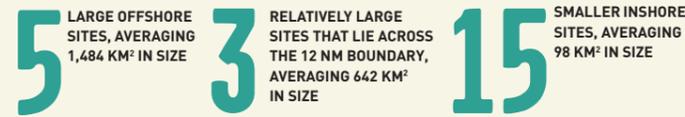


RECOMMENDED MARINE CONSERVATION ZONES - 2nd Tranche

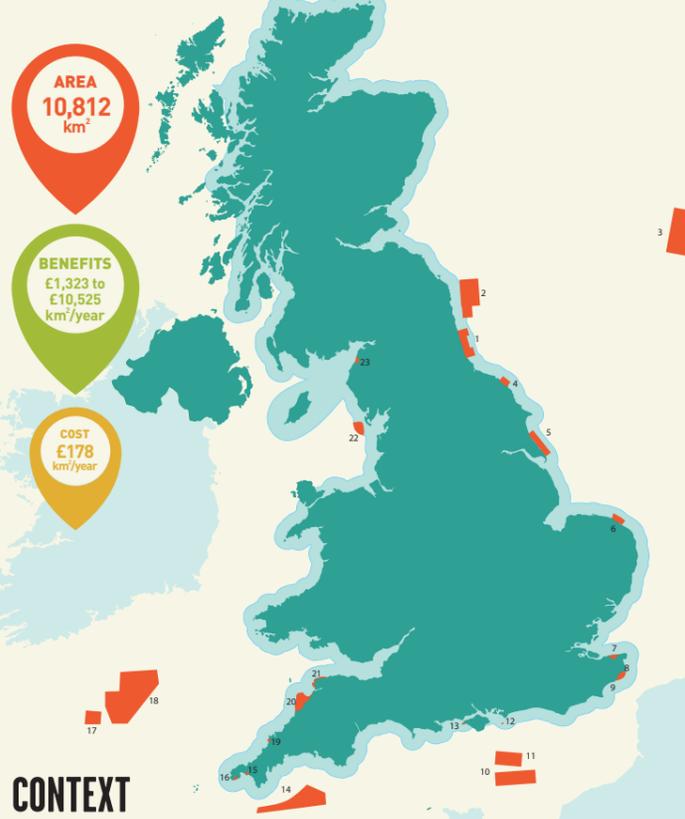
THE SITES

THE 23 rMCZs INCLUDE:



They range from the tiny Utopia rMCZ in the Solent of less than 3 km², to the vast Fulmar rMCZ, covering almost 2,500 km² of the North Sea.

RMCZ	SITE NO	AREA (KM ²)	NO. FEATURES	OFFSHORE/INSHORE
Coquet to St. Mary	1	188	15	In
Farnes East	2	945	9	In/Off
Fulmar	3	2,437	5	Off
Runswick Bay	4	68	12	In
Holderness Inshore	5	309	8	In
Cromer Shoal Chalk Beds	6	320	10	In
The Swale Estuary	7	51	13	In
Dover to Deal	8	10	13	In
Dover to Folkstone	9	20	20	In
Offshore Brighton	10	862	4	Off
Offshore Overfalls	11	593	4	In/off
Utopia	12	3	6	In
The Needles	13	11	15	In
Western Channel	14	1,614	2	Off
Mounts Bay	15	12	10	In
Land's End (Runnel Stone)	16	20	10	In
North West of Jones Bank	17	464	6	Off
Greater Haig Fras	18	2,041	8	Off
Newquay and the Gannel	19	9	13	In
Hartland Point to Tintagel	20	304	14	In
Bideford to Foreland Point	21	104	21	In
West of Walney	22	388	4	In/off
Allonby Bay	23	39	11	In



CONTEXT

Although not often visible, the seas around our coast are home to some of the best marine wildlife in Europe, with a wide diversity of underwater landscapes habitats and species. The marine environment is also essential to our social, economic and environmental well-being providing many goods and services including food, building materials, recreation, transport, oil, gas, renewable energy, potential carbon capture and pollution control.

However, at present our seas and their wildlife are being damaged by many human activities. The Marine and Coastal Access Act requires that a network of MPAs, including examples of all features of UK waters, is created to help improve the health of the marine environment. A network of well managed MPAs will allow damaged marine ecosystems to recover, and protect those that are healthy, more effectively than would individual, unrelated protected sites. If designated as MCZs, these 23 sites would form part of the network, helping to fulfil this obligation, and resulting in many benefits.

ESTIMATED BENEFITS AND COSTS PER YEAR

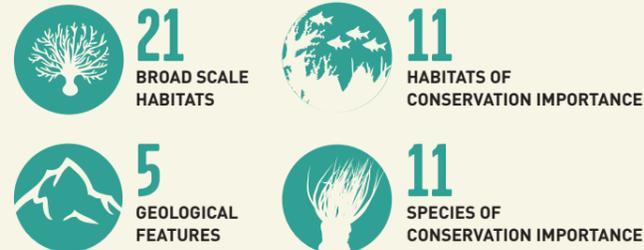
COSTS
£1,924,226

BENEFITS
DIVERS & ANGLERS
£14.3 MILLION

BENEFITS
GENERAL
£113.8 MILLION

FEATURES PROPOSED FOR PROTECTION

Offshore and inshore/offshore rMCZs would protect a small number of features (average 5/site) mainly broad scale habitats e.g. Western Channel rMCZ would protect 2. Inshore sites would protect more features (average 12/site) due to the diversity of shallower waters e.g. Bideford to Foreland Point would protect 21. Five rMCZs protect geological features, such as the subtidal part of Spurn Head, and the Haig Fras rock complex.



IMPORTANCE OF THESE rMCZs WITHIN THE MPA NETWORK

The 23 rMCZs address the big ecological gaps within the network of MPAs that has been designated so far, including species and habitats not yet protected in a region and those where only a very small proportion is protected e.g. Offshore Brighton would protect circalittoral rock in deep waters which is a current gap. Other sites will protect rare and vulnerable features, such as Mounts Bay rMCZ and the Needles rMCZ (both would protect the beautiful stalked jellyfishes), and Dover to Deal rMCZ (would protect rosworm reef, found only in Kent). If designated these sites will double the area protected as MCZs to a total of c. 20,000 km².

The features proposed for protection in the rMCZs support numerous associated plants, animals and ecological processes that will also benefit from designation. Thus, the subtidal broad scale habitats to be protected in Coquet St Mary's rMCZ create productive feeding and breeding areas for grey seals, harbour porpoises, white-beaked dolphins, and 1000s of seabirds, including 90% of the entire UK Roseate tern population, England's rarest seabird.

COSTS TO BUSINESS OVERVIEW

UK COMMERCIAL FISHERIES

In 10 of the rMCZs, management will potentially result in costs to the fishing industry, if certain gear types can no longer be used, or if fishing is prohibited in parts of a site because it damages a feature. The exact impact on fishing is unknown until management is implemented, but there is little overlap between rMCZs and core fishing grounds. The best estimate cost (£35,000/yr) is based on a range of management scenarios and assumes that static gears will be less affected than bottom abrading mobile gears.

OIL AND GAS

The best estimate cost to the sector (£49,000/yr) is based on cost of assessing impact of oil, gas and CCS developments on protected features. Figures were provided by the industry and cover external consultant costs and internal company staff time.

AGGREGATES

To obtain a licence for extraction within 1 km of an MCZ, the sector has to assess the potential impact on protected features (estimated cost of £28,000/application). For 2 rMCZs, there may be about 8 licence applications over 20 years, which gives the figure of c. £11,000/yr.

CABLES (POWER AND TELECOMMUNICATIONS)

Future cable route locations are not known but the sector will have to assess the impact on protected broad-scale habitats of installation near or in MCZs. Using the method for 1st tranche MCZs (agreed with the UK Cable Protection Committee), cost to the industry per year is estimated c. £1,000/yr.

PORTS, HARBOURS, SHIPPING & DISPOSAL SITES

11 rMCZs include areas under port and harbour operational jurisdiction, or lie close to disposal sites. The best estimate of costs to the sector (£123,000/yr) is based on costs of assessing the impact of navigational dredging and dumping of spoil at disposal sites on protected features.

RENEWABLE ENERGY (WAVE AND TIDAL)

6 rMCZs are adjacent to areas for which there are an estimated 8 licence applications over the 20 year IA period. The best estimate cost to this sector (£7,000/yr) is based on costs of assessing the impact of the developments on protected broad-scale habitats.

NON-UK FISHERIES

8 rMCZs are currently fished in by other countries. Their revenues that might be affected by management measures have been estimated at about £985,000/yr (N.B. this is not directly comparable to the figures estimated for UK fishing as a different method was used). N.B. these costs are not included in the UK costs to business.

BENEFITS TO PEOPLE FROM DESIGNATION OF THE 23 rMCZs

NON-USE AND REQUEST VALUES

HIGH CONFIDENCE THAT THERE WILL BE A BENEFIT BUT LOW CONFIDENCE IN THE SCALE
Some people like places, habitats and even species to be protected even if they do not use them i.e. there is a "non-use" value. The non-use value, to divers and anglers, of protecting the 23 sites is estimated at £211m over a 20 yr period or about £10m/yr.

RESEARCH AND EDUCATION

RELATIVELY HIGH CONFIDENCE
Research and monitoring within designated sites will increase our understanding of marine ecosystems and how they are useful to us.

FISH AND SHELL FISH FOR HUMAN CONSUMPTION

FAIRLY HIGH CONFIDENCE FOR SHELLFISH; VERY LOW CONFIDENCE FOR FISH
Intertidal sediments, coastal saltmarsh, infralittoral rock, mud habitats in deep water and seagrass beds are important fish habitats. These features would be protected in several tranche 2 MCZs. Once these sites are managed, fish populations are expected to increase both within and outside the boundaries, benefiting commercial fishers and recreational anglers.

GAS AND CLIMATE REGULATION

MEDIUM CONFIDENCE
Intertidal mud, coastal salt marshes and saline reed beds, mud in deep waters and seagrass beds are all efficient sequestrators of carbon and thus contribute to gas and climate regulation. These features are protected in several tranche 2 MCZs which may result in a net increase in the rate of carbon sequestration.

COST TO BUSINESS PER YEAR



ENVIRONMENTAL RESILIENCE

MEDIUM CONFIDENCE

Rising sea temperatures and sea levels, greater storm frequency, increasing numbers of severe storm surges, and changes in the timing of plankton production, composition and distribution, all of which are a result of climate change, will damage ecosystems. Protected sites with healthy diverse ecosystems will be more resilient to such threats, in the same way as healthy humans tend to be more resistant to stress and disease.

NATURAL HAZARD PROTECTION

LOW CONFIDENCE

Mudflats, intertidal wetlands, estuaries and coral reefs are habitats that help to protect the coastline by preventing erosion and flooding. These features will be protected in several tranche 2 MCZs and their improvement through protection might possibly strengthen coastline protection.

REGULATION OF POLLUTION (NUTRIENT RECYCLING)

LOW CONFIDENCE

Subtidal sediments are known to act as pollution sinks and salt marshes and seagrass beds are also thought to be good regulators of pollution. These features will be protected in several tranche 2 MCZs and if they improve in condition this may increase their capacity to process waste.

PUBLIC SECTOR INVESTMENT PER YEAR



PUBLIC SECTOR INVESTMENT OVERVIEW

ECOLOGICAL MONITORING

The SNCBs monitor the condition of the MCZ features in order to report on success of protection (Natural England for inshore sites; JNCC for offshore sites). The SNCBs have provided cost estimates for ecological surveys that total £1,171,000/yr for all 23 sites.

MANAGEMENT

The best estimate cost covers the management needed in the 10 MCZs where fishing may need regulation by the MMO and IFCAs. Costs cover enforcement and surveillance and do not take account of possible cost savings through single measures for several MCZs.

NATIONAL DEFENCE

The best estimate of costs (£2,000/yr) is based on the work required by the Ministry of Defence to use its guidance on reducing impacts of military activities on MCZs and in adjusting electronic charts after designation to consider MCZs.

SECTORS THAT WILL NOT BE IMPACTED BY TRANCHE 2

WIND RENEWABLES

Many developments have now been consented and the Crown Estate anticipates there will be no extra costs as a result of future MCZs designations.

RECREATION

Recreational activities will generally not prevent the achievement of MCZ conservation objectives. The exception is anchoring which may need regulation where it might damage features such as sea grass beds. The Needles rMCZ is the only site affected but stakeholder information indicates little overlap between anchoring and seagrass, and management could possibly be on a voluntary basis.

COASTAL DEVELOPMENT

The 23 rMCZs will not impact on known future coastal developments as these are not sufficiently close to the proposed sites or expected to interfere with site conservation objectives.

ARCHAEOLOGY

Licence applications to English Heritage and the MMO for archaeological work in MCZs will require an assessment of the impact on protected broad-scale habitats. But the footprint of such activity is very small compared to the area covered by broad-scale habitats and additional costs to this sector are expected to be minimal.

AQUACULTURE

There are no aquaculture sites close to the rMCZs except in the Swale Estuary, where there are small scale private oyster and mussel operations that do not require licence applications.

The Marine Socio Economics Project (MSEP www.mseproject.net) have developed a 'Infographic Impact Assessment' (IIA) for the Marine Conservation Zone (MCZ) process. The MSEP partners (New Economics Foundation, Marine Conservation Society, RSPB, the Wildlife Trusts and WWF) have used costs and benefits of protecting sites from the Defra consultation documents and relevant studies, and presented these in a visual way to make the trade-offs clearer than a simple Cost-Benefit Analysis (CBA) could achieve on the summary page of an Impact Assessment (IA). June 2015.