Consultation on

The development of fisheries management measures for Marine Protected Areas and establishment of Scallop enhancement sites in the Northern Ireland inshore region

November 2020

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Department of
Agriculture, Environment and Rural Affairs
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- **Email:** MarineConservation@daera-ni.gov.uk

- **Write to:** Marine Conservation and Reporting Team
  Marine and Fisheries Division
  Klondyke Building
  Cromac Avenue
  Malone Lower
  Belfast
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Contents

Overview of Consultation

Thank you for taking the time to consider this consultation paper. The Department welcomes your views on the introduction of fisheries management measures to safeguard features within Marine Protected Areas (MPAs) and the proposal to establish scallop enhancement sites, within the Northern Ireland inshore region.

The consultation will last for 12 weeks, commencing on 30 November 2020.

Please ensure that your response reaches us before the closing date of 22 February 2021.

What documents should I read to answer the questions?

The relevant information required to respond to the consultations questions is contained within this consultation paper.

Part 1 of this consultation paper refers to the proposed fisheries management measures in MPAs.

Part 2 of this consultation paper refers to the proposed scallop enhancement sites.

You may also wish to consider the following information sources:

1. The Agri-Food Biosciences Institute (AFBI) fisheries impact assessment report, https://www.afbini.gov.uk/articles/inshore-fisheries;
2. Habitats Regulations Assessment (HRA); and
3. Marine Conservation Zone (MCZ) Assessment.

Links to all the relevant documents and the consultation questions can be found at: https://www.daera-ni.gov.uk/consultations/consultation-development-fisheries-management-measures-marine-protected-areas-mpas-and-establishment

Policy assessments

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

How to respond

Please respond to this consultation using one of the following methods:

- Online at: https://www.daera-ni.gov.uk/consultations/consultation-development-fisheries-management-measures-marine-protected-areas-mpas-and-establishment
- By e-mail at: MarineConservation@daera-ni.gov.uk
- By post to:

  Marine Conservation and Reporting Team
  Marine and Fisheries Division
  Klondyke Building
  Cromac Avenue
  Malone Lower
  Belfast
  BT7 2JA

When responding please provide the following information:

- Your name;
- Your district council area;
- Contact details (preferably email);
- Organisation you represent (if applicable); and
- Your main area of interest (e.g. commercial fisheries, marine conservation, aquaculture, tourism & recreation etc.)

This information will assist in the analysis of responses.

Accessibility

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Freedom of Information (FoI), Confidentiality of Responses and Sharing of Information

DAERA will publish a summary of responses following completion of the consultation process. We are unable to reply individually to the points you may raise as part of your reply.

Your response, and all other responses to the consultation, may be disclosed on request. The Department can only refuse to disclose information in exceptional circumstances. Before you submit your response, please read the paragraphs below on the confidentiality of consultations and this will provide you with guidance on the legal position about any information submitted by you in response to this consultation.

Section 8(e) of the Data Protection Act 2018 permits processing of personal data when necessary for an activity that supports or promotes democratic engagement. Information provided by respondents to this stakeholder engagement exercise will be held and used for the purposes of the administration of this current exercise and subsequently disposed of in accordance with the provisions of the Data Protection Act 2018 and the General Data Protection Regulation. For more information and to view the DAERA Privacy Statement please go to: https://www.daera-ni.gov.uk/publications/daera-privacy-statement-document

The FOI Act gives the public a right of access to any information held by a public authority, namely, the Department in this case. This right of access to information includes information provided in response to a consultation. The Department cannot automatically consider as confidential, information supplied to it in response to a consultation. However, it does have the responsibility to decide whether any information provided by you in response to this consultation, including information about your identity should be made public or be treated as confidential. If you do not wish information about your identity to be made public please include an explanation in your response including any harm you believe such a disclosure might cause.

This means that information provided by you in response to the consultation is unlikely to be treated as confidential, except in very particular circumstances. The Lord Chancellor's Code of Practice on the FOI Act provides that:

- The Department should only accept information from third parties in confidence if it is necessary to obtain that information in connection with the exercise of any of the Department's functions and it would not otherwise be provided;

- The Department should not agree to hold information received from third parties "in confidence" which is not confidential in nature, acceptance by the Department of confidentiality provisions must be for good reasons, capable of being justified to the Information Commissioner.

For further information about confidentiality of responses please contact the Information Commissioner's Office, or visit the ICO Website.

Rationale

The seas around Northern Ireland have a wide variety of marine wildlife and contain rich and varied habitats that support a diverse abundance of living organisms. As an island-based society, the sea has always had an important role to play, offering a source of food, recreation and a place of work to many.

Fishing makes an important contribution to the Northern Ireland economy and in particular the economy of coastal communities. In 2018, there were 854 fishers in Northern Ireland. Fish landings into Northern Ireland in 2018 were 22,417 tonnes, with a value of approximately £27.7 million. Indirectly, commercial fishing supports a variety of other jobs, such as ancillary engineering and service industries. The fish and shellfish processing sector employed 643 full time equivalents in 2018 and had a value of approximately £94m[1].

After the transition period with the EU ends, the UK will no longer be bound by the Common Fisheries Policy and will have control over access to its seas and the fisheries resources it contains. The UK will become an independent coastal state and exercise its responsibilities in accordance with the UK Marine Policy Statement (MPS), the UN Convention of the Law of the Sea (UNCLOS), the UN Sustainable Development Goals, and the UN Convention on Biological Diversity.

Sea Fisheries management is largely devolved and DAERA has responsibility for the management of the Northern Ireland zone, which encompasses both the inshore and offshore regions, and for Northern Ireland registered fishing vessels wherever they fish.

The Northern Ireland inshore region supports diverse fishing opportunities that make an important contribution to the economies of coastal communities and the introduction of changes to fisheries management regimes outlined in this consultation document are intended to support fishing at sustainable levels while protecting the marine environment. This approach is consistent with implementation of an ecosystem approach to marine planning as set out in the UK MPS. A Northern Ireland Marine Plan is in development.

Marine protection needs to evolve to protect habitats that capture carbon, such as in shellfish beds, seaweeds and sea grasses. Management of activities that impact on ecosystem functions is required, to contribute to climate change effects.

There are two parts to the consultation:

Part 1 - Development of fisheries management measures for Marine Protected Areas (MPAs).

Part 2 - Proposals to establish Scallop enhancement sites.

1 https://www.daera-ni.gov.uk/sites/default/files/publications/daera/Key%20Statistics%20for%202019.pdf

Part 1 - Development of fisheries management measures for Marine Protected Areas (MPAs)

1.1 - Introduction

Well managed Marine Protected Area (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 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[2].

The MPA network is made up of five types of designations:

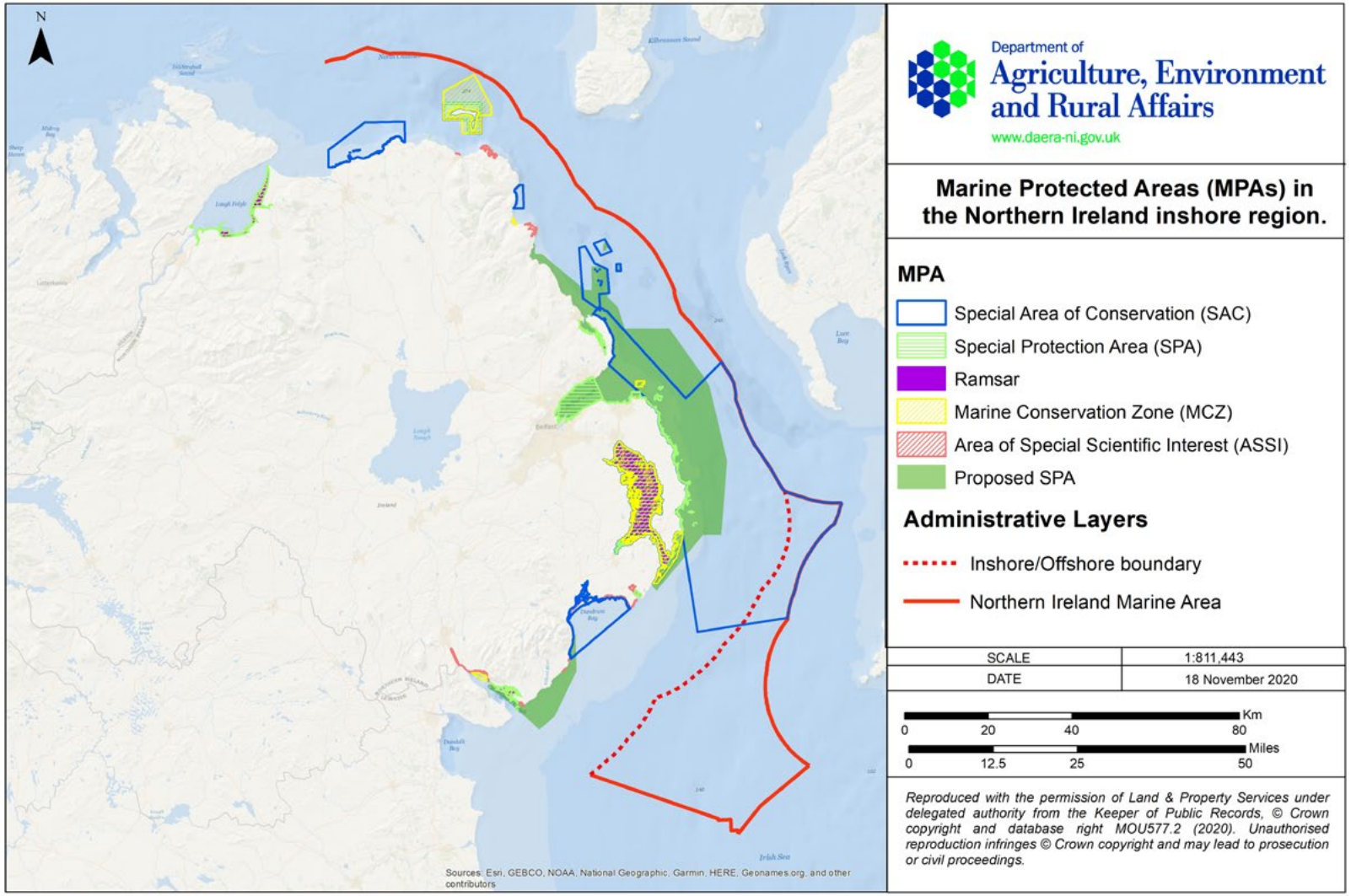
- Special Areas of Conservation (SACs) - for habitats of European importance, such as reefs and sandbanks;
- Special Protection Areas (SPAs) - for seabirds of European importance, such as guillemots and terns;
- Ramsar sites - for wetlands;
- Areas of Special Scientific Interest (ASSIs) - for nationally important habitats and species such as mudflats and seals; and
- Marine Conservation Zones (MCZs) - to protect rare, threatened or nationally important marine habitats, species and geological features.

2 https://www.daera-ni.gov.uk/publications/report-creation-network-conservation-sites-northern-ireland-inshore-region-progress-toward

A map of Marine Protected Areas in the Northern Ireland inshore region is displayed in Figure 1.

The designation phase involved significant stakeholder engagement and the local fishing industry contributed to this by identifying important areas for fishing and participating in boundary setting discussions. The MPA boundaries were set to protect the feature of interest while ensuring there were no unnecessary restrictions on activities such as fishing.

Figure 1: Map of Marine Protected Areas in the Northern Ireland inshore region



1.2 - What legal protection applies under these designations?

Special Areas of Conservation (SACs) are designated under Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 and the Department is required to exercise its functions so as to secure compliance with the requirements of the Habitats Directive. To fulfil this duty the Department must establish the necessary management measures to ensure the conservation objectives of the qualifying features are achieved.

Marine Conservation Zones (MCZs) are designated under the Marine Act (Northern Ireland) 2013 and the Department is required to exercise its functions in a manner which best furthers the conservation objectives of the MCZ.

1.3 - Why are fisheries management measures required?

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 the main pressure is from physical damage of the seabed from fishing gear.[3]

Fisheries regulations have already been introduced for Rathlin and Strangford Lough SACs and recent surveys are showing evidence that the benthic habitats are recovering in these areas. In Rathlin, divers have observed evidence that sensitive taxa, including sponges, bryzoans and anemones, are recovering since the use of towed demersal fishing gear was prohibited in the SAC. Similarly, recent surveys have found that Horse mussel beds *(Modiolus modiolus)* in Strangford Lough are recovering.

There are important fisheries that occur within our MPAs that are important to coastal communities and this consultation sets out management options that the Department considers are 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).

This consultation proposes fisheries management measures for the following MPAs:

- Skerries and Causeway SAC
- Rathlin Island SAC/SPA and MCZ
- Red Bay SAC
- Waterfoot MCZ
- Maidens SAC
- Outer Belfast Lough MCZ
- Strangford Lough MCZ
- Murlough SAC
- Carlingford Lough MCZ

3 https://moat.cefas.co.uk/biodiversity-food-webs-and-marine-protected-areas/benthic-habitats/

These management measures, together with measures for other non-fishing activities, will be incorporated into the regional MPA management plans that are being produced by the Interreg Va Marine Protected Areas Management and Monitoring[4] (MarPAMM) project.

1.4 - Formulation of management options

The management options for each MPA were developed using the approach set out in the Department's Guidance on the Development of Conservation Objectives and Potential Management Options[5]. This approach is based on the Marine Evidence based Sensitivity Assessment (MarESA[6]) and assesses the damage risk that human activities pose to vulnerable features.

In order to undertake this assessment, the level of commercial fishing activities known to occur within MPAs 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.

It is recognised there are some gaps in our knowledge, most significantly, the lack of information on fishing vessels under 12m, which are not required to have VMS. This relates to both vessels fishing static and demersal mobile gear.

'Risk' of damage or disturbance to designated features was assessed against the current management of fishing activity as follows:

- High risk activities are those for which the feature has a high vulnerability, and there is inadequate or no management mechanism for that location.
- Moderate risk activities are those for which the feature has a low or moderate vulnerability, and there is inadequate or no management mechanism for that location.

4 http://www.mpa-management.eu/
5 https://www.daera-ni.gov.uk/sites/default/files/consultations/daera/mcz-guidelines-for-conservation-objectives-information-on-activities-and-management.PDF
6 https://www.marlin.ac.uk/assets/pdf/MarESA-Sensitivity-Assessment-Guidance-Rpt-Mar2018v2.pdf

- Low risk activities are those where there is low feature vulnerability (i.e. the activity does not adversely impact the feature) or where the moderate-high vulnerability is mitigated by existing management mechanisms.

From this, three levels of management were considered in each MPA:

1. Management would be introduced to remove or avoid pressures, i.e. activities would be prohibited within the MPA.

   This management measure would be considered when the feature vulnerability is moderate or high.

2. Management would be introduced to reduce or limit pressures i.e. certain activities will be allowed within the MPA, but this will be subject to certain additional management measures (e.g. modification of methodologies used, effort limitation etc).

   This management measure would be considered when the feature vulnerability is moderate or low.

3. No additional management required i.e. no restrictions in place other than general regulations (quotas, technical measures, etc.) that are not site specific.

The management options are specifically tailored for each MPA. For most of the MPAs there is only one management option recommended for demersal mobile gear fishing and one option for static gear fishing. This applies to MPAs where the designated boundary encompasses the qualifying feature(s) only and no non-feature habitat is present. Where alternative management options are provided, the Department has presented a minimum option, based on the minimum requirements to protect the features, and an extended option, that could deliver wider ecosystem benefits, including benefits to fish stocks.

The minimum requirements are management measures that have been identified as necessary following the completion of the Habitats Regulations Assessment (HRA) and Marine Conservation Zone assessment.

The following options were considered for management of demersal mobile gear fishing:

- Prohibition of demersal mobile gear use in zones containing qualifying features only; or
- Prohibition of demersal mobile gear throughout the site.

The following options were considered for management of static gear fishing:

- Managed pot fishing throughout the site.
- Prohibition of static gear use on certain qualifying features and managed static gear fishery in the remainder of the site.
- Prohibition of static gear use throughout the site.

Managed pot fishing

Pot fishing in the Northern Ireland inshore region is predominately for crab and lobster, but the Department is aware of pots also being used to fish for Wrasse, for the purposes of aquaculture.

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.

In relation to the best practice guidance on biosecurity, the Department will work with the Inshore Fisheries Partnership group to develop this guidance note.

As it is not currently possible to fully quantify potting effort and to identify important areas for pot fishing, the proposals for mandatory vessel position monitoring for all vessels operating in an MPA and the introduction of a pot tagging scheme have been included to address this.

The Department considers there is merit in extending these measures to all pot fishing activities regardless of whether it is within an MPA and is planning to undertake a specific consultation on this matter.

The Department is aware of an enforceability issue with The Unlicensed Fishing for Crabs and Lobster Regulations (Northern Ireland) 2008 and is proposing to amend the Regulations to provide clarity around enforcement.

1.5 - How measures would be implemented

The Fisheries Act (Northern Ireland) 1966 provides that the Department may make such regulations as appear to be expedient for the management, conservation, protection, improvement or increase of sea-fisheries in Northern Ireland inshore waters or in the Northern

Ireland zone. Any measures to give effect to the proposed fisheries management measures agreed as a consequence or outworking of this consultation exercise would be legislated under these powers.

Once implemented, the management measures will be kept under review as part of an adaptive management framework which will include both a scientific programme to assess the effectiveness of the management measures and a compliance and enforcement programme. The Inshore Fisheries Partnership will continue to provide an opportunity for stakeholders to participate in the development and implementation of these management measures.

The Department currently supports a science partnership for inshore fisheries and as part of this Agri-Food Biosciences Institute (AFBI) is developing assessment methods to provide advice on sustainable catch levels of inshore stocks. These include brown crab, lobster, velvet crab, scallop and queen scallop. It has been identified that enhanced data collection from the commercial fisheries which target these species would be highly beneficial and the Department intends to increase the funding so that a dedicated inshore observer can be appointed and a fisher self-sampling scheme, as currently used in the Nephrops fishery, can be established.

A scallop self-sampling programme is in place in other areas of the UK and is demonstrated to supply key data. Increased data collection would not only improve assessment of these stocks but also contribute to the monitoring of closed areas and MPAs through novel methods, such as genetic analysis to support the use of management within MPAs to act as reserves for the stocks and support more productive fisheries. This data collection would also support projects to look at wider ecosystem function not just for the inshore stocks but for the productivity of the entire marine zone in our waters and further afield. Payments will be made to fishers for having an observer on board their vessel and to provide a sample of their catch for scientific assessment.

1.6 - Proposed fisheries management measures for MPAs

The following sections provide details of the designated features, conservation objectives, and current condition status for each MPA, along with the management options recommended by the Department. Where possible, the value of loss of fishing opportunities have been provided. The value figures are based on information provided by AFBI.

1.6.1 - Skerries and Causeway Special Area of Conservation

The Skerries and Causeway Special Area of Conservation (SAC) is sited on the north coast of Northern Ireland adjacent to the coastline of Portstewart, Portrush, Bushmills and the Giant's Causeway World Heritage Site (which lends part of its name to the SAC site; the other half of the SAC name comes from the Skerries islands and rocks off Portrush).

The site has been designated for the following qualifying features:

- Reef;
- Sandbanks slightly covered by seawater at all times;
- Submerged or partially submerged sea caves, and
- Harbour porpoise.

It also contains non-qualifying species, such as grey seal, common seal, and bottlenose dolphin.

Figure A1 in Annex A displays a habitat map of Skerries and Causeway SAC and Table 1 outlines the qualifying features, conservation objectives and most recent condition status.

Further detail on the Skerries and Causeway SAC can be found at:
https://www.daera-ni.gov.uk/protected-areas/skerries-and-causeway-sac

Table 1: Skerries and Causeway SAC features, conservation objectives and current condition status

Qualifying feature	Conservation objective	Current condition status (reporting period)
Reefs	Maintain	Favourable (2014-2019)
Sandbanks slightly covered by seawater at all times (including seagrass *(Zostera marina)* beds	Maintain	Favourable (2014-2019)
Submerged or partially submerged sea caves	Maintain	Favourable (2008-2013)
Harbour porpoise *Phocoena phocoena*	Maintain	Favourable (2008-2013)

A summary of the recommended management options for consideration is provided in Table 2 below. Full details of the level of risk associated with demersal mobile gear (Table B1) and

static gear (Table B2) and the action advised can be found in Annex B. For Skerries and Causeway SAC, two management options are presented. Option 1 refers to a zoned prohibition for demersal fishing, and defines the minimum level of management that the Department considers necessary to protect the designated features of the site. Option 2 refers to prohibition of demersal mobile gear throughout the entire SAC, and is the Department's preferred option, due to the increased ecological and fisheries benefits that total closure of the SAC would bring. Only one management option is proposed for static gear fishing. Maps detailing these options are provided in Figures 2-4.

Table 2: Recommended options for Skerries and Causeway SAC

Fishing type	Option 1 (Minimum)	Option 2 (Preferred)
Demersal	Prohibition of demersal mobile gear use on reef and sandbank features. (Figure 2).	Prohibition of demersal mobile gear use throughout entire SAC. (Figure 3)
Static	Prohibition of static gear use on the seagrass and managed pot fishery throughout the rest of the SAC. (Figure 4).	

The average annual landings from the SAC and the value of loss of fishing opportunity, from the two proposed management options is displayed in Table 3, to allow comparison.

Table 3: Value of the loss of fishing opportunity from management options for Skerries and Causeway SAC

Fishing type	Average annual value of landings from SAC	Option 1 (Minimum)		Option 2 (Preferred)	
		Summary	Value of the loss of fishing opportunity	Summary	Value of the loss of fishing opportunity
Demersal	£5,992	Prohibition of demersal mobile gear use on reef and sandbank features.	£3,195	Prohibition of demersal mobile gear use throughout entire SAC.	£5,992
Static	£46,479	Prohibition of static gear use on the seagrass and managed pot fishery throughout the rest of the SAC.	£353		

Figure 2: Map displaying Option 1 - minimum management for demersal mobile gear fishing in Skerries and Causeway SAC

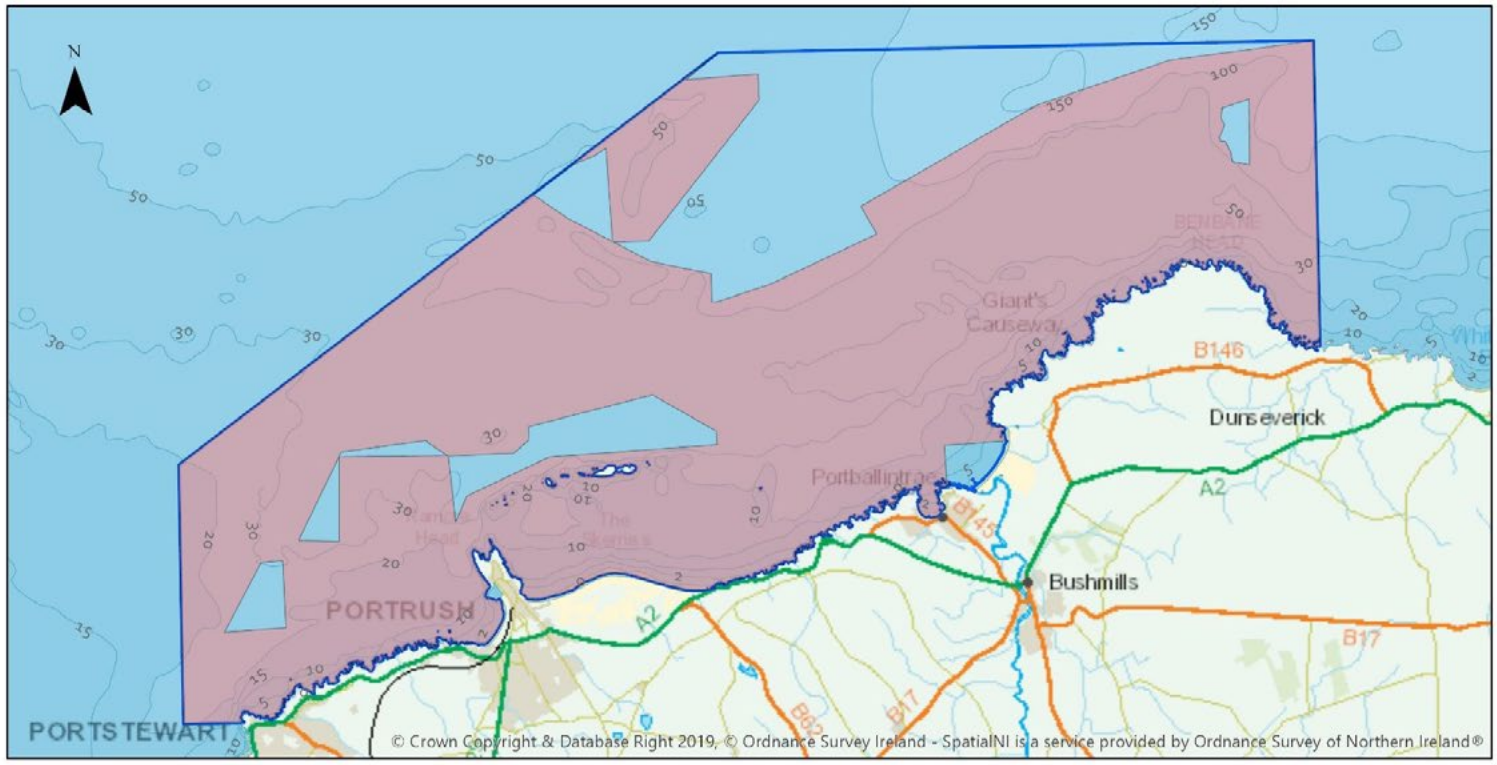


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Figure 3: Map displaying Option 2 - preferred management for demersal mobile gear fishing in Skerries and Causeway SAC

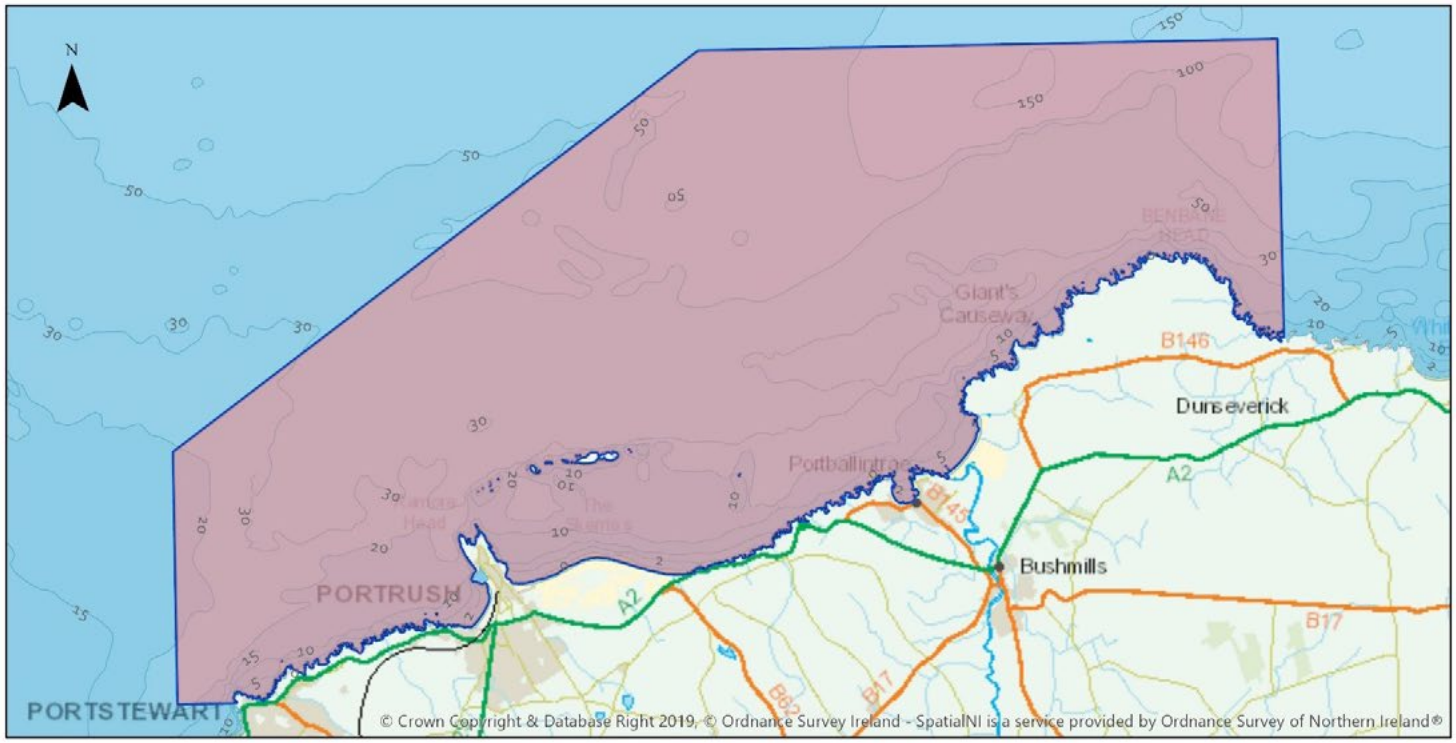

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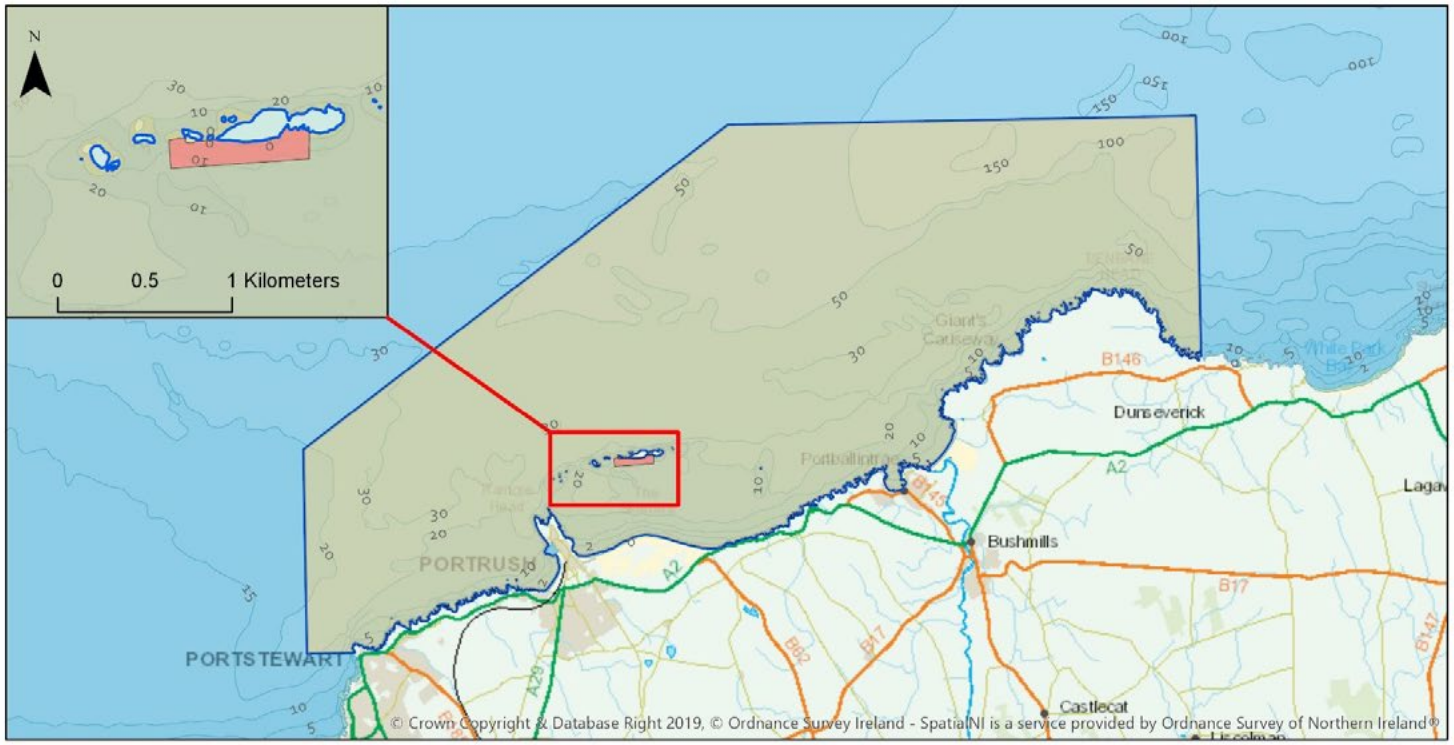
Figure 4: Map displaying recommended management for static gear fishing in Skerries and Causeway SAC



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Demersal mobile gear

The value of demersal mobile gear fishing within the Skerries and Causeway SAC is approximately £5,992 per annum, indicating there is a relatively low level of demersal fishing activity taking place.

The designated reef and sandbank features, and seagrass bed sub-features are highly to moderately sensitive to demersal mobile gear fishing pressures, which results in a moderate level of risk. Two management options are proposed for Skerries and Causeway SAC to remove risks associated with demersal mobile gear fishing. The minimum option is to prohibit mobile gear fishing within the designated features, and the estimated value of loss of fishing opportunity from this option would be £3,195 per annum.

The second option for consideration, is the whole site approach and would involve the prohibition of demersal mobile gear use throughout the whole SAC. The estimated value of the loss of fishing opportunity from option 2 is £5,992 per annum. The second option is preferred by the Department as the additional value of £2,797 per annum to close the whole SAC to demersal mobile gear use, is considered to be low, in comparison to the ecosystem benefits total closure will bring. These benefits include a reduction in physical damage to the seabed which will facilitate habitat recovery. This could also help fish stocks outside the SAC and will also contribute to the achievement of the conservation objectives of the site.

The sea caves feature is considered to be unaffected by demersal mobile gear fishing as it is unsuitable for this activity. At present, there is also no evidence to suggest that fishing activities within MPAs in the Northern Ireland inshore region are having an adverse impact on the Harbour porpoise feature. Tools to assess sensitivities of marine mammals are currently being developed through the Marine Life Information Network (MarLIN)[7]. Therefore no fisheries management measures for sea caves or Harbour porpoise are proposed at this current time.

Static gear

The value of static gear fishing within the Skerries and Causeway SAC is approximately £46,479 per annum, indicating there is a moderate level of fishing activity taking place. The sub-feature seagrass *(Zostera marina)* bed is considered to be at high risk from physical pressures associated with static gear fishing therefore the Department recommends removing this risk by prohibiting static gear fishing within the seagrass zone of the SAC. The value of loss of fishing opportunity from this prohibition is estimated as £353 per annum.

The MarESA assessment indicated that reef features have a high risk associated with biological pressures i.e. the accidental introduction of invasive species from the transfer of static gear fishing from other areas. However, due to the localised nature of the static gear fishing activities within the SAC and as those involved are not likely to be fishing in other areas, the Department considers the likelihood of this occurring to be low. Recreational boating currently presents a

7 https://www.marlin.ac.uk/

greater risk, therefore the Department plans to issue guidance on biosecurity management to all harbours and marinas that will cover both fishing and recreational activities.

As the designated reef, sandbanks and sea caves features are considered to be moderately sensitive and at a moderate risk from static gear fishing, the Department recommends the introduction of a managed pot fishery to limit this level of risk. Further detail regarding the managed pot fishing proposals can be found at the end of the 'Formulation of management options' section. There is no expected loss of fishing opportunity from the introduction of the managed pot fishery.

Consultation questions

Questions relating to Skerries and Causeway SAC are summarised below:

1.1. Do you support the preferred option (No 2), to prohibit demersal mobile gear fishing throughout Skerries and Causeway SAC?

1.2. If you answered no to question 1.1, do you support the minimum option (No.1) to prohibit demersal mobile gear fishing on reef and sandbank features within Skerries and Causeway SAC?

1.3. Do you support the recommended option to prohibit static gear fishing, on the seagrass feature and to manage static gear fishing throughout the remainder of Skerries and Causeway SAC?

1.4. Do you support the proposed measures to manage pot fishing, such as following best practice on biosecurity, mandatory vessel position monitoring, pot tagging, recording of bycatch and entanglements of protected species and the continued use of more selective gear?

1.5. Do you agree with the assessment of the current value of fishing within Skerries and Causeway SAC?

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

To respond to these questions please see online response form.

1.6.2 - Rathlin Island Special Area of Conservation / Special Protection Area and Rathlin Marine Conservation Zone

The Rathlin MPA contains a Special Area of Conservation (SAC), a Special Protection Area (SPA) and a Marine Conservation Zone (MCZ). Further information on each designated area is provided below.

SAC

Rathlin Island is the northernmost point of Northern Ireland. It has been designated a marine SAC because it contains habitat types and/or species which are rare or threatened within a European context.

The site has been designated for the following qualifying marine features:

- Reef:
- Sandbanks slightly covered by seawater at all times; and
- Submerged or partially submerged sea caves.

Further detail on Rathlin Island SAC can be found at: https://www.daera-ni.gov.uk/protected-areas/rathlin-island-sac.

SPA

Rathlin Island SPA includes sea cliffs and an area of sea around the island which is used by many of the seabirds that occur around the island's coast. The SPA boundary is entirely coincident with the boundary of the SAC. Further detail on Rathlin Island SPA can be found at: https://www.daera-ni.gov.uk/protected-areas/rathlin-island-spa.

Within Rathlin Island SAC/SPA fishing is entirely by static gear as with the help and support of local fishermen, regulations were agreed to protect habitats from mobile fishing gear. Following public consultation, The Rathlin Island (Prohibited Methods of Fishing) Regulations (Northern Ireland) 2016 were introduced. These regulations prohibit the use of mobile gear within the designated boundary and provide protection to static gear fisheries and the designated features of the SAC and SPA. However, during the consultation, it became apparent that the risk of damage to fragile sponge and anthozoan communities by static gear fishing had not been considered, therefore these have been included as part of this assessment.

MCZ

Rathlin MCZ was designated after the introduction of the Rathlin Island fishing regulations, it surrounds Rathlin Island with a large extension between the north of the Island and the North Channel. The boundary therefore includes Rathlin Island SAC/SPA and Rathlin Island Area of Scientific Interest (ASSI).

Rathlin MCZ has been designated for the following features:

- Deep-sea bed;
- Black guillemot; and
- Geological/geomorphological features.

As the MCZ was designated after the introduction of the 2016 fisheries regulations part of the site is already subject to a prohibition of demersal mobile gear, however the area outside the SAC/SPA boundary is not covered by the prohibition, so will be considered as part of this work. In relation to the MCZ designation, local fishermen were consulted at the time and assisted with setting the boundary.

Further detail on Rathlin MCZ can be found at: https://www.daera-ni.gov.uk/protected-areas/rathlin-mcz.

Figure A2 in Annex A displays a habitat map of Rathlin Island SAC/SPA, the habitat map of Rathlin MCZ is displayed in figure A3 in Annex A and Table 4 outlines the qualifying marine features, conservation objectives and most recent condition status.

Table 4: Rathlin Island SAC and Rathlin MCZ features#, conservation objectives and current condition status.

Site	Qualifying feature	Conservation objective	Current condition status (reporting period)
Rathlin Island SAC	Reefs (including fragile sponge and anthozoan communities on rocky outcrops).	Recover	Unfavourable recovering (2014-2019)
	Sandbanks slightly covered by sea water all the time (including seagrass *(Zostera marina)* beds and maerl beds).	Maintain	Favourable (2002-2007)
	Submerged or partially submerged sea caves.	Maintain	Favourable (2002-2007)
Rathlin MCZ	Deep-sea bed.	Maintain	Favourable (2014-2019)
	Black guillemots *Cepphus grylle.*	Recover	Unfavourable (2014-2019)
	Geological/Geomorphological features indicating past change in relative sea level.	Maintain	Favourable (2014-2019)

Only fully marine features are listed.

A summary of the recommended management options for consideration is provided in Table 5 below, and option maps are presented in Figures 5-7. Full details of the level of risk associated with demersal mobile gear (Table B3) and static gear (Table B4) and the action advised can be found in Annex B.

Table 5: Recommended Options for Rathlin Island SAC/SPA and Rathlin MCZ

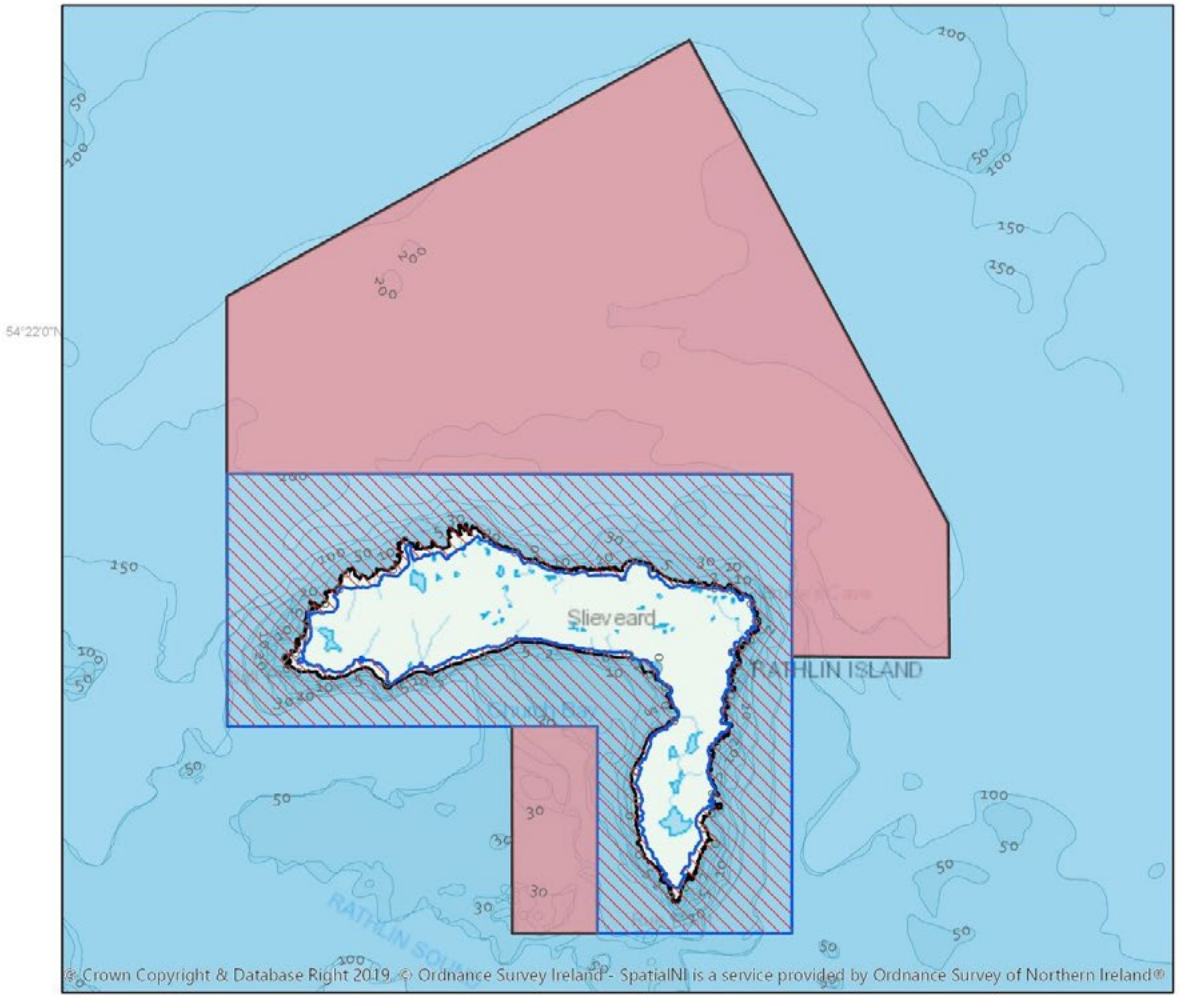
Fishing gear type	Recommended option
Demersal	Extend existing prohibition of demersal mobile gear use in the SAC to include deep-sea bed and habitat associated with black guillemot (will include full extent of the SAC and the MCZ). (Figure 5).
Static	Prohibition of static gear use on fragile sponge and anthozoan communities on rocky outcrops feature, and managed pot fishery throughout the full extent of the SAC and the MCZ. (Figures 6 and 7).

The average annual landings from the MPA and the value of loss of fishing opportunity from from the recommended management options is displayed in Table 6, to allow comparison.

Table 6: Value of the loss of fishing opportunity from recommended options for Rathlin Island SAC/SPA and Rathlin MCZ

Fishing type	Average annual value of landings from MPA	Recommended option	Value of the loss of fishing opportunity
Demersal	£2,468	Extend prohibition of demersal mobile gear use to include deep-sea bed and habitat associated with black guillemot (will include full extent of the SAC and the MCZ).	£2,468
Static	£41,838	Prohibition of static gear use on fragile sponge and anthozoan communities on rocky outcrops feature, and managed pot fishery throughout the full extent of the SAC and the MCZ.	£1,083

Figure 5: Map displaying recommended management for demersal mobile gear fishing in Rathlin Island SAC / SPA and Rathlin MCZ



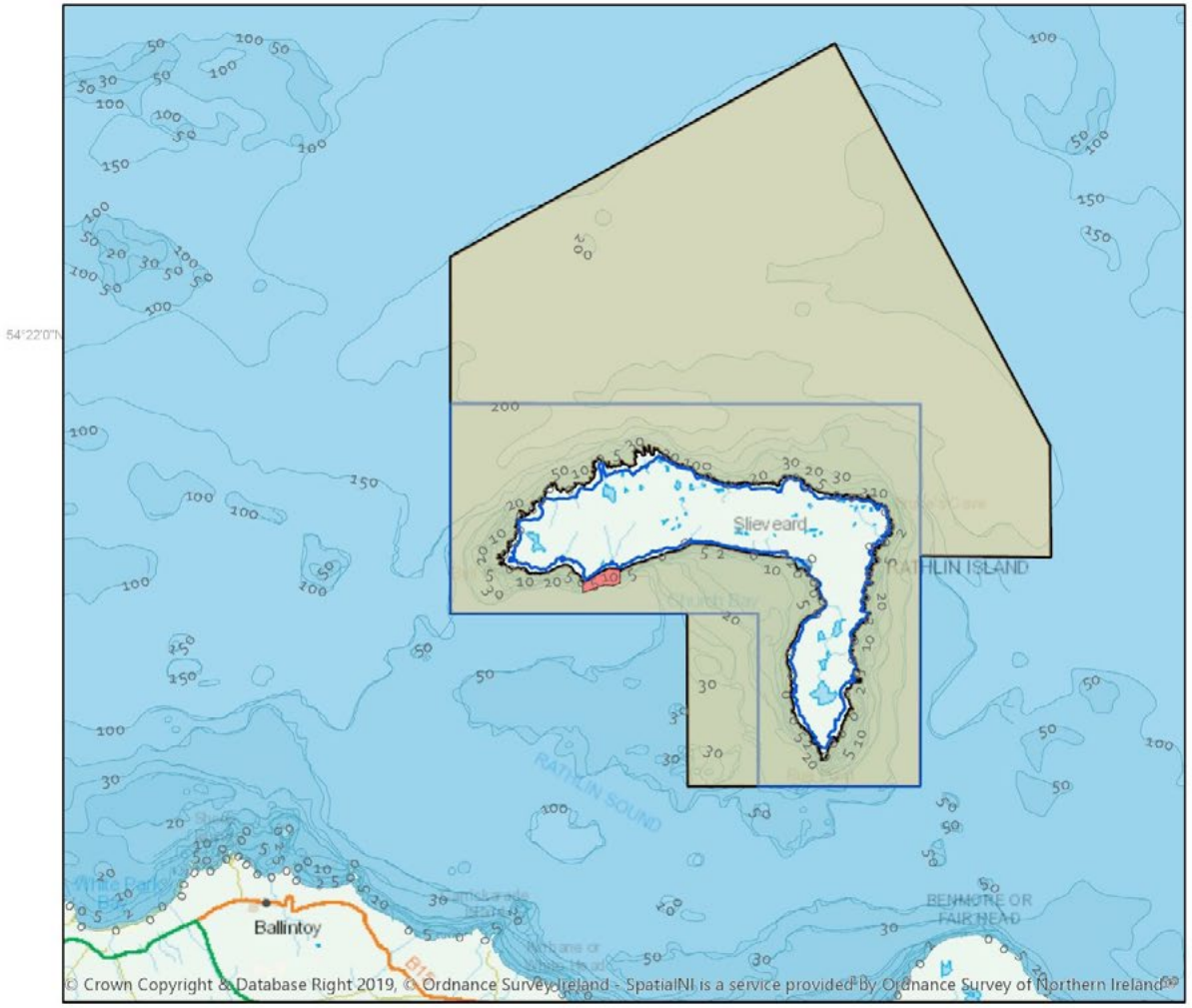
Current demersal mobile gear prohibition
SAC & SPA
Marine Conservation Zone
Proposed extension to demersal mobile gear prohibition

Scale: 1:95,847
Date: 25 February 2020

0 1 2 4 Kilometers

Department of Agriculture, Environment and Rural Affairs
www.daera-ni.gov.uk

Figure 6: Map displaying recommended management for static gear fishing in Rathlin Island SAC / SPA and Rathlin MCZ



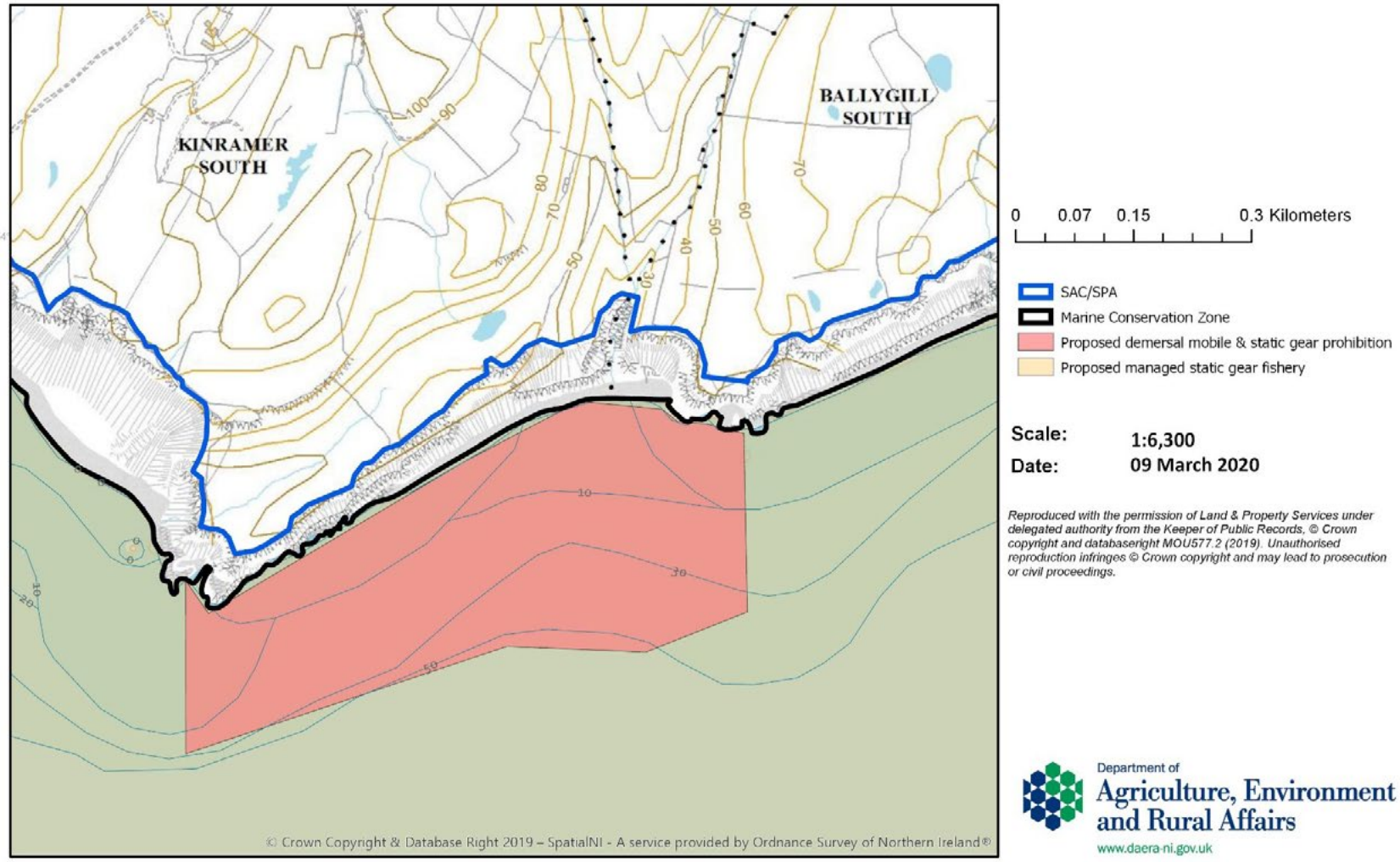
Proposed prohibition of static gear fishery
Proposed managed static gear fishery
SAC & SPA
Marine Conservation Zone

Scale: **1:116,411**
Date: **25 February 2020**

0 1.25 2.5 5 Kilometers

Department of Agriculture, Environment and Rural Affairs
www.daera-ni.gov.uk

Figure 7: Map displaying proposed static gear fishing prohibition zone in Rathlin Island SAC



Demersal mobile gear

As there is an existing demersal gear ban within Rathlin Island SAC, the level of demersal mobile gear fishing within the wider MPA is considered as low. The designated features of reef, fragile sponge and anthozoan communities on rocky outcrops, sandbanks, maerl beds, seagrass beds and deep sea bed are highly/moderately sensitive to demersal mobile gear fishing pressures and are considered to be at moderate risk of damage. The black guillemot feature also depends on these habitats for foraging. To protect these features, the Department's recommended option for demersal mobile gear is to remove these fishing pressures by extending the existing mobile gear prohibition in the SAC to include the MCZ features. In summary, the prohibition would apply to the entire MPA. The estimated value of loss of fishing opportunity is £2,468 per annum.

Static gear

The level of exposure to static gear fishing in Rathlin SAC is considered as low. The SAC includes highly diverse fragile sponge and Anthozoan communities as part of the Reef feature, which is considered to be highly sensitive to fishing activity[8,9,10,11]. To protect these features, the Department recommends the prohibition of static gear (and demersal mobile gear) fishing in this area. The estimated value of loss of fishing opportunity from this recommendation is £1,083 per annum.

As the other MPA features of reef, sandbanks, sea caves and black guillemot are considered to be moderately sensitive and are at a moderate level of risk from static gear fishing pressures, the Department recommends the introduction of a managed pot fishery to limit this level of risk. Further detail regarding the managed pot fishery proposals can be found at the end of the 'Formulation of the management options' section. There is no expected loss of fishing opportunity from the introduction of the managed pot fishery.

Consultation questions

Questions relating to Rathlin MPA are summarised below:

2.1. Do you support the recommended option, to extend the existing prohibition of demersal mobile gear fishing in the SAC, to include the full extent of the SAC and the MCZ?

2.2. Do you support the recommended option to prohibit static gear fishing, on the fragile sponge and anthozoan communities on rocky outcrops feature and to manage pot fishing throughout the remainder of the SAC and the MCZ?

2.3. Do you support the proposed measures to manage pot fishing, such as following best practice on biosecurity, mandatory vessel position monitoring, pot tagging, recording of bycatch and entanglements of protected species and the continued use of more selective gear?

8 https://www.marlin.ac.uk/assets/pdf/Fishing_EMS_Report_Final.pdf
9 https://www.marlin.ac.uk/habitats/detail/1081/deep_sponge_communities
10 Rathlin Dive Expedition Report, CEDaR, May 2019 - WEB.pdf (daera-ni.gov.uk)
11 https://www.marlin.ac.uk/assets/pdf/habitats/marlin_habitat_10_2019-03-12.pdf

2.4. Do you agree with the assessment of the current value of fishing within Rathlin Island SAC/SPA and Rathlin MCZ?

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

To respond to these questions please see online response form.

1.6.3 - Red Bay Special Area of Conservation

Red Bay Special Area of Conservation (SAC) is sited within the northern part of Red Bay, off the County Antrim village of Cushendun and is the largest embayment of the east Antrim coastline outside Larne Lough.

The site has been designated for the following qualifying feature:

- Sandbanks slightly covered by seawater at all times. These are composed of maerl, sub-fossil maerl, coarse sands, gravels and cobbles.

Figure A4 in Annex A displays a habitat map of Red Bay SAC and Table 7 outlines the qualifying marine feature, conservation objective and most recent condition status. Further detail on Red Bay SAC can be found at: https://www.daera-ni.gov.uk/protected-areas/red-bay-sac.

Table 7 Red Bay SAC feature, conservation objective and current condition status

Qualifying feature	Conservation objective	Current condition status
Sandbanks slightly covered by seawater at all time (including maerl beds).	Maintain	Favourable (2014-2019)

A summary of the recommended management options for consideration is provided in Table 8 below, and option maps are presented in Figures 8 and 9. Full details of the level of risk associated with demersal mobile gear (Table B5) and static gear (Table B6) and the action advised can be found in Annex B.

Table 8: Recommended options for Red Bay SAC

Fishing type	Recommended option
Demersal	Prohibition of demersal mobile gear use throughout entire SAC (Figure 8).
Static	Prohibition of static gear use throughout entire SAC. (Figure 9).

Figure 8: Map displaying recommended management for demersal mobile gear fishing in Red Bay SAC

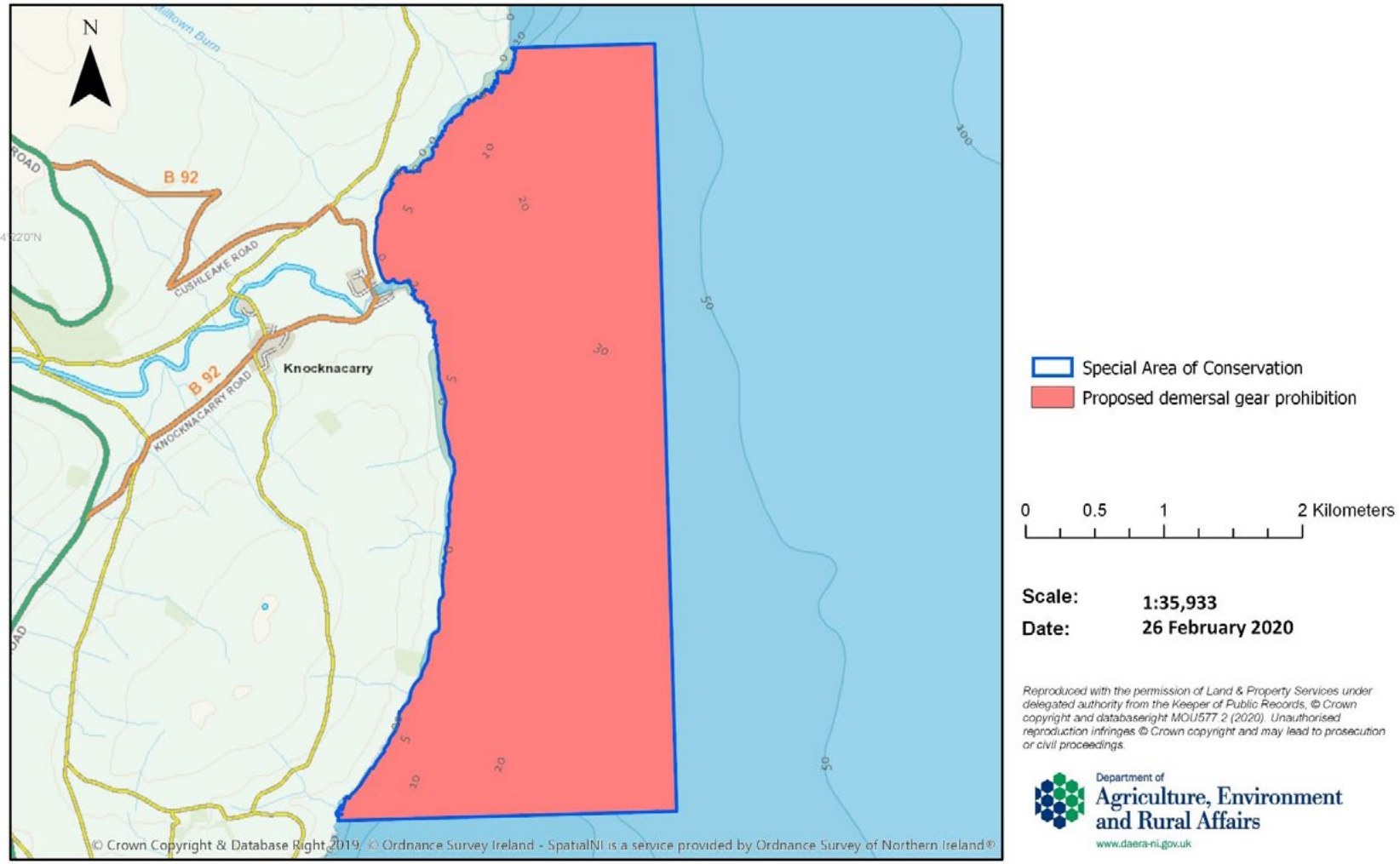
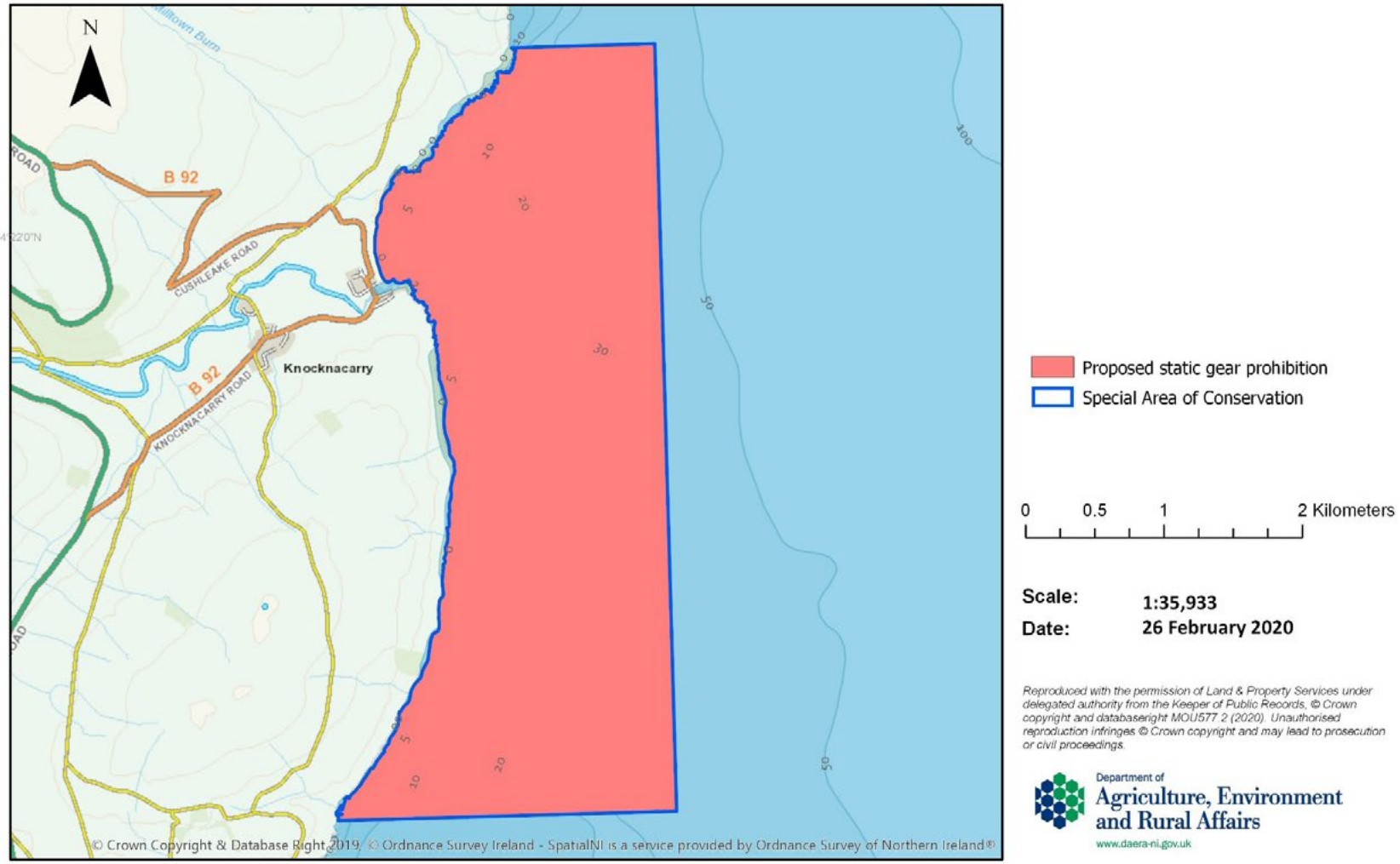


Figure 9: Map displaying recommended management for static gear fishing in Red Bay SAC



Value of the loss of fishing opportunity

The value of the loss of fishing opportunity from the recommended management options could not be calculated as no VMS data was recorded between 2012 and 2016 and no static gear use data is available.

Demersal mobile gear

The level of exposure to demersal mobile gear fishing in Red Bay SAC is considered as low. The designated sandbank feature which includes the sub-feature Maerl bed is considered to be moderately/highly sensitive to demersal mobile gear fishing pressures and are at moderate level of risk of damage. Therefore the Department recommends removing pressures from demersal mobile gear fishing in the site by prohibiting demersal mobile gear fishing throughout the entire SAC.

Static gear

The level of exposure to static gear fishing in Red Bay SAC is also considered as low, but as the designated Sandbank feature, which includes the sub-feature Maerl bed, is considered to be highly/moderately sensitive to static gear fishing pressures, the risk of damage is moderate. There is a zone approximately 200m between the shore and the Maerl bed feature that does not contain a designated feature but permitting potting within this narrow zone could lead to confusion and compliance issues. The Department therefore recommends total closure of the SAC to static gear.

Consultation questions

Questions relating to Red Bay SAC are summarised below:

3.1. Do you support the recommended option, to prohibit demersal mobile gear fishing throughout Red Bay SAC?

3.2. Do you support the recommended option to prohibit static gear fishing throughout the Red Bay SAC?

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

To respond to these questions please see online response form.

1.6.4 - Waterfoot Marine Conservation Zone

Waterfoot Marine Conservation Zone (MCZ) is located in a small embayment offshore from the village of Waterfoot (within the wider Red Bay area) on the east coast of County Antrim, Northern Ireland. The seabed in the MCZ encompasses mainly sand and gravel sediments.

The site has been designated for:

- Seagrass bed *(Zostera marina)* on subtidal (sublittoral) sand.

Zostera marina is a marine flowering plant (angiosperm) with long leaves up to 1-2m long. This seagrass species forms dense beds in sheltered bays, loughs and lagoons from the lower shore to approximately 5m depth.

Figure A5 in Annex A displays a habitat map of Waterfoot MCZ and Table 9 outlines the qualifying marine feature, conservation objective and most recent condition status. Further detail on Waterfoot MCZ can be found at: https://www.daera-ni.gov.uk/protected-areas/waterfoot-mcz.

Table 9: Waterfoot MCZ feature, conservation objective and current condition status

Qualifying feature	Conservation objective	Current condition status
Seagrass bed *(Zostera marina)* on subtidal sand.	Maintain	Favourable (2014-2019)

A summary of the recommended management options for consideration is provided in Table 10 below, and option maps are presented in Figures 10 and 11. Full details of the level of risk associated with demersal mobile gear (Table B7) and static gear (Table B8) and the action advised can be found in Annex B.

Table 10 Recommended options for Waterfoot MCZ

Fishing type	Recommended option
Demersal	Prohibition of demersal mobile gear use throughout entire MCZ (Figure 10).
Static	Prohibition of static gear use throughout entire MCZ (Figure 11).

Figure 10: Map displaying recommended management for demersal mobile gear fishing in Waterfoot MCZ

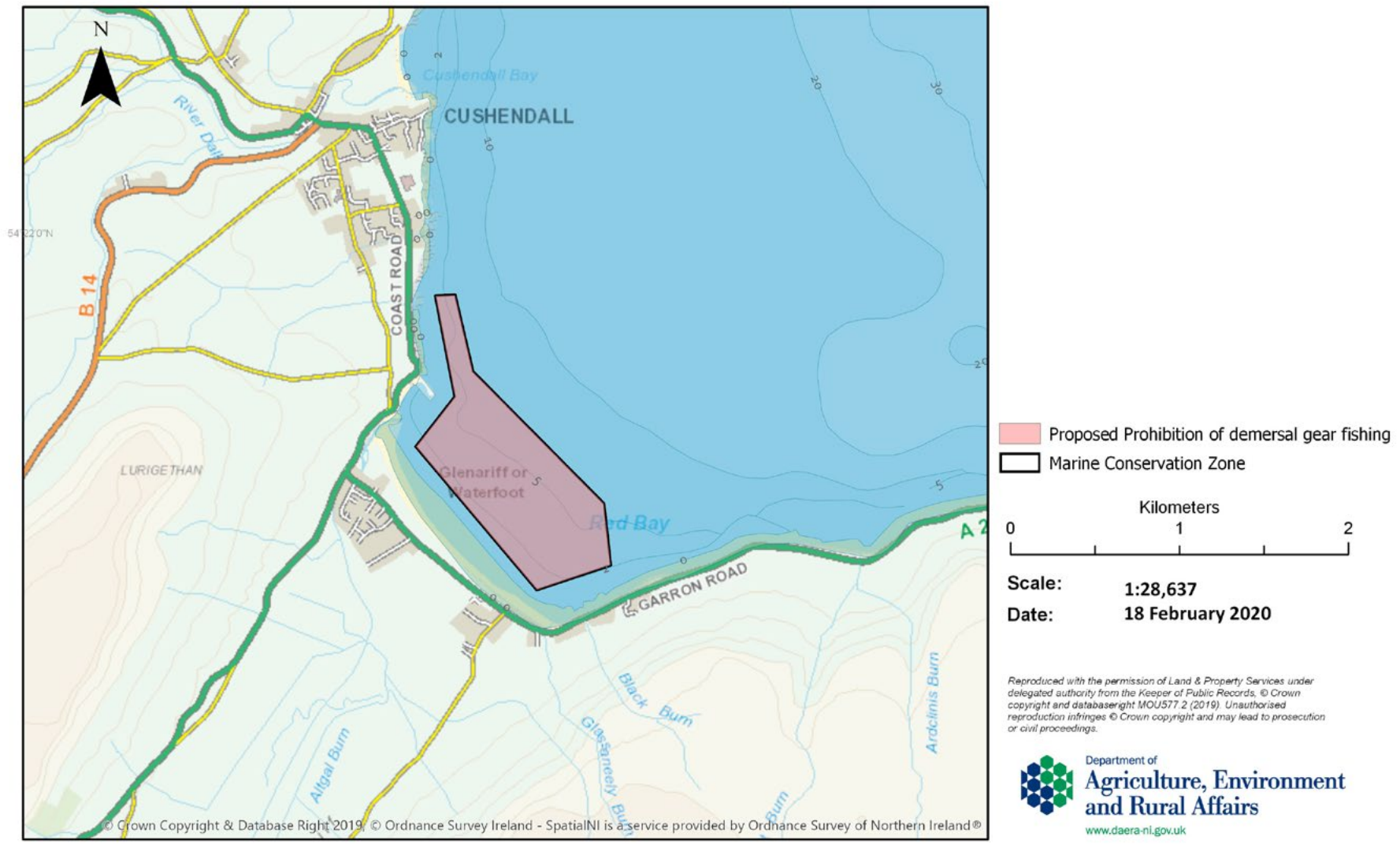
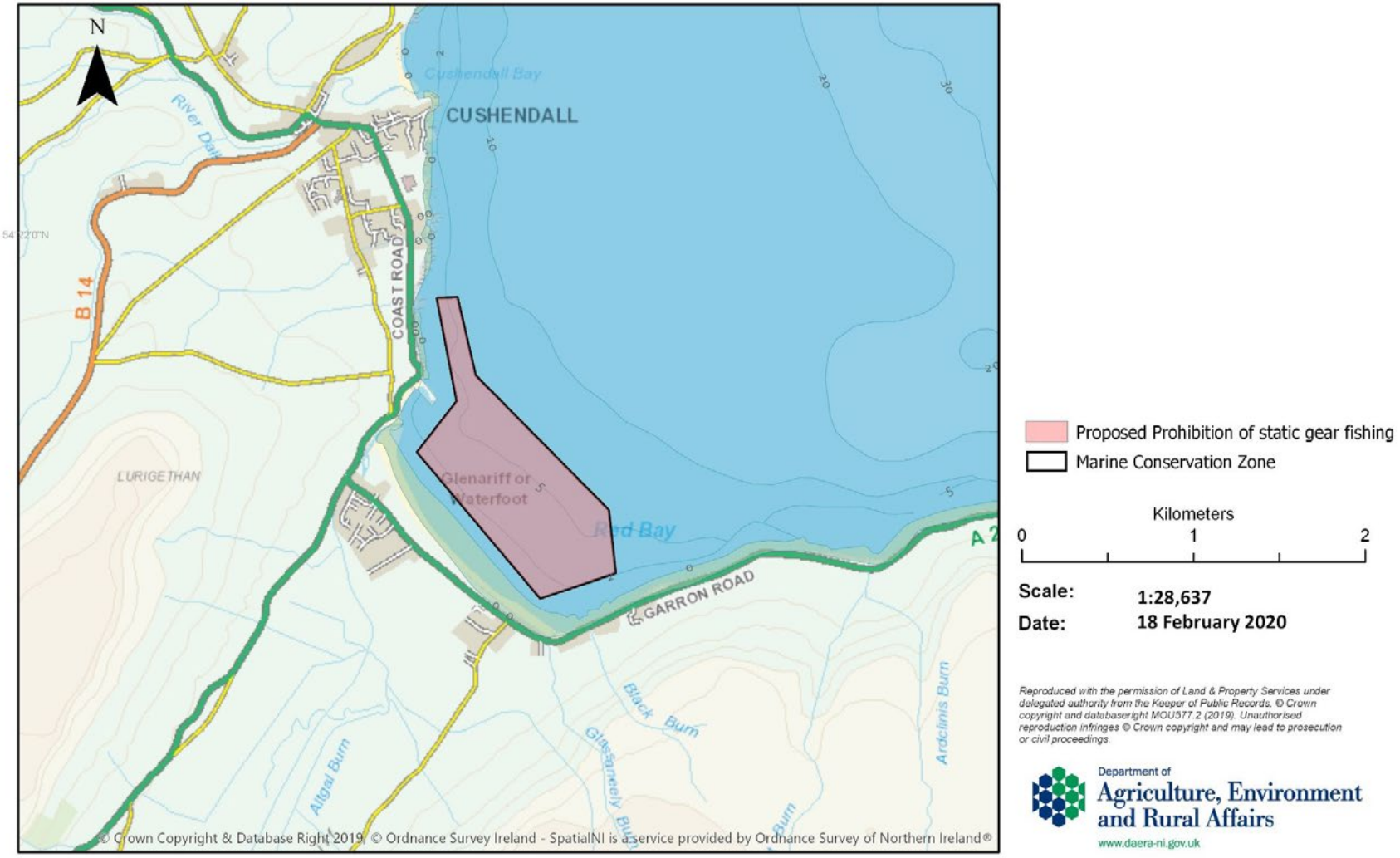


Figure 11: Map displaying recommended management for static gear fishing in Waterfoot MCZ



Value of the loss of fishing opportunity

The value of loss of fishing opportunity from the recommended management options could not be determined as no VMS data was recorded between 2012 and 2016 and no static gear use data is available.

Demersal mobile gear

The level of exposure to demersal mobile gear fishing in Waterfoot MCZ is considered to be low. However, as the designated feature Seagrass bed *(Zostera marina)* on subtidal (sublittoral) sand is present throughout the site and is moderately/highly sensitive to mobile gear pressures, there is a moderate level risk of damage. To protect the seagrass bed, the Department recommends the prohibition of demersal mobile gear fishing throughout the entire MCZ.

Static gear

The level of exposure to static gear fishing in Waterfoot MCZ is also considered as low. However, as the designated feature Seagrass bed *(Zostera marina)* on subtidal (sublittoral) sand is highly/moderately sensitive to static gear pressures, there is a moderate level risk of damage. To protect the seagrass bed, the Department recommends the prohibition of static gear fishing throughout the entire MCZ.

Consultation questions

Questions relating to Waterfoot MCZ are summarised below:

4.1. Do you support the recommended option, to prohibit demersal mobile gear fishing throughout Waterfoot MCZ?

4.2. Do you support the recommended option to prohibit static gear fishing throughout Waterfoot MCZ?

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

To respond to these questions please see online response form.

1.6.5 - The Maidens Special Area of Conservation

The Maidens Special Area of Conservation (SAC) is a group of rocky reefs detached from the coast, north east of Larne, Northern Ireland. The Maidens (or Hulin Rocks) are identified on the Admiralty Charts as a group of small rocky reefs either awash or just emergent. As well as the main reef plateaus of East and West Maiden, there are also four other reef areas that form part of the SAC: North Klondyke which is a large submerged reef or shoaling, approximately 9 km north of West Maiden; Outer Klondyke, a submerged pinnacle 6km east of West Maidens; an unnamed small deep reef 8km north west of West Maiden; and Hunter Rock 5km to the south of West Maiden.

The site has been designated for the following qualifying features:

- Reef;
- Sandbanks slightly covered by seawater at all times; and
- Grey seal.

The Maidens SAC encompasses a wide range of habitats of conservation importance, including extensive bedrock areas but also boulders, cobbles and pebbles on mixed sand and sandy gravel with maerl. This site is also a stronghold for several Northern Ireland Priority Species.

Figure A6 in Annex A displays a habitat map of the Maidens SAC and Table 11 outlines the qualifying marine features, conservation objectives and most recent condition status.

Further detail on The Maidens SAC can be found at: https://www.daera-ni.gov.uk/protected-areas/maidens-sac.

Table 11 The Maidens SAC features, conservation objectives and current condition status

Qualifying feature	Conservation objective	Current condition status (reporting period)
Reefs.	Maintain	Favourable (2014-2019)
Sandbanks which are slightly covered by sea water all the time (including maerl beds).	Maintain	Favourable (2008-2016)
Grey seal *Halichoerus grypus*.	Maintain	Favourable*

* Insufficient data but records indicate borderline Favourable

A summary of the recommended management options for consideration is provided in Table 12 below. Full details of the level of risk associated with demersal mobile gear (Table B9) and static gear (Table B10) and the action advised can be found in Annex B.

For the Maidens SAC two management options are presented, Option 1 refers to a zoned prohibition for demersal fishing, and defines the minimum level of management that the Department considers necessary to protect the designated features of the site. Option 2 refers to prohibition of demersal mobile gear throughout the entire SAC, and is the preferred option of the Department, due to the increased ecological and fisheries benefits the total closure would bring. Only one management option is proposed for static gear fishing. Maps detailing these options are provided in Figures 12-14.

Table 12: Recommended options for The Maidens SAC

Fishing type	Option 1 (Minimum)	Option 2 (Preferred)
Demersal	Prohibition of demersal mobile gear use on reef and maerl features. (Figure 12).	Prohibition of demersal mobile gear use throughout entire SAC. (Figure 13).
Static	Prohibition of static gear use on the maerl feature; and managed pot fishery throughout the rest of the SAC. (Figure 14).	

The average annual landings from the SAC and the value of loss of fishing opportunity from the two proposed management options are displayed in Table 13, to allow comparison.

Table 13: Value of the loss of fishing opportunity from management options for the Maidens SAC

Fishing type	Average annual value of landings from SAC	Option 1 (Minimum)		Option 2 (Preferred)	
		Summary	Value of the loss of fishing opportunity	Summary	Value of the loss of fishing opportunity
Demersal	£6,155	Prohibition of demersal mobile gear use on reef and maerl features.	£1,845	Prohibition of demersal mobile gear use throughout entire SAC.	£6,155
Static	Insufficient data available.	Prohibition of static gear use on the maerl feature and managed pot fishery throughout the rest of the SAC.	Insufficient data available.		

Figure 12: Map displaying Option 1 - minimum management for demersal mobile gear fishing in the Maidens SAC

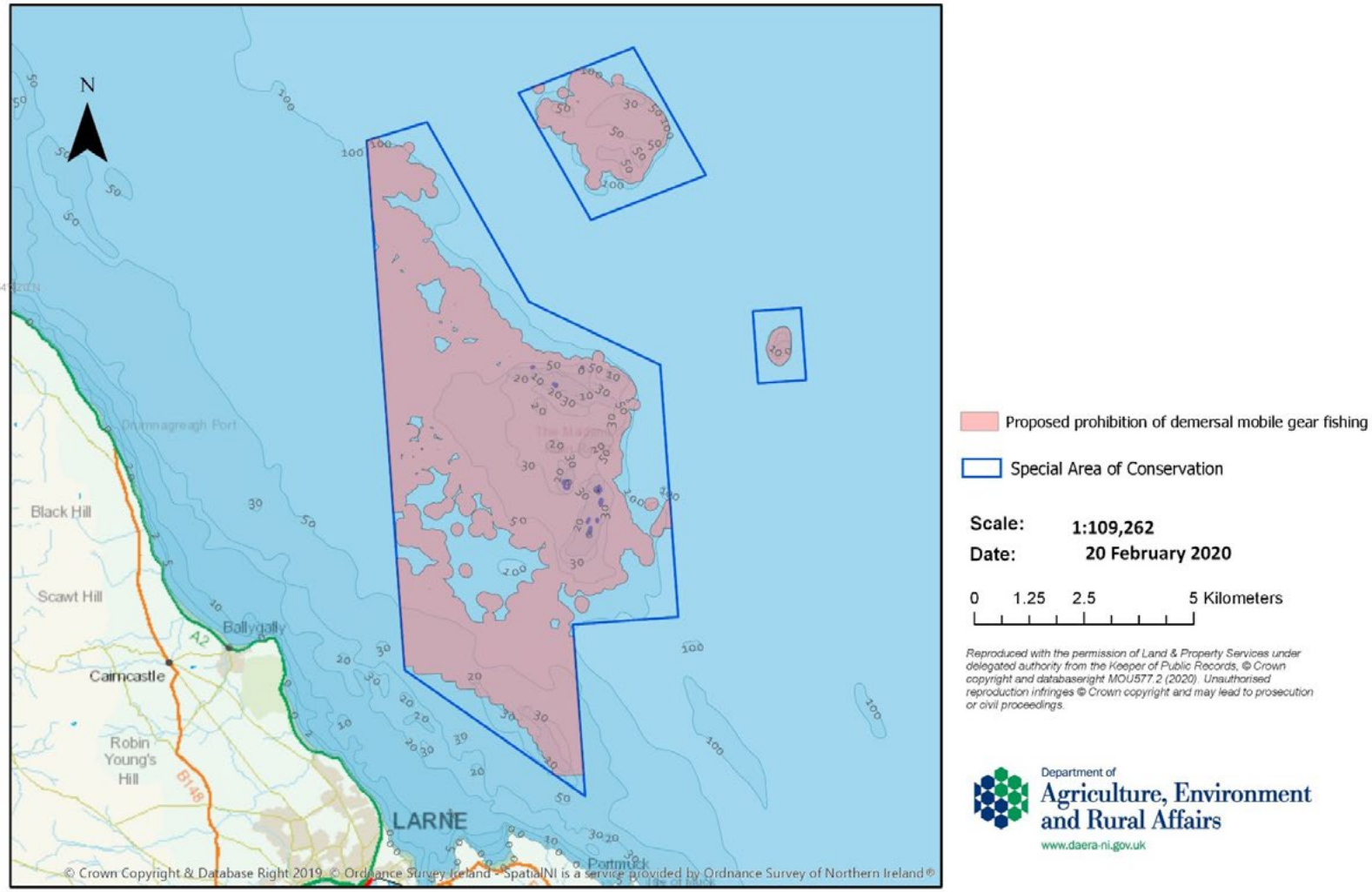


Figure 13: Map displaying Option 2 - preferred management for demersal mobile gear fishing in the Maidens SAC

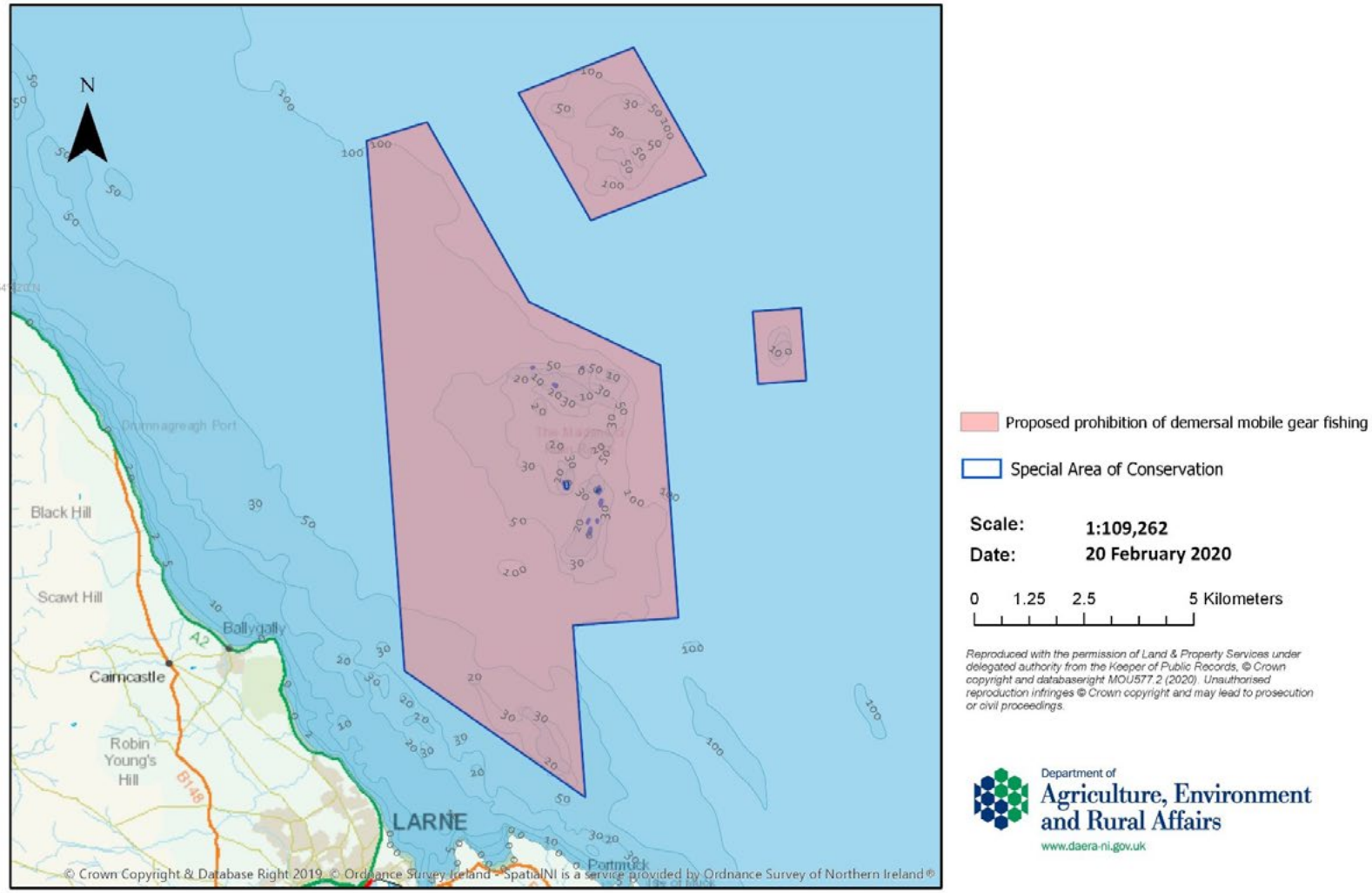
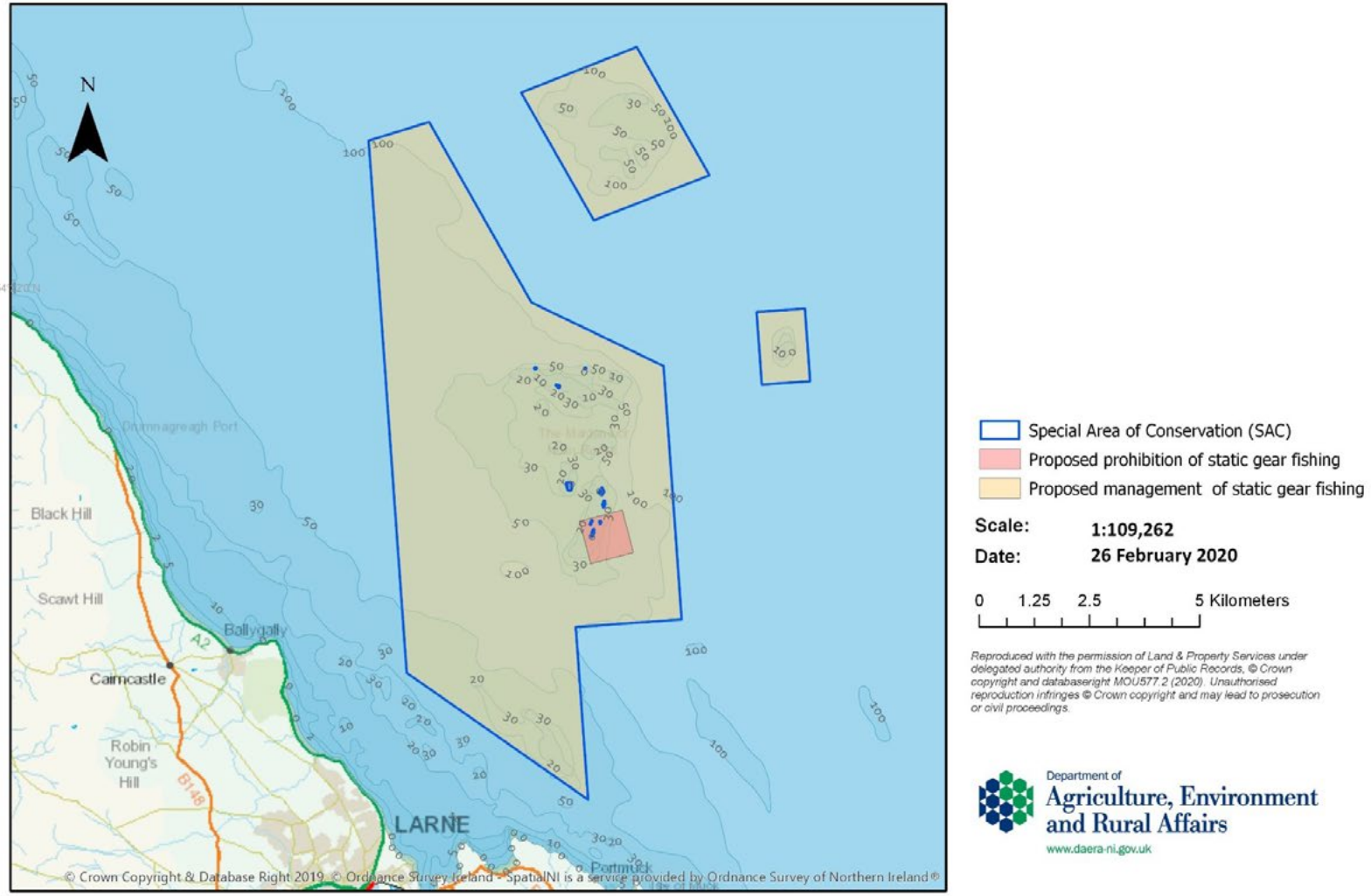


Figure 14: Map displaying recommended management for static gear fishing in the Maidens SAC



Demersal mobile gear

The level of demersal mobile gear fishing within the Maidens SAC is considered to be moderate. As the designated features, reef and sandbanks - maerl beds, are moderately/highly sensitive to mobile gear fishing pressures, the designated features are at a high level of risk of damage. To mitigate this risk two management options are presented for consideration.

Option 1 - the minimum requirement, will prohibit mobile gear fishing within areas containing the designated features. The estimated value of the loss of fishing opportunity from this option is £1,845 per annum. The second option for consideration is a whole site approach and would involve the prohibition of demersal mobile gear use throughout the SAC. The estimated value of the loss of fishing opportunity from option 2 is £6,155 per annum.

The second option is preferred by the Department as the additional value of £4,310 per annum to close the whole SAC to demersal mobile gear use, is considered to be reasonable, in comparison to the ecosystem benefits that total closure of the SAC will bring. These benefits include a reduction in physical damage to the seabed which will facilitate habitat recovery. This could help fish stocks outside the SAC and will also contribute to the achievement of the conservation objectives of the site.

Static gear

The level of exposure to static gear fishing in The Maidens SAC is considered as low. However, as the sandbank-maerl bed feature is highly sensitive and is considered to be at moderate risk from the physical pressures associated with static gear fishing, the Department recommends removing this risk by prohibiting static gear fishing within the maerl bed zone of the SAC. Some limited observer data was available for vessels using static gear in the Maidens SAC, but this was not sufficient to determine the value of the loss of fishing opportunity from this option.

The MarESA assessment indicated that reef features are highly sensitive to biological pressures i.e. the accidental introduction of invasive species from the transfer of static gear fishing from other areas. However, due to the localised nature of the static gear fishing activities within the SAC, the Department considers the likelihood of this occurring to be low, but will issue guidance on best practice for biosecurity, to mitigate the high level of risk. As the designated reef features are considered to be moderately sensitive and at a moderate risk of damage from static gear fishing, the Department recommends the introduction of a managed pot fishery to limit this level of risk. Further detail regarding the managed pot fishing proposals can be found at the end of the ‘formulation of management options’ section. There is no expected loss of fishing opportunity from the introduction of the managed pot fishery.

Grey seal

At present there is no evidence to suggest that fishing activities within MPAs in the Northern Ireland inshore region are having an adverse impact on the grey seal features. Further work on marine mammal sensitivities is currently being developed through the Marine Line Information Network (MarLIN)[12].

Consultation questions

Questions relating to The Maidens SAC are summarised below:

5.1. Do you support the preferred option (No 2), to prohibit demersal mobile gear fishing throughout the Maidens SAC?

5.2. If you answered no to question 5.1, do you support the minimum option (No.1) to prohibit demersal mobile gear fishing on reef and maerl features within Maidens SAC?

5.3. Do you support the recommended option to prohibit static gear fishing, on the maerl feature and to manage pot fishing throughout the remainder of Maidens SAC?

5.4. Do you support the proposed measures to manage pot fishing, such as following best practice on biosecurity, mandatory vessel position monitoring, pot tagging, recording of bycatch and entanglements of protected species and the continued use of more selective gear?

5.5. Do you agree with the assessment of the current value of fishing within The Maidens SAC?

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

To respond to these questions please see online response form.

12 https://www.marlin.ac.uk

1.6.6 - Outer Belfast Lough Marine Conservation Zone

Belfast Lough is a large sea inlet situated at the mouths of the Lagan, Farset and Blackstaff Rivers on the eastern coast of Northern Ireland. Outer Belfast Lough Marine Conservation Zone (MCZ) is located within Northern Ireland's busiest sea-lough. Home to a variety of species, the Outer Lough encompasses a wide range of habitats such as subtidal sand and subtidal mixed sediments, sediment dominated bays and rocky shores.

The MCZ has been designated for the following qualifying features:

- Subtidal (sublittoral) sand; and
- The presence of a well-established population of Ocean quahog *(Arctica islandica)* that lives buried in the sediment.

The Ocean quahog is a large suspension feeding bivalve mollusc that can reach over 400 years in age. The oldest recorded Ocean quahog from Belfast Lough was approximately 220 years old. This species can survive for long periods of time buried in the sediment, enabling it to avoid predation.

Figure A7 in Annex A displays a habitat map of Outer Belfast Lough MCZ and Table 14 outlines the qualifying marine features, conservation objectives and most recent condition status. Further detail on Outer Belfast Lough MCZ can be found at: https://www.daera-ni.gov.uk/protected-areas/outer-belfast-lough-mcz.

Table 14 Belfast Lough MCZ features, conservation objectives and current condition status

Qualifying feature	Conservation objective	Current condition status (reporting period)
Subtidal (sublittoral) sand.	Recover	Unfavourable (2014-2019)
Ocean quahog *(Arctica islandica).*	Recover	Unfavourable (2014-2019)

A summary of the recommended management options for consideration is provided in Table 15 below, and option maps are presented in Figures 15 and 16. Full details of the level of risk associated with demersal mobile gear (Table B11) and static gear (Table B12) and the action advised can be found in Annex B.

Table 15 :Recommended options for Outer Belfast Lough MCZ

Fishing type	Recommended option
Demersal	Prohibition of demersal mobile gear throughout MCZ. (Figure 15).
Static	Managed pot fishery throughout MCZ. (Figure 16).

The average annual landings from the MCZ and the value of loss of fishing opportunity from the proposed management options are displayed in Table 16, to allow comparison.

Table 16: Value of the loss of fishing opportunity from recommended management options for Outer Belfast Lough MCZ

Fishing type	Average annual value of landings from MCZ	Recommended option	Value of the loss of fishing opportunity
Demersal	£3,371	Prohibition of demersal mobile gear use throughout MCZ.	£3,371
Static	Insufficient data available.	Managed pot fishery throughout MCZ.	£0

Figure 15: Map displaying recommended management for demersal mobile gear fishing in Outer Belfast Lough MCZ

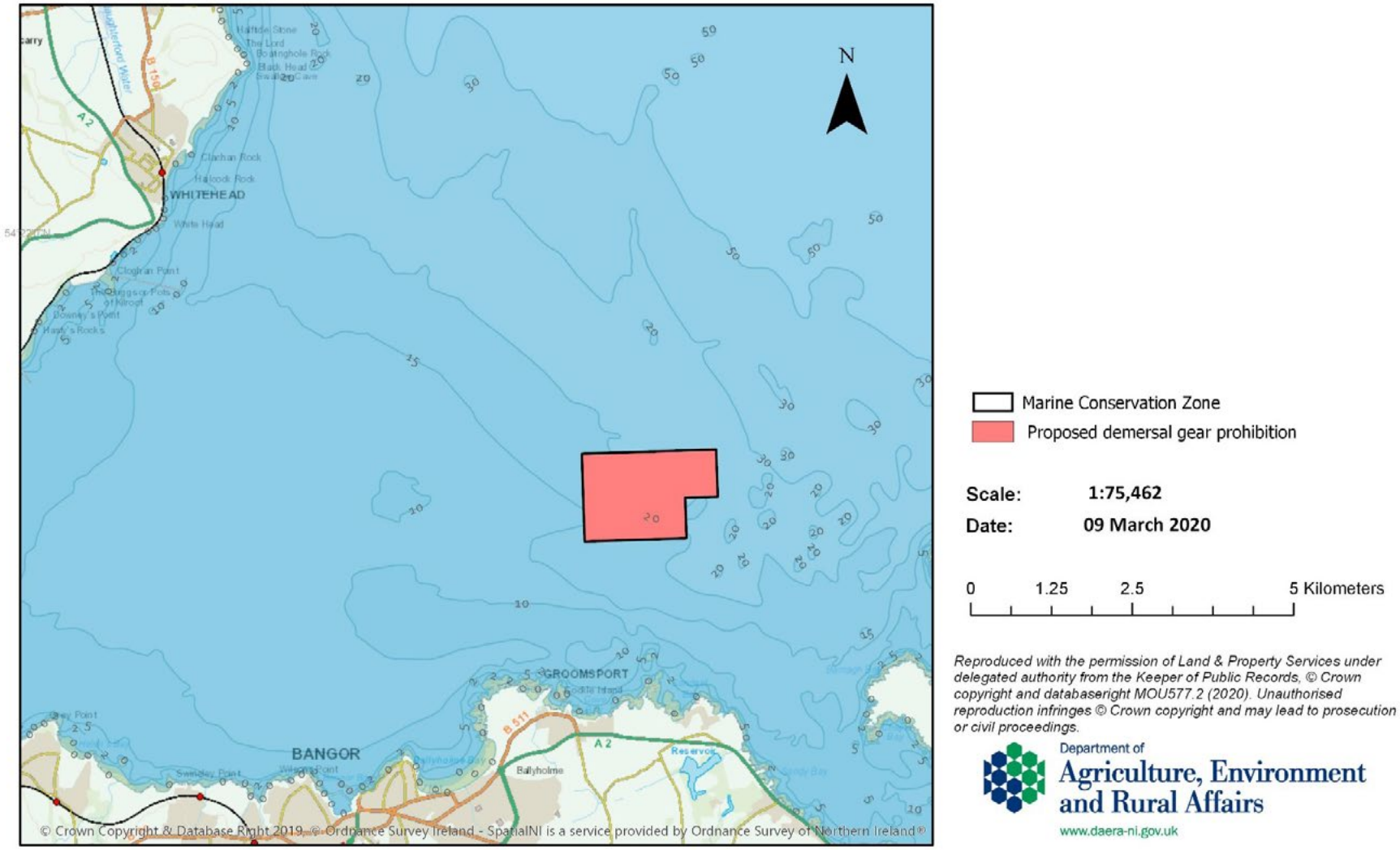
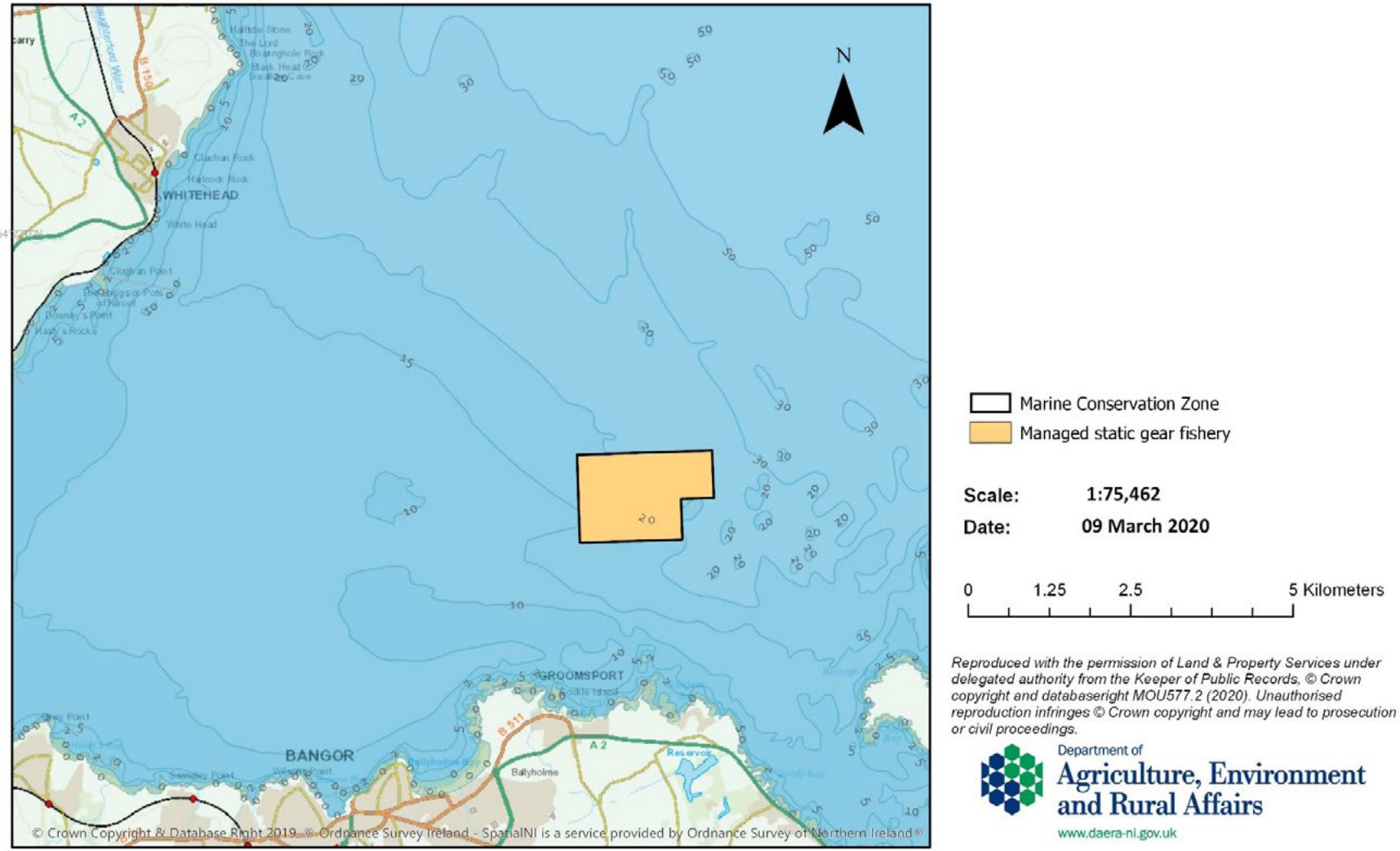


Figure 16: Map displaying recommended management for static gear fishing in Outer Belfast Lough MCZ



Demersal mobile gear

The level of demersal mobile gear fishing within Outer Belfast Lough MCZ is considered to be moderate for dredging and low for trawl fishing activities. As the designated feature Ocean quahog *(Arctica islandica)* and its supporting subtidal (sublittoral) sand habitat are present throughout the site and are highly sensitive to demersal mobile gear fishing pressures, the Department recommends removing these pressures by prohibiting demersal mobile gear fishing within the MCZ. The estimated value of the loss of fishing opportunity from this prohibition is £3,371 per annum.

Static gear

The level of static gear fishing activity taking place in Belfast Lough MCZ is unknown, but has been estimated as low. As the designated feature Ocean quahog *(Arctica islandica)* and its supporting subtidal (sublittoral) sand habitat are moderately sensitive to static gear fishing pressures, the risk of damage is at moderate level. To mitigate this risk the Department recommends the introduction of a managed static gear fishery throughout the MCZ. Further detail regarding the managed static gear fishing proposals can be found at the end of the 'formulation of management options' section. There is no expected loss of fishing opportunity from the introduction of the managed pot fishery.

Consultation questions

Questions relating to Outer Belfast Lough MCZ are summarised below:

6.1. Do you support the recommended option, to prohibit demersal mobile gear fishing throughout Outer Belfast Lough MCZ?

6.2. Do you support the recommended option to manage pot fishing throughout the Outer Belfast Lough MCZ?

6.3. Do you support the proposed measures to manage pot fishing, such as following best practice on biosecurity, mandatory vessel position monitoring, pot tagging, recording of bycatch and entanglements of protected species and the continued use of more selective gear?

6.4. Do you agree with the assessment of the current value of fishing within Outer Belfast Lough MCZ?

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

To respond to these questions please see online response form.

1.6.7 - Strangford Lough Special Area of Conservation/Special Protection Area and Marine Conservation Zone

The Strangford MPA contains a Special Area of Conservation (SAC), a Special Protection Area (SPA) and a Marine Conservation Zone (MCZ). Further information on each designated area is provided below.

SAC

Strangford Lough is a large marine inlet with a broad shallow basin and a deep central channel connected to the Irish Sea by the Strangford Narrows. It has been designated a marine SAC as it contains habitat types and/or species which are rare or threatened within a European context.

The site has been designated for the following qualifying features:

- large shallow inlets/bays and coastal lagoons;
- reef;
- mudflats and sandflats not covered by seawater at low tide;
- coastal lagoon, and
- harbour (common) seal *(Phoca vitulina)*.

Further detail on Strangford Lough SAC can be found at:
https://www.daera-ni.gov.uk/protected-areas/strangford-lough-sac.

SPA

Strangford Lough SPA is Northern Ireland's most important coastal site for wintering waterfowl, and it is important for breeding terns. The SPA boundary is entirely coincident with the boundary of the SAC.

Further detail on Strangford Lough SPA can be found at:
https://www.daera-ni.gov.uk/protected-areas/strangford-lough-spa.

A number of fisheries management measures already exist within Strangford Lough:

- The Inshore Fishing (Prohibition of Fishing and Fishing Methods) (Amendment) Regulations (Northern Ireland) 2003) prohibited the use of mobile fishing gear in Strangford Lough.
- The Strangford Lough (Sea Fishing Exclusion Zones) Regulations (Northern Ireland) 2012) created no fishing zones to protect Horse mussel beds.
- A pot fishing permit scheme was introduced for the remainder of Strangford Lough in 2014.
- The Department is supporting a three year inshore Vessel Monitoring System (iVMS) pilot project in Strangford Lough.

MCZ

Strangford Lough Marine Nature Reserve (MNR) was re-designated as Northern Ireland's first MCZ on the introduction of the Marine Act (Northern Ireland) 2013.The MCZ boundary is larger than the SAC/SPA boundary extending to the outer area of Strangford Lough, with a difference of 16.51km^2.

Figure A8 in Annex A displays a habitat map of Strangford Lough MCZ, outside the SAC.

The Department is currently working on the development of proposed MCZ (pMCZ) features and will consult with stakeholders on these.

Three out of the four broad scale habitats present within the area outside the Strangford Lough SAC, within the MCZ boundary, were identified as gaps in the MPA network assessment in Northern Ireland [13]. These include sublittoral coarse sediment and small areas of moderate and low energy circalittoral rock.

Although work to refine the list of pMCZ features is still ongoing, the proposed list will include Priority Marine Features (PMFs) present within these broad scale habitats, such as tide-swept channels and subtidal gullies. Additionally, important blue carbon habitat features such as kelp habitat are also present in this area.

To protect the features present, the Department recommends extending the existing prohibition of demersal fishing to incorporate the full extent of the MCZ. A managed pot fishery throughout the MCZ area, located outside of the SAC is also recommended.

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

At present, the biotope evidence available for that area does not provide enough resolution to carry out a full risk assessment associated with demersal mobile and static gear. However, precautionary approach has been taken, based on the known occurrence of important features. A summary of the recommended management options for consideration is provided in Table 17, and a map of the options is presented in Figures 17 and 18.

Table 17: Recommended Options for Strangford Lough MCZ, outside the SAC

Fishing type	Recommended option
Demersal	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). (Figure 17).
Static	Managed pot fishery within the MCZ area, outside the SAC (MCZ outside SAC) (Figure 18).

The average annual landings from Strangford Lough MCZ, from the area outside the SAC boundary, and value of the loss of fishing opportunity from the recommended management options is displayed in Table 18, to allow comparison.

Table 18: Value of the loss of fishing opportunity from recommended options for Strangford Lough MCZ, outside the SAC

Fishing type	Average annual value of landings from area	Recommended option	Value of the loss of fishing opportunity
Demersal	£208	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).	£208
Static	Insufficient data available.	Managed pot fishery within the MCZ area, outside the SAC (MCZ outside SAC).	£0

Figure 17: Map displaying recommended management for demersal mobile gear fishing in Strangford Lough MCZ, outside the SAC

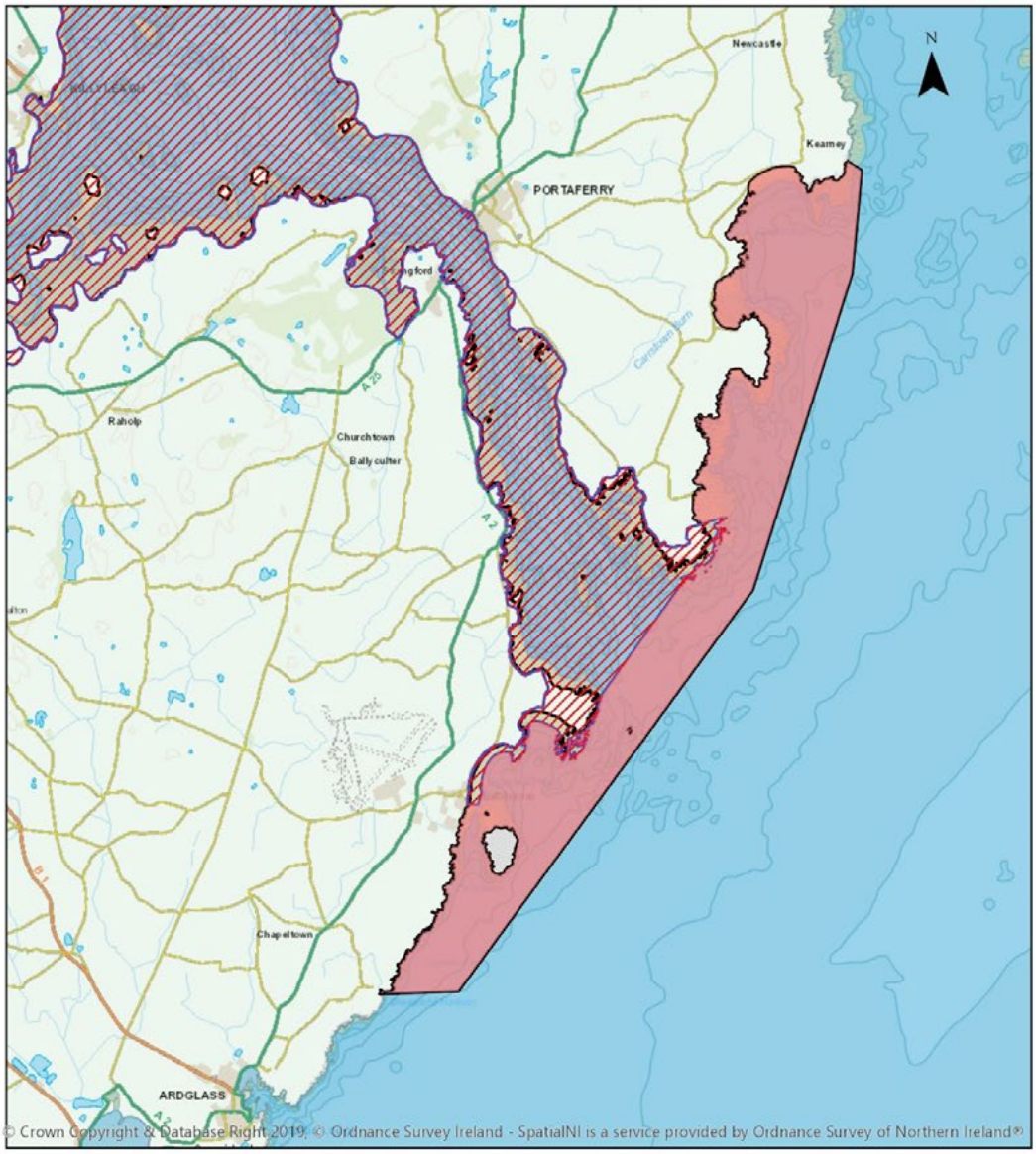
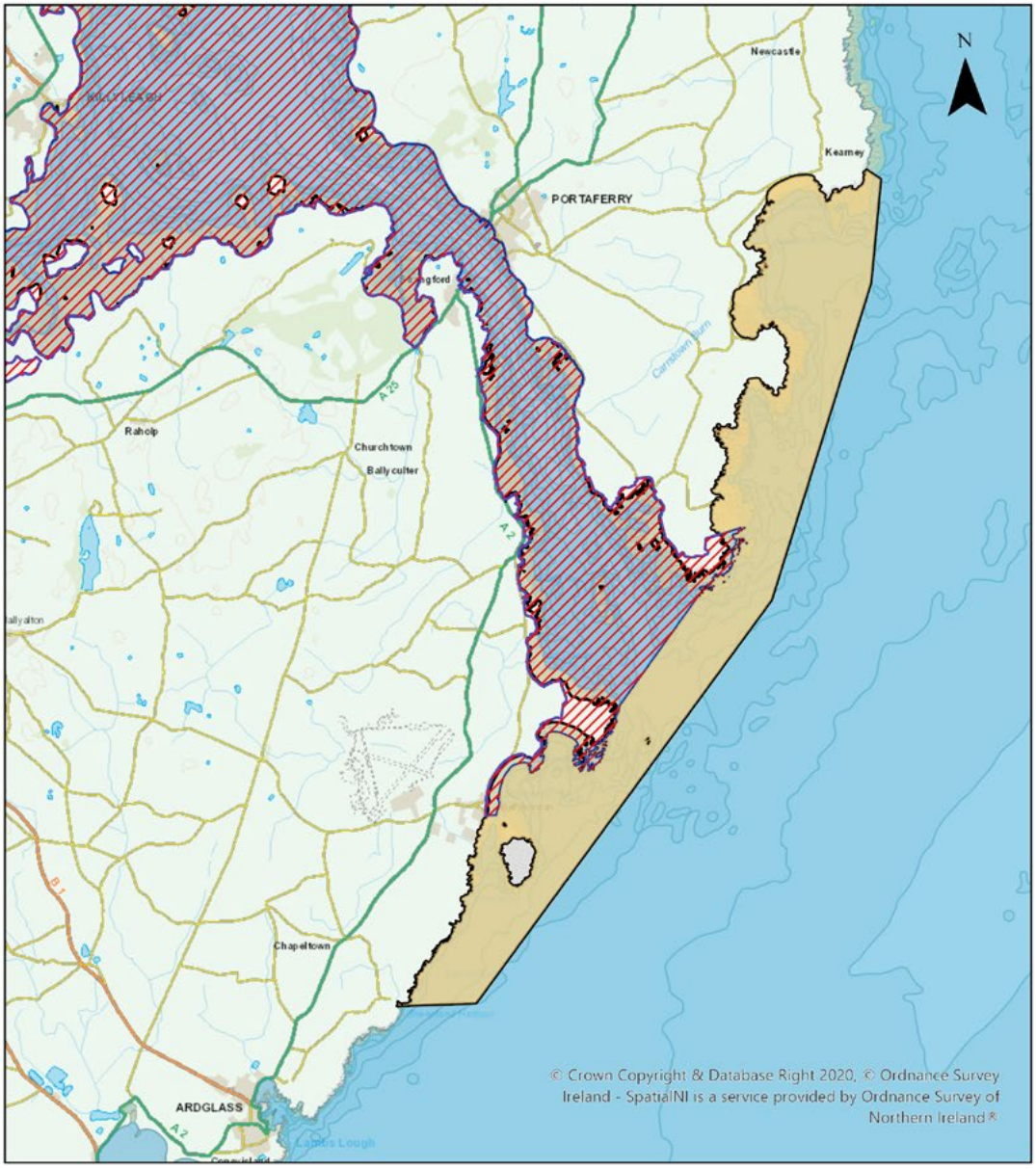


Figure 18: Map displaying recommended management for static gear fishing in Strangford Lough MCZ, outside the SAC



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Demersal mobile gear

As there is an existing demersal gear ban within Strangford Lough SAC, the level of demersal mobile gear fishing within the wider MPA is considered as low. Some of the non-designated habitat features present in the MCZ area outside the SAC, are considered gaps in the current network of MPAs and therefore should be considered for protection.

To protect these features, the Department's recommended option for demersal mobile gear is to remove these fishing pressures by extending the existing mobile gear prohibition in the SAC to include the MCZ features outside the SAC boundary. In summary, the prohibition would apply to the entire MPA. The estimated value of the loss of fishing opportunity is £208 per annum.

Static gear

Existing regulations will remain in place for the SAC. The level of exposure to static gear fishing in the Strangford Lough MPA, including the outer area of the MCZ, is considered as low. Some of the non-designated habitat features present in the MCZ area outside the SAC, are not represented in the current network of MPAs and therefore should be considered for protection.

To protect these features, the Department recommends the introduction of a managed pot fishery to limit the level of risk. Further detail regarding the managed pot fishery proposals can be found at the end of the 'Formulation of the management options' section. There is no expected loss of fishing opportunity from the introduction of the managed pot fishery.

Consultation questions

Questions relating to Strangford Lough MPA are summarised below:

7.1. Do you support the recommended option, to extend the existing prohibition of demersal mobile gear fishing in the SAC, to include the full extent of the MCZ?

7.2. Do you support the proposed measures to manage pot fishing, such as following best practice on biosecurity, mandatory vessel position monitoring, pot tagging, recording of bycatch and entanglements of protected species and the continued use of more selective gear within the MCZ area outside the SAC?

7.3. Do you agree with the assessment of the current value of fishing within the MCZ area, outside the SAC?'

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

To respond to these questions please see online response form.

1.6.8 - Murlough Special Area of Conservation

The site adjoins Dundrum Bay and includes the shallow waters of the Bay itself, of importance as the largest area of shallow sub-littoral sandbanks in Northern Ireland. The inter-tidal sands and muds are also extensive, and the beach area at Ballykinler is important as a haul-out for harbour (common) seals. The terrestrial element comprises the major dune systems of Murlough and Ballykinler, together with the relatively intact low dunes and ridges within Royal County Down golf club. These host a range of dune communities, but most important, are the dune heath and grey dune grasslands.

The site has been designated for the following qualifying features:

- Atlantic decalcified fixed dunes *(Calluno-Ulicetea)*;
- Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)*;
- Dunes with Salix repens spp. Argentea *(Salicion arenariae)*;
- Embryonic shifting dunes;
- Fixed dunes with herbaceous vegetation (grey dunes);
- Mudflats and sandflats not covered by seawater at low tide;
- Sandbanks which are slightly covered by seawater all the time;
- Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes);
- Marsh Fritillary *(Euphydryas aurinia)*; and
- Harbour (common) Seal *(Phoca vitulina)*.

Figure A9 in Annex A displays a habitat map of Murlough Special Area of Conservation (SAC) and Table 19 outlines the qualifying marine features, conservation objectives and most recent condition status. Further detail on Murlough SAC can be found at: https://www.daera-ni.gov.uk/publications/reasons-designation-special-area-conservation-murlough.

Within Dundrum Bay, trawling and seine netting are currently prohibited through the The Inshore Fishing (Prohibition of Fishing and Fishing Methods) Regulations (Northern Ireland) 1993 within the sea area to the landward side of an imaginary line drawn from the Chapel (near Miner's Town, County Down) at Rossglass Bay to Roaring Rock.

Table 19: Murlough SAC features, conservation objectives and current condition status. Only fully marine features are listed here.

Qualifying feature	Conservation objective	Current condition status (reporting period)
Harbour (common) seal	Maintain	Favourable (2014-2019)
Sandbanks which are slightly covered by seawater all the time.	Maintain	Favourable (2014-2019)
Mudflats and sandflats not covered by seawater at low tide*.	Maintain	Favourable (2014-2019)

*This feature is not considered further as this is an intertidal habitat.

A summary of the recommended management options for consideration is provided in Table 20 below, and option maps are presented in Figures 19 and 20. Full details of the level of risk associated with demersal mobile gear (Table B13) and static gear (Table B14) and the action advised can be found in Annex B.

Table 20: Recommended option for Murlough SAC

Fishing type	Recommended option
Demersal	Maintain existing Dundrum Bay Prohibition Regulations* and extend demersal mobile gear prohibition to the SAC boundary to protect features. (Figure 19).
Static	Managed pot fishery throughout SAC. (Figure 20).

*The Inshore Fishing (Prohibition of Fishing and Fishing Methods) Regulations (Northern Ireland) 1993.

Figure 19: Map displaying recommended management for demersal mobile gear fishing in Murlough SAC

Special Area of Conservation
Proposed extension to demersal mobile gear prohibition
Current mobile demersal gear prohibition

0 3.25 6.5 13 Kilometers

Scale: 1:175,568
Date: 28 February 2020

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Figure 20: Map displaying recommended management for static gear fishing in Murlough SAC

The average annual landings from the SAC and the value of loss of fishing opportunity from the proposed management options are displayed in Table 21, to allow comparison.

Table 21: Value of the loss of fishing opportunity from recommended management options for Murlough SAC

Fishing type	Average annual value of landings from MPA	Recommended option	Value of the loss of fishing opportunity
Demersal	£712	Maintain existing Murlough Prohibition Regulations* and extend demersal mobile gear prohibition to the SAC boundary to protect features.	£712
Static	£700	Managed pot fishery throughout SAC.	£0

Demersal mobile gear

The level of demersal mobile gear fishing within Murlough SAC is considered to be low, mainly due to the existing demersal mobile gear ban, which applies to a large area of the SAC. As the designated sandbank features are highly/moderately sensitive to demersal mobile gear fishing pressures, the risk of damage is moderate. To mitigate this risk, the Department recommends removing these pressures by extending the existing demersal mobile gear ban to include the entire SAC. The estimated value of loss of fishing opportunity from this prohibition is £712 per annum.

Static gear

The level of static gear fishing activity taking place in Murlough SAC is considered as low. As the designated sandbank features are moderately sensitive to static gear fishing pressures, the risk of damage is moderate. To mitigate this risk the Department recommends the introduction of a managed static gear fishery throughout the SAC. Further detail regarding the managed static gear fishing proposals can be found at the end of the 'formulation of management options' section. There is no expected loss of fishing opportunity from the introduction of the managed pot fishery.

Harbour Seals

At present, there is no evidence to suggest that fishing activities within MPAs in the Northern Ireland inshore region are having an adverse impact on the harbour (common) seal feature. Tools to assess sensitivities of marine mammals are currently being developed through Marine Line Information Network (MarLIN)[14].

Consultation questions

Questions relating to Murlough SAC are summarised below:

8.1. Do you support the recommended option, to extend the existing prohibition of demersal mobile gear fishing in Dundrum Bay, to include Murlough SAC?

8.2. Do you support the recommended option to manage pot fishing throughout Murlough SAC?

8.3. Do you support the proposed measures to manage pot fishing, such as following best practice on biosecurity, mandatory vessel position monitoring, pot tagging, recording of bycatch and entanglements of protected species and the continued use of more selective gear?

8.4. Do you agree with the assessment of the current value of fishing within Murlough SAC?

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

To respond to these questions please see online response form.

14 https://www.marlin.ac.uk

1.6.9 - Carlingford Lough Marine Conservation Zone

Carlingford Lough is a narrow and shallow sea lough that lies on the east coast of Ireland, located at the border of Northern Ireland and the Republic of Ireland. The Marine Conservation Zone (MCZ) is located off the northern shore and lies north of the navigation channel in the inner part of the Lough.

The MCZ has been designated for the following qualifying features:

- Habitat *Philine quadripartita* (White lobe shell, previously *Philine aperta*); and
- *Virgularia mirabilis* (Sea-pen) in soft stable infralittoral mud.

This habitat is only present in Carlingford Lough; throughout the coast off Northern Ireland individual records of *Philine quadripartita* and *Virgularia mirabilis* have been recorded. *Philine quadripartita* and *Virgularia mirabilis* occur in high densities within the MCZ and this habitat is thought to be a temporal variant of other sublittoral cohesive mud and sandy mud communities.

Figure A10 in Annex A displays a habitat map of for Carlingford Lough MCZ and Table 22 outlines the qualifying feature, conservation objective and most recent condition status. Further detail on Carlingford Lough MCZ can be found at: https://www.daera-ni.gov.uk/publications/carlingford-lough-mcz.

Table 22: Carlingford Lough MCZ feature, conservation objective and current condition status

Qualifying feature	Conservation objective	Current condition status (reporting period)
Philine quadripartita and *Virgularia mirabilis* in soft stable infralittoral mud.	Maintain	Favourable (2014-2019)

A summary of the recommended management options for consideration is provided in Table 23 below, and option maps are presented in Figures 21 and 22. Full details of the level of risk associated with demersal mobile gear (Table B15) and static gear (Table B16) and the action advised can be found in Annex B.

Table 23 Recommended options for Carlingford Lough MCZ

Fishing type	Recommended option
Demersal	Prohibition of demersal mobile gear use throughout entire MCZ. (Figure 21).
Static	Managed pot fishery throughout MCZ. (Figure 22).

Value of the loss of fishing opportunity

The value of loss of fishing opportunity from the recommended management options could not be determined as no VMS data was recorded between 2012 and 2016 and no static gear use data is available.

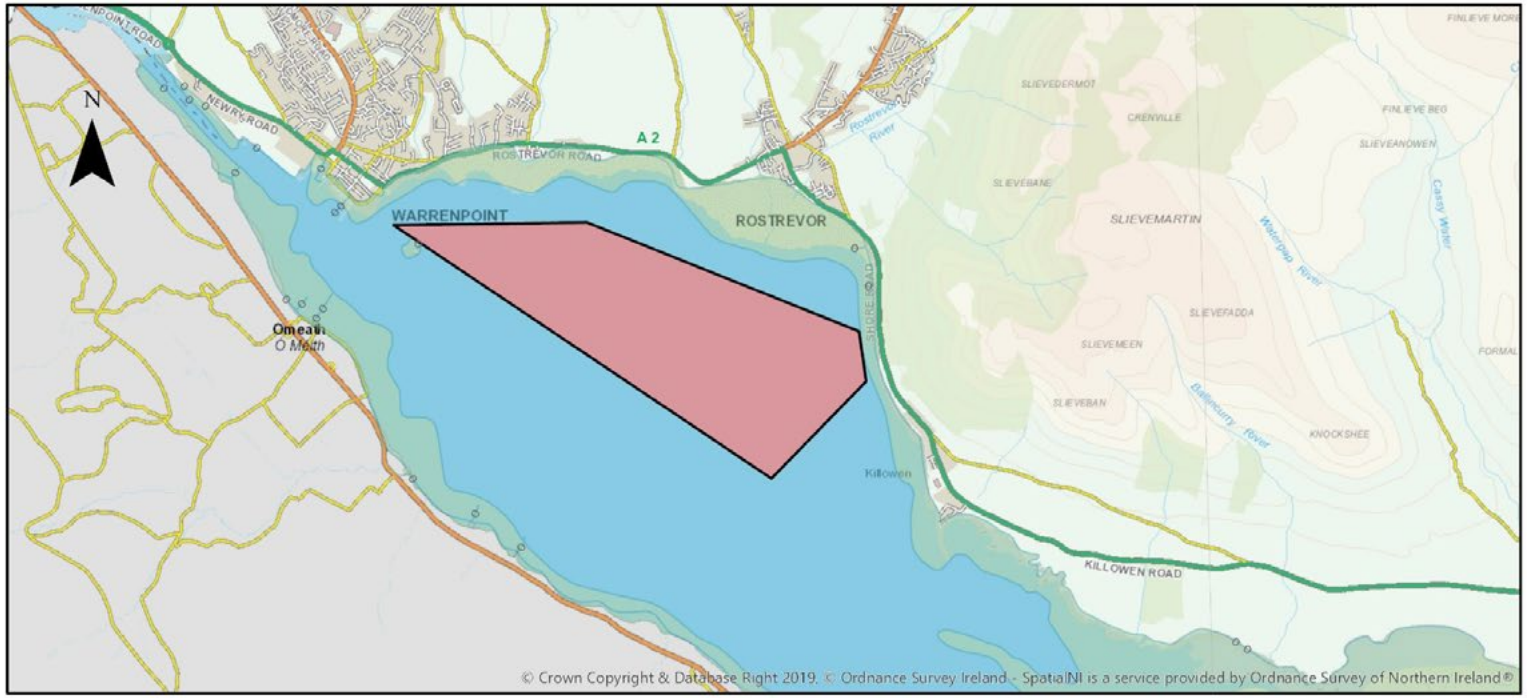
Demersal mobile gear

The level of exposure to demersal mobile gear fishing in Carlingford MCZ is considered as low. The designated feature *Philine quadripartita* and *Virgularia mirabilis* in soft stable infralittoral mud is present throughout the MCZ and is highly sensitive to pressures from demersal mobile gear fishing, warranting a moderate risk of damage rating. To protect these features, the Department recommends prohibiting demersal mobile gear fishing within the MCZ.

Static gear

The level of exposure to static gear fishing in Carlingford MCZ is considered as low. As the designated features are moderately sensitive to static gear fishing pressures, the risk of damage is moderate. To mitigate this risk the Department recommends the introduction of a managed static gear fishery throughout the MCZ. Further detail regarding the managed static gear fishing proposals can be found at the end of the 'formulation of management options' section. There is no expected loss of fishing opportunity from the introduction of the managed pot fishery.

Figure 21: Map displaying recommended management for demersal mobile gear fishing in Carlingford MCZ



Marine Conservation Zone

Proposed demersal gear prohibition

0 0.5 1 2 3 Kilometers

Scale: 1:42,799

Date: 02 March 2020

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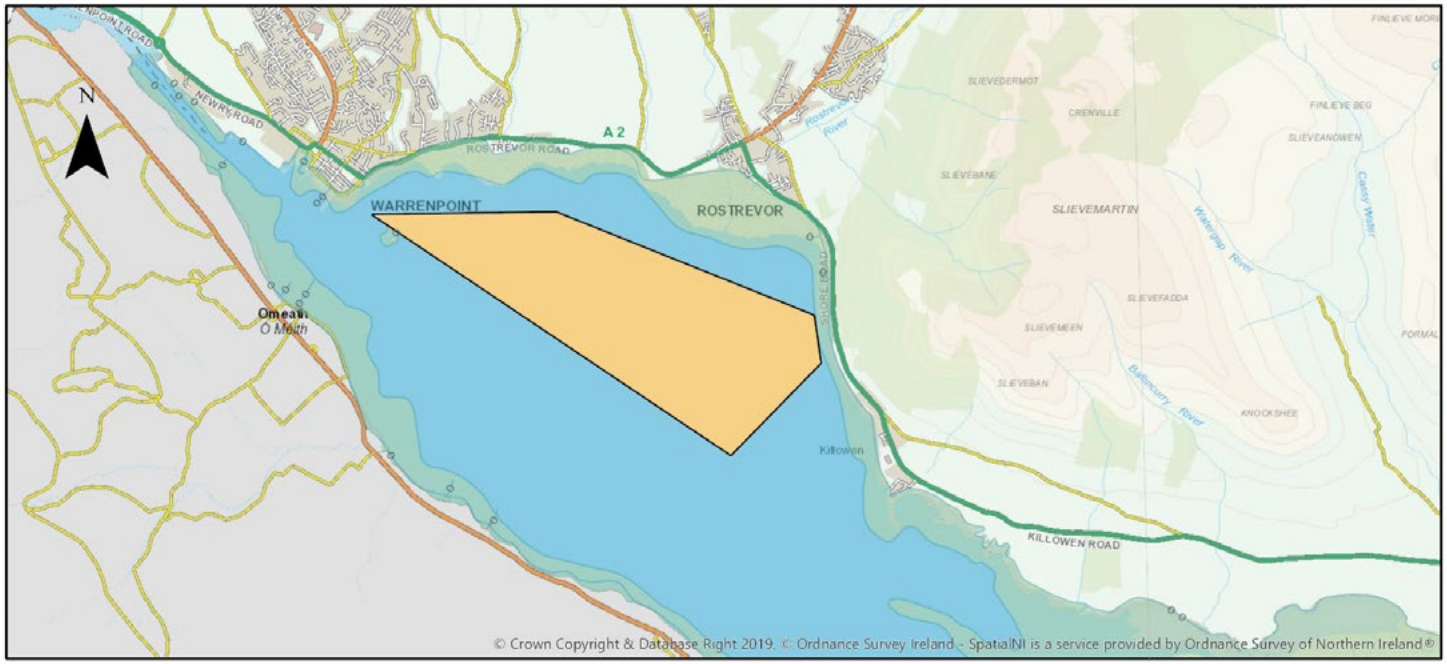
Figure 22: Map displaying recommended management for static gear fishing in Carlingford MCZ



Proposed managed static gear fishing
Marine Conservation Zone

0 0.5 1 2 3 Kilometers

Scale: 1:42,799
Date: 02 March 2020

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Consultation questions

Questions relating to Carlingford Lough MCZ are summarised below:

9.1. Do you support the recommended option, to prohibit demersal mobile gear fishing throughout Carlingford Lough MCZ?

9.2. Do you support the recommended option to manage pot fishing throughout Carlingford Lough MCZ?

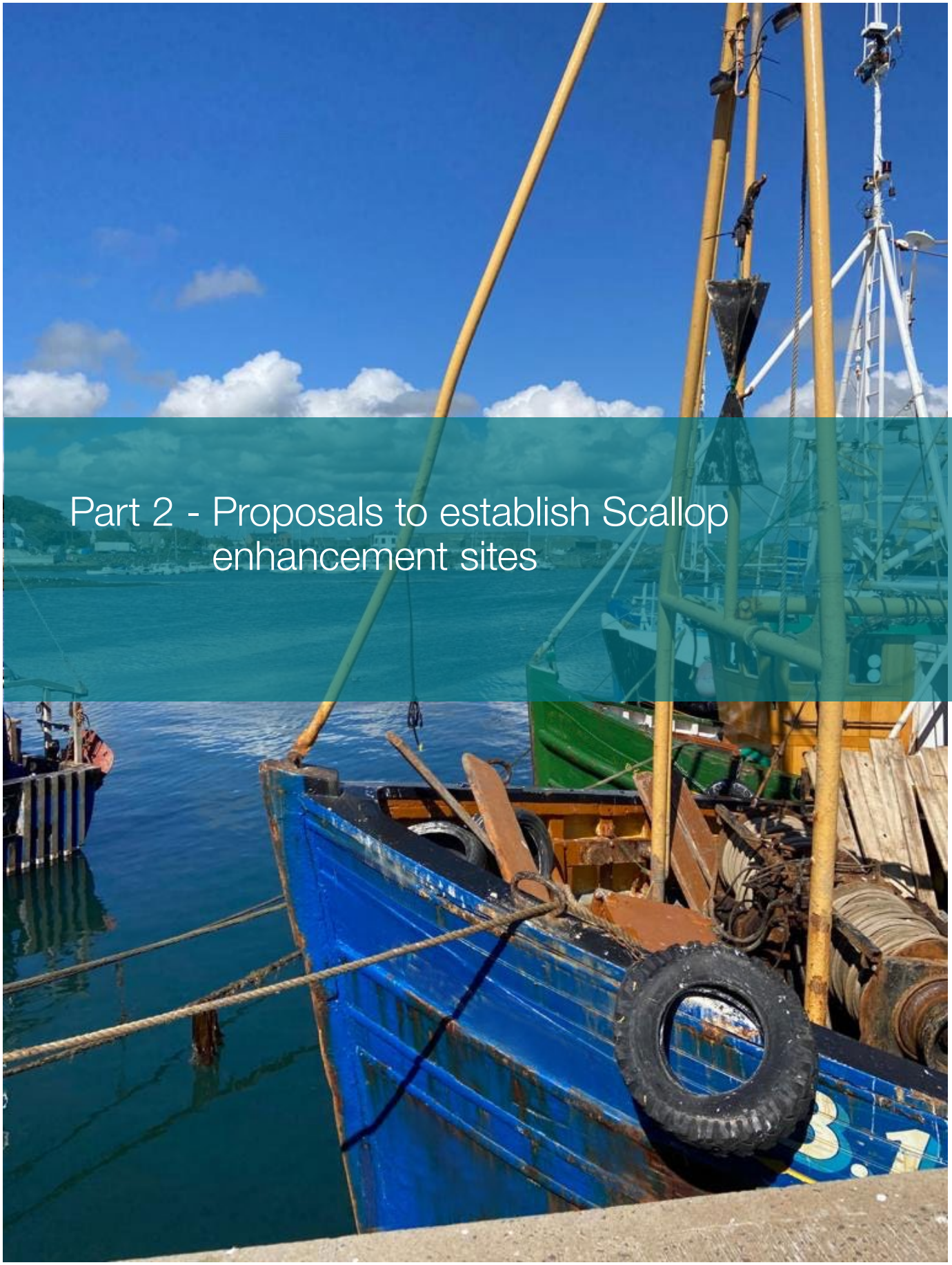
9.3. Do you support the proposed measures to manage pot fishing, such as following best practice on biosecurity, mandatory vessel position monitoring, pot tagging, recording of bycatch and entanglements of protected species and the continued use of more selective gear?

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

To respond to these questions please see online response form.

1.7 - Conclusion

As detailed above, this consultation paper sets out evidence based management options for the development of fisheries management measures in MPAs. The Department welcomes your views on these proposed options. To respond to the questions please see online response form.



Part 2 - Proposals to establish Scallop enhancement sites

2.1 - Rationale

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 in Part 1 of this consultation will ensure that fishing for scallops does not cause damage to the designated features of marine protected areas. There are a number of existing management measures to protect scallop stocks, including gear restrictions, minimum landing sizes and curfews that apply to the fishery.

2.2 - Scallop larval dispersal study

With increasing exploitation of scallop stocks around the Northern Ireland 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 and Biosciences Institute (AFBI) to undertake a scallop larval dispersal study with a view to identifying potential sites for reseeding. For further information please see: https://www.seafish.org/document/?id=AD0B23C5-5BE6-48A7-BCDC-67BFB09285DA.

This study identified four sites that have habitat conditions suitable for reseeding. A map displaying the locations of these sites can be viewed at Figure 23.

Reseeding is a frequently used option for scallop stock enhancement but it is reliant on sourcing suitable seed. Other options include translocation of scallops from fishable areas to the reseeding site where they would be protected from future fishing and left to act as a breeding stock, and the use of spat collectors.

Closing areas to fishing without additional stock enhancement has also been shown to be an effective management option. The AFBI report summarises a number of studies where closed areas, have resulted in increases in the density, mean age and size of scallops, with the recovery of the population increasing as the duration of the closure increased. These studies suggest that the build-up of high densities of scallops within the protected areas enhances local reproductive potential and the likelihood of larval export to surrounding fishing grounds.

2.3 - Further AFBI study on options for scallop enhancement

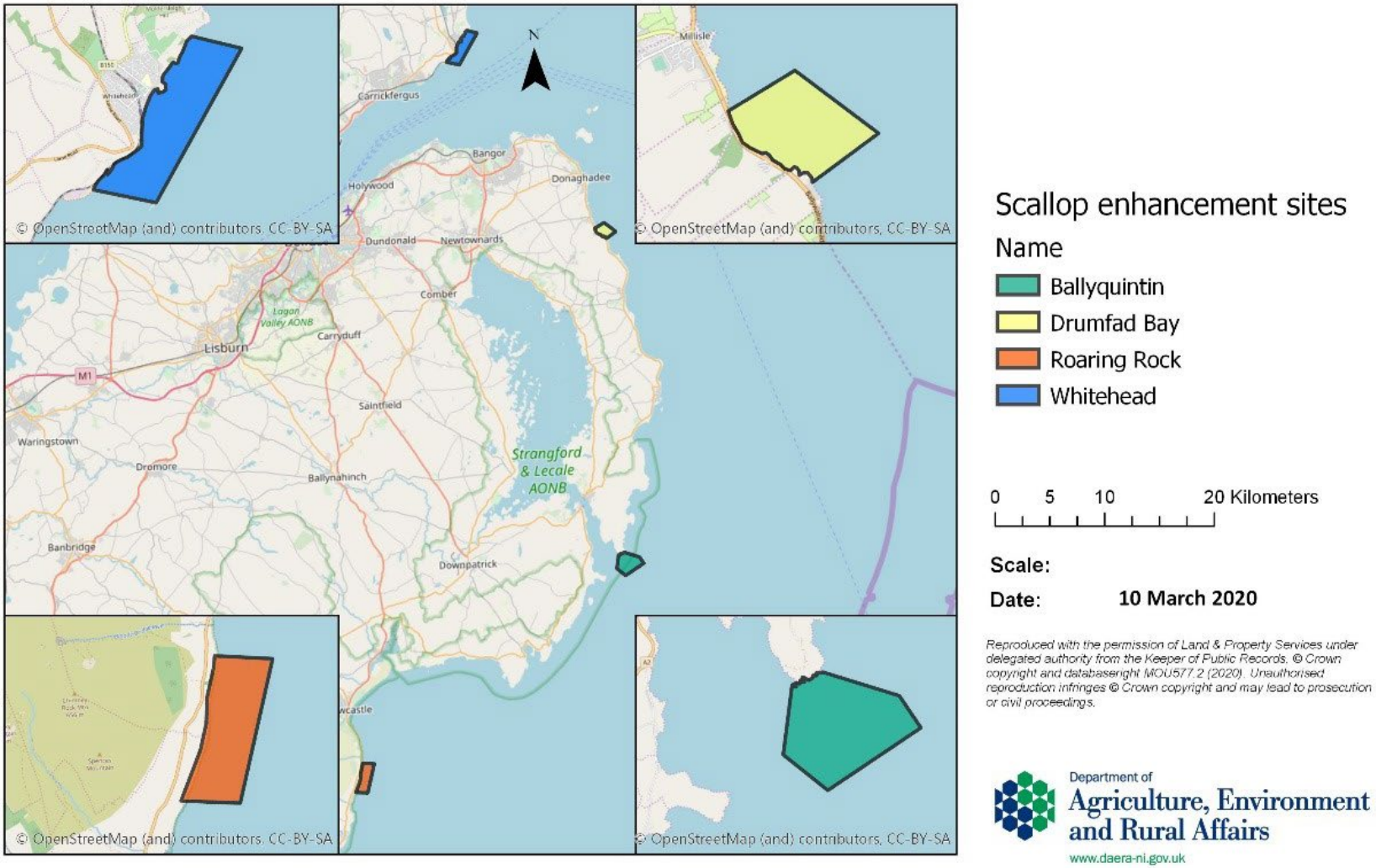
Seafish and the Northern Ireland Scallop Association has commissioned AFBI to undertake a further study on options for scallop enhancement. This study is looking at:

- Scallop stock enhancement techniques used globally, including closed areas (Marine Protected Areas and other fisheries closures), reseeding, and use of spat collectors.
- The positives and negatives of scallop enhancement techniques.
- The logistics of scallop reseeding - sourcing scallop seed, cost.
- Monitoring of such enhancement schemes to determine success.

The study is also undertaking hydrodynamic modelling to examine larval dispersal from the proposed reseeding sites to provide a clearer indication of where scallop larvae would expect to settle. The outcome of this study will inform the future approach that is taken to scallop enhancement.

Regardless of the outcome of the current AFBI study, the Northern Ireland Scallop Association has asked DAERA to introduce regulations to prohibit bottom dredging within the four sites recommended in the AFBI Scallop larval dispersal study.

Figure 23: map of the potential scallop enhancement sites within the Northern Ireland inshore region



2.4 - Current position

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 existing prohibition of mobile gear use through the Inshore Fishing (Prohibition of Fishing and Fishing Methods) (Amendment) Regulations (Northern Ireland) 2003 do not apply.

2.5 - Proposed management options

The recommended management option for all four scallop enhancement sites is the **prohibition of demersal mobile gear use, throughout each site**. To ensure scallops remain protected in these areas, **the prohibition of hand diving / gathering of scallops** is also recommended. There is currently no requirement for any change to static gear fishing within the proposed sites.

The prohibition of demersal mobile gear use is based on the recommendations of the AFBI scallop larval dispersal study and the Department has been asked to implement this prohibition to allow the closure to be enforced. The closure of these sites is an initial step towards improving the sustainability of scallop stocks and future management will be informed by the outcome of the ongoing AFBI study. The future management could range from relying only on the benefits of closed areas through to active scallop enhancement at some or all of the proposed sites.

Dredged areas tend to have low habitat complexity and in some cases it is believed that a lack of suitable settlement substrate, rather than a lack of juveniles, leads to a reduction in scallop abundance. The prohibition of dredging will allow the seabed within the scallop enhancement sites to recover and aid the recovery of species such as hydroids and bryozoans, species which are key to the settlement of juvenile scallops.

The existing level of demersal mobile gear fishing within each of the proposed sites is summarised below. The level of hand diving / gathering of scallops in each of the proposed sites is not known.

2.5.1 - Whitehead

The value of demersal mobile gear fishing within the proposed Whitehead scallop enhancement site could not be determined as no VMS records are present for vessels using demersal mobile gear.

2.5.2 - Drumfad Bay

The average annual landings for demersal mobile gear from 2012-2016 is displayed in Table 24, below.

Table 24: Value of the loss fishing opportunity from management option for Drumfad Bay scallop enhancement site

Fishing type	Average annual value of landings from scallop enhancement site	Recommended option	Value of the loss of fishing opportunity
Demersal	£1,782	Prohibition of demersal mobile gear use throughout the entire scallop enhancement site	£1,782

2.5.3 - Ballyquintin Point

The value of demersal mobile gear fishing within the proposed Ballyquintin Point scallop enhancement site could not be determined due to the limited VMS data available. No landings could be attributed to this data.

2.5.4 - Roaring Rock

Trawling and seine netting are already prohibited in the Roaring Rock scallop enhancement site, and no VMS records were present for vessels using demersal mobile gear, so the value of demersal mobile gear fishing could not be determined.

Consultation questions relating to the scallop enhancement sites

Questions relating to Whitehead scallop enhancement site are summarised below:

10.1. Do you support the recommended option, to prohibit demersal mobile gear fishing throughout the entire Whitehead scallop enhancement site?

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

Questions relating to Roaring Rock scallop enhancement site are summarised below:

11.1. Do you support the recommended option, to prohibit demersal mobile gear fishing throughout the entire Roaring Rock scallop enhancement site?

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

Questions relating to Drumfad Bay scallop enhancement site are summarised below:

12.1. Do you support the recommended option, to prohibit demersal mobile gear fishing throughout the entire Drumfad Bay scallop enhancement site?

12.2. Do you agree with the assessment of the current value of fishing within Drumfad Bay scallop enhancement site?

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

Questions relating to Ballyquintin Point scallop enhancement site are summarised below:

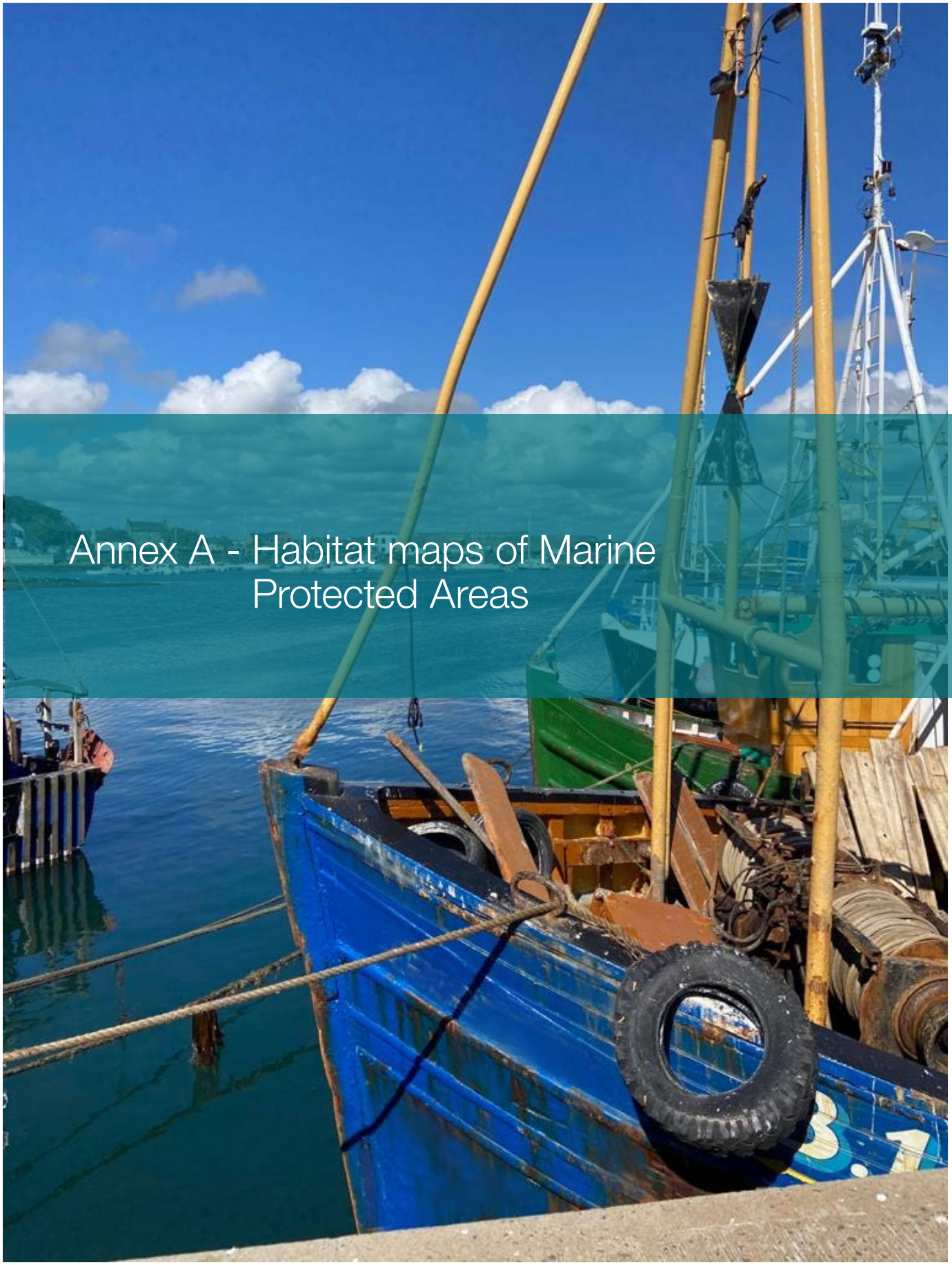
13.1. Do you support support the recommended option, to prohibit demersal mobile gear fishing throughout the entire Ballyquintin Point scallop enhancement site?

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

To respond to these questions please see online response form.

2.6 - Conclusion

The Department welcomes your views on the potential establishment of scallop enhancement sites at Whitehead, Drumfad Bay, Ballyquintin Point and Roaring Rock, and the proposed management options to protect these areas. To respond to the consultation questions please see online response form.



Annex A - Habitat maps of Marine Protected Areas

Figure A1: Skerries and Causeway SAC habitat map

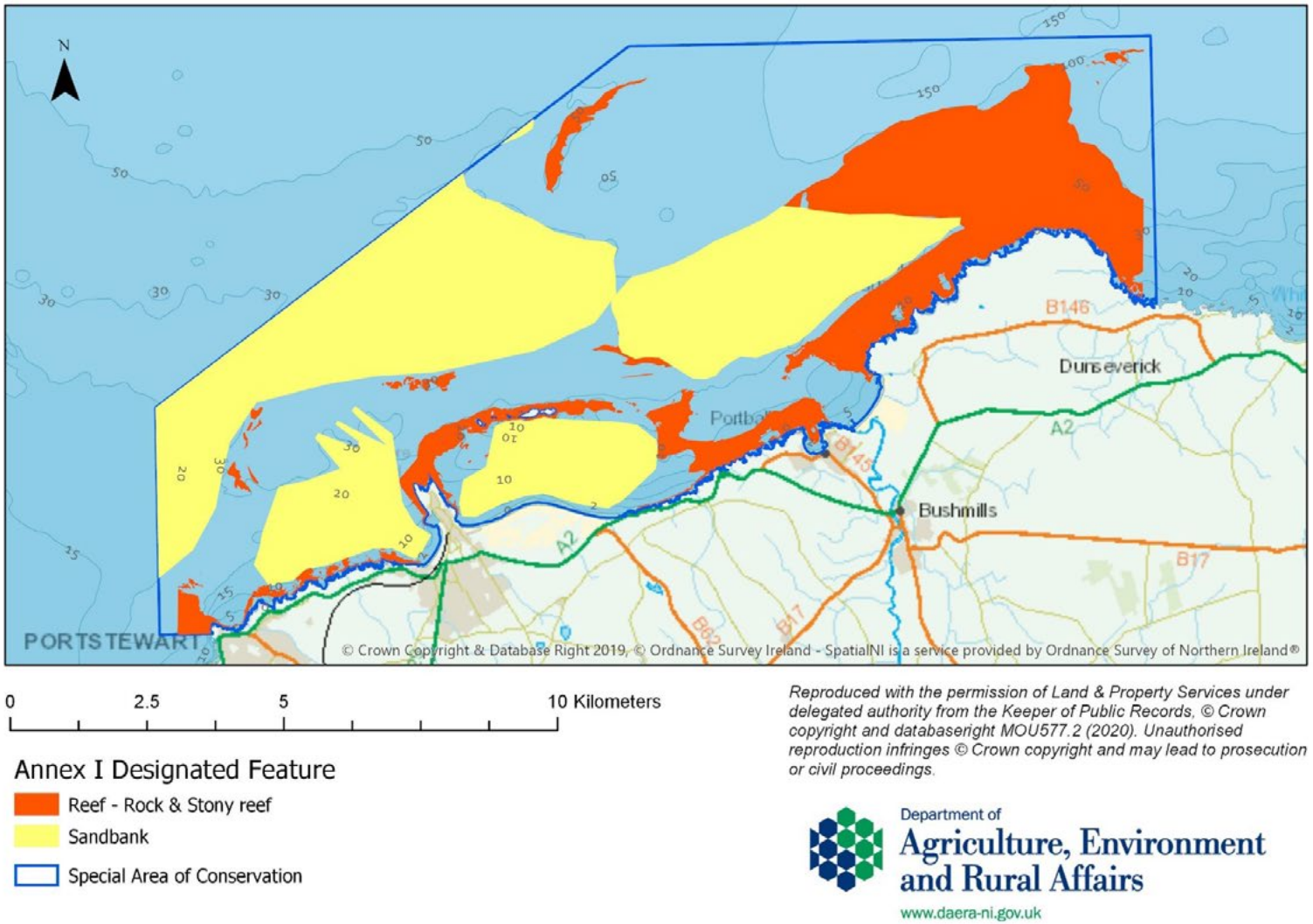


Figure A2: Rathlin Island SAC and SPA habitat map

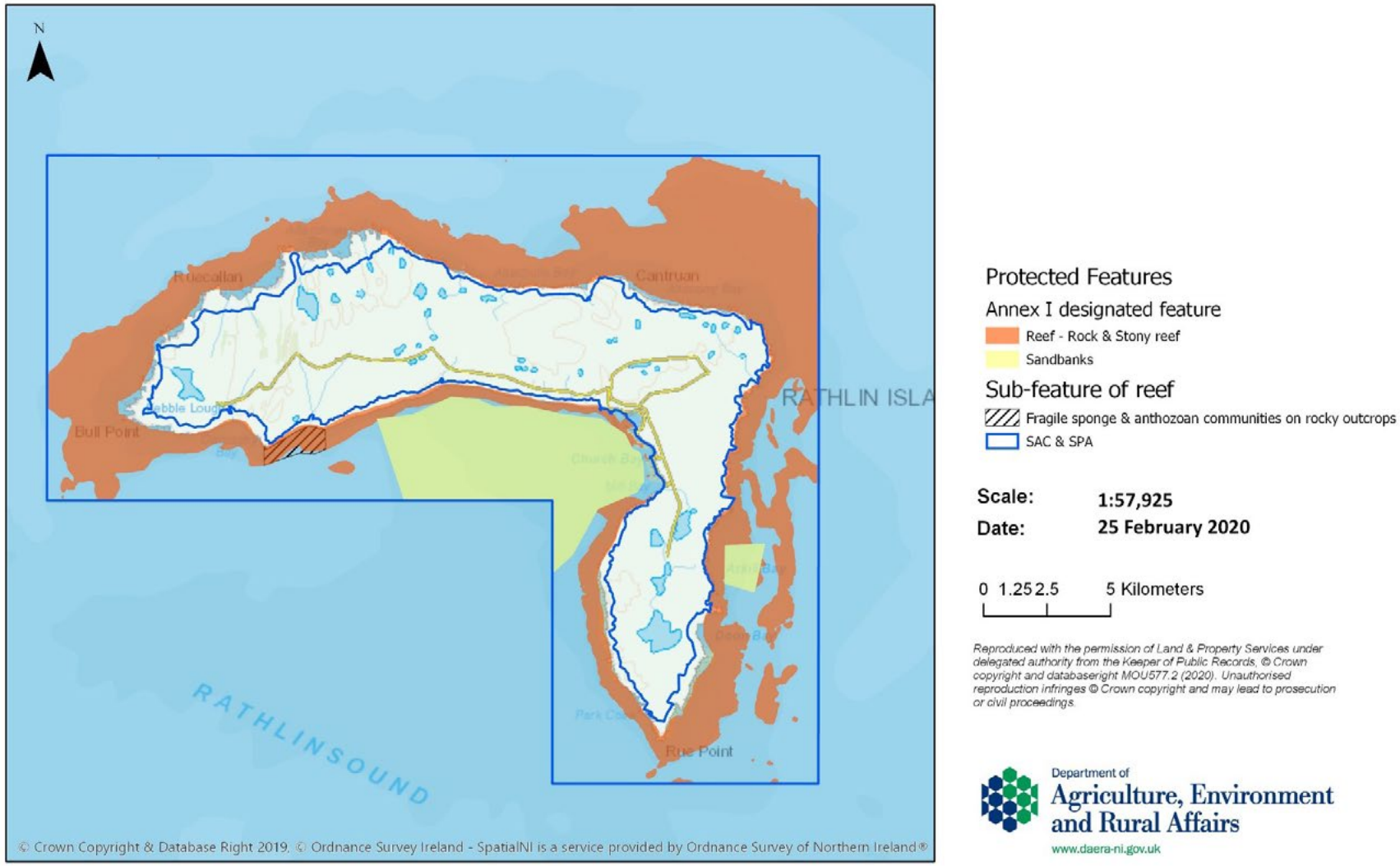


Figure A3: Rathlin MCZ habitat map

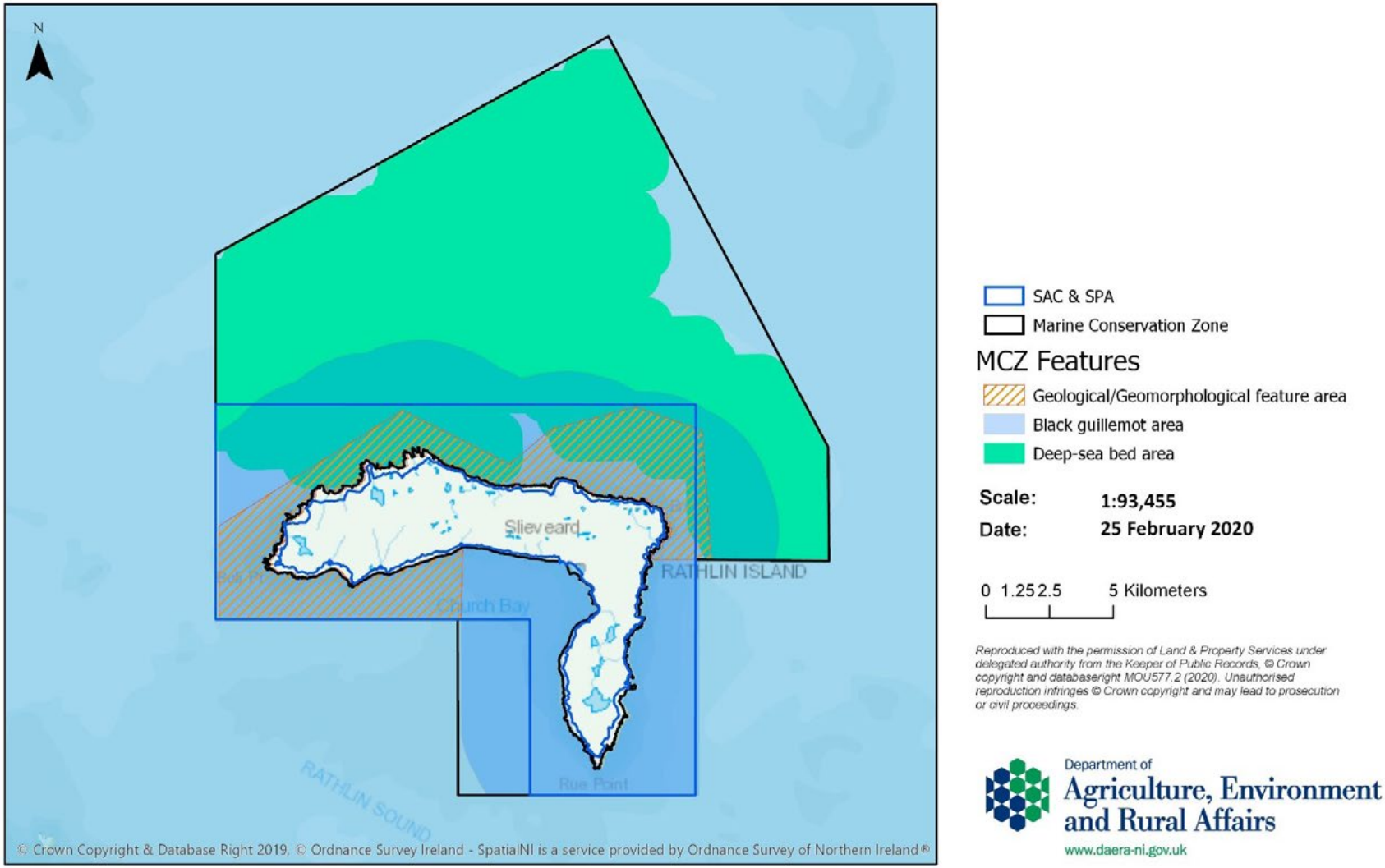


Figure A4: Red Bay SAC habitat map

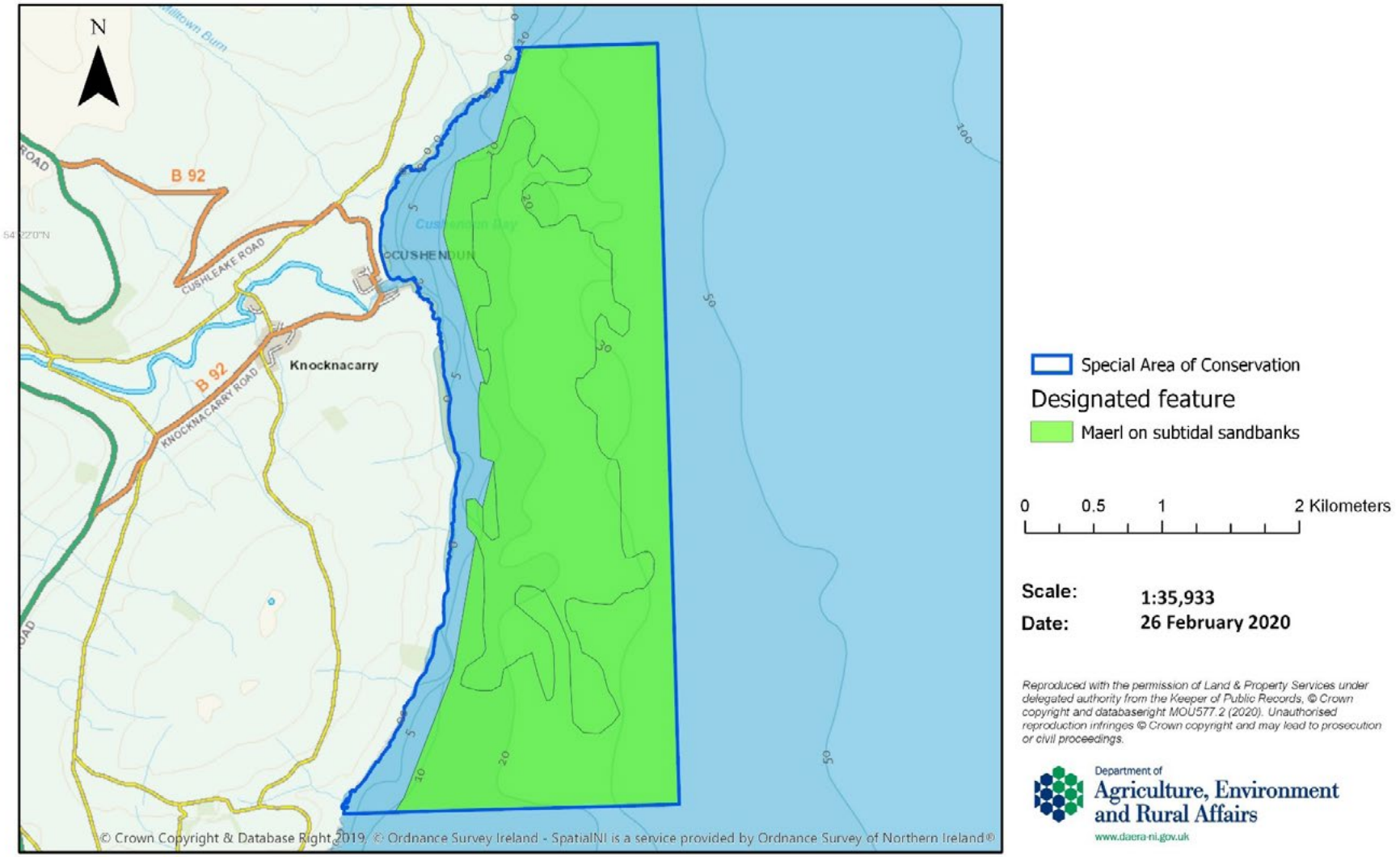


Figure A5: Waterfoot MCZ habitat map

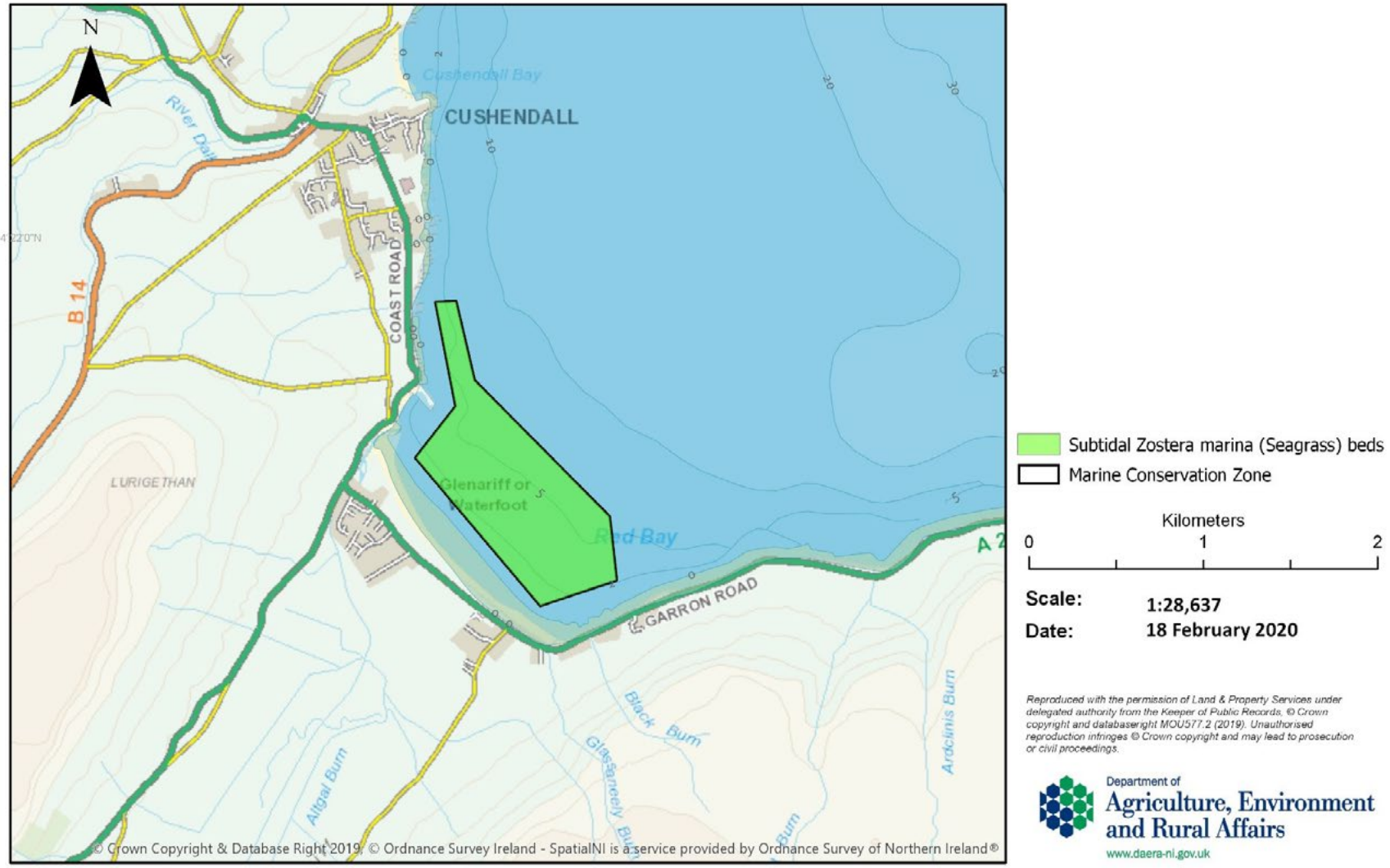
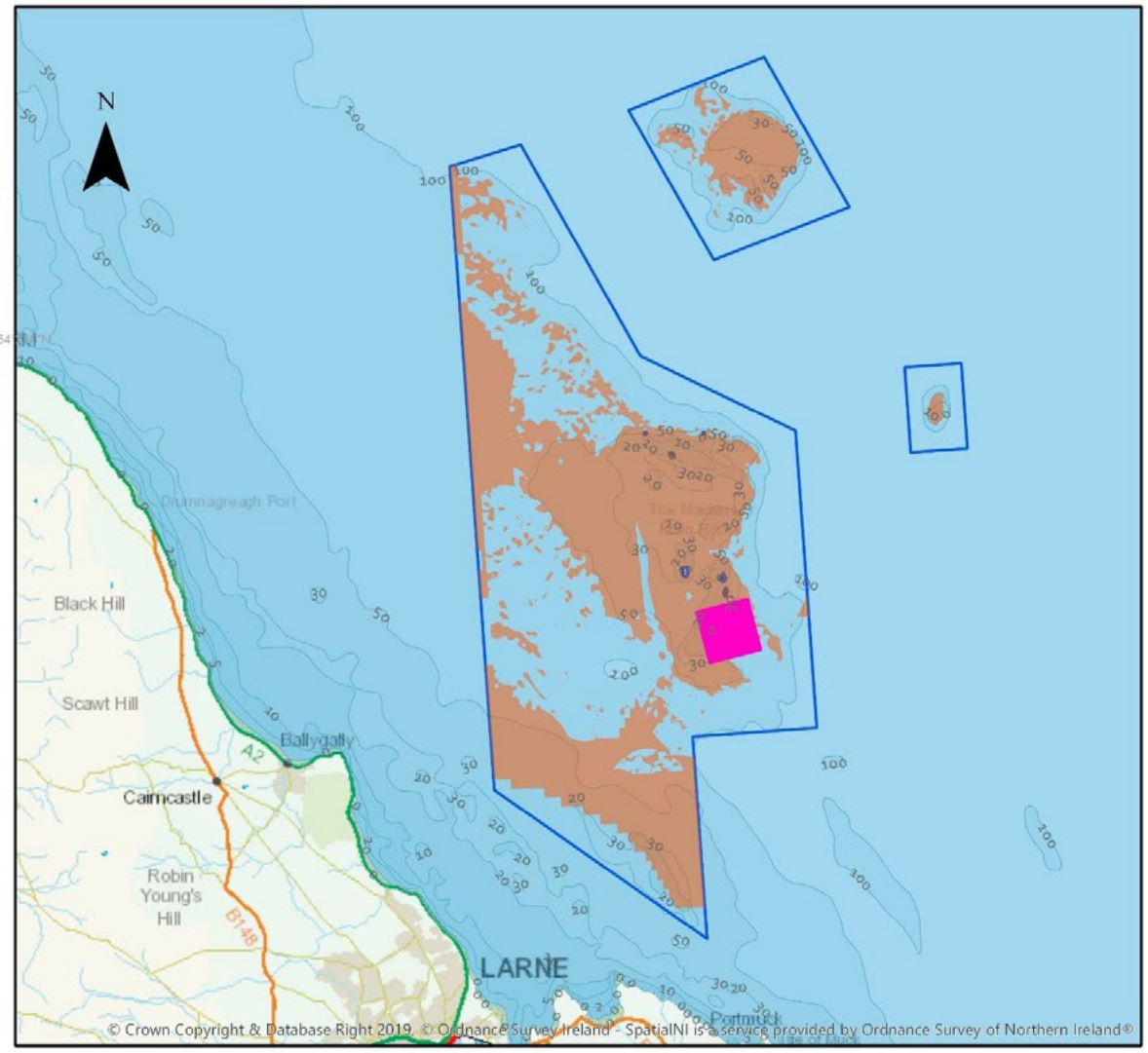


Figure A6: Maidens SAC habitat map



Annex I Designated Feature

Reef - Rock & Stony reef

Maerl on Submerged Sandbank (1x1km grid)

Special Area of Conservation

Scale: 1:109,262

Date: 20 February 2020

0 1.25 2.5 5 Kilometers

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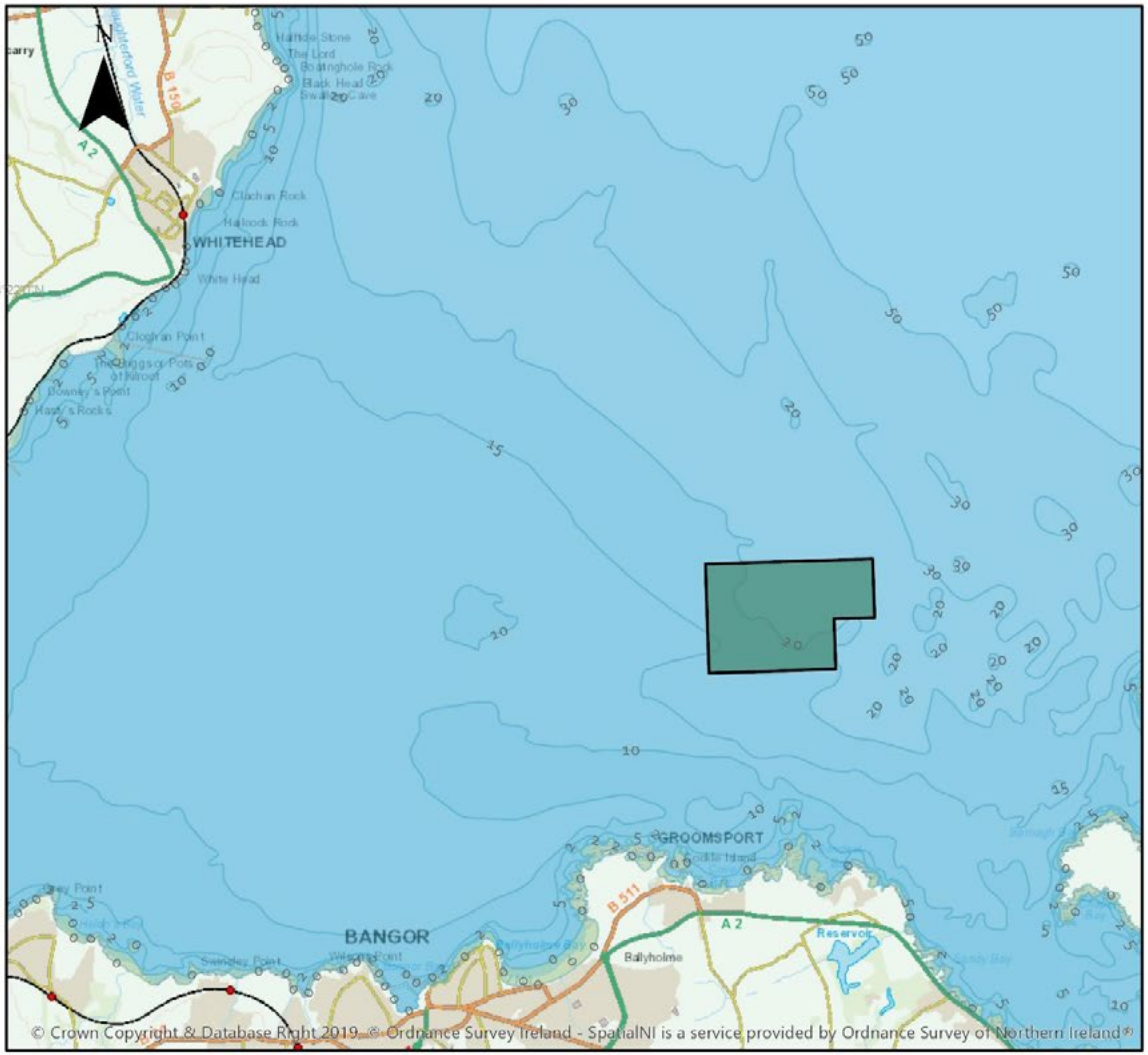
Figure A7: Outer Belfast Lough MCZ habitat map



Marine Conservation Zone

Arctica islandica (Ocean quahog) in subtidal sand

Scale: **1:75,462**

Date: **28 February 2020**

0 1.25 2.5 5 Kilometers

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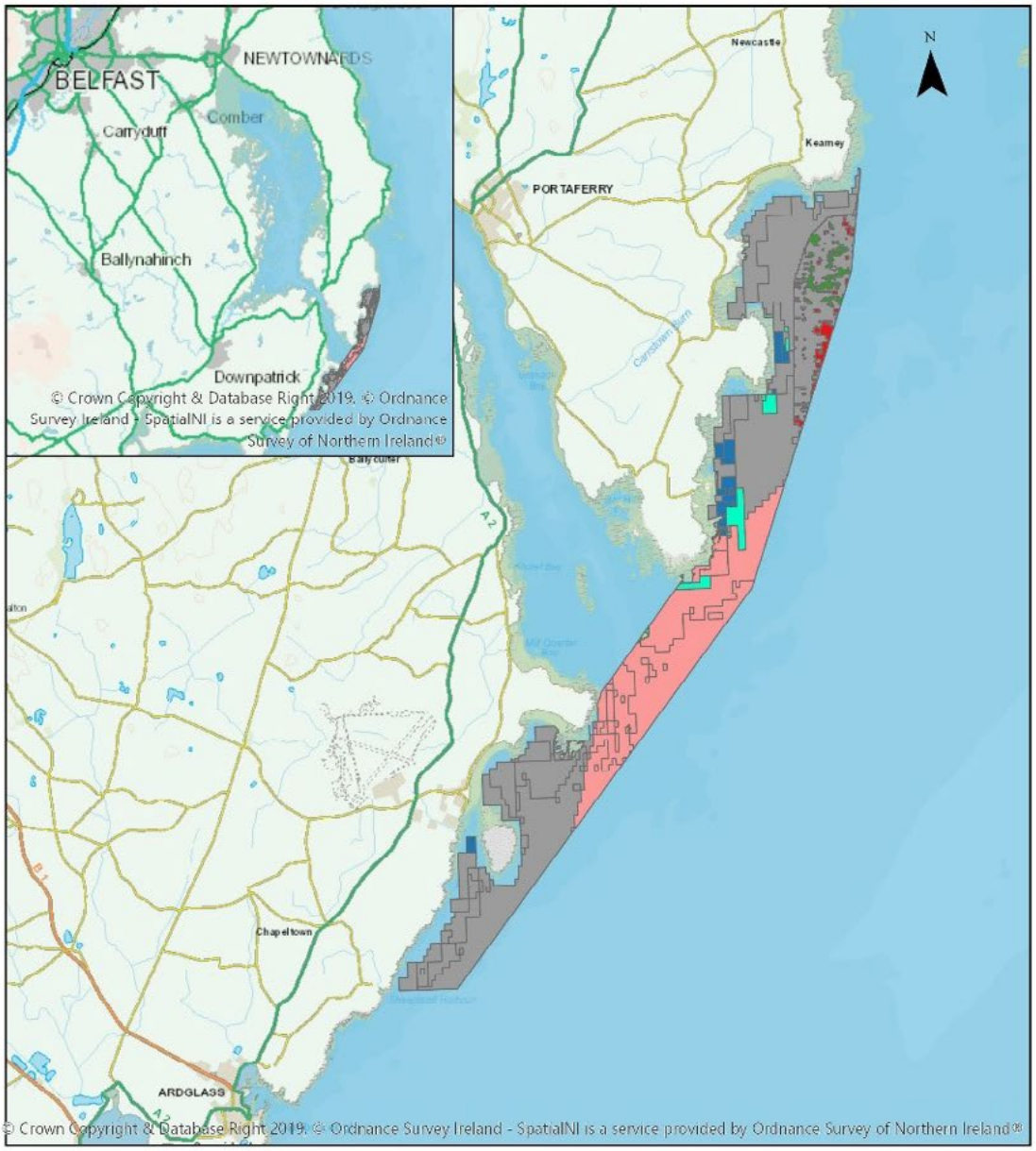
Figure A8: Strangford Lough MCZ outside the SAC habitat map



Eunis level 3 Broadscale Habitat

- A5.1 Sublittoral Coarse Sediment
- A5.4 Sublittoral Mixed Sediments
- A3.2 Moderate Energy Infralittoral Rock
- A3.3 Low Energy Infralittoral Rock
- A4.1 High Energy Circalittoral Rock
- A4.2 Moderate Energy Circalittoral Rock
- A5.2 Sublittoral Sand
- Marine Conservation Zone
- Special Area of Conservation

0 5 10 20 Kilometers

Date Exported: 13/03/2020

Scale: 1:84,324

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Figure A9: Murlough SAC habitat map

Special Area of Conservation

Designated feature

Submerged sandbank

0 3.25 6.5 13 Kilometers

Scale: 1:175,568

Date: 28 February 2020

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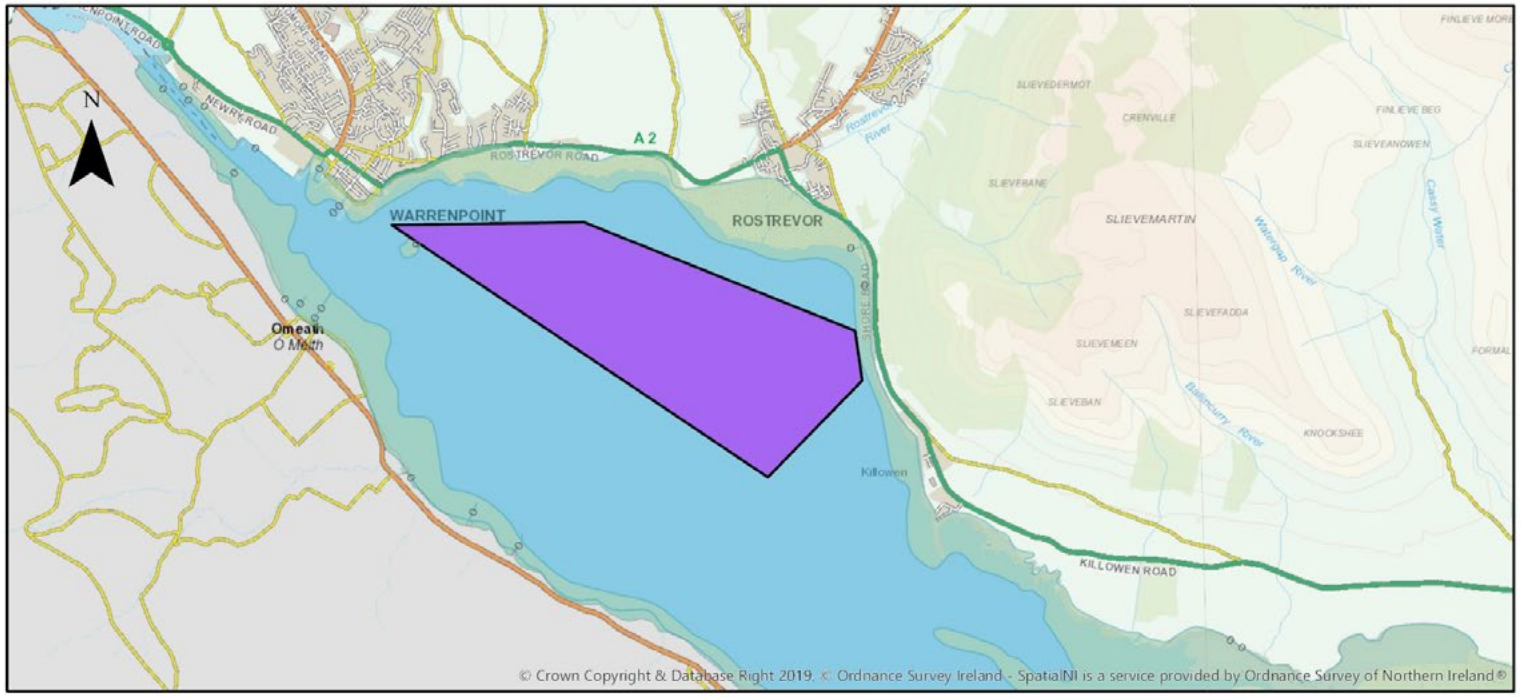
Figure A10: Carlingford MCZ habitat map



Philine quadripartita & Virgularia mirabilis in stable infralittoral mud
Marine Conservation Zone

0 0.5 1 2 3 Kilometers

Scale: 1:42,799
Date: 02 March 2020

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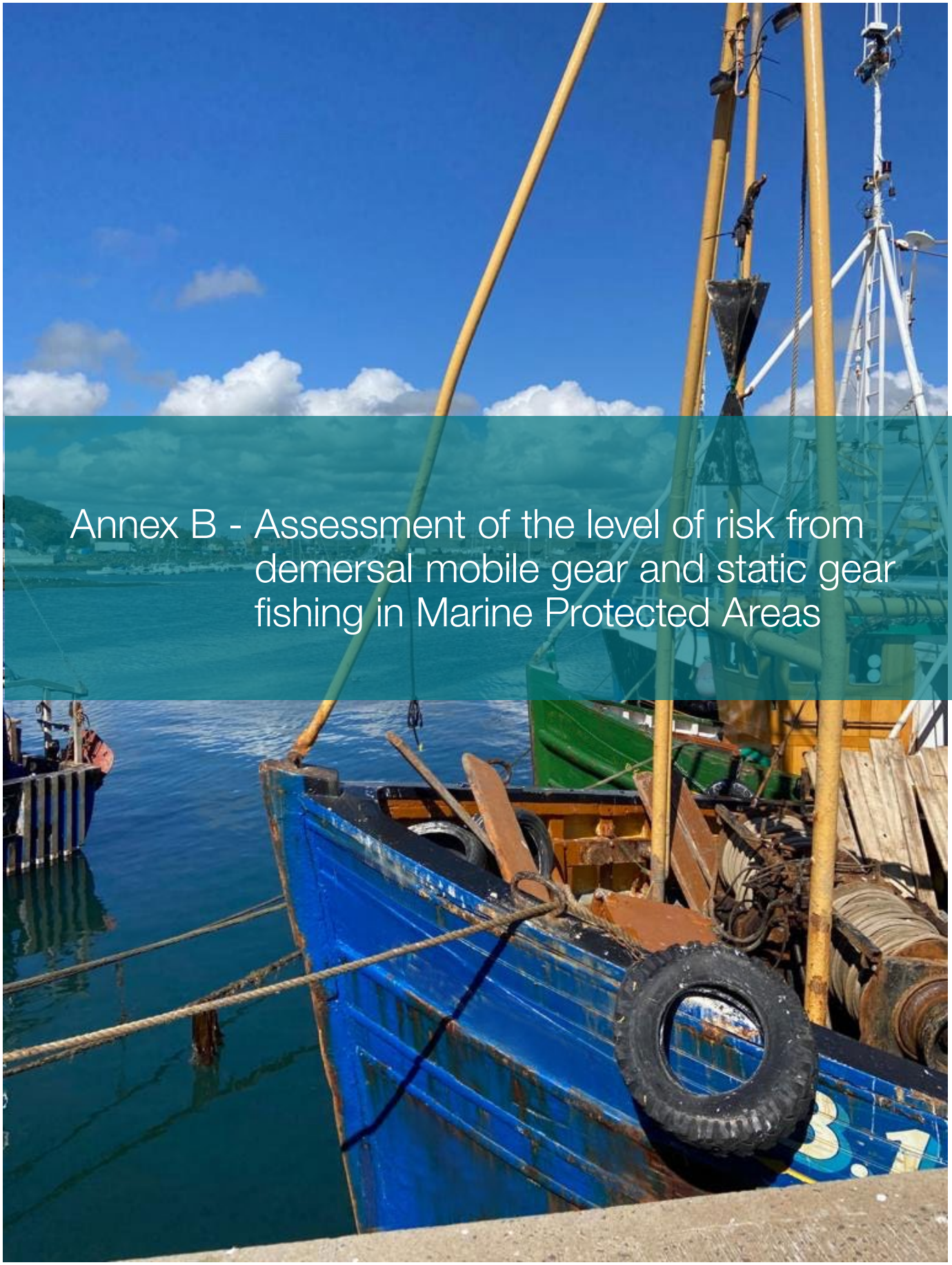

Annex B - Assessment of the level of risk from demersal mobile gear and static gear fishing in Marine Protected Areas

Skerries and Causeway SAC

Table B1: Level of risk associated with demersal mobile gear and action advised for each feature within Skerries and Causeway SAC (based on MarESA).

MPA	Feature	Biological Pressures	Chemical Pressures	Physical Pressures	Action advised
		Level of risk	Level of risk	Level of risk	
Skerries and Causeway SAC	Reefs	Moderate	Low	Moderate	Remove/Avoid
	Sandbanks slightly covered by seawater at all times	Moderate	Low	Moderate	Remove/Avoid
	Seagrass *(Zostera marina)* beds	Moderate	Low	Moderate	Remove/Avoid
	Submerged and partially submerged sea caves	Low	Low	Low	No Additional Management
	Harbour porpoise (*Phocoena phocoena)*	Tools to assess the sensitivities of harbour porpoise (MarLIN) are currently under development and not available at this time. There is no evidence to suggest that fishing activities within MPAs in the Northern Ireland inshore region are having an adverse impact on the harbour porpoise features at present.			

Table B2: Level of risk associated with static gear and action advised for each feature within Skerries and Causeway SAC (based on MarESA)

MPA	Feature	Biological Pressures	Chemical Pressures	Physical Pressures	Action advised
		Level of risk	Level of risk	Level of risk	
Skerries and Causeway SAC	Reefs	High	Low	Moderate	Reduce/Limit
	Sandbanks slightly covered by seawater at all times	Moderate	Low	Moderate	Reduce/Limit
	Seagrass *(Zostera marina)* beds	High	Low	High	Remove/Avoid
	Submerged and partially submerged sea caves	Moderate	Low	Moderate	Reduce/Limit
	Harbour porpoise (*Phocoena phocoena)*	Tools to assess the sensitivities of harbour porpoise (MarLIN) are currently under development and not available at this time. There is no evidence to suggest that fishing activities within MPAs in the Northern Ireland inshore region are having an adverse impact on the harbour porpoise features at present.			

Rathlin Island SAC/SPA and MCZ

Table B3: Level of risk associated with demersal mobile gear and action advised for each feature within Rathlin Island MPA (Rathlin Island SAC/SPA and Rathlin MCZ) (based on MarESA)

MPA	Feature	Biological Pressures	Chemical Pressures	Physical Pressures	Action advised
		Level of risk	Level of risk	Level of risk	
Rathlin Island SAC/ SPA and Rathlin MCZ	Reefs	Moderate	Low	Moderate	Remove/Avoid
	Fragile sponge and anthozoan communities on rocky outcrops	Local expert opinion considers the individual sponge species **highly sensitive** to any fishing activity (Stewart-Moore 2019)[15].			Remove/Avoid
	Sandbanks slightly covered by seawater at all times	Moderate	Low	Moderate	Remove/Avoid
	Submerged and partially submerged sea caves	Low	Low	Low	No Additional Management
	Deep sea bed	Moderate	Low	Moderate	Remove/Avoid
	Black guillemot *(Cepphus grylle)*	Black guillemot depend on the Reef and Sandbank habitats for foraging and are also at risk from fishing activities including collision with boats and bycatch/entanglement.			Remove/Avoid

15 Rathlin Dive Expedition Report, CEDaR, May 2019 - WEB.pdf (daera-ni.gov.uk)

Table B4: Level of risk associated with static gear and action advised for each feature within Rathlin Island MPA (Rathlin Island SAC/SPA and Rathlin MCZ) (based on MarESA)

MPA	Feature	Biological Pressures	Chemical Pressures	Physical Pressures	Action advised
		Level of risk	Level of risk	Level of risk	
Rathlin Island SAC/ SPA and Rathlin MCZ	Reefs	Moderate	Low	Moderate	Reduce/Limit
	Fragile sponge and anthozoan communities on rocky outcrops	Local expert opinion considers the individual sponge species **highly sensitive** to any fishing activity (Stewart-Moore 2019)[16].			Remove/Avoid
	Sandbanks slightly covered by seawater at all times	Moderate	Low	Moderate	Reduce/Limit
	Submerged and partially submerged sea caves	Moderate	Low	Moderate	Reduce/Limit
	Deep sea bed	Moderate	Low	Moderate	Reduce/Limit
	Black guillemot *(Cepphus grylle)*	Black guillemot depend on the Reef and Sandbank habitats for foraging and are also at risk from fishing activities including collision with boats and bycatch/entanglement.			Reduce/Limit

16 Rathlin Dive Expedition Report, CEDaR, May 2019 - WEB.pdf (daera-ni.gov.uk)

Red Bay SAC

Table B5: Level of risk associated with demersal mobile gear and action advised for each feature within Red Bay SAC (based on MarESA)

MPA	Feature	Biological Pressures	Chemical Pressures	Physical Pressures	Action advised
		Level of risk	Level of risk	Level of risk	
Red Bay SAC	Sandbanks slightly covered by seawater at all times	Moderate	Low	Moderate	Remove/Avoid
	Maerl bed	Moderate	Low	Moderate	Remove/Avoid

Table B6: Level of risk associated with static gear and action advised for each feature within Red Bay SAC (based on MarESA)

MPA	Feature	Biological Pressures	Chemical Pressures	Physical Pressures	Action advised
		Level of risk	Level of risk	Level of risk	
Red Bay SAC	Sandbanks slightly covered by seawater at all times	Moderate	Low	Moderate	Reduce/Limit
	Maerl bed	Moderate	Low	Moderate	Remove/Avoid

Waterfoot MCZ

Table B7: Level of risk associated with demersal mobile gear and action advised for each feature within Waterfoot MCZ (based on MarESA)

MPA	Feature	Biological Pressures	Chemical Pressures	Physical Pressures	Action advised
		Level of risk	Level of risk	Level of risk	
Waterfoot MCZ	Seagrass bed *(Zostera marina)* on subtidal (sublittoral) sand	Moderate	Low	Moderate	Remove/Avoid

Table B8: Level of risk associated with static gear and action advised for each feature within Waterfoot MCZ (based on MarESA)

MPA	Feature	Biological Pressures	Chemical Pressures	Physical Pressures	Action advised
		Level of risk	Level of risk	Level of risk	
Waterfoot MCZ	Seagrass bed *(Zostera marina)* on subtidal (sublittoral) sand	Moderate	Low	Moderate	Remove/Avoid

The Maidens SAC

Table B9: Level of risk associated with demersal mobile gear and action advised for each feature within The Maidens SAC (based on MarESA)

MPA	Feature	Biological Pressures	Chemical Pressures	Physical Pressures	Action advised
		Level of risk	Level of risk	Level of risk	
The Maidens SAC	Sandbanks slightly covered by seawater at all times - Maerl bed	High	Low	High	Remove/Avoid
	Reefs	High	Low	High	Remove/Avoid
	Grey seal *(Halichoerus grypus)*	Tools to assess the sensitivities of Grey Seal (MarLIN) are currently under development and not available at this time. There is no evidence to suggest that fishing activities within MPAs in the Northern Ireland inshore region are having an adverse impact on the grey seal features at present.			

Table B10: Level of risk associated with static gear and action advised for each feature within The Maidens SAC (based on MarESA)

MPA	Feature	Biological Pressures	Chemical Pressures	Physical Pressures	Action advised
		Level of risk	Level of risk	Level of risk	
The Maidens SAC	Sandbanks slightly covered by seawater at all times - Maerl bed	Moderate	Low	Moderate	Remove/Avoid
	Reefs	Moderate	Low	Moderate	Reduce/Limit
	Grey seal *(Halichoerus grypus)*	Tools to assess the sensitivities of Grey Seal (MarLIN) are currently under development and not available at this time. There is no evidence to suggest that fishing activities within MPAs in the Northern Ireland inshore region are having an adverse impact on the grey seal features at present.			

Outer Belfast Lough MCZ

Table B11: Level of risk associated with demersal mobile gear and action advised for each feature within Outer Belfast Lough MCZ (based on MarESA)

MPA	Feature	Biological Pressures	Chemical Pressures	Physical Pressures	Action advised
		Level of risk	Level of risk	Level of risk	
Outer Belfast Lough MCZ	Ocean quahog *(Arctica islandica)*	High	Low	High	Remove/Avoid
	Subtidal (sublittoral) sand	Moderate	Low	High	Remove/Avoid

Table B12: Level of risk associated with static gear and action advised for each feature within Outer Belfast Lough MCZ (based on MarESA)

MPA	Feature	Biological Pressures	Chemical Pressures	Physical Pressures	Action advised
		Level of risk	Level of risk	Level of risk	
Outer Belfast Lough MCZ	Ocean quahog *(Arctica islandica)*	Moderate	Low	Moderate	Reduce/Limit
	Subtidal (sublittoral) sand	Moderate	Low	Moderate	Reduce/Limit

Murlough SAC

Table B13: Level of risk associated with demersal mobile gear and action advised for each feature within Murlough SAC (based on MarESA)

MPA	Feature	Biological Pressures	Chemical Pressures	Physical Pressures	Action advised
		Level of risk	Level of risk	Level of risk	
Murlough SAC	Sandbanks slightly covered by seawater at all times	Moderate	Low	Moderate	Remove/Avoid
	Harbour seal *(Phoca vitulina)*	Tools to assess the sensitivities of harbour (common) seal (MarLIN) are currently under development and not available at the time. There is no evidence to suggest that fishing activities within MPAs in the Northern Ireland inshore region are having an adverse impact on the harbour (common) seal features at present.			

Table B14: Level of risk associated with static gear and action advised for each feature within Murlough SAC (based on MarESA)

MPA	Feature	Biological Pressures	Chemical Pressures	Physical Pressures	Action advised
		Level of risk	Level of risk	Level of risk	
Murlough SAC	Sandbanks slightly covered by seawater at all times	Moderate	Low	Moderate	Reduce/Limit
	Harbour seal *(Phoca vitulina)*	Tools to assess the sensitivities of harbour (common) seal (MarLIN) are currently under development and not available at the time. There is no evidence to suggest that fishing activities within MPAs in the Northern Ireland inshore region are having an adverse impact on the harbour (common) seal features at present.			

Carlingford Lough MCZ

Table B15: Level of risk associated with demersal mobile gear and action advised for each feature within Carlingford Lough MCZ (based on MarESA)

MPA	Feature	Biological Pressures	Chemical Pressures	Physical Pressures	Action advised
		Level of risk	Level of risk	Level of risk	
Carlingford Lough MCZ	*Philine quadripartita* and *Virgularia mirabilis* in soft stable infralittoral mud	Moderate	Low	Moderate	Remove/Avoid

Table B16: Level of risk associated with static gear and action advised for each feature within Carlingford Lough MCZ (based on MarESA)

MPA	Feature	Biological Pressures	Chemical Pressures	Physical Pressures	Action advised
		Level of risk	Level of risk	Level of risk	
Carlingford Lough MCZ	*Philine quadripartita* and *Virgularia mirabilis* in soft stable infralittoral mud	Moderate	Low	Moderate	Reduce/Limit

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DMS 20.21.105