

# The road to success for new Highly Protected Marine Areas

Wildlife and Countryside Link briefing - February 2022

# **Executive Summary**

The Government has committed to introduce Highly Protected Marine Areas (HPMAs) in English waters by the end of this year. This hugely welcome new designation could provide much needed sanctuaries for our threatened marine life, which is being failed by our current Marine Protected Area (MPA) network. If delivered effectively and at scale HPMAs can help the UK achieve numerous objectives, including:

- **UK Marine Strategy Regulations 2010:** goal to achieve or maintain Good Environmental Status in UK seas, next assessment in 2024.
- Climate Change Act 2008: goal of net-zero emissions by 2050 through the protection of vital blue carbon habitats.
- The Environment Act 2021: legally-binding target to reverse the decline in species abundance by the end of 2030.
- Levelling Up agenda: international evidence shows that effective marine protections bring jobs and economic opportunities to coastal regions through increased tourism and recreational activity and the potential for improved fish catches outside marine protected areas (the spillover effect).

However, in order to achieve these benefits, the Government must ensure that HPMAs are delivered in the right manner:

- Strong protections: HPMAs must provide a higher level of protection than other types of MPA, allowing these marine areas to recover to as natural a state as possible. To date, there are no areas of English waters fully protected from all extractive or damaging human activities.
- Delivered strategically as part of the wider MPA network: HPMAs have an important role to play in achieving the Government's goal of 30x30 (protecting 30% of the sea for nature by 2030). To achieve 30x30, a high proportion of England's MPA network should consist of properly designed and managed HPMAs.<sup>1</sup>
- Funding: Sufficient funding is required to ensure that HPMAs are well managed, monitored and enforced, with benefits communicated to local communities to ensure their success.<sup>2</sup>
- Management: A complete management and monitoring programme should be in place for each site from designation, with monitoring undertaken to determine how

<sup>&</sup>lt;sup>1</sup> These HPMAs must meet the IUCN definition of 'fully protected MPAs' to count towards this goal. For full definitions see the Protected Planet Marine Protected Areas Guide https://www.protectedplanet.net/en/resources/mpa-guide

 $<sup>^2</sup>$  A 2018 analysis of MPAs in the North Devon Biosphere found that the gap between current spending and that required to achieve a "well managed" scenario was on average £156,000 per MPA per annum -North Devon Marine Protected Areas Cost Evaluation, eftec, 2018



- different ecosystems recover when pressures are reduced, alongside assessments of the social and economic benefits HPMAs are likely to afford.
- **Site selection:** HPMAs must be sufficient in size and number, in each regional sea, in inshore, nearshore and offshore English waters, so they encompass a range of ecosystems.

We welcome the Government's intention to consult on pilot HPMAs this Spring. Natural England and JNCC have produced a longlist of sites based on ecological principles and criteria<sup>3</sup> which Defra will then shortlist based on socio-economic criteria. These will be put out for consultation, with the Secretary of State picking pilot sites for designation and we look forward to engaging with this process.

# Introduction

In 2020, the Government's Benyon Review into Highly Protected Marine Areas<sup>4</sup> (HPMAs) was published. The Link Marine Group backed its recommendations that HPMAs should be an essential part of the UK network for protection and recovery of the marine environment, and that the Government should introduce HPMAs as soon as possible.

A year later, on World Ocean Day (8<sup>th</sup> June) 2021, the Government committed to designate the first Highly Protected Marine Areas in 2022, as a first step towards the greater protection needed by our seas. Following this, on 5<sup>th</sup> July 2021, JNCC published the ecological criteria for selecting the first HPMA sites and invited third parties to submit proposals. Natural England and JNCC have produced a longlist of sites based on ecological principles and criteria<sup>5</sup> which Defra will then shortlist based on socio-economic criteria. These will be put out for consultation, with the Secretary of State picking pilot sites for designation and we look forward to engaging with this process.

# The benefits of HPMAs

As our seas become increasingly crowded with the growth of industries such as offshore renewables, our fragile marine wildlife is affected by multiple pressures. We need to ensure there is space for nature - havens where wildlife can recover and thrive, without pressures from human activities.

Decades of overexploitation and pollution have left our seas damaged and degraded and existing Marine Protected Areas (MPAs) are limited in their ability to restore nature. At present, there are only an extremely limited number of small 'No Take Zones', which prohibit all methods of fishing (but not all extractive activities). In England, these are at Flamborough

 $<sup>^{3}\,\</sup>underline{\text{https://data.jncc.gov.uk/data/47bafb41-05d8-4929-b236-162f4eddd22f/pilot-hpma-ecological-guidance-note.pdf}$ 

<sup>&</sup>lt;sup>4</sup> The Benyon Review into Highly Protected Marine Areas: <a href="https://www.gov.uk/government/publications/highly-protected-marine-areas-hpmas-review-2019">https://www.gov.uk/government/publications/highly-protected-marine-areas-hpmas-review-2019</a>

<sup>&</sup>lt;sup>5</sup> https://data.jncc.gov.uk/data/47bafb41-05d8-4929-b236-162f4eddd22f/pilot-hpma-ecological-guidance-note.pdf



Head, Lundy Island and the Medway Estuary and cover an area of 1km<sup>2</sup>, 3.3km<sup>2</sup> and 12.1km<sup>2</sup> respectively. These sites are located away from significant commercial fishing pressure. To date there are no areas of English waters fully protected from all extractive or damaging human activities.

Furthermore, very few MPAs are adequately managed and monitored<sup>6</sup>. Successful HPMAs will allow us to see what true recovery at sea looks like. They will set a new bar against which other protected areas can and should be measured against in the future.

Marine recovery within HPMAs will have multiple benefits for wildlife and people, helping achieve wider Government objectives:

Outcome	Government target (s):	Potential impact of HPMA
Increase the carbon sequestration and storage potential of our seas and coastal habitats	Climate Change Act (2008): net- zero greenhouse gas emissions by 2050	Globally, the ocean represents the largest active carbon sink, removing 25–30% of carbon dioxide added to the atmosphere by human activities. Marine ecosystems in the UK have an estimated total carbon sequestration rate of 11 million tCO₂e/year. <sup>7</sup> Research on the current English North Sea MPA network has found that in just the top 10cm of sediment, the study area contained roughly the same carbon as ¼ of all the UK's forests and woodlands. <sup>8</sup> However, in the English North Sea, only 51.9% of the total organic and 42.1% of total inorganic carbon can be found within the existing MPA network, and almost all of these MPAs are subject to broadscale disturbance, such as bottom trawling. Better protection of areas both inside and outside of current MPAs is urgently needed to ensure that carbon stores remain undisturbed. Halting bottom trawling would deliver large carbon sequestration benefits which are only now being fully appreciated. <sup>9</sup> While there is still a need for a more robust evidence base around blue carbon, this only strengthens the case for HPMAs to serve as reference points for the carbon sequestration potential of undisturbed seas.

<sup>&</sup>lt;sup>6</sup> Wildlife and Countryside Link – 30x30 in the Marine Environment:

https://www.wcl.org.uk/docs/assets/uploads/WCL\_30x30\_in\_the\_Marine\_Environment.pdf

<sup>&</sup>lt;sup>7</sup> https://researchbriefings.files.parliament.uk/documents/POST-PN-0651/POST-PN-0651.pdf

<sup>&</sup>lt;sup>8</sup> https://wwf.panda.org/discover/our\_focus/oceans\_practice/news2/?4427941/Assessment-of-Carbon-Capture-and-Storage-in-Natural-Systems-within-the-English-North-Sea-Including-within-Marine-Protected-Areas

<sup>9</sup> https://www.nature.com/articles/s41586-021-03371-z

		Blue carbon coastal habitats such as salt marsh, maerl beds and sea grass, can provide carbon benefits as well as providing valuable nurseries for fish species. Through better protecting marine life, HPMAs can therefore also deliver the carbon storage potential of wildlife <sup>10</sup> . When large marine animals die, for example, they take huge amounts of carbon with them to the seabed. <sup>11</sup>
Enhance and protect marine biodiversity	UK Marine Strategy Regulations (2010): Goal to achieve or maintain Good Environmental Status in UK seas  Environment Act (2021): halt species decline by 2030  25 Year Environment Plan: leave nature in a better state than we found it	In Lamlash Bay, since protection as a no-take zone, biodiversity has increased substantially, along with the size, age and density of commercially important species such as the king scallop and the European lobster. Another analysis of 69 biological measures demonstrated that HPMAs had a huge benefit to the densities (doubled) and biomass (tripled) of marine organisms. Furthermore, in well managed No Take Zones (NTZs) biodiversity and mean size can increase by 20-30%.  Effective HPMAs will also enable greater ecosystem recovery, aiding climate resilience of our seas. For example, evidence from Lyme Bay, where bottomtowed fishing gear is prohibited, shows that the MPA recovered from a storm event in 2014 more quickly than surrounding areas.
Improve opportunities for the fishing sector	Levelling Up agenda  Fisheries Act (2020): sustainability objective; ecosystem objective	As HPMAs conserve wildlife and habitats on a large scale, the number, diversity and size of fish will increase. Neighbouring fisheries will benefit as commercially and recreationally fished species spillover into surrounding waters, helping restock our overfished seas. For this reason, HPMAs should not be seen as standing in opposition to a flourishing fisheries sector, but rather as complementary, helping ensure the health of our seas for generations to come.  Benefits of no-take zones can be seen in Scotland in Lamlash Bay where studies have shown that marine

 $<sup>^{10}</sup>$  For example, research suggests rebuilding whale populations would lead to 145,000 tonnes of carbon being locked away in whale carcasses each year <a href="https://uk.whales.org/green-whale/">https://uk.whales.org/green-whale/</a>

<sup>11</sup> https://uk.whales.org/green-whale/
12 https://eprints.whiterose.ac.uk/158673/1/Stewart\_et\_al\_2020\_Marine\_conservation\_begins\_at\_home.pdf

<sup>&</sup>lt;sup>13</sup> Halpern, B<sub>2</sub> 2003. The impact of marine reserves: do reserves work and does reserve size matter? Ecol Appl 13 (1):S117-S137



life has flourished since the establishment of Scotland's first no-take zone. Some species are reported to have increased by nearly 400% since protection measures were introduced, with benefits for exploited fish stocks. The designation of Lyme Bay in southwest England as an MPA added £2 million to the total value of tourism and recreation in the area <sup>14</sup> and the restriction of bottom-towed fishing gear has seen an increase in the number of exploited fish by 430% and total abundance by 370%, inside the MPA over 11 years <sup>15</sup> .
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# The criteria for success for HPMAs

For HPMAs to achieve the benefits outlined above, they must be delivered in line with the following principles:

- Appropriately designated as part of a wider network

HPMAs work best when they form part of a larger network of MPAs. Sites allowing multiple uses currently make up the vast majority of MPAs in English waters. But it is simply not enough to consider multiple use MPAs as adequate protection for marine biodiversity in themselves - we also require substantial areas of ocean to be effectively 'off limits' to any destructive or invasive human activity.

HPMAs have an important role to play in achieving the Government's goal for 30x30; protecting 30% of the marine environment by 2030. Our recent assessment found that the vast majority of the MPA network should not currently count towards the 30%. <sup>16</sup> To achieve 30x30, at least 30% of England's seas should be either within properly designed and managed HPMAs<sup>17</sup> or licensed to allow only extremely limited activity, within the context of wider ecologically coherent networks. As an absolute minimum, at least a third of the 30% of English seas protected for nature should be designated as HPMAs, where all human pressures and impacts are removed. If delivered in the right manner, HPMAs would provide strong protections, making them equivalent to the internationally defined 'fully protected' marine protected areas. <sup>18</sup>

This status would provide permanent protection for nature and permanent prohibitions against all extractive or destructive activities, with additional benefits for blue carbon habitats

<sup>&</sup>lt;sup>14</sup> Rees *et al.*, 2015 - The socio-economic effects of a Marine Protected Area on the ecosystem service of leisure and recreation: https://doi.org/10.1016/j.marpol.2015.09.011

<sup>&</sup>lt;sup>15</sup> Davies *et al.*, 2021 - Ecosystem Approach to Fisheries Management works—How switching from mobile to static fishing gear improves populations of fished and non-fished species inside a marine-protected area <a href="https://doi.org/10.1111/1365-2664.13986">https://doi.org/10.1111/1365-2664.13986</a>

<sup>&</sup>lt;sup>16</sup> Wildlife and Countryside Link – 30x30 in the Marine Environment: https://www.wcl.org.uk/docs/assets/uploads/WCL 30x30 in the Marine Environment.pdf

<sup>&</sup>lt;sup>17</sup> These HPMA's must meet the IUCN definition of 'fully protected MPAs' to count towards this goal. For full definitions see the Protected Planet Marine Protected Areas Guide <a href="https://www.protectedplanet.net/en/resources/mpa-guide">https://www.protectedplanet.net/en/resources/mpa-guide</a>
<sup>18</sup> Ibid



and neighbouring commercial fisheries. To meet the goal of 30x30, initial HPMA sites will need to be numerous and large enough to deliver progress towards these ambitions. Pilot sites must be quickly followed by a rapid scaling up of HPMA designations across English seas.

# - Strong protections

HPMAs must provide a higher level of protection than other types of MPA, allowing marine areas to return to as natural a state as possible. They must prohibit extractive, destructive and depositional uses and allow only non-damaging levels of other activities. We believe that effective protection entails stronger action than is currently delivered through the domestic MPA network.

The Government accepts the benefits of much stronger protections abroad, with its Blue Belt initiative promoting the Tristan da Cunha MPA in the UK Overseas Territories, the fourth largest 'no take zone' on the planet, <sup>19</sup> as an example of the 30x30 initiative's success, urging other nations to follow suit. <sup>20</sup> A 'no take zone' is equivalent to a HPMA, with no commercial fishing or other extractive activities permitted across the whole area, So, while domestically the Government is failing to deliver MPAs which offer the same protections as in the Overseas Territories, HPMAs offer a chance to remedy this inconsistency.

In addition, the Government should acknowledge displacement of all fishing activity in its decision making and put strategies in place to support marine users and avoid creating new problems from moving pressures to other parts of the marine environment.

#### - Site selection

We welcome the Government's intention to consult on pilot HPMAs this Spring. Natural England and JNCC have produced a longlist of sites based on ecological principles and criteria<sup>21</sup> which Defra will then shortlist based on socio-economic criteria. These will be put out for consultation, with the Secretary of State picking pilot sites for designation and we look forward to engaging with this process. While we recognise that this process is already underway, there are key principles that must be recognised throughout the shortlisting process and crucial decisions which remain. These principles will also be relevant for any future designations of HPMAs:

- While consideration of socio-economic factors is important for the designation, management and enforcement processes of the HPMA introduction, as it was for Marine Conservation Zones, the primary basis on which HPMA site selection should be made must be science-led and based on ecological and conservation evidence and principles. Where socio-economic factors are considered, assessments must factor in both the positive socio-economic outcomes of HPMAs (increased wildlife tourism, spillover effects for fishing etc) as well as negative ones.
- HPMAs must be **sufficient in size and number**, in each regional sea, in inshore, nearshore and offshore English waters, so they encompass a range of habitats

<sup>19</sup> https://www.rspb.org.uk/about-the-rspb/about-us/media-centre/press-releases/tristan-da-cunha-mpa/

<sup>&</sup>lt;sup>20</sup> https://www.gov.uk/government/news/worlds-most-remote-island-helps-uk-exceed-protected-ocean-target

<sup>&</sup>lt;sup>21</sup> https://data.jncc.gov.uk/data/47bafb41-05d8-4929-b236-162f4eddd22f/pilot-hpma-ecological-guidance-note.pdf



allowing us to study how different ecosystems recover when pressures are reduced. A lack of significant evidence should not be used as an excuse for not designating sites which have significant ecological merit. Pilot sites should include blue carbon habitats in recognition of the potential of these ecosystems to store and sequester carbon.

- The currently outlined minimum size of 5km in diameter for a HPMA is not large enough to realise the full benefits of new protections and if the longlist of sites includes much larger sites these should not be the first to be struck off when applying the socio economic criteria.
- HPMAs must take a whole-site approach, protecting all the wildlife and habitats
  within their boundaries with effective management measures. A buffer-zone should
  be incorporated around their boundaries to avoid impacts from neighbouring
  activities affecting their success.
- The Government must deliver nature conservation alongside offshore development.
   HPMAs should only be excluded from sites where developments have already been given permission.
- The positive benefits of HPMAs should be actively communicated by the
  Government. While Link members are supportive of the HPMA process and happy to
  support the programme where possible, the Government must also make the public
  case that greater coastal and offshore marine protections have multiple benefits for
  coastal communities.

# - Appropriately managed and monitored

HPMAs must be backed with sufficient long-term funding, including from the recent Spending Review, to ensure they are a success. A complete management and monitoring programme should be in place for each site from day one of designation. HPMAs should be marked on Admiralty charts to raise awareness of their locations and to aid compliance. Where available, technologies should be used to aid monitoring, management and enforcement.

The main objective of any HPMA should be to allow full recovery of the marine environment and its ecological processes. This would require a whole site approach to management, in order to conserve all habitats and species within the site boundary (including mobile and migratory species that visit or pass through the site). This objective should not be balanced against considerations of public benefit.

Monitoring must be sufficient to understand what happens when damaging activities are removed and how our seas can recover. This information should be used to determine appropriate management measures for the rest of the Marine Protected Area network.

## - Enforcement

The removal of prohibited activities must be enforced. Defra and arms-length bodies should work with local communities and stakeholders, with early and transparent communication to enhance support for HPMAs and compliance with restrictions.

Effective enforcement will require well-trained personnel that have the necessary resources to fulfil their role. In addition, it is essential that authorities can apply dissuasive and



proportionate penalties that genuinely act as a deterrent to non-compliance. It's important to note that for the implementation of HPMAs to be as successful as possible, community and stakeholder buy-in is essential. Strong and clear legislation that is simple to understand and follow will be vital in fully involving stakeholders in the establishment of HPMAs, which will in turn greatly help ensure compliance with the rules.

Experience has demonstrated that wide public engagement in the design and management of inshore and estuarine management regimes can provide a significant bonus in terms of informal community driven surveillance. This can reduce enforcement costs for these sites to a minimum. The development of local citizen science programmes can engender this process.

#### Citizen Science

There is the potential for HPMAs to benefit from the recent development of collaborative citizen science survey exercises and other public led initiatives. With modest funding support these could develop further into a very effective augmentation of the regulator driven survey programmes, particularly with reference to early life stages of commercial and non-commercial species in intertidal habitats existing within estuaries, saltmarshes and embayments, as well as surveys of seabirds and marine mammals.

Experience has shown that such citizen science programmes can provide valuable scientific data at low cost, with the additional benefit of drawing the volunteers into supporting and engagement over future management regimes. There are often consequential additional social benefits around community engagement around health, exercise and environmental education.

## Conclusion

Protecting English seas with HPMA designations, sufficient monitoring and management will help to restore marine habitats and wildlife, with added benefits for our climate and people. It's crucial the Government delivers HPMAs this year and demonstrates their commitment to our ocean by ensuring stakeholder support, while backing these sites with the necessary, long-term funding to make them a success.

Wildlife and Countryside Link is a coalition of 65 organisations working for the protection of nature. Together we have the support of over eight million people in the UK and directly protect over 750,000 hectares of land and 800 miles of coastline.