Title: Consultation on the development of fisheries management measures for offshore Marine Protected Areas	**Regulatory Impact Assessment (RIA)**
	Date: 24/03/2026
	Type of measure: Secondary Legislation
Lead department or agency: Department of Agriculture, Environment and Rural Affairs (DAERA)	**Stage:** Consultation
	Source of intervention: Domestic Northern Ireland
Other departments or agencies: N/A	**Contact details:** DAERA
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Summary Intervention and Options

What is the problem under consideration? Why is government intervention necessary?

DAERA has responsibility for managing Marine Protected Areas within the Northern Ireland offshore region, contributing to the

Programme for Government (PfG) 'Outcome 8: Protecting Lough Neagh and the environment' by increasing the protected area under effective management. Furthermore, the Northern Ireland Environmental Improvement Plan (the EIP) has a specific target related to the development and publication of management measures for the Northern Ireland Offshore MPAs.

The latest assessments for both the UK Marine Strategy Regulations and Habitats Regulations identified that overall NI benthic habitats are not reaching the required status, therefore, management measures are considered necessary to support their recovery.

What are the policy objectives and the intended effects?

In Marine Protected Areas (MPAs), the introduction of changes to fisheries management regimes are intended to allow fisheries to persist into the future, whilst protecting the species and the habitats on which they depend, from overexploitation. These measures are also intended to aid protected areas meeting their conservation objectives of remaining, or returning to, favourable condition.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

Option 1 – Full closure of offshore MPAs to mobile bottom contact fishing gear. **This is the preferred option** as the protected features of these sites are vulnerable to fishing activity and are not able to enter a period of recovery whilst pressure exists within these MPAs. Economically, the three sites in question account for 1.35% of landed quota weight for the Irish Sea demersal catch, and 1.71% of demersal quota value from the Irish Sea. Given that full quota uptake is rarely utilised, and quota caught within these MPAs will still be available to catch in other locations, the financial implications of a full closure are not deemed significant. This option could also provide benefits to fish stocks outside the MPAs through spillover effect.

Option 2 – Prohibition of demersal mobile gear throughout the site, with the exception of 33% of available mud habitat.

Option 3 – Do nothing, no management measures implemented and only statutory monitoring of features carried out. This Option is not viable as DAERA is bound by national policies and legislation, and international commitments, to introduce management measures to conserve the protected features within MPAs and support their recovery, where necessary.

Option 1 is the Department's preferred option but can be amended following feedback from the consultation process.

Will the policy be reviewed?	**If applicable, set review date:**
Yes	2030

Does Implementation go beyond minimum EU requirements?			**YES** ☐	**NO** ☒
Is this measure likely to impact on trade and investment?			**YES** ☐	**NO** ☒
Are any of these organisations in scope?	**Micro** Yes ☒ No ☐	**Small** Yes ☒ No ☐	**Medium** Yes ☒ No ☐	**Large** Yes ☐ No ☒

Indicative Cost of the Preferred Option: Option 1		
Total outlay cost £m	**Total net cost per year £m**	**Annual cost for implementation by all Northern Ireland Civil Service (NICS) Departments** £m
Nil	Nil	Nil

Summary: Analysis and Evidence — Policy Option 1

Description: Full closure of offshore MPAs to mobile bottom contact fishing gear

ECONOMIC ASSESSMENT: Option 1

Costs (£m)	Total Transitional (Policy) (£m) (constant price)	Years	Average Annual (recurring) (£m) (excl. transitional) (constant price)	Total Cost (£m) (Present Value)
Low	**Optional**		**Optional**	**Optional**
High	**Optional**		**Optional**	**Optional**
Best Estimate	**Nil**		**Nil**	**Nil**

Description and scale of key monetised costs by 'main affected groups'

The main group affected is commercial fishers in the Norther Ireland offshore region. The estimated value of fish landings into Northern Ireland in 2023 were approximately £31.1 million (ICES Area VIIa). There will be no incurred cost to commercial fishers of implementing option 1. It is estimated that the total fleet value of lost fishing opportunity will be approximately £120,000 per annum (operating profit), however there will be no reduction in overall available quota so there is opportunity to generate this profit in other areas of the ICES VIIa area. Landings (tonnes) and value of demersal catches from these three offshore MPAs equate to 1.35% and 1.71% respectively of the total quota for ICES VIIa.

Other key non-monetised costs by 'main affected groups'

No other monetised costs associated.

Benefits (£m)	Total Transitional (Policy) (£m) (constant price)	Years	Average Annual (recurring) (£m) (excl. transitional) (constant price)	Total Benefit (£m) (Present Value)
Low				
High				
Best Estimate	**0**		**0**	0

Description and scale of key monetised benefits by 'main affected groups'

The benefits are mostly intangible and cannot be monetised.

Other key non-monetised benefits by 'main affected groups'

Applying the Option 1 fisheries management measures:

- could provide benefits to offshore fish stocks, through potential 'spill-over' from closed sites, leading to security of future income for fishers

- provide protection for important 'Blue Carbon' habitats such as subtidal mud, which are valuable in mitigating climate change.

- provide an opportunity for recovery of protected features sensitive to physical disturbance.

Key Assumptions, Sensitivities, Risks (Maximum 5 lines)

The total annual loss of revenue through reduced fishing opportunity to commercial fishers as a result of introducing fisheries management measures does not include vessels under 12m. We will seek to obtain further information on the under 12m fleet during the consultation process. It should be noted that the method of calculating economic value of each MPA was carried out at an ICES sub-rectangle and assumes equal value of landings across the entire sub-rectangle.

BUSINESS ASSESSMENT (Option 1)

Direct Impact on business (Equivalent Annual) £m		
Costs: 0	**Benefits: 0**	**Net: 0**

Cross Border Issues (Option 1)

How does this option compare to other UK regions and to other EU Member States (particularly Republic of Ireland (ROI))

Protection of priority marine habitats are a priority for UK regions and EU member states. Fisheries management measures have already been introduced in the offshore area in Scotland through the Offshore Fishing (Prohibition of Fishing Methods) (Scotland) Order 2025. In England, the MPA Bottom Towed Fishing Gear Byelaw 2023 prohibits bottom towed fishing gears in 13 MPAs. Furthermore, the Marine Protected Areas (Prohibited methods of fishing) Regulations (Northern Ireland) 2022 prohibit the use of mobile demersal gear and some static gear in nine inshore MPAs in Northern Ireland.

Summary: Analysis and Evidence — Policy Option 2

Description: Prohibition of mobile bottom contact fishing gear in all three MPAs, with the exception of 33% of available mud habitat in South Rigg MCZ and Queenie Corner MCZ.

ECONOMIC ASSESSMENT: Option 2

Costs (£m)	Total Transitional (Policy) (£m) (constant price)	Years	Average Annual (recurring) (£m) (excl. transitional) (constant price)	Total Cost (£m) (Present Value)
Low				
High				
Best Estimate	Nil		**Nil**	**Nil**

Description and scale of key monetised costs by 'main affected groups'

The main group affected is commercial fishers in the Northern Ireland offshore region. The estimated value of fish landings into Northern Ireland in 2023 were approximately £31.1 million (ICES Area VIIa). There will be no incurred cost to commercial fishers of implementing option 2. It is estimated that the total fleet value of lost fishing opportunity will be approximately £90,000 per annum (operating profit), however there will be no reduction in overall available quota so there is opportunity to generate this profit in other areas of the ICES VIIa area. Landings (tonnes) and value of demersal catches from these three offshore MPAs equate to 1.35% and 1.71% respectively of the total quota for ICES VIIa.

Other key non-monetised costs by 'main affected groups'

No other monetised costs associated

Benefits (£m)	Total Transitional (Policy) (£m) (constant price)	Years	Average Annual (recurring) (£m) (excl. transitional) (constant price)	Total Benefit (£m) (Present Value)
Low				
High				
Best Estimate	**0**		**0**	**0**

Description and scale of key monetised benefits by 'main affected groups'

The benefits are mostly intangible and cannot be monetised.

Other key non-monetised benefits by 'main affected groups'

Applying the Option 2 fisheries management measures:
- could increase the area protected from damage from demersal mobile gear fishing pressures
- could provide some benefits to inshore fish stocks, through potential 'over-spill' from closed sites, leading to security of future income for fishers
- provide some protection for important 'Blue Carbon' habitats such as subtidal muds, which are valuable in mitigating climate change

Key Assumptions, Sensitivities, Risks Maximum 5 lines

The total annual loss of revenue through reduced fishing opportunity to commercial fishers as a result of introducing fisheries management measures does not include vessels under 12m. We will seek to obtain further information on the under 12m fleet during the consultation process. It should be noted that the method of calculating economic value of each MPA was carried out at an ICES sub-rectangle and assumes equal value of landings across the entire sub-rectangle.

BUSINESS ASSESSMENT (Option 2)

Direct Impact (Equivalent Annual) (£m)		
Costs: 0	**Benefits: 0**	**Net: 0**

Cross Border Issues (Option 2)

How does this option compare to other UK regions and to other EU Member States (particularly Republic of Ireland)

Protection of priority marine habitats are a priority for UK regions and EU member states. Fisheries management measures have already been introduced in the offshore area in Scotland through the Offshore Fishing (Prohibition of Fishing Methods) (Scotland) Order 2025. In England, the MPA Bottom Towed Fishing Gear Byelaw 2023 prohibiting bottom towed fishing gears in 13 MPAs. Furthermore, the Marine Protected Areas (Prohibited methods of fishing) Regulations (Northern Ireland) 2022 prohibit the use of mobile demersal gear and some static gear in nine inshore MPAs in Northern Ireland.

Summary: Analysis and Evidence — Policy Option 3

Description: Do nothing, no management measures implemented and only statutory monitoring of designated features carried out.

ECONOMIC ASSESSMENT: Option 3

Costs (£m)	Total Transitional (Policy) (£m)		Average Annual (recurring) (£m)	Total Cost (£m)
	(constant price)	Years	(excl. transitional) (constant price)	(Present Value)
Low				
High				
Best Estimate	Nil		**Nil**	**Nil**

Description and scale of key monetised costs by 'main affected groups'
Failure to act and implement fisheries management measures (i.e. Option 3 - do nothing) would place DAERA in breach of its statutory obligations under the Marine and Coastal Access Act 2009 and the Conservation of Offshore Marine Habitats and Species Regulations 2017. This could expose the Department to legal and financial liabilities, while allowing further deterioration of protected sites and their designated features.

Other key non-monetised costs by 'main affected groups'

No other monetised costs associated

Benefits (£m)	Total Transitional (Policy) (£m)		Average Annual (recurring) (£m)	Total Benefit (£m)
	(constant price)	Years	(excl. transitional) (constant price)	(Present Value)
Low				
High				
Best Estimate	**0**		**0**	**0**

Description and scale of key monetised benefits by 'main affected groups'

The benefits are mostly intangible and cannot be monetised.

Other key non-monetised benefits by 'main affected groups'

This option does not induce any non-monetised benefits.

Key Assumptions, Sensitivities, Risks Maximum 5 lines

In a 'do nothing' scenario, monitoring of protected features would still continue to inform condition assessments.

BUSINESS ASSESSMENT (Option 3)

Direct Impact (Equivalent Annual) (£m)		
Costs: 0	**Benefits: 0**	**Net: 0**

Cross Border Issues (Option 3)

How does this option compare to other UK regions and to other EU Member States (particularly Republic of Ireland)

Protection of priority marine habitats are a priority for UK regions and EU member states. Fisheries management measures have already been introduced in the offshore area in Scotland through the Offshore Fishing (Prohibition of Fishing Methods) (Scotland) Order 2025. In England, the MPA Bottom Towed Fishing Gear Byelaw 2023 prohibiting bottom towed fishing gears in 13 MPAs. . Furthermore, the Marine Protected Areas (Prohibited methods of fishing) Regulations (Northern Ireland) 2022 prohibit the use of mobile demersal gear and some static gear in nine inshore MPAs in Northern Ireland.

Option 3 therefore does not align with regulations being made in other parts of the UK.

Evidence Base

1. The policy issue and rationale for government intervention

Marine Protected Areas (MPAs)
Marine Protected Area (MPA) networks are internationally recognised as a key mechanism for safeguarding marine biodiversity, and the Kunming–Montreal Global Biodiversity Framework (GBF) sets out ambitious global commitments that reinforce this role. Adopted in 2022 under the UN Convention on Biological Diversity, the GBF provides a pathway for halting and reversing biodiversity loss, including in the marine environment. Several of its global targets directly support and strengthen the use of MPAs.

Of particular relevance is GBF Target 3, which calls for the effective conservation and management of at least 30% of the world's coastal and marine areas by 2030 through ecologically representative, well-connected, and equitably governed systems of protected areas and other effective area-based conservation measures (OECMs). The framework also emphasises restoration, resilience, and the reduction of human pressures on marine ecosystems—aligning closely with the purpose and design of MPA networks.

The GBF builds upon, but significantly expands, earlier commitments such as the Aichi Biodiversity Targets. Whereas Aichi Target 11 required conservation of 10% of coastal and marine areas, the GBF's updated ambition reflects the urgency of global biodiversity decline and the need for transformative action across all ecosystems.
Implementation of the GBF is delivered regionally through mechanisms such as the Oslo–Paris Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR). As an independent coastal state, the UK now reports directly to OSPAR on progress toward regional and global biodiversity commitments, complementing and supporting domestic delivery mechanisms that were previously aligned with European directives including the Habitats Directive, Wild Birds Directive, and Marine Strategy Framework Directive.

To meet this commitment, DAERA undertook a programme of designations between 2013 and 2018 to establish an ecologically coherent network. The Marine Protected Areas (MPA) network now encompasses 48 MPAs that provide protection for 38% of the Northern Ireland inshore region. Further information can be found at https://www.daera-ni.gov.uk/publications/report-creation-network-conservation-sites-northern-ireland-inshore-region-progress-toward. Additionally, three offshore MPAs were designated in the Northern Ireland offshore region by the Defra Secretary of State between 2017-2019. Further information can be found at https://jncc.gov.uk/our-work/offshore-mpas/

The latest assessments for both the UK Marine Strategy (UKMS) and Habitats Regulations (9a) have identified that overall, our benthic habitats are not reaching the required status and that proposed management measures considered necessary to support their recovery.

Fisheries management is a devolved issue, and the Fisheries Act 2020 grants the Department powers to enact fisheries measures for conservation purposes through an amendment to the Marine and Coastal Access Act 2009. Fisheries regulations have already been introduced for the Northern Ireland inshore region through The Marine Protected Areas (Prohibited Methods of Fishing) Regulations (Northern Ireland) 2022. Previous fisheries restrictions, such as those implemented at Rathlin Island SAC thought The Rathlin Island (Prohibited Methods of Fishing) Regulations (Northern Ireland) 2016 have shown evidence of recovery since the removal of fishing pressure.

There are important fisheries that occur within the offshore MPAs and this work sets out management options that the Department considers necessary to ensure it meets all duties and obligations that relate to this activity. The introduction of these management measures will contribute to Programme for Government (PfG) Outcome 8: Protecting Lough Neagh and the Environment, as well as Strategic Environmental Outcome 3 of the Northern Ireland Environment Improvement Plan (EIP) which outlines targets relating to MPA management and coherence by 2030 and specifically, the development and publication of management measures for Northern Ireland Offshore MPAs in partnership with stakeholders.

Fisheries management measures have been proposed for the following MPAs:

- Queenie Corner MCZ
- South Rigg MCZ
- Pisces Reef Complex SAC

2. Problem under consideration

Section 137 (1) of the Marine and Coastal Access Act 2009 places a duty on the Department to make orders relating to the exploitation of sea fisheries resources in the Northern Ireland offshore region for the purpose of conserving marine flora, fauna and habitats. The three offshore MPAs in the Northern Ireland offshore region were designated between 2017-2019 however, to date, no management measures have been implemented, and the protected features are at risk of exposure to adverse physical pressures through mobile bottom towed fishing gear. To meet the conservation objectives of the sites, measures must be put in place to maintain or return protected features to favourable condition which may include the removal of associated pressures.

3. Policy Objectives

The Northern Ireland offshore area supports diverse fishing opportunities, and local communities will continue to depend on these. The introduction of changes to fisheries management regimes are intended to allow these fisheries to persist into the future, whilst protecting the species and the habitats within MPAs.

The level of commercial fishing activities known to occur within MPAs in the Northern Ireland offshore region was assessed for demersal mobile fishing gear (trawling and dredging) using information from the following sources:

• Vessel Monitoring Systems (VMS) data
• Physical abrasion layer provided by the Joint Nature Conservation Committee (JNCC)
• OSPAR indictor for extent of physical disturbance to benthic habitats (BH3)
• Fisheries landing data, assessed by Cefas and Seafish
• Natural Capital Assessment carried out by AFBI
• Local information provided by users through the Conservation and Fisheries stakeholder partnership- Co-Fish; and
• Expert opinion and knowledge

MPAs

Sensitivity assessments were completed for each MPA. These are assessments of the damage risk that human activities pose to vulnerable features. This approach is known as the Marine Evidence based Sensitivity Assessment (MarESA) (JNCC, 2015; Tillin & Waters, 2015). Following the sensitivity assessments, management options tailored to each individual MPA, were developed for demersal mobile fishing activities.

The policy objective is to put in place fisheries management measures which protects designated features, promotes recovery of sensitive habitats and helps sustain demersal fisheries in the surrounding areas. It is intended that new regulations will be enacted from 1st January 2027.

4. Independent and Expert Advice

An independent economic assessment was jointly carried out by Cefas and Seafish to ascertain the value of the three Northern Ireland offshore MPAs. This assessment used VMS data available for the ICES VIIa scale for demersal trawls and dredges fishing on sand and mud habitats, and considered:

- Total number of vessels
- Effort ('000 fishing hours)
- Employment (FTEs)
- Weight of landings, tonnes
- Value of fish landed (nominal)
- Value of fish landed (real)
- Gross Value Added (GVA)
- Operating profit
- Net profit

AFBI also carried out a primary assessment of natural capital value using the BEACH tool from the NI-MANACA project. The table below outlines the current natural capital value (2019 assessment) of offshore MPAs, natural capital value in 20-years with no management, and natural capital value in 20-years with management under full (option 1) and partial (option 2) recovery scenarios.

HIGH LEVEL OUTPUT SUMMARY VALUES (£ million)						
	2019 value	**NPV (20 yr) 'Maintain'**	**NPV (20 yr) "Partial Recovery"**	**Uplift due to management**	**NPV (20 yr) 'Full Recovery'**	**Uplift due to management**
South Rigg MCZ	1.48	21.38	24.07	2.69	28.87	7.49
Queenie Corner MCZ	1.6	23.08	28.83	5.75	31.39	8.31
Pisces Reef	0.1	1.38	N/A	N/A	1.87	0.49
Combined	3.18	45.84	52.9	8.44	62.13	16.29

It is important to note that the estimates produced in this assessment are preliminary and based entirely on 2019 input data. As such, the values should be interpreted as indicative rather than definitive assessments. They are appropriate for high level comparison and for supporting early-stage planning or consultation material but should not be regarded as final valuations. The below caveats should also be considered when interpreting this table.

1. Limited Valuation Coverage
•Only 8 out of 14 societal benefits had UK-scale valuation data available.
•This means the total value of marine natural capital is likely underestimated, as key services like cultural heritage, education, and some regulating functions were excluded.

2. Benefit Transfer Limitations
•The BEACH tool relies on benefit transfer from UK-wide literature, not Northern Ireland-specific studies.
•This introduces uncertainty, as local ecological conditions, stakeholder priorities, and service delivery may differ significantly.

3. No Management Costs Included
•The Net Present Value (NPV) estimates reflect benefits only; they do not account for the costs of maintaining or restoring habitats.
•This limits the tool's use for full cost-benefit analysis or investment planning.

4. Static Habitat Assumptions

•Habitat extent and condition are assumed to be static in the “maintain” scenario and improved in the “recovery” scenario, without modelling ecological dynamics or degradation risks.

•The tool does not simulate pressures, threats, or climate change impacts over time.

5. No Confidence Intervals or Uncertainty Metrics

•Valuation outputs are presented as point estimates (low, mid, high), but no statistical confidence intervals or sensitivity analyses are included.

•This makes it harder to assess risk or robustness of the estimates.

6. Mapping Accuracy and Ground-Truthing

•Habitat maps are based on existing datasets and may lack ground-truthing or fine-scale resolution.

•This affects the accuracy of spatial valuation and scenario modelling.

5. Description of options considered

The management options proposed are specifically tailored to each MPA. Four options have been considered:

Option 1 – Full site closure

This option will result in the full closure of the three offshore MPAs to mobile bottom contact fishing gear. This is the preferred option as the protected features of these sites are vulnerable to bottom fishing activity and cannot recover whilst pressure exists within these sites. A summary table of this option is outlined below.

MPA	Mobile bottom towed gear
Queenie Corner MCZ	Prohibition of demersal mobile gear throughout the entire site
South Rigg MCZ	Prohibition of demersal mobile gear throughout the entire site
Pisces Reef Complex SAC	Prohibition of demersal mobile gear throughout the entire site

Option 2 – Partial closure

Prohibition of mobile bottom contact fishing gear in all three MPAs, with the exception of 33% of available mud habitat in South Rigg MCZ and Queenie Corner MCZ.

MPA	Mobile bottom towed gear
Queenie Corner MCZ	Prohibition of demersal mobile gear throughout the site, with the exception of 33% of available mud habitat
South Rigg MCZ	Prohibition of demersal mobile gear throughout the site, with the exception of 33% of available mud habitat
Pisces Reef Complex SAC	Prohibition of demersal mobile gear throughout the entire site

Option 3- Do nothing

Do nothing, no management measures implemented and only statutory monitoring of designated features carried out.

MPA	Mobile bottom towed gear
Queenie Corner MCZ	No management measures introduced, only monitoring of designated features.
South Rigg MCZ	No management measures introduced, only monitoring of designated features.
Pisces Reef Complex SAC	No management measures introduced, only monitoring of designated features.

6. Evaluation of option and option chose

This section identifies both monetised and non-monetised impacts with the aim of understanding what the overall impact to government and businesses might be from implementing these options. Where possible the estimated costs and benefits have been monetised.

Seafish and Cefas were commissioned by DAERA to provide information on the socio-economic impact of introducing fisheries management measures in MPAs. Please follow this link for further information.

Option 1- Full site closure

Cost of implementation to industry

The estimated value of fish landings into Northern Ireland in 2023 was approximately £31.1 million. There will be no direct cost incurred by the fishing industry for the implementation of fisheries management measures however there may be a loss of fishing opportunity from the three offshore MPAs, which under Option 1 is approximately £120,000 per annum. This is considered to be a short-term impact because research suggests there will be long term benefits that should outweigh the losses. Evidence suggests the protections afforded to habitats and species within managed MPAs and closed areas, provide significant biological benefits. One of the spill over benefits to areas located beside MPAs is the sustainable supply of larger fish. There is also no reduction in available quota so any lost fishing opportunity from the closure of these three MPAs (approx.. 1.35% of landings, 1.71% of profit) will still be available to catch in other areas of the ICES VIIa region.
Therefore, Option 1 is the preferred fisheries management required to protect designated features within MPAs.

The estimated annual value of the loss of fishing opportunity per annum from Option 1 has been provided in the table below to assist with the determination of the preferred option. This value has been calculated as the average operating profit between 2014-2023.

MPA	Potential loss of annual earnings (operating profit)
Queenie Corner MCZ	£64,000
South Rigg MCZ	£48,000
Pisces Reef Complex SAC	£8,000

Cost of implementation to DAERA

There is no expected additional direct cost to DAERA as inspections and enforcement activities required to support Option 1 will be met from within existing resource allocations for managing sustainable fisheries and protecting the marine environment. Funding of an expanded science partnership will also be explored through the Marine Environment and Fisheries Fund (MEFF) to support to fishers for participating in activities to protect and restore marine biodiversity, and to support partnerships between scientists and fishers.

Benefits to industry
The following benefits have been identified for Option 1:
- Could provide benefits to offshore fish stocks, through potential spill-over effects to adjacent areas, leading to security of future income for fishers
- Science partnership could provide an alternative income for fishers in the offshore region until the long-term spill over benefits from the closed areas are realised

Benefits to DAERA
The following benefits have been identified for Option 1:
- Provide the necessary protection to designated features from fishing pressures.
- Contribute to Programme for Government (PfG) Outcome 8: Protecting Lough Neagh and the environment, as well as EIP targets for MPA management, and increase the protected area under effective management (MEPCA indicator).
- Provide protection for important 'Blue Carbon' habitats such as subtidal mud, which are valuable in mitigating climate change.
- The science partnership co-management approach provides benefits for both the Department and the fishing industry through an adaptive management approach. The scheme would be designed to ensure that data collection by fishers was supporting their own interests and augmenting observations at-sea.

Option 2- Partial site closure

Cost of implementation to industry
The estimated value of fish landings into Northern Ireland in 2023 was approximately £31.1 million. There will be no direct cost incurred by the fishing industry for the implementation of fisheries management measures however there may be a loss of fishing opportunity from the three offshore MPAs, which under option 2 is approximately £90,000 per annum. This is considered to be a short-term impact because research suggests there will be long term benefits that should outweigh the losses. Furthermore, part of Queenie Corner MCZ and South Rigg MCZ will remain open and alternative fishing grounds are available within ICES VIIa with no reduction is quota. Evidence suggests the protections afforded to habitats and species within managed MPAs and closed areas, provide significant biological benefits. One of the spill over benefits to areas located beside MPAs is the sustainable supply of larger fish.

The estimated annual value of the loss of fishing opportunity per annum from Option 2 has been provided in the table below to assist with the determination of the preferred option. This value has been calculated as the average operating profit between 2014-2023.

MPA	Potential loss of annual earnings (operating profit)
Queenie Corner MCZ	£43,000
South Rigg MCZ	£39,000
Pisces Reef Complex SAC	£8,000

Cost of implementation to DAERA
There is no expected additional direct cost to DAERA as inspections and enforcement activities required to support Option 2 will be met from within existing resource allocations for managing sustainable fisheries and protecting the marine environment. There is, however, a risk of legal challenge for allowing an activity to continue within a protected site which is prohibiting the conservation objectives from being achieved, which may incur financial costs. Funding of an expanded science partnership will also be explored through the Marine Environment and Fisheries Fund (MEFF) to support to fishers for participating in activities to protect and restore marine biodiversity, and to support partnerships between scientists and fishers.

Benefits to industry
The following benefits have been identified for Option 2:

- Could provide benefits to offshore fish stocks, through potential spill-over into adjacent areas, leading to security of future income for fishers
- Science partnership could provide an alternative income for fishers in the offshore region until the long-term spill over benefits from the closed areas are realised

Benefits to DAERA
The following benefits have been identified for Option 2:
- Provide partial protection to designated features from fishing pressures
- Contribute to Programme for Government (PfG) Outcome 8: Protecting Lough Neagh and the environment, as well as EIP targets for MPA management, and increase the protected area under effective management (MEPCA indicator).
- Provide partial protection for important 'Blue Carbon' habitats such as subtidal mud, which are valuable in mitigating climate change
- The science partnership co-management approach provides benefits for both the Department and the fishing industry through an adaptive management approach. The scheme would be designed to ensure that data collection by fishers was supporting their own interests and augmenting observations at-sea.

Option 3- Do nothing
This option has not been considered as DAERA is bound by national policies, legislation and international commitments, to introduce management measures to preserve the protected features within MPAs and support their recovery, where necessary. As the latest assessments for both the UK Marine Strategy and Habitats Regulations have identified that overall, our benthic habitats are not reaching the required status, the introduction of management measures is required.

For the three offshore MPAs where the introduction of fisheries management is proposed, the conservation objectives are to 'maintain' the most recent condition status of 'favourable'. However, this is only applicable to moderate energy circalittoral rock and subtidal mixed sediments in South Rigg MCZ. All other features in the offshore MPAs are classified as 'unfavourable' and so the conservation objectives are to 'recover'.

7. Risks and Assumptions

For options 1 and 2 the following risks and assumptions have been identified:

- The total annual cost of introduction of fisheries management measures does not include vessels under 12m. To mitigate this risk, we will seek to obtain further information on the under 12m fleet during the consultation phase.
- Only landings from demersal trawls and dredges have been included in the socio-economic impact assessment as the proposed measures are focused on impacts from demersal fishing gear.
- To estimate landings, a proportional approach was used which assumed equal landings across a grid cell of 5x5km. The fishing activity within grid cells which are only partially affected by the spatial restriction were weighted by the proportion of the grid cell affected by the spatial restriction. Hence, if the spatial restriction only impacted 24% of the grid cell, only 24% of the fishing activity estimated to occur in the grid cell was included into the assessment.

8. Summary and preferred option

The preferred management proposal is Option 1 – full site closure as this option will provide the necessary protections to designated features within offshore MPAs from demersal fishing activities. In terms of the loss of fishing opportunity, the additional total fleet value of £30,000 per annum between Option 1 and Option 2 is considered by DAERA to be low, in comparison to the ecosystem benefits it will bring, and natural capital value

associated with the implementation of management within a 20-year recovery scenario. These benefits include a reduction in physical damage to the seabed, which will facilitate habitat recovery, and could also help fish stocks outside of MPAs, aiding with the future sustainability of commercial fishing.

Quota is set at an ICES VIIa level, and the full closure of these three MPAs equates to a loss of opportunity to catch approximately 1.35% of available quota by weight, and 1.71% of available quota by value. It is worth noting that the proposed closures of these sites will not result in a reduction in available quota, and any potential loss of opportunity will still be available to pursue in other areas of ICES VIIa.

To put these figures into the perspective of a real-world example, the below table outlines the landings of demersal catch from each offshore MPA in 2023.

2023 demersal quota allocation= 8192.9 tonnes
2023 demersal landings declared= 6099.2 tonnes (74.4% quota uptake)

MPA	Declared landings (T), 2023	% of quota, 2023
Queenier Corner	118,000	1.10%
South Rigg	106,000	1.99%
Pisces Reef	16,000	0.25%

DAERA considers the benefits of a full site closure to outweigh the potential loss of fishing opportunity from these three sites and therefore proposes option 1 as the preferred management approach.