

# Marine and Coastal Access Act 2009

Report to the National Assembly for Wales on Marine Protected Areas in Wales

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## **PART 1 INTRODUCTION**

- 1. This document is the Welsh Government's report to the National Assembly for Wales in accordance with Section 124 of the Marine and Coastal Access Act 2009 (Marine Act).
- 2. Section 124 of the Marine Act requires the Welsh Ministers to lay a report before the National Assembly for Wales every six years to set out:
  - a) The extent to which the objectives of Section 123(2) have been met, and
  - b) Any further steps which are required to be taken in order to contribute to the achievement of the objectives of Section 123(2).
- 3. Section 123(2) of the Marine Act requires the Welsh Ministers to designate Marine Conservation Zones (MCZs) which together with any other MCZs, Special Areas of Conservation, Special Protection Areas (European Marine Sites), Sites of Special Scientific Interest and Ramsar sites form a network across the UK marine area.
- 4. The network is required to:
  - a) Contribute to the conservation or improvement of the marine environment in the UK marine area,
  - b) Represent the range of features present in the UK marine area,
  - c) Reflect the fact the conservation of a feature may require the designation of more than one site.

#### **Reporting Period**

- 5. This report is the third report to the National Assembly for Wales. It covers progress made in Welsh inshore waters between January 2014 and December 2018.
- 6. The report also covers Welsh offshore waters between April 2018 and December 2018. This reflects the transfer of nature conservation powers for the Welsh offshore region from the Secretary of State to the Welsh Ministers, which transferred in two phases during 2017 and 2018.
- 7. Previous reports to the National Assembly for Wales were provided in December 2012, this being the first report and a subsequent report in February 2014, in response to a recommendation from the Environment and Sustainability Committee inquiry into marine policy for the period January 2013 to December 2013.

## **National and International Biodiversity Obligations**

8. The Welsh Government has a number of obligations to protect marine biodiversity. These are listed in Table 1. The national and international obligations listed include the establishment of a network of Marine Protected

Areas (MPAs), which protects, conserves and restores where possible, the range of species, habitats and ecological processes found within the marine environment whilst supporting the sustainable use of our seas.

## **Table 1 Marine Biodiversity Obligations**

#### International

The **Convention on Biological Diversity** – requires parties to the convention to establish and maintain representative and effectively managed marine protected areas that contribute towards a global network of protected areas.



**The Oslo and Paris Convention** (OSPAR) – aims to protect the marine environment of the North-East Atlantic. One of the tools to achieve this is the establishment of an ecologically coherent well-managed network of marine protected areas.

The **Bern Convention** - aims to conserve and protect wild plant and animal species and their natural habitats and seeks to establish the Emerald Network, an ecological network made up of Areas of Special Conservation Interest.

The Ramsar Convention on Wetlands of International Importance 1971 aims to conserve wetlands to support their sustainable use.

#### UK

UK **Marine Policy Statement** – provides a framework for marine planning. It requires marine plan authorities and decision makers to take account of how developments may impact on the UK's aim to halt biodiversity loss and the legal obligations relating to MPAs, their conservation objectives, and management.



The Marine and Coastal Access Act 2009 - places a duty on the Welsh Ministers to form a network of sites, which contribute towards the conservation and improvement of the marine environment in the UK.

The **UK Marine Strategy** (MSFD) - requires Member States to put in place measures to achieve or maintain Good Environmental Status (GES) in their seas by 2020. A network of MPAs will be a key tool in contributing to the achievement of GES.

The Conservation of Habitats and Species Regulations 2017 and The Conservation of Offshore Marine Habitats and Species Regulations 2017- provide for the establishment of Special Areas of Conservation and Special Protection Areas.

The **Wildlife** and **Countryside Act 1981** protects animals, plants and habitats in the UK and provides for the designation of Sites of Special Scientific Interest.

## **National**



The **Well-being of Future Generations Act 2015** – aims to improve the social, economic, environmental and cultural well-being of Wales. It sets out seven wellbeing goals for the Wales we want, the goals include a Wales which is globally responsible and resilient.

The **Environment (Wales) Act 2016** - sets out Wales' approach to planning and managing natural resources at a national and local level in line with the principles of the sustainable management of natural resources and places a duty on public authorities to seek to maintain and enhance biodiversity and promote the resilience of ecosystems.

## PART 2 MPA NETWORK IN WALES

- 9. A marine protected area (MPA) is a general term for any area of sea or shore protected by law for the conservation of habitats, species or other natural features.
- 10. A coherent and well-managed MPA network provides greater benefits to the marine environment than individual MPAs. It contributes to the conservation and improvement of the marine environment, the sustainable management of marine natural resources and the achievement of Good Environmental Status as required under the UK Marine Strategy.
- 11. The benefits to marine biodiversity, to society and our economic activity include, but are not limited to:



Conservation and enhancement of biological diversity, which builds ecosystem **resilience**.



**Sustainable** fisheries by protecting certain habitats, which may be important for key life cycle stages, including spawning or nursery grounds and major feeding grounds,



Local **communities**, through job creation, personal well-being, energy security and by providing opportunities for nature based tourism and leisure activities,



Opportunities for education, training and research, inspiring **future generations** and building a shared sense of ownership of our oceans.

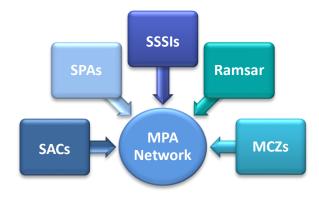
- 12. In general, we are aiming for a network of MPAs which:
  - represents the range of habitats and species in the UK marine area;
  - protects enough replicates to provide resilience;
  - protects an appropriate amount of each broad habitat feature;
  - provides connections between areas; and
  - is appropriately managed to contribute to the conservation or improvement of the marine environment.
- 13. There are 139 MPAs in Wales, covering 69% of Welsh inshore waters (out to 12 nautical miles) and 50% of all Welsh waters (out to the median line). Individual MPAs are designated under a range of different legislation. When taken together individual MPAs form a network around Wales, the UK and the Northeast Atlantic.

14. In Wales, the network is made up of the following types of MPAs:

• **Special Areas of Conservation** (SACs x 15) protect certain habitats and species under the European Habitats Directive (1992). SACs are designated

under the Conservation of Habitats and Species Regulations 2017 and the Conservation of Offshore Marine Habitats and Species Regulations 2017.

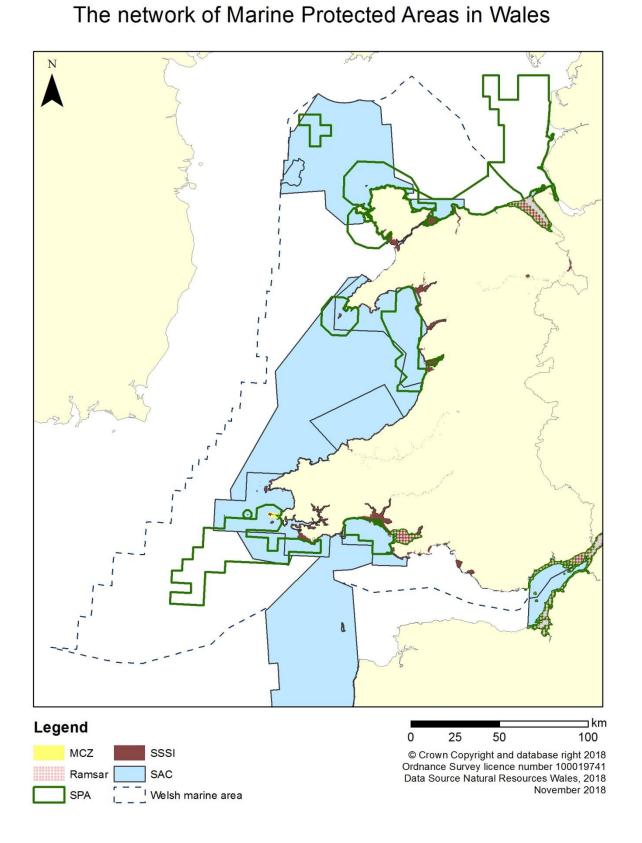
Special Protection Areas (SPAs x13) protect wild bird populations under the European Birds
 Directive (1979). SPAs are designated under the
 Conservation of Habitats and



Species Regulations 2017 and the Conservation of Offshore Marine Habitats and Species Regulations 2017.

- Marine Conservation Zones (MCZs x 1) protect marine species, habitats, or geological features of interest. MCZs are designated under the Marine and Coastal Access Act (2009).
- Sites of Special Scientific Interest (SSSIs x 107) protect certain wildlife and geology under the Wildlife and Countryside Act 1981. SSSIs are primarily a terrestrial designation, although they can cover the seashore down to the lowest tide and the seabed of estuary channels.
- Ramsar sites (x3) protect internationally important area of wetland habitats and associated species, mostly birds. Sites are required by the 1971 international wetlands convention ('Ramsar Convention').
- 15. A map of the current MPAs in Welsh waters (inshore and offshore) can be found at Figure 1. A table of the MPAs and the features they protect can be found in **Annex A**.

Figure 1.



## PART 3 ASSESSMENT AGAINST SECTION 123(2)

#### MPA Network Assessment on Ecological Coherence

- 16. In 2012, the Welsh Government reported to the National Assembly for Wales and noted its intention to supplement the existing MPA network in Wales with the designation of MCZs. The intention was for these MCZs to be afforded the highest level of protection from all extractive, dispositional, damaging and disturbing activities.
- 17. As a result the Welsh Government consulted on proposals to designate a number of highly protected MCZs. The consultation generated over 6000 responses expressing highly divergent and strongly held views. Many responses were in favour of the principle for highly protected MCZs, while others felt the highly protected approach would create unacceptable socioeconomic impacts with little evidence of the benefits.
- 18. Following the consultation, the Welsh Government established a Task and Finish Team to review the consultation feedback and recommend how MCZs should be progressed in Wales<sup>1</sup>.
- 19. In 2013, the Welsh Government formally withdrew its MCZ proposals. At the same time it committed to undertake additional work to understand the contribution existing MPAs in Wales are making towards its network obligations to inform future use of the MCZ power.
- 20. In 2014, the Welsh Government asked the Joint Nature Conservation Committee (JNCC) and Natural Resources Wales (NRW) to assess the contribution existing MPAs are making towards a UK network of MPAs and to provide evidence on<sup>2</sup>:
  - how existing MPAs in Wales contribute towards an ecologically coherent network of MPAs in the UK,
  - whether there are any shortfalls in the network of MPAs in Welsh waters (inshore and offshore) that need to be addressed to meet the Welsh Ministers network obligations.
- 21. The network assessment concluded MPAs in Wales are making a substantial contribution towards ecological coherence across the UK. The majority of habitats and species are represented and where possible replicated, and the network is well connected.
- 22. The assessment did identify some gaps in ecological coherence, which where possible need to be addressed. These gaps are detailed in **Annex B**.

<sup>&</sup>lt;sup>1</sup> https://gov.wales/docs/desh/publications/130717task-and-finish-team-report-on-mczs-in-wales-en.pdf

http://jncc.defra.gov.uk/pdf/JNCC NetworkProgressWelshWaters Final.pdf

23. Full detail of the network assessment can be found here: <a href="http://jncc.defra.gov.uk/pdf/JNCC\_NetworkProgressWelshWaters\_Final.pdf">http://jncc.defra.gov.uk/pdf/JNCC\_NetworkProgressWelshWaters\_Final.pdf</a>

## Nature Conservation in the Welsh Offshore Region

- 24. In 2014 the Commission on Devolution in Wales (Silk II) reported and recommended the Welsh Ministers executive functions for marine nature conservation in the Welsh inshore area be extended to the Welsh offshore marine area. These functions include European and domestic obligations for:
  - identifying, designating and managing MPAs as part of a network;
  - protecting certain species from deliberate capture, injury and death through licensing and enforcement; and
  - monitoring the status and condition of habitats and species.
- 25. The transfer of the Secretary of State's nature conservation functions to the Welsh Ministers was delivered through:
  - amendments to the Offshore Marine Conservation Regulations 2007, which transpose the EU Birds and Habitats Directives. This transferred European related nature conservation functions to Welsh Ministers in November 2017; and
  - the Wales Act 2017, which transferred domestic nature conservation functions to the Welsh Ministers, namely the powers contained in Part 5 of the Marine and Coastal Access Act 2009, in April 2018.

#### MPA Designations during the Reporting Period

- 26. In 2014, Part 5 of the Marine and Coastal Access Act came into force. As a consequence, the Marine Nature Reserve at Skomer was reclassified as an MCZ in line with the transitional provisions set out in Schedule 12 of the Marine Act. This is currently the only MCZ in Welsh waters.
- 27. Since 2014 the network has been strengthened with additional MPAs. Table 2 provides a list of the additional MPAs designated during this reporting period. It includes MPAs in the Welsh offshore region, which became the responsibility of Welsh Ministers following the transfer of offshore nature conservation powers.

**Table 2 New MPA Designations** 

MPA Name	Size of MPA (hectares ha)	Feature Protected / Reason for Designation	Advice on Conservation Objectives
West Wales Marine SAC **	737614.0ha		
North Anglesey Marine SAC **	324949.0ha	Harbour Porpoise	http://jncc.defra.gov.uk/page-7343
Bristol Channel and Approaches SAC **	584994.0ha		
Croker Carbonate Slabs SAC***	11599.0ha	Submarine structures made by leaking gases	http://jncc.defra.gov.uk/page-6530
Liverpool Bay SPA *	252757.73ha	SPA extended and little Gull, little tern and common tern were added as new qualifying features	http://jncc.defra.gov.uk/page-7507
		Red breasted merganser and Cormorant were added as named components of the existing waterbird assemblage	
Skomer, Skokholm and seas off Pembrokeshire SPA* ** ***	166800.74ha	SPA extended twice during reporting period to include marine foraging areas for Manx shearwater, Atlantic puffin, common guillemot and razorbill.	http://jncc.defra.gov.uk/page-7497
Anglesey Terns SPA *	101931.07ha	SPA renamed and extended to bring together the three breeding sites with the marine foraging area under one site boundary	https://cdn.naturalresources.wales/media/ 675726/anglesey-terns-pspa-draft- conservation-objectives-final.pdf
Northern Cardigan Bay SPA	82703.68ha	New SPA for wintering red-throated divers	https://cdn.naturalresources.wales/media/ 675730/northern-cardigan-bay-pspa-draft- conservation-objectives-final.pdf
Grassholm SPA*	1774.42ha	SPA extended to include marine area for Gannet	http://naturalresources.wales/media/67413 4/grassholm-spa-management-plan-21-1- 408-english.pdf
Aberdaron Coast and Bardsey Island SPA*	33942.42ha	SPA extended to include marine foraging areas for Manx Shearwater	http://naturalresources.wales/media/67209 2/glannau-aberdaron-plan-english.pdf
Irish Sea Front SPA***	118000ha	New SPA for Manx Shearwater	http://jncc.defra.gov.uk/page-4565

<sup>\*</sup> Extensions to existing SPAs

\*\* Extends into Welsh offshore waters

\*\*\*Wholly offshore (designated by UK Secretary of State) now the responsibility of the Welsh Ministers

#### Assessment of Feature Condition

- 28. The marine environment is very dynamic and natural fluctuations in feature condition are to be expected. The Welsh Government continues to implement management measures to address the pressures on MPAs to improve the condition of features and strengthen the contribution the network makes to the health and resilience of the marine environment.
- 29. In January 2018, NRW published indicative feature-level site condition reports for all inshore SACs and SPAs. The reports constitute NRW's advice on the indicative condition of protected features<sup>3</sup> and were produced to improve our understanding of the condition of site features. The reports are important for site management, in particular they inform the development of management measures to improve the condition of features, assist with the prioritisation of resources and help with the assessments of plans and projects.
- 30. The site condition reports indicate the network of MPAs is able to support significant populations of seabirds and marine mammals in favourable condition, as well as a variety of seabed species and habitats. The key findings from the reports are:
  - 46% of all features are in favourable condition, with the majority assessed with high confidence in the evidence used to assess condition.
  - 45% of features are in unfavourable condition, with around half assessed with high confidence.
  - 9% of features are in unknown condition, meaning there is currently insufficient evidence to make an assessment of indicative condition.
  - Marine mammal features, including bottlenose dolphin, grey seal and otter, are in favourable condition.
  - Most seabird populations are generally stable or increasing.
  - Where SPA features have been assessed as unfavourable, the main reason is linked to UK, European or worldwide trends rather than site level issues.
  - For SACs, water quality issues, pollution, non-licensable activities and invasive non-native species were identified as key pressures on feature condition.
- 31. For the two MPAs wholly in Welsh offshore waters, Croker Carbonate Slabs SAC and the Irish Sea Front SPA, the current status of the features is 'Unknown'. This is largely due to the fact these MPAs are relatively recent designations and therefore there is limited site condition monitoring information available with which to infer condition.

<sup>&</sup>lt;sup>3</sup> https://naturalresources.wales/guidance-and-advice/environmental-topics/wildlife-and-biodiversity/findprotected-areas-of-land-and-seas/indicative-feature-condition-assessments-for-european-marine-sitesems/?lang=en

https://documents.hf.wales.gov.uk/id:A21346950/document/versions/published

32. The tables at **Annex C** detail results from NRW's feature-level site condition reports and Article 17 reporting under the Habitats Directive, for each marine feature protected by inshore and offshore SACs and SPAs.

## Achievements in MPA Network Management

- 33. In 2014 the Welsh Government established the MPA Management Steering Group. The Group brings together representatives from the main management authorities in Wales to work towards a shared vision, agreed objectives and management principles. The MPA Management Steering Group aims to secure effective management of the MPA network, which ultimately improves its condition, safeguarding marine biodiversity, the wider ecosystem and socioeconomic benefits for Wales.
- 34. Further details on the role of the Steering Group can be found here: <a href="https://beta.gov.wales/marine-protected-area-management-steering-group-mpamsg-terms-reference">https://beta.gov.wales/marine-protected-area-management-steering-group-mpamsg-terms-reference</a>
- 35. Between 2015 and 2016 the Steering Group conducted a stakeholder engagement exercise looking at options for an area-based approach to managing MPAs as a network. Following a review of the engagement responses, the Steering Group concluded, in light of funding pressures, securing the resources needed to introduce and replicate an area-based approach across Wales would be too challenging for the management authorities concerned. The Steering Group agreed to focus activities on providing support and guidance to management authorities to facilitate improvements in the condition of species and habitats and the MPA network as a whole. This includes identifying opportunities where management authorities can work together to achieve better outcomes for MPAs in Wales.
- 36. As a first step, the Steering Group produced a document setting out the roles and responsibilities of management authorities for managing MPAs in Wales. In 2017, on behalf of the Steering Group, the Cabinet Secretary for Environment and Rural Affairs sent a copy of the roles and responsibilities document to all management authorities in Wales.
- 37. Following a significant period of activity in 2018 the Steering Group published the MPA Network Management Framework for Wales 2018-2023. The Framework sets out in one place how MPAs are managed now, and how they will be managed in the future to improve the condition of the network. It explains the main tool for managing the network is through the well-established regulatory system, which includes the marine licensing process. It also highlights the work already underway to improve the management and condition of the network and its protected features.

- 38. A copy of the MPA Network Management Framework for Wales 2018-2023 can be found here: <a href="https://beta.gov.wales/marine-protected-area-network-management-framework-wales">https://beta.gov.wales/marine-protected-area-network-management-framework-wales</a>
- 39. The Framework was published alongside an action plan. The MPA Network Management Action Plan 2018-2019, provides a focus for management authorities on the priority actions, identified by the MPA Management Steering Group, to further improve the management and condition of the network of MPAs in Wales. The Action Plan builds on the Prioritised Improvement Plans and the five priority work areas identified by NRW following the conclusion of the LIFE N2K Programme in Wales.
- 40. The actions set out in the MPA Network Management Action Plan 2018-2019 will be delivered in partnership with management authorities across Wales:

  <a href="https://beta.gov.wales/marine-protected-area-network-management-action-plan-wales">https://beta.gov.wales/marine-protected-area-network-management-action-plan-wales</a>

## PART 4 FURTHER WORK REQUIRED TO MEET SECTION 123(2)

- 41. Significant progress has been made during this reporting period towards Section 123 of the Marine Act and towards establishing an ecologically coherent, well managed network of MPAs in Wales.
- 42. The Welsh Government is fully committed to maintaining and enhancing marine biodiversity and ecosystems and will continue to work with the other UK administrations to fulfil our obligations.
- 43. Further work to meet the Welsh Ministers obligations, detailed below, will be undertaken during the next reporting period:
  - a) Completing the Welsh Contribution towards the MPA Network in UK Waters

The 2016 network assessment provides the evidence to demonstrate additional MPAs in Welsh waters are required to meet the Welsh Ministers obligations under the Marine Act and to satisfy commitments under the OSPAR convention.

Using the MCZ powers under the Marine Act, the Welsh Government will work in partnership with NRW, JNCC and stakeholders to consider the outcome of the 2016 network assessment to address the gaps identified, where possible. Further details on how MCZs will be identified to address these gaps and complete the Welsh contribution towards the MPA network in UK waters will be published in early 2019.

## b) Skomer MCZ

Following its transition from a Marine Nature Reserve to an MCZ under the Marine Act the Welsh Government needs to introduce a designating order for the existing MCZ at Skomer. The order will detail the protected features of the MCZ and associated conservation objectives. NRW and stakeholders will inform this future phase of work, which is expected to start late 2019.

## c) Highly Mobile Marine Species

The Welsh Government will also consider whether there is a need for MCZs for highly mobile species within the MPA network.

#### d) The MPA Management Cycle

The MPA Management Steering Group will continue to implement the MPA Network Management Action Plan for 2018-19. This includes NRW building on the condition assessment work and reports published in January 2018 to develop an approach to undertake improved and periodic MPA condition assessments. The project, which started in 2018 and is scheduled for

completion in 2021, will develop indicators and a process for future reporting on the condition of features protected within the network of MPAs.

The Welsh Government will also work with NRW and JNCC to develop and support the implementation of a prioritised and affordable marine biodiversity monitoring programme for Wales. The programme will build on existing monitoring activities to:

- provide an understanding of the health, condition and resilience of Welsh seas:
- provide an understanding of the key pressures on marine biodiversity and interactions with human activity; and
- inform management decisions and measures.

The marine biodiversity monitoring programme will cover MPAs, including any designated in the future.

The MPA Management Action Plan will be reviewed, updated and published on an annual basis. It will be supported by an annual MPA Network Management Report which will set out progress against delivery of the actions. In developing the Annual Report, the Steering Group will seek contributions from management authorities, European Marine Site Officers and others on projects which contribute to the management principles.

A review of the MPA Network Management Framework will be carried out in 2023.

## Annex A

# Lists of species and habitats protected at each Marine Protected Area in Wales

Special Area of Conservation	Marine Feature
Y Fenai a Bae Conwy / Menai Strait and	Reefs
Conwy Bay	Mudflats and sandflats not covered by
,	seawater at low tide
	Sandbanks which are slightly covered by
	seawater all the time
	Large shallow inlets and bays
	Submerged or partially submerged sea
	caves
Dee Estuary / Aber Dyfrdwy	Atlantic salt meadows Glauco-
	Puccinellietalia maritimae
	Salicornia and other annuals colonising mud
	and sand
	Mudflats and sandflats not covered by
	seawater at low tide
	Annual vegetation of drift lines
	Estuaries
	Sea lamprey Petromyzon marinus
	River lamprey Lampetra fluviatilis
Pen Llŷn a`r Sarnau / Lleyn Peninsula and the	Coastal lagoons
Sarnau	Estuaries
	Large shallow inlets and bays
	Reefs
	Sandbanks which are slightly covered by
	seawater all the time
	Atlantic salt meadows Glauco-
	Puccinellietalia maritimae
	Mudflats and sandflats not covered by
	seawater at low tide
	Submerged or partially submerged sea
	caves
	Salicornia and other annuals colonising mud
	and sand
	Grey seal Halichoerus grypus
	Otter Lutra lutra
	Bottlenose dolphin <i>Tursiops truncatus</i>
Carmarthen Bay and Estuaries / Bae	Atlantic salt meadows Glauco-
Caerfyrddin ac Aberoedd	Puccinellietalia maritimae
	Estuaries
	Salicornia and other annuals colonising mud
	and sand
	Twaite shad Alosa fallax
	Large shallow inlets and bays
	Mudflats and sandflats not covered by
	seawater at low tide

Special Area of Conservation	Marine Feature
	Sandbanks which are slightly covered by seawater all the time Sea lamprey Petromyzon marinus River lamprey Lampetra fluviatilis Allis shad Alosa alosa
	Otter Lutra lutra
Pembrokeshire Marine / Sir Benfro Forol	Reefs
	Estuaries
	Large shallow inlets and bays
	Atlantic salt meadows Glauco-
	Puccinellietalia maritimae Coastal lagoons
	Mudflats and sandflats not covered by
	seawater at low tide
	Sandbanks which are slightly covered by
	seawater all the time
	Submerged or partially submerged sea
	caves
	Grey seal Halichoerus grypus
	Twaite shad Alosa fallax
	Allis shad Alosa alosa
	Sea lamprey Petromyzon marinus
	River lamprey Lampetra fluviatilis Shore dock Rumex rupestris
	Otter Lutra lutra
Cardigan Bay / Bae Ceredigion	Reefs
	Sandbanks which are slightly covered by
	seawater all the time
	Submerged or partially submerged sea
	caves
	Bottlenose dolphin <i>Tursiops truncatus</i>
	Grey seal Halichoerus grypus
Severn Estuary / Môr Hafren	Sea lamprey Petromyzon marinus Atlantic salt meadows Glauco-
Octom Estadiy / Mor Harren	Puccinellietalia maritimae
	Estuaries
	Mudflats and sandflats not covered by
	seawater at low tide
	Sandbanks which are slightly covered by
	seawater all the time
	Reefs
	Twaite shad Alosa fallax
	Sea lamprey Petromyzon marinus River lamprey Lampetra fluviatilis
Cynffig / Kenfig	Atlantic salt meadows <i>Glauco-</i>
- Julia Julia	Puccinellietalia maritimae
Glannau Môn: Cors heli / Anglesey Coast:	Atlantic salt meadows Glauco-
Saltmarsh	Puccinellietalia maritimae

Special Area of Conservation	Marine Feature
	Salicornia and other annuals colonising mud and sand
	Estuaries
	Mudflats and sandflats not covered by seawater at low tide
Bae Cemlyn / Cemlyn Bay	Coastal lagoons
Arfordir Calchfaen de Orllewin Cymru /	Submerged or partially submerged sea
Limestone Coast of South West Wales	caves
North Anglesey Marine / Gogledd Môn Forol	Harbour porpoise Phocoena phocoena
West Wales Marine / Gorllewin Cymru Forol	Harbour porpoise Phocoena phocoena
Bristol Channel Approaches / Dynesfeydd Môr Hafren	Harbour porpoise Phocoena phocoena
Croker Carbonate Slabs	Submarine structures made by leaking gases

Special Protection Area	Marine Feature
Aber Dyfrdwy / Dee Estuary  Bae Caerfyrddin / Carmarthen Bay	Northern pintail Anas acuta Eurasian teal Anas crecca Dunlin Calidris alpina Red knot Calidris canutus Eurasian oystercatcher Haematopus ostralegus Bar-tailed godwit Limosa lapponica Black-tailed godwit Limosa limosa Eurasian curlew Numenius arquata Grey plover Pluvialis squatarola Common tern Sterna hirundo Little tern Sterna albifrons Sandwich tern Sterna sandvichensis Common shelduck Tadorna tadorna Common redshank Tringa tetanus Waterfowl assemblage
Bae Caerryrddin / Carmartnen Bay	Common scoter Melanitta nigra
Burry Inlet	Northern pintail Anas acuta Northern shoveler Anas clypeata Eurasian teal Anas crecca Eurasian wigeon Anas penelope Dunlin Calidris alpina Red knot Calidris canutus Eurasian oystercatcher Haematopus ostralegus Eurasian curlew Numenius arquata Grey plover Pluvialis squatarola

	Common shelduck Tadorna tadorna
	Common redshank <i>Tringa totanus</i>
	Waterfowl assemblage
Liverpool Bay / Bae Lerpwl	Red-throated diver Gavia stellata
	Common scoter <i>Melanitta nigra</i>
	Little gull <i>Larus minutus</i>
	Common tern Sterna hirundo
	Little tern Sterna albifrons
	Waterfowl assemblage
Môr Hafren / Severn Estuary	Gadwall Anas strepera
	European white-fronted goose Anser albifrons
	albifrons
	Dunlin Calidris alpina
	Common shelduck <i>Tadorna tadorna</i>
	Common redshank <i>Tringa totanus</i>
	Northern pintail <i>Anas acuta</i>
	Common ringed plover Charadrius hiaticula
	Eurasian curlew <i>Numenius arquata</i>
Traeth Lafan / Lavan Sands	Waterfowl assemblage
Traeth Lafan / Lavan Sands	Eurasian oystercatcher <i>Haematopus</i>
	ostralegus
Grassholm	Northern gannet <i>Morus Bassanus</i>
Ciussionii	Northern garnet words Bassarias
Skomer, Skokholm and the seas off	Atlantic puffin <i>Fratercula arctica</i>
Pembrokeshire / Sgomer, Sgogwm a	European storm petrel <i>Hydrobates pelagicus</i>
Moroedd Benfro	Lesser black-backed gull <i>Larus fuscus</i>
moroda Bonno	Manx shearwater <i>Puffinus puffinus</i>
	Seabird assemblage
Glannau Aberdaron ac Ynys Enlli /	Manx shearwater <i>Puffinus puffinus</i>
Aberdaron Coast and Bardsey Island	
Northern Cardigan Bay / Gogledd Bae	Red throated diver Gavia stellata
Ceredigion	
Anglesey Terns / Morwenoliaid Ynys Môn	Common tern Sterna hirundo
Anglesey Terns / Morwenoliaid Ynys Môn	Arctic tern Sterna paradisaea
Anglesey Terns / Morwenoliaid Ynys Môn	Arctic tern <i>Sterna paradisaea</i> Roseate tern <i>Sterna dougallii</i>
Anglesey Terns / Morwenoliaid Ynys Môn	Arctic tern Sterna paradisaea
	Arctic tern <i>Sterna paradisaea</i> Roseate tern <i>Sterna dougallii</i> Sandwich tern <i>Sterna sandvicensis</i>
Anglesey Terns / Morwenoliaid Ynys Môn  Irish Sea Front	Arctic tern <i>Sterna paradisaea</i> Roseate tern <i>Sterna dougallii</i>
	Arctic tern <i>Sterna paradisaea</i> Roseate tern <i>Sterna dougallii</i> Sandwich tern <i>Sterna sandvicensis</i>

Ramsar Sites	Marine Feature
The Dee Estuary	Curlew Numenius arquata Northern pintail Anas acuta Eurasian teal Anas crecca Dunlin Calidris alpina alpina Red knot Calidris canutus Eurasian oystercatcher Haematopus ostralegus Bar-tailed godwit Limosa lapponica Black-tailed godwit Limosa limosa Grey plover Pluvialis squatarola Common shelduck Tadorna tadorna Common redshank Tringa tetanus Estuaries Mudflats and sandflats not covered by seawater at low tide Atlantic salt meadows (Glauco-Puccinellietalia maritimae) Salicornia and other annuals colonising mud and sand Annual vegetation drift lines Waterfowl assemblage
Burry Inlet	Northern pintail Anas acuta Common redshank Tringa totanus Eurasian Oystercatcher Haematopus ostralegus Red knot Calidris canutus Waterfowl assemblage
Severn Estuary	Common shelduck <i>Tadorna tadorna</i> Dunlin <i>Calidris alpina</i> Common redshank <i>Tringa totanus</i> Ringed plover <i>Charadrius hiaticula</i> Gadwell Whimbrel Waterfowl assemblage Estuaries Assemblage of migratory fish species

Site of Special Scientific Interest	Marine Feature
Aber Afon Conwy/Conwy Estuary	Estuaries
	Rockpools
	Soft piddock bored substrata
Aber Mawddach/Mawddach Estuary	Common redshank Tringa totanus
	Assemblage of RDB and/or nationally scarce vascular plants
	Dwarf spike-rush Eleocharis parvula
	Salt-marsh
	Otter Lutra lutra
	Sheltered mud

Site of Special Scientific Interest	Marine Feature
Aber Taf/Taf Estuary	Salt-marsh
	Allis shad Alosa alosa
	Twaite shad Alosa fallax
	Coastal geomorphology of Wales
	Assemblage of RDB and/or national scarce
	vascular plants
Aberarth-Carreg Wylan	Grey seal Halichoerus grypus
	Bottlenose dolphin Tursiops truncatus
	Rock sea-lavender Limonium britannicum
	Assemblage of RDB and/or national scarce
	vascular plants
	Grey seal Halichoerus grypus
	Caves and overhangs
	Exposed rock
	Moderately exposed rock
	Rockpools
	Sand influenced biogenic reefs
	An amphipod Pectenogammarus planicrurus
Afon Dyfrdwy/River Dee	Salt-marsh
	River lamprey Lampetra fluviatilis
	European smelt Osmerus eperlanus
	Sea lamprey Petromyzon marinus
	Atlantic salmon Salmo salar
	Otter Lutra lutra
Afon Teifi	Inter-tidal
	Salt-marsh
	River lamprey Lampetra fluviatilis
	Sea lamprey Petromyzon marinus
	Atlantic salmon Salmo salar
	Otter Lutra lutra
	Bottlenose dolphin <i>Tursiops truncatus</i>
	Assemblage of RDB and/or nationally scarce
	vascular plants
Afon Tywi	Salt-marsh
	Allis shad Alosa alosa
	Twaite shad Alosa fallax
	Otter Lutra lutra
	Assemblage of RDB and/or nationally scarce
	vascular plants
	Allis shad Alosa alosa
	Twaite shad Alosa fallax
	Ringed plover Charadruis dubius
	Coastal geomorphology of Wales
Allt Wen a Traeth Tanybwlch	Sand influenced biogenic reefs
	An amphipod Pectenogammarus planicrurus
Arfordir Abereiddi	Grey seal Halichoerus grypus
	Caves and overhangs
	Exposed rock
	Rockpools

Site of Special Scientific Interest	Marine Feature
	Silled saline lagoon
Arfordir Gogleddol Penmon	Caves and overhangs
	Moderately exposed rock
	Rockpools
	Soft piddock bored substrata
Arfordir Marros-Pentywyn/Marros-Pendine	Exposed sand
Coast	Soft piddock bored substrata
	Coastal geomorphology of Wales
Arfordir Niwgwl - Aber bach/Newgale to Little	Caves and overhangs
Haven Coast	Rockpools
	Surge gullies
Adam l'a Dan Las (Dans Las Octobres)	Under-boulders
Arfordir Pen-bre/Pembrey Coast	Sanderling Calidris alba
	Eurasian oystercatcher <i>Haematopus ostralegus</i> Salt-marsh
	Allis shad <i>Alosa alosa</i> Twaite shad <i>Alosa fallax</i>
	Exposed sand
	Moderately exposed sand
	Rockpools
	Coastal geomorphology of Wales
	Assemblage of RDB and/or nationally scarce
	vascular plants
	Ground-beetle Eurynebria complanata
Arfordir Penrhyn Angle/Angle Peninsula	A red seaweed Gigartina pistillata
Coast	Caves and overhangs
	Rockpools
	Soft piddock bored substrata
	Tide-swept algae
	Under-boulders
Arfordir Saundersfoot-Telpyn/Saundersfoot-	Exposed sand
Telpyn Coast	Rockpools
Beddmanarch-Cymyran	Common ringed plover Charadrius hiaticula
	Common greenshank <i>Tringa nebularia</i>
	Assemblage of RDB and/or nationally scarce
	vascular plants
	Spiral tasselweed Ruppia cirrhosa
	Inter-tidal
	Eelgrass
	Muddy gravel
	Sheltered mud
Rlacknill Swansoa	Tide-swept algae Sanderling Calidris alba
Blackpill, Swansea	Common ringed plover <i>Charadrius hiaticula</i>
	Muddy gravel
Borth-Clarach	Moderately exposed rock
Dorar Glardon	Sand influenced biogenic reefs
Bracelet Bay	Sand influenced biogenic reefs
Diagolot Day	Sana iliilashosa biogeriis reels

Site of Special Scientific Interest	Marine Feature
Broadwater	Isolated saline lagoon
Burry Inlet and Loughor Estuary	Northern Pintail Anas acuta
	Northern shoveler Anas clypeata
	Eurasian teal Anas crecca
	Eurasian widgeon Anas penelope
	Ruddy turnstone Arenaria interpres
	Dunlin Calidris alpina
	Red knot Calidris canutas
	Eurasian oystercatcher Haematopus ostralegus
	Eurasian curlew Numenius arquata
	European golden plover Pluvialis apricaria
	Grey plover Pluvialis squatarola
	Common shelduck Tadorna tadorna
	Salt-marsh Salt-marsh
	Dwarf Eelgrass Zostrea noltei
	Mixed substrata
	Moderately exposed sand
	Rockpools
	Sheltered mud
	Polychaete worm Ophelia bicornis
	Coastal geomorphology of Wales
One through the Device Of the second	Eelgrass
Castlemartin Range Cliffs and Dunes	A red seaweed Gigartina pistillata
	Assemblage of RDB and/or nationally scarce vascular plants
	Grey seal <i>Halichoerus grypus</i>
	Otter Lutra lutra
	Coastal geomorphology of Wales
	Caves and overhangs
	Maritime cliff and associated ledges and
	crevices
	Exposed rock
	Moderately exposed rock
	Rockpools
	Soft piddock bored substrata
	Surge gullies
	Ground-beetle Eurynebria complanata
Caswell Bay	Moderately exposed rock
	Sand influenced biogenic reefs
Cemlyn Bay	Percolation saline lagoon
	Spiral tasselweed Ruppia cirrhosa
Coedydd Afon Menai	Chalk and very soft rock
Craig Ddu – Wharley Point Cliff	Assemblage of RDB and/or other Nationally
	Scarce vascular plants
	Coastal geomorphology of Wales
	Maritime cliff and associated ledges and
	crevices
Craigyfulfran & Clarach	Sand influenced biogenic reefs

Site of Special Scientific Interest	Marine Feature
Creigiau Aberarth-Morfa	Sand influenced biogenic reefs
Creigiau Cwm-Ceriw a Ffos-las (Morfa	Sand influenced biogenic reefs
Bychan)	
Creigiau Llansteffan – Llanstephen Cliffs	Coastal geomorphology of Wales
Creigiau Pen y graig	Sand influenced biogenic reefs
Creigiau Rhiwledyn/Little Ormes Head	Caves and overhangs
	Moderately exposed rock
	Rockpools
	Soft piddock bored substrata
	Under-boulders
Crymlyn Burrows	Salt-marsh
	Assemblage of RDB and/or nationally scarce
	vascular plants
0 (" 11/4 ("	Ground-beetle Eurynebria complanata
Cynffig/Kenfig	Rockpools
	Sand influenced biogenic reefs
	Assemblage of RDB and/or nationally scarce
	vascular plants
Dala and Cauth Mariago Coast	Soft piddock bored substrata
Dale and South Marloes Coast	A red seaweed Gigartina pistillata
	Grey seal Halichoerus grypus
	Caves and overhangs
	Chalk and very soft rock
	Exposed rock  Moderately exposed rock
	Rockpools
	Assemblage of RDB and/or nationally scarce
	vascular plants
	Lichen assemblage: marine and maritime
	associations, Lichen assemblage: marine and
	maritime associations
	Lichen Degelia ligulata
	Maritime cliff and associated ledges and
	crevices
De Porth Sain Ffraidd/St Bride's Bay South	Grey seal Halichoerus grypus
	Caves and overhangs
	Rockpools
	Tide-swept algae
	Under-boulders
Dee Estuary/Aber Afon Dyfrdwy	Northern pintail Anas acuta
	Eurasian teal <i>Anas crecca</i>
	Eurasian widgeon Anas penelope
	Dunlin Calidris alpina
	Red knot Calidris canutas
	Common ringed plover Charadrius hiaticula
	Eurasian oystercatcher Haematopus ostralegus
	Bar-tailed godwit Limosa lapponica
	Black-tailed godwit Limosa limosa
	Eurasian curlew Numenius arquata

Site of Special Scientific Interest	Marine Feature	
	Great cormorant Phalacrocorax carbo	
	Grey plover Pluvialis squatarola	
	Great crested grebe Podiceps cristatus	
	Common tern Sterna hirundo	
	Sandwich tern Sterna sandvicensis	
	Common shelduck Tadorna tadorna	
	Common redshank Tringa totanus	
	Salt-marsh flat-sedge Blysmus rufus	
	River lamprey Lampetra fluviatilis	
	European smelt Osmerus eperlanus	
	Sea lamprey Petromyzon marinus	
	Estuaries	
	Salt-marsh	
	Maritime cliff and associated ledges and	
	crevices	
	Moderately exposed sand	
	Rockpools	
	Assemblage of RDB and/or nationally scarce	
	vascular plants	
	Sand influenced biogenic reefs	
	Soft piddock bored substrata	
	Polychaete worm Ophelia bicornis	
Dyfi	Eurasian widgeon Anas penelope	
	Greenland white-fronted goose Anser albifrons	
	flavirostris	
	Common redshank Tringa totanus	
	Inter-tidal (BBB)	
	Assemblage of RDB and/or nationally scarce	
	vascular plants	
	Coastal geomorphology of Wales	
	Salt-marsh	
	Otter Lutra lutra	
	Estuaries	
	Moderately exposed sand	
	Muddy gravel	
Fact Abouthous Coast	Sheltered mud	
East Aberthaw Coast	Rockpools	
Flat Holm	Under-boulders Sand influenced biogenia roofs	
riat noiiii	Sand influenced biogenic reefs  Maritime aliff and associated ladges and	
	Maritime cliff and associated ledges and	
Freshwater East Cliffs to Skrinkle Haven	crevices Caves and overhangs	
Treshwater Last Cillis to Skillikie Haveil	Assemblage of RDB and/or nationally scarce	
	vascular plants	
	Rockpools	
	Maritime cliff and associated ledges and	
	crevices	
	Soft piddock bored substrata	
Glanllynnau a Glannau Pen-ychain i Gricieth	Caves and overhangs	
Giannyimau a Giannau Fen-ychani i Gricleth	Caves and Overnanys	

Site of Special Scientific Interest	Marine Feature
	Mixed substrata
	Rockpools
	Sand influenced biogenic reefs
	Soft piddock bored substrata
	Under-boulders
Glannau Aberdaron	Caves and overhangs
	Ciliate strap-lichen
	Assemblage of RDB and/or nationally scarce
	vascular plants
	Exposed rock
	Maritime cliff and associated ledges and
	crevices
	Rockpools
Glannau Penmon - Biwmares	Caves and overhangs
	Mixed substrata
	Muddy gravel
	Soft piddock bored substrata
	Tide-swept algae
	Under-boulders
Glannau Porthaethwy	Caves and overhangs
	Mixed substrata
	Muddy gravel
	Rockpools
	Sheltered rock
	Tide-swept algae
Glannau Rhoscolyn	Ciliate strap-lichen
	Assemblage of RDB and/or nationally scarce
	vascular plants
	Salt-marsh
	Eelgrass
	Exposed rock
Glannau Tonfanau i Friog	Mixed substrata
	Rockpools
	Sand influenced biogenic reefs
Glannau Ynys Gybi/ Holy Island Coast	Ciliate strap-lichen
	Assemblage of RDB and/or nationally scarce
	vascular plants
	Caves and overhangs
	Maritime cliff and associated ledges and
	crevices
	Rockpools
Clacker	Under-boulders
Glaslyn	Salt-marsh
Course Coost, Disposition Don't France	Dwarf spike-rush <i>Eleocharis parvula</i>
Gower Coast: Rhossili to Port Eynon	Caves and overhangs
	Assemblage of RDB and/or nationally scarce
	vascular plants
	Coastal geomorphology of Wales

Site of Special Scientific Interest	Marine Feature	
	Maritime cliff and associated ledges and	
	crevices	
	Rockpools	
	Soft piddock bored substrata	
Grassholm / Ynys Gwales	Grey seal Halichoerus grypus	
	Exposed rock	
Gronant Dunes and Talacre Warren	Sanderling Calidris alba	
	Little tern Sternula albifrons	
	Great cormorant Phalacrocorax carbo	
	Assemblage of RDB and/or nationally scarce	
	vascular plants	
	Inter-tidal	
	Salt-marsh	
	Exposed sand	
	Shingle/boulders above high water mark	
	Strandline vegetation	
Gwydir Bay	Soft piddock bored substrata	
Hook Wood	Salt-marsh	
Horton, Eastern and Western Slade	Sand influenced biogenic reefs	
Lydstep Head to Tenby Burrows	Caves and overhangs	
	Assemblage of RDB and/or nationally scarce	
	vascular plants	
	Sea-lavender Limonium procerum	
	Lagoon snail Paludinella littorina	
	Maritime cliff and associated ledges and	
	crevices	
	Soft piddock bored substrata	
	Tide-swept algae	
Merthyr Mawr	Salt-marsh	
	Sand influenced biogenic reefs	
	Ground beetle Eurynebria complanata	
Milford Haven Waterway	Eurasian teal <i>Anas crecca</i>	
	Eurasian widgeon Anas penelope	
	Dunlin Calidris alpina	
	Eurasian curlew Numenius arquata	
	Little grebe Tachybaptus ruficollis	
	Common shelduck Tadorna tadorna	
	Saltmarsh invertebrate assemblage	
	Assemblage of RDB and/or nationally scarce	
	vascular plants	
	Dwarf Eelgrass, Zostera noltei	
	Salt-marsh	
	European smelt Osmerus eperlanus	
	Otter Lutra lutra	
	Caves and overhangs	
	Eelgrass	
	Mixed substrata	
	Moderately exposed rock	
	Moderately exposed sand	

Site of Special Scientific Interest	Marine Feature	
	Muddy gravel	
	Rockpools	
	Sheltered mud	
	Sheltered rock	
	Silled saline lagoon	
	Tide-swept algae	
	Under-boulders	
	Tentacled lagoon worm Alkmaria romijni	
	An amphipod Gammarus chevreuxi	
Monknash Coast	Sand influenced biogenic reefs	
	Assemblage of RDB and/or nationally scarce	
	vascular plants	
	Coastal geomorphology of Wales	
	Maritime cliff and associated ledges and	
	crevices	
	Soft piddock bored substrata	
Morfa Dinlle	Coastal geomorphology of Wales	
Morfa Dyffryn	Salt-marsh	
	Assemblage of RDB and/or nationally scarce	
	vascular plants	
	Coastal geomorphology of Wales	
	Sand influenced biogenic reefs	
Montallanian	Strandline vegetation	
Morfa Harlech	Northern pintail <i>Anas acuta</i>	
	Salt-marsh	
	Otter Lutra lutra	
	Exposed sand	
	Moderately exposed sand	
	Muddy gravel	
	Dwarf spike-rush <i>Eleocharis parvula</i> Welsh mudwort <i>Limosella australis</i>	
	Assemblage of RDB and/or nationally scarce vascular plants	
	Coastal geomorphology of Wales	
	Other strandline vegetation	
Morfa Uchaf, Dyffryn Conwy	Salt-marsh	
Mynydd Penarfynnydd	Rockpools	
mynydd i ondryfmydd	Maritime cliff and associated ledges and	
	crevices	
Mynydd Tir y Cwmwd a'r Glannau at Garreg	Caves and overhangs	
yr Imbill	Muddy gravel	
	Soft piddock bored substrata	
Newborough Warren - Ynys Llanddwyn	Northern Pintail <i>Anas acuta</i>	
	Salt-marsh	
	Moderately exposed sand	
	Rockpools	
	Polychaete worm Ophelia bicornis	
	Assemblage of RDB and/or nationally scarce	

Newport Cliffs  Caves  Maritin crevice Rockpe Sand i  Oxwich Bay  Salt-m Assem	ools Influenced biogenic reefs
Newport Cliffs  Caves  Maritin crevice Rockpe Sand i  Oxwich Bay  Salt-m Assem	and overhangs ne cliff and associated ledges and es cols nfluenced biogenic reefs arsh blage of RDB and/or nationally scarce ar plants
Mariting crevices Rockpe Sand i  Oxwich Bay Salt-m Assem	ne cliff and associated ledges and es cols influenced biogenic reefs arsh blage of RDB and/or nationally scarce ar plants
Crevice Rockpo Sand i  Oxwich Bay Salt-m Assem	es pols influenced biogenic reefs arsh blage of RDB and/or nationally scarce ar plants
Oxwich Bay Salt-m Assem	nfluenced biogenic reefs arsh blage of RDB and/or nationally scarce ar plants
Oxwich Bay Salt-m Assem	nfluenced biogenic reefs arsh blage of RDB and/or nationally scarce ar plants
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	ately exposed rock
	blage of RDB and/or nationally scarce
	ar plants
Rockpo	•
	ddock bored substrata
	boulders
Pennard Valley Salt-m	
	blage of RDB and/or nationally scarce
	ar plants
	Man cabbage <i>Coincia monensis</i>
	monensis
Penarth Coast Rockpo	
	blage of RDB and/or nationally scarce
	ar plants
	nfluenced biogenic reefs
	ddock bored substrata
<u></u> -	wept algae
	ed rock
Rockp	ools
Assem	blage of RDB and/or nationally scarce
vascul	ar plants
Tide-s	wept algae
Under-	boulders
Porth Ceiriad, Porth Neigwl ac Ynysoedd Caves	and overhangs
Sant Tudwal Assem	blage of RDB and/or nationally scarce
vascul	ar plants
Coasta	ll geomorphology of Wales
Expose	ed rock
Maritin	ne cliff and associated ledges and
crevice	<del>-</del>
Rockp	pols
	wept algae
	ss Zostera marina
Eelgra	
	ne cliff and associated ledges and
crevice	
Moder	ately exposed sand

Site of Special Scientific Interest	Marine Feature	
	Rockpools	
Porth Towyn i Borth Wen	Caves and overhangs	
	Moderately exposed rock	
	Rockpools	
Puffin Island - Ynys Seiriol	Soft piddock bored substrata	
•	Under-boulders	
Pwll-Du Head and Bishopston Valley	Sand influenced biogenic reefs	
	Assemblage of RDB and/or nationally scarce	
	vascular plants	
	Red hemp-nettle Galeopsis angustifolia	
	Coastal geomorphology of Wales	
Ramsey/Ynys Dewi	Grey seal Halichoerus grypus	
	Caves and overhangs	
	Exposed rock	
	Maritime cliff and associated ledges and	
	crevices	
	Rockpools	
	Surge gullies	
	Tide-swept algae	
	Under-boulders	
	A lichen Ramalina polymorpha	
Phoenoigr Poofe	A sponge Thymosia guernei	
Rhosneigr Reefs	Caves and overhangs Rockpools	
	Under-boulders	
Rhossili Down	Coastal geomorphology of Wales	
Severn Estuary	Northern pintail <i>Anas acuta</i>	
Octom Estuary	Northern shoveler <i>Anas clypeata</i>	
	Eurasian teal <i>Anas crecca</i>	
	Eurasian widgeon <i>Anas penelope</i>	
	Dunlin Calidris alpina	
	Common ringed plover Charadrius hiaticula	
	Black-tailed godwit Limosa limosa	
	Eurasian curlew Numenius arquata	
	European golden plover Pluvialis apricaria	
	Grey plover Pluvialis squatarola	
	Common shelduck Tadorna tadorna	
	Common redshank Tringa totanus	
	Gadwell Anas strepera	
	Assemblage of RDB and/or nationally scarce	
	vascular plants	
	Salt-marsh	
	Allis shad Alosa alosa	
	Twaite shad Alosa fallax	
	European eel Anguilla anguilla	
	River lamprey Lampetra fluviatilis	
	Sea lamprey Petromyzon marinus	
	Atlantic salmon Salmo salar	
	Eelgrass Zostera marina	

Site of Special Scientific Interest	Marine Feature
	Eelgrass
	Estuaries
	Rockpools
	Sand influenced biogenic reefs
	Tide-swept algae
	An amphipod <i>Gammarus chevreuxi</i>
	Lagoon sand shrimp Gammarus insensibilis
	Lagoon sea slug Tenellia adspersa
Skokholm	Grey seal Halichoerus grypus
	Tide-swept algae
	Maritime cliff and associated ledges and
	crevices
Skomer Island and Middleholm	Grey seal Halichoerus grypus
	Maritime cliff and associated ledges and
	crevices
	Assemblage of RDB and/or nationally scarce
	vascular plants
	Exposed rock
	Surge gullies
Southerndown Coast	Caves and overhangs
	Sand influenced biogenic reefs
	Assemblage of RDB and/or nationally scarce
	vascular plants
St. David's Peninsula Coast	Grey seal Halichoerus grypus
	Exposed rock
	Rockpools
	Assemblage of RDB and/or nationally scarce
	vascular plants
	Coastal geomorphology of Wales
	Maritime cliff and associated ledges and
	crevices
	Ciliate strap-lichen Heterodermia leucomelos
	Lesser scalewort Frullania microphylla
	Sea scalewort Frullania teneriffae
St. Margaret's Island	Caves and overhangs
	Soft piddock bored substrata
Otania da Otania Tanana ( Bala)	Under-boulders
Stackpole Quay - Trewent Point	Caves and overhangs
	Moderately exposed rock
	Rockpools
	Soft piddock bored substrata
	Assemblage of RDB and/or nationally scarce
	vascular plants
	Maritime cliff and associated ledges and
Ctaclinala	crevices
Stackpole	Otter Lutra lutra
	Caves and overhangs
	Rockpools

Site of Special Scientific Interest	Marine Feature	
	Assemble as of DDB and/or nationally assess	
	Assemblage of RDB and/or nationally scarce vascular plants	
	Maritime cliff and associated ledges and	
	crevices	
	Lichen assemblage: Maritime cliff and slope	
	Lagoon snail <i>Palundinella littorina</i>	
	Soft piddock bored substrata	
Strumble Head - Llechdafad Cliffs	Caves and overhangs	
	Exposed rock	
	Surge gullies	
	Maritime cliff and associated ledges and	
	crevices	
Sully Island	Dunlin <i>Calidris alpina</i>	
	Common ringed plover Charadrius hiaticula	
	Grey plover Pluvialis squatarola	
	Common redshank Tringa totanus	
	Sand influenced biogenic reefs	
Tenby Cliffs and St. Catherine's Island	Caves and overhangs	
	Exposed sand	
	Soft piddock bored substrata	
	Assemblage of RDB and/or nationally scarce	
The Office of Development of the I	vascular plants	
The Offshore Islets of Pembrokeshire /	Grey seal Halichoerus grypus	
Ynysoedd Glannau Penfro	Exposed rock	
The Skerries	Rockpools Cayos and overhands	
Tiroedd a Glannau Rhwng Cricieth ac Afon Glaslyn	Caves and overhangs	
Giasiyii	Eelgrass Mederately expected and	
	Moderately exposed sand Rockpools	
	Assemblage of RDB and/or nationally scarce	
	vascular plants	
	Sand influenced biogenic reefs	
Traeth Lafan	Eurasian oystercatcher <i>Haematopus ostralegus</i>	
	Red-breasted merganser <i>Mergus serrator</i>	
	Eurasian curlew <i>Numenius arquata</i>	
	Common redshank <i>Tringa totanus</i>	
	Great crested grebe Podiceps cristatus	
	Dwarf Eelgrass Zostera marina	
	Eelgrass	
	Moderately exposed sand	
	Rockpools	
Traeth Llanon	Sand influenced biogenic reefs	
Traeth Lligwy	Rockpools	
Twyni Chwitffordd, Morfa Landimor a Bae	Eurasian oystercatcher Haematopus ostralegus	
Brychdwn/Whiteford Burrows etc	Ground beetle Eurynebria complanata	
	Salt-marsh	
	Eelgrass	
	Exposed sand	
	Rockpools	

Site of Special Scientific Interest	Marine Feature	
	Soft piddock horod substrate	
	Soft piddock bored substrata	
	Tide-swept algae	
	Saltmarsh morphology	
	Sand dune	
	Polychaete worm Ophelia bicornis	
	Assemblage of RDB and/or nationally scarce	
	vascular plants	
Turnel Lockow Deuterman I contains	Coastal geomorphology of Wales	
Twyni Lacharn - Pentywyn/Laugharne -	European golden plover Pluvialis apricaria	
Pendine Burrows	Otter Lutra lutra	
	Exposed sand	
	Coastal geomorphology of Wales	
	Assemblage of RDB and/or nationally scarce	
	vascular plants	
Ty Croes	Rockpools	
	Surge gullies	
Tywyn Aberffraw	Salt-marsh	
	Coastal geomorphology of Wales	
Waterwynch Bay to Saundersfoot Harbour	Caves and overhangs	
	Exposed sand	
	Rockpools	
	Tide-swept algae	
Wig Bach a'r Glannau i Borth Alwm	Caves and overhangs	
	Rockpools	
	Surge gullies	
Y Foryd	Eurasian widgeon Anas penelope	
	Eelgrass	
Ynys Enlli	Caves and overhangs	
	Exposed rock	
	Rockpools	
	Under-boulders	
	Assemblage of RDB and/or nationally scarce	
	vascular plants	
	Maritime cliff and associated ledges and	
	crevices	
Ynys Feurig	Rockpools	
	Under-boulders	
Ynysoedd y Gwylanod - Gwylan Islands		
This cood a grant of the stands	Caves and overhangs	

<sup>\*</sup>NB: Since 2012 NRW and JNCC have undertaken a review of the SPAs and SSSIs to determine which features utilise the marine environment and should therefore be considered as a marine feature. As a result there are some changes to the features listed above compared to those listed in previous reports. Further information can be found on the JNCC website: <a href="http://jncc.defra.gov.uk/page-7438">http://jncc.defra.gov.uk/page-7438</a>. Alternatively, please contact NRW for the most up to date feature lists.

## **Annex B**

# Gaps identified in the MPA network in Welsh waters

Gap	Reason for Gap	Regions where gaps are identified in Welsh waters	Can the gap be addressed at this time? Y/N
Seabed of coarse sand, gravel and/or stones Sublittoral coarse sediment	Adequacy (shortfall in amount of habitat protected)	Irish Sea and Western Channel and Celtic Sea	Yes
Sandy seabed Sublittoral sand	Adequacy (shortfall in amount of habitat protected)	Western Channel and Celtic Sea	Yes
Muddy seabed Sublittoral mud	Adequacy (shortfall in amount of habitat protected)	Western Channel and Celtic Sea	Yes
Seabed of mixture of stones, gravels, sand and muds Sublittoral mixed sediment	Adequacy (shortfall in amount of habitat protected)	Irish Sea	Yes
Estuarine rocky habitat	Replication (another example needed in the network)	Irish Sea	No*
Fragile sponge and anthrozoan communities on subtidal rocky habitat	Replication Another example needed in the network	Irish Sea	Yes
Mud habitats in deep water	Replication (another example needed in the network)	Irish Sea and Western Channel and Celtic Sea	Yes
Musculus discors beds Green crenella (carpet mussel beds)	Replication (another example needed in the network)	Irish Sea	No*
Sea-pen and burrowing megafauna communities	Replication (another example needed in the network)	Western Channel and Celtic Sea	Yes
Sheltered muddy gravels	Replication (another example needed in the network)	Western Channel and Celtic Sea	No*
Ocean quahog	Replication (another example needed in the network)	Western Channel and Celtic Sea	Yes
Pink sea-fan Eunicella verrucosa	Replication (another example needed in the network)	Irish Sea	Yes
Stalked jellyfish Haliclystus auricula	Representation (not currently represented in Welsh network)	Irish Sea	No*
Flat/native oyster Ostrea edulis	Representation (not currently represented in Welsh network)	Irish Sea and Western Channel and Celtic Sea	No*
Crayfish (crawfish/spiny lobster) Palinurus elephas	Representation (not currently represented in Welsh network)	Irish Sea	No*

<sup>\*</sup>Limited or no evidence currently. Feature will be reassessed as new evidence becomes available and as part of any future network assessment.

## **Feature Level Indicative Condition Assessment**

**Anglesey Coast SAC: Saltmarsh** 

Feature	2005-07 assessments*	2017 indicative assessments**
Salicornia and other annuals colonising mud and sand	Favourable	Favourable
Atlantic salt meadows	Unfavourable (2010)	Unfavourable
Estuaries	Favourable	Favourable
Mudflats and sandflats not covered by seawater at low tide	Unfavourable	Favourable

# Cardigan Bay SAC

Feature	2005-07 assessments	2017 indicative assessments
Bottlenose dolphin	Favourable	Favourable
Grey seal	Favourable	Favourable
River lamprey	Unfavourable	Favourable
Sea lamprey	Unfavourable	Unknown
Reefs	Not assessed	Favourable
Sandbanks which are slightly covered by seawater all the time	Not assessed	Unfavourable
Submerged or partially submerged sea caves	Favourable	Unknown

# Carmarthen Bay and Estuaries SAC

Feature	2005-07 assessments	2017 indicative assessments
Estuaries	Unfavourable	Unfavourable
Mudflats and sandflats	Unfavourable	Unfavourable
not covered by		
seawater at low tide		
Atlantic salt meadows	Unfavourable	Unfavourable
Salicornia and other	Favourable	Favourable
annuals colonising		
mud and sand		
Large shallow inlets	Unfavourable	Unfavourable
and bays		
Sandbanks which are	Unfavourable	Unfavourable
slightly covered by		
seawater all the time		
Allis shad	Unfavourable	Unfavourable
Twaite shad	Unfavourable	Unfavourable
River lamprey	Unfavourable	Unfavourable
Sea lamprey	Unfavourable	Unfavourable
Otter	Favourable	Favourable

## **Cemlyn Bay SAC**

Feature	2005-07 assessments	2017 indicative assessments
Coastal lagoon	Not assessed	favourable

# **Dee Estuary SAC**

Feature	Previous assessment (2011)	2017 indicative assessments
Mudflats and sandflats not covered by seawater at low tide	Not assessed	Favourable
Salicornia and other annuals colonising mud and sand	Favourable	Favourable
Atlantic salt meadows	Favourable	Favourable
Estuaries	Not assessed	Unfavourable
River lamprey	Not assessed	Unfavourable
Sea lamprey	Not assessed	Unfavourable

# Kenfig SAC

Feature	2009 assessn	ments 2017 indicative assessments	
Atlantic salt mead	dows Unfavourable	Unfavourable	

## **Limestone Coast of South West Wales SAC**

Feature	2005-07 assessments	2017 indicative assessments
Submerged or partially	Favourable	Unknown
submerged sea caves		

## Menai Strait and Conwy Bay SAC

Feature	2005-07 assessments*	2017 indicative assessments**
Mudflats and sandflats	Unfavourable	Favourable
not covered by		
seawater at low tide		
Reefs	Unfavourable	Favourable
Sandbanks which are	Unfavourable	Favourable
slightly covered by		
seawater all the time		
Large shallow inlets	Unfavourable	Unfavourable
and bays		
Submerged or partially	Favourable	Unknown
submerged sea caves		

## **Pembrokeshire Marine SAC**

Feature	2005-07	2017 indicative assessments
	assessments	

Large shallow inlets	Unfavourable	Unfavourable
and bays		
Estuaries	Unfavourable	Unfavourable
Reefs	Unfavourable	Unfavourable
Atlantic salt meadows	Unfavourable	Unfavourable
Mudflats and sandflats not covered by seawater at low tide	Unfavourable	Unfavourable
Coastal lagoons	Favourable	Unfavourable
Submerged or partially submerged sea caves	Favourable	Unknown
Sandbanks which are slightly covered by seawater all the time	Unfavourable	Unfavourable
Grey seal	Favourable	Favourable
Allis shad	Not assessed	Favourable
Twaite shad	Not assessed	Favourable
River lamprey	Unfavourable	Unfavourable
Sea lamprey	Unfavourable	Unfavourable
Otter	Favourable	Favourable
Shoredock	Not assessed	Favourable

# Pen Llŷn a'r Sarnau SAC

Feature	2005-07 assessments	2017 indicative assessments
Reefs	Favourable	Unfavourable
Large shallow inlets and bays	Unfavourable	Favourable
Sandbanks which are slightly covered by seawater all the time	Favourable	Unfavourable
Estuaries	Unfavourable	Unfavourable
Coastal lagoons	Unfavourable	Unfavourable
Mudflats and sandflats not covered by seawater at low tide	Unfavourable	Unfavourable
Atlantic salt meadows	Unfavourable	Unfavourable
Salicornia and other annuals colonising mud and sand	Favourable (2011)	Unfavourable
Submerged or partially submerged sea caves	Favourable	Unknown
Bottlenose dolphin	Favourable	Favourable
Otter	Unfavourable	Favourable
Grey seal	Favourable	Favourable

# **Severn Estuary SAC**

Feature	2005-07	2017 indicative assessments
	assessments	
Estuaries	Not assessed	Unfavourable
Mudflats and sandflats	Not assessed	Unfavourable
not covered by		
seawater at low tide		
Atlantic salt meadows	Not assessed	Unfavourable
Sandbanks which are	Not assessed	Favourable
slightly covered by		
seawater all the time		
Reefs	Not assessed	Unknown
Sea lamprey	Not assessed	Unfavourable
River lamprey	Not assessed	Unfavourable
Twaite shad	Not assessed	Unfavourable

## **Croker Carbonate Slab SAC**

Feature	2013 Assessment
Submarine structures made by leaking	Unknown
gases	

# Harbour porpoise SACs

Feature	2005-07 assessments
	(informed site selection)
Harbour porpoise	Favourable

## **Summary of indicative condition of SPA features (Welsh inshore)**

	Indicative Condition Assessment		
SPA Name	Favourable (number of species)	Unfavourable (number of species)	Unknown (number of species)
The Dee Estuary	9	7	0
Liverpool Bay	2	0	1
Traeth Lafan	3	1	1
Anglesey Terns	3	1	0
Aberdaron Coast and Bardsey Island	1	0	0
Northern Cardigan Bay	0	0	1
Skomer, Skokholm and the Seas off Pembrokeshire	3	1	1
Grassholm	1	0	0
Carmarthen Bay	1	0	0
Burry Inlet	7	5	1
Severn Estuary	3	4	0

## Irish Sea Front SPA

Feature	2013 Assessment
Manx Shearwater	Unknown