

Marine Protected Areas The road to a new network

Richard White Marine and Fisheries Consultant to The Wildlife Trusts

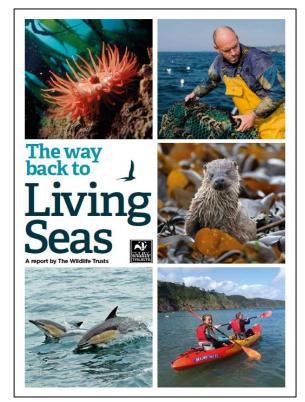


The Wildlife Trusts and Living Seas

- Marine team since 1996
- Living Seas programme since 2010
- Working nationally...
- ...and locally
- Long-term focus on Marine Protected Areas (MPAs)

The Wildlife Trusts and Living Seas

- Latest strategy sets out our approach to:
 - Fisheries
 - MPAs
 - Offshore development
 - Pollution etc.
- Integrated through Regional Sea Plans



https://www.wildlifetrusts.org/sites/default/files/2018-03/the wildlife trusts marine strategy.pdf



The road to a new network



- Marine Protected Areas work!
- Making them work better building a network
- Marine Conservation Zones past, present and future
- Managing fisheries in MPAs
- Brexit challenges and opportunities in offshore waters

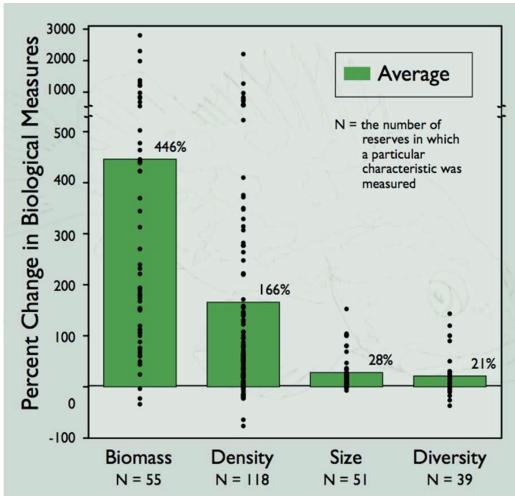
Some terminology



- Marine Reserves
 - areas where all damaging activities are excluded...
 - …also known as No Take Zones
- Marine Protected Areas (MPA)
 - broader term...
 - ...includes Marine Reserves and multi-use areas
- All MPAs in the UK are multi-use



Marine Reserves work



Lester et al.: Biological effects within marine reserves Mar Ecol Prog Ser 384: 33-46, 2009



International criteria for network design



1. Features

Sites should be identified for their range of species and habitats (known as features). Consideration should be given to those species and habitats that are in decline, rare or threatened.

close enough to ensure ecological links are maintained so that fragmented habitats can recover.

be represented within the network and an adequate proportion of features should be included.



4. Resilience

Individual sites should be large enough to provide meaningful protection, and replicated to ensure a resilient network.

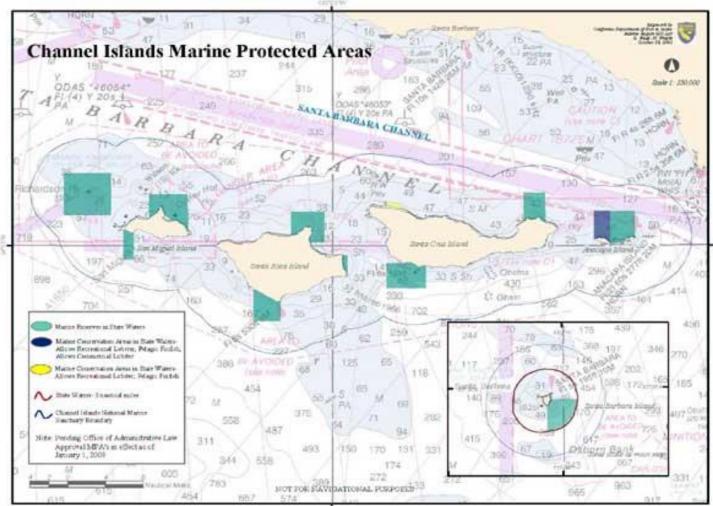


5. Management

Each site should be managed to ensure protection of the features for which it was proposed. There should be no damaging activites.

Ecological Networks

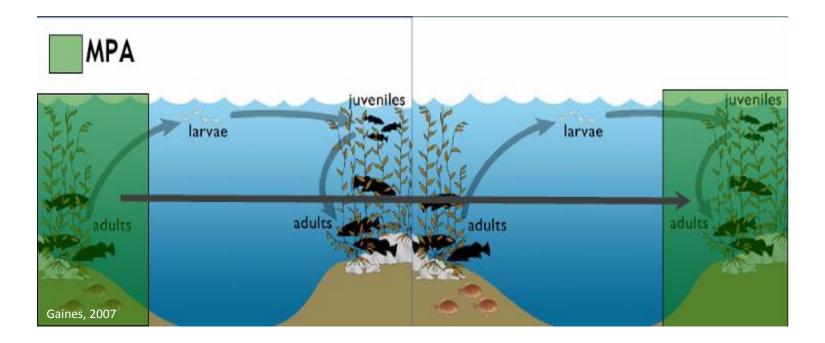




INVOW.

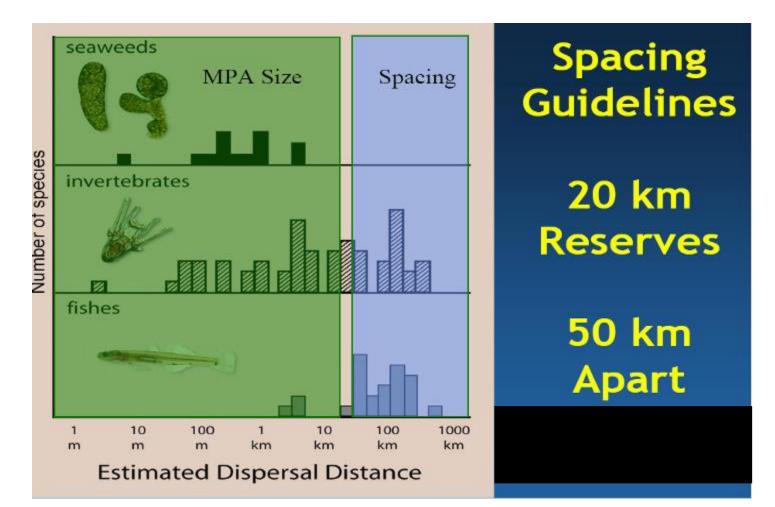
Species dispersal



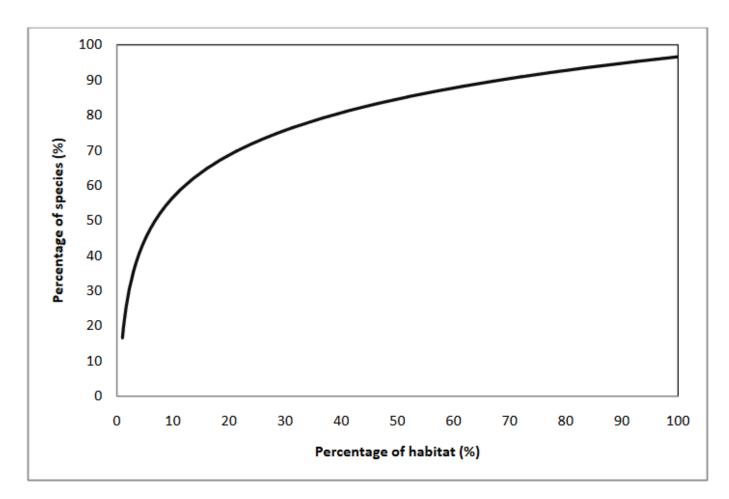


Ecological networks - size and connectivity





Resilience: how much of each habitat to protect?



JNCC/Natural England (2010) MCZ Project – Ecological Network guidance

Resilience: how much of each habitat to protect?

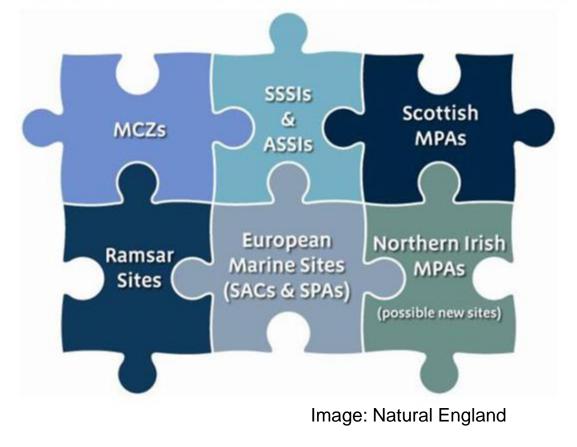


Broad-scale habitat types		Percentage of species (10% incremental steps)				
High energy intertidal rock (A1.1)	_	4.9	10.8	21.2	37.9	63.2
Moderate energy intertidal rock (A1.2)	area	4.9	10.9	21.3	38.0	63.3
Low energy intertidal rock (A1.3		5.4	11.6	22.2	39.0	64.1
Intertidal coarse sediments (A2.1)	habitat	6.69	13.6	24.8	41.8	66.3
Intertidal sand and muddy sand (A2.2)	hat	6.3	13.0	24.8	41.8	65.7
Intertidal mud (A2.3)	ale	6.3	13.0	24.8	41.8	65.7
Intertidal mixed sediments (A2.4)	Sce	6.3	13.0	24.8	41.8	65.7
High energy infralittoral rock (A3.1)	ģ	2.5	6.6	15.0	30.5	57.1
Moderate energy infralittoral rock (A3.2)	broad-scale	3.0	7.5	16.5	32.4	58.7
Low energy infralittoral rock (A3.3)		2.8	7.1	15.9	31.6	58.0
High energy circalittoral rock (A4.1)	total	1.4	4.3	11.2	25.4	52.3
Moderate energy circalittoral rock (A4.2)	of	1.9	5.4	13.0	27.9	54.7
Low energy circalittoral rock (A4.3)	ge	2.7	7.1	15.7	31.5	57.9
Subtidal coarse sediment (A5.1)	nta	3.0	7.6	16.5	32.4	58.7
Subtidal sand (A5.2)	Percentage	2.3	6.3	14.5	29.9	56.6
Subtidal mud (A5.3)	Per	2.3	6.2	14.5	29.8	56.5
Subtidal mixed sediments (A5.4)	1 -	2.8	7.3	16.1	31.9	58.3

JNCC/Natural England (2010) MCZ Project – Ecological Network guidance

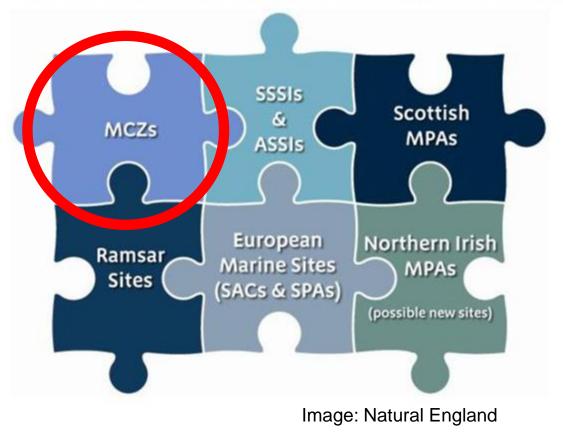


One network, six designations





One network, six designations



- Marine Conservation Zones (MCZs)
- Marine and Coastal Access Act 2008

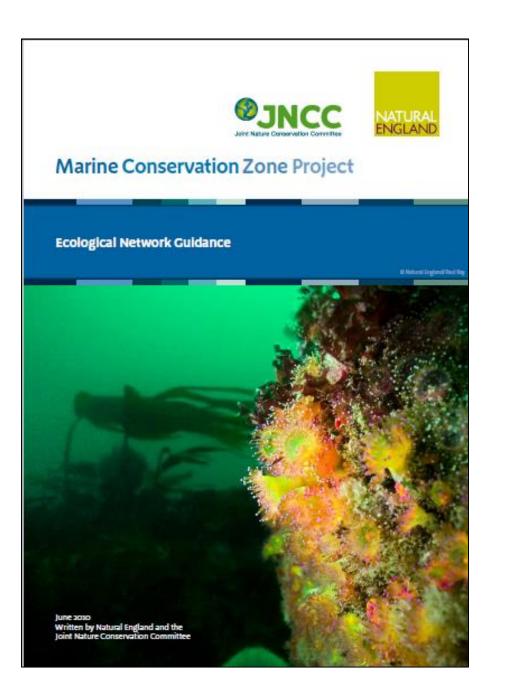




A bold experiment







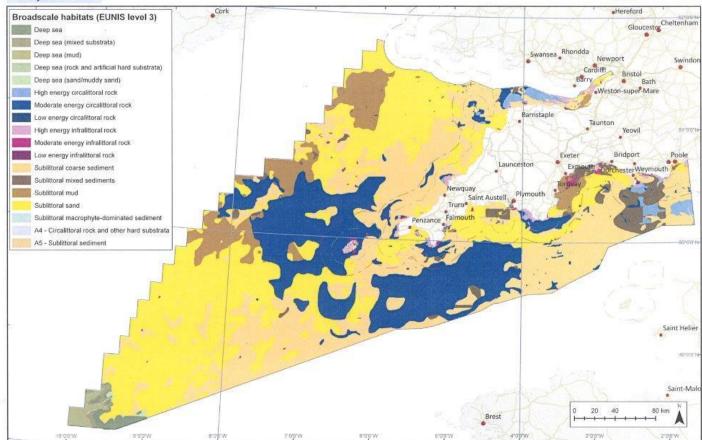




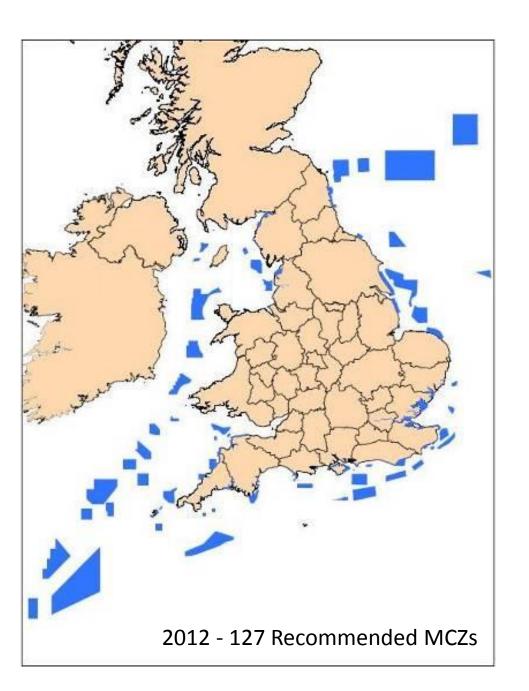
Map: A.1.1.1 Version: 27Sep10 Notes: yes Docs: yes

Broadscale classification of seafloor habitats (EUNIS level 3) Map shows modelled EUNIS level 3 habitats (broad-scale seafloor habitats). They are modelled based on depth, light penetration, waves and tidal currents, and sea floor substrate. UKSeaMap provided by the JNCC (2010).





Maritime basemap, coestine © Crown Capyright, all rights reserved (2009), SeaZone Solutions Ltd, products licence no, 042005 003, Not to be used for navigation. Land basemap part © OpenStreetMap & contributors, CC-BY-54. This map is part of a series with accompanying notes,

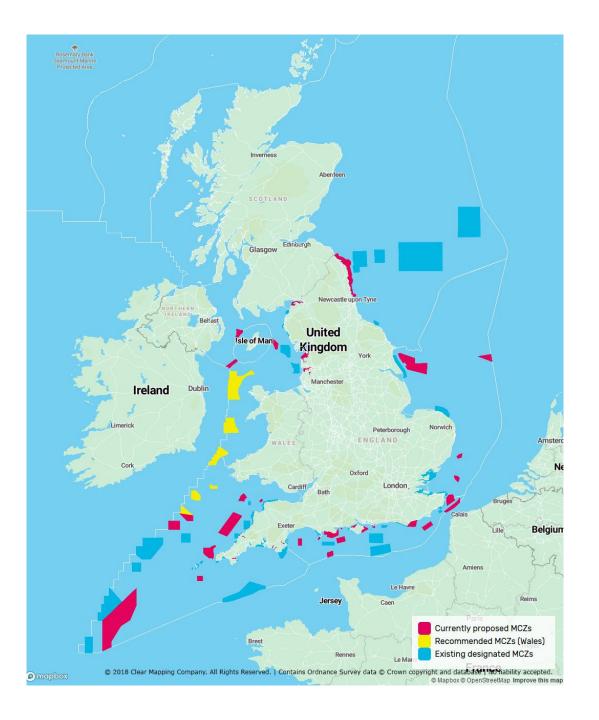




MCZ designation



- First tranche of 27 MCZs 2013
- Second tranche of 23 sites 2016
- Third tranche 41 sites proposed 2018





MCZ designation



- First tranche of 27 MCZs 2013
- Second tranche of 23 sites 2016
- Third tranche 41 sites proposed 2018
- A complete network?
- Not a done deal!
 - six week consultation
 - closes 20 July
 - <u>https://www.wildlifetrusts.org/marine-protected-areas/england</u>

Managing fishing in MPAs



- European Marine Sites (SAC and SPA)
- Defra agreed fishing is 'project or plan' 2014
- Fishing subject to Article 6
- Close all sites to fishing?





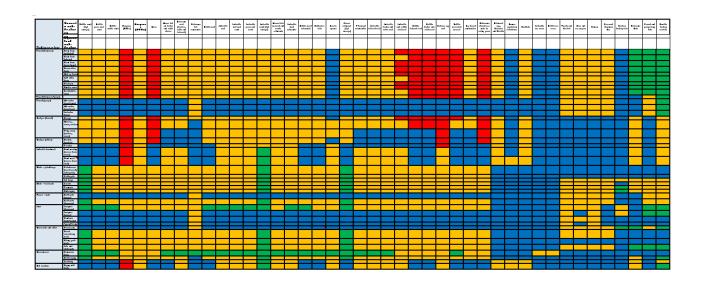
Managing fishing in MPAs



- European Marine Sites (SAC and SPA)
- Defra agreed fishing is 'project or plan' 2014
- Fishing subject to Article 6
- Close all sites to fishing?
- Pragmatic approach
- Risk-based assessment of impacts



Risk-based approach: the matrix



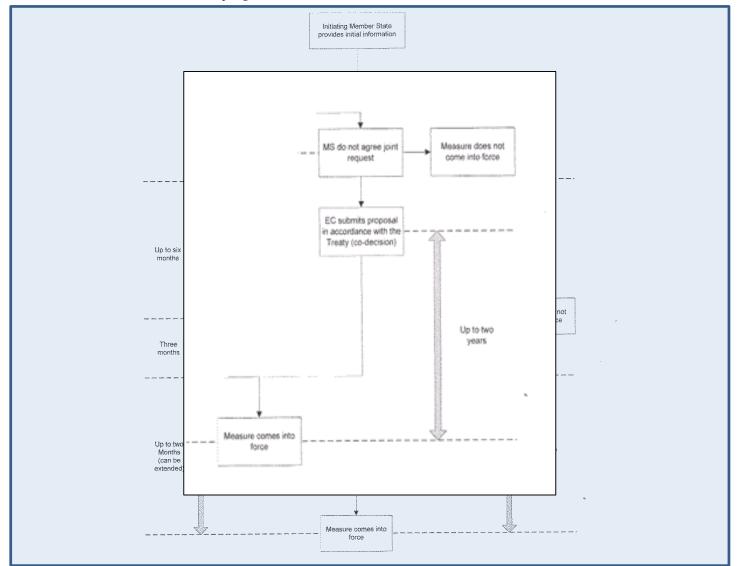
- High risk 'reds' by December 2013
- 'Ambers' by end 2016 (?)
 - Tests of likely significant effect
 - Appropriate assessment
 - Management
- Steady progress
- Extended to apply to MCZs

Who is doing what?



0-6nm	Inshore Fisheries and Conservation Authorities (IFCA)
6-12nm	Marine Management Organisation (MMO)
12-200nm	Defra

 Defra process subject to Common Fisheries Policy (CFP) rules Annex 1: Flow chart showing process for implementation of fisheries measures for offshore MPAs as defined by articles 11 and 18 of the Common Fisheries Policy regulation (1380/2013).





Compromise, not conservation





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Department for Environment Food & Rural Affairs

After Brexit...



New legislation must:

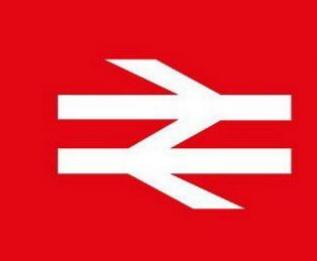
- enable MPAs in UK offshore waters to be managed after we leave the EU
- ensure that the UK and devolved administrations have a final say in management

The road to a new network



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We're getting there.