**Title:** Consultation on the development of fisheries management measures for Marine Protected Areas and establishment of scallop enhancement sites

**Regulatory Impact Assessment (RIA)**

<table>
<thead>
<tr>
<th>Date:</th>
<th>10 November 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of measure:</td>
<td>Secondary Legislation</td>
</tr>
<tr>
<td>Stage:</td>
<td>Consultation</td>
</tr>
<tr>
<td>Source of intervention:</td>
<td>Domestic NI</td>
</tr>
</tbody>
</table>

**Lead department or agency:** DAERA

**Other departments or agencies:**

**Contact details:**
- DAERA Marine Conservation and Reporting
- MarineConservation@daera-ni.gov.uk

### 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 NI inshore region, contributing to draft Programme for Government (PIG) ‘Outcome 2: to live and work sustainably’ by protecting the environment, by increasing the protected area under favourable management. The latest assessments for both the Marine Strategy Framework Directive and Habitats Directive identified that overall NI benthic habitats are not reaching the required status, therefore management measures are considered necessary to support their recovery.

In relation to the Scallop enhancement sites, the NI Scallop Association approached DAERA to facilitate the prohibition of demersal mobile gear fishing in proposed scallop enhancement sites.

**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.

In relation to the scallop enhancement sites, the introduction of fisheries management is required to create protected scallop nursery areas where fishing with demersal mobile gear is prohibited.

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

- Do nothing - This Option is not viable as DAERA is bound by national policies and legislation and international commitments, to introduce management measures to preserve the protected features within MPAs and support their recovery, where necessary. Also fisheries management will be required to close scallop enhancement sites to demersal mobile gear fishing.
- Option 1 - Minimum fisheries management measures required to protect features within MPAs, and provide protections for scallop enhancement sites
- Option 2 - Extended fisheries management measures. **This is the preferred option** as the additional costs are considered to be low in comparison to the ecological benefits. This option could also provide benefits to fish stocks outside the MPAs and scallop enhancement sites.

Option 2 is the preferred option, but can be amended following feedback from the consultation process.

**Will the policy be reviewed?** Yes

If applicable, **set review date:** 2025

### Cost of Preferred (or more likely) Option

<table>
<thead>
<tr>
<th>Total outlay cost for business £m</th>
<th>Total net cost to business per year £m</th>
<th>Annual cost for implementation by Regulator £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nil (100% EMFF/DAERA funding available)</td>
<td>Nil</td>
<td>Nil (No additional cost - complements existing system)</td>
</tr>
</tbody>
</table>

**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 ☐

The final RIA supporting legislation must be attached to the Explanatory Memorandum and published with it.

Approved by:          Date:
Summary: Analysis and Evidence
Policy Option 1

Description: - Minimum fisheries management measures required to protect designated features within MPAs, and provide protections for scallop enhancement sites.

ECONOMIC ASSESSMENT (Option 1)

<table>
<thead>
<tr>
<th>Costs (£m)</th>
<th>Total Transitional (Policy) (constant price)</th>
<th>Average Annual (recurring) (excl. transitional) (constant price)</th>
<th>Total Cost (Present Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>High</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>Best Estimate</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
</tr>
</tbody>
</table>

Description and scale of key monetised costs by ‘main affected groups’ Maximum 5 lines
The main group affected is commercial fishers in the NI inshore region. The estimated value of fish landings into NI in 2018 were approximately £27.7 million. There is no cost to commercial fishers, but the estimated total fleet value of lost fishing opportunity from Option 1 is £15,017 per annum. It is intended that the cost of introducing a pot tagging scheme, installing inshore vessel position monitoring systems and the science partnership will be met from the European Maritime and Fisheries Fund (EMFF) or any domestic replacement funding scheme.

Other key non-monetised costs by ‘main affected groups’ Maximum 5 lines

The benefits are mostly intangible and cannot be monetised.

Benefits (£m) | Total Transitional (Policy) (constant price) | Average Annual (recurring) (excl. transitional) (constant price) | Total Benefit (Present Value) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>High</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>Best Estimate</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
</tr>
</tbody>
</table>

Description and scale of key monetised benefits by ‘main affected groups’ Maximum 5 lines
Applying the Option 1 fisheries management measures:
- could provide benefits to inshore fish stocks, leading to security of future income for fishers
- provide protection for important ‘Blue Carbon’ habitats such as seagrass beds, which are valuable in mitigating climate change

Key Assumptions, Sensitivities, Risks Maximum 5 lines
The total annual cost of introduction of fisheries management measures does not include vessels under 12m. We will try to obtain further information on the under 12m fleet during the consultation process. It is intended that the cost to commercial fishers, of introducing a pot tagging scheme, installing inshore vessel position monitoring systems and the science partnership will be met from the EMFF or any domestic replacement funding scheme.

BUSINESS ASSESSMENT (Option 1)

Direct Impact on business (Equivalent Annual) £m

Costs: £0  Benefits:  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) Maximum 3 lines
Protection of priority marine habitats are a priority for UK regions and EU member states. Fisheries management measures have already been introduced in the inshore area in Scotland and recommendations have been made through the ‘Benyon review’ to establish Highly Protected Marine Areas (HPMAs) in Secretary of State waters.
**Summary: Analysis and Evidence**

**Policy Option 2**

**Description:** - Extended fisheries management measures.

### ECONOMIC ASSESSMENT (Option 2)

<table>
<thead>
<tr>
<th>Costs (£m)</th>
<th>Total Transitional (Policy) (constant price)</th>
<th>Average Annual (recurring) (excl. transitional) (constant price)</th>
<th>Total Cost (Present Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>High</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>Best Estimate</td>
<td>Nil</td>
<td>Optional</td>
<td>Nil</td>
</tr>
</tbody>
</table>

**Description and scale of key monetised costs by ‘main affected groups’**

The main group affected is commercial fishers in the NI inshore region. The estimated value of fish landings into NI in 2018 were approximately £27.7 million. There is no cost to commercial fishers, but the estimated total fleet value of lost fishing opportunity from Option 2 would be £22,124 per annum. It is intended that the cost of introducing a pot tagging scheme, installing inshore vessel position monitoring systems and the science partnership will be met from the European Maritime and Fisheries Fund (EMFF) or any domestic replacement funding scheme.

**Other key non-monetised costs by ‘main affected groups’**

The benefits are mostly intangible and cannot be monetised.

### BUSINESS ASSESSMENT (Option 2)

**Direct Impact on business (Equivalent Annual) £m**

<table>
<thead>
<tr>
<th>Costs: £0</th>
<th>Benefits:</th>
<th>Net: £0</th>
</tr>
</thead>
</table>

**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 inshore area in Scotland and recommendations have been made through the ‘Benyon review’ to establish Highly Protected Marine Areas (HPMAs) in Secretary of State waters.
1. The policy issue and rationale for government intervention

**MPA networks are recognised internationally as one of the ways of protecting our marine environment and international commitments have been made accordingly. The UN Sustainable Development Goals (SDG) are the blueprint to achieving a better and more sustainable future for all, and specifically, SDG 14 relates to life below water and how the world’s oceans are managed. There are 10 agreed targets for SDG 14 and the following can directly be linked to MPAs:**

- By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans; and
- By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.

The UN Convention on Biological Diversity (CBD) Strategic Plan for Biodiversity 2011-2020 is an overarching framework on biodiversity for the entire United Nations system. One target of particular relevance is the Aichi Conservation Target 11 to conserve and protect 10% of coastal and marine areas through the establishment of a well-managed, ecologically representative and well-connected system of protected areas. The CBD Strategy is delivered regionally through conventions such as the Convention Oslo-Paris Convention for the Protection of the Marine Environment of the North East Atlantic (OSPAR convention). As an independent coastal state, the UK will now report directly to OSPAR whereas this was previously reported through the European Commission via European Directives such as the Habitats Directive, the Wild Birds Directive, and the Marine Strategy Framework Directive (MSFD).

To meet this commitment, DAERA undertook a programme of designations between 2013 and 2018 to establish an ecologically coherent network and the 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](https://www.daera-ni.gov.uk/publications/report-creation-network-conservation-sites-northern-ireland-inshore-region-progress-toward)

The latest assessments for both the Marine Strategy Framework Directive (MSFD) and Habitats Directive have identified that overall our benthic habitats are not reaching the required status and these management measures considered necessary to support their recovery.

Fisheries Regulations have already been introduced for Rathlin and Strangford Lough Special Areas of Conservation and recent surveys are showing evidence that the benthic habitats are recovering. The most recent Rathlin Dive survey in 2019 helped demonstrate that the prohibition of towed demersal gear has led to recovery of sensitive taxa including sponges, bryozoans and anemones. In Strangford Lough, the status of *Modiolus* beds has improved from 'Unfavourable declining to Unfavourable recovering'.

There are important fisheries that occur within 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 draft Programme for Government (PfG) Outcome 2: to live and work sustainably – protecting the environment, and increase the protected area under favourable management (PfG Biodiversity indicator).

Fisheries management measures have been proposed for the following MPAs:
- Skerries and Causeway Special Area of Conservation (SAC)
- Rathlin Island SAC/Special Protected Area (SPA) and Marine Conservation Zone (MCZ)
- Red Bay SAC
- Waterfoot MCZ
- Maidens SAC
- Outer Belfast Lough MCZ
- Strangford Lough MCZ (Outer area located outside the SAC)
- Murlough SAC
- Carlingford Lough MCZ
Scallop enhancement sites

The King scallop, Pecten maximus, is a long lived scallop which can commonly grow to 150mm in length or more. In Northern Ireland fishing for scallops has been established since the 1930s and while historically the fishery consisted of a small number of vessels, it has now greatly expanded. In 2015, 76 vessels, ranging in size from 9m to over 30m in length, reported landings of 1,300 tonnes of scallops into Northern Ireland ports, with a first sale value of £2.7 million.

Scallops are fished using dredges and the management measures proposed earlier in relation to MPAs, will ensure that fishing for scallops does not cause damage to the designated features of MPAs. The proposed measures are in addition to existing gear restrictions, minimum landing sizes and curfews that apply to the fishery.

With increasing exploitation of scallop stocks around the Northern Irish coast, the Northern Ireland Scallop Association is being proactive in working with industry to enhance long-term sustainability of stocks and together with Seafish, commissioned the Agri-Food Biosciences Institute (AFBI) to undertake scallop larval dispersal study with a view to identifying potential sites for reseeding. For further information please see: https://www.seafish.org/media/publications/Scallop_reseeding_report_Final.pdf

The study identified four sites that have habitat conditions suitable for scallop reseeding:

- Whitehead
- Drumfad Bay
- Ballyquintin Point
- Roaring Rock

In Northern Ireland, no legal protections currently apply to preserve areas for scallop enhancement. However, the Roaring Rock site is located within Dundrum Bay, where trawling and seine netting are prohibited through the Inshore Fishing (Prohibition of Fishing and Fishing Methods) Regulations (Northern Ireland) 1993. The Roaring Rock site is also located within the Murlough Special Area of Conservation (SAC) designated area.

The Ballyquintin Point site falls within the Strangford Lough Marine Conservation Zone but outside the SAC boundary and therefore the existing prohibition of mobile gear use through the Inshore Fishing (Prohibition of Fishing and Fishing Methods) (Amendment) Regulations (Northern Ireland) 2003 does not apply.

The AFBI report stipulated, that for scallop enhancement sites to be successful, the selected sites must be closed to mobile fishing gear. Dredging is viewed as one of the most environmentally damaging forms of fishing. Prohibiting dredging from the proposed scallop enhancement sites will significantly reduce the detrimental impact from demersal mobile gear fishing. It will also have secondary affects which may, in turn, benefit fishing. Dugged areas tend to have low habitat complexity. The prohibition of dredging will allow the area to recover. This will aid in the recovery of species such as hydroids and bryozoans, species which are key to the settlement of juvenile scallops (in some cases it is believed that is the lack of suitable settlement substrate rather than a lack of juveniles which leads to a reduction in scallop abundance). This in turn could, provide a high abundance area which seeds fishing grounds outside of the protected area.
2. Policy objectives

The inshore area around Northern Ireland 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 and scallop enhancement sites.

The level of commercial fishing activities known to occur within MPAs and scallop enhancement sites, in the Northern Ireland inshore region was assessed for demersal mobile gear (trawling and dredging) and static gear (pots and traps) fishing using information from the following sources:

- Vessel Monitoring Systems (VMS) data;
- Physical abrasion layer provided by the Joint Nature Conservation Committee (JNCC);
- Fleet observer programme;
- Fisheries landing data;
- Local information provided by users through the Inshore Fisheries partnership group; 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 and static gear fishing.

Scallop enhancement sites

The policy objective for the 4 scallop enhancement sites is to prohibit demersal mobile gear fishing within these areas.

3. Policy options considered, including alternatives to regulation

The management options proposed are specifically tailored to each MPA and scallop enhancement site. Three options have been considered:

- The do nothing option
- Option 1 – minimum option based on the minimum requirements to protect the features; and
- Option 2 – the extended option that could deliver wider ecosystem benefits, including benefits to fish stocks.

For all options, the voluntary approach has been discounted as it is not deemed sufficient to effectively manage MPAs to protect designated features and aid the recovery of habitats or to provide protection to the scallop enhancement sites.

Do nothing option

MPAs

This option has not been considered as DAERA is bound by national policies and 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 MSFD and Habitats Directive have identified that overall our benthic habitats are not reaching the required status, the introduction of management measures is required.

For the majority of the Northern Ireland MPAs where the introduction of fisheries management is proposed, the Conservation objectives are to ‘maintain’ the most recent condition status of ‘favourable’. However, for Outer Belfast Lough MCZ and the Reef and Black Guillemot habitats in Rathlin, the conservation objectives are to ‘recover’ as the current condition assessments are evaluated as ‘unfavourable’.
Scallop enhancement sites

The ‘do nothing option’ is not viable for the scallop enhancement sites as the AFBI report stipulated, that for scallop enhancement sites to be successful, the selected sites must be closed to mobile fishing gear.

Option 1 – Minimum fisheries management measures

For most of the MPAs there is only one management option recommended for demersal mobile gear fishing and one option recommended for static gear fishing. This applies to MPAs where the designated boundary encompasses the qualifying feature(s) only and where no non-feature habitat is present. The Option 1 MPA management measures were identified through Habitats Regulations Assessments and Marine Conservation Zone assessments as the minimum requirements necessary to provide protection for designated features.

For all four scallop enhancement sites only one management option is proposed (Option 1 – the minimum option), to provide protection to these sites through the prohibition of demersal mobile gear fishing within these areas.

A summary is provided in Table 1 of the Option 1 management measures for MPAs and in Table 2 for the scallop enhancement sites.

Table 1 – Option 1 management measures for MPAs

<table>
<thead>
<tr>
<th>MPA</th>
<th>Demersal mobile gear fishing</th>
<th>Static gear fishing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skerries and Causeway SAC</td>
<td>Prohibition of demersal mobile gear use on reef and sandbank features</td>
<td>Prohibition of static gear use on seagrass, and managed pot fishery throughout rest of the SAC</td>
</tr>
<tr>
<td>Rathlin Island SAC/SPA and Rathlin MCZ</td>
<td>Extend existing prohibition of demersal mobile gear use in the SAC to include Deep-sea bed and habitat associated with black guillemot habitat (entire MPA).</td>
<td>Prohibition of static gear use on fragile sponge and anthozoan communities on rocky outcrops feature and managed pot fishery throughout the entire MPA</td>
</tr>
<tr>
<td>Red Bay SAC</td>
<td>Prohibition of demersal mobile gear use throughout entire SAC</td>
<td>Prohibition of static gear use throughout entire SAC</td>
</tr>
<tr>
<td>Waterfoot MCZ</td>
<td>Prohibition of demersal mobile gear use throughout entire site</td>
<td>Prohibition of static gear use throughout entire site</td>
</tr>
<tr>
<td>Maidens SAC</td>
<td>Prohibition of demersal mobile gear use on reef and Maerl features</td>
<td>Prohibition of static gear use on the Maerl feature; and managed pot fishery throughout the rest of the SAC</td>
</tr>
<tr>
<td>Outer Belfast Lough MCZ</td>
<td>Prohibition of demersal mobile gear use throughout entire site</td>
<td>Managed pot fishery throughout MCZ</td>
</tr>
<tr>
<td>Strangford Lough MCZ</td>
<td>Extend existing prohibition of demersal mobile gear use in the SAC to include full extent of the MCZ and associated habitats and PMFs in that area (outside the SAC).</td>
<td>Managed pot fishery throughout the rest of the MPA (MCZ outside SAC)</td>
</tr>
<tr>
<td>Murlough SAC</td>
<td>Maintain existing Dundrum Bay Prohibition Regulations and extend demersal mobile gear prohibition to the SAC boundary to protect features</td>
<td>Managed pot fishery throughout SAC</td>
</tr>
<tr>
<td>Carlingford Lough MCZ</td>
<td>Prohibition of demersal mobile gear use throughout entire site</td>
<td>Managed pot fishery throughout MCZ</td>
</tr>
</tbody>
</table>
Table 2 – Option 1 management measures for scallop enhancement sites

<table>
<thead>
<tr>
<th>Scallop enhancement site</th>
<th>Demersal mobile gear fishing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whitehead</td>
<td>Prohibition of demersal mobile gear use throughout entire site</td>
</tr>
<tr>
<td>Drumfad Bay</td>
<td>Prohibition of demersal mobile gear use throughout entire site</td>
</tr>
<tr>
<td>Ballyquintin Point</td>
<td>Prohibition of demersal mobile gear use throughout entire site</td>
</tr>
<tr>
<td>Roaring Rock</td>
<td>Prohibition of demersal mobile gear use throughout entire site</td>
</tr>
</tbody>
</table>

Option 2 – the extended option

MPAs
An extended option is presented for consideration in two of the MPAs, Skerries and Causeway SAC and The Maidens SAC. For all the other MPAs, the designated boundary encompasses the qualifying feature(s) only, so non-feature habitat is not present.

Option 2 expands the protection provided by the minimum option by extending the introduction of fisheries management measures for demersal mobile gear fishing throughout Skerries and Causeway SAC and The Maidens SAC, so would include areas where protected features are present and non-feature habitats.

A summary of the Option 2 management measures for MPAs is provided in Table 3.

Table 3 – Option 2 management measures for MPAs

<table>
<thead>
<tr>
<th>MPA</th>
<th>Demersal mobile gear fishing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skerries and Causeway SAC</td>
<td>Prohibition of demersal mobile gear use throughout entire SAC</td>
</tr>
<tr>
<td>The Maidens SAC</td>
<td>Prohibition of demersal mobile gear use throughout entire SAC</td>
</tr>
</tbody>
</table>

Scallop enhancement sites
An extended option is not applicable to the scallop enhancement sites.

Managed pot fishing

For Option 1 and Option 2 the Department’s preferred mechanisms for managing pot fishing will apply to all types of pot fishing and include the following proposals:

- Following best practice guidance on biosecurity to prevent the spread of disease and accidental introduction of invasive species from the transfer of static gear fishing from other areas;
- Mandatory vessel position monitoring for all vessels operating in the MPA;
- Introduction of a pot tagging scheme to enable quantification of effort, with different colours for commercial and recreational pots. The number of tags issued to each recreational fisherman will reflect the current 5 pot limit, as described in Regulation 4 of The Unlicensed Fishing for Crabs and Lobster Regulations (Northern Ireland) 2008;
- 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.
4. Expected level of impact on business and government

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.

The Agri-Food Biosciences Institute (AFBI) were commissioned by DAERA to provide information on the impact of introducing fisheries management measures in MPAs and the scallop enhancement sites. Please see https://www.afbini.gov.uk/articles/inshore-fisheries for further information.

Option 1 – Minimum fisheries management measures

Cost of implementation to industry

The estimated value of fish landings into NI in 2018 was approximately £27.7 million. However, there is no expected direct cost to commercial fishers, from the introduction of Option 1, the minimum fisheries management required to protect designated features within MPAs, and provide protection to scallop enhancement areas, as alternative fishing grounds are available. It is intended the cost of introducing a pot tagging scheme and installing inshore vessel position monitoring systems will be met from the European Maritime and Fisheries Fund (EMFF) or its subsequent replacement.

The estimated annual value of the loss of fishing opportunity from Option 1 has been provided in Table 3 below to assist with the determination of the preferred option.

Table 3 – Value of the loss of fishing opportunity per annum from Option 1

<table>
<thead>
<tr>
<th>MPA or scallop enhancement site</th>
<th>Demersal value of loss (£)</th>
<th>Static value of loss (£)</th>
<th>Total value of loss (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skerries and Causeway SAC</td>
<td>3,195</td>
<td>353</td>
<td>3,548</td>
</tr>
<tr>
<td>Rathlin Island SAC/SPA and Rathlin MCZ</td>
<td>2,468</td>
<td>1,083</td>
<td>3,551</td>
</tr>
<tr>
<td>Red Bay SAC</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Waterfoot MCZ</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Maidens SAC</td>
<td>1,845</td>
<td>No data</td>
<td>1,845</td>
</tr>
<tr>
<td>Outer Belfast Lough MCZ</td>
<td>3,371</td>
<td>No data</td>
<td>3,371</td>
</tr>
<tr>
<td>Strangford Lough MCZ</td>
<td>208</td>
<td>No data</td>
<td>208</td>
</tr>
<tr>
<td>Murlough SAC</td>
<td>712</td>
<td>0</td>
<td>712</td>
</tr>
<tr>
<td>Carlingford Lough MCZ</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
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<tr>
<td>Whitehead scallop enhancement site</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
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<tr>
<td>Drumfad Bay scallop enhancement site</td>
<td>1,782</td>
<td></td>
<td>1,782</td>
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<tr>
<td>Ballyquintin Point scallop enhancement site</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Roaring Rock scallop enhancement site</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>15,017</td>
</tr>
</tbody>
</table>
The total fleet value of lost fishing opportunity, for option 1 is £15,017 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.

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. In relation to the introduction of a pot tagging scheme and the requirement for commercial fishers to install inshore vessel position monitoring systems, funding will be sought through the existing EMFF or its subsequent replacement funding scheme. Funding of an expanded science partnership will also be explored through EMFF 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 inshore fish stocks, leading to security of future income for fishers
- Will ensure recreational fishers adhere to potting limits
- Science partnership could provide an alternative income for fishers in the inshore 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 draft Programme for Government (PfG) Outcome 2: to live and work sustainably – protecting the environment, and increase the protected area under favourable management (PfG Biodiversity indicator).
- Provide protection for important ‘Blue Carbon’ habitats such as seagrass beds, which are valuable in mitigating climate change
- The science partnership co-management approach provides benefits for both the Department and the fishing industry. The scheme would be designed to ensure that data collection by fishers was supporting their own interests and augmenting observations at-sea.
Option 2 – the extended option

Cost of implementation to industry

The estimated value of fish landings into NI in 2018 was approximately £27.7 million. However, there is no expected direct cost to commercial fishers, from the introduction of Option 2, the extended option to protect designated features within MPAs, and provide protection to scallop enhancement areas, as alternative fishing grounds are widely available. It is also intended that the cost of introducing a pot tagging scheme and installing inshore vessel monitoring systems will be met from the EMFF or its subsequent replacement.

The estimated annual value of the loss of fishing opportunity from Option 2 has been provided in Table 4 below to assist with the determination of the preferred option.

Table 4 – Value of the loss of fishing opportunity from Option 2 per annum

<table>
<thead>
<tr>
<th>MPA or scallop enhancement site</th>
<th>Demersal value of loss (£)</th>
<th>Static value of loss (£)</th>
<th>Total value of loss (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skerries and Causeway SAC</td>
<td>5,992</td>
<td>353</td>
<td>6,345</td>
</tr>
<tr>
<td>Rathlin Island SAC/SPA and Rathlin MCZ</td>
<td>2,468</td>
<td>1,083</td>
<td>3,551</td>
</tr>
<tr>
<td>Red Bay SAC</td>
<td>No data</td>
<td>No data</td>
<td>0</td>
</tr>
<tr>
<td>Waterfoot MCZ</td>
<td>No data</td>
<td>No data</td>
<td>0</td>
</tr>
<tr>
<td>Maidens SAC</td>
<td>6,155</td>
<td>No data</td>
<td>6,155</td>
</tr>
<tr>
<td>Outer Belfast Lough MCZ</td>
<td>3,371</td>
<td>No data</td>
<td>3,371</td>
</tr>
<tr>
<td>Strangford Lough MCZ</td>
<td>208</td>
<td>No data</td>
<td>208</td>
</tr>
<tr>
<td>Murlough SAC</td>
<td>£712</td>
<td>0</td>
<td>712</td>
</tr>
<tr>
<td>Carlingford Lough MCZ</td>
<td>No data</td>
<td>No data</td>
<td>0</td>
</tr>
<tr>
<td>Whitehead scallop enhancement site</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Drumfad Bay scallop enhancement site</td>
<td>1,782</td>
<td></td>
<td>1,782</td>
</tr>
<tr>
<td>Ballyquintin Point scallop enhancement site</td>
<td>No data</td>
<td></td>
<td>No data</td>
</tr>
<tr>
<td>Roaring Rock scallop enhancement site</td>
<td>No data</td>
<td></td>
<td>No data</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>22,124</td>
</tr>
</tbody>
</table>

The total fleet value of lost fishing opportunity, for option 2 is £22,124 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.

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. In relation to the introduction of a pot tagging scheme and the requirement for commercial fishers to install inshore vessel position monitoring
systems, funding will be sought through the existing EMFF or its subsequent replacement funding scheme. Funding of an expanded science partnership will also be explored through EMFF to support 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 inshore fish stocks, leading to security of future income for fishers
- will ensure recreational fishers adhere to potting limits
- Science partnership could provide an alternative income for fishers in the inshore 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 the extended protection to designated features in MPAs from demersal mobile gear fishing pressures.
- Contribute to draft Programme for Government (PfG) Outcome 2: to live and work sustainably – protecting the environment, and increase the protected area under favourable management (PfG Biodiversity indicator).
- Provide protection for important ‘Blue Carbon’ habitats such as seagrass beds, which are valuable in mitigating climate change
- The science partnership co-management approach provides benefits for both the Department and the fishing industry. The scheme would be designed to ensure that data collection by fishers was supporting their own interests and augmenting observations at-sea.

Risks

For both options the following risks 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 try to obtain further information on the under 12m fleet during the consultation phase.
- It is intended that the cost to commercial fishers, of introducing a pot tagging scheme and installing inshore vessel position monitoring systems will be met from EMFF or its subsequent replacement fund. There is a low risk that the replacement fund will not provide funding for these measures. However, if DAERA funding is required, these costs are not expected to be excessive and can be met within existing baselines.

5. Summary and preferred option

The preferred option is Option 2 - the extended option as this option will provide the necessary protections to designated features with MPAs from fishing activities and will extend the prohibition of demersal mobile gear fishing throughout MPAs. It will also provide protection for the vulnerable habitats and species within the outer area of Strangford Lough MCZ, which are not currently protected from fishing activities. In terms of the loss of fishing opportunity, the additional total fleet value of £7,107 per annum between Option 1 and Option 2 is considered by DAERA to be low, in comparison to the ecosystem benefits it will bring. These benefits include a reduction in physical damage to the seabed, which will facilitate habitat recovery, and could also help fish stocks outside MPAs.

6. Other Impact Assessments

The proposed Fisheries management measures have also been subject to a Habitats Regulations Assessment, an Equality and Human Rights Impact Screening exercise, and a Rural Needs Impact
Assessment. The accompanying assessments are available to download from the Department’s website.

During stakeholder engagement sessions, stakeholders mentioned it would be useful to see figures for the loss of fishing opportunity for areas already closed to fishing activities included in this Regulatory Impact Assessment. Therefore, information from Rathlin and Strangford Lough SACs have been provided in Table 5 below.

### Table 5 – Value of the loss of fishing opportunity from areas already closed to fishing activities.

<table>
<thead>
<tr>
<th>MPA where fisheries management has already been introduced</th>
<th>Value of loss of fishing opportunity per annum (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strangford Lough SAC</td>
<td>No figure available, however the extended zones represent approximately 14% of the available fishing ground within the lough and about 30-40% of available potting ground.</td>
</tr>
<tr>
<td>Rathlin Island SAC</td>
<td>12,856</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12,856</strong></td>
</tr>
</tbody>
</table>

Stakeholders also expressed interest in seeing figures for the MCZs located in the Northern Ireland offshore region. Currently marine conservation designation and management functions in the NI offshore region are not devolved and remain the duty of the Secretary of State. One SAC and two MCZs have been designated by the Secretary of State in the NI Offshore region, but management measures have not yet been introduced. Estimated figures from Joint Nature Conservation Council (JNCC) have been provided in Table 6 below to provide an indication of the loss of the value of fishing opportunity, if fisheries management measures were introduced.

### Table 6 – Value of the loss of fishing opportunity in the Northern Ireland offshore region.

<table>
<thead>
<tr>
<th>Offshore MPA</th>
<th>Estimated value of loss of fishing opportunity per annum (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queenie Corner MCZ</td>
<td>7,000</td>
</tr>
<tr>
<td>South Rigg MCZ</td>
<td>20,000</td>
</tr>
<tr>
<td>Pisces Reef SAC</td>
<td>312,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>339,000</strong></td>
</tr>
</tbody>
</table>