



Historic England



Historic Environment Projects and Activities within Marine Conservation Zones

Paul Salmon

Discovery, Innovation and Science in the Historic Environment



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SUMMARY

Historic England plays a unique and diverse role in the management of marine heritage within England's marine area with obligations under the Marine and Coastal Access Act 2009 (MCAA) to ensure it considers the stated conservation objectives of Marine Conservation Zones (MCZs) and are best furthered or (if this is not possible) least hindered.

With 50 MCZs currently designated and another tranche moving forward for designation in 2018/19 Historic England has commissioned this project to better understand how MCZ management could affect historic environment activities. Additionally, the project also helps identify the actions Historic England needs to take to ensure that the activities it supports are compatible with the conservation objectives of MCZs.

A decision-making methodology has been set out which will be implemented by Historic England to aid their decision making process relating to historic environment activities in or near MCZs. The methodology is consistent with the principles of good regulation i.e. considering the need to eliminate or reduce duplication of effort, and unnecessary complication and elongation of the administrative processes. Additionally, the procedure provides for proportionate and targeted consideration of each instance where a historic environment activity in an MCZ is being decided upon by Historic England, taking into account third party licensing procedures—such as the marine licensing process administered by the Marine Management Organisation (MMO).

The methodology consists of four steps (screening, assessment, consultation with Statutory Nature Conservation Bodies [SNCBs], and decision) with each step supported by a decision flow diagram to aid interpretation and implementation.

Three case studies are provided illustrating examples of MCZs overlapping with designated heritage assets. The case studies demonstrate that there is some potential for future historic environment activities associated with the heritage assets to interact with the MCZ designated features. It should be noted that the general characteristics of historic environment activities can be normally considered to be: rare; episodic; of short duration; comprising of a small footprint; and impermanent. However, rare circumstances might arise where activities pose a risk to MCZ interests and it is noted that existing resources are available to assist in identifying solutions (or for screening) such as the Natural England standardised advice on marine industry activities for all marine protected site features.

To inform the project a seminar was held to provide the opportunity for relevant stakeholders to provide input to the decision making methodology. Participants included regulatory authorities, academics, SNCBs, organisations that carry out historic environment activities and Non-Governmental Organisations. Meaningful and useful dialogue was also progressed with Natural England, the Joint Nature Conservation Committee (JNCC) and the MMO, all of which are directly involved in management of MCZs and have their own obligations under the MCAA.

This document sets out a procedure that enables Historic England to satisfy its duties as a public authority arising from the MCAA in respect of MCZs. Generally, many of the potential historic environment activities that can take place are not likely to present a significant risk that the maintenance or achievement of protected features' favourable condition will be hindered (due to small spatial footprints, activities that are of temporary and of short duration, with little persistent effect). Intrusive historic environment activities will in any case be subject to marine licensing.

Nonetheless, historic environment activities differ considerably between each other in their details, so the procedure set out here provides for proportionate and targeted consideration of each instance where a historic environment activity in an MCZ is being decided upon by Historic England.

The outcomes will be utilised by Historic England in order to fulfil their duties under the MCAA with regard to MCZ and the work set out in this document will be relevant for any organisation or individual that conducts historic environment activities in the marine environment as well as the SNCBs.

The project has been delivered by a team from Marine Planning Consultants and Fjordr Ltd.

CONTRIBUTORS

Project prepared by E. Snaith and A. Firth; reviewed by P. Salmon and A. Firth; approved by P. Salmon.

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Valued comments on the draft assessment methodology were received from the Marine Management Organisation (MMO), Natural England (NE), the Joint Nature Conservation Committee (JNCC), Marine Biological Association (MBA) and Port of London Authority.

We would also like to thank everyone who attended a project workshop in London which helped finalise the assessment methodology and explain the concepts and thinking behind it. Additional thanks goes to Professor Terry Dawson (King's College London) who provided attendees with an informative talk on the cultural heritage of the Pitcairn Islands.

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The project took place between December 2016 and August 2017 and the report reflects the legislation and policy at the time.

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DATE OF PROJECT

December 2016 to August 2017

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1. INTRODUCTION

1.1 Introduction to the project

Marine Planning Consultants (MPC) and Fjordr Ltd have been jointly commissioned to provide Historic England with a better understanding of how the management of Marine Conservation Zones (MCZs) could affect historic environment activities, and to help identify the actions Historic England needs to take to ensure that the activities it supports are compatible with the conservation objectives of MCZs. Overall the project will support Historic England in fulfilling its duties under the Marine and Coastal Access Act 2009¹ (MCAA)².

This project aims to inform Historic England of the following issues in relation to the designation and management of MCZs:

- How activities in relation to the historic environment (projects, protection, research or recreational) may be affected by measures to manage and protect MCZs and to achieve the conservation objectives of MCZs.
- How management measures may be delivered by regulatory bodies such as Natural England, the Inshore Fisheries Conservation Associations (IFCAs) and the Marine Management Organisation (MMO).
- How the concepts of ecosystem services and natural capital might be applied to the management of MCZs.

All of these issues are considered from the perspective of Historic England's duty under the Marine and Coastal Access Act 2009 (MCAA) to exercise its functions in a manner which furthers those objectives, or in a manner which the authority considers least hinders the achievement of those objectives (Section 125 of MCAA, 2009).

The overall outcome of the project will assist Historic England in achieving its Corporate Plan objectives, contribute to Heritage 2020 and ensure that it fulfils, and is compliant with, its duties under the MCAA.

1.2 Historic England and the Marine Environment

The Historic Buildings and Monuments Commission for England (known as Historic England) was established by the National Heritage Act 1983³ with a remit to look after England's historic environment.

1 Marine and Coastal Access Act 2009. Available at: <http://www.legislation.gov.uk/ukpga/2009/23/contents>

2 Please note that legal provisions have been paraphrased in this report. For a full understanding reference must be made to the legislation in force rather than the abridged forms presented here. See <http://www.legislation.gov.uk/>

3 Heritage Act 1983. Available at: <http://www.legislation.gov.uk/ukpga/1983/47/contents>

Historic England plays a unique and diverse role in the management of marine heritage within the UK marine area (which extends to 200nm offshore or the median line with an adjacent state). Historic England carries out projects, activities and provides advice on the protection and management of England's historic environment, including the marine and maritime heritage on land and in intertidal and subtidal areas out to 12nm offshore. This remit includes providing advice to the MMO on marine licences and regulating access to historic shipwreck sites. As such, ensuring Historic England's advice, activities and the projects it supports meet the requirements of the MCAA is important for legislative compliance and will directly benefit post-designation management of designated historic shipwreck sites, in respect of MCZ conservation objectives.

Currently there is no guidance available for Historic England in relation to historic environment activities and MCZs. The work set out here provides Historic England with a logical and auditable process when providing advice to volunteers and other bodies involved in MCZ management in relation to historic environment activities in MCZs, ensuring that the site's objectives are not compromised.

1.2.1 Three Year Corporate Plan 2016–19

In terms of the specific aims and outcomes in Historic England's Three Year Corporate Plan (2016–2019), the project will benefit three internal teams/groups: (1) The Planning Group, in relation to advising the MMO and other decision-makers of the importance of activities directed towards the marine historic environment in areas that are also important for nature conservation. (2) The Listing Group, in relation to promoting access and licensing activities on designated heritage assets in MCZs, which has been a source of concern amongst the wider cadre of marine archaeological volunteers that do so much for the marine historic environment. (3) The Engagement Group, in relation to their duties of providing advice on the impact of national law and policy on England's heritage.

1.2.2 Heritage 2020

The greater understanding and appreciation of Historic England's duty under the MCAA will contribute to elements within Heritage 2020, particularly in relation to Section 7 (Helping things to happen) to create a broader understanding of how priorities and activities of others, impact on heritage, and the priorities for collaborative action through the Historic Environment Forum and with others.

The brief focuses on the duty around MCZs, however the understanding of how heritage activities and projects may interact with marine habitats and species (both positively and negatively) will be directly relevant to other protected sites such as Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Ramsar Sites and Sites of Special Scientific Interest (SSSIs), even though these other conservation designations are not directly covered by this project.

2. MARINE CONSERVATION ZONES

2.1 Marine Protected Areas—A Network of Conservation Sites

Across Europe under the Habitats Directive (Council Directive 92/43/EEC)⁴ and Birds Directive (Directive 2009/147/EC)⁵ there is a requirement for a coherent European ecological network of protected sites, the Natura 2000 network. Additionally, international agreements establishing the requirement for an ecologically coherent network of well-managed Marine Protected Areas (MPAs) is include the Convention on Biological Diversity (CBD) and the OSPAR Convention. This project will not address matters as specifically relevant to the Natura 2000 network.

Within the UK Marine Protected Areas (MPAs), including European Marine Sites (EMS), Sites of Special Scientific Interest (SSSI), Ramsar sites and MCZs, are proposed to form an ecologically coherent network of protected areas required under National and European legislation and international conventions. An ecologically coherent network includes well managed, resilient, and adequately sized Marine Protected Areas that are ecologically connected and which represent a range of replicated marine habitats and species.

The focus for this project is on MCZs as provided for under exclusively under UK legislation. Nationally, under the MCAA (Section 123), MCZs will contribute to the network of conservation sites in the UK and wider, contributing to the conservation or improvement of the marine environment in the UK marine area; with the features which are protected by the network representing the range of natural features present in the UK marine area.



Colossus Dive Trail © CISMAS

4 Council Directive on the conservation of natural habitats and of wild flora and fauna (the 'Habitats Directive'): https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/200285/Annex-A-Habitats-Directive.pdf

5 Council Directive on the conservation of wild birds (the 'Birds Directive'): <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:020:0007:0025:en:PDF>

2.2 Overview of MCZs

MCZs are enabled under the MCAA to protect a range of nationally important, rare or threatened habitats, marine wildlife, geology and geomorphology, and can be designated anywhere in English and Welsh territorial and UK offshore waters.

There are currently (June 2017) 50 MCZs in waters around England, illustrated in Figure 2.1. These were designated in two phases: during the first tranche of MCZ designations in 2013 27 zones were designated; the remaining 23 MCZs were designated during the second tranche in 2016, bringing the total area protected to 7,886km². There are a number of recommended MCZs (rMCZs) which have been proposed for designation in a third tranche of designations, with a forecast date for designation of 2018. Also, there are a number of additional features being considered for designation in existing MCZs as part of the third tranche (these are termed 'additional site options'—see Figure 2.1).

The rare, threatened or declining habitats and species that MCZs protect are referred to as Features of Conservation Importance (FOCI). These species and habitats may be more sensitive to pressures and therefore receive targeted protection. There are currently 19 habitat FOCI and 30 species FOCI. The entire list of FOCI is provided in Appendix A (JNCC, 2016).

In addition to protecting rare, threatened or declining features habitats and species MCZs have grouped a range of habitats and species together into broad-scale habitats, which take the place of more detailed information on biodiversity to help make sure that the full range of marine biodiversity is conserved.

Each MCZ is designated (and, if necessary, amended) by way of secondary legislation known as Designation Orders which are all available online as PDFs at <https://www.gov.uk/government/collections/marine-conservation-zone-designations-in-england> with MCZ boundaries available for viewing and downloading as a GIS layer via the JNCC Interactive Viewer: <http://jncc.defra.gov.uk/page-5201>.

Each MCZ has a stated Conservation Objective which usually takes the following form:

that the protected features

- a. so far as already in favourable condition, remain in such condition; and
- b. so far as not already in favourable condition, be brought into such condition, and remain in such condition.

'Favourable Condition' is generally defined as follows, according to whether a protected feature is a habitat, species or geological feature:

With respect to a species of marine fauna within a Zone, means that:

the quality and quantity of its habitat and the composition of its population in terms of number, age and sex ratio are such as to ensure that the population is maintained in numbers which enable it to thrive.

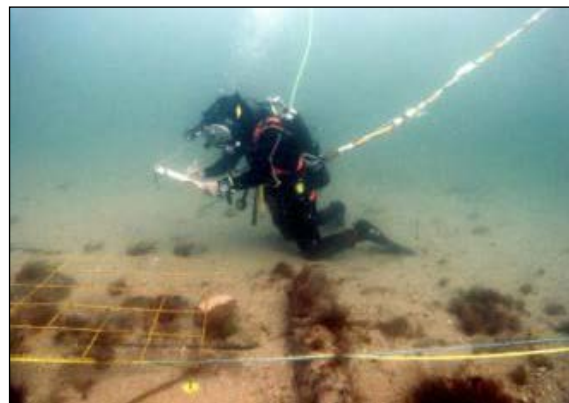
With respect to a habitat within the Zone, means that:

- i. its extent is stable or increasing; and
- ii. its structures and functions, its quality, and the composition of its characteristic biological communities are such as to ensure that it remains in a condition which is healthy and not deteriorating;

With respect to the feature of geological interest within the Zone, means that:

- I. its extent, component elements and integrity are maintained;
- II. its structure and functioning are unimpaired; and
- III. its surface remains sufficiently unobscured for the purposes of determining whether the conditions in paragraphs (i) and (ii) are satisfied.

Details of each MCZ are set out in MCZ factsheets on the GOV.UK web site⁶, Conservation advice packages for MCZs can also be found online. This includes onward links to Natural England's Designated Sites System, which also has links for supplementary advice, advice on operations and condition assessment⁷. Site Information Centres for the Offshore MCZs for which JNCC is the Statutory Nature Conservation Body (SNCB) are available online on the JNCC website⁸.



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2.3 MCZ Legislation

MCZs are enabled under the MCAA, Part 5 Nature conservation, Chapter 1 Marine Conservation Zones. The Sections placing obligations onto public authorities, and therefore Historic England, in relation to MCZs are as follows:

6 MCZ Factsheets: <https://www.gov.uk/government/collections/marine-conservation-zone-designations-in-england>

7 Conservation Advice Packages: <https://www.gov.uk/government/collections/conservation-advice-packages-for-marine-protected-areas>.

8 Site Information Centres: <http://jncc.defra.gov.uk/page-4525>.

Section 125	General duties of public authorities in relation to MCZs –requires public authorities to exercise their functions in a manner to best further (or, if not possible, least hinder) the conservation objectives for MCZs.
Section 126	Duties of public authorities in relation to certain decisions –requires public authorities to consider the effect of proposed activities on MCZs before authorising them and imposes restrictions on the authorisation of activities that may have a significant risk of hindering the conservation objectives of an MCZ.

Additionally, it should also be noted that Section 127 of the MCAA places additional responsibilities on SNCBs to advise public authorities if requested:

Section 127	Advice and guidance by conservation bodies –states that the SNCBs may give conservation advice in relation to MCZs to public authorities, and are required to give that advice should an authority ask for it.
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2.4 MCZ Management

There are a number of organisations responsible for assessing, managing and monitoring MPAs (see Table 2.1) with the most significant bodies with management responsibilities being The MMO and IFCA who have the power to regulate activities in inshore sites through byelaws (see section 2.4.1). A summary of their management responsibilities and other bodies with responsibilities regarding MCZs are summarised in Table 2.1.

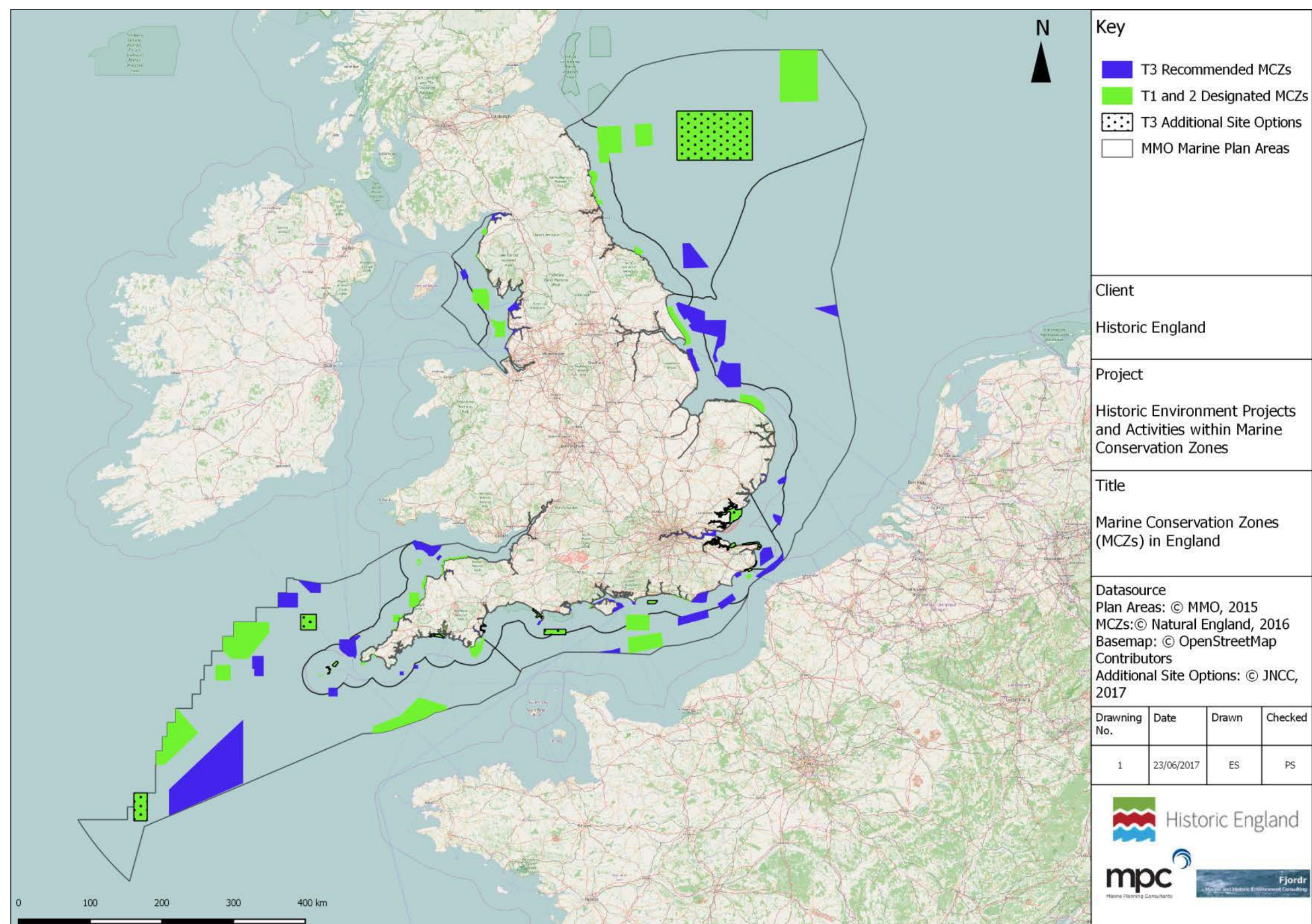


Figure 2.1 Existing (Tranche 1 and 2) MCZs and recommended Tranche 3 rMCZs in English Waters

Table 2.1 MCZ Management, Advisory and Monitoring Responsibilities

Name	Role	Section in MCAA
Marine Management Organisation (MMO)	The MMO is a regulatory body with the power to manage MCZs and regulate activities within MCZs. Such activities include killing, removing, or disturbing any flora or fauna, and any activities that interfere with the seabed or damages or disturbs any object in the MCZ. Such regulation is advanced by the MMO through the marine licensing and marine planning process. More information is provided on this in Sections 2.4.1 and 2.5. The MMO also regulate commercial fishing activities in inshore MCZs, from 6 to 12nm, through the making and enforcement of byelaws. The MMO can also regulate non-licensable activities within MCZs through local codes of conduct and voluntary agreements. To date this has not been conducted by the MMO but is due to occur after the third tranche of MCZs are designated (MMO pers. comm., 2017).	Section 125 and Section 126
Inshore Fisheries Conservation Authority (IFCA)	The IFCAs have the power to regulate activities in inshore MCZs, from 0 to 6nm, through the making and enforcement of byelaws. Each IFCA has a duty to manage fisheries within MCZs within their district and must seek to ensure that the conservation objectives of those MCZs are furthered. As part of the revised approach to the management of commercial fishing in MPAs, MCZ type assessments ⁹ have been completed by the authorities in order to determine whether fishing activities meet the conservation objectives of each MCZ.	Section 125 and 126
Department for Environment, Food and Rural Affairs (Defra)	Defra has a duty to monitor MCZs with a specific duty to publish a report every six years with an assessment of how well MCZs are achieving their objectives individually and collectively as part of an effective network of marine protected areas. Defra may direct the SNCBs to carry out the necessary monitoring on their behalf. These reports should also provide information on MCZs established during that period and any further steps required. The first of these reports was published in 2012 ¹⁰ . Other duties include: publishing notices of designated MCZs; and seeking management measures through the relevant EU or international channels. For example, this may be in relation to matters covered by the Common Fisheries Policy (CFP); or amendment, review and revocation of MCZ designations as part of the adaptive management of the MPA network.	Section 125
Joint Nature Conservation Committee (JNCC)	JNCC is a Statutory Nature Conservation Body (SNCB) providing advice relating to MCZs beyond 12nm. JNCC is required to provide formal advice to the government for the third tranche of MCZs to be designated in 2018 (Defra, 2016). They also provide advice to public authorities including those who will be responsible for implementing the required management through byelaws.	Section 127
Natural England (NE)	NE is the SNCB responsible for sites from 0–12nm (inter alia) within English marine waters. NE is required to provide formal advice to the government for the third tranche of MCZs to be designated in 2018 (Defra, 2016). They also provide advice to public authorities including those who will be responsible for implementing the required management through byelaws.	Section 127
Public Authorities (including Historic England)	Where the functions of a public authority have the potential to impact on an MCZ the MCAA places an obligation on the authority to carry out its functions in a manner that best furthers the conservation objectives of the MCZ. Where this is not possible, the public authority is required to proceed in the manner that least hinders the achievement of any such conservation objectives. Public Authorities also provide advice and support to stakeholders as management options are considered and site recommendations agreed for MCZs.	Section 125 and Section 126

⁹ MCZ type assessments are the same as MCZ assessments but are not official MCZ assessments as have not been triggered by the MCAA rather they are a requirement under Defra's revised approach to commercial fisheries

¹⁰ Report to Parliament on the Marine Protected Areas Network. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69623/pb13856-marine-protected-areas.pdf

2.4.1 MCZ Byelaws

It should be noted that the MMO and IFCAs have the ability to create byelaws in order to protect MPAs including MCZs. The MMO is responsible for making byelaws in English inshore waters to protect MPAs from any activities that may harm them. The ten IFCAs are responsible for making fisheries byelaws within their districts (0–6nm) to protect sensitive MPA features as well as fisheries activities within their districts.

2.5 Marine Licensing and MCZs

The MMO is responsible for marine licensing in English inshore and offshore areas (as well as for Welsh and Northern Ireland offshore areas). Section 126 of the MCAA places specific responsibility on the MMO relating to marine licence decision making and MCZs. The MMO has introduced a new assessment process ('MCZ assessments') that are being integrated into existing marine licencing procedures.

MCZ assessments are required for any act that has the potential to impact the protected features of an MCZ. The MCZ assessments are conducted by the MMO following a three stage process, as set out below. Published guidance from the MMO on MCZ assessments is available online¹¹.

Screening	Determines whether the activity is taking place within or near the MCZ and whether the activity is capable of impacting the protected features of the site.
Stage 1 Assessment	Assesses whether there are significant risks to the protected features from the activity which would hinder the conservation objectives of the site and a consideration of alternatives or mitigation measures to lower the risk of hindering the conservation objectives.
Stage 2 Assessment	Assess if the activity will cause an impact to the protected features of the MCZ even after mitigation measures have been applied. If impacts are predicted then the MMO will assess whether the benefit to the public from the activity will outweigh the damage to the environment. Stage 2 involves wider consultation with government departments and relevant local government organisations.

In relation to the historic environment the MMO will only issue a marine licence for archaeological activities where the intended activity falls under the definition provided at Section 66 (8) of the MCAA. This states that a marine licence is required for any, 'use of a vehicle, vessel, aircraft, marine structure or floating container to remove any substance or object from the sea bed within the UK marine licensing area'. See Section 3 for more information on marine licences for historic environment activities and for activities where a marine licence would not be required.

¹¹ Guidance on MCZs from the MMO, available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/410273/Marine_conservation_zones_and_marine_licensing.pdf

3. HISTORIC ENGLAND'S OBLIGATIONS TOWARDS MCZS

Historic England is a public authority that exercises functions and takes authorisation decisions that could affect the protected features of an MCZ or the processes on which their conservation depends. As such, Historic England has obligations under Section 125 of the MCAA in respect of the exercise of its functions and under Section 126 for its authorisation decisions. Table 3.1 sets out Historic England's obligations under the MCAA with regards to MCZ management.

3.1 Authorisation Decisions (Section 126)

The two principal forms of authorisation decisions taken by Historic England are decisions in respect of: a) licences to carry out activities on Protected Wrecks by virtue of the Protection of Wrecks Act (PWA) 1973; and b) Scheduled Monument Consent (SMC) for works on Scheduled Monuments by virtue of the Ancient Monuments and Archaeological Areas Act (AMAAA) 1979. As these designations extend only to territorial waters, they relate principally to MCZs for which Natural England is the SNCB¹².

Currently, 8 Protected Wrecks intersect with 6 MCZs, and 47 Scheduled Monuments intersect with 15 MCZs. Here, 'intersect' means that the designated area overlaps fully or partially with the area of an MCZ. See Appendix B for details of such interactions.

Protected Wrecks can only be designated below high water. Where a designated area might otherwise extend above high water (by virtue of a radius drawn from a point), the area above high water is excluded from the designation¹³.

Many of the Scheduled Monuments that intersect with MCZs are located predominantly above high water, but with part of their area extending below high water. Authorisation decisions relating to Scheduled Monuments—including for works taking place wholly above high water—could affect the protected features of a MCZ or the processes on which their conservation depends. Historic England's Section 126 obligations also apply to Scheduled Monuments that are largely above high water, though in some cases the horizontal intersection shown on a map disguises a considerable separation due to the monument being on a cliff, such that the implications of works for the protected features of an MCZ are negligible. In addition to Scheduled Monuments that are largely above high water, a number of Scheduled Monuments are located in the intertidal zone and some also extend below low water, hence the relation to MCZs is far more immediate.

There are further forms of designation relating to heritage assets that are relevant to MCZ obligations, namely: World Heritage Sites; Listed Buildings; Registered

12 A small number of MCZs span the territorial limit for which both Natural England and JNCC provide conservation advice

13 See e.g. Moor Sand, SI 1979/56 http://www.legislation.gov.uk/ukxi/1979/56/pdfs/ukxi_19790056_en.pdf.

Battlefields; and Registered Parks and Gardens. Historic England has roles and responsibilities in respect of heritage assets subject to these forms of designation, but authorisation decisions are taken by other authorities, such as local planning authorities. Hence, Historic England's obligations under Section 126 do not extend to these forms of designated heritage asset. Historic England's obligations towards these forms of designated heritage asset under Section 125 (exercise of functions) are addressed in the relevant sections below.

Some heritage assets are designated as protected places or controlled sites under the Protection of Military Remains Act 1986 (PMRA 1986). However, implementation of the PMRA 1986 (including designation and licensing) is administered by the Ministry of Defence; activities in respect of the PMRA 1986 do not fall within Historic England's responsibilities towards MCZs.

3.2 Exercise of functions

Historic England's exercise of functions is much broader than the scope of its authorisation decisions. In the coastal and marine sphere its functions encompass matters such as advice to Government and its agencies, funding or providing other support or advice for investigations by third parties, encouraging public access, or any other actions to deliver Historic England's corporate plan¹⁴. Advice to Government and its agencies includes advising on the designation of heritage assets;

advising on applications for marine licences and national infrastructure development consents (i.e. Development Consent Orders); and advising on a wide range of policy issues relating to the historic environment.



Species FOCI Blue Mussel © Marine Ecological Surveys Ltd

As noted above, Historic England does not have Section 126 obligations towards authorisation decisions in respect of World Heritage Sites, Listed Buildings, Registered Battlefields and Registered Parks and Gardens, but it does have Section 125 responsibilities towards these designated heritage assets in exercising its functions by advising on designation and policy, and responding to planning authorities regarding consents for Grade I and II* Listed Buildings, for example.

There are significant intersections between these forms of designation and MCZs. Of the currently designated MCZs, two MCZs intersect with two World Heritage Sites; one MCZ intersects with one Registered Battlefield; and three MCZs intersect with five Registered Parks and Gardens. Intersections between MCZs and Listed Buildings are also numerous (see Appendix B), but as Listed Buildings are currently mapped only as points rather than extents, it is not possible to identify and

¹⁴ <https://historicengland.org.uk/about/what-we-do/corporate-strategy/>

quantify the overlap. Many waterside buildings and structures are designated as Listed Buildings, including harbour walls, quays, piers, lighthouses and waterfront properties. The entirety of these structures is designated, and these structures often form or fall within the high water mark, which is the landward boundary of most coastal MCZs. Activities relating to such infrastructure could very well take place in, or affect, MCZs in some way.

Notwithstanding the large number of designated heritage assets, most heritage assets—both on land and at sea—are not designated. As the UK Marine Policy Statement (MPS) states, ‘the absence of designation for such assets does not necessarily indicate lower significance’ (UK MPS para. 2.6.6.5). The exercise of many of Historic England’s functions is concerned with non-designated heritage assets, and examples of such non-designated assets can be expected to be present in all MCZs, including in MCZs beyond territorial waters.

Historic England advises the MMO on marine licences and the Planning Inspectorate on national infrastructure planning applications. Both forms of consent may include historic environment considerations but marine licensing procedures are designed to ensure that there are no significant implications on MCZs (as sensitive receptors).

Historic England’s role in supporting activities to deliver its Corporate Plan or by third parties (through commissioned projects, for example) could also affect the protected features of an MCZ or the processes on which their conservation depends.

3.3 General Duties with respect to Exercise of Functions

Under Section 125(2) Historic England must exercise its functions in the way that it considers the stated conservation objectives of an MCZ are best furthered or (if this is not possible) least hindered. If it considers that the exercise of its functions might significantly hinder MCZ conservation objectives, then Historic England must inform the relevant SNCB (Section 125(3)).

Historic England must also inform the MMO and the relevant SNCB if there have been any offences in relation to which Historic England exercises functions, which Historic England considers will or may significantly hinder the achievement of conservation objectives (Section 125(8–10)).

Further to these general duties, Historic England may wish to draw the attention of third parties engaged in historic environment activities in the vicinity of MCZs, to the existence of MCZ features and byelaw offences¹⁵, to encourage overall compliance with the requirements of MCZs by the archaeological community and to help prevent inadvertent infringements. This provision would apply where Historic England is not

¹⁵ Offences of contravening byelaws and damaging protected features apply directly to individuals. Historic England is exempt from feature and byelaw offences insofar as its activities are done in accordance with its general duties under s. 125. Activities authorised in accordance with s. 126 are also exempt from feature and byelaw offences (s. 141(1)).

otherwise involved in the activity through its authorisation decisions or the exercise of its functions.

3.4 Obligations in Respect of Activities

The obligations on Historic England in respect of activities carried out in exercising its functions (Section 125) or which it authorises (Section 126) are set out in Table 3.1. Historic England's obligations under Section 125 and Section 126 in respect of activities carried out are broadly similar: if Historic England believes there may be a significant risk of an act (or omission) hindering the stated conservation objectives of an MCZ then Historic England must notify the appropriate SNCB. The obligation on Historic England to consider the risk of its actions towards MCZ conservation objectives is the focus of the decision-making methodology set out in Section 5 below.

Historic England must not decide to carry out or grant authorisation for the act until 28 days after having notified the SNCB. There is an exception to the 28-day period if the SNCB has already provided Historic England with specific advice or guidance about activities carried out in exercising its functions (Section 125(4–6)).

There are also exceptions in relation to both the exercise of functions and authorisation decisions if the SNCB has already notified Historic England that it need not wait, or if Historic England thinks there is an urgent need for the act (Section 125(7); Section 126(3–4)).

Historic England must have regard to any advice or guidance given by the appropriate SNCB (Section 125(12); Section 126(10)). SNCBs can request an explanation for what the SNCB regards as a failure of Historic England to comply with the obligations to notify the SNCB under Section 125 and Section 126, or to act in accordance with the advice or guidance given by the SNCB (Section 128).

With respect to authorisation decisions, an authorisation must not be granted unless the applicant satisfies Historic England that there is no significant risk of the act hindering the stated conservation objectives of the MCZ. There is an exception to this requirement on applicants in the following circumstances:

- there is no other means of proceeding which would create substantially lower risk, and
- the benefit to the public clearly outweighs the risk of damage to the environment,
- and the person will undertake or arrange measures of equivalent environmental benefit to the damage (Section 126 (5–8)).

Where this exception is invoked, Historic England must make its authorisation subject to conditions that require the measures of equivalent environmental benefit to be undertaken (Section 126(9)).

Table 3.1 Historic Environment Activities–implications arising from MCAA 2009 and NHA 2002

Responsibility for Activity	Type of Activity		Historic England’s Duties in relation to the activity
Historic environment activities by Historic England	Activities arising from Historic England exercising its functions under NHA 2002	Historic environment activities subject to authorisation by Historic England under heritage legislation	When authorising such activities, Historic England must meet requirements of Section 126
		Historic environment activities subject to a Marine Licence	When exercising its functions through such activities, Historic England must meet requirements of Section 125 , though MCZ considerations are also likely to feature in the Marine Licensing process
		Historic environment activities not subject to authorisation under heritage legislation or a Marine Licence	When exercising its functions through such activities, Historic England must meet requirements of Section 125
		Historic environment activities subject to MCZ feature and byelaw offences	Historic England is excepted from MCZ feature and byelaw offences under Section 141(a) (and Section 141(b) if an authorisation has been obtained)
Historic environment activities by 3 rd Third Parties	3 rd party activities entirely independent of Historic England	3 rd party activities subject to a Marine Licence	Obligations in respect of MCZs will arise through marine licensing, rather than through Historic England’s obligations
		3 rd party activities not subject to a Marine Licence	Such activities will be subject to MCZ feature and byelaw offences. Historic England may wish, voluntarily, to alert 3 rd parties to MCZ features and byelaws; to make representations regarding byelaws to MMO/SoS; and to consider the overall effect of MCZs on 3 rd parties’ independent activities
	3 rd party activities subject to authorisation by Historic England under heritage legislation		When authorising such activities, Historic England must meet requirements of Section 126
			Once authorised by Historic England, 3 rd parties are excepted from MCZ feature and byelaw offences under Section 141(b)
	3 rd party activities arising from Historic England exercise of functions		When exercising its functions through the activities of 3 rd where those activities are not otherwise authorised or licensed), Historic England must meet requirements of Section 125
			The activities of 3 rd parties that arise from the functions of Historic England are not excepted from MCZ feature and byelaw offences by virtue of Section 141(a). Historic England may wish, voluntarily, to alert 3 rd parties to MCZ features and byelaws when exercising its functions

4. IDENTIFICATION OF HISTORIC ACTIVITIES WITHIN MCZS

For the purposes of this project and development of the assessment methodology set out in Section 5 historic environment activities have been categorised into five main groups:

- 1) Access
- 2) Non-intrusive activities
- 3) Intrusive Activities
- 4) Stabilisation and monitoring
- 5) Incidental activities

The types of historic environment activities occurring under each category are displayed in Table 4.1 and this list provides the basis for the risk assessment methodology set out in Section 5 and the illustrative assessment of risk to favourable conservation of protected features provided in Appendix C. It is felt that the grouping and activity identification process set out here provides for a comprehensive and auditable basis for any examination of risk and should be considered as a useful starting point for any assessment of risk.

Table 4.1 Historic Environment Activities

Activity Group	Activity
Access	Anchoring
	Mooring
	Shotlines
	Vessel traffic
	Vehicle traffic
	Non-guided diving
	Walking
	Foraging–lobsters, crabs, scallops, flatfish
Non-intrusive Activities	Measured survey
	Photographic survey
	Photogrammetric survey
	Marine geophysical survey
	Walked geophysical survey
	Drone survey
	Dive trail
Intrusive Activities	Surface recovery
	Sediment/ timber/ artefact sampling

Activity Group	Activity
Intrusive Activities, cont.	Evaluation (sondage; test pit; trench)
	Area excavation
	Removal
	Secondary effects–sediment plumes
	Secondary effects–topographic changes
	Secondary effects–changes to habitat structure
Stabilisation and monitoring	Sandbagging
	Geotextiles
	Structure
Incidental impacts	Clearing Vegetation
	Wafting

It should be noted that the general characteristics of historic environment activities can be considered to be:

- Not confined to MCZs but can occur throughout coastal and marine environments;
- Rare;
- Episodic;
- Short Duration;
- Small Footprint; and
- Impermanent.

It is worth noting that access is not intrinsically archaeological and it is not regulated under heritage legislation, except in the case of diving operations on Protected Wrecks.

There could be instances where activities pose a risk to MCZ interests either through disturbance to sensitive species, e.g. access or walk-over surveys disturbing nesting birds, birds feeding on mudflats or seal haul-outs, plus disturbance to marine mammals from seismic surveys; activities damaging/altering marine habitats e.g. excavations, grabs/cores, stabilisation/preservation of historic features. However there are existing resources available to create a solution and/or screening tool to help inform these issues. Natural England has generated standardised advice on marine industry activities across a standardised set of pressures for all marine protected site features. While these are not specifically for historic environment activities, it could be possible to build on this advice with HE to create a similar set of advice.

Intrusive historic environment activities will normally require a Marine Licence and will therefore be assessed by the MMO through their licencing protocols.

5. DECISION-MAKING METHODOLOGY FOR HISTORIC ENVIRONMENT ACTIVITIES AND MCZS

This section sets out a decision-making methodology that Historic England could implement when making decisions about historic environment activities in or near MCZs, in order to meet their obligations under Section 125 and Section 126 of the MCAA 2009. The methodology has four stages:

1 Screening	Establish whether the activity is subject to Section 125 and Section 126 obligations.
2 Assessment	Establish whether the activity presents a significant risk of hindering stated conservation objectives, taking into account (in the case of applications for authorisation) the applicant's assurances or exceptional circumstances under Section 126(5–8).
3 Consult SNCB	Inform SNCB (unless the SNCB has advised otherwise or it is a case of urgent need) and have regard to SNCB advice or guidance.
4 Decision	To include conditions on authorisation if necessary.

These stages apply to all relevant decisions by Historic England that could affect the protected features of MCZs, including authorisations decisions under the PWA 1973 and AMAAA 1979, decisions relating to activities on which Historic England has been consulted, funding decisions, decisions relating to designation, decisions relating to policy advice, and so on.

In order to navigate the proposed assessment methodology a series of flow diagrams are set out in Appendix D comprising of:

- Step 1–Screening
- Step 2–Assessment
- Step 3–Consult
- Step 4–Decision

5.1 Third-party Assessment Procedures

Historic environment activities in the vicinity of MCZs may also be subject to third-party consents, such as marine licensing administered by the MMO. The risk of hindering MCZ conservation objectives arising from an activity for which a marine licence is required will be assessed by the MMO in accordance with its procedures as set out in Marine Conservation Zones and Marine Licences (MMO, April 2013). For example, the following activities in the vicinity of MCZs arising from Historic

England decisions would also be subject to the MMO's own consideration of risk to protected features:

- Activities subject to authorisation decisions under the PWA 1973 or AMAAA 1979 for which a marine licence is also required;
- Activities funded by Historic England on non-designated assets for which a marine licence is required; and
- Activities prompted by Historic England planning advice for which a marine licence is required.

Duplication, unnecessary complication and elongation of administrative processes, and the potential for inconsistency in outcomes are all inconsistent with principles of good regulation. Consequently, it is proposed that Historic England's duties towards MCZs in respect of any activity subject to third party consents are met by Historic England making its decisions conditional on the third-party consent satisfying the requirements of Section 125 and Section 126 of the MCAA 2009. In the case of an activity subject to a marine licence, for example, Historic England's decision will be conditional on the activity receiving a marine licence in accordance with the procedures set out in Marine Conservation Zones and Marine Licences (ibid).

5.2 Screening (see [Step 1 flow diagram](#))

Screening is used here to refer to the process of determining whether the act to be decided upon intersects with an MCZ such that the protected features of the MCZ may be affected.

Decisions about all activities in the vicinity of an MCZ will be assessed by Historic England unless they are screened out.

Decisions about activities that involve physical intervention (i.e. some form of fieldwork) will be assessed. Activities that do not involve fieldwork (e.g. strategic studies; desk-based research) will not be assessed. Fieldwork includes all such work by third parties, e.g. where advice by Historic England requires a third party to make some form of physical intervention.

As noted previously, access (including navigation) is not intrinsically archaeological and it is not regulated under heritage legislation (except in the case of diving operations on Protected Wrecks). Although access itself could be screened out at this stage, the activities for which access is required will generally need to be addressed as fieldwork. Additionally, where an activity facilitates or requires an amount or volume of access that could affect the protected features of the MCZ, then the activity should be considered as warranting assessment and not be screened out. Again it is the activity that has to be addressed, rather than access in itself.

For the purposes of screening, an activity will be regarded as being in the vicinity of an MCZ if the proposed activity is to take place within the MCZ or within a set

distance of the MCZ boundary. The following set distances—which are consistent with buffers adopted by some IFCAs, for example—are proposed:

- activities above high water line: 100m
- activities below high water line: 500m

The differences in set distance reflect the fact that effects on the protected features of MCZs can be transmitted over greater distances in the sea than on land.

To facilitate the identification of authorisation decisions that may have implications for MCZs, it is recommended that HE introduce a ‘flag’ on its internal data and administrative systems for the eight Protected Wrecks and 47 Scheduled Monuments that currently intersect with MCZs.

As noted above, if the activity is subject to a third-party consent procedure under which risk to the conservation objectives of an MCZ is addressed—such as marine licensing procedures—then the activity will not be subject to a duplicate assessment by Historic England.

5.3 Assessment of Significant Risk (see [Step 2 flow diagram](#))

Having concluded that the activity requires assessment by Historic England, Historic England must determine whether there is a significant risk the conservation objective of an MCZ will be hindered by the activity that is subject to decision.



Native oyster ©Marine Ecological Surveys Ltd

For authorisation decisions, the applicant must satisfy Historic England that there is no significant risk of the activity hindering the stated conservation objectives of the MCZ (unless the ‘no other means’ provisions apply). Historic England will be able to draw upon the applicant’s risk assessment and accompanying information in conducting its own risk assessment. Historic England may need to amend its guidance for consent under the PWA 1973 and AMAAA 1979 to demonstrate that in the case of applications that may affect an MCZ, applicants will need to satisfy Historic England that there is no significant risk to the MCZ’s conservation objectives.

The question of significant risk concerns the conservation objectives framed in terms of the favourable condition of protected features. As noted above, the definition of favourable condition is different for habitats, species and geological features; hence the question of significant risk is different for these three types:

Habitat	Is there a significant risk that the activity will hinder a protected habitat remaining in–or being brought into–a condition whereby the extent of the habitat is stable or increasing and the habitat is healthy and not deteriorating? (Where the health of the habitat reflects its structures and functions, quality, and composition of its characteristic communities).
Species	Is there a significant risk that the activity will hinder a protected species remaining in–or being brought into–a condition whereby the population is maintained in numbers which enable it to thrive? (Where the ability of the species to thrive reflects the quality and quantity of the habitat and the composition of the species' population in terms of number, age and sex ratio?).
Geological Feature	Is there a significant risk that the activity will hinder a protected geological feature remaining in–or being brought into–a condition whereby: its extent, component elements and integrity are maintained; its structure and functioning are unimpaired; and its surface remains sufficiently unobscured.

Many historic environment activities are non-intrusive and as a matter of Government policy and professional standards, intrusive activities are kept to a minimum and must always be justified in their application. Most intrusive activities will also be subject to a marine licence and their implications for MCZs will be assessed through the marine licensing process, rather than through the process outlined here.

In very general terms, historic environment activities—especially ones that are not also subject to a marine licence—are not likely to present a significant risk that the maintenance or achievement of favourable condition will be hindered. Also—and in equally general terms—the footprint of historic environment activities, especially intrusive activities, will have a very small footprint relative to the footprint upon which the favourable condition of the protected feature is based. Historic environment activities are also generally temporary and of short duration, with little persistent effect once the activity has ceased¹⁶.

Beyond this very general appraisal, it is likely that historic environment activities will differ considerably between each other in the details of their footprint, instrumentation, effects on substrate and water column, location relative to protected features, frequency, density, and so on. Accordingly, an event-based approach to assessing risk is proposed, rather than an activity-based approach. Each instance

16 For example, the depression left by the excavation and recovery of much of the remaining hull of the Mary Rose—the largest ever archaeological intervention in English waters—is 45m long x 40m wide x 4m deep. The continued presence of the sheet pile cofferdam partially around the wreck of the Amsterdam is a unique example of the persistence of large scale infrastructure on an underwater archaeological site. No archaeological intervention on the scale of the Mary Rose or Amsterdam has been attempted in the UK since the 1980s illustrating the highly infrequent nature of major intrusive works.

where an activity in an MCZ is to be decided upon will be assessed by Historic England, rather than the general form of activity being assessed (as in the approach taken to fisheries, where the generic sensitivity of protected features to different forms of fishing activity have been assessed¹⁷).

In assessing whether there is a significant risk that a conservation objective will be hindered, a risk assessment matrix is proposed that considers both severity (negligible; marginal; critical; catastrophic) and probability (unlikely; equivocal; probable, highly likely) of the effect of the activity on favourable condition:

		Severity of effect on favourable condition			
		Negligible	Notable	Critical	Catastrophic
Probability of effect on favourable condition	Unlikely	less than significant risk	less than significant risk	less than significant risk	significant risk
	Equivocal	less than significant risk	less than significant risk	significant risk	significant risk
	Probable	less than significant risk	significant risk	significant risk	significant risk
	Highly Likely	less than significant risk	significant risk	significant risk	significant risk

As noted above, historic environment activities should be assessed on a case-by-case basis as discrete events, but an activity-based risk assessment has been appended to this document to illustrate this matrix and the range of historic environment activities that might be subject to assessment (see Appendix C).

In carrying out the assessment, reference can be made to Natural England's Designated Sites System (DSS) and JNCC's Site Information Centres. The DSS includes Advice on Operations for each MCZ that indicates the sensitivity of protected features to the pressures associated with different operations, including a risk profile. Historic environment activities are not included in the operations covered by this advice, but the advice could be used in the course of assessment to identify equivalent pressures that might arise from historic environment activities.

As noted above, assessment of access-related activities should bear in mind that—except for Protected Wrecks—access to the sea is not restricted. Access to an MCZ by boat, walking on the shore, diving, and their ancillary activities may occur irrespective of Historic England's decisions. With respect to access, Historic England's assessment need only concern itself with whether the activity will increase

17 See Managing Fisheries in Marine Protected Areas: approach and process overview. MMO, January 2016 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/538394/Approach_and_Process_overview_-_Managing_Fisheries_in_MPAs.pdf.

access above a threshold such that there is a significant risk of hindering favourable condition, not that access itself presents a significant risk.

If Historic England concludes that the activity upon which they are deciding presents a significant risk of hindering the favourable condition of protected features, then Historic England is obliged to notify the relevant SNCB.

5.4 Consulting Appropriate SNCB (see [Step 3 flow diagram](#))

As required by Section 125(5) and 126(2), Historic England will notify the relevant SNCB in cases where Historic England believes there is a significant risk of an act hindering a conservation objective. Historic England should prompt the SNCB to indicate that they wish to make use of the full 28-day period or that the SNCB is of the view that Historic England need not wait.

Historic England need not notify the relevant SNCB of significant risk if Historic England thinks there is an urgent need for the activity to take place. However, although not an obligation, it is recommended that where Historic England believes there is no significant risk to the MCZ's conservation objectives—or there is a significant risk but the need for the activity is urgent—Historic England should contact the relevant SNCB as a matter of course to inform them of the activity and of the result of its assessment. Informing the relevant SNCB where Historic England does not believe there is a significant risk (or the need is urgent) will help discharge Historic England's general duties with respect to MCZs and build a corpus of examples upon which the SNCBs can draw if there is a need to revisit Historic England's approach.

5.5 Decision (see [Step 4 flow diagram](#))

After 28-days (or earlier if the SNCB has indicated Historic England need not wait), Historic England can decide whether the activity can go ahead.

In its decision, Historic England must have regard to any advice or guidance given by the appropriate SNCB. In the case of authorisation decisions where the 'no other means of proceeding' clauses apply, Historic England must make its authorisation subject to conditions that require measures of equivalent environmental benefit to be undertaken.

6. CASE STUDIES

6.1 Blackwater, Crouch, Roach and Colne Estuaries MCZ

6.1.1 MCZ summary

The Blackwater, Crouch, Roach and Colne Estuaries MCZ is located on the Essex coast extending from the mean high water mark to where the estuary mouths join the North Sea. It is the UK's largest inshore MCZ covering an area of 284km², illustrated in Figure 6.1. The MCZ was designated in the first Tranche of MCZs in 2013 (Natural England, 2013).

There are a number of other conservation designations in the area including SSSIs, an SAC and SPA with protected habitats and species including mudflats, saltmarsh and nationally important numbers of waterfowl. The MCZ builds upon these designations and extends the protection to include native oysters which were not previously protected (Natural England, 2013). A full list of protected features and the associated management approach (i.e. maintain or recover to favourable condition) are provided in Table 6.1.

Table 6.1 Blackwater Crouch, Roach and Colne Estuary MCZ designated features and Management Approach

Feature Type	Feature	Management Approach	Comments
Geological feature	Clacton Cliffs and Foreshore	Maintain to favourable condition	A geological feature of international importance which extends from the land into the subtidal area of the MCZ. It has been identified as one of the best Quaternary sites in Britain. The MCZ offers protection to the marine extent of the feature (Natural England, 2013).
Broadscale Habitat	Intertidal mixed sediments	Maintain to favourable condition	This is an uncommon broadscale habitat, found at a few scattered sites in the British Isles—notably in the south-west and northeast of England, East Anglia, and west Wales. Due to the broad range of sediment types that comprise this habitat the flora and fauna utilising the habitat are typically diverse (JNCC, 2014).

Feature Type	Feature	Management Approach	Comments
Species of Conservation Importance (SOI)	Native oyster (<i>Ostrea edulis</i>)	Recover to favourable condition	This MCZ is the most important area for wild and cultivated native oyster in the south-east region. Where native oysters are found in large numbers they form beds made up of the oysters themselves and dead shells. Many species such as crabs, sea urchins and sea snails, use these beds using them as a place of shelter or to attach themselves to the surface. Extensive beds are found throughout the estuaries within the MCZs (Natural England, 2013).
Habitat of Conservation Importance (HOI)	Native oyster (<i>Ostrea edulis</i>) beds	Recover to favourable condition	

6.1.2 Designated Heritage Assets intersecting with the MCZ

A number of scheduled monuments and one registered battlefield (the Battle of Maldon, 991) intersect with this MCZ. Additionally, there are a number of listed buildings in close proximity to the boundary of the MCZ. All designated heritage assets within the MCZ are illustrated in Figure 6.1.

The scheduled monuments intersecting with the MCZ include: a Saxon coastal fish weir at Sales Point; a coastal fish weir at northern end of The Nass; a Roman saltern 750m north west of Maydays Farm; coastal fish weirs at West Mersea, 570m south east of St Peter's Wall; and a coastal fish weir 440m north west of Pewet Island.



Coastal Fish Weir © CITiZAN

The Battle of Maldon battlefield is included within the Register of Historic Battlefields by Historic England for its special historic interest and abuts the boundary of the MCZ. There is public access to the site along the dyke path. This allows easy appreciation of the topography of the battlefield and subsequent land changes. The line of the causeway is obvious even at high tide. The existing Maritime Trail leads visitors around much of the battlefield (Historic England, 2017a).

6.1.3 Historic Environment Activities and the MCZ

Historic environment investigations in the Blackwater, Crouch, Roach and Colne Estuaries MCZ have focussed on the extensive prehistoric and early Medieval remains in the intertidal area, including numerous non-designated examples. For example, extensive archaeological excavations took place on the prehistoric site of the Stumble in Goldhanger Creek between Osea Island and Goldhanger (Wilkinson et al. 2012). The density and variety of archaeological material of all periods in the MCZ means that it is a continuing focus for predominantly non-intrusive archaeological investigations, including by the Coastal and Intertidal Zone Archaeological Network (CITiZAN, <http://www.citizan.org.uk/>). Archaeological activities such as these are unlikely to present a significant risk to the conservations objectives of the Blackwater, Crouch, Roach and Colne Estuaries MCZ.

6.2 Lundy MCZ

6.2.1 MCZ Summary

Lundy MCZ is an inshore site covering a 31km² rectangle around Lundy Island, 19km off the north Devon coast (see Figure 6.2). The marine area around Lundy was established as England's first marine nature reserve (MNR) in 1986 and was converted to a MCZ in 2010 following the establishment of the MCAA Act in 2009. The boundary of the MCZ mirrors that of the Lundy SAC, both of which contain an existing fisheries no-take zone (Natural England, 2013b). The MCZ extends the protection offered by the SAC to include the Spiny Lobster which was not protected as part of the SAC. A description of the designated feature and management approach is provided in Table 6.2

Table 6.2 Lundy MCZ designated features and Management Approach

Feature Type	Feature	Management Approach	Comments
Species of Conservation Importance (SOCI)	Spiny Lobster (<i>Palinurus elephas</i>)	Recover to favourable condition	The species is protected due to the reduction in the population of spiny lobsters, particularly in areas of south-west England. Spiny lobsters are found on the south and west coasts of the British Isles, as well as the warmer waters of the Canary Islands and Mediterranean (Natural England, 2013b).

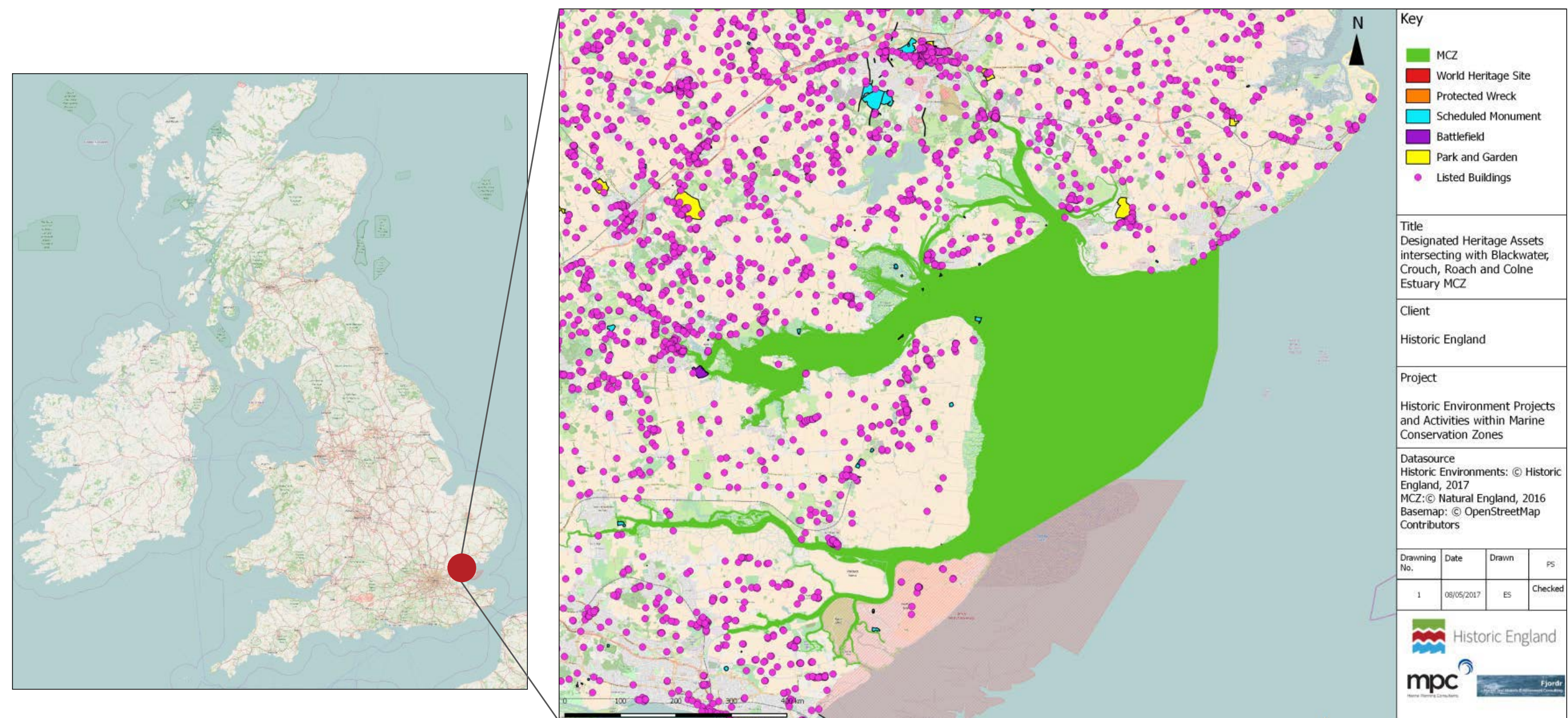


Figure 6.1 Blackwater Crouch, Roach and Colne Estuary MCZ and intersecting designated Heritage Assets

6.2.2 Designated Heritage Assets intersecting with the MCZ

Lundy MCZ contains two Protected Wrecks (Gull Rock and Iona II) and intersects with one scheduled monument that is predominantly above high water (a medieval settlement immediately south of Halfway Wall).

Gull Rock Protected Wreck is the remains of a wreck believed to be of fifteenth- to sixteenth-century origin as indicated by an assemblage of cannon and shot on the site, from a vessel presumed to have foundered. The wreck on the site is thought to have been an armed cargo vessel or a warship. A Genoese carrack is recorded as being wrecked on Lundy in 1418 (Historic England, 2017b).



Spiny Lobster © Ed Bierman

Iona II Protected Wreck is the remains of a paddle steamer which foundered off Lundy having left the River Clyde in 1864 for its first transatlantic trip to Kingston in Jamaica and/or Nassau with the suspected intention of becoming a gun runner for the Confederate States of America. Originally built as a ferry for the Clyde, the vessel was constructed of iron with paddle wheels and a state-of-the-art twin cylinder oscillating engine (Historic England, 2017b).

The medieval settlement designated as a scheduled monument survives well with field boundaries and associated enclosures preserved as earthworks over a wide area. The remains will preserve good evidence of the farming economy over a long period of occupation, perhaps dating back to the Iron Age.

6.2.3 Historic Environment Activities and the MCZ

Previous historic environment activities in the area of the MCZ have focussed on the Iona II wreck site, which has been subject to various non-intrusive investigations over the years that have been licensed under the Protection of Wrecks Act 1973 (see <https://www.landmarktrust.org.uk/lundyisland/discovering-lundy/activities/diving/divesites/iona-ii-dive-trail/iona-ii-dive-trail-wreckinvestigations/>). A new diver trail was launched on the Iona II in 2014, for which 91 divers were licensed to visit in 2015 (Alison James pers. com.; Cooper and Knott, 2016). Neither the diver trail on the Iona II nor non-intrusive archaeological investigations are likely to present a significant risk to the conservation objectives of Lundy MCZ.

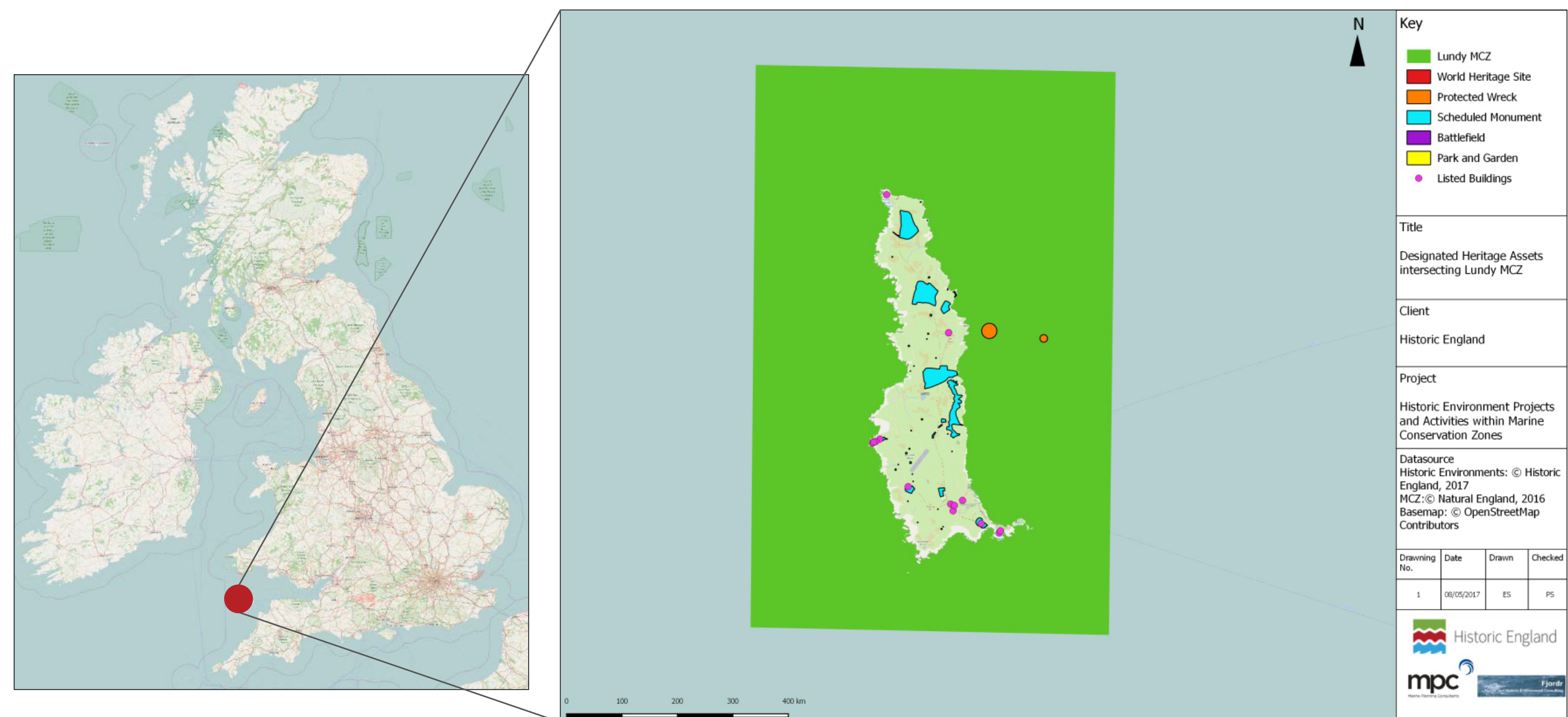


Figure 6.2 Lundy MCZ and intersecting designated Heritage Assets

6.3 Yarmouth to Cowes rMCZ

6.3.1 MCZ Summary

Yarmouth to Cowes recommended MCZ (rMCZ) is an inshore site recommended for the 3rd tranche of MCZs. The site covers an area of 17km² running along the north west coast of the Isle of Wight, from Sconce Point (to the west of Yarmouth) to the West Cowes headlands, illustrated in Figure 6.3.



Iona II © The Lundy Company Ltd

The site was identified as a rMCZ because it contains a large number and variety of features, listed in Table 6.3

The site contains some of the best examples of peat and clay exposures on the south coast as well as habitats such as intertidal underboulder communities. Such boulders on the intertidal foreshore host a variety of sponges, anemones, sea squirts and crustaceans together with numerous piddocks (a bivalve mollusc specially adapted for boring into rocks) which are present on the clay exposures. Some very good examples of seagrass beds occur along this coastline and, together with the other sites around the Isle of Wight, this is an important area for native oyster (Defra, 2015)

Table 6.3 Yarmouth to Cowes rMCZ designated Features

Feature Type	Feature	Comments
Broadscale Habitat	• Intertidal coarse sediment • Low energy intertidal rock • Moderate energy infralittoral rock • Subtidal coarse sediment	There are a range of habitats in this area, often in close proximity to each other. Together these can be categorised into a wide range of broad-scale habitats. A number of other habitats are present including intertidal sand and muddy sand, intertidal mixed sediments, and subtidal mud. Subtidal mixed sediment is also present but is not designated due to protection provided by existing marine protected areas.
Species of Conservation Importance (SOCI)	• Lagoon sand shrimp (<i>Gammarus insensibilis</i>) • Native oyster (<i>Ostrea edulis</i>)	Lagoon sand shrimps are found only in the coastal lagoons that form high up on beaches. Southern England is the furthest north that lagoon sand shrimps have ever been recorded, and where they do live, they can occur in large numbers. They are only found in a very few locations on the south and east coasts, and this makes them vulnerable.

Feature Type	Feature	Comments
Habitat of Conservation Importance (HOCI)	• Estuarine rocky habitats • Intertidal underboulder communities • Native oyster beds • Peat and clay exposures • Rossworm (<i>Sabellaria spinulosa</i>) reef • Seagrass beds	The site was identified as a candidate because it contains a large number and variety of features, including some of the best examples of peat and clay exposures on the south coast. Some very good examples of seagrass beds occur along this coastline and, together with the other sites around the Isle of Wight, this is an important area for native oyster and the beds they form that provide important habitats for a range of species (Defra, 2015).

6.3.2 Designated Heritage Assets intersecting with the rMCZ

Yarmouth to Cowes rMCZ contains two protected wrecks, Yarmouth Roads Wreck and an Unknown Wreck off Thorness Bay, plus one scheduled monument: a medieval settlement and settlement remains at Newton. The locations of these heritage assets within the rMCZ are displayed in Figure 6.3.

Yarmouth Roads Wreck contains remains of late 16th or early 17th century carrack, possibly of Spanish origin, which stranded in Yarmouth Roads, Isle of Wight. The wreck may possibly be the Santa Lucia (Historic England, 2017c). The wreck lies on an eroding, shallow ledge and is comprised four substantial, well preserved, fragments on an area of largely undisturbed clay seabed overlaid with mobile sediments. The bottom and the keel have disappeared although the collapsed parts of the stern but the sides have survived as they are buried in hollows in the clay (Historic England, 2017).



Thorness Bay designated wreck © Michael Pitts

The Unknown Wreck off Thorness Bay is the remains of a wooden sailing vessel located in shallow water off the Isle of Wight. The site consists of ship's structure, framing, planking, fixtures and fittings. There are many small finds scattered across the site that are associated with many aspects of technology including rigging and navigation equipment and possible material associated with the ship's cargo or provisions (Historic England, 2017c).

The first record of the Medieval settlement and cultivation remains at Newtown was at the Bishop of Winchester's Court Roll for the year 1254–5 in a document referencing the settlement, then recorded as the new borough of Francheville or 'Freetown'. There are known to have been 73 plots in the borough, which was the last of the town foundations of the Bishops of Winchester and probably replaced an earlier settlement called Stretley. There is some evidence to suggest that by as early as 1334 the settlement was already in economic decline and in 1377 it was attacked and burned by French raiders.

As well as the designated heritage assets that intersect with the rMCZ, other known and significant remains are present. Most notably, the MCZ includes Bouldnor Cliff, which is a submerged sequence of silts and clays that were deposited during the period of lower sea level after the last glacial maximum but are now subject to erosion, producing a distinctive underwater 'cliff'.

6.3.3 Historic Environment Activities and the rMCZ

The Bouldnor Cliff feature has been investigated archaeologically since the late 1980s, resulting in the discovery and subsequent excavation of flint tools, other artefacts and palaeo-environmental evidence dating to the Mesolithic period (Momber, 2000; Momber et al., 2011). As Bouldnor Cliff is a prehistoric occupation site that has no structural elements it cannot be designated under current heritage legislation irrespective of its significance. Bouldnor Cliff is of national and probably international significance. As indicated above, it has been a focus for a variety of both non-intrusive and intrusive investigations, though the intrusive investigations have been very small in scale.

Also within the rMCZ, intrusive investigations took place on the Yarmouth Roads Wreck in the mid-late 1980s (Watson & Gale, 1990) and more recently. Investigations of the Unknown Wreck in Thorness Bay have, so far, been non-intrusive. Although this area is likely to remain a focus for archaeological investigation in future, non-intrusive and small scale intrusive investigations are unlikely to present a risk to conservation objectives introduced by designation of the Yarmouth to Cowes rMCZ.

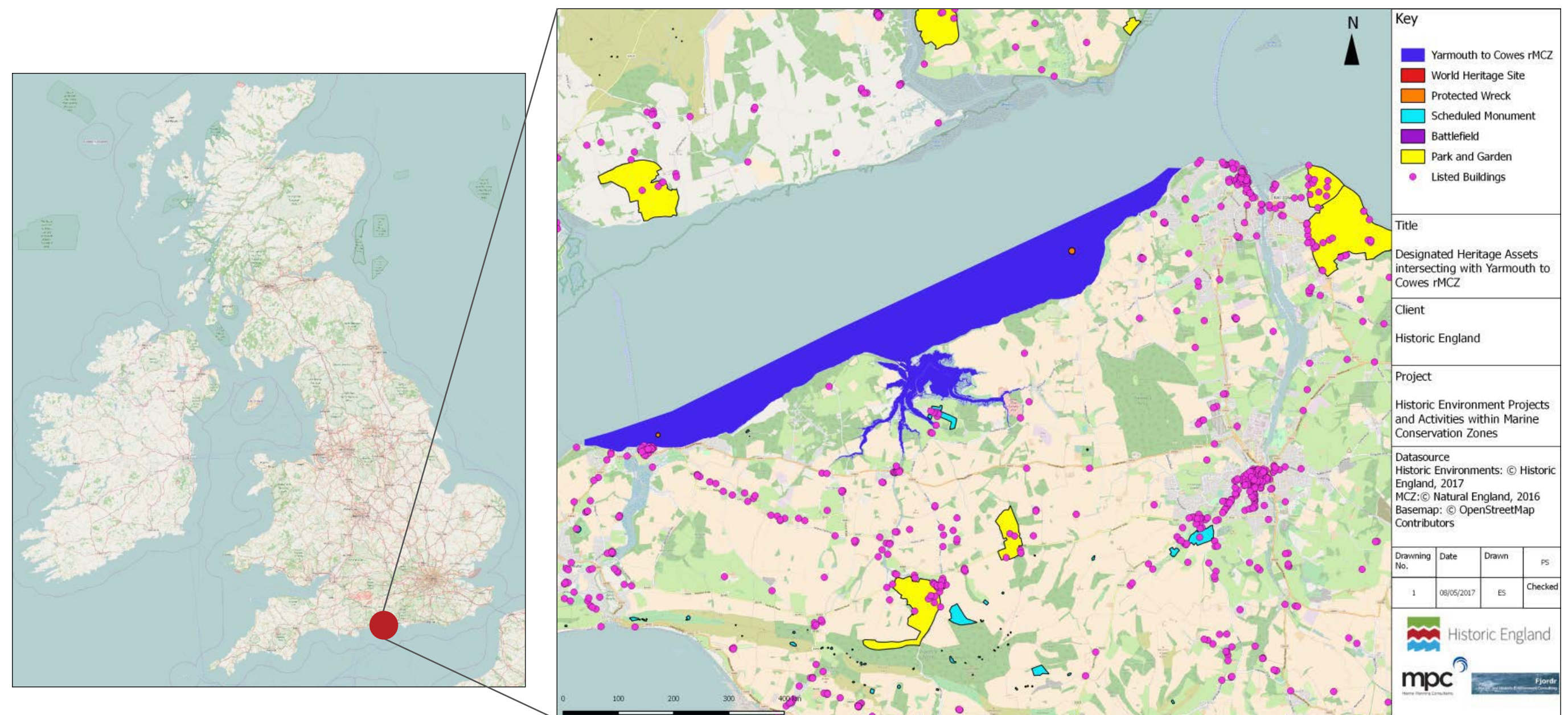
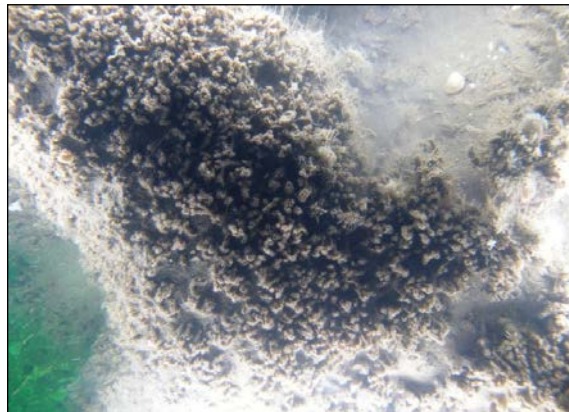


Figure 6.3 Yarmouth to Cowes rMCZ and intersecting designated Heritage Assets

7. ECOSYSTEM SERVICES AND MCZ MANAGEMENT

Over recent years there has been increased interest in the services that the natural environment provides to humanity. There are numerous definitions of such ‘ecosystem services’ but it can broadly be defined as the services or benefits people obtain from ecosystems. Other definitions of ecosystem services include “the benefits human populations derive, directly or indirectly, from ecosystem functions” (Costanza and others 1997), “the benefits people obtain from ecosystems” (MEA, 2003); “the direct and indirect contributions of ecosystems to human well-being” (Balmford and others, 2008), and the “services provided by the natural environment that benefit people” (Defra, 2007). Some examples of ecosystem services include production of food, climate regulation, flood protection, raw materials for industries and opportunities for recreation.



Sabellaria Spinulosa © Marine Ecological Surveys

Most marine features protected by MCZs or those to be protected by future designations are expected to have a range of ecosystem services associated with them. Natural England has conducted an extensive literature review to provide a baseline understanding of the ecosystem services that are provided by the broad-scale habitats and features of conservation importance that are likely to be protected by Marine Protected Areas (Natural England, 2016). The study found MCZ designations are likely to result in an improvement in the ecosystem services available at MCZ sites, with the value of ecosystem services expected to increase with MCZ designations and decrease in the absence of MCZ designations (Natural England, 2016). Additionally, it is thought that the benefits associated with designation of an MCZ network are likely to be more substantial and secure than a small number of unconnected MCZs (Fletcher et al., 2012).

An ecosystem service approach could be integrated into MCZ management, providing an alternative perspective and changing the focus from how people are impacting protected marine environments to how the environment can impact us and the services we rely upon. By having this alternative perspective we can increase the way we inform management and governance of MCZs.

An ecosystem service approach provides a tool to identify the services provided by a particular MCZ site, allowing a contextual value to be assigned to the associated benefits for society. This information can inform MCZ site managers allowing them to understand the interconnectivity of services, where trade-offs can be made and where pressures may affect the services provided to society. This is useful information for decision making and the management of MCZs.

A number of studies are available considering 'Cultural Ecosystem Services' where the natural environment contributes to people culturally^{18,19,20}. The inclusion of cultural services within the ecosystem services approach can be seen as an opportunity to integrate benefits arising from marine historic environments within the overall approach rather than in isolation from the other services (Scottish National Heritage, 2015).

Although included conceptually within the Ecosystem Services approach, there is a broad acknowledgement that methods of addressing Cultural Ecosystem Services are underdeveloped (Firth, 2016). There can be in some cases an invisibility of the value of cultural heritage when considered from an ecosystem services approach (Firth, 2015). Often it is assumed that cultural values flows one-way from ecosystems, rather than recognising that the values placed by humans on the natural environment have been actively attributed, meaning they are contingent and variable rather than intrinsic or fixed (Firth, 2016). This could have implications for cultural heritage in the management of the environment. To ensure this underestimation does not occur there needs to be parallel commitments made towards managing marine cultural heritage along with other ecosystem services (Firth, 2015).

As made evident by this project there are interactions amongst the designated heritage assets that intersect MCZs and the marine environments they protect. This interaction reinforces the requirement to include Cultural Ecosystem Services within the overall approach and should be incorporated into any management of MCZs that utilise the ecosystem services approach. Although an ecosystem services approach could be a helpful tool for MCZ management there are a number of issues delaying its widespread application. There is currently some confusion surrounding the terminology used for ecosystem services as there are a number of terms used such as 'natural capital', 'natural resources', 'natural capital assets', 'ecosystem based approach' which can lead to a lack of understanding of the general concept of ecosystem services (Alexander et al., 2016).

In addition to a lack of understanding there is also a lack of guidance for delivery of ecosystem services in policy and legislation. A recent study looking at obligation-based and policy-based drivers for an ecosystem service approach in the marine environment reviewed the extent ecosystem services are included in UK policy and legislative instruments. The study found only three instruments that include mechanisms that specifically require ecosystem services to be considered or taken into account. Other instruments make reference to ecosystem services or the premise of ecosystem services however; they don't expand on how these concepts should be taken into account in delivery and decision making (Alexander et al., 2016).

18 <https://content.historicengland.org.uk/images-books/publications/social-and-economic-value-of-marine-historicenvironment/social-and-economic-value-of-marine-historic-environment-report.pdf/>

19 http://honorfrostfoundation.org/wp/wp-content/uploads/2015/09/HFF_Report_2015_web-4.pdf

20 <https://content.historicengland.org.uk/images-books/publications/historic-england-research-4/he-research4.pdf/>

Therefore, although in theory ecosystem services could be a useful tool for MCZ management, the confusion around the definition of ecosystem services and the lack of direction for its application makes this currently difficult to achieve. Due to this status we do not recommend that an ecosystems services approach be incorporated in to Historic England's methodology for assessing effects on MCZs from historic environment activities at this time. In future there may well be a change of thinking, more consensus on definitions and further tool development by the SNCBs and others, and Historic England should maintain a general awareness of such developments and be prepared to incorporate such thinking at a later date.

8. IMPACT ASSESSMENT

An assessment of the projects effectiveness has been conducted which assesses the projects reach and significance. The project reach signifies the amount of people and organisations that are influenced by the project and the significance signifies the effect the project has on people and organisations.

During the project a consultation was held in which the main outcome of the project, the assessment methodology, was sent to a number of relevant stakeholders for their review and feedback. A seminar was also held to discuss the assessment methodology and to gather wider inputs to the project allowing for face-to-face engagement and open discussion with the consultees. The organisations invited to take part in the consultation were agreed in advance between Historic England and the project team. Consultees included regulatory authorities, academics, SNCBs, organisations that carry out historic environment activities and NGO's, providing a well-rounded list of stakeholders that are likely to be interested in the project and have the potential to use the project's outcomes. A list of all organisations involved in the consultation and seminar are provided in Appendix E.



Preparing to dive © Antony Firth

Out of the 21 people invited to the seminar 14 attended and were able to provide feedback on the project methodology. Of the 24 people sent the assessment methodology to review 4 people provided a response. Although only a 17% of people responded the feedback gained was extremely beneficial in improving the assessment methodology for the project and it should be noted that many of the 24 consultees were present at the project seminar and provided valuable verbal feedback at the event. All feedback from consultees and subsequent amendments to the assessment methodology were logged in a Stakeholder Consultation Tracker to ensure that all comments were considered and those of value acted on. Amongst the responses gained from consultees were those from Natural England, JNCC and the MMO, all of which are directly involved in management of MCZs and have their own obligations under the MCAA. This is a vital sub-group of consultees and the project can be considered to have successfully gained appropriate buy-in from this group.

The assessment methodology proposed by this project will be relevant to all 50 designated MCZs in English waters as well as any future rMCZs due to the standardised approach taken. The methodology will also be relevant for any historic environment activities that may occur within, or in close proximity to, an MCZ. During the consultation period consultees stated that the project outcomes did not consider other designations such as SACs and SPAs and would be more effective if it was functional for all MPAs. Although the project focused on Historic England's duties under the MCAA and therefore their duties towards MCZs, the assessment

methodology proposed could be tailored for use with other MPAs and is an approach being considered by Historic England in the future.

The outcomes of this project will be relevant for any organisation or individual that conducts historic environment activities in the marine environment. The outcomes will also be utilised by Historic England in order to fulfil their duties under the MCAA with regard to MCZs. SNCB's may also make use of the assessment methodology or any guidelines that will be developed based of the methodology when they are giving or receiving advice from Historic England.

9. CONCLUSION AND RECOMMENDATIONS

This document sets out a procedure that enables Historic England to satisfy its duties as a public authority arising from the Marine and Coastal Access Act 2009 in respect of MCZs. Generally, many of the potential historic environment activities that can take place are not likely to present a significant risk that the maintenance or achievement of protected features' favourable condition will be hindered. The footprint of historic environment activities will usually be very small relative to the footprint upon which favourable condition is based. Historic environment activities are also generally temporary and of short duration, with little persistent effect. Intrusive historic environment activities will in any case be subject to marine licensing, to which the procedures as set out in Marine Conservation Zones and Marine Licences will apply.

Nonetheless, historic environment activities differ considerably between each other in their details, so the procedure set out here provides for proportionate and targeted consideration of each instance where a historic environment activity in an MCZ is being decided upon by Historic England. The procedure takes in to account third party licensing procedures (such as the marine licensing process administered by the MMO) and aims to provide a decision making process consistent with the principles of good regulation i.e. considering the need to eliminate or reduce duplication of effort, and unnecessary complication and elongation of the administrative processes.

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APPENDIX A LIST OF MCZ PROTECTED FEATURES

Table A.0.1 Protected Features of MCZs (JNCC, 2016)

Broadscale Habitat	Habitat FOCI	Species FOCI	Geological Features
Intertidal mud	Blue mussel beds	Amphipod shrimp (<i>Gitanopsis bispinosa</i>)	Clacton Cliffs and Foreshore
Intertidal biogenic reefs	Cold-water coral reefs	Burgundy maerl paint weed (<i>Cruoria cruoriaeformis</i>)	Folkestone Warren
High energy intertidal rock	Coral gardens	Common maerl (<i>Phymatolithon calcareum</i>)	North Norfolk coast (Subtidal)
Moderate energy intertidal rock	Deep-sea sponge aggregations	Coral maerl (<i>Lithothamnion corallioides</i>)	Spurn Head (Subtidal)
Low energy intertidal rock	Estuarine rocky habitats	Couch's goby (<i>Gobius couchii</i>)	
Intertidal sand and muddy sand	Fragile sponge and anthozoan communities	Defolin's lagoon snail (<i>Caecum armoricum</i>)	
Intertidal mixed sediments	Honeycomb worm reefs	Fan mussel (<i>Atrina fragilis</i>)	
Intertidal coarse sediment	Horse mussel beds	Giant goby (<i>Gobius cobitis</i>)	
Coastal saltmarshes and saline reedbeds	Intertidal underboulder communities	Gooseneck barnacle (<i>Pollicipes pollicipes</i>)	
Intertidal sediments dominated by aquatic angiosperms	Littoral chalk communities	Grateloup's little-lobed weed (<i>Grateloupia montagnei</i>)	
High energy infralittoral rock	Maerl beds	Lagoon sandworm (<i>Armandia cirrhosa</i>)	
Moderate energy infralittoral rock	Native oyster beds	Lagoon sand shrimp (<i>Gammarus insensibilis</i>)	
Low energy littoral rock	Peat and clay exposures	Lagoon sea slug (<i>Tenellia adspersa</i>)	
High energy circalittoral rock	Ross worm reefs	Long snouted seahorse (<i>Hippocampus guttulatus</i>)	
Moderate energy circalittoral rock	Seagrass beds	Native oyster (<i>Ostrea edulis</i>)	
Low energy circalittoral rock	Sea pen and burrowing megafauna communities	Ocean quahog (<i>Arctica islandica</i>)	
Subtidal mixed sediments	Sheltered muddy gravels	Peacock's tail (<i>Padina pavonica</i>)	
Subtidal coarse sediments	Subtidal chalk	Pink sea-fan (<i>Eunicella verrucosa</i>)	
Subtidal mud	Tide swept channels	Sea-fan anemone (<i>Amphianthus dohrnii</i>)	
Subtidal sand		Short snouted seahorse (<i>Hippocampus hippocampus</i>)	
Subtidal macrophyte dominated sediment		Smelt (<i>Osmerus eperlanus</i>)	
Subtidal biogenic reefs		Spiny lobster (<i>Palinurus elephas</i>)	
Deep sea bed		St John's jellyfish (<i>Lucernariopsis cruxmelitensis</i>)	
		Stalked jellyfish (<i>Haliclystus spp.</i>)	
		Stalked jellyfish (<i>Lucernariopsis campanulata</i>)	
		Starlet sea anemone (<i>Nematostella vectensis</i>)	
		Sunset cup coral (<i>Leptopsammia pruvoti</i>)	
		Tentacled lagoon-worm (<i>Alkmaria romijni</i>)	
		Trembling sea mat (<i>Victorella pavida</i>)	
		Undulate ray (<i>Raja undulata</i>)	

APPENDIX B MCZS (ENGLISH INSHORE (TO 12NM) REGIONS ONLY) AND DESIGNATED HERITAGE ASSETS

MCZ Name	Protected Wrecks	Scheduled Monuments	Listed Buildings (indicative)	World Heritage Sites	Registered Battlefields	Registered Parks & Gardens
Allonby Bay				Frontiers of Roman Empire		
Aln Estuary			Multiple			
Beachy Head West	Brighton Marina	Camp near Belle Tout	Beachy Head Lighthouse			
Bideford to Foreland Point		Wrecks at Westward Hoe! and Northam Burrows	Multiple			
Blackwater, Crouch, Roach and Colne Estuaries		Multiple	Multiple		Battle of Maldon 991	
Chesil Beach and Stennis Ledges						
Coquet to St Mary's			Multiple			
Cromer Shoal Chalk Beds			Cromer Pier			
Cumbria Coast						
Dover to Deal						
Dover to Folkestone						
Folkestone Pomerania						
Fylde						
Farnes East						
Hartland Point to Tintagel		Tintangel	Multiple			
Holderness Inshore						
Isles of Scilly: Bishop to Crim	Tearing Ledge		Bishop Rock Lighthouse			
Isles of Scilly: Bristows to the Stones						
Isles of Scilly: Gilstone to Gorregan	Association					
Isles of Scilly: Hanjague to Deep Ledge		Prehistoric field systems etc.				
Isles of Scilly: Higher Town		Prehistoric field systems etc.				
Isles of Scilly: Lower Ridge to Innisvouls						
Isles of Scilly: Men a Vaur to White Island		Prehistoric field systems etc.				
Isles of Scilly: Peninnis to Dry Ledge		Prehistoric field systems etc.				

MCZ Name	Protected Wrecks	Scheduled Monuments	Listed Buildings (indicative)	World Heritage Sites	Registered Battlefields	Registered Parks & Gardens
Isles of Scilly: Plympton to Spanish Ledge		Prehistoric linear boundary				
Isles of Scilly: Smith Sound Tide Swept Channel		Prehistoric field systems etc.				
Isles of Scilly: Tean		Prehistoric field systems etc.				
Kingmere						
Lundy	Gull Rock; Iona II	Medieval settlement				
Medway Estuary		Multiple	Multiple			
Mounts Bay			Harbour Walls, St. Michael's Mount			St. Michael's Mount
Newquay and The Gannel		Multiple	Old Lifeboat House and slipway			
Offshore Overfalls						
Padstow Bay and Surrounds		Multiple				
Pagham Harbour						
Poole Rocks						
Runnel Stone		Treryn Dinas Promontory Fort				
Runswick Bay		Alum Quarries				
Skerries Bank and Surrounds	Moor Sand; Salcombe Cannon Site	Multiple	Start Point Lighthouse			
South Dorset						
Tamar Estuary Sites		Multiple	Multiple	Cornwall and West Devon Mining Landscape		Port Eliot; Antony; Cotehele
Thanet Coast			Multiple			
The Manacles						
The Needles	The Needles Site		Multiple			
The Swale Estuary			Slipway, Whitstable			
Torbay		Multiple	Multiple			Princess Gardens and Royal Terrace Gardens
Upper Fowey and Pont Pill		Lerryn Bridge	Multiple			
Utopia						
West of Walney						
Whitsand and Looe Bay			Piers and Quays, Looe			
Total MCZs	5 MCZs	15 MCZs	19 MCZs	2 MCZs	1 MCZ	3 MCZ
Total Designated Heritage Assets	8 PWs	47 SMs		2 WHS	1 Battlefield	5 P&G

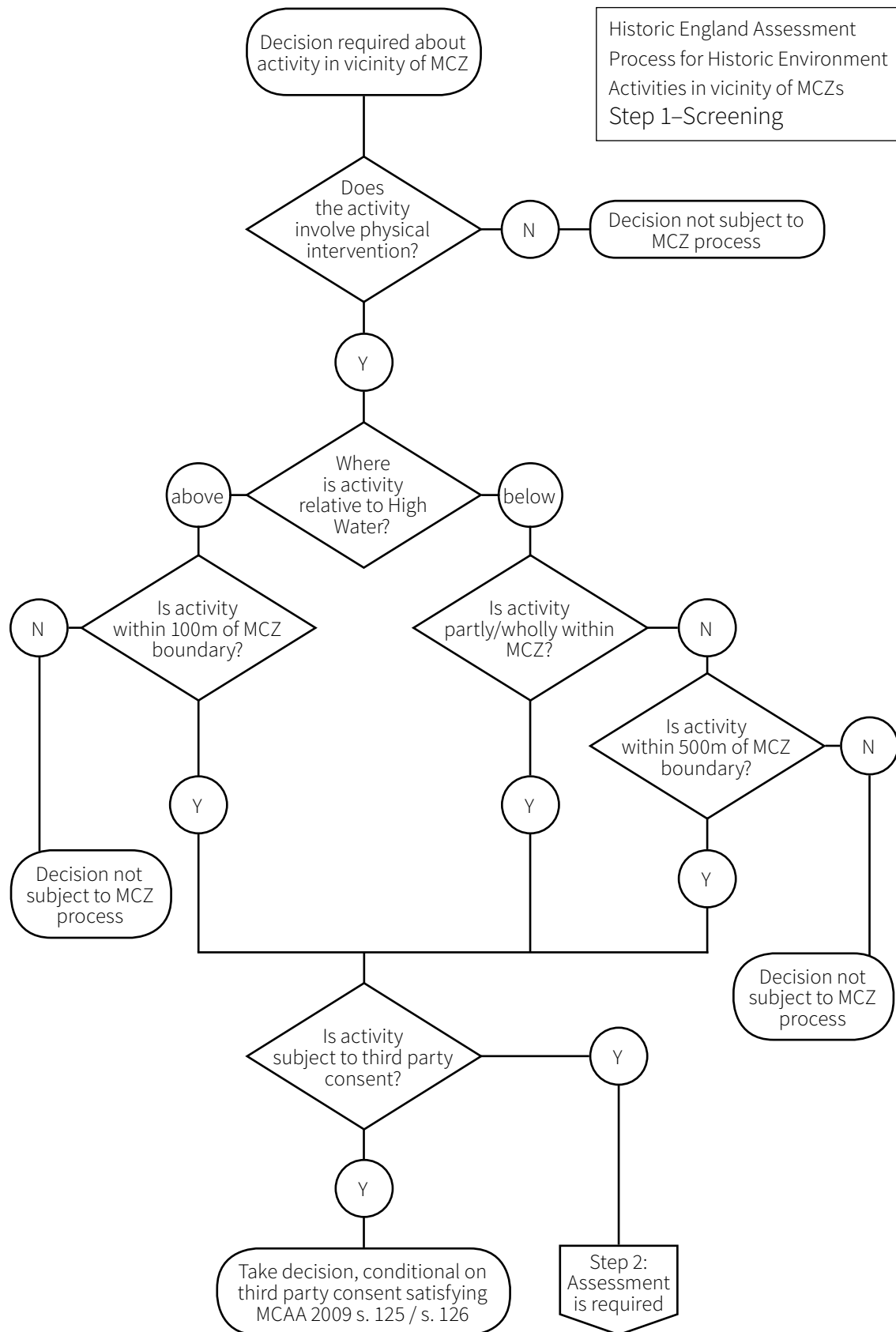
APPENDIX C ILLUSTRATIVE ASSESSMENT OF RISK TO THE FAVOURABLE CONDITION OF PROTECTED FEATURES FROM HISTORIC ENVIRONMENT ACTIVITIES

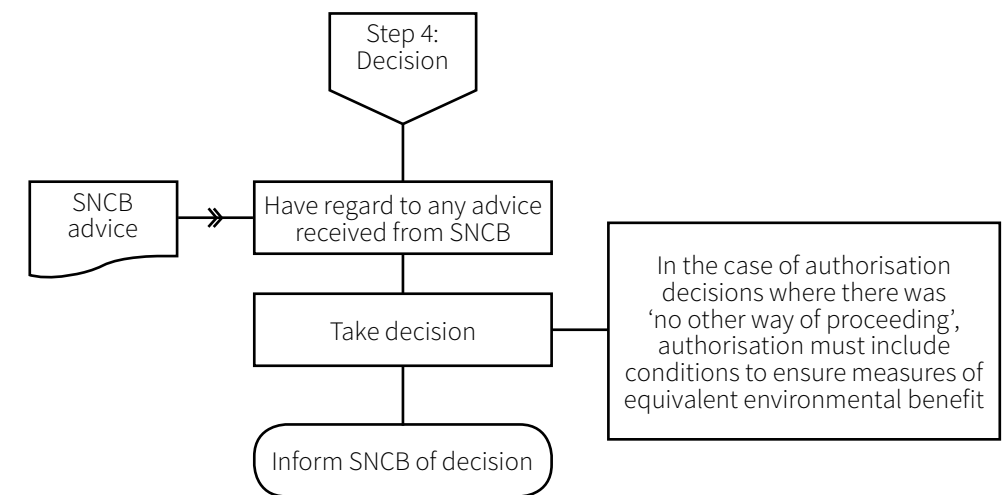
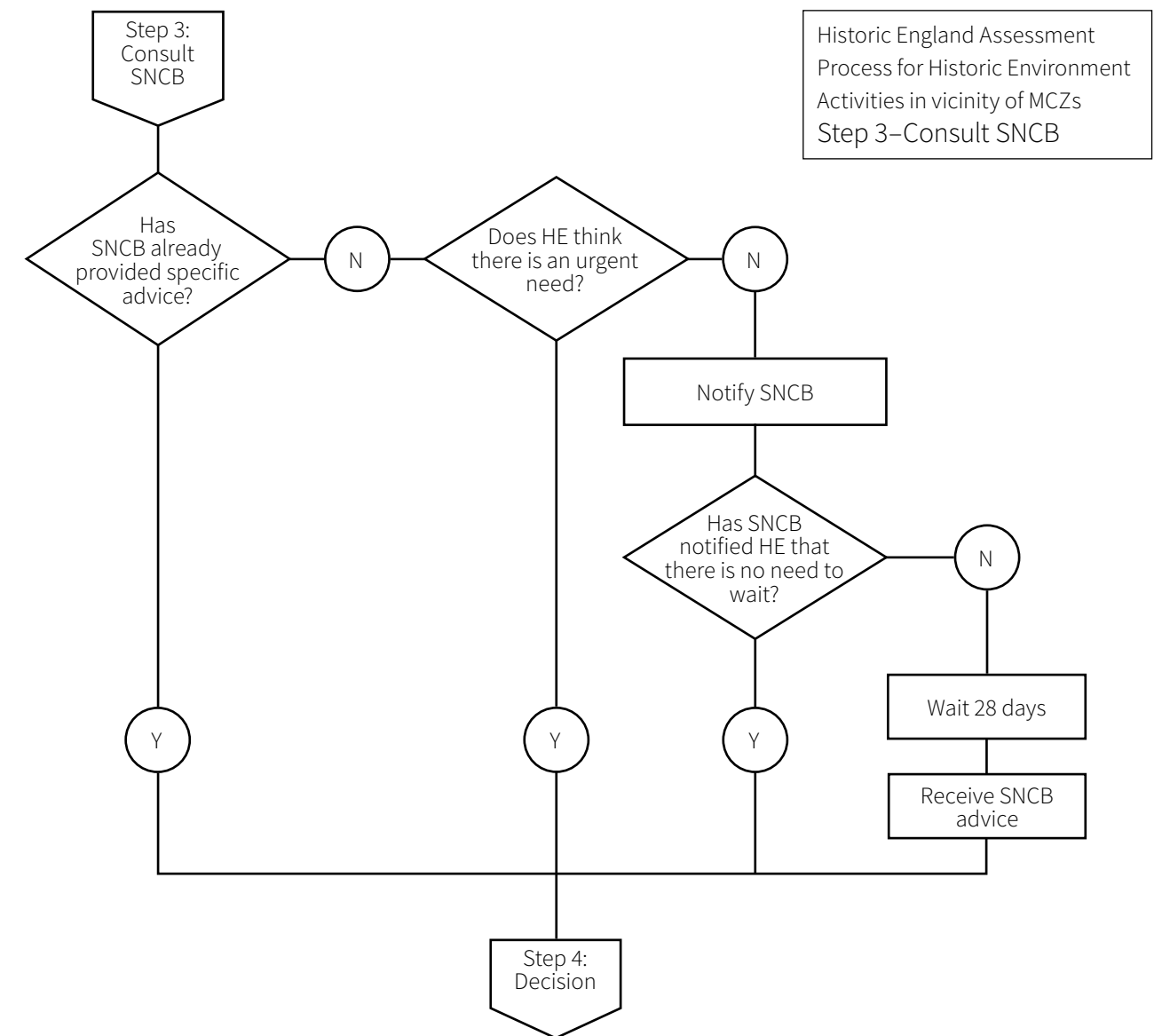
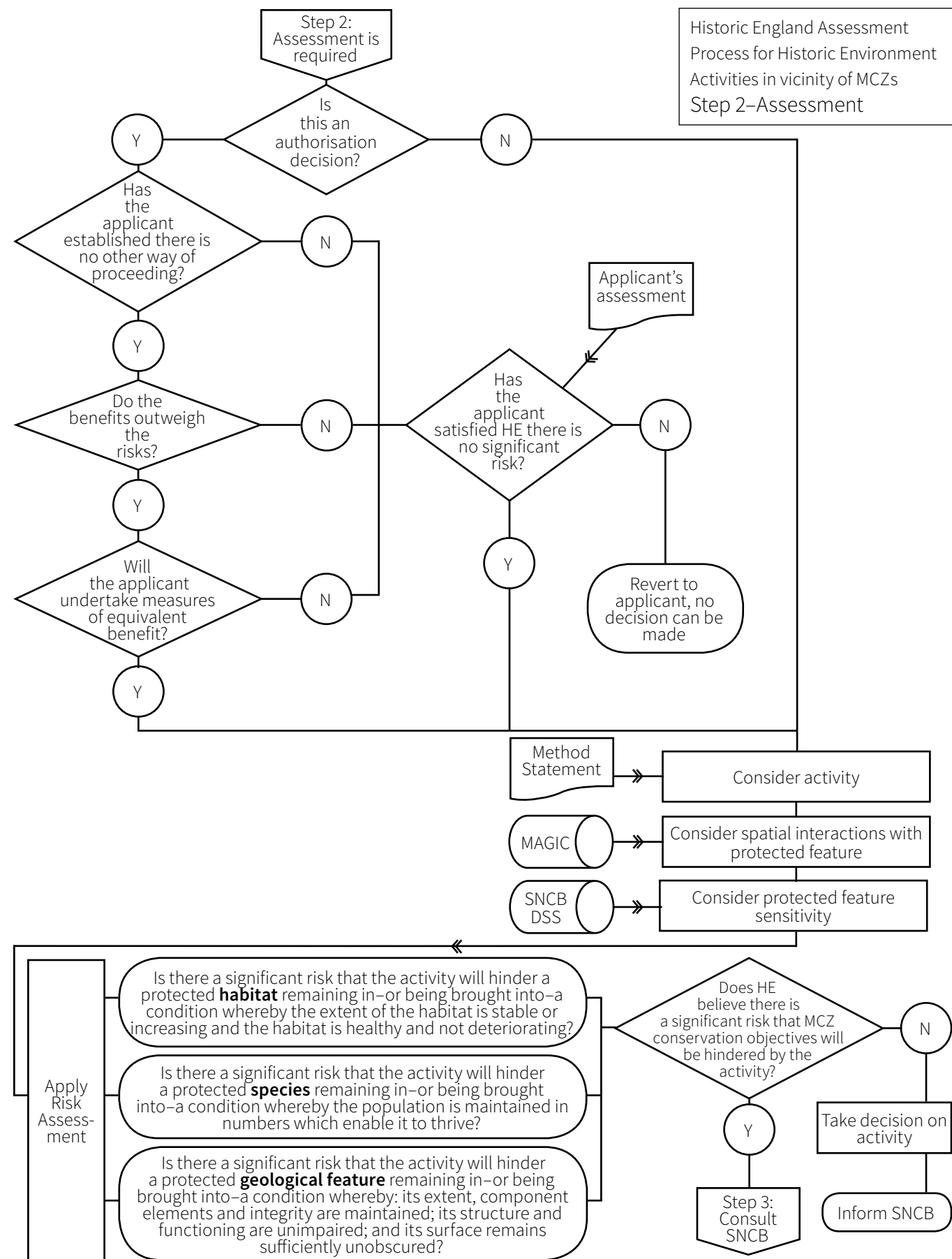
Activity Group	Activity	Marine Licence required ²¹	Risk to Favourable Condition								
			Protected Species			Protected Habitats			Protected Geological Feature		
			Severity	Probability	Risk	Severity	Probability	Risk	Severity	Probability	Risk
Access	Anchoring		Negligible	Unlikely	Less than Significant	Negligible	Equivocal	Less than Significant	Negligible	Equivocal	Less than Significant
	Mooring to an existing mooring		Negligible	Unlikely	Less than Significant	Negligible	Equivocal	Less than Significant	Negligible	Equivocal	Less than Significant
	Use of shotlines		Negligible	Unlikely	Less than Significant	Negligible	Equivocal	Less than Significant	Negligible	Equivocal	Less than Significant
	Vessel traffic		Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant
	Vehicle traffic		Negligible	Unlikely	Less than Significant	Negligible	Equivocal	Less than Significant	Negligible	Equivocal	Less than Significant
	Diving		Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant
	Walking		Negligible	Unlikely	Less than Significant	Negligible	Equivocal	Less than Significant	Negligible	Equivocal	Less than Significant
	Incidental foraging for e.g. lobsters, crabs, scallops, flatfish		Negligible	Equivocal	Less than Significant	Negligible	Equivocal	Less than Significant	Negligible	Unlikely	Less than Significant
Non-intrusive Activities	Measured survey		Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant
	Photographic survey		Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant
	Photogrammetric survey		Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant
	Marine geophysical survey		Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant
	Walked geophysical survey		Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant
	Drone survey		Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant
	Install mooring	x	Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant
	Install dive trail		Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant	Negligible	Unlikely	Less than Significant

Activity Group	Activity	Marine Licence required ²¹	Risk to Favourable Condition								
			Protected Species			Protected Habitats			Protected Geological Feature		
			Severity	Probability	Risk	Severity	Probability	Risk	Severity	Probability	Risk
Intrusive Activities	Surface recovery		Negligible	Unlikely	Less than Significant	Negligible	Equivocal	Less than Significant	Negligible	Unlikely	Less than Significant
	Sediment / timber / artefact sampling		Negligible	Unlikely	Less than Significant	Negligible	Equivocal	Less than Significant	Negligible	Unlikely	Less than significant
	Evaluation (sondage; test pit; trench)	x	Negligible	Unlikely	Less than Significant	Negligible	Equivocal	Less than Significant	Negligible	Unlikely	Less than Significant
	Area excavation	x	Notable	Equivocal	Less than Significant	Notable	Probable	Significant	Notable	Probable	Significant
	Removal of structural remains	x	Notable	Equivocal	Less than Significant	Notable	Probable	Significant	Negligible	Unlikely	Less than significant
	Secondary effects– sediment plumes	x	Critical	Equivocal	Significant	Critical	Probable	Significant	Notable	Probable	Significant
	Secondary effects– topographic changes	x	Critical	Equivocal	Significant	Critical	Probable	Significant	Notable	Probable	Significant
	Secondary effects– changes to habitat structure	x	Critical	Equivocal	Significant	Critical	Probable	Significant	Negligible	Unlikely	Less than significant
Stabilisation and monitoring	Sandbagging	x	Notable	Equivocal	Less than Significant	Notable	Probable	Significant	Notable	Probable	Significant
	Geotextiles	x	Notable	Equivocal	Less than Significant	Notable	Probable	Significant	Notable	Probable	Significant
	Structures	x	Notable	Equivocal	Less than Significant	Notable	Probable	Significant	Notable	Probable	Significant
Incidental Impacts	Clearing vegetation		Critical	Probable	Significant	Critical	Probable	Significant	Negligible	Unlikely	Less than Significant
	Hand fanning		Notable	Equivocal	Less than Significant	Notable	Equivocal	Less than Significant	Notable	Probable	Significant

21 See <https://www.gov.uk/government/publications/marine-licensing-exempted-activities/marine-licensing-exempted-activities>; <https://www.bsac.com/page.asp?section=4586§ionTitle=Marine+Licensing+%2D+guidance+for+divers>

APPENDIX D HISTORIC ENGLAND ASSESSMENT PROCESS FOR HISTORIC ENVIRONMENT ACTIVITIES IN VICINITY OF MCZS





APPENDIX E ORGANISATIONS INVOLVED IN THE PROJECT CONSULTATION

Below is a list of organisations that were present at the seminar event held in London or provided feedback during the consultation period.

Table E.1 Organisations involved in the project consultation

Organisation	Attended Seminar	Provided feedback during consultation
Historic England–Licensing	X	
Sussex IFCA	X	
Association of Local Government Archaeological Officers	X	
CITiZAN	X	
Chartered Institute for Archaeologists	X	
University of Southampton	X	
British Sub-Aqua Club	X	
National Trust	X	
Natural England	X	X
Lundy Island	X	
WWF	X	
Independent Marine Policy Consultant	X	
Crown Estate	X	
JNCC		X
Port of London Authority		X
MMO		X
Marine Biological Association		X



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A good understanding of the historic environment is fundamental to ensuring people appreciate and enjoy their heritage and provides the essential first step towards its effective protection.

Historic England works to improve care, understanding and public enjoyment of the historic environment. We undertake and sponsor authoritative research. We develop new approaches to interpreting and protecting heritage and provide high quality expert advice and training.

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Where no final project report is available, you should consult the author before citing these reports in any publication. Opinions expressed in these reports are those of the author(s) and are not necessarily those of Historic England.

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