact gears would need to be removed from within the site.*

*Under normal operations, **use of pelagic fishing gears** is not expected to interact with any of the protected features within the site. Therefore, **no additional management of this gear type is advised.***

*The **use of static bottom-contacting fishing gears** is occurring within the site. This has the potential to impact any of the protected features but it is not possible to assess the degree of impact. This is*

*due to limitations around knowledge of the extent and intensity of the fishing activity itself, as well as the impact of this fishing type on the site's protected features. **More scientific research and better fishing effort data is needed.** In the meantime, JNCC advises that **static gear fishing effort within the site is monitored** and the **effects of ongoing use on the conservation status of the protected feature is kept under review.** If monitoring evidence of detrimental effects at the scale of the conservation status of the protected features, additional management may need to be considered."*

NIMTF would inquire why there has not been a buffer put in place to address the latter end of this conservation advice? This could be twinned with VMS and REM records to establish greater enforcement.

Additionally, it highlights that **"No new licensable activities capable of impacting** (either directly or indirectly) the qualifying feature, Annex I Reef or hindering its recovery, **should be permitted."** Whilst NIMTF respects that this consultation focuses solely on fisheries management, it is worthwhile highlighting additional pressures not only to the natural environment, but also to the fishing sector due to the risk of spatial squeeze with the presence of Offshore Renewable Energy Developments, that ORE will be placed upon this site. NIMTF would request that this full closure also applies to other licensable activities such as ORE. Within the Conservation Objectives, it has also highlighted that Telecommunications Cabling is also an identified pressure which must be managed accordingly for the site to achieve Favourable conditions. Within the draft Marine Plan, there are 2 intersecting points where Telecommunications cabling has been identified (Figure 15)⁴⁶, which falls across the area which would be partially closed to fishing activity. It is unfair to the fishing sector that they should not be allowed to carry out a damaging activity, but there still be the opportunity for other sectors to carry that out - in this case, subsea telecommunication cables.

See our points regarding buffer zones for Question 1 as this is relevant here too.

Action: DAERA to implement buffer zones for mobile gear which are "3x actual depth" as part of their management around the three Offshore MPAs.

5. Do you agree with the assessment of the current value of fishing within South Rigg MCZ?

See our comments under Q2 as these also apply to this MPA.

6. Is there any further evidence that should be considered in terms of values, costs or benefits?

From the Marine unProtected Areas Report by MCS, Figure 14³⁴ shows that there is an approximate value associated with the annual cost of carbon disturbance of between £2million - £4million for South Rigg MCZ showing that the economic value in going against the Blue Carbon Action Plan 2025 - 2030³⁶ is a costly investment. The overall long-term impacts of bottom-trawling within the Irish Sea has shown for the first time that there is disturbance down to 50cm within the seabed. Until now, evidence has only really focused on the first 10cm, but this shows that up to 50cm has disturbance;

leading to the dispersal of up to 160 years' worth of stored organic carbon releasing into the surrounding water column³⁵. The Irish Sea Mud Belt is one of the most trawled areas and as a result is facing consistent disturbance, further going against the objectives of the Blue Carbon Action Plan 2025 - 2030³⁶.

Ulster Wildlife commissioned a report entitled "MPAs in relation to Climate Change for Northern Ireland" (see attached in email correspondence) which highlights that there are climate refugia areas - those which will show the most stability in a changing climate - which covers the majority of the offshore region. If we are to protect both the carbon-sequestering stocks and the biodiversity which is in the MPAs then we must establish areas that **actually guarantee protection** from known impacts which have been identified within the conservation objectives.

NIMTF is aware that the Marine Natural Capital (MANACA) Report (2023)⁴⁷ and associated BEACH tool has been used to apply a value to the mud belt which is of high economic value to the fishing sector due to the presence of nephrops, but also because this is the sole mud belt present within the Irish Sea within the NI EEZ that is present at this depth. The ability for this habitat to sequester carbon within its layers will be of greater significance than the more shallower layers. This is further supported by the "Assessment of Marine Carbon Storage and Sequestration Potential in the Irish Sea and Welsh Coast Region (Including Within Marine Protected Areas)" Report⁴⁸ by The Wildlife Trusts, RSPB and WWF which states within the Irish Sea and Welsh Coast Region that "the total organic carbon (OC) store was much larger in the more extensive offshore MPAs, particularly those MCZs and SACs that contained sand and coarse sediment (see Figure 18)". Additionally, the report highlights that "This imbalance suggests that imports of OC to sediments from outside the Region's marine habitats may be particularly important. Blue carbon habitats, particularly saltmarshes, accumulate OC at a faster rate than offshore sediments." The characteristic seabed within the area is "Fine mud", which does not get a mention within the Blue Carbon Action Plan 2025 - 2030 specifically, but is unique to the NI offshore area and is not found to the same extent anywhere else within the aforementioned region. This coincides with the "Conservation Objectives"⁴⁵ which highlights the ecosystem function of climate regulation: providing a long-term sink for carbon within sedimentary habitats.

DAERA's Blue Carbon Action Plan 2025 - 2030³⁶ which identifies, protects, manages and creates important blue carbon habitats for the ecosystem service of storing soluble carbon to support the interconnected issue of climate change. The Action Plan itself does not give mention or reference to the offshore region, however for this not to apply across this area would be missing out on incredibly important blue carbon sequestering habitats, as previously mentioned. **Activity which undermines the actions of the Blue Carbon Action Plan 2025 - 2030 cannot be allowed to continue** - in this case mobile bottom-contacting trawls, which turns carbon sinks into carbon sources⁴⁹ through the disturbance of carbon rich seabed sediment, releasing into the wider water column and some of this back into the atmosphere.

Additionally, South Rigg MCZ overlaps with an Important Shark and Ray Areas (ISRA) specifically designated for Spurdog (spiny dogfish), meeting several ISRA criteria (criterion A - vulnerability and Sub-criterion C1 - Reproductive Areas)³⁷. It is important that the draft NI Elasmobranch Conservation Strategy³⁰ acknowledges the connection to ISRAs, as well as the important link to these identified

reproductive areas within the ISRA catalogue. The value of the offshore area cannot be understated given the links to the ECS and their reproductive grounds. Within the Annual Report for data collection in the fisheries and aquaculture sectors 2021 - 2024³⁸, Spurdog reached a total of 13,067 individuals caught over a 3 year period, alongside Tope (62 individuals) which this ISRA is also designated for. Spurdogs are highly vulnerable to overfishing given their long gestation periods, small litter sizes and slow reproductive maturation^{39,40,41,42}; making this figure highly alarming and urgent links to the draft NI Elasmobranch Conservation Strategy³⁰. Given that this location is likely to intersect strongly with the developing Demersal³² and Pelagic³¹ FMPs, better identification⁴³ and reduction of bycatch will be imperative to meet Good Environmental Status (GES) under the UK Marine Strategy²¹, of which bycatch makes up several metrics for different species failing to meet GES. This data was highlighted within NIMTF's report on "Reducing Elasmobranch Bycatch in Northern Ireland" 2026³³ which provides a series of recommendations to reduce these numbers moving forward.

NIMTF notes that the consultation document uses Rathlin Island and Strangford Lough as case studies to show recovery from areas which have been closed and whilst NIMTF is in support of these case studies, there was an incident due to a lack of enforcement which occurred where Horse Mussels were damaged potentially beyond repair within Strangford Lough earlier this year from a bottom trawling interaction. NIMTF would like to put forward case studies from around the rest of the UK which show the greater benefit of closing down these areas to fishing based on the length of time that they have been closed for. The South Arran MPA has found that sealife has tripled since the introduction of the bottom trawling ban, yet this has taken a decade to reach this scale⁵⁰. If full-closure is to be implemented, it must be put in place for a decade minimum to be able to see the potential improvements.

Queenie Corner MCZ

7. Do you agree with the recommended option of a full closure? If not, what is your preferred option?

Yes. Queenie Corner MCZ shows that all PMFs are in Unfavourable condition (2025) and must be returned to Favourable condition to meet it's conservation objectives and statutory requirements of the Marine and Coastal Access Act 2009, meeting 30by30 under the Global Biodiversity Framework and the marine environment indicators of the UK Marine Strategy. Without implementation of management across the full site, Queenie Corner MCZ cannot meet these objectives to the fullest extent and will compromise the existing 35.5% of the designated NI MPA Network.

The Statements on Conservation Benefits, Condition and Conservation Measures⁵¹ states:

"Using evidence available about the site and information contained within the Advice on Operations⁵² for this site, we consider that the activities listed below are capable of significantly affecting the qualifying features of the site. These activities should be managed to recover the broad-scale habitat and habitat FOCI by minimising the impact of associated pressures from:

- Fishing - benthic trawling
- Oil and Gas infrastructure”

The same document then goes on to say:

“The simple presence of such human activities would not necessarily significantly affect the sites were they to occur. Advice on Operations⁵² should be used in conjunction with the specific details of a proposed plan or project (e.g. indirect and/or additive impacts, activity duration, time of year, scale etc.) and the Supplementary Advice on Conservation Objectives (SACO) to develop assessments of impacts to features within the site.”

Therefore, it is understandable to link that benthic trawling within the site by itself would not necessarily be grounds for impacting species. However, given the intensity of fishing as a result of socio-economic impacts due to crews, visas and displacement from around the rest of the Irish Sea, what would have previously been a lighter activity within this MCZ has now become intensified.

The Advice on Operations⁵² for Queenie’s Corner MCZ highlights several areas from different fishing gear types which provide a medium-high risk score and is detailed further within the Annex of this response, but primarily includes **traps alongside demersal and pelagic trawling**.

See our points regarding buffer zones for Question 1 as this is relevant here too.

Action: DAERA to implement buffer zones for mobile gear which are “3x actual depth” as part of their management around the three Offshore MPAs.

8. Do you agree with the assessment of the current value of fishing within Queenie Corner MCZ?

See our comments under Q2 as these also apply to this MPA.

9. Is there any further evidence that should be considered in terms of values, costs or benefits?

In relation to blue carbon, please see our comments under Q6.

From the Marine unProtected Areas Report by MCS, Figure 14 shows that there is an approximate value associated with the annual cost of carbon disturbance of between £2million - £4million for Queenie Corner MCZ showing that the economic value in going against the Blue Carbon Action Plan 2025 - 2030 is a costly investment. The overall long-term impacts of bottom-trawling within the Irish Sea has shown for the first time that there is disturbance down to 50cm within the seabed. Until now, evidence has only really focused on the first 10cm, but this shows that up to 50cm has disturbance; leading to the dispersal of up to 160 years’ worth of stored organic carbon releasing into the surrounding water column. The Irish Sea Mud Belt is one of the most trawled areas and as a

result is facing consistent disturbance, further going against the objectives of the Blue Carbon Action Plan 2025 - 2030.

Additionally, Queenie Corner MCZ sits adjacent with an Important Shark and Ray Areas (ISRA) specifically designated for Spurdog (spiny dogfish), meeting several ISRA criteria (criterion A - vulnerability and Sub-criterion C1 - Reproductive Areas)³⁷. It is important that the draft NI Elasmobranch Conservation Strategy³⁰ acknowledges the connection to ISRAs, as well as the important link to these identified reproductive areas within the ISRA catalogue. The value of the offshore area cannot be understated given the links to the ECS and their reproductive grounds. Within the Annual Report for data collection in the fisheries and aquaculture sectors 2021 - 2024³⁸, Spurdog reached a total of 13,067 individuals caught over a 3 year period, alongside Tope (62 individuals) which this ISRA is also designated for. Spurdogs are highly vulnerable to overfishing given their long gestation periods, small litter sizes and slow reproductive maturation^{39,40,41,42}, making this figure highly alarming and urgent links to the draft NI Elasmobranch Conservation Strategy³⁰. Given that this location is likely to intersect strongly with the developing Demersal³² and Pelagic³¹ FMPs, better identification⁴³ and reduction of bycatch will be imperative to meet Good Environmental Status (GES) under the UK Marine Strategy²¹, of which bycatch makes up several metrics for different species failing to meet GES. This data was highlighted within NIMTF's report on "Reducing Elasmobranch Bycatch in Northern Ireland" 2026³³ which provides a series of recommendations to reduce these numbers moving forward.

NIMTF once again thanks the Department for the opportunity to comment on this consultation. If we are to provide meaningful protection for our marine species and habitats, then we must reduce the identified pressures within the conservation objectives. The only way to achieve this is through a **full closure** through pressure removal within a whole site approach. NIMTF will continue to work with DAERA and NIFF through the Co-Fish forum to ensure that holistic benefits can be felt by all.

For further information, please contact the NIMTF Officer, Robert Walsh on robert.walsh@nimtf.org.

References

- 1 <https://www.daera-ni.gov.uk/sites/default/files/2026-02/25.26.185%20Environment%20Improvement%20Plan%20-%20Annual%20Progress%20Report%202025-26%20-%20final.pdf>
- 2 <https://www.theoep.org.uk/report/progress-improving-natural-environment-northern-ireland-20242025>
- 3 <https://www.legislation.gov.uk/nia/2013/10/contents>
- 4 <https://www.legislation.gov.uk/ukpga/2009/23/contents>
- 5 <https://www.daera-ni.gov.uk/sites/default/files/2026-05/MCZ%20Assessment%20South%20Rigg%20and%20Queenie%20Corner.PDF>
- 6 https://assets.publishing.service.gov.uk/media/6842f04f0392ed9b784c012a/OFFSEN_-_Stage_3_MPA_Site_Assessment_Methodology.pdf
- 7 <https://www.belfasttelegraph.co.uk/news/northern-ireland/nis-only-fisheries-protection-vessel-out-of-service-for-more-than-a-year-due-to-certification-issues/a/140158025.html>
- 8 <https://www.gov.scot/publications/fisheries-management-measures-within-scottish-offshore-marine-protected-areas-mpas-consultation-analysis/>
- 9 <https://www.gov.uk/government/publications/highly-protected-marine-areas-hpmas-review-2019/benyon-review-into-highly-protected-marine-areas-final-report-executive-summary>
- 10 <https://www.gov.uk/government/publications/highly-protected-marine-areas/highly-protected-marine-areas-hpmas>
- 11 <https://www.gov.uk/government/publications/highly-protected-marine-areas-allonby-bay>
- 12 <https://www.gov.uk/government/publications/highly-protected-marine-areas-north-east-of-farnes-deep>
- 13 <https://www.gov.uk/government/publications/highly-protected-marine-areas-dolphin-head>
- 14 <https://www.bbc.co.uk/news/uk-scotland-66053133>
- 15 <https://data.incc.gov.uk/data/e858173d-a762-4fbe-9e28-83a06e91fafa/jncc-report-812a.pdf>
- 16 <https://www.cbd.int/gbf/targets>
- 17 <https://www.daera-ni.gov.uk/articles/inshore-fisheries-policy>
- 18 <https://www.daera-ni.gov.uk/articles/marine-plan-northern-ireland>
- 19 <https://www.daera-ni.gov.uk/sites/default/files/consultations/daera/Marine%20Plan%20for%20NI%20final%2016%2004%2018.PDF>, Page 66
- 20 <https://gis.daera-ni.gov.uk/arcgis/apps/experiencebuilder/experience/?id=3c69dfff66fe4bc2a520c9387617f694>
- 21 <https://moat.cefas.co.uk/summary-of-progress-towards-good-environmental-status/>
- 22 <https://data.incc.gov.uk/data/d88c1cc9-63e4-4e1d-9ef6-aab93a65d70f/sr-mcz-coma-2025-v-2-0.pdf>
- 23 <https://data.incc.gov.uk/data/4f8ac443-777f-4a55-a5c8-fc44e80fa965/prc-sac-coma-2026.pdf>
- 24 <https://jncc.gov.uk/resources/39cde4b5-f14d-4cba-a569-9e024c933b0d>
- 25 <https://globalfishingwatch.org/>
- 26 <https://oceanographicmagazine.com/news/supertrawlers-fish-for-7380-hours-annually-in-uk-mpas/>
- 27 <https://www.mcsuk.org/what-we-do/marine-management/marine-protected-areas-mpas/marine-unprotected-areas/>
- 28 https://uk.oceana.org/wp-content/uploads/sites/14/2024/11/Oceana-UK_Mission-Regeneration_Roadmap-to-End-Overfishing.pdf
- 29 <https://www.daera-ni.gov.uk/sites/default/files/2026-06/Northern%20Ireland%20Seabird%20Conservation%20Strategy%202026-2035.PDF>
- 30 <https://www.daera-ni.gov.uk/consultations/consultation-elasmobranch-conservation-strategy-northern-ireland-daera>
- 31 <https://www.daera-ni.gov.uk/consultations/consultation-draft-irish-sea-pelagic-fisheries-management-plan>
- 32 <https://www.daera-ni.gov.uk/consultations/consultation-draft-irish-sea-demersal-fisheries-management-plan>
- 33 <https://nimtf.org/wp-content/uploads/2026/05/final-report-reducing-elasmobranch-bycatch-in-ni-ab.pdf>

34

https://www.mcsuk.org/media/filer_public/81/c0/81c0adfe-2b30-4931-8676-5dcde3f9823d/marine-unprotected-areas.pdf, Page 28

35 <https://www.noc.ac.uk/news/study-reveals-long-term-carbon-impacts-intensive-bottom-trawling-irish-sea>

36

<https://www.daera-ni.gov.uk/sites/default/files/2025-04/Northern%20Ireland%20Blue%20Carbon%20Action%20Plan%202025%20%E2%80%93202030.pdf>

37

<https://sharkrayareas.org/wp-content/uploads/isra-factsheets/2EuropeanAtlantic/Northwest-Irish-Sea-2EuropeanAtlantic.pdf>

38 <https://www.gov.uk/guidance/data-collection-framework>

39

<https://oap.ospar.org/en/ospar-assessments/committee-assessments/biodiversity-committee/status-assesments/spurdog/>

40 <https://iwt.ie/new-irish-fishing-quota-for-vulnerable-spurdog/>

41 <https://www.wildlifetrusts.org/wildlife-explorer/marine/fish-including-sharks-skates-and-rays/spurdog-shark>

42 <https://www.sharktrust.org/Handlers/Download.ashx?IDMF=cce86e24-1b64-4eca-9e0b-9f1965a2f0cf>

43 <https://fishingnews.co.uk/news/skates-and-rays-must-be-correctly-identified/>

44 <https://fishingnews.co.uk/news/fears-fuel-price-will-keep-rising-if-iran-war-continues/>

45 <https://data.incc.gov.uk/data/d88c1cc9-63e4-4e1d-9ef6-aab93a65d70f/sr-mcz-coma-2025-v-2-0.pdf>

46

<https://www.daera-ni.gov.uk/sites/default/files/consultations/daera/Marine%20Plan%20for%20NI%20final%2016%2004%2018.PDF>, Page 127

47 <https://darylburdon.co.uk/wp-content/uploads/2023/12/NI-MANACA-Final-Report-June-2023.pdf>

48

<https://www.northwaleswildlifetrust.org.uk/sites/default/files/2024-09/Irish%20Sea%20%26%20Welsh%20Coast%20-%20scientific%20report.pdf>

49 <https://www.nature.com/articles/s43247-025-02132-4>

50 <https://oceaneconomist.com/articles/south-arran-mpa-seabed-recovery>

51

<https://data.incc.gov.uk/data/13cfc298-e1bf-4576-a2d5-28d9361b0eff/QueenieCorner-ConservationStatements-V1.0.pdf>

52 <https://incc.gov.uk/resources/13cfc298-e1bf-4576-a2d5-28d9361b0eff#QueenieCorner-AdviceOnOperations-V1.0.xlsx>

Annex 1: Advice on Operations for Queenie Corner MCZ relevant to NI Fishing Activity (JNCC)⁵²

Justification Code	Operation	Pressure	Justification text	RPP Score
Demersal trawling				
525	Extraction of living resources	Removal of non-target species	Bycatch (i.e. discarded catch) is associated with almost all fishing activities and is related to factors such as the gear type and its design (i.e. its selectivity), the targeted species and effort. There are significant concerns over the impacts of discards on marine ecosystems, including changes in population abundance and demographics of affected species and altered species assemblages and food web structures [4408],[3137]. However, discards also provide important food resources for some scavenging species, including seabirds [4467],[4468]. Mixed-species and shrimp/prawn demersal trawl fisheries are associated with the highest rates of discarding and pose the most complex problems to resolve [4408],[4464],[4465]. Benthic trawls most frequently result in bycatch of fish, crustaceans and other invertebrates and less frequently turtles and birds [1419],[1436],[3130],[4354],[4462],[4463],[4361].	Medium - high
566	Extraction of living resources	Removal of target species	Demersal trawls target a range of demersal fish species and also remove species which may themselves be of conservation importance or may form part of the biotope (e.g. Norway lobster - <i>Nephrops norvegicus</i>) or wider community composition associated with designated features/sub-features. As part of targeted fisheries, incidental non-target catch may also be retained and landed due to its commercial value (e.g. spiny lobster (<i>Palinurus elephas</i>), lobsters (<i>Homarus gammarus</i>), crabs, scallops (<i>Pecten spp.</i>), etc). These species may be considered part of the wider community composition associated with features or sub-features of designated sites or may themselves be of conservation importance (e.g. crawfish) [1419],[1436],[4362].	Medium - high
986	Extraction of living resources	Abrasion/disturbance of the substrate on the surface of the	The pressure results where the gear makes contact with the seafloor. The area affected is determined by the footprint of the gear and the amount of movement across the seabed. The different gear components will make variable contributions to the total physical disturbance of the seabed and its associated biota, and hence the pressure will	Medium - high

		seabed	vary according to factors such as gear type, design/modifications, size and weight, method of operation (including tow speed) and habitat characteristics (e.g. topography) [3168],[3172],[4458]. Towed bottom fishing gears are used to catch species that live in, on or in association with the seabed and therefore are designed to remain in close contact with the seabed. That interaction with the seabed can lead to disturbance of the upper layers of the seabed (e.g. see pressures 'Siltration rates changes (low)', 'Changes in suspended solids'); direct removal (e.g. see pressures 'Removal of target species', 'Removal of non-target species'), damage, displacement or death of the benthic flora and fauna; short-term attraction of scavengers; and the alteration of habitat structure (e.g. flattening of wave forms, removal of rock, removal of structural organisms) [3137],[1419],[1436],[4471],[4448]. As a relative comparison of gear types, otter trawls tend to have less physical impact on the seafloor than beam trawls (and dredges) with their heavy tickler chains, although the doors of an otter trawl do create recognisable scour of the seabed [4452],[3172],[3168],[4364]. The magnitude of the immediate response to fishing disturbance, cumulative effects and recovery times varies significantly according to factors such as the type of fishing gear and fishing intensity, the habitat and sediment type, levels of natural disturbance and among different taxa [4471],[4472],[4473],[4410],[3137].	
987	Extraction of living resources	Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion	The pressure results where the gear makes contact with the seafloor. The area affected is determined by the footprint of the gear and the amount of movement across the seabed. The different gear components will make variable contributions to the total physical disturbance of the seabed and its associated biota, and hence the pressure will vary according to factors such as gear type, design/modifications, size and weight, method of operation (including tow speed) and habitat characteristics (e.g. topography) [3168],[3172],[4458]. Towed bottom fishing gears are used to catch species that live in, on or in association with the seabed and therefore are designed to remain in close contact with the seabed. That interaction with the seabed can lead to disturbance of the upper layers of the seabed (e.g. see pressus 'Siltration rates changes (low)', 'Changes in suspended solids'); direct removal (e.g. see pressures 'Removal of target species', 'Removal of non-target species'), damage, displacement or death of the benthic flora and fauna; short-term attraction of scavengers; and the alteration of habitat structure	Medium - high

			(e.g. flattening of wave forms, removal of rock, removal of structural organisms) [3137],[1419],[1436],[4471],[4448]. As a relative comparison of gear types, otter trawls tend to have less physical impact on the seafloor than beam trawls (and dredges). The heavy tickler chains of beam trawls can penetrate up to 8cm into the seabed, whereas it is the trawl door of an otter trawl that creates the greatest amount of scour of the seabed [4452],[3172],[3168],[4364]. The magnitude of the immediate response to fishing disturbance, cumulative effects and recovery times varies significantly according to factors such as the type of fishing gear and fishing intensity, the habitat and sediment type, levels of natural disturbance and among different taxa [4471],[4472],[4473],[4410],[3137].	
1034	Extraction of living resources	Changes in suspended solids (water clarity)	This pressure may result from physical disturbance of the sediment, along with hydrodynamic action caused by the passage of towed gear, leading to entrainment and suspension of the substrate behind and around the gear components [3186],[1419],[3168],[4448],[4407],[4351],[4446],[4451]. The quantity of suspended material and its spatial and temporal persistence will depend on factors associated with the gear (such as type/design, weight, towing speed), sediment (particle size, composition, compactness), the intensity of the activity and the background hydrographic conditions [3186],[4448],[4446],[4451]. Turbid plumes can reduce light levels and smother feeding and respiratory organs. Prolonged exposure to the pressure may result in changes in sediment composition through suspension and transport of finer material. There are also concerns over resuspension of phytoplankton cysts and copepod eggs [3137],[3186],[1419],[4448],[4451]. Further effects are also considered under the pressures: Deoxygenation, Nutrient enrichment and Organic enrichment.	Medium - high
1035	Extraction of living resources	Smother and siltation rate changes (Light)	This pressure may result from physical disturbance of the sediment, along with hydrodynamic action caused by the passage of towed gear, leading to entrainment and suspension of the substrate behind and around the gear components [3186],[1419],[3168],[4448],[4407],[4351],[4446],[4451]. The quantity of suspended material and its spatial and temporal persistence will depend on factors associated with the gear (such as type/design, weight, towing speed), sediment (particle size, composition, compactness), the intensity of the activity and the background hydrographic conditions [3186],[4448],[4446],[4451]. Sediment remobilisation and	Medium - high

			deposition can affect the settlement, feeding and survival of biota through smothering of feeding and respiratory organs. Prolonged exposure of an area to the pressure may result in changes in sediment composition [3137],[3186],[1419],[4448],[4451]. Further effects are also considered under the pressures: Deoxygenation, Nutrient enrichment and Organic enrichment.	
Pelagic fishing (or fishing activities that do not interact with sea bed)				
526	Extraction of living resources	Removal of non-target species	Bycatch (i.e. discarded catch) is associated with almost all fishing activities and is related to factors such as the gear type and its design (i.e. its selectivity), the targeted species and effort. There are significant concerns over the impacts of discards on marine ecosystems, including changes in population abundance and demographics of affected species and altered species assemblages and food web structures [4408],[3137]. However, discards also provide important food resources for some scavenging species, including seabirds [4467],[4468]. Pelagic/mid water trawls, drift nets, pelagic seines and long lines can result in the entanglement and bycatch of a range of fauna including mammals, turtles, fish, elasmobranchs, crustaceans and other invertebrates and birds [1419],[3130],[3202],[4455],[4354], the consequences of which can be significant to species and populations [4453],[5125],[4454],[2786].	Medium - high
735	Extraction of living resources	Removal of target species	Pelagic fishing includes a wide range of activities that are not intended to interact with the seabed including drift nets, longlines and rod and line angling. These activities can result in the direct removal of features of conservation importance e.g. salmon (<i>Salmo salar</i>) and other species of conservation concern [1419],[1436],[4362].	Medium - high
Traps				
528	Extraction of living resources	Removal of non-target species	Bycatch (i.e. discarded catch) is associated with almost all fishing activities and is related to factors such as the gear type and its design (i.e. its selectivity), the targeted species and effort. There are significant concerns over the impacts of discards on marine ecosystems, including changes in population abundance and demographics of affected species and altered species assemblages and food web structures [4408],[3137]. However, discards also provide important food resources for some scavenging species,	Medium - high

			including seabirds [4467],[4468]. Whilst generally considered one of the most selective gear types, pots/traps are associated with bycatch, including of non-target crustaceans (berried females of target species are also considered bycatch in some fisheries, for example), fish, mammals (e.g. seals in cod pots) and potentially some bird species [3130],[1436],[4457]. Bycatch survival rates are generally higher for pots than other fishing gear types [4458],[4413]. However, the associated ropes can also result in entanglement of turtles and mammals [1436],[4354]. Salmon nets and fyke nets have been associated with bycatch of birds and mammals [4456],[4409],[3130],[4353], as well as non-target fish species.	
931	Extraction of living resources	Abrasion/disturbance of the substrate on the surface of the seabed	The pressure can result from surface disturbance caused by contact between the pots/traps and any associated groundropes and anchors. This occurs during setting of the pots/traps and/or by movement of the gear over the seabed, for example during rough weather or during retrieval. Such physical disturbance can result in epifauna, especially emergent species such as erect sponges and coral, being dislodged (including snagged on the pot) or damaged, although there are limited studies of such effects [3168],[3172],[4363],[1419],[1436],[4474].	Medium - high
1049	Extraction of living resources	Removal of target species	Traps and pots are used to collect crustaceans, fish and molluscs. Features of conservation interest could be directly removed as a result of targeted fisheries e.g. spiny lobster (<i>Palinurus elephas</i>), salmon (<i>Salmo salar</i>). Incidental non-target catch including features of conservation importance may also be retained as part of targeted fisheries due to its commercial value e.g. lobster (<i>Homarus gammarus</i>) fisheries landing crawfish. Traps and pots may also target species which form part of the community composition of features or sub-features e.g. species such as crabs and lobster associated with reef features and other species such as whelks [1419],[1436],[4362].	Medium - high