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

Northern Ireland Marine Task Force response to: MPA Strategy Review
Submitted: 9th August 2024

NIMTF appreciates the opportunity to respond to the consultation on Northern Ireland's Marine Protected Areas (MPAs) Strategy Review. This review of the original MPA Strategy (2014)[1] will be instrumental in ensuring that NI's MPA Network acts as the cornerstone for marine restoration in our seas, guaranteeing effective management that ensures designated species and habitats are not only protected but in a state of recovery, as well as meeting statutory requirements and Good Environmental Status (GES) in the marine environment. In this response, NIMTF outlines actions that must be taken to ensure the MPA network acts as a primary tool for nature restoration.

The State of Nature Report 2023[2] shows that Northern Ireland is now one of the most nature-depleted countries in the world with 12% of assessed species being threatened with extinction, including marine species such as the Basking Shark (*Cetorhinus maximus*) and Flapper Skate (*Dipturus Intermedius*). Furthermore the most recent Seabird Count 2023[3] showed that NI MPA designated species such as the Atlantic Puffin has declined by over 70% in the last two decades.

NIMTF welcomes the achievement of 30x30 in terms of spatial designation, however this has not been enough to reverse the declines in species and habitats across NI as the development and implementation of management plans are lacking. To fully achieve 30x30 and restore vulnerable features of our marine environment we must ensure that the current MPA network is ecologically connected and well-managed, monitored and resourced to deliver ocean recovery in our wider seas.

In recent years, it has been promising to see bylaws introduced to alleviate the pressures from some of the more devastating impacts on local species and habitats within the MPA network; such as the prohibition of bottom-trawling in nine MPAs in 2023[4] and the formation of Co-Fish[5] - a joint effort between eNGOs, Industry and Government to achieve future sustainability practices in our seas. However, these initiatives require long-term, reliable funding for ongoing delivery, monitoring and implementation.

Several other pieces of legislation and strategies currently being developed must also be considered in this MPA Strategy Review. This includes:

- the NI Biodiversity Strategy
- NI Seabird Conservation Strategy (SCS)
- NI Elasmobranch Conservation Strategy (ECS)
- Fisheries Management Plans (FMPs)

- Offshore Renewable Energy Action Plan (OREAP)[6]
- Climate Sectoral Plans
- NI Blue Carbon Action Plan (BCAP), which is designed in tandem with this strategy.
- The Green Growth Strategy
- Regional Development Strategy
- NI Climate Adaptation Plan

This reinforces the point that this MPA Strategy Review must be a working document that will incorporate commitments and targets from new policies and strategies.

1) **<u>Assessing targets from the previous MPA Strategy (2014)</u>**

This review follows on from the MPA Strategy (2014)[1], in which DAERA committed to achieving a number of objectives to ensure that the MPA network is functioning efficiently and has strong, well implemented management measures. If DAERA is to truly ensure that NI's MPA Network is delivering for nature and that this strategy review plays a role in achieving this,

ACTION: Review the previous strategy, and then assess why and objectives have not been achieved in order to move forward and achieve outcomes for nature.

An ambitious series of objectives and goals were set out within the MPA Strategy from 2014, of which some have not been fully achieved:

I. Establish an ecologically coherent network of well managed MPAs in the Northern Ireland inshore region.

Further work is needed in order to establish an ecologically coherent network of well-managed MPAs within the NI inshore region.

The JNCC (2018)[7] Assessment on the ecological coherence of NI's MPA Network identified that there are still gaps in both replication and representation within NI's MPA network which must be addressed. For example, JNCC states '*Native oyster (Ostrea edulis) beds is the only feature not yet represented in the Northern Ireland MPA network*'. Crucial work has been undertaken by Ulster Wildlife identifying urgent measures that must be taken in Strangford Lough to restore this priority marine feature, including feature designation within Strangford Lough MCZ. In addition, there are many unknown factors relating to population dynamics of native oysters in Larne Lough, Belfast Lough and Carlingford Lough[8].

ACTION: DAERA reviews the recommendations from the JNCC report and designates Native Oyster to improve the overall ecological coherence of NI's network.

JNCC further stated that '*For four PMF/pMCZ species there's an opportunity to address ecological gaps at both Northern Ireland and biogeographic region scales*'; this includes Black Guillemot (*Cepphus grylle*) and Common Skate (*Dipturis batis*). Work progressed through the MARPamm project researching black guillemot foraging ecology identified locations of priority foraging for the species in the Belfast Lough region[9].

ACTION: DAERA to identify key sites for black guillemot in NI waters and designate for the species to address network coherence.

Further work is urgently required to address knowledge gaps of critically endangered common skate usage in NI waters to increase species resilience, allowing recovery alongside a more robust MPA network. The Oslo and Paris Commission (OSPAR) have provided guidance on the key principles that underpin coherence and connectivity within MPA networks[10].

ACTION: NIMTF would appreciate six-monthly updates on DAERA's plans with associated timescales to achieve full ecologically coherence in the MPA network - e.g. every six months

The Kunming-Montreal Global Biodiversity Framework (GBF) 2022[11] objectives and purpose states:

"ensure and enable that by 2030 at least 30 percent of terrestrial and inland water areas, and of marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem functions and services ***are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas.'***

In NI, we recognise and commend the department for ensuring over 30% of our inshore waters fall within the MPA network. However, we need development and implementation of management plans to ensure the MPA network fully achieves its outcomes and is coherent and climate-smart and well-connected.

It is imperative that ambitious management plans with SMART targets, that are user-friendly and well resourced are implemented throughout NI's MPA network to truly achieve recovery and protection of designated features. The inclusion of "Potential for success of management measures" has the potential to assist with the formation of an iterative framework for how the MPA Management Plans will address the successfulness. With the inclusion of "Potential damage to the area by human activities", it may be possible to increase the feasibility of recovery of species and habitats and how we can achieve Good Environmental Status (GES) in terms of improving the condition of these features. This would ensure that our MPA Network is able to build in climate resilience in terms of "sensitivity", whilst accounting for invasive, non-native species (INNS) through "naturalness". NIMTF would recommend going further than the JNCC (2018)[7] analysis of the connectivity of our MPA Network to incorporate the above components such as sensitivity and naturalness.

Additionally, NatureScot have provided a review in gathering evidence in relation to specifically marine protected areas[12]. Proposals which link to ecological coherence here are recommended as follows:

- Resilient ecological networks support species through natural perturbations and human activities (including climate change)
- How well it supports large-scale distribution and dynamics of species and communities
- Functional connectivity among habitat patches through migration, dispersal and gene flow
- Important consideration to passively drifting organisations

In developing NI's MPA Network framework for establishing management plans, NIMTF would recommend that DAERA consult these principles to build on the 2018 JNCC recommendations.

II. Ensure that Northern Ireland's MPAs contribute to the wider UK MPA network.

Whilst NI's MPAs contribute to the overall number of designations within the wider UK network in terms of abundance and presence, approximately 30% of marine features are defined as in

unfavourable condition based on 2014 - 2019 condition assessments (DAERA, *pers. corres.*). To truly contribute to the wider network it is critical that designated features are progressing towards favourable conditions.

ACTION: DAERA to publish the proportion of the MPA Network that is under active management to provide a better understanding of where management and enforcement efforts should be focussed.

To truly halt the decline in nature and promote habitat and species recovery along and across borders, as well as within them, greater levels of engagement between Northern Ireland, the other devolved nations and the Republic of Ireland (RoI) are necessary. As a marine unit, interconnectedness must be considered across NI, UK (and Isle of Man) and RoI to achieve policy alignment and active co-operation, especially for designated mobile species such as cetaceans, elasmobranchs and seabirds. North-South and East-West collaboration will help identify features that require designations to improve the ecological coherence of both NI and ROI MPA networks, acting further to meet the objectives of the OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic, and marine biodiversity throughout the region.

Additionally, it is important that the conservation value produced in the NI MPA network contributes beyond that of the UK and RoI, to the wider marine environment. To truly appreciate the worth of marine protected areas to all stakeholders and the wider public, NIMTF would advocate for additional studies to be undertaken to gauge whether species are in recovery within MPA's and whether there is a 'spillover effect' whereby a species becomes so abundant it 'spills over' into the surrounding area and can contribute to sustainable fisheries. Research carried out in Lyme Bay assessed the rate of recovery in MPAs[13]:

- Working alongside communities to create a national and global case study
- Protecting the whole ecosystem as opposed to habitat level showed recovery in a matter of years
- Working alongside the Fishing Industry at the ecosystem level provided benefits for conservation and fisheries
- Adequately resourced, planned and financed monitoring required for robust datasets

ACTION: DAERA to implement a monitoring programme to assess the effectiveness of MPAs based on recovery and 'spillover effect' to further promote collaboration with the fishing industry.

III. Establish appropriate protection and conservation measures for species and habitats designated 'Priority Marine Features'.

NIMTF welcomed DAERA's decision to introduce conservation by laws that came into operation in 2023, prohibiting demersal mobile gear (bottom-towed) in nine inshore MPAs[5], alongside management of pot fishing activity. These measures are vital to protect many designated benthic species and habitats from disturbance and damage throughout the network. To ensure success it is vital long-term monitoring is secured to analyse the benefits of these fisheries regulations, including species recovery rates. The impacts and benefits for nature must be well communicated with marine stakeholders (especially fishing and coastal communities who have or could be impacted), and the wider public to highlight the results that can be produced when appropriate management is established within our MPA network. Resourcing ongoing enforcement is also vital to ensure these measures are abided by long-term. The roll-out of a Programme for Government (PfG) would support

this further by ensuring the outcomes consider the benefits for all citizens regarding the wider links from the marine environment under the jurisdiction of the NI Executive.

NIMTF would recommend the inclusion of our Marine Vision[14] Priorities within the PfG[15]:

- Recovering Biodiversity
- Sustainable Fishing
- Sustainable Developments at Sea
- Climate action
- Raising Voices

We are still waiting on a response and action to be taken by DAERA following the 2022 consultation on 'Fast Craft Management Measures'[16]. DAERA must urgently review NIMTF's previous response and enact recommendations that will establish appropriate protection and conservation measures for species and habitats designated 'Priority Marine Features' regarding fast craft impacts, especially highly mobile designated species such as harbour porpoise (*Phocoena phocoena)*[17].

The NI Marine Plan is still sitting in draft, with potential to be published at the end of 2024 (DAERA, *pers. corres.*). Without this marine plan in place, it is difficult to meet the objectives of a fully ecologically and coherent MPA Network as this will link to multiple policies currently in development such as FMPs or the OREAP.

Hand-gathering of shellfish was also consulted on by DAERA in June 2022[18], with NIMTF producing a response with recommendations to alleviate the threats and pressures which have come from unregulated gathering of shellfish, especially native oyster in Strangford Lough[19]. Recently, DAERA produced a synopsis of the response from the consultation[20]. NIMTF are pleased to see that DAERA have adopted the inclusion of a Periwinkle FMP within the Inshore FMPs but now wish to see the implementation of recommended conservation management for all intertidal species at risk of unregulated hand-gathering.

ACTION: Conservation management is needed for all intertidal species which are at risk from unregulated hand-gathering such as:

- **A personal consumption bag limit.**
- **A Code of Practice for Intertidal shellfish gathering.**
- **A night time curfew for gathering intertidal shellfish.**

Alongside the Inshore MPA network, NI has four offshore MPAs, Pisces Reef Complex SAC, South Rigg SAC, Queenie Corner MCZ and a part of North Channel SAC which we have been informed will come under the authority of DAERA in 2025/2026 (DAERA, *pers. corres.*). Currently, DAERA have the powers to implement fisheries management measures at these MPA's, but can only implement site designations up to the 12 nautical miles. Powers to implement past 12 nautical miles lies with DEFRA.

ACTION: DAERA to work with DEFRA to manage offshore MPAs as they move to devolved responsibility.

In addition, NIMTF proposes that developments in the marine environment must be done so sustainably to ensure we are enabling the recovery of species and habitats. Renewable energy development must be in harmony with nature and adhere to the mitigation hierarchy whereby in the first instance, any impacts must be avoided, where this is not possible then the impacts must be minimised. Only where this is not possible then sufficient mitigation measures must be put in place.

However, this needs to be implemented in a fair and just transition manner. Achievement of this can take the form of securing fishery workers rights and livelihood as we shift to more sustainable management measures to protect biodiversity.

ACTION: Management measures introduced consisting of SMART targets to reduce impact to the seabed, benthic-communities and associated mobile marine features within MPAs and ensure sufficient enforcement of existing measures.

This management measure will not only protect and conserve designated features, but will also help us meet GBF targets[21] including:

Table 1. MPA Strategy Review Action Table Objectives against the relevant GBF Targets.

Action Plan Objectives	GBF Targets
Objective 1	Target 1 - Plan and Manage all Areas to Reduce Biodiversity Loss Target 3 - Conserve 30% of Land, Waters and Seas Target 7 - Reduce Pollution to Levels That Are Not Harmful to Biodiversity Target 8 - Minimise the Impacts of Climate Change on Biodiversity and Build Resilience
Objective 2	Target 1 - Plan and Manage all Areas to Reduce Biodiversity Loss Target 2 - Restore 30% of all Degraded Ecosystems Target 3 - Conserve 30% of Land, Waters and Seas Target 5 - Ensure Sustainable, Safe and Legal Harvesting and Trade of Wild Species Target 6 - Reduce the Introduction of Invasive Alien Species by 50% and Minimise Their Impact Target 7 - Reduce Pollution to Levels That Are Not Harmful to Biodiversity Target 8 - Minimise the Impacts of Climate Change on Biodiversity and Build Resilience Target 20 - Strengthen Capacity-Building, Technology Transfer, and Scientific and Technical Cooperation for Biodiversity
Objective 3	Target 1 - Plan and Manage all Areas to Reduce Biodiversity Loss Target 2 - Restore 30% of all Degraded Ecosystems Target 3 - Conserve 30% of Land, Waters and Seas Target 6 - Reduce the Introduction of Invasive Alien Species by 50% and Minimise Their Impact Target 7 - Reduce Pollution to Levels That Are Not Harmful to Biodiversity Target 8 - Minimise the Impacts of Climate Change on Biodiversity and Build Resilience Target 20 - Strengthen Capacity-Building, Technology Transfer, and Scientific and Technical Cooperation for Biodiversity
Objective 4	Target 1 - Plan and Manage all Areas to Reduce Biodiversity Loss Target 2 - Restore 30% of all Degraded Ecosystems Target 3 - Conserve 30% of Land, Waters and Seas Target 7 - Reduce Pollution to Levels That Are Not Harmful to Biodiversity Target 10 - Enhance Biodiversity and Sustainability in Agriculture, Aquaculture, Fisheries and Forestry
Objective 5	Target 1 - Plan and Manage all Areas to Reduce Biodiversity Loss Target 2 - Restore 30% of all Degraded Ecosystems

	Target 3 - Conserve 30% of Land, Waters and Seas
Objective 6	Target 1 - Plan and Manage all Areas to Reduce Biodiversity Loss Target 11 - Restore, Maintain and Enhance Nature's Contributions to People Target 14 - Integrate Biodiversity in Decision-Making at Every Level Target 20 - Strengthen Capacity-Building, Technology Transfer, and Scientific and Technical Cooperation for Biodiversity Target 21 - Ensure That Knowledge Is Available and Accessible to Guide Biodiversity Action
Objective 7	Target 1 - Plan and Manage all Areas to Reduce Biodiversity Loss Target 2 - Restore 30% of all Degraded Ecosystems Target 6 - Reduce the Introduction of Invasive Alien Species by 50% and Minimise Their Impact Target 7 - Reduce Pollution to Levels That Are Not Harmful to Biodiversity Target 8 - Minimise the Impacts of Climate Change on Biodiversity and Build Resilience Target 20 - Strengthen Capacity-Building, Technology Transfer, and Scientific and Technical Cooperation for Biodiversity
Objective 8	Target 1 - Plan and Manage all Areas to Reduce Biodiversity Loss Target 6 - Reduce the Introduction of Invasive Alien Species by 50% and Minimise Their Impact Target 8 - Minimise the Impacts of Climate Change on Biodiversity and Build Resilience Target 14 - Integrate Biodiversity in Decision-Making at Every Level Target 20 - Strengthen Capacity-Building, Technology Transfer, and Scientific and Technical Cooperation for Biodiversity
Objective 9	Target 1 - Plan and Manage all Areas to Reduce Biodiversity Loss Target 5 - Ensure Sustainable, Safe and Legal Harvesting and Trade of Wild Species Target 10 - Enhance Biodiversity and Sustainability in Agriculture, Aquaculture, Fisheries and Forestry Target 11 - Restore, Maintain and Enhance Nature's Contributions to People Target 14 - Integrate Biodiversity in Decision-Making at Every Level Target 18 - Reduce Harmful Incentives by at Least $500 Billion per Year, and Scale Up Positive Incentives for Biodiversity Target 19 - Mobilise $200 Billion per Year for Biodiversity From All Sources, Including $30 Billion Through International Finance

IV. Establish appropriate management measures to enable the achievement of favourable condition status and/or Good Environmental Status through regular monitoring of species and habitats while promoting sustainable use of our seas.

Based on the most recent condition assessments for NI's MPA features (2014 - 2019), ~30% are currently in unfavourable condition. Overall, just over 5.6% have not been assessed (DAERA, *pers. corres.*). Whilst the majority of MPA features are currently in 'Favourable' condition, this will need to be maintained through effective management. No data has been provided by NIEA in terms of the condition assessments relating to species and habitats within their responsibility.

ACTION: NIEA and Marine Division should work together to ensure that condition assessments, where appropriate, of coastal habitat are aligned under different survey rationale - eg Saltmarsh

are and both available publically in the same place to support the recovery of habitats not covered by DAERA's MD. Condition assessments should be monitored with more frequency than every 6 years to form continuous and robust datasets to inform management measures.

A lack of monitoring to assess the efficiency of our MPA network is a hindrance to understanding its full condition and how well it is achieving objectives for marine biodiversity. Greater resourcing is urgently required to achieve ongoing and regular monitoring of all designated features and the wider ecosystem health of our MPA network. Monitoring reporting is currently done across a 6-year period to inform management. Staggering monitoring programmes to dedicate a year to a specific MPA designation could provide greater efficiency to ensuring effective management is in place.

1.1) Missed Timeframes from the MPA Strategy (2014)

Table 2. Timeframes of objectives from the MPA Strategy (2014) and the current progress of those objectives

Timeframes	**Adjustments**
2015: Substantively complete designation of Northern Ireland's marine Special Protection Areas (SPAs) - informed by UK Marine SPA Programme	Proposed SPA for East Coast and Carlingford Lough not designated
2015: Public consultation on draft Marine Plan for Northern Ireland.	A Marine Plan public consultation was launched in 2018 but the strategy has yet to be published - with the end of 2024 provided as an expected date (DAERA, *pers. corres.*)
2016: All MCZs formally designated.	Still gaps in terms of representation and replication (see Table 3).
2016: Establishment of a well-managed network of MPAs	MPAs are still lacking SMART, actionable management plans.
2020: Aichi Targets[22] - Contribute to the delivery of actions that effectively reduce the rate of, halt and reverse the loss of biodiversity.	We have not met the overall target for 2020 of contributing to the Aichi Targets, as illustrated by statistics from State of Nature Report (2023)[2] and Seabird Count (2023)[3]. In 2022, the Aichi Targets were replaced with the GBF[21] and detailed targets until 2030, as described fully in the previous section. It will be imperative that we strongly meet the objectives outlined within this new framework.

Prior to embarking on this MPA strategy review, it is vital that DAERA reflects on the shortcomings of the previous strategy, including targets and objectives that have not been met/fully met. It would be unwise to attempt to achieve goals established in this upcoming strategy without first assessing the barriers to thus far having a full, ecologically coherent MPA network and presenting solutions to these. The international obligation to meet the statutory requirements of an ecologically connected and coherent network is by 2030.

ACTION: DAERA must outline the timeframe within this MPA Strategy Review between 2025 and 2029 which will lead to the achievement of new targets.

2) Action Table Components

2.1) Developing and completing the MPA Network

We are facing a twin nature and climate crisis, with declines in species and habitats occurring across the UK, with Northern Ireland ranking 12th worst out of 240 countries when it comes to biodiversity loss[2]. At sea, the picture is startling. The latest Seabird Count (2023) demonstrates significant declines in almost 50% of all breeding seabird populations in the UK[23,] with declines evident in NI in seabird populations such as Roseate terns by 75%[3]. Research on blue carbon habitats definitively concludes that at least 44% of the UK's seagrass meadows have been lost since 1936[24]. Long-term data collection surrounding blue carbon is necessary, given the drastic loss of blue carbon habitats, - 92% of seagrass meadows, 86% of saltmarsh and 95% of oyster reefs (Blue Marine 2024)[25]. 11 out of 15 indicators are failing to achieve GES with the UK Marine Strategy, including benthic habitats, birds, fish and litter[26].

With half of NI biodiversity contained in our seas, we must urgently have an MPA network that not only protects but seeks to restore and create depleted species and habitats.

To deliver an MPA network that works to restore nature we need:

- A well managed network which takes an ecosystem based approach

NI MPA network has always been managed with a feature based approach, with each MPA's status defined by how well one or two designated features are faring. However, this risks wider ecosystem health and functioning being overlooked. NIMTF would strongly advocate that DAERA trial and refer to an ecosystem based approach to management within NI's MPA network. This would involve an integrated approach that incorporates the entire ecosystem, including humans, into resource management decisions, and is guided by an adaptive management approach, making it a more effective method to achieve species and habitat recovery throughout the network.

Referring to Action 1.1 / 1.2 - Given the urgency required to address the nature crisis it is vital that this MPA Strategy Review Action table includes detailed SMART targets; ensuring all actions are measurable and time bound, guaranteeing the goals outlined will be attainable. We welcome that this draft contains some time bound targets, for example '*In 2024, DAERA will develop a timetable for further designations to improve the ecological coherence of the MPA network'*. However, to truly deliver, this consistency will be necessary throughout and must also be SMART (Specific, Measurable, Achievable, Realistic and Timebound). Each action should also outline who will lead the delivery to create ownership and achieve outcomes at a fast, transparent pace. This MPA Strategy has an essential role in recovering our seas. Including time bound, ambitious commitments will not only reflect and help deliver this strategy, it will overall support the evaluation of the UK's progress towards ensuring incremental objectives and goals necessary to reach statutory targets are achieved.

Referring to Action 2.1 - NI's MPA network has been established with the primary purpose of improving the marine environment, putting in place measures to conserve designated species and habitats from an array of human-induced pressures. However, NI's MPA network can no longer safeguard designated features through objectives focused solely on protection. Restoration of NI's

vulnerable species and habitats must now be a priority. This will not be possible without MPA management plans, which are still absent from most of NI's MPA network. These plans must have SMART targets which focus on species recovery and be effectively resourced to deliver for nature.
MarPAMM MPA Management Plans[27] are referred to in the consultation document, however these were one of many iterations of management plans and have not officially been enacted. Furthermore these draft plans don't have SMART targets and in their current format are not user friendly.

ACTION: DAERA must introduce robust, ambitious, actionable MPA Management Plans which must include SMART targets to ensure reversal of declines and enable recovery of our marine species.

DAERA's Aim in Table 2 is *'Use a co-management approach to develop and implement effective management measures for network features.'* NIMTF welcomes this style of management, acknowledging that it has been beneficial in other areas, for example the establishment of Co-Fish[5].

Referring to Action 3.1 - Story Maps have been utilised previously by DAERA to share knowledge.

ACTION: DAERA develops and implements a communication Strategy tracking the impact (qualitative and quantitative) of differing communication methods demonstrating effective communication which increase a) awareness b) capacity to support/implement the blue carbon action plan c) influence change over a variety of timescales.

Focusing on Story Maps may not fully showcase the benefits MPAs provide and the urgent need to ensure protection and restore them in NI waters. NIMTF would advise DAERA to work in conjunction with the Departments for Education, Health, Communities and Infrastructure to identify additional methods to showcase the wider ecosystem benefits MPAs provide for society. NIMTF would recommend that a communication strand is set up that is cross-departmental to better communicate these benefits moving forward, with input from NIMTF members such as Ulster Wildlife (UW), RSPB NI, National Trust (NT), WWT, Marine Conservation Society (MCS) and WWF. These should link in within *Objectives 8 & 9 for communication and engagement*, taking lessons learned from previous wide-ranging communication plans[5] to ensure that these are effective in the future when engaging across different departments and with the public; such as the production of a heat map which shows how successful conservation objectives have been.

ACTION: With reference to Story Maps and a Communication Strategy, this must be co-designed with media, educational and communication experts and to outline a comms strategy that requires focus groups from specific, intended audiences.

NIMTF thanks DAERA for adopting the co-design approach to both the BCAP and MPA Strategy Review and would strongly recommend that this approach is continued into the future.

- Monitored

Greater resourcing is urgently required to achieve ongoing and regular monitoring of all designated features and the wider ecosystem health of our MPA network. To ensure regular stakeholder engagement and support with MPA management, a system of ongoing knowledge sharing, with accessible data on MPA feature condition assessments, should be established. This will allow greater transparency of the true state of the network, providing opportunities for the identification of solutions required to ensure species recovery.

Condition assessments for MPA features are not readily available and this needs to be communicated better for transparency, but also to inform urgent actions needed to recover features in poor condition, or facing potential declines.

Referring to Action 1.4 - Whilst NIMTF welcomes the inclusion of quality assured citizen science data from CEDaR[28], this action would be best served within *Objectives 8 & 9, which focuses on the communications and engagement components of the Action Table*. There are a number of citizen science projects which already operate in NI which contribute to CEDaR's database. DAERA must establish what standardised protocol citizen science project data must be in for it to become more efficient in use towards establishing an iterative developmental framework which works to support the recovery of MPA PMFs.

Referring to Action 1.1- This strategy states '*In 2024, DAERA will produce an updated MPA Network Report to be laid at the Assembly*.' DAERA must provide an outline of whether this report will contain an MPA Sufficiency Review, alongside an outline of the established monitoring process and database of available current condition assessments.

- Enforced

Referring to Actions 3.2 - 3.4 - It is futile to produce a MPA strategy that sets out objectives to protect nature if enforcement is not well resourced, ensuring compliance amongst a variety of marine stakeholders. Additionally, the marine environment is a challenging location to work within and monitor. As NI's MPA network is vast, many illegal or damaging activities to designated features may happen out of sight, out of mind. This further demonstrates the need for greater resourcing and capacity within this area.

DAERA mentions in this draft strategy '*From 2024, project delivery partners and landowners will adopt an integrated coastal management approach for protected sites*.' NIMTF are aware of and have raised several incidents in recent years that negatively impact the marine environment along our coast. This coastal management approach could provide a forum to address these challenges, wth members supporting engagement and enforcement efforts, but again it must be well- funded and have capacity.

To contribute to the effectiveness of enforcement, DAERA, Department of Finance and Department of Justice must review currently in place fines associated with breaches of existing regulation to ensure there is appropriate compliance with regulation.

Some recent, easier to identify and record activities that can cause disturbance to designated features include unsafe fast craft activity with MPA's. Recent Incidents include disturbance of seabird colonies featuring several designated species at the Rathlin SPA. Correspondence from RSPB Rathlin warden included '*A ship named " Seabourn venture", having been at anchor in Church Bay all morning with passengers ashore it then departed c 12.30 PM, at about 13.30 PM it was positioned in the first Bay East of the West Lighthouse and started dropping Zodiac tenders (10 in number by mid-afternoon) these zodiacs with their passengers then forked out along the North coast very close inshore where the seabirds nest, one of them came around as far as the West lighthouse.*' This information is vital to prevent similar incidents. As a growing number in tourism and cruise ships is occuring in NI coastal sites, it is vital strong enforcement is in place to ensure the MPA network functions appropriately.

ACTION: DAERA must include stakeholders associated with marine tourism within the list of stakeholders moving forward to ensure that we are including all marine users who have the potential to interact with MPA features.

The impacts of unregulated shellfish gathering have been identified alongside recommended actions already in this response. However, the aquaculture industry is expanding in NI. When assessing recent marine licensing applications we are witnessing an overlap in coastal areas that support blue carbon habitats such as seagrass meadows[29]. The impact of unregulated aquaculture activities occurring on Lough Foyle in the form of unlicensed installation of pacific oyster trestles[30,31] should be stopped. Unregulated and unlicensed activity in the SPA and wider lough is of great concern as this may result in habitat destruction, specifically for seagrass beds in that region. Both trestles and access to the trestles can result in the disturbance of seagrass in the lough which is not only a carbon store, but a vital component of the wider marine ecosystem- for example, acting as a food source for birds. NIMTF are therefore asking for action from DAERA to guarantee the cessation of all unlicensed aquaculture activities and undertake an assessment of all aquaculture activity in NI to ensure it is being managed sustainably to ensure impacts on marine habitats are stopped and habitats restored. Aquaculture across NI waters must be rigorously regulated to ensure no negative impacts to species and habitats. Furthermore, DAERA must consider the potential impacts that all in-situ aquaculture infrastructure can have on blue carbon habitat's CSR and ensure adequate enforcement is in place to manage these impacts in line with condition licences. Further information in relation to this can be found in our response to New Aquaculture Proposals for Mill Bay[29].

NIMTF appreciates that DAERA are responding to earlier consultations on both these challenges, it is now important that actions are taken to manage within the network.

As previously mentioned, NIMTF are delighted to see the enactment of fisheries bye laws within the NI MPA network. However, it is now vital these measures are properly enforced to make them adequate. To ensure measures are being complied with, a greater understanding of the ongoing activity is needed. This can be facilitated via the installation of technology that assists fisheries monitoring, including the requirement for Inshore-Vessel Monitoring Systems (I-VMS)[32] to be fully implemented on all vessels fishing within NI waters and the potential exploration of Remote Electronic Monitoring (REM)[33] all on vessels, as is being undertaken in the other devolved nations. Again, this will require adequate and long-term funding to support NI fisheries to install and maintain this equipment.

For all enforcement considerations, DAERA needs to provide accessible and clear routes for the general public and marine stakeholders to raise and report suspected illegal incidents:

- Clearly established process for reporting suspected illegal incidents for general public
- Clearly established process for reporting suspected illegal incidents for marine stakeholders
- Timely response from DAERA to actionable efforts in response to suspected illegal incidents
- Clearly defined roles and responsibilities from DAERA and other establishments when it comes to handling wildlife crime
- Development an iterative framework which continues to build and develop on promoting marine recovery in relation to developing policy

    - Well communicated

The climate and nature emergencies are evidence of people's disconnect with nature. The relationship between our society and nature is failing. This is highlighted as a key indirect driver of

biodiversity loss in the IPBES global assessment[34] and is exacerbated further within the marine environment, as the species, habitats and values our seas provide to society are often viewed as less accessible and out of sight, and therefore out of mind.

However, NI is a coastal nation, with many people having a deep rooted connection to the sea. This provides the perfect opportunity to engage communities in the value of NI's MPA network. From DAERA's NI Ocean Literacy Report[35], 41% surveyed considered their awareness of the challenges facing the global marine environment to be poor or very poor, however when asked about the marine environment concern was the most commonly reported feeling at 45%. There is therefore great potential to engage further and provide routes to empower the public to protect our seas.

To do this, It is crucial that we engage the public more in the benefits of a healthy marine environment. We are reminded of a Sir David Attenborough quote, "No one will protect what they don't care about; and no one will care about what they have never experienced". It is therefore vital to raise awareness of the ecosystem services a well functioning MPA network can provide, such as nutrient cycling and water purification, food, carbon storage and cultural services such as recreation, tourism and mental health benefits.

This will mean translating scientific and policy jargon surrounding our MPA network into a more widely accessible language that will aid the public in feeling empowered to raise their voices in support of actions that safeguard our seas. Behavioural change will be a key component of this to achieve long-lasting results. This could be channelled through an increased NI specific marine focus on the NI curriculum. There is also a real potential to ignite a passion for our seas amongst members of the public by providing interactive, readily accessible opportunities and resources that facilitate knowledge building and support marine conservation.

NIMTF would strongly encourage more resources to build sustained citizen science projects, providing an opportunity to teach participants more about NI's coastline and the marine species and habitats that inhabit our local seas. Citizen science projects that have taken place across NI historically include Shore NI and Sea Deep which focused on increasing the public's understanding of rocky shore assemblages and NI elasmobranchs. Examples of successful ongoing UK & Irish citizen science projects include NIMTF members Marine Conservation Society (MCS), Seasearch[36] and KNIB[37] and Beach Cleans[38]; with marine mammal surveys through Irish Whale and Dolphin Group (IWDG)[39] and the Great Eggcase Hunt through Shark Trust[40] . All these projects have the ability to break down barriers for the community in accessing information and upskilling in marine recording. In doing so, coastal communities will have a deeper sense of understanding & ownership of the MPA network and responsibility for protecting our seas.

It is essential that community-led events are supported and their visibility is enhanced throughout Northern Ireland. Many initiatives are already yielding impressive results but require further support. Some of the initiatives it is essential to highlight include but are not limited to; Healthy Oceans Healthy Mind[41], Adopt a Spot[42], Marine Litter Grant[43] & Eco-Schools[44].

This will also be the case for wider marine stakeholders. For example, for the fishing industry this could include demonstrating "good news" stories as a result of their efforts regarding fisheries management or sustainable practices, such as the potential for spillover effects from MPAs. NIMTF and NIFF have fostered a transparent working relationship to discuss routes for increased sustainability within industry. 'Co-Fish'[5] is one such successful partnership, resulting in fisheries management measures being implemented within MPAs; without which these platforms for communication managing NI's MPA network would be made more challenging. Additional examples

of fishery and eNGO collaboration producing co-benefits within MPA networks include Lyme Bay (South coast England)[45] and Arran (West coast Scotland)[46].

Overall, greater communication of the value of an MPA network will provide an exceptional tool for the public to gain an understanding of and comprehend our local marine biodiversity, whilst also encouraging members of the public to get involved and build connections with the sea. This will additionally support enforcement of management measures within the network.

Referring to Action 1.3 - DAERA mentions '*raise the awareness of the existing MPA layer which is published on Open Data NI and displayed on the publicly accessible Marine Map Viewer*.' To achieve this, immediate steps can be taken to make the MPA layer within the Marine Map Viewer known to a wider audience. The current location of the Marine Map Viewer is difficult to locate on the DAERA website[47], which should be addressed to ensure greater engagement with this tool. This should also have links to work being carried out by the Coastal Observatory[48] in relation to taking high-resolution imagery of coastal habitats around NI, showcasing in detail different species and habitats.

ACTION: Link the Blue Carbon Habitat Mapping into the Coastal Observatory and into the Marine Map Viewer - including *a 200m buffer.*

Beyond the wider public it will be important to engage with additional departments to ensure that there is greater understanding on the need for and the measures being delivered to protect the NI MPA Network. Within government departments there is a silo mentality, with environmental responsibility falling entirely under DAERA. Recent improvements with DAERA and DfE collaborating on OFW through the Offshore Renewable Energy Forum (OREF) are evident. Yet, to truly tackle marine environmental pressures and drivers and support a thriving MPA network, the environment must be enshrined across each department's remit and priorities.

- Well-Resourced

It is evident from the above recommendations, that robust funding and capacity will be crucial to deliver what is truly needed for NI's MPA network. The NI environmental budget[49] is reported to have fallen by approximately 20% since 2009/10 and within NI overall there is an estimated £1 billion financing gap for protecting and/or restoring biodiversity. Focused, ring-fenced budget towards nature in supporting, monitoring and increasing practical restoration work, resourcing and capacity is now essential. There is an urgent need to focus on longer-term sustained funding to allow upskilling and maintain capacity in NI.

Although challenges lie ahead, we wish to emphasise restoration projects currently underway in NI, such as Ulster Wildlife's (UW) native oyster restoration programme[50,51,52] and RSPB's LIFE Raft[53] project to tackle invasive non-native species (INNS) on Rathlin Island. Given NI's size, there is real potential to be a world leading example for restoration, by upscaling work that is ongoing and prioritising collaborative, nature-positive, long-term projects which produce results that will restore our seas and MPA network to a thriving, healthy and well-functioning state. To achieve projects such as this, this will need long-term, sustained funding in place as well as resources to deliver consistent monitoring programmes that inform an iterative, management process to ensure we are protecting our MPA Network.

NIMTF would appreciate more information on staff capacity and individuals currently managing and working directly on the MPA network with DAERA and if it is felt that these numbers are sufficient? Ideally, given the scale of NI's MPA network and the dedication required to achieve feature recovery,

we would advocate for one MPA officer per two MPAs, with a dedicated team under each officer overseeing management, regular monitoring, engagement and enforcement.

Further requirements for a fully functioning MPA network

- MPA Connectivity and Coherence: Future designations and additional features

Referring to Action 2.1 - DAERA has highlighted its intention to assess in 2024 whether the Marine Act (Northern Ireland) 2013[54] allows scope to designate and adapt MPA extent and features with changes in environmental conditions; this process must be carried out urgently to enhance both the connectivity and coherence of NI's MPA network.

However, it is important to note that prior to designating new sites, it is vital the MPA network in its current form is closer to delivering for nature, well-managed and ecologically coherent. Our existing MPA Network is currently not meeting the original targets and objectives set out from the MPA Strategy 2014[1]. It is important that we exceed these objectives, achieving restoration of current features before we consider adding in new designations, or new targets. This will include the official designation of the two pSPA's Carlingford Lough and East Coast. Please refer to NIMTF member RSPB's response to this consultation for further information.

The functionality of the connected MPAs needs to be addressed to whether they fully meet the representation and replication targets as outlined within the JNCC Analysis Report (2018)[7]. This analysis highlighted the following species and habitat gaps:

Table 3. JNCC (2018) Analysis Report for NI MPA Network, highlighting the species and habitat gaps for Representation, Replication and Data Gaps for achieving ecological connectivity and coherence.

Representation	Replication	Gaps
Native Oyster (*Ostrea edulis*)	Low Energy circalittoral rock Native Oyster (*Ostrea edulis*) Black Guillemot (*Cepphus grylle*) Common Skate (*Dipturis batis*) Sea Cucumber (*Paracucumaria hyndman*)	Moderate energy circalittoral rock Low energy circalittoral rock Sublittoral coarse sediment Sublittoral mud

It will be important to recognise that whilst the JNCC 2018 Report[7] helped to identify where species and habitat gaps for connectivity and coherence, this was based on a "proximity of broad habitats to represent the likelihood that sites with similar features are ecologically connected to each other." Whilst this is welcomed, it is a basic analysis of the network from 6 years ago, there is a limitation that this does not consider how permeable the wider seascape is between MPAs.

A study done by AFBI focused on modelling larval dispersal for Scallop Enhancement Sites also considered the probability and efficiency from some of the MPA sites[55]. The study found that The Maidens had the highest probability for success of larval dispersal and settlement for scallops. Given the gap in native oyster, there is potential here for successful dispersal after establishing a native oyster population to help create replication.

As highlighted within Figure 2 of the consultation pack, NI's Offshore MPAs sit alongside the rest of the NI MPA Network, however the ownership and management of NI's Offshore MPA's does not come into DAERA's remit until 2025/2026 (DAERA, *pers. corres.*). Therefore DAERA cannot say the entire MPA network as it stands is well connected, and management and therefore objectives for these sites cannot be fulfilled. Currently work is being undertaken through Co-Fish[5] to ensure that the fishing industry, eNGOs and DAERA work in harmony to ensure sustainability, protection and management within these Offshore MPAs. NIMTF wants DAERA to establish a robust monitoring programme to be formulated and implemented to fill data gaps ahead of the transfer; in doing so this will ensure that timely management can be effective and the development of MPA Management Plans for these offshore MPAs can be developed.

Future designations for the MPA Network (All)

To meet the objectives as outlined in the original MPA Strategy (2014)[1], the Northern Irish MPA network must be ecologically coherent and well connected. that also contributes to the wider UK MPA Network as a whole. One of the ways to achieve this will be to designate new sites as part of this process, but this must be done appropriately - e.g. If a species already designated for is found elsewhere, then it should also receive the same protections as its partner MPA. DAERA must be transparent with the process on how to designate new sites, with established links to the Biodiversity Strategy and Environment Strategy to take this into account. Designating new sites without an existing management framework that can be enforced and delivered will not deliver for species and habitats.

In addition, the Lawton Principles[56] should be considered here and whether, alongside the OSPAR Principles for coherency are we providing enough connectivity to new designations:

- That we better protect and manage our designated wildlife sites;
- That we establish new Ecological Restoration Zones;
- That we better protect our non-designated wildlife sites;

To achieve nature recovery across our MPA Network, we must ask the following questions to the functionality to further assess the functionality, coherence and connectivity[57]:

- Are MPAs acting as core sites within the network
- Are MPAs buffered from harmful external impacts coming in
- Is the local and surrounding seascape providing enough connectivity to ensure coherence
- Are MPAs achieving a net positive to coherence

When considering Figure 2 from the consultation document, it can be seen that the eastern side of NI's MPA Network is quite highly connected, but the North Coast and Antrim Coastline areas are less connected. NIMTF would recommend assessing potential areas for new designations to ensure that we have greater connectivity and coherence across our local seas, whilst ensuring that we do not neglect existing PMFs. However, DAERA must establish a framework as highlighted above which shows a transparent process on how new sites are established moving forward with implemented managed plans to accompany designations. NIMTF have already proposed that the inclusion of Native Oysters must feature within the MPA Network in order to deal with the only representation gap within NI's existing MPA Network

It is important as we progress our NI MPA Network that we do not overlook the remaining 70% of species and habitats which are currently in 'Favourable' condition. PMFs that fall in this category will still need effective management and monitoring to maintain their status and to ensure their condition does not decline. It will be key to work across the UK and RoI to ensure that our MPA networks are linked and coherent across the wider marine environment, not treating our local seas in isolation. As we have established, we have several migratory species which cross between the Irish Sea and around the island of Ireland.

MPA Sufficiency Review

NIMTF would propose that DAERA include an MPA Sufficiency Review as part of their statutory requirements. It is hoped that this would be part of *Objective 6* which considers the Governance Structure but also the publishing of annual MPA management progress reports as reflected in *Action Referring to Action 6.2*. Condition Assessments for the current MPA Network are produced every 6 years, however dealing with the existing challenges facing our MPA Network, a 6-yearly report may need to be more frequent in managing the maintenance and recovery of marine feature conditions; e.g. there are risks associated with the degradation and loss of primary marine features due to lack of existing enforcement capacity, which may not get acknowledged until the end of a 6-yearly process. NIMTF provided key evidence to the Office for Environmental Protection in January 2024[58] around the barriers in the marine environment to achieving GES overall for the UK from NI's perspective. This information contributed to the Wildlife & Countryside LINKS[59] response.

ACTION: DAERA to develop and implement annual condition assessments alongside their annual MPA Management Reporting process.

The OEP is currently investigating the Department for Agriculture, Environment and Rural Affairs (DAERA) in Northern Ireland over possible failures to comply with Northern Ireland environmental law in relation to SPAs and this investigation will look at what has happened in relation to previous recommendations made by UK SPA Reviews. However these reviews have been focused on terrestrial and coastal SPAs, and we know that focus is also urgently needed on the sufficiency of the SPA network in the marine environment[60].

- HPMAs

Within this consultation draft, DAERA states '*DAERA will develop policy on management approaches for MPAs, including the potential role of HPMAs'.*

The Benyon Report[61] regarding HPMA's state*s 'HPMAs allow marine ecosystems to recover to a mature state. By taking a 'whole site approach' to designation, thereby protecting all habitats and species in their boundaries, HPMAs give nature the best chance to thrive.' This report further highlighted that* HPMAs will support the UK in meeting GES, and if conserving 10% of coastal and marine areas, will contribute to protection of 30% of the world's ocean by 2030 and contribute to the UK's overall 25 Year Environment Plan[62]. To truly safeguard our seas and ensure the NI MPA network is delivering restoration for nature, HPMAs therefore must be identified and designated.

In doing so, it is important that DAERA review how this process has been undertaken in other regions to ensure all marine stakeholders understand the value of HPMAs and are in support of their designation. In Scotland, a consultation was carried out identifying the aims, purpose, implementation and potential impacts of HPMAs. This consultation showed 55% of respondents were in support of the introduction of HPMAs[63], however the process around this consultation did not provide the most comprehensive explanation around HPMA outputs. The HPMA consultation did

not land well, with the result of this that the issue became extremely politicised beyond the subject matter itself and we are still seeing tensions due to this, and therefore there is a need to handle this process delicately if HPMAs are to be progressed in NI, with early stakeholder and community inclusion.
One area of confusion in the Scottish consultation was whether there was legislative powers to designate in the 12nm - 200nm zone, leading to a concern of all potential HPMAs occurring in the 0nm - 12nm zone; creating spatial squeeze on fishers within the inshore zone (Scottish Wildlife Trust, *pers. corres.*). DAERA must ensure there is improved communication and engagement to key stakeholders and the public about the locations of HPMAs in Northern Ireland around the exact range which HPMAs would be designated within.

A limitation of the consultation within Scotland included no suggested site areas being taken into account, instead focusing on public perspectives on the general framework of how HPMAs work. This generated confusion within coastal communities as they did not know where future HPMAs would be sited. Additionally, questions within the document were technical and difficult to understand, linking to the challenges around ocean literacy for the UK and here in Northern Ireland.

Wildlife & Countryside LINK carried out a campaign around HPMAs where members of the public could provide a generic response to be sent, but these were weighted differently in terms of analysis with respect to handwritten responses[64]. DAERA must ensure that all responses are weighed appropriately and considered when it comes to communities empowered to represent the local perspective.

Within the Isle of Man, the only designation which exists are Marine Nature Reserves which strongly limit activities which take place within[65], covering 10.8% of their waters.

NIMTF would recommend that the introduction of HPMAs and related consultations in NI needs to implement the following:

- Clear definitions on the prohibitions of HPMAs and how these differ from MCZs
- Clear definition on how HPMAs protect marine habitats and/or species
- Clear and transparent communication between government, industry and eNGOs
- Consultation with clear, SMART targets around perspectives, impacts and potential designations for HPMAs
- Early stakeholder engagement, taking into account communities' views, with lots of participation
- Consideration of ocean literacy in the consultation phase i.e.- consultations on HPMAs should take place in a more digestible non-technical language format.
- Lack of clarity was a specific issue for Scotland. Defined guidelines and potential boundaries would perhaps lead to less confusion from the outset.

Could possibly name differently, to ensure this is not associated with current understanding of HPMA's. Terminology such as 'Ocean Recovery Zone' might be more palatable.

- OECM

OECM's have been defined as *"A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity,'* (CBD Decision 14/8). According to the World Database on OECMs, the UK has not yet formally reported any OECM's[66], even with existing requirements through the

National Biodiversity Strategy and Action Plans (NBSAPs)[66] in relation to Target 11[67]; and Target 3 of GBF[21].

The definition of an OECM as an area "other than a Protected Area" makes it clear that MPAs and OECMs are mutually exclusive. MPAs must therefore be recognized, dedicated and managed for nature conservation as a priority.

Concerns have centred around the risk that OECM recognition may be seen as an easy, and potentially quick way to reach the 30x30 target. If existing area-based management measures are simply relabelled as OECMs it may result in the recognition of areas that do not sufficiently contribute to sustained and long-term in-situ biodiversity conservation), thereby undermining conservation targets. The IUCN has produced criteria and guidance for recognising and reporting OECMs, making clear that OECMs are not a lighter touch option and that they should be delivering biodiversity outcomes equivalent to protected areas.

Scotland has developed a draft 30x30 framework which showcases a high-level approach to their definition of an OECM, based on the CBD criteria[68] and England is also developing its own 30 by 30 approach and criteria which will cover OECMs[69]. Lessons should be taken primarily from the existing suite of IUCN criteria and guidance on OECMs, supplemented with reviews of both Scotland and England to ensure that any proposals for NI meet international requirements and standards. There is potential that OECMs could be linked with OFW and marine spatial planning as a whole to deliver on marine net gain. The implementation of no-go zones could be achieved through OECMs rather than through MPAs.

Given that we do not have any OECMs established in NI, NIMTF proposes that OECMs are not a priority when compared to the existing MPA Network which already covers 38% of the inshore marine region. This can be achieved through effective MPA Management Plans and improvements on existing protections. OECMs are still a novel concept across the UK and this should not distract from developing the ecological function, cohesion and connectivity from achieving the MPA Network objectives.

- ## Cross-border management

Cross-border cooperation is a strong imperative for effective governance and management of protected sites, and too much divergence of approaches could compromise operational effectiveness. Two cross-border sites of particular importance are Carlingford Lough and Lough Foyle, which have had historical difficulties with management due to differing governance structures and enforcement challenges in the region; yet without aligning targets for species protection and recovery in cross border MPAs, it is not expected that conservation objectives set for marine biodiversity will be fully met. With DAERA currently developing this MPA strategy review, and the RoI on the verge of publishing its MPA Bill there is a real opportunity to co-ordinate objectives, targets and actions for marine biodiversity throughout Irish waters.

Challenges of managing mobile species

MPAs are in essence static, with borders that do not move. Therefore for mobile and migratory species, such as seabirds and cetaceans, their use as a management tool can be limited. For these species, their conservation needs shift across space. Other protected species only use specific marine regions at certain times of the year, so that their conservation needs shift over time. On top of this, climate change will alter ocean conditions over the long term, leading to continual shifts in species' ranges across large areas.

NIMTF would encourage DAERA to explore the use of mobile boundaries for MPAs. Instead of a static network, mobile boundaries could shift over time and space according to key species' needs. For example, an MPA network that accommodates Basking Shark species when migrating via NI waters in the summer months.

Mobile MPAs would not eliminate traditional MPAs, but rather complement them. They would allow managers to maximise connectivity between critical conservation regions in a dynamic, responsive way. As a management tool, they offer a unique and highly effective way to both support marine biodiversity and allow for sustainable human use. They may become increasingly more useful as our seas and species alter as a result of warming waters from climate change.

- Climate Smart

The marine environment is key to fighting the climate crisis. However, its potential decreases with the ongoing destruction of blue carbon habitats, such as seagrass and saltmarsh, releasing quantities of greenhouse gases into the atmosphere[70]. Restoration of these habitats can potentially sequester large amounts of carbon, reducing emissions significantly, providing a natural way to mitigate climate change[71] through nature-based climate solutions (NbCS). Despite the potential to significantly reduce carbon emissions, NbCS are not being created, monitored or protected in sufficient volumes; with many of these habitats in a degraded condition. Please refer to NIMTF member UW's Feasibility Study on blue carbon restoration for more information[8], showing that within the UK between 84% and 92% of seagrass has been lost since 1940 (Jones and Unsworth, 2016)[72].

A project called Marine Spatial Planning Addressing Climate Effects (MSPACE)[73] has been done to showcase where areas of *refugia* exist which can be safe-havens for marine species and features, but this work will not be carried forward into the NI Marine Plan.

ACTION: MSPACE adopted into the Marine Map Viewer as a layer to better understand the impacts of climate change on our marine environment and build into the dataset requirements for monitoring as we move forward.

Fair Seas carried out a climate report which modelled areas of potential climate resilience within the RoI MPA Network and a framework for establishing new MPA sites and features under this framework[74], falling under areas of refugia - or areas where climate resilience could be seen - further establishing the importance of MPAs in providing protection moving forward against the impacts of climate change. The ambition to establish climate-resilient MPAs is a global ambition[75], not just for the island of Ireland, but to ensure that we are able to meet multiple statutory commitments to marine biodiversity and to tackling the climate crisis.

ACTION: Climate-smart MPAs factor in the shift in species and habitat populations into future MPA planning; use SMART targets that help to build resilience into the existing MPA Network; and increase the number of blue carbon habitats improving the resilience of species and habitats within the MPA Network.

<u>Blue Carbon Habitats</u>

Protection of our blue carbon habitats will be essential in meeting climate-smart MPAs as these will be NI's nature-based solutions that can contribute to the objectives of the Climate Change (NI) Act 2022, as well as provide key habitats for species to aid in recovery.

Additional work is being done through the Peace Plus programme, which will ensure that projects will align for conservation efforts across Northern Ireland, but also for the Republic of Ireland too. This will involve projects in relation to blue carbon habitat management and restoration, whilst also filling in the gaps we have in terms of monitoring for NI for migratory species and harder to survey habitats. See our response to the BCAP for further information on how this will contribute to the MPA Network.

Nursery, Spawning and Breeding Grounds

We must ensure existing sites for prey species - e.g. herring and sprat - and essential habitats for spawning and juveniles - e.g. Spurdog, Common Skate, Thornback Rays - are effectively protected, introducing additional sites where needed to the NI MPA network. NI must have effective legislation and implementation procedures in place, enabling sustainable and climate friendly fishing to address fisheries interactions with blue carbon habitats.

Elasmobranchs, or sharks, skates and rays will face several challenges, such as embryonic development disturbance, behavioural changes, and migratory impacts due to electromagnetic fields (EMF)[76] coming from cabling from offshore renewable developments which will be required to meet the objectives of the Climate Change (NI) Act 2022[77]. Safeguards will need to be built into the planning process as has been for seabirds and marine mammals, to ensure that we are taking a nature-positive approach to marine net gain when considering elasmobranchs. This includes a Bycatch Mitigation Initiative[78] for which FMPs must take into account the impacts to species such as Spurdog. Spurdog is not being managed sustainably, with only tentative signs of recovery being seen[79]. In the wider UK, a fishery was reopened with a TAC which fully exploits ICES advice, without using the Precautionary Approach alongside restrictive measures. Cefas has deemed this fishery needs greater accurate data in relation to spurdog bycatch[80], alongside the unsustainable nature of the fishery given the lack of a sharing agreement with third countries creating a loophole for exploitation that exceeds current ICES advice. An Area of Search (AoS) for Flapper Skate (*Dipturis baptis*) had been set up around The Maidens SAC to scope for nursing grounds[81]. However further work needs to be done not only within an ECS, but also potentially within the NI MPA Network to ensure that the correct provisions and protections are in place. NIMTF would recommend ensuring that the outcomes of this strategy in terms of SMART targets for elasmobranchs are also applied to the upcoming ECS, expected in Autumn 2024.

ACTION: DAERA to ensure policy links are made across the Blue Carbon Action Plan (BCAP), Elasmobranch Conservation Strategy (ECS), Seabird Conservation Strategy (SCS) and Fishery Management Plans (FMPs) to MPA Strategy Review.

Impacts on designated features

There are certain activities NIMTF strongly advocates against occurring in the MPA network, as they're likely to result in high levels of disturbance that will reduce designated feature resilience and recovery rates. To achieve the targets of the MPA Network, DAERA must implement better management, enforcement and allocate adequate resource and capacity to tackle the challenges facing the marine environment from industrial activities below:

Fisheries

Many marine habitats and benthic features are highly sensitive to physical disturbance. If occurring on a regular basis, said habitats may not recover at a sustainable rate. DAERA's 2020 assessment on

commercial fisheries indicates that bottom trawling can have long-term devastating impacts on benthic communities, especially features of Marine Conservation Zones (MCZ)[82,83]. Static gear methods such as potting also have the potential to disturb vulnerable habitat, e.g. crab or lobster potting on temperate rocky reef habitats[84]. NIMTF welcomed new bye-laws introduced in January of 2022, restricting bottom-trawling and introducing management measures in 9 MPAs in NI[4], however efforts are now urgently needed to ensure these sites are monitored and measures are well enforced for species recovery.

Scallop dredging is a highly damaging activity to the seabed, with impacts shown in the UK and in the RoI - affecting numerous species e.g. burying and subsequent reduction of 70-70% of maerl beds and significantly reducing the structural integrity[85,86]; an elimination of a historical horse mussel reef bed located off the South of the Isle of Man between 1970s and 1980s; including the reduction of 59-90% of associated biodiversity communities for this area and Wales, and reduction of horse mussel reef beds in Strangford Lough in 2009[87,88,89,90]; soft sediments where exposure to scallop dredging reduced available biodiversity and created a much less 3-dimensional structure[91]; rocky reefs and mixed substrates were reduced by scallop dredging by 54-73% in Lyme Bay when compared to unfished areas[92], whilst in Scotland it showed the vulnerability of emergent fauna on hard substrates to dredging[93]. It is proposed that soft sediments are capable of recovering if they are protected from fishing, but the timeframes in which this occurs differ depending on species[94,95].

Dredging is not banned in all MPA's with sensitive designated features, e.g. the Outer Belfast Lough MCZ has been designated to protect ocean quahog, a slow-growing and vulnerable species. Evidence from sonar scans shows that dredging has occurred at high intensity within the MCZ and is likely to remove a large proportion of the population and/or cause damage to the shells and body[96]. This completely goes against the purpose of this MPA, to protect this designated species. NIMTF would strongly advocate for the prohibition of scallop dredging and bottom trawling to move towards recovery of benthic marine features. To achieve this, we must ensure that there is sufficient enforcement in place to ensure that existing measures are being adhered to; all of these actions have the potential to contribute to the recovery of MPA features. To reduce the impact from fisheries to MPA features:

ACTION: Management measures introduced consisting of SMART targets to reduce impact to the seabed and benthic carbon-storing marine features and ensure sufficient enforcement of existing measures.

ACTION: Measures within this Action Plan should be cross-referenced within the Blue Carbon Action Plan (BCAP) and existing Fisheries Management Plans (FMPs) for the Inshore and Demersal stocks[21], as well as other relevant cross departmental policy (not limited to) such as the Climate Action Plans, Regional Development Strategy and the Environmental Improvement Plan.

ACTION: Prohibit bottom-trawling to reduce the impact of seabed disturbance in key sites within MPAs around blue carbon features. These sites potentially could relate to those featuring reef systems which not only support biodiversity, but also promote the formation of carbon-storing benthic species.

<u>Sustainable Development at Sea</u>

It is critical that we avoid offshore windfarm development and construction within Marine Protected Areas (MPAs). MPAs have been designated to protect marine life and designed to function as a network; therefore, development in them is a no-go area.

The NI marine area is small and therefore is under increasing pressure for spatial competition from several activities and industries such as Offshore Wind (OFW).

- Islandmagee

The case study of Islandmagee has been an example of a proposed development which presents a significant threat to marine wildlife, including wildlife for which several MPAs, including Portmuck ASSI, North Channel SAC and East Coast pSPA, are designated. The proposed development would have caused significant environmental damage, for which NIMTF provided evidence[97]. Islandmagee communities rallied together alongside NIMTF member Friends of the Earth NI and took the case back to court on the basis of due process and won[98,99,100]; when the original case for environmental impacts were dismissed. It is highly concerning if developments are proposed within MPAs which threaten the conservation of NI priority marine species.

This is further outlined within fellow NIMTF member, RSPB's Powering Healthy Seas Report 2022[101] which advocates for renewables in harmony with nature. The Intergovernmental Panel on Greater collaboration must be established between DAERA, the Department for Infrastructure and the Department for the Economy to ensure that marine biodiversity and recovery are at the heart of planning and consenting processes. This will also ensure that no resources or capacity is wasted during these processes.

Biodiversity and Ecosystem Services (IPBES)[102] and the Intergovernmental Panel on Climate Change (IPCC)[103] make it clear that the nature and climate emergency is indivisible. The most recent UN Emissions Gap report identified that we are currently on track for 2.9 degrees of warming by 2100 – this would be devastating for wildlife and people[104]3. Rapid decarbonisation is therefore vital but so is the protection and restoration of ecosystems. In the case of offshore renewable energy development, this must be strategically and spatially planned so that the areas most sensitive for nature are avoided. Such an approach provides certainty for developers as well as protecting our most sensitive species and habitats on land and at sea. Strategic spatial planning does not negate the need to comply with the mitigation hierarchy in all developments whereby impacts to nature are avoided in the first instance, minimised where they cannot be avoided and mitigation is only pursued as a last resort.

We must ensure that there are ties to wider legislation such as the Nature Restoration Strategy, OREAP[6], SCS and ECS. NIMTF would propose no developments of OFW within MPAs to minimise the cumulative impacts already facing the network, and thus make provision and capacity for marine recovery.

These will all play strongly into the development of the OREAP[6] when it comes to strong implementation for future sustainable developments. NIMTF would recommend linking in with any communications opportunities to ensure the correct connection message between citizen science and the effective use of data to include and combine strands for *Objectives 8 & 9*.

There are several key drivers and pressures impacting on the marine environment within NI. Threats include but are not limited to the unsustainable use of marine resources, including from the fishing industry, habitat loss from activities such as trawling and dredging, invasive species impacts, pollution and the impacts of climate change. Renewable energy developments are currently not positioned within marine space for NI outside of trials which take place in Strangford Lough[105,106], but there is a requirement for renewable developments under *Action 14* of the 2022 Energy Strategy Action Plan to meet the 1GW of energy produced through offshore renewable energy production.

For cetaceans, it will be important to ensure that we are minimising and mitigating the impacts from noise pollution in upcoming sustainable developments at sea. Large proportions of the existing MPA Network are dedicated for the protection of species such as harbour porpoise and therefore we must ensure that the Mitigation Hierarchy is being followed here. With increasing activities occurring within our marine environment heightened levels of anthropogenic noise pollution is likely. There is limited knowledge on the full impacts for marine species, however many studies have highlighted associated challenges for species that communicate verbally and increased disorientation[107]. See in reference to the section on Islandmagee earlier in this response.

A lack of enforcement and understanding of these pressures can result in high-levels of disturbance and injury for species such as cetaceans, e.g. the inappropriate use of fast crafts such as jet skis. For further details on these impacts please refer to NIMTF consultation on fast craft management within MPAs[108]. NIMTF would recommend that DAERA implement the recommendations of the fast craft management within MPAs from the synopsis of consultation responses, along with the recommendations within NIMTF's response.

Transformative action is needed to address the drivers and pressures on the marine environment, both on land and at sea. Current investment and prioritisation is still far from being commensurate with the scale and pace of the nature and climate crisis. The Department for Agriculture, Environment and Rural Affairs (DAERA), alongside other government departments with links to developments within the marine environment such as Department for Infrastructure (DfI) and Department for Economy (DfE), need to direct resources and capacity towards marine and wider environmental protection and restoration, following a history of underinvestment. Collaboration and mainstreaming the marine environment across all departments is now essential. Furthermore, NI requires an independent Environmental Protection Agency to ensure independent governance and enforcement outside of DAERA is being followed when it comes to breaches in the regulations and conservation objectives for our MPA Network.

<u>Pollution</u>

Pollution is a key pressure which impacts the whole of NI's inshore waters and can have a direct effect on designated species & habitats. Varying sources of marine pollution need to be addressed to achieve GES and protect species & habitats within the NI MPA network.

According to the WFD Report, GES has not been met for water pollution sources in NI[109]. This is evident from recent events such as toxic algal blooms in Lough Neagh in Summer 2023, which were catastrophic not only to freshwater biodiversity, but marine species as pollutants reached the North Antrim coastline[110], in close proximity to Skerries & Causeway Coast SAC, via the River Bann This highlights the interlinkages between terrestrial and marine pollution and the urgent need from DAERA to understand and address the effects activities on land can have on our seas, including the NI MPA network.

Agricultural run-off is the primary contributor, with a lack of investment in appropriate treatment of wastewater[111,112] has contributed to the issues seen within Lough Neagh[113]. Appropriate investment in planning and infrastructure can alleviate issues around the introduction of nutrients and bacteria within estuarine and nearshore environments across NI, in addition to proper investment in monitoring and reporting. In 2007 a 'Statement of Regulatory Principles and Intent' (SORPI) agreement was created to protect NI Water from public prosecution for inappropriate operational practices and pollution incidents[114]. The Combined Sewer Overflows are commonplace, resulting in

bacteria contaminating watercourses and sea, and the unsightly Sewage Related Debris (SRD) found along watercourses after rainfall accumulating in coastal locations. Barriers and challenges such as investment, government policies around infrastructure and the sustainability of sources of pollution entering water bodies need to be addressed[115], requiring collaboration from DAERA and DfI. Many issues highlighted have still not been addressed after 16 years. Nature-based solution (NbS) feature to some degree in projects such as the DfI Living with Water Project[116] (LwWP) provides a plan for wastewater treatment within the Belfast area and can help reduce the impact on MPA features in Belfast Lough. However, it has been shown that levels and distribution of E Coli in Belfast Lough, a designated shellfish water can be directly linked to domestic sources and WasteWater Treatment Work (WWTW) outflows[117]. The LwWP was updated in 2022[118], complimenting the DfI's overall strategy for reaching sustainable water between 2015 - 2040[119]. However it now needs future, guaranteed funding[120]. With storm intensity set to increase as a result of the climate crisis, there is a risk this pressure will worsen and impact the integrity of Belfast Lough, but also associated protected areas such as Belfast Lough SPA, and our wider MPA network

A significant part of the pollution problem for marine habitats comes from litter, particularly single-use plastics. Using the survey method developed by the OSPAR Commission, The Marine Litter Reports are able to track Northern Ireland's performance on marine litter and identified some of the problem sources[121]. Our data is shared in a combined database with 14 other European countries. The information collected from each beach is fed into a central database, which shows trends in the types of litter found in the marine environment. Surveyors record all litter found on the beach under different categories to help describe the various groups and items of litter observed. A Marine Litter Report outlining the scale of the problem is published every year. Plastics account for 90% of the marine litter in Northern Ireland, which was found to have increased from 74% just over a decade ago. Tackling litter pollution must encompass a focus on plastics. The most recent Litter Composition Report[122] highlights the impact of plastics on our society and the damage it is doing to wildlife on land and at sea - creating 579 cases of animals and wildlife impacted by plastic pollution[123], with waterbirds such as gulls and geese and marine mammals being particularly vulnerable. Entrapment of marine species within larger pieces of plastic can also lead to mortalities, associated with physical harm[124]. Sea turtles, crabs, seabirds, seals and whales have been identified as having the greatest impact from the presence of plastic pollution within our seas[125]. For further information on the impacts of plastic on marine species, see NIMTF's response to the proposed ban on the sale of wet wipes containing plastic[126].

Governance

NIMTF welcomes the objectives relating to developing a Governance structure within *Objective 6* but must establish which relevant stakeholders are expected to lead on the actions outlined in *Action 6.3*. Capacity has been highlighted across multiple organisational structures as being a challenge, therefore support will need to be provided by DAERA and additional departments such as Department for Economy and Department for Infrastructure to ensure that the proposed Governance Structure will be complied with and those involved understand and have agreed on the proposed tasks. DAERA must also ensure that the delivery of actions in *Action 6.3* are developed as SMART targets to ensure effective delivery of actions that contribute to marine biodiversity and recovery.

Through the MPA Strategy Review there are several actions, however no clear lead has been assigned to *Actions 3.2*, *3.3*, *3.4*, *6.1*, *6.3*, *7.1*, *7.3* and *9.2*. These actions should outline who will lead the delivery to ensure overall objectives are achieved, to create a sense of ownership and achieve outcomes at a fast, transparent pace.

It is crucial the MPA Strategy Review outlines the importance of collaborative partnerships that will be required to deliver ecological connectivity through species and habitat restoration programmes. Funding for conservation projects is often competitive, sporadic and insecure, but working collaboratively can increase likelihood of securing funding as well as reducing the risk. Furthermore, large-scale habitat restoration is complex and requires a range of expertise (ecological, social science, policy). In Ulster Wildlifes 'Blue Carbon Feasibility Report' key partners for blue carbon restoration work are outlined in detail[8].

NIMTF member Friends of the Earth (FoE) stated "*The only way that environmental standards are maintained is if there are effective watchdogs and enforcement bodies. The difficulty is that those agencies don't exist or have been defunded or deprioritised.*" These comments are supported further by statements from Dr. Viviane Gravey, a politics lecturer and expert on EU environmental policy at Queen's University Belfast (QUB), who has stated "*There is all this potential for NI to be more ambitious than Great Britain but for that you need to have civil servants capable of doing the work and an environmental agency that has teeth. The civil service is under so much stress and there are so many gaps. Deadlines are being missed*[127]*.*"

Within government departments there is a silo mentality, with environmental responsibility falling entirely under DAERA. This has resulted in further strain of department capacity and resources, especially when addressing such a wide remit as the environment. Recent improvements with DAERA and DfE collaborating on OFW through the Offshore Renewable Energy Forum (OREF) and the Coastal Forum are evident as well as the Executives Draft Green Growth Strategy. Yet, to truly tackle marine environmental pressures and drivers, safeguarding NI's MPA network must be enshrined across each department's remit and priorities.

Referring to Action 6.1 - A clear timeframe for integration and implementation of this Governance structure will must be established and outlined to ensure that incremental deadlines are met.

Referring to Action 6.2 - The development of a North-South Technical Working Group (N-STWG) would need to have representation from both NI and RoI. NIMTF would recommend that Fair Seas are approached and have representation for the eNGOs like representation from NIMTF would be beneficial for this. This would ensure that transboundary areas are covered whilst being inclusive of relevant organisations.

ACTION: All Objectives should be SMART and have a Clear Lead Identified. All relevant key stakeholders should be engaged at the beginning of the process.

<u>Conclusion</u>

NIMTF once again thanks the DAERA for the opportunity to respond to this consultation. We thank DAERA for working to ensure the NI MPA network has achieved 30x30 and we are glad to hear DAERA's commitment to this MPA Strategy Review. However, we now believe the government must go further and take world-leading action to recover and protect our local seas. Having a well connected, functioning MPA network that exhibits an ecosystem based approach and has robust management plans is necessary to secure the effective protection of our unique and vulnerable marine environment and its associated ecosystem services into the future.

Additionally, greater resourcing, capacity and enhanced collaboration and coordination among the UK's devolved administrations, alongside the Republic of Ireland government, is necessary to

streamline the management of MPA's across this network and address regional disparities in conservation efforts.

If the above actions and recommendations are implemented accordingly and appropriately, NI's MPA Network will not only meet the coherence objectives set out by JNCC; but will surpass any previously failed goals and objectives from the previous strategy. It is also important to note that whilst the 30% of NI seas that fall within the MPA network is of great value to nature, it cannot be managed for restoration in a vacuum. What happens outside of the network impacts species and habitats within it and vice versa. DAERA must give equal consideration to the other 70% of our marine space to ensure activities are occurring throughout the seas in a sustainable manner.

We now look to the government to act urgently and be ambitious to guarantee healthy, thriving and well-functioning seas now and into the future.

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