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Marine Conservation Zones

Natural England's advice to Defra on proposed Marine Conservation Zones for designation in 2013

November 2013

Moderate energy infralittoral rock © Natural England/L Baldock

Executive Summary

Marine Conservation Zones (MCZs) are an important tool in England's protection of the marine environment and support the Government's requirements under the Marine and Coastal Access Act 2009 (MCCA). Defra will take decisions regarding MCZs based on sound evidence and Natural England's evidence-based, scientific advice will be used to support these decisions. This will help to ensure that the Government can create successful well-managed MCZs.

In July 2012 Natural England and the Joint Nature Conservation Committee (JNCC) submitted our advice package on the recommendations made by the four regional MCZ projects and the subsequent amendments report in December 2012. Since then considerable amounts of new data have become available that are pertinent to features within the proposed MCZs (pMCZs). Defra conducted a public consultation in January 2013 and also asked consultees to provide any new information on the 31 proposed MCZs and their constituent features that would support or affect their designation. This report provides Natural England's analysis and advice for each MCZ proposed for designation in 2013 using all data available to us. We have assessed scientific confidence in the evidence for feature presence and extent. We have recommended conservation objectives, based on an assessment of feature condition, and certainty in those conservation objectives for each feature, including our assessment of the relative risk of damage or deterioration to each site. It covers the 25 inshore proposed MCZs and the JNCC has provided complementary advice on offshore sites.

Key findings from our assessments:

Since our 2012 advice, further data have become available that have increased our understanding of the presence and extent of the features within the pMCZs. This assessment has used 76 new datasets, some provided through Defra's consultation and others from dedicated verification surveys. We assessed confidence in presence and extent for 276 features for the 25 pMCZs. On the whole this has led to an increase in our scientific confidence of features:

- 28% of assessments for feature presence have increased in confidence, 18% have decreased and the majority, 55%, remain unchanged. We now have high confidence in 42.8% of features, moderate confidence in 33.7%, low confidence in 20.7% and no confidence in 2.9%.
- 40% of assessments for feature extent have increased in confidence, 13% have decreased and 46% remain unchanged. We now have high confidence in 27.9% of features, moderate confidence in 46.4%, low confidence in 22.5% and no confidence in 3.3%.
- Decreases in confidence mean that for eight features in seven pMCZs we no longer have any confidence that they are present within the site.
- We advise changing the conservation objective for 14 features in six sites. We recommend changing four from Maintain to Recover, and 10 from Recover to Maintain. We no longer advise conservation objectives for eight features we have no confidence in feature presence; 254 conservation objectives remain unchanged.
- We have identified that seven sites out of the 25 are at higher risk of damage or deterioration.

As well as presenting the results of our assessments and the methods we used, we present collated summaries of the advice for each pMCZ in one of the annexes.

When compiling our advice we have endeavoured to comply with the Government Chief Scientific Adviser's guidelines for preparing scientific advice. Our advice has been comprehensively checked and quality assured through our internal systems. Our assessments followed published peer-reviewed protocols and used the best available evidence at the time. Overall we are content that our advice is a quality-assured product, fit for purpose, to assist the Government to make decisions on the designation of MCZs.

Acknowledgements

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Frequently used acronyms

BS – Balanced Seas
BSH – Broad-scale habitat
CA – Conservation Advice
Cefas – Centre for Environment, Fisheries and Aquaculture Science
CCO – Channel Coastal Observatory
CO – Conservation Objectives
COG – Conservation Objective Guidance
Defra – Department for Environment, Food and Rural Affairs
DOENI – Department of Environment Northern Ireland
EA – Environment Agency
ENG – Ecological Network Guidance
EUNIS – European Nature Information System
FOCI – Feature of Conservation Importance
FS – Finding Sanctuary
GI – Geographic Information
GIS – Geographic Information System
HOCI – Habitat of Conservation Importance
IER – Independent Expert Review
IFCA – Inshore Fisheries and Conservation Authority
ISCZ – Irish Sea Conservation Zones
JNCC – Joint Nature Conservation Committee
MALSF – Marine Aggregates Levy Sustainability Fund
MCAA – Marine and Coastal Access Act 2009
MCZ – Marine Conservation Zone (pMCZ = proposed Marine Conservation Zone; rMCZ = recommended Marine Conservation Zone)
MESH – Mapping European Seabed Habitats project
MHW – Mean High Water
MPA – Marine Protected Area
NE – Natural England
NG – Net Gain
Nm – Nautical mile
OS – Ordnance Survey
OSPAR – The Convention for the Protection of the marine environment of the North-East Atlantic
QA – Quality Assurance
RSPB – Royal Society for the Protection of Birds
RSG – Regional stakeholder group
SAC – Special Area of Conservation
SAP – Science Advisory Panel
SNCB – Statutory Nature Conservation Body
SOCI – Species of Conservation Importance
SSSI – Site of Special Scientific Interest
UKBAP – UK Biodiversity Action Plan
VA – Vulnerability assessment

1 Introduction

1.1 Purpose of this advice

This report contains Natural England's formal advice to Defra on the 25 proposed Marine Conservation Zones[1] (pMCZs) that Defra consulted upon in 2012/2013 in English inshore waters. This advice is the result of analysis of new evidence submitted through Defra's consultation process and evidence gathered and/or processed since July 2012. The advice is designed to enable Defra to make informed decisions about MCZ designation.

1.2 About Natural England and its role in Marine Conservation Zones

Natural England is a Defra Non-Departmental Public Body and advises Government on matters relating to nature conservation in England and in English territorial waters out to 12nm. Natural England's remit is defined in the Natural Environment and Rural Communities Act 2006 (as amended by the Marine and Coastal Access Act 2009 section 311(1) and (2)).

Natural England has a statutory and advisory role in the identification and delivery of MCZs.

- Statutory role: We have a statutory power under section 127 of the Marine and Coastal Access Act 2009 (MCAA) to provide advice and guidance as to:
    (a) the matters which are capable of damaging or otherwise affecting any protected feature(s)
    (b) the matters which are capable of affecting any ecological or geomorphological process on which the conservation of a protected feature(s) is (wholly or in part) dependent
    (c) how any conservation objectives stated for an MCZ may be furthered, or how the achievement of any such objectives may be hindered
    (d) how the effect of any activity or activities on an MCZ(s) may be mitigated
    (e) which activities are, or are not, of equivalent environmental benefit (for the purposes of section 126(7) (c)) to any particular damage to the environment (within the meaning of that provision).
- This advice or guidance may be given either in relation to a particular MCZ or MCZs or generally to public authorities or more generally. We have a duty to provide this advice to public authorities if they request it.
- Advisory role. We also have a wider role in relation to MCZs:
    - Identification of MCZs: Natural England and the Joint Nature Conservation Committee (JNCC) were asked by Defra to run a stakeholder-led process to identify MCZs.
    - Monitoring of MCZs: section 124(3) of the MCAA provides for the appropriate authority[2] to direct JNCC and Natural England to monitor MCZs.
    - Reporting on MCZs and the Marine Protected Area (MPA) network: section 124 of the MCAA outlines the reporting requirements on the appropriate authority and we expect to provide advice to inform this. JNCC will assess the MPA network as a whole.

1.3 About this document

This report provides Natural England's analysis, for each MCZ proposed for designation in 2013, of confidence in the evidence for feature presence and extent, an assessment of feature condition,

[1] Note that one of the sites for which advice is provided is Lundy. This is already designated an MCZ and there is a recommendation for the addition of a feature for protection.
[2] In the MCZ Project area the appropriate authority is the Secretary of State.

recommended conservation objectives and certainty in those conservation objectives for each feature, with our assessment of the risk to each site. It updates the assessments undertaken for the advice provided in July 2012 (JNCC and Natural England, 2012a) and the subsequent amendments report in December 2012 (JNCC and Natural England, 2012b), using new evidence from:

- surveys undertaken since the 2012 advice was prepared, particularly the verification surveys commissioned by Defra and undertaken by the Centre for Environment, Fisheries and Aquaculture Science (Cefas) and the Environment Agency (see Section 3.1.2);
- datasets which were not available or that could not be processed in time for inclusion in the 2012 analysis (some held by Natural England, others identified through the Defra MB0116 contract) (see Section 3.1.2); and
- Defra's consultation on its proposed sites for designation (December 2012–March 2013)[3].

Annex 5 of this report contains the advice for each pMCZ collated on a site-specific basis in order for readers to quickly view all the advice pertaining to a single pMCZ.

Our advice focuses on assessing the ecological implications of the recommendations and assessing the ecological evidence base for sites. It does not discuss in detail social and economic considerations of designating MCZs as this is outside of Natural England's remit and will be covered in Defra's Impact Assessment.

1.4 Standards and principles applied in writing this advice

Natural England followed all relevant aspects of the MCZ advice protocols[4] when producing this advice. These cover aspects of assessing confidence, quality assurance, document management and style and high level principles. These protocols were developed jointly with JNCC for the July 2012 advice to Government and all technical protocols went through an independent external review process. A further protocol (Protocol I) covering our approach to assessing certainty in conservation objectives was developed for this advice[5]. In addition JNCC and Natural England developed supplementary guidance on aspects of the practical application of Protocol E (JNCC and Natural England, 2013a).

Natural England also has a series of internal standards that Natural England staff follow in delivering work to ensure all advice provided and all decisions made by Natural England staff meet Natural England's Evidence Strategy (Natural England, 2012) and the Government Chief Scientific Adviser's Guidelines on the Use of Scientific and Engineering Advice in Policy Making (Government Office for Science, 2010). These standards include:

- Evidence Strategic Standard (Natural England, 2013a)[6]
- Analysis of Evidence Standard (Natural England, 2013b)[7]
- Communicating and Publishing Evidence (Natural England, 2013c)[8].

1.4.1 Quality management process

The evidence and advice in this report has been through a quality management process. The specific quality control methods used through each separate confidence assessment process are detailed in Section 3.

[3] Marine Conservation Zones: Consultation on proposals for designation in 2013 (Defra, 2012) https://www.gov.uk/government/consultations/marine-conservation-zones-consultation-on-proposals-for-designation-in-2013.
[4] http://www.naturalengland.org.uk/ourwork/marine/mpa/mcz/mczprojectadviceprotocols.aspx.
[5] http://www.naturalengland.org.uk/Images/protocol-I_tcm6-35740.pdf.
[6] http://publications.naturalengland.org.uk/publication/7699291?category=3769710
[7] http://publications.naturalengland.org.uk/publication/7850003?category=3769710
[8] http://publications.naturalengland.org.uk/publication/7698502?category=3769710

In addition the outputs from the assessment of certainty of conservation objectives underwent an independent external review. Natural England commissioned this additional review as this assessment was new and not part of the 2012 advice to Government. Reviewers from Cefas and the Department of the Environment Northern Ireland selected a proportion of results (at least one site per region; samples to include both Recover and Maintain conservation objectives and both more certain/less certain assessments of certainty in conservation objectives) to check that Protocol I had been correctly applied.

The output results tables were then internally quality assured by the Marine Evidence Principal Specialist, the Marine Head of Profession, the Marine Director and Chief Scientist[9]. The key aim of this review was to check that the protocols had been correctly applied and that the audit trail and evidence used for decisions was clear. This initial report was reviewed and signed off by the Executive Director for Science, Evidence and Advice.

This final published document has been through quality assurance by the Marine Evidence Principal Specialist, the Marine Head of Profession and the Marine Manager for Designations. The advice has been signed off by the Executive Director for Science, Evidence and Advice.

1.5 Understanding confidence levels for the different assessments

Throughout this document Natural England provides advice on our confidence in data and judgements. How confidence is assessed and described can vary between the different assessments.

In Table 3 we give our scientific confidence in the evidence for presence and extent of features. Confidence here is assessed using Protocol E which sets out data that must be present to achieve different levels of confidence, such as habitat maps or point records (Natural England and JNCC, 2012a). Where we have low confidence in the evidence for feature presence or extent this may be due to a single record, habitat maps based on modelled data only, or records older than 12 years for species or temporally variable habitats. Where we have no confidence in the evidence this is due to having no data for presence or conflicting data that show the presence of a different feature instead of the feature recommended.

To provide our advice on conservation objectives in Table 6 we have taken account of the confidence of the sensitivity of features to pressures, taken from ABPmer (2010), in order to complete a vulnerability assessment to recommend conservation objectives (Natural England and JNCC, 2011). We have provided advice on our confidence in the condition of features following Protocol F (Natural England and JNCC, 2012b). The majority of confidence assessments here are low due to the lack of direct monitoring evidence and therefore condition is assigned using a vulnerability assessment which has inherent uncertainties. For a discussion on these uncertainties see Protocol F. Defra requested that we provide an updated assessment of certainty to offer additional assurance that the conservation objectives are appropriate for designation. This assessment of certainty follows Protocol I and uses the expert judgement of Natural England staff. Our judgements are whether we are ‘more certain’ or ‘less certain’ in the appropriateness of the Maintain or Recover part of the conservation objective for each feature.

1.6 Links to JNCC advice

In July 2012 and December 2012 Natural England provided advice to Defra on MCZs jointly with JNCC[10] (JNCC and Natural England, 2012a; JNCC and Natural England, 2012b). As Defra requested site-specific advice on the tranche 1 proposed MCZs, JNCC and Natural England have written separate pieces of advice for Defra in 2013 with JNCC providing formal advice to Defra on the six proposed MCZs in offshore waters (JNCC, 2013).

[9] The Director and Chief Scientist delegated this review to the Marine Manager for Designations and Conservation Advice and Deputy Chief Scientist for quality assurance.

[10] http://publications.naturalengland.org.uk/publication/2030218?category=1723382.

Both JNCC and Natural England have followed the same protocols to assess evidence and provide advice and have continued working closely together. This has ensured that Defra can be confident that our advice is to the same standard.

1.7 Proposed Marine Conservation Zones in inshore waters

The 25 proposed MCZs that this advice covers are listed below.

- Aln Estuary
- Stour and Orwell Estuaries
- Blackwater, Crouch, Roach and Colne Estuaries
- Medway Estuary
- Thanet Coast
- Folkestone Pomerania
- Beachy Head West
- Kingmere
- Pagham Harbour
- Hythe Bay
- Poole Rocks
- South Dorset
- Chesil Beach and Stennis Ledges
- Torbay
- Skerries Bank and Surrounds
- Tamar Estuary Sites
- Whitsand and Looe Bay
- Upper Fowey and Pont Pill
- The Manacles
- Isles of Scilly sites
    - Bishop to Crim
    - Bristows to the Stones
    - Gilstone to Gorregan
    - Hanjague to Deep Ledge
    - Higher Town
    - Lower Ridge to Innisvouls
    - Men a Vaur to White Island
    - Peninnis to Dry Ledge
    - Plympton to Spanish Ledge
    - Smith Sound Tide Swept Channel
    - Tean
- Padstow Bay and Surrounds
- Lundy
- Fylde Offshore
- Cumbria Coast
- Hilbre Island Group

2 Background to this advice

2.1 Regional MCZ projects

JNCC and Natural England established the MCZ Project in 2008 to develop stakeholder recommendations on:

- the location, size and shape of MCZs;
- the features to be protected within the MCZs;
- the conservation objectives of the MCZs; and
- an assessment of environmental, economic and social impacts of the proposed regional MCZs, presenting the results in a draft formal Impact Assessment document.

Four independent regional MCZ projects covering the south-west (Finding Sanctuary), Irish Sea (Irish Sea Conservation Zones), North Sea (Net Gain) and south-east (Balanced Seas) were established to engage stakeholders to develop their recommendations. In September 2011 the regional MCZ projects delivered their recommendations to JNCC and Natural England with 108 MCZs and 65 reference areas recommended (Balanced Seas, 2011; Irish Sea Conservation Zones, 2011; Lieberknecht, et al. 2011; Net Gain, 2011).

2.2 SNCB advice to Government July 2012

JNCC and Natural England provided joint formal advice to Government in July 2012 (JNCC and Natural England, 2012a). As summarised by Defra (2011a), Defra requested that our 2012 advice to Government should contain:

- Advice on the creation of an ecologically coherent network of MPAs.
- An overview of the regional MCZ project process used to identify possible MCZs.
- JNCC and Natural England's view of the regional MCZ project recommendations.
- An assessment of the most at risk sites/priority sites for protection.
- An assessment of the scientific certainty of the regional MCZ project recommendations.

That advice document was submitted to Defra alongside the regional MCZ project final recommendation reports and the regional MCZ project Impact Assessment materials as part of the MCZ Advice Package on 18 July 2012. It contains our formal advice to Government on the science behind the regional MCZ project recommendations, the quality of the ecological data and our views on the overall regional MCZ project process. The report runs to over 1,500 pages including technical annexes setting out the detailed assessments.

2.3 Additional advice to Defra

Defra asked JNCC and Natural England to provide further advice on the level of certainty in the draft conservation objectives of the recommended Marine Conservation Zone (rMCZ) features. Advice was requested for the features in sites which were good candidates for designation in the first tranche. The advice was requested to provide additional assurance that the conservation objectives for features in proposed first tranche sites were appropriate.

The assessment to inform this advice was undertaken in July 2012 after agreeing the approach with Defra's MPA Network Project Board and was provided to Defra separately from the Statutory Nature Conservation Body (SNCB)'s statutory advice on MCZs recommended by the regional MCZ projects. The report was published as supplementary advice in December 2012 (JNCC and Natural England, 2012c).

2.4 SNCB advice amendments report

Following the submission of the July 2012 advice, JNCC and Natural England became aware of some factual errors and omissions within the advice document. An amendments report was therefore developed to highlight and address those errors and omissions which could have led to misinterpretation or misunderstanding of our advice.

As part of the amendments report, Defra requested further detail on the audit trail for the assessment of our confidence in presence and extent of features using the evidence in the July 2012 advice. As a result of the audit trail work, for some sites changes were made to the scores for our confidence in presence and extent of features. Where corrections and changes were likely to alter the information that Defra was using to make decisions on sites and features for possible designation in 2013, details were passed on to Defra promptly. This information was therefore available to Defra as they developed their consultation material. The changes made in this way were included in the amendments report.

The amendments report was published in December 2012 (JNCC and Natural England, 2012b). It should be noted that the amendments report does not provide an update on new information available for the recommended MCZs.

2.5 Defra MCZ consultation

On 12 December 2012, Defra launched the 12-week public consultation on Marine Conservation Zones, proposing 31 recommended MCZs for possible designation in 2013 (Defra, 2012). The choice of sites put forward by Defra was based on the levels of confidence in scientific evidence and the balance between the conservation advantages and the socio-economic costs of designating a site. Defra asked consultees to provide any new information on the 31 pMCZs and their constituent features that would support or affect their designation. The consultation closed on 31 March 2013 and following this Defra forwarded to Natural England those responses that were considered to contain ecological evidence that would inform the confidence assessments in the proposed features, and also socio-economic information that would inform the vulnerability assessments. This information, with other evidence supplied since our earlier advice, has been used to inform this advice on 25 inshore pMCZs.

3 Processes used for compilation of 2013 advice

3.1 Assessing confidence in feature presence and extent

3.1.1 Aims of this section

The aim of this section is to describe how evidence was analysed to assess our confidence in the presence and extent of proposed features within the proposed Marine Conservation Zones (pMCZs) in English inshore waters. These methods have allowed us to include all the new data available (see Section 3.1.2) and to present the results of the confidence assessment for the presence and extent of the proposed features within pMCZs (see Section 4).

The emphasis in the 2012 advice was to evaluate the evidence underpinning the regional MCZ project recommendations, whilst in the current advice, further assessments are made of the confidence on the presence and extent of features within the pMCZs. Throughout this process, the following questions were considered:

1) Is there measurable or verifiable evidence for the presence of the features, ie broad-scale habitats (BSHs), Features of Conservation Importance (FOCI), geological/geomorphological features of interest, and non-ENG features in the site?
2) Is there evidence of the spatial extent of these features in the site?

3.1.2 Evidence used in 2013 advice

Since our 2012 advice, considerable amounts of new data have become available that are pertinent to features within the pMCZs. This assessment used evidence available to Natural England from five key data sources. These were:

1) **Evidence previously identified as not being available for the 2012 advice packages that has since become available for analysis**. This evidence may not have been processed in time for inclusion in previous analyses or not available due to specific licence and confidentiality conditions (see Table 29, JNCC and Natural England, 2012a).

2) **Defra-funded verification surveys (MB0120)**. MB0120 was a data-gathering exercise led by Cefas in partnership with Defra, the Environment Agency (EA), JNCC and Natural England, involving verification surveys to collect evidence from a number of pMCZs. Verification surveys were conducted by the EA, Cefas, and SNCB contractors to increase the knowledge of pMCZ features with lower confidence. Not all of the data collected through these surveys were available before the cut-off period for inclusion in the automated assessment process.

3) **Evidence submitted through responses to the Defra consultation**. Consultation responses considered to include pertinent biological and physical data relating to the sites under consideration were forwarded to the SNCBs by Defra. The public consultation had a cut-off date of 31 March 2013.

4) **Datasets identified through the Independent Expert Review process (MB0116)**. The MB0116 contract involved an in-depth review of the ecological MCZ evidence led by ABP Marine Environmental Research Ltd (ABPmer), and was designed to build on and extend the evidence-specific work of the regional MCZ projects (ABPmer, 2013). This contract was commissioned by Defra following the recommendation from the independent Science Advisory Panel (SAP) that the evidence base for MCZs required further review. The report found that the majority of the most relevant data sources had already been used by the regional MCZ projects. However 56 new data sources not used in the 2012 assessment were found through the MB0116 work and were taken into consideration for the 2013 advice.

5) **Photographic evidence**. Photographic evidence supporting pMCZ features was submitted from several sources including Natural England regional staff and contractors and through the Defra consultation. The methodology and quality assurance process for this evidence is outlined in Section 3.1.5.

Where information, such as survey reports, was received after the cut-off and contained pertinent ecological information relating to proposed features, these data were used to manually adjust the confidence assessment in certain cases, for example if a verification survey categorically stated that a feature was not present within a pMCZ following 100% survey coverage, despite there being a level of confidence in presence and extent produced by the automated process based on the presence of the parent feature, an adjustment was made. Any changes in confidence as a result of data received in this manner were rigorously checked by Natural England's specialists.

3.1.3 Evidence not used and reasons

There were eight verification surveys undertaken under the Defra contract MB0120, for which the results were not available in time for inclusion in the confidence assessment analysis as the data were in the process of being collected or analysed. This affects the following pMCZs: Stour and Orwell Estuaries, Thanet Coast, Poole Rocks, South Dorset, Chesil Beach and Stennis Ledges, Whitsand and Looe Bay, Isles of Scilly (Bristows to the Stones), and Padstow Bay and Surrounds.

A number of other datasets from other sources were also not used. These were screened out by the Evidence Panel because they did not inform on proposed features in pMCZs. Details of the screening process are discussed below.

3.1.4 Evidence Panel process

On 21–22 May 2013, the Natural England MCZ Evidence Panel – a multi-agency panel made up of representatives from Cefas, JNCC and Natural England – convened to assess and agree which of the 474 datasets identified from the five data sources (see Section 3.1.2) should or should not be included for analysis. Natural England's Evidence Panel assessed the suitability of new evidence for inclusion in the process for developing revised confidence assessments but did not review the confidence assessments for features. The small number of offshore sites and the much smaller amount of evidence to be assessed meant that JNCC's Evidence Panel also reviewed the expert judgement applied at the confidence assessment stage (JNCC, 2013).

The screening criteria for suitability of evidence applied by the Natural England MCZ Evidence Panel to the 474 datasets were as follows**:**

1. The evidence had been submitted by 15 May 2013.
2. The evidence had not been used for production of the 2012 SNCB Statutory Advice on recommended MCZs.
3. The evidence contains ecological information pertinent to a site proposed in the current tranche.
4. The evidence contains information on a Tranche 1 feature.
5. The evidence could be converted into a Geographic Information System (GIS) format by 3 June 2013.
6. The evidence is suitable for use in revising the confidence assessments in feature presence and extent.

The terms of reference for the Evidence Panel are located in Annex 1, the minutes from the Evidence Panel meeting are available in Annex 2, and the outcomes of the decisions made about all 474 datasets are shown in the Evidence Panel audit log which is available on request from Natural England.

In summary, of the 56 items of evidence received during the consultation process that were relevant to pMCZs sites, 11 items were put forward for inclusion in the automated confidence assessment, whilst the remaining items of evidence were screened out on account of: 41 not containing new evidence; 1 not containing ecological information relevant to a pMCZs feature; 1 not being possible to convert to GI format by the GI cut off date; and 2 being considered unsuitable for inclusion in the confidence assessment process. Of the 73 non-consultation items of evidence received, that were relevant to the current pMCZs and were not submitted through the Defra MB116 contract, 49 were put forward for inclusion in the automated Confidence Assessment, whilst the remaining items of evidence were screened out on account of: 8 not being submitted by the data cut off date, 8 not containing new evidence; 2 not containing ecological information relevant to a pMCZ feature; and 6 being considered unsuitable for inclusion in the confidence assessment process.

Data quality varied significantly, and fields required for answering Protocol E questions were assigned where necessary (eg age of data, collected by specialist, data quality, which feature(s) the data informed). All Particle Size Analysis samples were converted to broad-scale habitats using the European Nature Information System (EUNIS)-modified Folk classification system (Long, 2006). All biotopes supplied were converted to Ecological Network Guidance (ENG) BSH and habitat FOCI using the JNCC Correlation Table showing the relationships between the Marine Habitat Classifications (2004 and 2006 versions) and Habitats listed for Protection (JNCC, 2009a). Where necessary, Mapping European Seabed Habitats (MESH) confidence scores were calculated for new datasets. To undertake the evidence assessment, all the pertinent data were imported into a Geographical Information System (GIS). This was crucial to allow the visualisation and interrogation of data and to undertake any spatial analysis.

It should be noted that during the automated confidence assessment, where multiple overlapping polygonal datasets existed to show the extent of broadscale habitats, criteria outlined in Technical Protocol E and the supplementary guidance paper (Natural England and JNCC, 2012a; JNCC and Natural England, 2013a) were used to consider the quality of each of the datasets available. Where broadscale habitat polygon datasets overlapped Natural England only used the most confident dataset to remove conflicts in differing, or less accurate habitat identifications. As a result of this, four items of evidence endorsed in the Evidence Panel process were screened out as there were other datasets with a greater level of confidence for the presence and extent of broadscale habitats in the same geographical location. These decisions are detailed in the Evidence Panel audit log (available on request from Natural England). Those items of evidence used to inform confidence in presence and extent of each feature during the 2013 Confidence Assessments are listed in Table 3 and detailed in Table 4.

3.1.5 Confidence assessment process

3.1.5.1 Overview of methodology and use of supplementary guidance to Technical Protocol E

Given to the large number of features and datasets in inshore pMCZs involved in the analysis, Natural England used an automated process to analyse the data and reduce the likelihood of error. Confidence assessments for the presence and extent of the features were calculated in line with the criteria outlined in Technical Protocol E and the supplementary guidance paper (Natural England and JNCC, 2012a; JNCC and Natural England, 2013a), particularly by following Tables 2–6 of that protocol. Results were recorded at the level of feature (for each pMCZ) and for every confidence assessment made an audit trail of decision making was recorded. There were four possible levels of confidence: no confidence, low confidence, moderate confidence and high confidence. A result of ‘no confidence’ for a feature was produced in two situations: a) where there were no data for analysis, and b) where there were some old data, but an MCZ

verification survey covered 100% of the site and did not record the feature. This allowed for high confidence that the feature was indeed not present within the site. Technical Protocol E and the supplementary guidance were followed closely, but additional points needed to be considered.

The Technical Protocol E supplementary guidance paper (JNCC and Natural England, 2013a) was produced in order to (a) clarify the text of Protocol E so that it could be applied to new feature extent information (as opposed to the extents recommended by the Regional MCZ Projects) and (b) to provide specific guidance on the practical application of some aspects of Protocol that had proved difficult and/or where the original text is ambiguous. Protocol E was written for use when assessing the features recommended by the regional MCZ projects in terms of presence and extent. Information collected subsequently updated the evidence base for the recommended MCZs, resulting in both the identification of new features within the site boundaries and the updating of the spatial distribution of the original features. In addition, an additional rule needed to be introduced for BSH and Habitats of Conservation of Importance (HOCI) confidence assessments to ensure that new high quality point data (eg drop down video, benthic samples etc) from survey, in the absence of any habitat maps, could be used to support feature presence and extent assessments (JNCC and Natural England, 2013a).

Protocol E requires that the question is asked as to how mapping data agree with respect to the habitat type for BSH and HOCI. The percentage agreement of habitat data was used as a metric for assessing scientific confidence in the presence of a given feature (see Protocol E, Tables 2 and 3). By analysing data and generating confidence scores automatically through a computer, HOCI that ‘co-exist’ together in the marine environment (eg Blue mussel beds and Estuarine rocky habitats) would incorrectly be considered as conflicting data points. In order to ensure our analyses of confidence were sense checked from such computer-based errors, we developed a procedure to identify which habitat features do and do not co-exist in the marine environment, in order to build these ecological relationships into our automated analyses.

Percentage agreement calculations for habitat features were based only on those features that were deemed not to co-exist, or where we had low confidence in their co-existence. Co-existence was subjectively defined as one HOCI having the potential to occur within 10m of another, but with the additional qualification that we then used expert judgement to decide whether HOCI could co-exist or not as a consequence of different depth and substrate requirements. A distance of 10m was selected as it represents a high level of accuracy for marine data and was imposed to ensure that high quality data recorded to this level of spatial accuracy (or greater) that conflicted with other high resolution data were classified as conflicting points. Each HOCI was compared with every other HOCI in a matrix using Natural England specialist expertise alongside habitat descriptions from: the OSPAR List of Threatened and/or Declining Species and Habitats (OSPAR, 2008); the UK List of Priority Species and Habitats (UK BAP) (BRIG, 2007) and the JNCC Correlation Table showing the relationships between the Marine Habitat Classifications (2004 and 2006 versions) and Habitats listed for Protection (JNCC, 2009a). In addition, a comprehensive literature search for specific references to habitats co-existing was carried out to identify supporting evidence. If co-existence between two HOCI was considered possible a score of 1 was ascribed, if it was not considered possible, a score of 0 was ascribed. On the basis of the level of information on co-existence, a confidence score was attributed. These confidence scores were as follows:

- High confidence – where habitat descriptions or distributions strongly do, or do not, overlap or there are specific site examples or references to the two habitats occurring together.
- Medium confidence – where habitat descriptions or distributions have the potential to overlap and some generic literature and descriptions support potential co-existence.
- Low confidence – where the habitat descriptions or distributions have the potential to overlap but there is little literature available to support the possibility and no actual examples can be found; the potential is theoretical.

The Quality Assurance (QA) for the Co-existence Matrix sought to verify the results of the co-existence analysis, through repeat scrutiny of each output by a different (and previously uninvolved) Natural England specialist, using HOCI descriptions, alongside additional corroboratory scientific literature. Where any discrepancies in output occurred, or clarification of habitat description was required, further information on the potential for co-existence of HOCI was sought from individuals with specialist knowledge within Natural England, and external colleagues within Natural Resources Wales and the Wildlife Trusts. Where uncertainty persisted, we applied a score of low confidence; therefore, only feature combinations that had strong evidence for co-existence with each other (ie were ascribed a 1 High or 1 Medium score) were assigned a 'Yes', whilst all other variations of outputs returned a 'No'. Only those feature combinations that were assigned a 'Yes' were used in the automated process to generate confidence for the relevant features. A full audit trail underpinning the decisions made along with supporting evidence was kept and is available on request from Natural England.

Natural England and its consultants, Marine Mapping Ltd, used Technical Protocol E to generate confidence assessment flow charts. These flow charts are shown in Figures A3.1–A3.6 in Annex 3. Detailed information on the outputs of the automated confidence assessment process can also be found in Annex 3 with directions on how to navigate them.

3.1.5.2 Quality assurance of confidence assessments

Natural England placed considerable emphasis on quality controlling the confidence assessments according to the rules of Technical Protocol E. We liaised closely throughout the process with JNCC technical staff to ensure consistency in our approach. Staff from JNCC sat on Natural England's Evidence Panel and Natural England staff similarly attended meetings of the JNCC Evidence Quality Assurance Group. Natural England's Evidence Panel included a marine data scientist from Cefas to ensure that the treatment, inclusion and exclusion of datasets were robust and transparent.

Once confidence levels had been assigned by the computer-based analysis, an internal quality QA process was undertaken. This process was conducted by sending assessments to the Natural England specialist and regional teams asking them for comment and to flag up and provide any missing data. Natural England staff who acted as MCZ stakeholder representatives on the regional stakeholder groups (RSGs) were required to comment specifically on the evidence for pMCZs within the regional MCZ projects they were involved with. Any amendments to confidence assessments arising from this sense checking stage were examined by Natural England's evidence specialists to ensure all data standards and protocols were adhered to. In some cases, confidence levels were changed as a result of the recommendations made during the QA process. Datasets flagged as not being included in the automated confidence assessment process were analysed and subjected to quality control before being added to the confidence assessment manually. This subsequent manual confidence assessment was then checked by Natural England specialists to ensure that the correct results were achieved.

The photographic evidence data supporting pMCZ features were incorporated into a database that included such metadata as the MCZ site name, the feature(s) it supported, and date taken. Each photo was assigned a quality score from 1 to 3 based on the accuracy of the photo location and how well it supported the feature using the criteria outlined in the Technical Protocol E supplementary guidance paper (JNCC and Natural England, 2013a). Only photos with a score of ≥ 2 were used.

Upon completion of the photo database, a rigorous quality control process was applied where Natural England's dive team and marine ecologists systematically examined all photos to ascertain whether they supported the features in question. Only photographic evidence that was ratified by these experts was used for the assessment. In addition to this, a random sample of 50 photos covering all sites and features was assessed by most of the individuals involved in the quality control process to ensure consistency between reviewers. These data were then included in the confidence assessment process detailed in Section

3.1.5.1. At a workshop carried out in London in July 2013 a further quality assurance process was conducted on the mapped photographic evidence with Natural England's regional teams to ensure that the results of the confidence assessment accurately reflected the number and quality of photos submitted for each proposed feature. A number of new photographic records were identified during this workshop and subsequently added to the confidence assessment process manually following application of the QA process detailed above by both Natural England's regional and specialist teams.

In conjunction with this assessment, site-specific aerial photography data obtained from the Channel Coast Observatory were used, where available, to support intertidal features, to add additional ground-truthing to intertidal photographs, and to increase confidence levels in specific features where applicable. These data were also subject to the QA process detailed above.

3.2 Assessing confidence in condition and revision of recommended conservation objectives

3.2.1 Aims of this section

This section describes the methods and processes used to assess confidence in condition and thus revise recommended conservation objectives where this was necessary. It also describes the method used to determine certainty in the conservation objectives. The fisheries vulnerability assessment is described in greater detail in Section 3.2.3.

3.2.2 Overview of the process used to revise conservation objectives

The revised conservation objectives for the 2013 advice were developed by Natural England's regional teams with support from national staff and specialists.

Conservation objectives were revised where new information was available that indicated:

- direct evidence informing the condition of a feature;
- a change in the extent of a feature causing exposure to pressure from existing socio-economic activities;
- a change in extent or intensity of pressures from socio-economic activities; or
- a combination of the above.

Features for which a change in exposure was identified required a revised assessment of feature condition. For features for which there was no change, it was not necessary to undertake a new assessment, and the conservation objective that was recommended in 2012 (either in the 2012 SNCB advice or the amendments report) has been put forward again.

The method described in the Conservation Objective Guidance (COG) (Natural England and JNCC, 2011) was used by the regional MCZ projects to undertake vulnerability assessments and develop conservation objectives for their recommended sites, and for subsequent Natural England sense checks (2011) and reviews (JNCC and Natural England, 2012a). It was similarly used for the 2013 assessment of feature condition but, although Stages 1–4 (page 12) were followed as laid out, Stages 5–7 were adapted since the RSGs are no longer involved in the MCZ process. The COG was produced to work within a stakeholder context and describes the role of the RSGs in the condition assessment process. The changes made are described below.

The work to reassess the condition of features and recommend revised conservation objectives started in the course of a workshop attended by staff from all Natural England regional seas teams in July 2013. The remaining vulnerability assessments and the quality assurance process were completed subsequently.

The COG lays out two possible approaches: assessing feature condition using direct evidence; and assessing feature condition by undertaking a vulnerability assessment.

3.2.2.1 Direct evidence approach

The 'direct evidence' approach uses direct measurements that inform the state of the feature, including evidence of damage.

For most features in the 25 pMCZs, there was no direct evidence on condition to allow identification of the conservation objective through this method. The Cefas and EA MCZ verification survey reports were checked for information that would inform feature condition but they generally only contained information on presence and extent of the features proposed.

Direct evidence of feature condition was available for features in the following pMCZs: Native oyster in the Blackwater, Crouch, Roach and Colne Estuaries pMCZ and High energy intertidal rock and Intertidal coarse sediment in Chesil Beach and Stennis Ledges pMCZ (see relevant site-specific advice documents). In both cases the evidence was used in combination with a revised vulnerability assessment, following the 'combined approach' described in Protocol F (Natural England and JNCC, 2012b).

3.2.2.2 Vulnerability assessment approach

Due to the absence or limited availability of evidence containing information on feature condition, a vulnerability assessment was conducted on all other features. This used the best available information on the sensitivity of the feature to pressures (ABPmer, 2010) associated with human activities (JNCC, 2010), combined with evidence of exposure to those pressures.

Where a vulnerability assessment had been completed for a feature by the regional MCZ projects and reviewed in the 2012 SNCB advice, a new assessment was undertaken only if new evidence suggested a change in the feature's exposure to pressures. In such cases, the need for a new vulnerability assessment was noted and recorded in the MCZ Vulnerability Assessment Audit Log 2013. The following maps were used for this purpose:

- 2013 feature map for each site. These maps were produced by Natural England from the updated evidence geodatabase and thus reflected our best understanding of feature presence and extent within the sites at the time.
- 2011 feature map for each site. These maps had been produced by the regional MCZ projects and were compared with the 2013 feature maps in order to identify changes in feature distribution.
- 2011 regional MCZ project activity spatial data layers. These are the best available spatial data on activity extent and intensity and were used to help determine feature exposure.

For the July 2013 assessments, Natural England's regional teams compared the 2013 feature maps to the 2011 activity spatial data layers and the 2011 regional MCZ project feature maps.

For 42% of the features, the new datasets and verification surveys resulted in improvements to our knowledge of the feature distribution and extent within the sites and triggered the need for a vulnerability assessment.

All consultation responses forwarded by Defra as having potentially useful narrative socio-economic information were assessed by the regional seas teams and considered during the vulnerability assessment. As no new socio-economic spatial data was submitted through the consultation, the spatial data on activities collected by the four regional MCZ projects were used. In two cases, MCZ verification survey reports contained information on activities observed during the survey, and this information was used and logged for the 2013 assessments.

The results of the vulnerability assessments were recorded in the MCZ Vulnerability Assessment Audit Log 2013. This incorporated the results of the 2012 vulnerability assessment and the record of vulnerability

assessment decision making back to the original regional project recommendations, all of which were available in the MCZ Vulnerability Assessment Audit Log 2012.

If new activities or changes in extent of feature were identified in a pMCZ, Stage 4 of the COG was undertaken, using the 2012 pressure-sensitivity-activity collated sheets produced by Natural England. These combine the sensitivity matrix (produced through the MB0102 contract) and the activities-pressures association matrix (produced by JNCC from information contained within the OSPAR Assessment Framework). The new feature-activity-pressure combinations were added to the log by the regional teams.

The regional teams then completed Stage 5 of the COG, taking account of any new information on activities, and Stage 6, using the sensitivity-exposure-vulnerability table in the COG as a guide. The assessments were recorded in the 2013 audit log.

3.2.3 Fisheries vulnerability assessment

As described above, for those proposed features where there has been a change in our knowledge of their extent, their exposure to the standardised fishing pressures needed to be re-estimated. This re-estimation was done in accordance with sections A6.1.10 and A6.1.11 of the 2012 advice (JNCC and Natural England (2012a, pp. 1083–1086).

The regional teams used the revised exposures and existing information on sensitivity to assess the vulnerability of the features to a given fishing pressure, applying the methodology detailed in Annex 6 of the 2012 advice (JNCC and Natural England (2012a, pp. 1087–1088). In accordance with the COG (Natural England and JNCC, 2011), high or moderate vulnerability to a given fishing pressure led to a Recover conservation objective, whereas low or no known vulnerability to a given fishing pressure led to a Maintain conservation objective.

Prior to the final conservation objectives being set, the fishing pressure exposures, vulnerability categories and conservation objectives were subject to a sense check[11] by the regional teams and QA by national fisheries specialists. The following considerations were taken into account:

- Different understanding of the exposure level due to regional knowledge. This was primarily related to:
    - recent changes in fishing exposure as the fisheries standardisation used data collected between 2007 and 2010; or
    - regional adviser knowledge of fishing exposure at a finer spatial resolution than the fisheries standardisation (0.05*0.05 degree grid square). In these cases, the exposure and associated vulnerability score (and conservation objective, where applicable) were adjusted accordingly. However, local amendments were only made to the standardised exposures where there was sound justification.
- Lack of interaction between a fishing activity and a feature. For example, midwater trawls generally do not have a direct impact on benthic features but this was not accounted for when the standardised exposure levels were estimated. In these cases, the exposure was set as ‘not exposed’.
- Lack of evidence of significant impact of a gear type on a feature. Where a Recover conservation objective was initially recommended as a result of a sensitive feature’s exposure to static gear (pots and traps, nets, lines) but there was limited or no evidence of that gear exerting an impact on that feature, expert judgement was applied and the recommended conservation objective was revised to Maintain. The management requirements for these activities will need to be determined following further consideration of the level of exposure of the feature and its likely or known condition.

[11] Also see section A6.1.12 of the 2012 advice (JNCC and Natural England, 2012a (pp. 1087–1088).

- Gear and feature combinations where unrestricted access was considered compatible with a Recover conservation objective, for example static gear on subtidal sand. We used the advice on fisheries impacts on MCZ habitat features (JNCC and Natural England, 2011) to determine those cases and the recommended conservation objective was revised to Maintain.
- Consistency in advice for the European eel (*Anguilla anguilla)*. The conservation objective for this species FOCI had previously been recommended as Recover within Finding Sanctuary proposed MCZs but Maintain in sites within the Balanced Seas project area. In the absence of any pressures within the proposed MCZs to which the local eel population may be vulnerable and therefore for which management measures could be identified, a Maintain conservation objective has been recommended. Note that a vulnerability assessment cannot be carried out for highly mobile species as these do not feature in the sensitivity-pressure matrix. The conservation objectives advised at the current time are therefore largely based on expert judgement, advice from the Environment Agency and knowledge of activities in the site.

3.2.4 Quality assurance

Quality assurance measures were built into the vulnerability assessment process. Guidance on the work to be undertaken was provided by the national project team, supported by experienced regional staff. The audit log used provided reference to and an audit trail of previous vulnerability assessment decision making. Regional staff with experience in both the MCZ Project and regional MCZ projects and with good local knowledge of the proposed sites were able to support and quality assure the work of less experienced staff. National specialists were available to advise on questions and issues arising.

For features where it was determined that a recommended conservation objective had changed from 2012 (14 features – see Section 4.5), relevant national specialists for recreation and fisheries provided an additional review and assessment. The vulnerability assessments were reviewed and signed off by the relevant regional seas team Senior Advisers involved in the MCZ Project.

3.2.5 Assessment of certainty of conservation objectives

For the July 2012 SNCB advice, the assessment of certainty of conservation objectives was carried out as a separate exercise, after the submission of the main advice (see Section 3.2). In 2013, Defra asked the SNCBs to develop a protocol that would set out the approach to be used in providing advice on certainty in the appropriateness of feature conservation objectives and why this assessment is needed. This protocol, Protocol I (JNCC and Natural England, 2013b), describes guiding principles rather than a strict step-by-step process because the assessment of certainty in conservation objectives is a matter of best scientific judgement. The protocol also advised that the outputs of this assessment of certainty should be described in terms of ‘more certain’ and ‘less certain’ in the conservation objective proposed.

These assessments were undertaken by the regional teams once they had revised the conservation objectives. The initial step in the process, as in 2012, involved applying Protocol F (Natural England and JNCC, 2012b) to assess certainty in feature condition. This protocol provides a method to assess confidence in the assessments of feature condition whether they were undertaken using direct evidence, a vulnerability assessment (VA) approach, or a combination of both. The method results in high, moderate or low confidence scores for assessment of condition of a feature.

Using Protocol I, assessments were then repeated for each feature to determine the level of certainty in the appropriateness of the Maintain or Recover part of the conservation objective. The assessments were made for all features regardless of whether the conservation objective had changed, and were reviewed and signed off by the relevant regional seas team Senior Adviser involved in the MCZ Project.

The outputs of the assessment work were put out to Independent Expert Review (IER) and revisions incorporated as required (see Section 1.4.1). The process that was used and a summary of the results of the IER are given in Annex 4.

3.3 Assessing risk to sites

3.3.1 Aims of this section

This section describes the method used to assess the risk to each pMCZ.

3.3.2 How the risk to each site was assessed

The relative risk to each pMCZ of damage or deterioration was assessed using the same process as for the 2012 advice and details of the method are given in Protocol G and in Section 6 the 2012 advice (JNCC and Natural England, 2012a). There are two parts to this method:

- Calculating a risk score for the pMCZ, which is based on the number of features in the site and the number with a Recover conservation objective (ie the number of features with moderate to high vulnerability to any pressures to which they are exposed);
- Identifying whether highly sensitive features are present in the site.

The site risk score for each pMCZ was calculated following the procedure laid out in Protocol G and using the equation:

$$\text{rMCZ site risk score (\%)} = \frac{\text{n (features with moderate to high vulnerability to any pressures to which they are exposed)}}{\text{n (features in rMCZ being put forward for designation)}} \text{ X 100}$$

For highly sensitive features, the list given in Section 6.2 of the July 2012 advice has been used.

In the 2012 advice, the number of features in the rMCZ being put forward for designation (ie the number of features recommended by the regional MCZ projects) was used as the total number of features for the site. For the 2013 advice, the total number of features for each site refers to the number of features that have been assessed by Natural England; this figure excludes features for which there is 'no confidence' in the data and includes new features proposed (see Section 4.2). For the Isles of Scilly subsites, Bristows to the Stones has been kept as a separate subsite, given its separate geographic location, but the other 10 subsites have been combined.

The risk assessment highlights sites at higher risk of damage or deterioration where the score is 50% or above. The risk assessment also identifies (column 7 of Table 7 in Section 4.6) the features in each site considered to be highly sensitive (see Section 6.2 of JNCC and Natural England (2012a) for the full list of these features).

3.4 Other advice requested by Defra

Following the consultation and while Natural England was developing its advice, Defra was also analysing the consultation responses. As part of this, Defra submitted a number of site-specific requests to Natural England in relation to the boundaries of the sites and/or the features recommended for protection. The queries were logged and responded to in writing, with the involvement of senior officers as appropriate, depending on the level of query.

The advice provided in response to these queries is described, on a pMCZ by pMCZ basis, in Annex 5.

We answered various queries arising about the presence and extent of features (see introduction to Annex 5).

For boundaries we advised on:

- Small amendments required to the boundary as a result of minor errors in maps in the consultation documents.
- More precise delineation of the landward boundary of coastal pMCZs as required for designation orders. For a number of sites, areas of land above mean high water (MHW) had been proposed by the regional MCZ projects for inclusion in the pMCZ in order to protect ENG features. The Marine and Coastal Access Act allows for inclusion of such areas provided that the area above MHW is linked to the main body of the pMCZ and allows for exchange of tidal water.
- The ecological implications of changes to the pMCZ boundaries proposed through the public consultation. Boundary change recommendations from consultees were only considered by Defra if they were new proposals that had not been discussed in the course of the regional MCZ project stakeholder process. Natural England was asked to review the relevant regional MCZ project documentation to confirm whether or not such discussions had taken place. If the new boundary had not been discussed in the course of the regional project work, we were then asked to review the ecological implications of such a change on the recommended features in the site. A visual assessment was made of the extent of potential loss of the feature from the site as a result of such a potential change and the impact that this would have on the viability of the feature. Viability is one of the Marine Protected Area (MPA) network design principles identified in Defra's guidance on MCZ selection (Defra, 2010): 'the MPA network should incorporate self-sustaining, geographically dispersed component sites of sufficient size to ensure species and habitat persistence through natural cycles of variation', and the ENG lays out the criteria for viability for each feature (Natural England and JNCC, 2010).

4 Results

4.1 Aims of this section

This section provides summaries of the main components of our advice:

- Assessment of confidence in the evidence for presence and extent of features in pMCZs (Section 4.2);
- Evidence used for the assessment of confidence (Section 4.3);
- List of verification surveys for which the results were not ready in time for inclusion in the analysis (Section 4.4);
- Recommended conservation objectives for features, and assessment of certainty in conservation objectives (Section 4.5);
- Assessment of risk to sites (Section 4.6).

The summaries of the results look at all pMCZs together and the information is presented in table form. For a summary of the results on a site-by-site basis, refer to Annex 5, which provides further details and collates all information relating to an individual pMCZ.

4.2 Confidence assessment of evidence for presence and extent of pMCZ features

4.2.1 Summary of results

The confidence assessment of evidence for presence and extent was undertaken for a total of 276 features for the 25 pMCZs. Of these:

- 118 features (42.8%) had a high confidence score for presence and 77 (27.9%) had a high confidence score for extent.
- 93 features (33.7%) had a moderate confidence score for presence and 129 (46.7%) had a moderate confidence score for extent.
- 57 features (20.7%) had a low confidence score for presence and 62 (22.5%) had a low confidence score for extent.
- 8 features (2.9%) had a no confidence score for both presence and extent.

Since our initial 2012 advice, further data have become available that have increased our understanding of the presence and extent of the features within the pMCZs (see Section 3.1). This has led to changes in our scientific confidence of features in these sites as follows:

- Confidence in presence has increased for 76 features (28%), decreased for 49 features (18%) and remains unchanged for 151 features (55%).
- Confidence in extent has increased for 111 features (40%); decreased for 37 features (13%) and remained unchanged for 128 features (46%).

Increases in confidence are due to new, high quality survey data, as well as new data submitted through the public consultation, the use of evidence not previously available, and due to the manner in which high quality survey point data is treated as per the amendments detailed in the Technical Protocol E supplementary paper (JNCC and Natural England, 2013a).

Decreases in confidence assessments are due to a number of factors:

- Where new data are considered to be of particularly high quality (eg from verification surveys) and cover 100% of the site, they have been used in place of previously used, lower quality data. Although this often increases confidence in feature presence and extent, it may reduce confidence

(eg if a feature is not found during a survey). Where new data do not cover 100% of the site then they are used in conjunction with older data.

- Age of data: In accordance with Protocol E, where the data used in the 2012 advice has aged beyond the 6- and 12-year cut-offs, then confidence in these data has reduced.
- Geo referenced photographic evidence of intertidal features was assigned high confidence in the 2012 advice. In this advice, we have treated photographic evidence as a data point (see Section 3.1) and so some features have reduced in confidence if the number of photographs of the feature does not meet the Protocol E requirements for high confidence.
- Duplicate data points, resulting from the same data being submitted by different consultees, were removed (eg Seasearch data submissions that were already entered onto Marine Recorder). In some cases the removal of these duplicates resulted in reduced confidence.

Decreases in confidence mean that for eight features in seven pMCZs (Table 1) we no longer have any confidence that they are present within the site. In Table 3, these features are shown as 'no confidence' and they are not shown on the feature maps.

Table 1 Features recommended for deletion due to no confidence in presence

pMCZ site	**Feature name**	**Feature type**
Aln Estuary	High energy infralittoral rock	BSH
Folkestone Pomerania	Blue mussel beds	HOCI
Skerries Bank and Surrounds	Intertidal mud	BSH
Whitsand and Looe Bay	High energy infralittoral rock	BSH
Isles of Scilly Gilstone to Gorregan	Giant goby (*Gobius cobitis*)	SOCI
Isles of Scilly Gilstone to Gorregan	Stalked jellyfish (*Haliclystus auricula*)	SOCI
Isles of Scilly Higher Town	Peat and clay exposures	HOCI
Isles of Scilly Tean	Stalked jellyfish (*Lucernariopsis campanulata*)	SOCI

For the majority of mobile species recommended for protection by the regional MCZ projects, Defra has decided to defer consideration for designation (Defra, 2012). We were however, asked to provide advice on a number of mobile species in specific pMCZs. A list of these species is found in Table 2.

Table 2 Mobile species in pMCZs

pMCZ site	Feature name
Blackwater, Crouch, Roach and Colne Estuaries	European eel
Beachy Head West	European eel
Kingmere	Black bream
Pagham Harbour	European eel
Tamar Estuary Sites	Smelt
Tamar Estuary Sites	European eel
Upper Fowey and Pont Pill	European eel
Cumbria Coast	Black guillemot

This advice includes assessments of four non-ENG marine habitats that occur in two pMCZs:

Non_ENG 20 infralittoral rock and thin sandy sediment	Beachy Head West
Non_ENG 21 infralittoral rock and thin mixed sediments	Beachy Head West and Kingmere
Non_ENG 23 infralittoral muddy sand	Beachy Head West
Non_ENG 24 infralittoral sandy mud	Beachy Head West

The ENG broad scale habitats are taken from European Nature **I**nformation System (EUNIS) classification, Level 3, as described in the ENG. EUNIS Level 4 is a finer scale classification that provides more precise definitions and that the Balanced Seas regional MCZ project considered to be a more accurate description of the seabed and the habitats in the Eastern Channel than the habitats described by EUNIS Level 3.

Non_ENG 23 infralittoral muddy sand and non_ENG 24 infralittoral sandy mud are both EUNIS level 4 habitats proposed for protection in Beachy Head West pMCZ.

Non_ENG 20 Infralittoral rock and thin sandy sediment and Non_ENG 21 infralittoral rock and thin mixed sediments are based on new EUNIS Level 4 habitats proposed by James *et al*. (2011)[12]. These additions to the EUNIS classification were proposed as they were considered by the authors to better represent thin veneers of sediment (less than one meter thick) overlying bedrock, which are prevalent throughout the Eastern Channel area but are not well described in the current EUNIS classification system. The Balanced Seas regional MCZ project proposed these features for protection in a number of their rMCZs as it considered that they reflected the habitats that needed protection more precisely (see Annex 5, site specific advice for pMCZ BS 13.2 Beachy Head West and pMCZ BS 16 Kingmere).

Both infralittoral rock and thin sandy sediment and infralittoral rock and thin mixed sediments were originally described by James *et al*. (2011) with energy level qualifiers, ie Low, Moderate or High Energy. For the purpose of the confidence assessments for our 2013 advice, the different energy levels have been grouped so that the energy level qualifier has been dropped.

As a result of the automated confidence assessment and the subsequent QA processes, Natural England advises that a number of features be added to or deleted from the list of those recommended for designation. This was for a number of reasons:

1. The SNCBs had provided advice (JNCC and Natural England, 2013c) that the designation of the HOCI Subtidal sands and gravels is not necessary in cases where the BSH Subtidal coarse sediment and/or Subtidal sand are being designated and wholly cover the proposed HOCI area. The sites where this occurs were: Aln Estuary, Stour and Orwell Estuaries, Thanet Coast, Folkestone Pomerania, and Fylde Offshore. In the case of the Aln Estuary, whilst the BSH Subtidal sand was proposed as an alternative feature to Subtidal sands and gravels, the supporting evidence was considered insufficient, and the BSH is therefore not being recommended for protection.
2. The confidence in the presence of a particular feature is based solely on the presence of the parent feature and/or more recent, high quality survey data explicitly states that the feature was not recorded. In this situation the feature is recommended for deletion with a different feature being proposed in some cases. The sites where this occurred were: Folkestone Pomerania, where the removal of Moderate energy circalittoral rock and replacement with High energy circalittoral rock is recommended due to prior evidence based on parent feature and improved evidence from recent verification surveys; Blackwater, Crouch, Roach and Colne Estuaries, where the removal of High energy intertidal rock is recommended as a result of reduced confidence in evidence based on parent feature and additional evidence failing to record the feature; and Cumbria Coast where the removal of High energy infralittoral rock and replacement with Moderate energy infralittoral rock is recommended, as a result of SNCB advisers correcting the energy classification based on species assemblages exposed during an extreme low tide in spring 2013.
3. The feature has been suggested for addition following interpretation of previously unused data. This occurs in Fylde Offshore where sufficient evidence supported high confidence in the presence and extent of Subtidal mud.
4. The feature has been reclassified based on new evidence. This occurred where Stalked jellyfish (two species) was proposed for designation in the Isles of Scilly Tean site but has been reclassified as Stalked jellyfish (*Haliclystus auricula)* and Stalked jellyfish (*Lucernariopsis campanulata*) which are now proposed for addition.

4.2.2 Introduction to Table 3

Table 3 provides the following information about the features in each site: the 2012 and 2013 assessments of confidence in the evidence for presence and extent of each feature; the evidence used to determine the 2013 assessments; and other comments relating to evidence and the features. Section 3.1.5 details the methodology used to produce the results displayed in this table. The 2013 results are in bold for clarity. The term ‘2012 advice’ refers to both Natural England’s July 2012 advice and the December 2012 amendments report.

Confidences in presence and extent for a given feature were determined following the application of Technical Protocol E. The datasets used to inform each feature are shown in the column titled ‘Evidence used’ and are listed in code format (M_XXXXX). The coded data sources align with a more complete description of the datasets, their location and licence conditions that is provided in Table 4 (Section 4.3.1).

The ‘Evidence not used’ column lists the verification datasets not used in the 2013 confidence assessments. These datasets are listed in code format (using a prefix of A) and align with a more complete description of the corresponding datasets shown in Table 5 (Section 4.4).

The final column gives recommendations as to the addition or deletion of features. The ‘comments’ column contains additional information or considerations that were taken into account when assessing the confidence levels. An empty cell in this column means that Technical Protocol E was followed without any additional or technical considerations to note.

Table 3 Confidence assessment of evidence for presence and extent of pMCZ features

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Aln Estuary	Intertidal mud	BSH	High	Moderate	Yes – proposed for designation	**High**	**Moderate**		M_00308, M_00310, M_00361		
Aln Estuary	Coastal saltmarshes and saline reedbeds	BSH	High	Moderate	Yes – proposed for designation	**High**	**High**		M_00361, M_00500		
Aln Estuary	High energy infralittoral rock	BSH	Low	Low	No – evidence considered insufficient	**No confidence**	**No confidence**		No data		Deletion
Aln Estuary	Subtidal sand	BSH	Not assessed	Not assessed	No – proposed alternative feature but evidence considered insufficient	**Low**	**Low**	Alternative feature for HOCI_21 Subtidal sands and gravels. If HOCI_21 not designated, subtidal sand is not appropriate for designation as confidence still L/L	M_00308		Addition
Aln Estuary	Estuarine rocky habitats	HOCI	High	Moderate	Yes – proposed for designation	**High**	**Moderate**		M_00310, M_00361		
Aln Estuary	Sheltered muddy gravels	HOCI	Moderate	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00310, M_00361		
Aln Estuary	Subtidal sands and gravels	HOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**	JNCC and NE generic advice recommend this FOCI is not needed. Covered by broad-scale habitat A5.2	M_00059		Deletion
Stour and Orwell Estuaries	Low energy intertidal rock	BSH	Moderate	Low	No – evidence considered insufficient	**High**	**High**		M_00308, M_00310, M_00317, M_00332		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Stour and Orwell Estuaries	Intertidal mixed sediments	BSH	Moderate	Low	No – evidence considered insufficient	**High**	**High**		M_00025, M_00308, M_00310, M_00317, M_00332		
Stour and Orwell Estuaries	Subtidal coarse sediment	BSH	Moderate	Moderate	Yes – proposed for designation	**High**	**Moderate**		M_00025, M_00085, M_00310, M_00332, M_00334, M_00336, M_00337, M_00340		
Stour and Orwell Estuaries	Blue mussel beds	HOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00308		
Stour and Orwell Estuaries	Estuarine rocky habitats	HOCI	Low	Low	No – evidence considered insufficient	**High**	**High**		M_00059, M_00308, M_00310, M_00317		
Stour and Orwell Estuaries	Honeycomb worm reefs (*Sabellaria alveolata*)	HOCI	Moderate	Low	Yes – proposed for designation	**Low**	**Low**		M_00308		
Stour and Orwell Estuaries	Native oyster beds (*Ostrea edulis*)	HOCI	High	Low	Yes – proposed for designation	**Moderate**	**Moderate**		M_00351, M_00352, M_00353, M_00354, M_00355, M_00356		
Stour and Orwell Estuaries	Peat and clay exposures	HOCI	Low	Low	No – evidence considered insufficient	**High**	**High**		M_00007, M_00308, M_00317		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Stour and Orwell Estuaries	Ross worm reefs (*Sabellaria spinulosa*)	HOCI	Low	Low	Yes – proposed for designation	**High**	**High**		M_00308, M_00317		
Stour and Orwell Estuaries	Sheltered muddy gravels	HOCI	High	Low	No – evidence considered insufficient	**High**	**High**		M_00308, M_00310, M_00317		
Stour and Orwell Estuaries	Subtidal sands and gravels	HOCI	High	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**	JNCC and NE generic advice recommend this FOCI is not needed. Covered by broad-scale habitat A5.1	M_00055, M_00059, M_00308, M_00310, M_00340		Deletion
Blackwater, Crouch, Roach and Colne Estuaries	High energy intertidal rock	BSH	Low	Low	No – evidence considered insufficient	**Low**	**Low**	Automated assessment of M/M changed to L/L. Based on parent feature, and unused evidence from M_00317 covers Blackwater rMCZ and did not record feature therefore recommend L/L confidence	M_00308, M_00310		Deletion
Blackwater, Crouch, Roach and Colne Estuaries	Intertidal mixed sediments	BSH	High	Moderate	Yes – proposed for designation	**High**	**High**		M_00025,M_00308, M_00310,M_00317		
Blackwater, Crouch, Roach and Colne Estuaries	Native oyster beds (*Ostrea edulis*)	HOCI	High	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00101,M_00273, M_00357		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Blackwater, Crouch, Roach and Colne Estuaries	Native oyster (*Ostrea edulis*)	SOCI	High	Low	No – evidence considered insufficient	**High**	**High**		M_00198,M_00273, M_00309,M_00357		
Blackwater, Crouch, Roach and Colne Estuaries	Lagoon sea slug (*Tenellia adspersa*)	SOCI	Moderate	Moderate	Yes – proposed for designation	**Low**	**Low**		M_00056,M_00309		
Blackwater, Crouch, Roach and Colne Estuaries	European eel (*Anguilla anguilla*)	SOCI	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**	Four records in each area (n=8), six of which are over six years old	M_00215		
Blackwater, Crouch, Roach and Colne Estuaries	Clacton cliffs and foreshore	Geo-logical	High	High	Yes – proposed for designation	**High**	**High**	Confident that geological feature exists within site. Cannot assess extent accurately			
Medway Estuary	Low energy intertidal rock	BSH	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00308,M_00310		
Medway Estuary	Intertidal sand and muddy sand	BSH	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00025,M_00308, M_00310		
Medway Estuary	Intertidal mixed sediments	BSH	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00025,M_00308, M_00310		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Medway Estuary	Subtidal coarse sediment	BSH	Low	Low	No – evidence considered insufficient	**High**	**Moderate**		M_00025,M_00093, M_00308,M_00338		
Medway Estuary	Subtidal sand	BSH	Moderate	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00025,M_00093, M_00308		
Medway Estuary	Subtidal mud	BSH	Moderate	Moderate	Yes – proposed for designation	**High**	**Moderate**		M_00025,M_00308, M_00310,M_00338		
Medway Estuary	Estuarine rocky habitats	HOCI	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00310		
Medway Estuary	Peat and clay exposures	HOCI	Moderate	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00361		
Medway Estuary	Sheltered muddy gravels	HOCI	High	Moderate	No – evidence considered insufficient	**Low**	**Low**		M_00310		
Medway Estuary	Tentacled lagoon-worm (*Alkmaria romijni*)	SOCI	Moderate	Moderate	Yes – proposed for designation	**Low**	**Low**		M_00026		
Thanet Coast	Moderate energy infralittoral rock	BSH	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00308,M_00310, M_00331		
Thanet Coast	Moderate energy circalittoral rock	BSH	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00308,M_00310		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Thanet Coast	Subtidal coarse sediment	BSH	High	High	Yes – proposed for designation	**High**	**Moderate**		M_00025,M_00085, M_00093,M_00310		
Thanet Coast	Subtidal sand	BSH	High	High	Yes – proposed for designation	**Moderate**	**Moderate**		M_00093,M_00308, M_00310		
Thanet Coast	Subtidal mixed sediments	BSH	High	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00093,M_00308, M_00310		
Thanet Coast	Blue mussel beds	HOCI	High	Moderate	Yes – proposed for designation	**High**	**Moderate**		M_00361		
Thanet Coast	Peat and clay exposures	HOCI	Low	Low	No – evidence considered insufficient	**High**	**High**		M_00007,M_00310, M_00330		
Thanet Coast	Ross worm reefs (*Sabellaria spinulosa*)	HOCI	High	Moderate	Yes – proposed for designation	**High**	**Moderate**		M_00013,M_00101, M_00362		
Thanet Coast	Subtidal chalk	HOCI	High	High	Yes – proposed for designation	**Moderate**	**Moderate**		M_00059,M_00310, M_00331		
Thanet Coast	Subtidal sands and gravels	HOCI	High	High	Yes – proposed for designation	**Moderate**	**Moderate**	JNCC and NE generic advice recommend this FOCI is not needed. Covered by BSH A5.1 and A5.2	M_00055,M_00059, M_00310		Deletion
Thanet Coast	Stalked jellyfish (*Haliclystus auricula*)	SOCI	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00309, M_00361		
Thanet Coast	Stalked jellyfish (*Lucernariopsis cruxmelitensis*)	SOCI	Moderate	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00309		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Folkestone Pomerania	High energy circalittoral rock	BSH	Not assessed	Not assessed	Proposed new feature	**High**	**High**	Proposed new feature identified through recent MCZ verification survey (M_00348)	M_00310,M_00320, M_00348,M_00358		Addition
Folkestone Pomerania	Moderate energy circalittoral rock	BSH	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**	M/M assessment based on parent data only. Recent Cefas verification survey (M_00348) did not report presence of feature in site. Propose replace feature with A4.1	M_00093,M_00348		Deletion
Folkestone Pomerania	Subtidal coarse sediment	BSH	Moderate	Moderate	Yes – proposed for designation	**High**	**High**		M_00093,M_00320, M_00341,M_00348, M_00358		
Folkestone Pomerania	Subtidal sand	BSH	Moderate	Moderate	Yes – proposed for designation	**High**	**High**		M_00025,M_00093, M_00308,M_00320, M_00341,M_00348, M_00358		
Folkestone Pomerania	Blue mussel beds	HOCI	Low	Low	No – evidence considered insufficient	**No confidence**	**No confidence**		No data		Deletion
Folkestone Pomerania	Fragile sponge and anthozoan communities on subtidal rocky habitats	HOCI	Moderate	Low	Yes – proposed for designation	**High**	**Moderate**		M_00310,M_00348, M_00358,M_00361		
Folkestone Pomerania	Honeycomb worm reefs (*Sabellaria alveolata*)	HOCI	Low	Low	Yes – proposed for designation	**Low**	**Low**		M_00014		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Folkestone Pomerania	Ross worm reefs (*Sabellaria spinulosa*)	HOCI	Moderate	Moderate	Yes – proposed for designation	**High**	**Moderate**		M_00310,M_00348, M_00358		
Folkestone Pomerania	Subtidal sands and gravels	HOCI	Low	Low	No – evidence considered insufficient	**High**	**High**	JNCC and NE generic advice recommend this FOCI is not needed. Covered by BSH A5.1 and A5.2	M_00055,M_00308, M_00320,M_00341, M_00348,M_00358		Deletion
Beachy Head West	Intertidal coarse sediment	BSH	Moderate	Low	No – evidence considered insufficient	**High**	**High**		M_00308,M_00318		
Beachy Head West	Subtidal sand	BSH	High	High	Yes – proposed for designation	**High**	**High**		M_00022,M_00088, M_00161,M_00308, M_00310		
Beachy Head West	Subtidal mud	BSH	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00310		
Beachy Head West	Subtidal mixed sediments	BSH	High	High	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00308,M_00310		
Beachy Head West	Blue mussel beds	HOCI	High	High	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00310, M_00363		
Beachy Head West	Littoral chalk communities	HOCI	Low	Low	Yes – proposed for designation	**Moderate**	**Moderate**		M_00059,M_00310		
Beachy Head West	Subtidal chalk	HOCI	High	High	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00059,M_00310		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Beachy Head West	Long snouted seahorse (*Hippocampus guttulatus*)	SOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00309		
Beachy Head West	Short snouted seahorse (*Hippocampus hippocampus*)	SOCI	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00009,M_00056, M_00309,M_00361		
Beachy Head West	Native oyster (*Ostrea edulis*)	SOCI	High	High	Yes – proposed for designation	**Moderate**	**Moderate**		M_00309		
Beachy Head West	European eel (*Anguilla anguilla*)	SOCI	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**	Not automatically assessed: CA reassessed using 10 Marine Recorder records – confidence increased to M/M	M_00309		
Beachy Head West	Infralittoral rock and thin sandy sediment	non-ENG	High	High	Yes – proposed for designation	**High**	**High**	Not automatically assessed: High MESH polygon data contained fully within MCZ boundary	M_00022, M_00088, M_00309, M_00161		
Beachy Head West	Infralittoral rock and thin mixed sediments	non-ENG	Low	Low	No – evidence considered insufficient	**Low**	**Low**	Not automatically assessed: Modelled data with no supporting ground truth points	M_00093		
Beachy Head West	Infralittoral muddy sand	non-ENG	High	High	Yes – proposed for designation	**High**	**High**	Not automatically assessed: High MESH polygon data supported by ground truth records	M_00022, M_00088, M_00310, M_00309, M_00161		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Beachy Head West	Infralittoral sandy mud	non-ENG	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**	High MESH polygon data supported by ground truth records – reduced confidence as evidence suggests a muddy sand environment rather than a sandy mud environment	M_00022, M_00088, M_00310, M_00161		
Kingmere	Subtidal chalk	HOCI	High	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**	Presence confidence decreases in automated assessment due to survey quality 2	M_00310		
Kingmere	Native oyster (*Ostrea edulis*)	SOCI	Low	Low	Yes – proposed for designation	**Low**	**Low**		M_00309		
Kingmere	Black seabream (*Spondyliosoma cantharus*)	non-ENG	High	Moderate	Yes – proposed for designation	**High**	**Moderate**	Not automatically assessed: High MESH polygon data contained fully within MCZ boundary from Tarmac consultation response M_00326	M_00088, M_00089, M_00326, M_00367		
Kingmere	Infralittoral rock and thin mixed sediments	non-ENG	Low	Low	Yes – proposed for designation	**High**	**Moderate**	Not automatically assessed: High MESH polygon data contained fully within MCZ boundary from Tarmac consultation response M_00326	M_00088, M_00326		
Pagham Harbour	Seagrass beds	HOCI	High	High	Yes – proposed for designation	**High**	**Moderate**		M_00058,M_00281		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Pagham Harbour	European eel (*Anguilla anguilla*)	SOCI	Moderate	Low	No – evidence considered insufficient	**Moderate**	**Low**	EA river catchment data has three records of *A. anguilla* in rivers that flow into Pagham Harbour. Assumption that freshwater eel sampled up-river of pMCZ must have all passed through pMCZ due to catadromous life cycle of this species. Automated assessment of M/M reduced to M/L due to there being only three records	M_00364		
Pagham Harbour	Defolin's lagoon snail (*Caecum armoricum*)	SOCI	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00056,M_00309		
Pagham Harbour	Lagoon sand shrimp (*Gammarus insensibilis*)	SOCI	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00024		
Hythe Bay	Subtidal mud	BSH	High	High	Yes – proposed for designation	**High**	**High**		M_00025,M_00308, M_00310,M_00319, M_00342		
Hythe Bay	Mud habitats in deep water	HOCI	High	High	Yes – proposed for designation	**Moderate**	**Moderate**	Confidence manually reduced from H/H to Moderate for presence and extent as only one sampling station borderline meets BAP definition for this HOCI ie depth and represents a poor example of this HOCI	M_00025		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Hythe Bay	Sea pen and burrowing megafauna communities	HOCI	High	High	Yes – proposed for designation	**High**	**Moderate**		M_00310,M_00025		
Poole Rocks	Moderate energy circalittoral rock	BSH	High	High	Yes – proposed for designation	**High**	**Moderate**		M_00310,M_00361	A5	
Poole Rocks	Subtidal sand	BSH	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00088,M_00310		
Poole Rocks	Subtidal mixed sediments	BSH	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00088,M_00310, M_00361	A5	
Poole Rocks	Couch's goby (*Gobius couchi*)	SOCI	Moderate	Moderate	Yes – proposed for designation	**High**	**High**		M_00274		
Poole Rocks	Native oyster (*Ostrea edulis*)	SOCI	High	High	Yes – proposed for designation	**High**	**High**		M_00309,M_00361		
South Dorset	High energy circalittoral rock	BSH	Low	Low	No – evidence considered insufficient	**Moderate**	**Low**		M_00093		
South Dorset	Moderate energy circalittoral rock	BSH	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00093,M_00310		
South Dorset	Subtidal coarse sediment	BSH	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00093,M_00310		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
South Dorset	Subtidal mixed sediments	BSH	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00093		
South Dorset	Subtidal chalk	HOCI	High	Moderate	Yes – proposed for designation	**High**	**Moderate**		M_00058,M_00310		
Chesil Beach and Stennis Ledges	High energy intertidal rock	BSH	High	High	Yes – proposed for designation	**High**	**Moderate**		M_00308,M_00310, M_00361,M_00362		
Chesil Beach and Stennis Ledges	Intertidal coarse sediment	BSH	Low	Low	No – evidence considered insufficient	**High**	**Moderate**		M_00305,M_00308, M_00361		
Chesil Beach and Stennis Ledges	High energy infralittoral rock	BSH	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00310		
Chesil Beach and Stennis Ledges	Subtidal coarse sediment	BSH	High	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00093,M_00308, M_00310,M_00361		
Chesil Beach and Stennis Ledges	Subtidal sand	BSH	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00093		
Chesil Beach and Stennis Ledges	Native oyster (*Ostrea edulis*)	SOCI	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00309		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Chesil Beach and Stennis Ledges	Pink sea-fan (*Eunicella verrucosa*)	SOCI	Moderate	Moderate	Yes – proposed for designation	**High**	**High**		M_00309,M_00361		
Torbay	Moderate energy intertidal rock	BSH	High	Low	No – evidence considered insufficient	**High**	**High**		M_00308,M_00310, M_00315		
Torbay	Low energy intertidal rock	BSH	High	Low	No – evidence considered insufficient	**High**	**High**		M_00308,M_00310, M_00315, M_00362		
Torbay	Intertidal coarse sediment	BSH	High	Low	No – evidence considered insufficient	**High**	**High**		M_00305,M_00308, M_00316,M_00362		
Torbay	Intertidal sand and muddy sand	BSH	High	Low	No – evidence considered insufficient	**High**	**High**		M_00305, M_00308,M_00310, M_00316,M_00361		
Torbay	Intertidal mud	BSH	High	High	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00305, M_00308		
Torbay	Intertidal mixed sediments	BSH	High	High	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00308		
Torbay	Subtidal mud	BSH	High	Moderate	Yes – proposed for designation	**High**	**Moderate**		M_00093,M_00198, M_00308,M_00310		
Torbay	Honeycomb worm reefs (*Sabellaria alveolata*)	HOCI	High	Low	No – evidence considered insufficient	**Low**	**Low**		M_00310		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Torbay	Intertidal underboulder communities	HOCI	Moderate	Moderate	Yes – proposed for designation	**High**	**High**		M_00310, M_00315		
Torbay	Seagrass beds	HOCI	High	Low	Yes – proposed for designation	**Moderate**	**Moderate**		M_00059,M_00308, M_00310		
Torbay	Long snouted seahorse (*Hippocampus guttulatus*)	SOCI	Low	Low	Yes – proposed for designation	**Low**	**Low**		M_00056		
Torbay	Native oyster (*Ostrea edulis*)	SOCI	Moderate	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00309		
Torbay	Peacock's tail (*Padina pavonica*)	SOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00056,M_00309		
Skerries Bank and Surrounds	High energy intertidal rock	BSH	High	Low	No – evidence considered insufficient	**High**	**High**		M_00308,M_00310, M_00314		
Skerries Bank and Surrounds	Moderate energy intertidal rock	BSH	High	Low	No – evidence considered insufficient	**High**	**High**		M_00308,M_00310, M_00314		
Skerries Bank and Surrounds	Intertidal coarse sediment	BSH	Low	Low	No – evidence considered insufficient	**High**	**High**		M_00305,M_00308, M_00314		
Skerries Bank and Surrounds	Intertidal sand and muddy sand	BSH	High	Low	No – evidence considered insufficient	**High**	**High**		M_00308,M_00314		
Skerries Bank and Surrounds	Intertidal mud	BSH	No con-fidence	No con-fidence	No – evidence considered insufficient	**No confidence**	**No confidence**	New survey data (M_00314) confirms absence of mud feature. Assessment of M/M based on parent feature only	M_00308		Deletion

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Skerries Bank and Surrounds	Intertidal mixed sediments	BSH	Moderate	Low	No – evidence considered insufficient	**High**	**High**		M_00308,M_00314		
Skerries Bank and Surrounds	High energy infralittoral rock	BSH	High	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00093,M_00308, M_00310		
Skerries Bank and Surrounds	Moderate energy infralittoral rock	BSH	Low	Low	No – evidence considered insufficient	**High**	**Moderate**		M_00093,M_00308, M_00310,M_00314		
Skerries Bank and Surrounds	Moderate energy circalittoral rock	BSH	High	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00093,M_00310		
Skerries Bank and Surrounds	Subtidal coarse sediment	BSH	Low	Low	No – evidence considered insufficient	**High**	**Moderate**		M_00093,M_00308, M_00310,M_00347		
Skerries Bank and Surrounds	Subtidal sand	BSH	Moderate	Moderate	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00093,M_00308, M_00310,M_00347		
Skerries Bank and Surrounds	Subtidal mud	BSH	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00308,M_00310		
Skerries Bank and Surrounds	Intertidal under boulder communities	HOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**	New high quality survey data (M_00314) confirms feature is not present in site. EA polygon data for this feature in this site is questioned as, whilst boulder exists, its communities have not been found by recent survey. H/H changed to L/L	M_00305,M_00310, M_00314		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Skerries Bank and Surrounds	Short snouted seahorse (*Hippocampus hippocampus*)	SOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00056		
Skerries Bank and Surrounds	Spiny lobster (*Palinurus elephas*)	SOCI	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Low**		M_00309		
Skerries Bank and Surrounds	Pink sea-fan (*Eunicella verrucosa*)	SOCI	High	High	Yes – proposed for designation	**High**	**High**		M_00056,M_00309		
Tamar Estuary Sites	Intertidal coarse sediment	BSH	High	High	No – evidence considered insufficient	**High**	**High**		M_00305,M_00324		
Tamar Estuary Sites	Intertidal biogenic reefs	BSH	High	High	No – evidence considered insufficient	**High**	**High**		M_00308,M_00310, M_00324		
Tamar Estuary Sites	Blue mussel beds	HOCI	High	Low	No – evidence considered insufficient	**High**	**High**		M_00308,M_00310, M_00323,M_00324		
Tamar Estuary Sites	Native oyster (*Ostrea edulis*)	SOCI	Low	Low	Yes – proposed for designation	**Low**	**Low**		M_00045,M_00309		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Tamar Estuary Sites	European eel (*Anguilla anguilla*)	SOCI	High	High	Yes – proposed for designation	**High**	**High**	EA sample data taken from the freshwater catchment above the Plymouth Sound TraC water body (1982–2011; Tavy, Tamar, Lynher only). Assumption that freshwater eel sampled up-river of pMCZ must have all passed through pMCZ due to catadromous life cycle of this species	M_00364		
Tamar Estuary Sites	Smelt (*Osmerus eperlanus*)	SOCI	High	Moderate	No – evidence considered insufficient	**Moderate**	**Moderate**	Three specialist records from 2003 recorded in otter trawl off Warren Point (Tamar) in pMCZ within Tamar Estuary TraC water body. FS Final Recommendations report summarises personal communications with professionals from Bangor University and EA, and papers in the Journal of the Marine Biological Association, which identify the area below Gunnislake as being a spawning ground for this species (unique in the SW)	M_00364		
Whitsand and Looe Bay	High energy intertidal rock	BSH	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00308,M_00310		
Whitsand and Looe Bay	Moderate energy intertidal rock	BSH	High	Low	No – evidence considered insufficient	**High**	**Moderate**		M_00308,M_00310, M_00361		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Whitsand and Looe Bay	Low energy intertidal rock	BSH	High	Low	No – evidence considered insufficient	**High**	**Moderate**		M_00308,M_00310, M_00361		
Whitsand and Looe Bay	Intertidal coarse sediment	BSH	High	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00305,M_00308, M_00361		
Whitsand and Looe Bay	Intertidal sand and muddy sand	BSH	High	Low	No – evidence considered insufficient	**High**	**Moderate**		M_00308,M_00361		
Whitsand and Looe Bay	Intertidal mixed sediments	BSH	High	Low	No – evidence considered insufficient	**Low**	**Low**	Automated assessment of M/M changed to L/L based on records of only parent feature and marine advisers have searched for the feature in the site and not found it	M_00308		
Whitsand and Looe Bay	High energy infralittoral rock	BSH	Low	Low	No – evidence considered insufficient	**No confidence**	**No confidence**		No data		Deletion
Whitsand and Looe Bay	Moderate energy circalittoral rock	BSH	Low	0	No – evidence considered insufficient	**Low**	**Low**		M_00310		
Whitsand and Looe Bay	Subtidal coarse sediment	BSH	Moderate	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00093,M_00101, M_00310		
Whitsand and Looe Bay	Subtidal sand	BSH	Low	Low	No – evidence considered insufficient	**High**	**Moderate**		M_00093,M_00101, M_00105,M_00310		
Whitsand and Looe Bay	Seagrass beds	HOCI	High	High	No – evidence considered insufficient	**High**	**High**		M_00059,M_00103		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Whitsand and Looe Bay	Giant goby (*Gobius cobitis*)	SOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00045,M_00309		
Whitsand and Looe Bay	Stalked jellyfish (*Haliclystus auricula*)	SOCI	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00045,M_00309		
Whitsand and Looe Bay	Long snouted seahorse (*Hippocampus guttulatus*)	SOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00045		
Whitsand and Looe Bay	Sea-fan anemone (*Amphianthus dohrnii*)	SOCI	High	High	Yes – proposed for designation	**Moderate**	**Moderate**		M_00056,M_00309		
Whitsand and Looe Bay	Ocean quahog (*Arctica islandica*)	SOCI	Moderate	Moderate	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00056,M_00309		
Whitsand and Looe Bay	Pink sea-fan (*Eunicella verrucosa*)	SOCI	High	High	Yes – proposed for designation	**High**	**High**		M_00045,M_00056, M_00309		
Upper Fowey and Pont Pill	Low energy intertidal rock	BSH	Moderate	Moderate	Yes – proposed for designation	**High**	**Moderate**		M_00308,M_00310		
Upper Fowey and Pont Pill	Intertidal coarse sediment	BSH	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00305,M_00345		
Upper Fowey and Pont Pill	Intertidal sand and muddy sand	BSH	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00308,M_00310, M_00345		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Upper Fowey and Pont Pill	Intertidal mud	BSH	High	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00308,M_00310, M_00345		
Upper Fowey and Pont Pill	Coastal saltmarshes and saline reedbeds	BSH	Low	Low	No – evidence considered insufficient	**High**	**High**	Automated assessment of M/M changed to H/H due to CCO georeferenced photographic evidence of feature in site	M_00305		
Upper Fowey and Pont Pill	Estuarine rocky habitats	HOCI	High	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00308,M_00310		
Upper Fowey and Pont Pill	Sheltered muddy gravels	HOCI	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00059,M_00305, M_00308,M_00310		
Upper Fowey and Pont Pill	European eel (*Anguilla anguilla*)	SOCI	High	High	Yes – proposed for designation	**High**	**High**	Environment Agency sample data taken from the freshwater catchment above the Fowey TraC water body (1977–2011). Assumption that freshwater eel sampled up-river of pMCZ must have all passed through pMCZ due to catadromous life cycle of this species	M_00364, M_00045, M_00309		
The Manacles	Moderate energy intertidal rock	BSH	Moderate	Moderate	Yes – proposed for designation	**High**	**Moderate**		M_00308,M_00361		
The Manacles	Intertidal coarse sediment	BSH	High	High	Yes – proposed for designation	**Moderate**	**Moderate**		M_00305,M_00308, M_00361		
The Manacles	Intertidal sand and muddy sand	BSH	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00308		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
The Manacles	Intertidal mud	BSH	No con-fidence	No con-fidence	No – evidence considered insufficient	**Low**	**Low**		M_00308		
The Manacles	Intertidal mixed sediments	BSH	Moderate	Low	No – evidence considered insufficient	**Low**	**Low**		M_00308		
The Manacles	Moderate energy infralittoral rock	BSH	Moderate	Moderate	Yes – proposed for designation	**High**	**Moderate**		M_00308,M_00310, M_00350,M_00360		
The Manacles	Moderate energy circalittoral rock	BSH	Moderate	Moderate	Yes – proposed for designation	**High**	**Moderate**		M_00308,M_00350, M_00360		
The Manacles	Subtidal coarse sediment	BSH	High	High	Yes – proposed for designation	**High**	**High**		M_00308,M_00310, M_00344,M_00350, M_00360		
The Manacles	Subtidal sand	BSH	Moderate	Moderate	Yes – proposed for designation	**High**	**Moderate**		M_00093,M_00308, M_00310,M_00344, M_00350,M_00360		
The Manacles	Subtidal mixed sediments	BSH	Moderate	Moderate	Yes – proposed for designation	**High**	**Moderate**		M_00308,M_00344, M_00350,M_00360		
The Manacles	Subtidal macrophyte-dominated sediment	BSH	High	High	Yes – proposed for designation	**High**	**Moderate**		M_00308,M_00350, M_00360		
The Manacles	Maerl beds	HOCI	Low	Low	Yes – proposed for designation	**High**	**Moderate**		M_00059,M_00350, M_00360		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
The Manacles	Stalked jellyfish (*Haliclystus auricula*)	SOCI	Low	Low	Yes – proposed for designation	**Low**	**Low**		M_00045		
The Manacles	Sunset cup coral (*Leptopsammia pruvoti*)	SOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00045		
The Manacles	Sea-fan anemone (*Amphianthus dohrnii*)	SOCI	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00045,M_00309		
The Manacles	Spiny lobster (*Palinurus elephas*)	SOCI	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00309		
The Manacles	Pink sea-fan (*Eunicella verrucosa*)	SOCI	High	High	Yes – proposed for designation	**High**	**High**		M_00045,M_00309, M_00350,M_00360		
Isles of Scilly: Bishop to Crim	Spiny lobster (*Palinurus elephas*)	SOCI	Low	Low	Yes – proposed for designation	**Moderate**	**Moderate**		M_00361		
Isles of Scilly: Bristows to the Stones	High energy infralittoral rock	BSH	High	Low	No – evidence considered insufficient	**Low**	**Low**		M_00283,M_00361		
Isles of Scilly: Bristows to the Stones	Moderate energy infralittoral rock	BSH	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00093		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Isles of Scilly: Bristows to the Stones	High energy circalittoral rock	BSH	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00283,M_00361		
Isles of Scilly: Bristows to the Stones	Moderate energy circalittoral rock	BSH	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00093,M_00361		
Isles of Scilly: Bristows to the Stones	Subtidal coarse sediment	BSH	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00093		
Isles of Scilly: Bristows to the Stones	Subtidal mixed sediments	BSH	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00093		
Isles of Scilly: Bristows to the Stones	Fragile sponge and anthozoan communities on subtidal rocky habitats	HOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00037,M_00361		
Isles of Scilly: Bristows to the Stones	Spiny lobster (*Palinurus elephas*)	SOCI	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00361		
Isles of Scilly: Bristows to the Stones	Pink sea-fan (*Eunicella verrucosa*)	SOCI	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00361		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Isles of Scilly: Gilstone to Gorregan	High energy intertidal rock	BSH	Moderate	Moderate	Yes – proposed for designation	**High**	**Moderate**	Automated assessment of L/L changed to H/M. Georeferenced CCO image confirming parent feature. High energy due to location. Extent of high energy feature moderate due to lack of feature habitat map	M_00361		
Isles of Scilly: Gilstone to Gorregan	Moderate energy intertidal rock	BSH	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**	Automated assessment of L/L changed to M/M. Georeferenced CCO image confirming parent feature	M_00361		
Isles of Scilly: Gilstone to Gorregan	Giant goby (*Gobius cobitis*)	SOCI	Low	Low	No – evidence considered insufficient	**No confidence**	**No confidence**		No data		Deletion
Isles of Scilly: Gilstone to Gorregan	Stalked jellyfish (*Haliclystus auricula*)	SOCI	Low	Low	No – evidence considered insufficient	**No confidence**	**No confidence**		No data		Deletion
Isles of Scilly: Gilstone to Gorregan	Spiny lobster (*Palinurus elephas*)	SOCI	Low	Low	Yes – proposed for designation	**Moderate**	**Moderate**		M_00361		
Isles of Scilly: Hanjague to Deep Ledge	High energy intertidal rock	BSH	Moderate	Low	No – evidence considered insufficient	**High**	**Moderate**	Automated assessment of L/L changed to H/M. Georeferenced CCO image confirming parent feature. High energy due to location. Extent of high energy feature moderate due to lack of feature habitat map	M_00308,M_00310, M_00361		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Isles of Scilly: Hanjague to Deep Ledge	Moderate energy intertidal rock	BSH	Moderate	Low	No – evidence considered insufficient	**Moderate**	**Moderate**	Automated assessment of L/L changed to M/M. Georeferenced CCO image confirming parent feature. Extent of moderate energy feature moderate due to lack of feature habitat map	M_00283,M_00310, M_00361		
Isles of Scilly: Hanjague to Deep Ledge	Intertidal coarse sediment	BSH	Moderate	Low	No – evidence considered insufficient	**Moderate**	**Moderate**	Automated assessment of L/L changed to M/M. Georeferenced CCO image confirming parent feature. Extent of moderate energy feature moderate due to lack of feature habitat map	M_00305,M_00308, M_00361		
Isles of Scilly: Hanjague to Deep Ledge	Intertidal under boulder communities	HOCI	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**	NE site lead questioned EA polygon data for this feature in this site. Communities associated with the boulders have not been confirmed. Automated assessment of H/H manually changed to M/M	M_00305		
Isles of Scilly: Hanjague to Deep Ledge	Spiny lobster (*Palinurus elephas*)	SOCI	Moderate	Moderate	Yes – proposed for designation	**High**	**High**		M_00309,M_00361		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Isles of Scilly: Higher Town	Moderate energy intertidal rock	BSH	High	Low	No – evidence considered insufficient	**Moderate**	**Moderate**	Automated assessment of L/L changed to M/M. Georeferenced CCO image confirming parent feature. Extent of moderate energy feature moderate due to lack of feature habitat map	M_00310, M_00361		
Isles of Scilly: Higher Town	Low energy intertidal rock	BSH	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00283,M_00308, M_00310		
Isles of Scilly: Higher Town	Intertidal coarse sediment	BSH	Moderate	Low	No – evidence considered insufficient	**Moderate**	**Moderate**	Automated assessment of L/L changed to M/M. Intertidal presence and extent confidence increased to M/M respectively for this feature, supported by CCO aerial photos	M_00305,M_00308		
Isles of Scilly: Higher Town	Intertidal sand and muddy sand	BSH	Moderate	Low	No – evidence considered insufficient	**Moderate**	**Moderate**	Automated assessment of L/L changed to M/M. Intertidal presence and extent confidence increased to M/M respectively for this feature, supported by CCO aerial photos	M_00308, M_00305		
Isles of Scilly: Higher Town	Intertidal under boulder communities	HOCI	High	High	Yes – proposed for designation	**High**	**High**		M_00305,M_00310		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Isles of Scilly: Higher Town	Peat and clay exposures	HOCI	High	Moderate	Yes – proposed for designation	**No confidence**	**No confidence**		No data		Deletion
Isles of Scilly: Higher Town	Stalked jellyfish (*Haliclystus auricula*)	SOCI	Moderate	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00045,M_00228, M_00309		
Isles of Scilly: Higher Town	Stalked jellyfish (*Lucernariopsis campanulata*)	SOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00045,M_00056, M_00309		
Isles of Scilly: Lower Ridge to Innisvouls	Moderate energy intertidal rock	BSH	Moderate	Low	No – evidence considered insufficient	**Moderate**	**Moderate**	Automated assessment of L/L changed to M/M. Georeferenced CCO image confirming parent feature	M_00310,M_00361		
Isles of Scilly: Lower Ridge to Innisvouls	Spiny lobster (*Palinurus elephas*)	SOCI	Low	Low	Yes – proposed for designation	**High**	**High**		M_00228,M_00309, M_00361		
Isles of Scilly: Men a Vaur to White Island	High energy intertidal rock	BSH	High	High	Yes – proposed for designation	**High**	**High**		M_00308,M_00310, M_00328		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Isles of Scilly: Men a Vaur to White Island	Moderate energy intertidal rock	BSH	High	High	Yes – proposed for designation	**High**	**High**		M_00310,M_00328		
Isles of Scilly: Men a Vaur to White Island	Intertidal coarse sediment	BSH	Moderate	Moderate	Yes – proposed for designation	**High**	**High**		M_00305,M_00308, M_00328		
Isles of Scilly: Men a Vaur to White Island	Intertidal sand and muddy sand	BSH	High	High	Yes – proposed for designation	**High**	**High**		M_00308,M_00328		
Isles of Scilly: Men a Vaur to White Island	Intertidal under boulder communities	HOCI	High	High	Yes – proposed for designation	**High**	**High**		M_00305,M_00310, M_00328		
Isles of Scilly: Men a Vaur to White Island	Stalked jellyfish (*Haliclystus auricula*)	SOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00045		
Isles of Scilly: Men a Vaur to White Island	Stalked jellyfish (*Lucernariopsis campanulata*)	SOCI	Low	Low	No – evidence considered insufficient	**High**	**High**		M_00045,M_00056, M_00228		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Isles of Scilly: Men a Vaur to White Island	Spiny lobster (*Palinurus elephas*)	SOCI	Low	Low	Yes – proposed for designation	**Moderate**	**Moderate**		M_00045,M_00361		
Isles of Scilly: Peninnis to Dry Ledge	Moderate energy intertidal rock	BSH	High	Moderate	Yes – proposed for designation	**High**	**High**		M_00308,M_00310, M_00328		
Isles of Scilly: Peninnis to Dry Ledge	Low energy intertidal rock	BSH	High	High	Yes – proposed for designation	**High**	**High**		M_00310,M_00328		
Isles of Scilly: Peninnis to Dry Ledge	Intertidal coarse sediment	BSH	High	Moderate	Yes – proposed for designation	**High**	**High**		M_00305,M_00308, M_00328		
Isles of Scilly: Peninnis to Dry Ledge	Intertidal sand and muddy sand	BSH	High	High	Yes – proposed for designation	**High**	**High**		M_00308,M_00328		
Isles of Scilly: Peninnis to Dry Ledge	Intertidal mixed sediments	BSH	High	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**	Automated assessment of L/L changed to M/M. Georeferenced CCO image confirming parent feature	M_00308, M_00361		
Isles of Scilly: Peninnis to Dry Ledge	Intertidal under boulder communities	HOCI	High	High	Yes – proposed for designation	**High**	**High**		M_00047,M_00305, M_00328		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Isles of Scilly: Peninnis to Dry Ledge	Giant goby (*Gobius cobitis*)	SOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00045,M_00309		
Isles of Scilly: Peninnis to Dry Ledge	Stalked jellyfish (*Haliclystus auricula*)	SOCI	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00045,M_00228, M_00309		
Isles of Scilly: Peninnis to Dry Ledge	Stalked jellyfish (*Lucernariopsis campanulata*)	SOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00045,M_00056		
Isles of Scilly: Peninnis to Dry Ledge	Spiny lobster (*Palinurus elephas*)	SOCI	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00045,M_00309, M_00361		
Isles of Scilly: Peninnis to Dry Ledge	Ocean quahog (*Arctica islandica*)	SOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00045,M_00309		
Isles of Scilly: Plympton to Spanish Ledge	High energy intertidal rock	BSH	High	High	Yes – proposed for designation	**High**	**High**		M_00308,M_00310, M_00328		
Isles of Scilly: Plympton to Spanish Ledge	Moderate energy intertidal rock	BSH	High	High	Yes – proposed for designation	**High**	**High**		M_00308,M_00310, M_00328		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Isles of Scilly: Plympton to Spanish Ledge	Intertidal sand and muddy sand	BSH	High	High	Yes – proposed for designation	**High**	**High**		M_00308,M_00328		
Isles of Scilly: Plympton to Spanish Ledge	Intertidal under boulder communities	HOCI	High	High	Yes – proposed for designation	**High**	**High**		M_00047,M_00305, M_00328		
Isles of Scilly: Plympton to Spanish Ledge	Spiny lobster (*Palinurus elephas*)	SOCI	Moderate	Moderate	Yes – proposed for designation	**High**	**High**		M_00228,M_00309, M_00361		
Isles of Scilly: Smith Sound Tide Swept Channel	High energy intertidal rock	BSH	High	Moderate	Yes – proposed for designation	**High**	**High**		M_00308,M_00328		
Isles of Scilly: Smith Sound Tide Swept Channel	Moderate energy intertidal rock	BSH	High	Moderate	Yes – proposed for designation	**High**	**High**		M_00328		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Isles of Scilly: Smith Sound Tide Swept Channel	Giant goby (*Gobius cobitis*)	SOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00309		
Isles of Scilly: Smith Sound Tide Swept Channel	Stalked jellyfish (*Lucernariopsis cruxmelitensis*)	SOCI	Moderate	Moderate	Yes – proposed for designation	**Low**	**Low**		M_00309		
Isles of Scilly: Smith Sound Tide Swept Channel	Spiny lobster (*Palinurus elephas*)	SOCI	Low	Low	Yes – proposed for designation	**Moderate**	**Moderate**		M_00361		
Isles of Scilly: Smith Sound Tide Swept Channel	Burgundy maerl paint weed (*Cruoria cruoriaeformis*)	SOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00045,M_00309		
Isles of Scilly: Tean	High energy intertidal rock	BSH	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Low**		M_00308,M_00310		
Isles of Scilly: Tean	Moderate energy intertidal rock	BSH	High	High	Yes – proposed for designation	**Moderate**	**Moderate**	Automated assessment of L/L changed to M/M. Georeferenced CCO image confirming parent feature	M_00361		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Isles of Scilly: Tean	Intertidal coarse sediment	BSH	High	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**	Automated assessment of L/L changed to M/M. Georeferenced CCO image confirming parent feature	M_00305,M_00308, M_00361		
Isles of Scilly: Tean	Intertidal sand and muddy sand	BSH	Moderate	Low	No – evidence considered insufficient	**Moderate**	**Moderate**	Automated assessment of L/L changed to M/M. Georeferenced CCO image confirming parent feature	M_00308,M_00310, M_00361		
Isles of Scilly: Tean	Intertidal under boulder communities	HOCI	High	High	Yes – proposed for designation	**Moderate**	**Moderate**	SNCB site lead questioned EA polygon data for this feature in this site. Communities associated with the boulders have not been confirmed. Automated assessment of H/H manually changed to M/M	M_00305		
Isles of Scilly: Tean	Stalked jellyfish (*Haliclystus auricula*)	SOCI	Not assessed	Not assessed	No – proposed alternative feature. Low confidence but highly sensitive feature	**Low**	**Low**	Alternative feature for non-ENG_25 Stalked jellyfish (two species) as species have been identified. One record	M_00309		Addition
Isles of Scilly: Tean	Stalked jellyfish (*Lucernariopsis campanulata*)	SOCI	Not assessed	Not assessed	No – proposed alternative feature. Highly sensitive feature – no data	**No confidence**	**No confidence**	Alternative feature for non-ENG_25 Stalked Jellyfish (two species) as species have been identified. No records	No data		Deletion

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Isles of Scilly: Tean	Stalked jellyfish (two species)	non-ENG	Low	Low	No – evidence considered insufficient	**Low**	**Low**	At the time of recommendations, Finding Sanctuary did not differentiate between species of jellyfish. These have subsequently been identified: Change to SOCI_14 and SOCI_20. No records for SOCI_20, one record for SOCI-_14	No data		Deletion
Padstow Bay and Surrounds	High energy intertidal rock	BSH	High	Moderate	Yes – proposed for designation	**High**	**High**		M_00308,M_00313, M_00362		
Padstow Bay and Surrounds	Moderate energy intertidal rock	BSH	High	Low	No – evidence considered insufficient	**High**	**High**		M_00308,M_00313		
Padstow Bay and Surrounds	Intertidal coarse sediment	BSH	High	Low	No – evidence considered insufficient	**High**	**High**		M_00305,M_00308, M_00313		
Padstow Bay and Surrounds	Intertidal sand and muddy sand	BSH	High	Low	No – evidence considered insufficient	**High**	**High**		M_00308,M_00313		
Padstow Bay and Surrounds	Intertidal mud	BSH	Low	Low	No – evidence considered insufficient	**Low**	**Low**	Automated assessment of M/M changed to L/L due to feature confidence being determined on parent habitat only and supporting NE site knowledge	M_00308		
Padstow Bay and Surrounds	High energy infralittoral rock	BSH	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00093,M_00308, M_00310,M_00313		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Padstow Bay and Surrounds	Moderate energy infralittoral rock	BSH	Low	Low	No – evidence considered insufficient	**High**	**Moderate**		M_00093,M_00310, M_00313	A7	
Padstow Bay and Surrounds	High energy circalittoral rock	BSH	Low	Low	No – evidence considered insufficient	**Moderate**	**Moderate**		M_00093,M_00310	A7	
Padstow Bay and Surrounds	Moderate energy circalittoral rock	BSH	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00093,M_00310	A7***	
Padstow Bay and Surrounds	Subtidal coarse sediment	BSH	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00093,M_00310	A7***	
Padstow Bay and Surrounds	Stalked jellyfish (Haliclystus auricula)	SOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00045		
Padstow Bay and Surrounds	Stalked jellyfish (*Lucernariopsis cruxmelitensis*)	SOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00045,M_00056		
Padstow Bay and Surrounds	Spiny lobster (*Palinurus elephas*)	SOCI	Low	Low	Yes – proposed for designation	**Low**	**Low**		M_00309, M_00361		
Padstow Bay and Surrounds	Ocean quahog (*Arctica islandica*)	SOCI	Low	Low	No – evidence considered insufficient	**Low**	**Low**		M_00045		
Padstow Bay and Surrounds	Pink sea-fan (*Eunicella verrucosa*)	SOCI	Moderate	Moderate	Yes – proposed for designation	**Moderate**	**Moderate**		M_00045,M_00309		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Lundy	Mud habitats in deep water	HOCI	Moderate	Moderate	Yes – proposed for designation	**Low**	**Low**		M_00310		
Lundy	Spiny lobster (*Palinurus elephas*)	SOCI	High	High	Yes – proposed for designation	**High**	**High**		M_00309,M_00056		
Fylde Offshore	Subtidal sand	BSH	High	High	Yes – proposed for designation	**High**	**Moderate**		M_00093,M_00308, M_00346		
Fylde Offshore	Subtidal mud	BSH	Not assessed	Not assessed	Proposed new feature	**High**	**High**		M_00093,M_00346		Addition
Fylde Offshore	Subtidal sands and gravels	HOCI	High	High	Yes – proposed for designation	**High**	**Moderate**	JNCC and NE generic advice recommend this FOCI is not needed. Covered by broad-scale habitat A5.2	M_00055,M_00059, M_00308,M_00346		Deletion
Cumbria Coast	High energy intertidal rock	BSH	High	Low	No – evidence considered insufficient	**High**	**High**		M_00308,M_00310, M_00312		
Cumbria Coast	Intertidal sand and muddy sand	BSH	High	Low	No – evidence considered insufficient	**High**	**High**		M_00308,M_00310, M_00312		
Cumbria Coast	Intertidal biogenic reefs	BSH	High	High	No – evidence considered insufficient	**High**	**High**		M_00308,M_00310, M_00312		
Cumbria Coast	High energy infralittoral rock	BSH	High	Low	No – evidence considered insufficient	**Low**	**Low**	Automated assessment of M/L changed to L/L based on feature being assigned confidence on parent feature only and previously being incorrectly identified as high energy and not moderate energy	M_00310		Deletion

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Cumbria Coast	Moderate energy infralittoral rock	BSH	Not assessed	Not assessed	Proposed new feature	**High**	**Moderate**	Based on regional seas team expertise, recommended feature is moderate energy (A3.2) rather than high energy (A3.1). Extreme low tide exposed the infralittoral during spring 2013 and regional NE advisers were able to confirm the energy, based on species assemblages, as moderate and not high as previously thought	M_00310,M_00312		Addition
Cumbria Coast	Blue mussel beds	HOCI	High	Low	No – evidence considered insufficient	**Low**	**Low**		M_00310		
Cumbria Coast	Honeycomb worm reefs (*Sabellaria alveolata*)	HOCI	High	Moderate	Yes – proposed for designation	**High**	**High**		M_00058,M_00059, M_00229,M_00308, M_00310,M_00312		
Cumbria Coast	Intertidal under boulder communities	HOCI	High	Low	No – evidence considered insufficient	**High**	**High**		M_00310,M_00312, M_00361		
Cumbria Coast	Peat and clay exposures	HOCI	Moderate	Low	No – evidence considered insufficient	**High**	**High**		M_00007,M_00312, M_00361		
Cumbria Coast	Black guillemot (*Cepphus grille*)	non-ENG	High	Low	No – evidence considered insufficient	**High**	**Low**	This is the only breeding site for Black guillemot in England. RSPB 2010 figures at St Bee's Head: black guillemot (n=6); 2011 and 2012 figures n = 10	M_00365, M_00366		

Site name	Feature name	Feature type	2012 Advice presence	2012 Advice extent	Feature originally proposed for designation in 2013?	2013 Advice presence	2013 Advice extent	2013 Comments	Evidence used	Evidence not used (*** highlights features that verification work is likely to improve confidence for)	Natural England suggested feature Addition/ Deletion?
Hilbre Island Group	Blue mussel beds	HOCI	High	Moderate	Yes – proposed for designation	**High**	**Moderate**		M_00059,M_00310, M_00327,M_00361		
Hilbre Island Group	Peat and clay exposures	HOCI	Low	Low	Yes – proposed for designation	**Low**	**Low**		M_00059		

4.3 Evidence sources used in the preparation of this advice

Table 4 gives information on each of the datasets used during the 2013 confidence assessment. These datasets correspond to those that satisfied the screening criteria used during the Natural England Evidence Panel process (see Section 3.1.4). The codes shown in the ‘Evidence used’ column of Table 3 with a prefix of M_XXX correspond to the datasets shown here. Table 4 gives the data source, whether it contains new data for the 2013 confidence assessment, its location, and licence and distribution details. Section 3.1.2 describes in greater detail the sources of these datasets and the selection process for their inclusion.

Table 4 Evidence sources used

Dataset UID	Dataset (Identifying Name or Code)	New data for 2013 assessments	Held digitally on GIS database?	Publicly available?	Location	Licence condition
M_00004	1975–2010 Kent Wildlife Trust, Native Oyster (*Ostrea edulis*)	Yes	Yes	No	Bryony Chapman, Marine Officer, Kent Wildlife Trust, Tyland Barn, Sandling, Maidstone, Kent ME14 3BD Tel: 01622 662012 Bryony.Chapman@kentwildlife.org.uk	To access this data, please contact the data owner
M_00007	English Heritage Coastal Peat	Yes	Yes	No	English Heritage/Natural England National GI Chris Pater, Marine Planner, English Heritage chris.pater@english-heritage.org.uk	
M_00009	Seahorse Trust Data, Kent Wildlife Trust	No	Yes	Yes	Natural England National GI/The Seahorse Trust (registered charity no. 1086027), 36 Greatwood Terrace, Topsham, Devon EX3 0EB info@theseahorsetrust.org	n/a
M_00013	Survey Data – Balanced Seas Regional MCZ Project	No	Yes	Yes	Natural England: http://publications.naturalengland.org.uk/publication/2080291	n/a
M_00014	Aggregate Survey Data around Hythe – Balanced Seas Regional MCZ Project	No	Yes	Yes	Natural England: http://publications.naturalengland.org.uk/publication/2080291	n/a
M_00022	Sussex IFCA – Broad-scale Habitat Survey data	Yes	Yes	No	Sussex Inshore Fisheries and Conservation Authority, 12A Riverside Business Centre, Brighton Road, Shoreham-by-Sea, West Sussex BN43 6RE admin@sussex-ifca.gov.uk Tel: 01273 454407 http://www.sussex-ifca.gov.uk/index.php?option=com_contact&view=contact&id=1&Itemid=14	On request from Sussex IFCA: http://www.sussex-ifca.gov.uk/index.php?option=com_content&view=article&id=39&Itemid=77
M_00024	Species data for *Gammarus insensibilis* – Balanced Seas Regional MCZ Project	Yes	Yes	Yes	Natural England: http://publications.naturalengland.org.uk/publication/2080291	n/a
M_00025	1983–2009 Environment Agency, Biotope data	Yes	Yes	Yes	Environment Agency http://www.geostore.com/environment-agency	EA Standard Notice

Dataset UID	Dataset (Identifying Name or Code)	New data for 2013 assessments	Held digitally on GIS database?	Publicly available?	Location	Licence condition
M_00026	1900–2007 Environment Agency, *Alkmaria romijni*	Yes	Yes	Yes	Ian Humphreys Senior Environmental Monitoring Officer, Environment Agency, Kent & South London Area, Orchard House, London Road, Addington, West Malling, Kent ME13 5SH Tel: 01732 223286 Ian.Humphreys@Environment-Agency.gov.uk	EA Standard Notice
M_00027	Finding Sanctuary Regional MCZ Project	No	Yes	Yes	http://publications.naturalengland.org.uk/publication/2080291	n/a
M_00037	Finding Sanctuary Regional MCZ Project – Habitat data for Isles of Scilly	No	Yes	Yes	http://publications.naturalengland.org.uk/publication/2080291	n/a
M_00045	Cornwall Wildlife Trust FOCI Species Data	Partial	Yes	Yes	Environmental Records Centre for Cornwall and the Isles of Scilly: http://www.erccis.org.uk	Data held by Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS) http://www.erccis.org.uk/about_us/policies_and_procedures
M_00047	Seasearch/Shoresearch Survey Data Points Environmental Records Centre for Cornwall and the Isles of Scilly/Cornwall Wildlife Trust	Partial	Yes	Yes	Environmental Records Centre for Cornwall and the Isles of Scilly: http://www.erccis.org.uk	Data held by Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS) http://www.erccis.org.uk/about_us/policies_and_procedures
M_00055	MB0102 British Geological Survey (BGS) Modelled Habitat Map for subtidal sands and gravels (Defra via ABPmer)	No	Yes	Yes	via Defra: https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/about/publication-scheme	Open Government Licence
M_00056	MB0102 Sample Points for non-mobile species (Defra via ABPmer)	No	Yes	Yes	via Defra: https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/about/publication-scheme	Open Government Licence
M_00058	MB0102 HOCI Map (Defra via ABPmer)	No	Yes	Yes	via Defra: https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/about/publication-scheme	Open Government Licence

Dataset UID	Dataset (Identifying Name or Code)	New data for 2013 assessments	Held digitally on GIS database?	Publicly available?	Location	Licence condition
M_00059	MB0102 Sample Point Data for HOCI (Defra via ABPmer)	No	Yes	Yes	via Defra: https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/about/publication-scheme	Open Government Licence
M_00077	Net Gain Regional MCZ Project HOCI point data (merged)	No	Yes	Yes	http://publications.naturalengland.org.uk/publication/2080291	n/a
M_00085	Outer Thames Estuary Habitat Map – MALSF	No	Yes	Yes	Marine Aggregate Levy Sustainability Fund	Open Access: http://www.marinealsf.org.uk/downloads/MALSF_Data_Statement.pdf
M_00088	South Coast Habitat Map – MALSF	No	Yes	Yes	Marine Aggregate Levy Sustainability Fund	Open Access: http://www.marinealsf.org.uk/downloads/MALSF_Data_Statement.pdf
M_00089	South Coast Habitat Sample Points – MALSF	No	Yes	Yes	Marine Aggregate Levy Sustainability Fund	Open Access: http://www.marinealsf.org.uk/downloads/MALSF_Data_Statement.pdf
M_00093	UKSeaMap V8 – JNCC	No	Yes	Yes	www.jncc.defra.gov.uk/UKSeaMap	Various – contact Helen Ellwood, Marine Ecosystems Team: helen.ellwood@jncc.gov.uk
M_00101	Cefas Habitat Data	Yes	Yes	Yes	Knowledge and Information, Cefas, Pakefield Road, Lowestoft, Suffolk NR33 0HT Tel: 01502 524380 lowlibrary@cefas.co.uk http://www.cefas.defra.gov.uk/publications-and-data/access-to-information.aspx	Open Government Licence
M_00103	Cornwall Wildlife Trust Looe Seagrass Survey	Yes	Yes	Yes	Environmental Records Centre for Cornwall and the Isles of Scilly: http://www.erccis.org.uk	Data held by Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS) http://www.erccis.org.uk/about_us/policies_and_procedures

Dataset UID	Dataset (Identifying Name or Code)	New data for 2013 assessments	Held digitally on GIS database?	Publicly available?	Location	Licence condition
M_00105	Cornwall Wildlife Trust Biotope and Species Survey Data	Yes	Yes	Yes	Environmental Records Centre for Cornwall and the Isles of Scilly: http://www.erccis.org.uk	Data held by Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS) http://www.erccis.org.uk/about_us/policies_and_procedures
M_00121	Essex Estuaries SAC	Yes	Yes	Yes	Natural England National GI: http://www.naturalengland.org.uk/publications/data/default.aspx	Open Government Licence
M_00122	EurOBIS Species Point Data	Yes	Yes	Yes	http://www.marbef.org/data/eurobissearch.php	MarBEF log on required
M_00124	Habitat Sample Data for Irish Sea Region – Habmap	Yes	Yes	Yes	National Museum Wales	Contact: Andy Mackie, National Museum Wales: Andy.Mackie@museumwales.ac.uk
M_00125	Habitat Biotope Map for Irish Sea – Habmap	Yes	Yes	Yes	National Museum Wales	Contact: Andy Mackie, National Museum Wales: Andy.Mackie@museumwales.ac.uk
M_00128	IBTS Swansea University Species Sample Data	Yes	Yes	Yes	Department of Biosciences, Wallace Building, Swansea University, Singleton Park, Swansea SA2 8PP	On request from Swansea University
M_00135	Kent Wildlife Trust Broad-scale Habitat Map	Yes	Yes	No	Kent Wildlife Trust	On request from: Bryony Chapman, Marine Officer, Kent Wildlife Trust, Tyland Barn, Sandling, Maidstone, Kent ME14 3BD Tel: 01622 662012 Bryony.Chapman@kentwildlife.org.uk
M_00161	MALSF 2007 Broad-scale Habitat Point Data – Sussex IFCA	Yes	Yes	Yes	Marine Aggregate Levy Sustainability Fund	Open Access: http://www.marinealsf.org.uk/downloads/MALSF_Data_Statement.pdf
M_00198	Environment Agency National Water Framework Directive	No	Yes	Yes	Environment Agency	EA Standard Notice

Dataset UID	Dataset (Identifying Name or Code)	New data for 2013 assessments	Held digitally on GIS database?	Publicly available?	Location	Licence condition
	Benthic Data					
M_00215	Environment Agency Smelt and European eel data (2012). National fish populations database	Yes	Yes	Yes	Environment Agency	EA Standard Notice
M_00225	Killeen, I.J. & Light, J.M. (2002) The status, distribution and ecology of *Paludinella littorina* (Delle Chiaje, 1828) (Gastropoda: Assimineidae) in the British Isles. *Journal of Conchology 37(5)*:576	Yes	Yes	No	http://www.marbef.org/data/eurobissearch.php	MarBEF log on required
M_00228	ERCCIS and Cornwall Wildlife Trust – Seasearch + other data	Partial	Yes	No	Environmental Records Centre for Cornwall and the Isles of Scilly http://www.erccis.org.uk	Under licence but available if asked for: Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS) http://www.erccis.org.uk/about_us/policies_and_procedures
M_00229	Final Sabellaria Report – Institute of Estuarine and Coastal Studies (IECS)	Yes	Yes	Yes	Institute of Estuarine and Coastal Studies (IECS), University of Hull, Hull HU6 7RX Tel: 01482 464120 iecs@hull.ac.uk http://www.hull.ac.uk/iecs/contactus.html http://www.hull.ac.uk/iecs/portinter.html	n/a
M_00230	Natural England 2008 – Isles of Scilly Seagrass Records	No			Natural England GI: http://publications.naturalengland.org.uk	n/a
M_00237	Environment Agency, Sabellaria reef on mud – 2009	No	Yes	Yes	Environment Agency	EA Standard Notice

Dataset UID	Dataset (Identifying Name or Code)	New data for 2013 assessments	Held digitally on GIS database?	Publicly available?	Location	Licence condition
M_00273	Blackwater Oystermen's Association (BOA) Oyster survey Blackwater 2011/13	Yes	Yes	No	Essex Wildlife Trust Limited, The Joan Elliot Visitor Centre, Abbotts Hall Farm, Great Wigborough, Colchester, Essex CO5 7RZ Tel: 01621 862984 http://www.essexwt.org.uk/contact-us	Restricted/Confidential. Ownership of this information remains with the Essex Wildlife Trust and the Blackwater Oysterman's Association in accordance with the Confidentiality Agreement dated 19 June 2013
M_00274	Baldock, L. & Kay, P. (2012) New records of some rare British and Irish gobies (Teleostei: Gobiidae) Marine Biodiversity Records, 5, e25	Yes	No	Yes	http://journals.cambridge.org/action/displayJournal?jid=MBD	Need to register for an account
M_00281	Environment Agency WFD Seagrass Monitoring Programme, 2007–2011, Pagham Harbour water body	Yes	No	Yes	Environment Agency	EA Standard Notice
M_00283	Natural England Revised Isles of Scilly MCZ Habitat Boundaries	Yes	Yes	Yes	Natural England National GI	Open Government Licence
M_00305	Environment Agency Habitat Mapping	Yes	Yes	Yes	Environment Agency: http://www.environment-agency.gov.uk/contactus/default.aspx	EA Standard Notice
M_00308	Mapping European Seabed Habitats Data: 2004 to current date. Habitat mapping supplied by JNCC, Ghent University, Ifremer, Marine Institute, IMARES, TNO, Cefas, AFBI, Natural England, Envisions, National Museum Wales and BGS	Partial	Yes	Yes	MESH Project, JNCC, Monkstone House, City Road, Peterborough PE1 1JY Tel: 01733 562626 info@searchmesh.net http://www.searchmesh.net	All material variously copyrighted by MESH project partners 2004-2010
M_00309	Marine Recorder 1986–2013 Species FOCI. Data submitted by SNCBs, Cefas, DASSH, Porcupine Marine	Partial	Yes	Yes	www.nbn.org.uk	Various – see NBN website

Dataset UID	Dataset (Identifying Name or Code)	New data for 2013 assessments	Held digitally on GIS database?	Publicly available?	Location	Licence condition
	Natural History Society, marine consultants and Seasearch					
M_00310	Marine Recorder 1986013 Broad-scale Habitat / Habitat FOCI. Data submitted by SNCBs, Cefas, DASSH, Porcupine Marine Natural History Society, marine consultants and Seasearch	Partial	Yes	Yes	www.nbn.org.uk	Various – see NBN website
M_00312	2013 Natural England MCZ Verification Survey of Cumbria Coast	Yes	Yes	Yes	Natural England National GI: http://publications.naturalengland.org.uk	Open Government Licence
M_00313	2013 Natural England MCZ Verification Survey of Padstow Bay and Surrounds	Yes	Yes	Yes	Natural England National GI: http://publications.naturalengland.org.uk	Open Government Licence
M_00314	2013 Natural England MCZ Verification Survey of Skerries	Yes	Yes	Yes	Natural England National GI: http://publications.naturalengland.org.uk	Open Government Licence
M_00315	2013 Natural England MCZ Verification Survey of Torbay – Intertidal Rock	Yes	Yes	Yes	Natural England National GI: http://publications.naturalengland.org.uk	Open Government Licence
M_00316	2013 Natural England MCZ Verification Survey of Torbay – Intertidal Sediment	Yes	Yes	Yes	Natural England National GI: http://publications.naturalengland.org.uk	Open Government Licence
M_00317	2013 Natural England Stour and Orwell Estuaries rMCZ Verification Survey	Yes	Yes	Yes	Natural England National GI: http://publications.naturalengland.org.uk	Open Government Licence
M_00318	2013 Natural England Verification Survey of Intertidal Sediments within Beachy Head West rMCZ	Yes	Yes	Yes	Natural England National GI: http://publications.naturalengland.org.uk	Open Government Licence

Dataset UID	Dataset (Identifying Name or Code)	New data for 2013 assessments	Held digitally on GIS database?	Publicly available?	Location	Licence condition
M_00319	2013 A18 Environment Agency MCZ Verification Survey of Hythe Bay – Habitat map	Yes	Yes	Yes	Environment Agency: http://www.environment-agency.gov.uk/contactus/default.aspx	EA Standard Notice
M_00320	2012 A29 Cefas MCZ Verification Survey of Folkestone Pomerania – Habitat map	Yes	Yes	Yes	Environment Agency http://www.environment-agency.gov.uk/contactus/default.aspx	EA Standard Notice
M_00323	A73 Littoral Biotope Survey and Condition Assessment of the Lynher Estuary SSSI 2010 (Natural England via Ecospan)	Yes	Yes	Yes	Natural England Offices: http://publications.naturalengland.org.uk	n/a
M_00324	A74 Littoral Biotope Survey and Condition Assessment of the Tamar, Tavy and St John's Lake SSSIs 2010 (Natural England via Ecospan)	Yes	Yes	Yes	Natural England Offices: http://publications.naturalengland.org.uk	n/a
M_00325	Allen, J.H. & Hemingway, K.L. (2005). The Dee Estuary biotope survey 2004/5. Report to English Nature. Institute of Coastal and Estuarine Studies, Hull. Report no. ZBB640-F-2005	Yes	Yes	Yes	Institute of Estuarine and Coastal Studies (IECS), University of Hull, Hull HU6 7RX Tel: 01482 464120 iecs@hull.ac.uk http://www.hull.ac.uk/iecs/contactus.html http://www.hull.ac.uk/iecs/portinter.html	n/a
M_00326	Public Consultation Response: C1-117 Tarmac / CEMEX Dredging	Partial	Yes	Yes	Dr Andrew Bellamy, Tarmac Marine Dredging Ltd, UMA House, Shopwhyke Road, Chichester, West Sussex PO20 2AD http://www.lafargetarmac.com	On request from Lafarge Tarmac Ltd
M_00327	CMACS (2011) North West Region European marine sites: Condition monitoring of Littoral Features. Report to Natural England. Centre for	No	No	Yes	Natural England Offices	n/a

Dataset UID	Dataset (Identifying Name or Code)	New data for 2013 assessments	Held digitally on GIS database?	Publicly available?	Location	Licence condition
	Marine and Coastal Studies. Report reference: J3155					
M_00328	Isles of Scilly Intertidal Biotope Mapping Dataset (2010) – Natural England	No	Yes	Yes	Natural England National GI	n/a
M_00329	Natural England Commissioned Reports, Number 087, Jackson, E.L., Higgs, S., Allsop, T., Cawthray, A., Evans, J. & Langmead, O. (2011) Isles of Scilly Seagrass Mapping	Yes	No	Yes	http://publications.naturalengland.org.uk/file/82006	Open Access
M_00330	Natural England 2013 Verification Survey of Intertidal Sediments within the Thanet Coast rMCZ	Yes	Yes	Yes	http://publications.naturalengland.org.uk/publication/60023	Open Access
M_00331	Thanet Coast SAC 2011 Intertidal Monitoring Report 2012 – Natural England	Yes	No	Yes	http://publications.naturalengland.org.uk/publication	Open Access
M_00332	Consultation Response: Harwich Haven Authority	Partial	Yes	Yes	Harwich Haven Authority	Open Access
M_00334	Unicomarine 2005 DWAC data	Yes	Yes	Yes	Harwich Haven Authority, Harbour House, The Quay, Harwich, Essex CO12 3HH Tel: 01255 243030 http://www.hha.co.uk	Open Access
M_00335	Unicomarine 2005 Harwich Harbour Authority data	Yes	Yes	Yes	Harwich Haven Authority, Harbour House, The Quay, Harwich, Essex CO12 3HH Tel: 01255 243030 http://www.hha.co.uk	Open Access
M_00336	Unicomarine 2005 Orwell data	Yes	Yes	Yes	Harwich Haven Authority, Harbour House, The Quay, Harwich, Essex CO12 3HH	Open Access

Dataset UID	Dataset (Identifying Name or Code)	New data for 2013 assessments	Held digitally on GIS database?	Publicly available?	Location	Licence condition
					Tel: 01255 243030 http://www.hha.co.uk	
M_00337	Unicomarine 2005 Stour data	Yes	Yes	Yes	Harwich Haven Authority, Harbour House, The Quay, Harwich, Essex CO12 3HH Tel: 01255 243030 http://www.hha.co.uk	Open Access
M_00338	Environment Agency Water Framework Directive Operational Benthic Infauna Survey – Medway Estuary	Yes	Yes	Yes	Natural England National GI: http://www.geostore.com/environment-agency	EA Standard Notice http://www.environment-agency.gov.uk/contactus/
M_00339	Environment Agency Water Framework Directive Subtidal Benthic Infauna Survey 2011 – Orwell Estuary	Yes	Yes	Yes	Natural England National GI: http://www.geostore.com/environment-agency	EA Standard Notice http://www.environment-agency.gov.uk/contactus/
M_00340	Environment Agency Water Framework Directive Subtidal Benthic Infauna Survey 2011 – Stour Estuary	Yes	Yes	Yes	Natural England National GI: http://www.geostore.com/environment-agency	EA Standard Notice http://www.environment-agency.gov.uk/contactus/
M_00341	Cefas MCZ Verification Survey – Folkestone Pomerania – pressure-sensitivity-activity (PSA) analysis	Yes	Yes	Yes	Knowledge and Information, Cefas, Pakefield Road, Lowestoft, Suffolk NR33 0HT Tel: 01502 524380 lowlibrary@cefas.co.uk http://www.cefas.defra.gov.uk/publications-and-data/access-to-information.aspx	Open Government Licence
M_00342	Environment Agency MCZ Verification Survey – Hythe Bay – PSA analysis	Yes	Yes	Yes	Knowledge and Information, Cefas, Pakefield Road, Lowestoft, Suffolk NR33 0HT Tel: 01502 524380 lowlibrary@cefas.co.uk http://www.cefas.defra.gov.uk/publications-and-data/access-to-information.aspx	Open Government Licence

Dataset UID	Dataset (Identifying Name or Code)	New data for 2013 assessments	Held digitally on GIS database?	Publicly available?	Location	Licence condition
M_00343	Environment Agency MCZ Verification Survey – Kingmere – PSA analysis	Yes	Yes	Yes	Knowledge and Information, Cefas, Pakefield Road, Lowestoft, Suffolk NR33 0HT Tel: 01502 524380 lowlibrary@cefas.co.uk http://www.cefas.defra.gov.uk/publications-and-data/access-to-information.aspx	Open Government Licence
M_00344	Environment Agency MCZ Verification Survey – The Manacles – PSA analysis	Yes	Yes	Yes	Knowledge and Information, Cefas, Pakefield Road, Lowestoft, Suffolk NR33 0HT Tel: 01502 524380 lowlibrary@cefas.co.uk http://www.cefas.defra.gov.uk/publications-and-data/access-to-information.aspx	Open Government Licence
M_00345	Environment Agency MCZ Verification Survey – Upper Fowey & Pont Pill	Yes	Yes	Yes	Knowledge and Information, Cefas, Pakefield Road, Lowestoft, Suffolk NR33 0HT Tel: 01502 524380 lowlibrary@cefas.co.uk http://www.cefas.defra.gov.uk/publications-and-data/access-to-information.aspx	Open Government Licence
M_00346	Grab surveys of North-west (2003–2004): Kaiser, M.J. et al. (2006) Distribution and behaviour of Common Scoter, *Melanitta nigra*, relative to prey resources and environmental parameters	Yes	No	No	Ibis 148, 11-128 http://www.bou.org.uk/ibis	Subscription required
M_00347	Plymouth Marine Laboratory – Prawle Point to Plymouth Sound candidate Special Area of Conservation (cSAC) drop down video survey and Haskoning grab survey 2007	No	Yes	No	Plymouth Marine Laboratory, Prospect Place The Hoe, Plymouth PL1 3DH	Natural England (cSAC) and Royal Haskoning (grab survey 2007)

Dataset UID	Dataset (Identifying Name or Code)	New data for 2013 assessments	Held digitally on GIS database?	Publicly available?	Location	Licence condition
M_00348	Cefas MCZ Verification Survey – Folkestone Pomerania – Stills	Yes	Yes	Yes	Knowledge and Information, Cefas, Pakefield Road, Lowestoft, Suffolk NR33 0HT Tel: 01502 524380 lowlibrary@cefas.co.uk http://www.cefas.defra.gov.uk/publications-and-data/access-to-information.aspx	Open Government Licence
M_00349	Environment Agency MCZ Verification Survey – Kingmere – Stills	Yes	Yes	Yes	Knowledge and Information, Cefas, Pakefield Road, Lowestoft, Suffolk NR33 0HT Tel: 01502 524380 lowlibrary@cefas.co.uk http://www.cefas.defra.gov.uk/publications-and-data/access-to-information.aspx	Open Government Licence
M_00350	Environment Agency MCZ Verification Survey – The Manacles – Stills	Yes	Yes	Yes	Knowledge and Information, Cefas, Pakefield Road, Lowestoft, Suffolk NR33 0HT Tel: 01502 524380 lowlibrary@cefas.co.uk http://www.cefas.defra.gov.uk/publications-and-data/access-to-information.aspx	Open Government Licence
M_00351	Eastern IFCA 2004 Stour and Orwell Oyster survey	Yes	Yes	No	Eastern Inshore Fisheries and Conservation Authority, 6 North Lynn Business Village, Bergen Way, King's Lynn, Norfolk PE30 2JG	http://www.eastern-ifca.gov.uk/index.php?option=com_content&view=article&id=39&Itemid=77
M_00352	Eastern IFCA 2006 Stour and Orwell Oyster survey	Yes	Yes	No	Eastern Inshore Fisheries and Conservation Authority, 6 North Lynn Business Village, Bergen Way, King's Lynn, Norfolk PE30 2JG	http://www.eastern-ifca.gov.uk/index.php?option=com_content&view=article&id=39&Itemid=77
M_00353	Eastern IFCA 2007 Stour and Orwell Oyster survey	Yes	Yes	No	Eastern Inshore Fisheries and Conservation Authority, 6 North Lynn Business Village, Bergen Way, King's Lynn, Norfolk PE30 2JG	http://www.eastern-ifca.gov.uk/index.php?option=com_content&view=article&id=39&Itemid=77
M_00354	Eastern IFCA 2009 Stour and Orwell Oyster survey	Yes	Yes	No	Eastern Inshore Fisheries and Conservation Authority, 6 North Lynn Business Village, Bergen Way, King's Lynn, Norfolk PE30 2JG	http://www.eastern-ifca.gov.uk/index.php?option=com_content&view=article&id=39&Itemid=77

Dataset UID	Dataset (Identifying Name or Code)	New data for 2013 assessments	Held digitally on GIS database?	Publicly available?	Location	Licence condition
M_00355	Eastern IFCA 2010 Stour and Orwell Oyster survey	Yes	Yes	No	Eastern Inshore Fisheries and Conservation Authority, 6 North Lynn Business Village, Bergen Way, King's Lynn, Norfolk PE30 2JG	http://www.eastern-ifca.gov.uk/index.php?option=com_content&view=article&id=39&Itemid=77
M_00356	Eastern IFCA 2012 Stour and Orwell Oyster survey	Yes	Yes	No	Eastern Inshore Fisheries and Conservation Authority, 6 North Lynn Business Village, Bergen Way, King's Lynn, Norfolk PE30 2JG	http://www.eastern-ifca.gov.uk/index.php?option=com_content&view=article&id=39&Itemid=77
M_00357	Kent and Essex IFCA Blackwater oyster dredge survey 2012	Yes	Yes	No	Joss Wiggins, Kent and Essex Inshore Fisheries and Conservation Authority, 33–35 High Street, Brightlingsea, Essex CO7 0AG	On request from Kent and Essex IFCA
M_00358	Cefas MCZ Verification Survey – Folkestone Pomerania – Video	Yes	Yes	Yes	Knowledge and Information, Cefas, Pakefield Road, Lowestoft, Suffolk NR33 0HT Tel: 01502 524380 lowlibrary@cefas.co.uk http://www.cefas.defra.gov.uk/publications-and-data/access-to-information.aspx	Open Government Licence
M_00359	Environment Agency MCZ Verification Survey – Kingmere – Video	Yes	Yes	Yes	Environment Agency	EA Standard Notice
M_00360	Environment Agency MCZ Verification Survey – The Manacles – Video	Yes	Yes	Yes	Environment Agency	EA Standard Notice
M_00361	MCZ Photo Evidence database including photographs sourced from Natural England regional advisers, Wildlife trusts, Tim Allsop (Cornwall IFCA) and the Channel Coast Observatory (Aerial photography). Coordinate format in decimal degrees	Partial	Yes	Yes	Natural England National GI & Channel Coastal Observatory, Channel Coastal Observatory, National Oceanography Centre, European Way, Southampton SO14 3ZH Tel: 023 8059 8467 cco@channelcoast.org http://www.channelcoast.org/data_management/online_data_catalogue	Open Government Licence

Dataset UID	Dataset (Identifying Name or Code)	New data for 2013 assessments	Held digitally on GIS database?	Publicly available?	Location	Licence condition
M_00362	MCZ Photo Evidence database including photographs sourced from Natural England regional advisers, Wildlife trusts, Tim Allsop (Cornwall IFCA) and the Channel Coast Observatory (Aerial photography). Coordinate format in OS grid reference	Partial	Yes	Yes	Natural England National GI & Channel Coastal Observatory, Channel Coastal Observatory, National Oceanography Centre, European Way, Southampton SO14 3ZH Tel: 023 8059 8467 cco@channelcoast.org http://www.channelcoast.org/data_management/online_data_catalogue	Open Government Licence
M_00363	Titley, I., Spurrier, C.J.H., Fererro, T.J. & Chimonides, P.J. (2010) Biological survey of the intertidal chalk reef at Seaford to Beachy Head and Brighton to Newhaven Cliffs Site of Special Scientific Interest (SSSI) to set a baseline for SSSI condition assessment. Contract No. FST20/75/026	No	No	Yes	Natural England offices: http://publications.naturalengland.org.uk	n/a
M_00364	Environment Agency (2012) National Fish Populations Database output, accessed 30 January 2012	No	Yes	Yes	Natural England offices	EA standard notice
M_00365	RSPB foraging bird data and seabird 2000 data	No	Yes	No	Natural England national GI	Contact the RSPB, Helen Booker (Exeter office, Tel: 01392 453762)
M_00366	2011 Royal Society of Wildlife Trusts UK Areas of Additional Pelagic Ecological Importance	No	Yes	Yes	http://portal.oceannet.org/search/full/catalogue/dassh.ac.uk__MEDIN_2.3__ISCZ00000001.xml	Open access
M_00367	Sussex IFCA Black sea bream studies	No	No	Yes	Sussex Inshore Fisheries and Conservation Authority, 12A Riverside Business Centre, Brighton Road, Shoreham-by-Sea, West Sussex BN43 6RE admin@sussex-ifca.gov.uk	Open Access: http://www.sussex-ifca.gov.uk/index.php?option=com_content&view=article&id=63&

Dataset UID	Dataset (Identifying Name or Code)	New data for 2013 assessments	Held digitally on GIS database?	Publicly available?	Location	Licence condition
						Itemid=159
M_00500	Environment Agency (2012). Saltmarsh Extents – AfA137	Yes	Yes	Yes	Natural England National GI: http://www.geostore.com/environment-agency	EA Standard Notice http://www.environment-agency.gov.uk/contactus

4.4 Verification evidence not used

Table 5 lists the eight verification surveys that were undertaken under the Defra MB0120 contract, for which the results were not available in time for inclusion in the confidence assessment analysis as the data were in the process of being collected or analysed. This affects the following pMCZs: Stour and Orwell Estuaries, Thanet Coast, Poole Rocks, South Dorset, Chesil Beach and Stennis Ledges, Whitsand and Looe Bay, Isles of Scilly (Bristows to the Stones) and Padstow Bay and Surrounds.

The datasets are described using a code (with the prefix 'A') in the 'Evidence not used' column of Table 5. It is intended that they will be included in future confidence assessments, in order to improve confidence in the presence and extent of the features within those sites. A number of datasets were not used as they did not inform on proposed features in pMCZs as determined during the Evidence Panel process (Section 3.1.4).

Table 5 Verification evidence not used

Survey ID	Survey (Identifying Name or Code)	pMCZs (pMCZ to which the survey relates)	Surveyor	Data collection methods (eg Multibeam, grab samples etc)	Type of data (eg distribution and abundance of habitat/species, PSA, etc)
A1	Cefas MCZ Verification survey: Whitsand and Looe Bay	Whitsand and Looe Bay	Cefas	Multibeam, camera and grab sample ground-truthing	Distribution and abundance of habitat/species, PSA, Multibeam backscatter and bathymetry
A2	Cefas MCZ Verification survey: Isles of Scilly – Bristows to the Stones	Isles of Scilly: Bristows to the Stones	Cefas	Multibeam and drop video camera	Multibeam backscatter and bathymetry, Distribution and abundance of habitat/species
A3	EA MCZ Verification survey: Stour and Orwell Estuaries	Stour and Orwell Estuaries	Environment Agency	Multibeam	Multibeam backscatter and bathymetry
A4	EA MCZ Verification survey: Thanet Coast	Thanet Coast	Environment Agency	Multibeam	Multibeam backscatter and bathymetry
A5	EA MCZ Verification survey: Poole Rocks	Poole Rocks	Environment Agency	Drop video and grab sample ground-truthing	Distribution and abundance of habitat/species, PSA
A6	EA MCZ Verification survey: Chesil Beach and Stennis Ledges	Chesil Beach and Stennis Ledges	Environment Agency	Drop video and grab sample ground-truthing	Distribution and abundance of habitat/species, PSA
A7	EA MCZ Verification survey: Padstow Bay and Surrounds	Padstow Bay and Surrounds	Environment Agency	Drop video and grab sample ground-truthing	Distribution and abundance of habitat/species, PSA
A8	Cefas MCZ Verification Survey: South Dorset	South Dorset	CEFAS	Multibeam, drop video camera and grab sample ground-truthing	Distribution and abundance of habitat/species, Multibeam backscatter and bathymetry

4.5 Conservation objectives and certainty in conservation objectives

Table 6 gives the conservation objectives and an assessment of their certainty for each feature within each pMCZ. The methods used to obtain the results in the table are described in Section 3.2.

The tables show the following:

- the recommended conservation objectives given in Defra's 2012 consultation document (column 6);
- the recommended conservation objectives assessed through this advice (column 7);
- a brief explanation of the rationale for any changes in conservation objective between the consultation document and this advice (column 8);
- confidence in feature condition (determined using Protocol F) in 2013 (column 9);
- our assessment of certainty in the 2013 conservation objective (using Protocol I) (column 10);

Where we have no confidence that the feature exists we have not provided updated assessments.

Conservation objectives are no longer recommended for eight features due to no confidence in feature presence in the site. Conservation objectives for four features are no longer recommended as as these features have been replaced by other features, for which conservation objectives have been recommended. Conservation objectives have changed between the Defra 2012 consultation document and this advice for a total of 14 features in five sites:

Tamar Estuary Sites	Intertidal biogenic reefs: from Recover to Maintain Intertidal coarse sediment: from Recover to Maintain Blue mussel beds: from Recover to Maintain European eel: from Recover to Maintain
Upper Fowey and Pont Pill	Intertidal sand and muddy sand: from Maintain to Recover European eel: from Recover to Maintain
The Manacles	Subtidal coarse sediment: from Maintain to Recover Subtidal mixed sediments: from Maintain to Recover Pink sea-fan: from Maintain to Recover
Lundy	Mud habitats in deep water: from Recover to Maintain
Cumbria Coast	High energy infralittoral rock: from Recover to Maintain Intertidal biogenic reefs: from Recover to Maintain Honeycomb worm reefs: from Recover to Maintain Black guillemot: from Recover to Maintain

The rationale for each change is given in the table below.

Information on changes in the certainty of conservation objectives between 2012 and the 2013 advice is given in the site-specific advice documents in Annex 5.

Table 6 Conservation objectives and certainty in conservation objectives

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Aln Estuary	NG13a	A2.3	Intertidal mud	BSH	Maintain	Maintain	No change	Low	More certain
Aln Estuary	NG13a	A2.5	Coastal salt marshes and saline reed beds	BSH	Maintain	Maintain	No change	Low	More certain
Aln Estuary	NG13a	A3.1	High energy infralittoral rock	BSH	Maintain	N/A	No confidence in feature presence and extent	N/A	N/A
Aln Estuary	NG13a	A5.2	Subtidal sand	BSH	N/A	Maintain	Feature not proposed in 2012. This feature is included as it is the underlying BSH for HOCI_21	Low	Less certain
Aln Estuary	NG13a	HOCI_5	Estuarine rocky habitats	HOCI	Maintain	Maintain	No change	Low	More certain
Aln Estuary	NG13a	HOCI_19	Sheltered muddy gravels	HOCI	Maintain	Maintain	No change	Low	More certain
Aln Estuary	NG13a	HOCI_21	Subtidal sands and gravels	HOCI	Maintain	Maintain	No change	Low	Less certain
Stour and Orwell Estuaries	BS02	A1.3	Low energy intertidal rock	BSH	Maintain	Maintain	No change	Moderate	More certain
Stour and Orwell Estuaries	BS02	A2.4	Intertidal mixed sediments	BSH	Maintain	Maintain	No change	Low	More certain
Stour and Orwell Estuaries	BS02	A5.1	Subtidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
Stour and Orwell Estuaries	BS02	HOCI_1	Blue mussel beds	HOCI	Maintain	Maintain	No change	Low	More certain
Stour and Orwell Estuaries	BS02	HOCI_5	Estuarine rocky habitats	HOCI	Maintain	Maintain	No change	Low	More certain
Stour and Orwell Estuaries	BS02	HOCI_8	Honeycomb worm reefs (*Sabellaria alveolata*)	HOCI	Recover	Recover	No change	Low	More certain
Stour and Orwell Estuaries	BS02	HOCI_14	Native oyster beds (*Ostrea edulis*)	HOCI	Recover	Recover	No change	Moderate	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Stour and Orwell Estuaries	BS02	HOCI_15	Peat and clay exposures	HOCI	Maintain	Maintain	No change	Low	More certain
Stour and Orwell Estuaries	BS02	HOCI_16	Ross worm reefs (*Sabellaria spinulosa*)	HOCI	Recover	Recover	No change	Low	More certain
Stour and Orwell Estuaries	BS02	HOCI_19	Sheltered muddy gravels	HOCI	Recover	Recover	No change	Moderate	Less certain
Stour and Orwell Estuaries	BS02	HOCI_21	Subtidal sands and gravels	HOCI	Maintain	Maintain	No change but feature no longer recommended as covered by feature A5.1	Low	More certain
Blackwater, Crouch, Roach and Colne Estuaries	BS03	A1.1	High energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Blackwater, Crouch, Roach and Colne Estuaries	BS03	A2.4	Intertidal mixed sediments	BSH	Maintain	Maintain	No change	Low	More certain
Blackwater, Crouch, Roach and Colne Estuaries	BS03	HOCI_14	Native oyster beds (*Ostrea edulis*)	HOCI	Recover	Recover	No change	Moderate	More certain
Blackwater, Crouch, Roach and Colne Estuaries	BS03	SOCI_22	Native oyster (*Ostrea edulis*)	SOCI	Recover	Recover	No change	Moderate	More certain
Blackwater, Crouch, Roach and Colne Estuaries	BS03	SOCI_28	Lagoon sea slug (*Tenellia adspersa*)	SOCI	Maintain	Maintain	No change	Low	More certain
Blackwater, Crouch, Roach and Colne Estuaries	BS03	SOCI_31	European eel (*Anguilla anguilla*)	SOCI	Maintain	Maintain	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Blackwater, Crouch, Roach and Colne Estuaries	BS03	G10	Clacton cliffs and foreshore	Geological	Maintain	Maintain	No change	Low	More certain
Medway Estuary	BS06	A1.3	Low energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Medway Estuary	BS06	A2.2	Intertidal sand and muddy sand	BSH	Maintain	Maintain	No change	Low	More certain
Medway Estuary	BS06	A2.4	Intertidal mixed sediments	BSH	Maintain	Maintain	No change	Low	More certain
Medway Estuary	BS06	A5.1	Subtidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
Medway Estuary	BS06	A5.2	Subtidal sand	BSH	Maintain	Maintain	No change	Low	More certain
Medway Estuary	BS06	A5.3	Subtidal mud	BSH	Maintain	Maintain	No change	Low	More certain
Medway Estuary	BS06	HOCI_5	Estuarine rocky habitats	HOCI	Maintain	Maintain	No change	Low	More certain
Medway Estuary	BS06	HOCI_15	Peat and clay exposures	HOCI	Maintain	Maintain	No change	Low	More certain
Medway Estuary	BS06	HOCI_19	Sheltered muddy gravels	HOCI	Recover	Recover	No change	Low	Less certain
Medway Estuary	BS06	SOCI_1	Tentacled lagoon-worm (*Alkmaria romijni*)	SOCI	Maintain	Maintain	No change	Low	More certain
Thanet Coast	BS07	A3.2	Moderate energy infralittoral rock	BSH	Maintain	Maintain	No change	Low	More certain
Thanet Coast	BS07	A4.2	Moderate energy circalittoral rock	BSH	Maintain	Maintain	No change	Low	More certain
Thanet Coast	BS07	A5.1	Subtidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
Thanet Coast	BS07	A5.2	Subtidal sand	BSH	Maintain	Maintain	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Thanet Coast	BS07	A5.4	Subtidal mixed sediments	BSH	Maintain	Maintain	No change	Low	More certain
Thanet Coast	BS07	HOCI_1	Blue mussel beds	HOCI	Maintain	Maintain	No change	Low	More certain
Thanet Coast	BS07	HOCI_15	Peat and clay exposures	HOCI	Maintain	Maintain	No change	Low	More certain
Thanet Coast	BS07	HOCI_16	Ross worm reefs (*Sabellaria spinulosa*)	HOCI	Recover	Recover	No change	Low	More certain
Thanet Coast	BS07	HOCI_20	Subtidal chalk	HOCI	Maintain	Maintain	No change	Low	Less certain
Thanet Coast	BS07	HOCI_21	Subtidal sands and gravels	HOCI	Maintain	Maintain	No change but feature no longer recommended as covered by feature A5.2	Low	More certain
Thanet Coast	BS07	SOCI_14	Stalked jellyfish (*Haliclystus auricula*)	SOCI	Maintain	Maintain	No change	Low	More certain
Thanet Coast	BS07	SOCI_19	Stalked jellyfish (*Lucernariopsis cruxmelitensis*)	SOCI	Maintain	Maintain	No change	Low	More certain
Folkestone Pomerania	BS11.4	A4.1	High energy circalittoral rock	BSH	N/A	Recover	Feature not proposed in 2012 (was considered to be moderate energy circalittoral rock)	Moderate	More certain
Folkestone Pomerania	BS11.4	A4.2	Moderate energy circalittoral rock	BSH	Recover	Recover	No change	Low	Less certain
Folkestone Pomerania	BS11.4	A5.1	Subtidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
Folkestone Pomerania	BS11.4	A5.2	Subtidal sand	BSH	Maintain	Maintain	No change	Moderate	More certain
Folkestone Pomerania	BS11.4	HOCI_1	Blue mussel beds	HOCI	Maintain	N/A	No confidence in feature presence and extent	N/A	N/A
Folkestone Pomerania	BS11.4	HOCI_7	Fragile sponge and anthozoan communities on subtidal rocky habitats	HOCI	Recover	Recover	No change	Moderate	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Folkestone Pomerania	BS11.4	HOCI_8	Honeycomb worm reefs (*Sabellaria alveolata*)	HOCI	Recover	Recover	No change	Low	More certain
Folkestone Pomerania	BS11.4	HOCI_16	Ross worm reefs (*Sabellaria spinulosa*)	HOCI	Recover	Recover	No change	Moderate	More certain
Folkestone Pomerania	BS11.4	HOCI_21	Subtidal sands and gravels	HOCI	Maintain	Maintain	No change but feature no longer recommended as covered by feature A5.2	Moderate	More certain
Beachy Head West	BS13.2	A2.1	Intertidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
Beachy Head West	BS13.2	A5.2	Subtidal sand	BSH	Maintain	Maintain	No change	Low	More certain
Beachy Head West	BS13.2	A5.3	Subtidal mud	BSH	Maintain	Maintain	No change	Low	More certain
Beachy Head West	BS13.2	A5.4	Subtidal mixed sediments	BSH	Maintain	Maintain	No change	Low	More certain
Beachy Head West	BS13.2	HOCI_1	Blue mussel beds	HOCI	Maintain	Maintain	No change	Low	Less certain
Beachy Head West	BS13.2	HOCI_11	Littoral chalk communities	HOCI	Recover	Recover	No change	Low	Less certain
Beachy Head West	BS13.2	HOCI_20	Subtidal chalk	HOCI	Maintain	Maintain	No change	Low	More certain
Beachy Head West	BS13.2	SOCI_15	Long snouted seahorse (*Hippocampus guttulatus*)	SOCI	Maintain	Maintain	No change	Low	Less certain
Beachy Head West	BS13.2	SOCI_16	Short snouted seahorse (*Hippocampus hippocampus*)	SOCI	Maintain	Maintain	No change	Low	Less certain
Beachy Head West	BS13.2	SOCI_22	Native oyster (*Ostrea edulis*)	SOCI	Maintain	Maintain	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Beachy Head West	BS13.2	SOCI_31	European eel (*Anguilla anguilla*)	SOCI	Maintain	Maintain	No change	Low	More certain
Beachy Head West	BS13.2	non-ENG_20	Infralittoral rock and thin sandy sediment	non-ENG	Maintain	Maintain	No change	Low	More certain
Beachy Head West	BS13.2	non-ENG_21	Infralittoral rock and thin mixed sediment	non-ENG	Maintain	Maintain	No change	Low	More certain
Beachy Head West	BS13.2	non-ENG_23	Infralittoral muddy sand	non-ENG	Maintain	Maintain	No change	Low	More certain
Beachy Head West	BS13.2	non-ENG_24	Infralittoral sandy mud	non-ENG	Maintain	Maintain	No change	Low	More certain
Kingmere	BS16	HOCI_20	Subtidal chalk	HOCI	Recover	Recover	No change	Moderate	More certain
Kingmere	BS16	SOCI_22	Native oyster (*Ostrea edulis*)	SOCI	Maintain	Maintain	No change	Low	More certain
Kingmere	BS16	non-ENG_1	Black sea bream (*Spondyliosoma cantharus*)	non-ENG	Recover	Recover	No change	Moderate	More certain
Kingmere	BS16	non-ENG_21	Infralittoral rock and thin mixed sediment	non-ENG	Recover	Recover	No change	Low	More certain
Pagham Harbour	BS25.1	HOCI_17	Seagrass beds	HOCI	Maintain	Maintain	No change	Low	More certain
Pagham Harbour	BS25.1	SOCI_6	Defolin's lagoon snail (*Caecum armoricum*)	SOCI	Maintain	Maintain	No change	Low	More certain
Pagham Harbour	BS25.1	SOCI_9	Lagoon sand shrimp (*Gammarus insensibilis*)	SOCI	Maintain	Maintain	No change	Low	More certain
Pagham Harbour	BS25.1	SOCI_31	European eel (*Anguilla anguilla*)	SOCI	Maintain	Maintain	No change	Low	More certain
Hythe Bay	BS26	A5.3	Subtidal mud	BSH	Recover	Recover	No change	Low	Less certain
Hythe Bay	BS26	HOCI_13	Mud habitats in deep water	HOCI	Recover	Recover	No change	Moderate	Less certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Hythe Bay	BS26	HOCI_18	Sea pen and burrowing megafauna communities	HOCI	Recover	Recover	No change	Low	Less certain
Poole Rocks	FS14	A4.2	Moderate energy circalittoral rock	BSH	Maintain	Maintain	No change	Low	More certain
Poole Rocks	FS14	A5.2	Subtidal sand	BSH	Maintain	Maintain	No change	Low	More certain
Poole Rocks	FS14	A5.4	Subtidal mixed sediments	BSH	Maintain	Maintain	No change	Low	More certain
Poole Rocks	FS14	SOCI_12	Couch's goby (*Gobius couchi*)	SOCI	Recover	Recover	No change	Low	More certain
Poole Rocks	FS14	SOCI_22	Native oyster (*Ostrea edulis*)	SOCI	Recover	Recover	No change	Moderate	More certain
South Dorset	FS16	A4.1	High energy circalittoral rock	BSH	Recover	Recover	No change	Low	More certain
South Dorset	FS16	A4.2	Moderate energy circalittoral rock	BSH	Recover	Recover	No change	Moderate	More certain
South Dorset	FS16	A5.1	Subtidal coarse sediment	BSH	Maintain	Maintain	No change	Low	Less certain
South Dorset	FS16	A5.4	Subtidal mixed sediments	BSH	Maintain	Maintain	No change	Low	Less certain
South Dorset	FS16	HOCI_20	Subtidal chalk	HOCI	Recover	Recover	No change	Low	More certain
Chesil Beach and Stennis Ledges	FS19	A1.1	High energy intertidal rock	BSH	Maintain	Maintain	No change	Moderate	More certain
Chesil Beach and Stennis Ledges	FS19	A2.1	Intertidal coarse sediment	BSH	Maintain	Maintain	No change	Moderate	More certain
Chesil Beach and Stennis Ledges	FS19	A3.1	High energy infralittoral rock	BSH	Recover	Recover	No change	Low	More certain
Chesil Beach and Stennis Ledges	FS19	A5.1	Subtidal coarse sediment	BSH	Recover	Recover	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Chesil Beach and Stennis Ledges	FS19	A5.2	Subtidal sand	BSH	Recover	Recover	No change	Low	Less certain
Chesil Beach and Stennis Ledges	FS19	SOCI_8	Pink sea-fan (*Eunicella verrucosa*)	SOCI	Recover	Recover	No change	Moderate	More certain
Chesil Beach and Stennis Ledges	FS19	SOCI_22	Native oyster (*Ostrea edulis*)	SOCI	Recover	Recover	No change	Moderate	Less certain
Torbay	FS22	A1.2	Moderate energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Torbay	FS22	A1.3	Low energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Torbay	FS22	A2.1	Intertidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
Torbay	FS22	A2.2	Intertidal sand and muddy sand	BSH	Maintain	Maintain	No change	Low	More certain
Torbay	FS22	A2.3	Intertidal mud	BSH	Maintain	Maintain	No change	Low	More certain
Torbay	FS22	A2.4	Intertidal mixed sediments	BSH	Maintain	Maintain	No change	Low	More certain
Torbay	FS22	A5.3	Subtidal mud	BSH	Recover	Recover	No change	Low	More certain
Torbay	FS22	HOCI_8	Honeycomb worm reefs (*Sabellaria alveolata*)	HOCI	Maintain	Maintain	No change	Low	More certain
Torbay	FS22	HOCI_10	Intertidal underboulder communities	HOCI	Maintain	Maintain	No change	Low	More certain
Torbay	FS22	HOCI_17	Seagrass beds	HOCI	Recover	Recover	No change	Moderate	More certain
Torbay	FS22	SOCI_15	Long snouted seahorse (*Hippocampus guttulatus*)	SOCI	Recover	Recover	No change	Low	More certain
Torbay	FS22	SOCI_22	Native oyster (*Ostrea edulis*)	SOCI	Maintain	Maintain	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Torbay	FS22	SOCI_23	Peacock's tail (*Padina pavonica*)	SOCI	Maintain	Maintain	No change	Low	More certain
Skerries Bank and Surrounds	FS24	A1.1	High energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Skerries Bank and Surrounds	FS24	A1.2	Moderate energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Skerries Bank and Surrounds	FS24	A2.1	Intertidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
Skerries Bank and Surrounds	FS24	A2.2	Intertidal sand and muddy sand	BSH	Maintain	Maintain	No change	Low	More certain
Skerries Bank and Surrounds	FS24	A2.3	Intertidal mud	BSH	Maintain	N/A	No confidence in feature presence and extent	N/A	N/A
Skerries Bank and Surrounds	FS24	A2.4	Intertidal mixed sediments	BSH	Maintain	Maintain	No change	Low	More certain
Skerries Bank and Surrounds	FS24	A3.1	High energy infralittoral rock	BSH	Maintain	Maintain	No change	Low	More certain
Skerries Bank and Surrounds	FS24	A3.2	Moderate energy infralittoral rock	BSH	Maintain	Maintain	No change	Low	More certain
Skerries Bank and Surrounds	FS24	A4.2	Moderate energy circalittoral rock	BSH	Recover	Recover	No change	Low	More certain
Skerries Bank and Surrounds	FS24	A5.1	Subtidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
Skerries Bank and Surrounds	FS24	A5.2	Subtidal sand	BSH	Maintain	Maintain	No change	Low	More certain
Skerries Bank and Surrounds	FS24	A5.3	Subtidal mud	BSH	Maintain	Maintain	No change	Low	More certain
Skerries Bank and Surrounds	FS24	HOCI_10	Intertidal underboulder communities	HOCI	Maintain	Maintain	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Skerries Bank and Surrounds	FS24	SOCI_8	Pink sea-fan (*Eunicella verrucosa*)	SOCI	Maintain	Maintain	No change	Low	More certain
Skerries Bank and Surrounds	FS24	SOCI_16	Short snouted seahorse (*Hippocampus hippocampus*)	SOCI	Maintain	Maintain	No change	Low	More certain
Skerries Bank and Surrounds	FS24	SOCI_24	Spiny lobster (*Palinurus elephas*)	SOCI	Recover	Recover	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Tamar Estuary sites	FS27	A2.1	Intertidal coarse sediment	BSH	Recover	Maintain	This feature was not fully VA assessed in 2013 as there had been no change in socio- economic activity or feature distribution. However, as the feature had in 2012 been judged exposed to similar pressures as Intertidal biogenic reefs and Blue mussel beds (which were VA assessed in 2013), in 2013 it was assessed for activities/pressures to which it was judged exposed to maintain consistency of approach with these other site features. The conservation objective for this feature has been revised to Maintain based on a detailed assessment of the feature's sensitivities to known pressures. The 2012 Recover objective was based on a less detailed combined sensitivity to pressures assessment. The 2012 Recover objective was triggered by an assessment of the feature's sensitivity and exposure to: 1) Industrial and agricultural liquid discharges; 2) Sewage disposal. The pressures brought about by these activities were evaluated on a cumulative basis and an overall assessment made that 'The activity creates the pressure above the benchmark level'. In 2013 a more detailed evaluation of the individual pressures associated with each activity and the feature's sensitivities to them did not trigger a Recover objective. Additionally we used available information on site condition (current condition reporting for similar, but not identical, intertidal features of the Lynher Estuary SSSI [2009/2010], the Tamar-Tavy Estuary SSSI [2009/2010] and the Plymouth Sound and estuaries SAC [December 2012]) to further support the revision of the CO from Recover to Maintain	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Tamar Estuary sites	FS27	A2.7	Intertidal biogenic reefs	BSH	Recover	Maintain	In 2012 the Recover objective was triggered by an assessment of the feature's sensitivity and exposure to: 1) Industrial and agricultural liquid discharges; 2) Sewage disposal. The pressures brought about by these activities were evaluated on a cumulative basis and an overall assessment made that 'The activity creates the pressure above the benchmark level'. In 2013 further evidence was used to undertake a more detailed analysis of the individual pressures associated with each activity and the feature's sensitivities to them did not trigger a Recover objective	Low	More certain
Tamar Estuary sites	FS27	HOCI_1	Blue mussel beds	HOCI	Recover	Maintain	In 2012 the Recover objective was triggered by an assessment of the feature's sensitivity and exposure to: 1) Industrial and agricultural liquid discharges; 2) Sewage disposal. The pressures brought about by these activities were evaluated on a cumulative basis and an overall assessment made that 'The activity creates the pressure above the benchmark level'. In 2013 further evidence was used to undertake a more detailed analysis of the individual pressures associated with each activity and the feature's sensitivities to them did not trigger a Recover objective	Low	More certain
Tamar Estuary sites	FS27	HOCI_14	Native oyster (*Ostrea edulis*)	SOCI	Recover	Recover	No change	Low	Less certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Tamar Estuary sites	FS27	SOCI_31	European eel (*Anguilla anguilla*)	SOCI	Recover	Maintain	The European eel is subject to Recovery management plans due to the current status of the species. In compliance with the European Council (Regulation No. 1100/2007), the EA has developed a management plan for the South West river basin. The VA has not identified any pressures within the site to which the local eel population may be vulnerable nor that may be contributing to the wider unfavourable status of eels. A Maintain CO is advised on this basis	Low	More certain
Tamar Estuary sites	FS27	SOCI_32	Smelt (*Osmerus eperlanus*)	SOCI	Recover	Recover	No change	Low	More certain
Whitsand and Looe Bay	FS28	A1.1	High energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Whitsand and Looe Bay	FS28	A1.2	Moderate energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Whitsand and Looe Bay	FS28	A1.3	Low energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Whitsand and Looe Bay	FS28	A2.1	Intertidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
Whitsand and Looe Bay	FS28	A2.2	Intertidal sand and muddy sand	BSH	Maintain	Maintain	No change	Low	More certain
Whitsand and Looe Bay	FS28	A2.4	Intertidal mixed sediments	BSH	Maintain	Maintain	No change	Low	Less certain
Whitsand and Looe Bay	FS28	A3.1	High energy infralittoral rock	BSH	Maintain	N/A	No confidence in feature presence and extent	N/A	N/A
Whitsand and Looe Bay	FS28	A4.2	Moderate energy circalittoral rock	BSH	Maintain	Maintain	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Whitsand and Looe Bay	FS28	A5.1	Subtidal coarse sediment	BSH	Maintain	Maintain	No change	Low	Less certain
Whitsand and Looe Bay	FS28	A5.2	Subtidal sand	BSH	Maintain	Maintain	No change	Low	Less certain
Whitsand and Looe Bay	FS28	HOCI_17	Seagrass beds	HOCI	Maintain	Maintain	No change	Low	More certain
Whitsand and Looe Bay	FS28	SOCI_2	Sea-fan anemone (*Amphianthus dohrnii*)	SOCI	Recover	Recover	No change	Low	Less certain
Whitsand and Looe Bay	FS28	SOCI_3	Ocean quahog (*Arctica islandica*)	SOCI	Maintain	Maintain	No change	Low	Less certain
Whitsand and Looe Bay	FS28	SOCI_8	Pink sea-fan (*Eunicella verrucosa*)	SOCI	Recover	Recover	No change	Low	Less certain
Whitsand and Looe Bay	FS28	SOCI_11	Giant goby (*Gobius cobitis*)	SOCI	Maintain	Maintain	No change	Low	More certain
Whitsand and Looe Bay	FS28	SOCI_14	Stalked jellyfish (*Haliclystus auricula*)	SOCI	Maintain	Maintain	No change	Low	More certain
Whitsand and Looe Bay	FS28	SOCI_15	Long snouted seahorse (*Hippocampus guttulatus*)	SOCI	Maintain	Maintain	No change	Low	More certain
Upper Fowey and Pont Pill	FS29	A1.3	Low energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Upper Fowey and Pont Pill	FS29	A2.1	Intertidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
Upper Fowey and Pont Pill	FS29	A2.2	Intertidal sand and muddy sand	BSH	Maintain	Recover	There is evidence that crab tiling occurs as well as a large amount of bait digging at a recreational level. Both these activities will cause damage to foreshore >25mm	Low	More certain
Upper Fowey and Pont Pill	FS29	A2.3	Intertidal mud	BSH	Maintain	Maintain	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Upper Fowey and Pont Pill	FS29	A2.5	Coastal saltmarshes and saline reedbeds	BSH	Maintain	Maintain	No change	Low	More certain
Upper Fowey and Pont Pill	FS29	HOCI_5	Estuarine rocky habitats	HOCI	Maintain	Maintain	No change	Low	More certain
Upper Fowey and Pont Pill	FS29	HOCI_19	Sheltered muddy gravels	HOCI	Maintain	Maintain	No change	Low	More certain
Upper Fowey and Pont Pill	FS29	SOCI_31	European eel (*Anguilla anguilla*)	SOCI	Recover	Maintain	The European eel is subject to Recovery management plans due to the current status of the species. In compliance with the European Council (Regulation No. 1100/2007), the EA has developed a management plan for the South West river basin. The VA has not identified any pressures within the site to which the local eel population may be vulnerable nor that may be contributing to the wider unfavourable status of eels. A Maintain CO is advised on this basis	Low	More certain
The Manacles	FS32	A1.2	Moderate energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
The Manacles	FS32	A2.1	Intertidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
The Manacles	FS32	A2.2	Intertidal sand and muddy sand	BSH	Maintain	Maintain	No change	Low	More certain
The Manacles	FS32	A2.3	Intertidal mud	BSH	Maintain	Maintain	No change	Low	Less certain
The Manacles	FS32	A2.4	Intertidal mixed sediments	BSH	Maintain	Maintain	No change	Low	Less certain
The Manacles	FS32	A3.2	Moderate energy infralittoral rock	BSH	Maintain	Maintain	No change	Low	More certain
The Manacles	FS32	A4.2	Moderate energy circalittoral rock	BSH	Maintain	Maintain	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
The Manacles	FS32	A5.1	Subtidal coarse sediment	BSH	Maintain	Recover	This feature was identified in the 2012 EA verification surveys as stable sediment with pink sea-fan growing in it. As a result it is likely to be vulnerable to benthic trawling which is shown to overlay this feature in both the fisheries sensitivity mapping and through the consultation information	Low	More certain
The Manacles	FS32	A5.2	Subtidal sand	BSH	Maintain	Maintain	No change	Low	More certain
The Manacles	FS32	A5.4	Subtidal mixed sediments	BSH	Maintain	Recover	Subtidal coarse sediment was identified in the 2012 EA verification surveys as stable sediment with pink sea-fan growing in it. Subtidal mixed sediments, directly adjacent to the subtidal coarse sediment, is therefore also assumed to be stable and as a result it is likely to be vulnerable to benthic trawling which is shown to overlay this feature in both the fisheries sensitivity mapping and through the consultation information	Low	More certain
The Manacles	FS32	A5.5	Subtidal macrophyte-dominated sediment	BSH	Recover	Recover	No change	Low	More certain
The Manacles	FS32	HOCI_12	Maerl beds	HOCI	Recover	Recover	No change	Moderate	More certain
The Manacles	FS32	SOCI_2	Sea-fan anemone (*Amphianthus dohrnii*)	SOCI	Maintain	Maintain	No change	Low	More certain
The Manacles	FS32	SOCI_8	Pink sea-fan (*Eunicella verrucosa*)	SOCI	Maintain	Recover	Pink sea-fans were recorded on subtidal coarse sediment in the 2012 EA verification surveys. The feature is likely to be vulnerable to benthic trawling which is shown to overlay this feature in both the fisheries sensitivity mapping and through the consultation information	Moderate	More certain
The Manacles	FS32	SOCI_14	Stalked jellyfish (*Haliclystus auricula*)	SOCI	Maintain	Maintain	No change	Low	Less certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
The Manacles	FS32	SOCI_17	Sunset cup coral (*Leptopsammia pruvoti*)	SOCI	Maintain	Maintain	No change	Low	More certain
The Manacles	FS32	SOCI_24	Spiny lobster (*Palinurus elephas*)	SOCI	Recover	Recover	No change	Moderate	More certain
Isles of Scilly: Bishop to Crim	FS35c	SOCI_24	Spiny lobster (*Palinurus elephas*)	SOCI	Recover	Recover	No change	Low	More certain
Isles of Scilly: Bristows to the Stones	FS35d	A3.1	High energy infralittoral rock	BSH	Recover	Recover	No change	Low	More certain
Isles of Scilly: Bristows to the Stones	FS35d	A3.2	Moderate energy infralittoral rock	BSH	Recover	Recover	No change	Low	More certain
Isles of Scilly: Bristows to the Stones	FS35d	A4.1	High energy circalittoral rock	BSH	Recover	Recover	No change	Low	More certain
Isles of Scilly: Bristows to the Stones	FS35d	A4.2	Moderate energy circalittoral rock	BSH	Recover	Recover	No change	Low	More certain
Isles of Scilly: Bristows to the Stones	FS35d	A5.1	Subtidal coarse sediment	BSH	Maintain	Maintain	No change	Low	Less certain
Isles of Scilly: Bristows to the Stones	FS35d	A5.4	Subtidal mixed sediments	BSH	Maintain	Maintain	No change	Low	Less certain
Isles of Scilly: Bristows to the Stones	FS35d	HOCI_7	Fragile sponge and anthozoan communities on subtidal rocky habitats	HOCI	Recover	Recover	No change	Low	More certain
Isles of Scilly: Bristows to the Stones	FS35d	SOCI_8	Pink sea-fan (*Eunicella verrucosa*)	SOCI	Recover	Recover	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Isles of Scilly: Bristows to the Stones	FS35d	SOCI_24	Spiny lobster (*Palinurus elephas*)	SOCI	Recover	Recover	No change	Low	More certain
Isles of Scilly: Gilstone to Gorregan	FS35e	A1.1	High energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Gilstone to Gorregan	FS35e	A1.2	Moderate energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Gilstone to Gorregan	FS35e	SOCI_11	Giant goby (*Gobius cobitis*)	SOCI	Maintain	N/A	No confidence in feature presence and extent	N/A	N/A
Isles of Scilly: Gilstone to Gorregan	FS35e	SOCI_14	Stalked jellyfish (*Haliclystus auricula*)	SOCI	Maintain	N/A	No confidence in feature presence and extent	N/A	N/A
Isles of Scilly: Gilstone to Gorregan	FS35e	SOCI_24	Spiny lobster (*Palinurus elephas*)	SOCI	Recover	Recover	No change	Low	More certain
Isles of Scilly: Hanjague to Deep Ledge	FS35f	A1.1	High energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Hanjague to Deep Ledge	FS35f	A1.2	Moderate energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Hanjague to Deep Ledge	FS35f	A2.1	Intertidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Hanjague to Deep Ledge	FS35f	HOCI_10	Intertidal underboulder communities	HOCI	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Hanjague to Deep Ledge	FS35f	SOCI_24	Spiny lobster (*Palinurus elephas*)	SOCI	Recover	Recover	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Isles of Scilly: Higher Town	FS35g	A1.2	Moderate energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Higher Town	FS35g	A1.3	Low energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Higher Town	FS35g	A2.1	Intertidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Higher Town	FS35g	A2.2	Intertidal sand and muddy sand	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Higher Town	FS35g	HOCI_10	Intertidal underboulder communities	HOCI	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Higher Town	FS35g	HOCI_15	Peat and clay exposures	HOCI	Maintain	N/A	No confidence in feature presence and extent	N/A	N/A
Isles of Scilly: Higher Town	FS35g	SOCI_14	Stalked jellyfish (*Haliclystus auricula*)	SOCI	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Higher Town	FS35g	SOCI_20	Stalked jellyfish (*Lucernariopsis campanulata*)	SOCI	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Lower Ridge to Innisvouls	FS35h	A1.2	Moderate energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Lower Ridge to Innisvouls	FS35h	SOCI_24	Spiny lobster (*Palinurus elephas*)	SOCI	Recover	Recover	No change	Low	More certain
Isles of Scilly: Men a Vaur to White Island	FS35i	A1.1	High energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Men a Vaur to White Island	FS35i	A1.2	Moderate energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Isles of Scilly: Men a Vaur to White Island	FS35i	A2.1	Intertidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Men a Vaur to White Island	FS35i	A2.2	Intertidal sand and muddy sand	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Men a Vaur to White Island	FS35i	HOCI_10	Intertidal underboulder communities	HOCI	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Men a Vaur to White Island	FS35i	SOCI_14	Stalked jellyfish (*Haliclystus auricula*)	SOCI	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Men a Vaur to White Island	FS35i	SOCI_20	Stalked jellyfish (*Lucernariopsis campanulata*)	SOCI	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Men a Vaur to White Island	FS35i	SOCI_24	Spiny lobster (*Palinurus elephas*)	SOCI	Recover	Recover	No change	Low	More certain
Isles of Scilly: Peninnis to Dry Ledge	FS35j	A1.2	Moderate energy intertidal rock	BSH	Maintain	Maintain	No change	low	More certain
Isles of Scilly: Peninnis to Dry Ledge	FS35j	A1.3	Low energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Peninnis to Dry Ledge	FS35j	A2.1	Intertidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Peninnis to Dry Ledge	FS35j	A2.2	Intertidal sand and muddy sand	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Peninnis to Dry Ledge	FS35j	A2.4	Intertidal mixed sediments	BSH	Maintain	Maintain	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Isles of Scilly: Peninnis to Dry Ledge	FS35j	HOCI_10	Intertidal underboulder communities	HOCI	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Peninnis to Dry Ledge	FS35j	SOCI_3	Ocean quahog (*Arctica islandica*)	SOCI	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Peninnis to Dry Ledge	FS35j	SOCI_11	Giant goby (*Gobius cobitis*)	SOCI	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Peninnis to Dry Ledge	FS35j	SOCI_14	Stalked jellyfish (*Haliclystus auricula*)	SOCI	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Peninnis to Dry Ledge	FS35j	SOCI_20	Stalked jellyfish (*Lucernariopsis campanulata*)	SOCI	Maintain	Maintain	No change	low	More certain
Isles of Scilly: Peninnis to Dry Ledge	FS35j	SOCI_24	Spiny lobster (*Palinurus elephas*)	SOCI	Recover	Recover	No change	Low	More certain
Isles of Scilly: Plympton to Spanish Ledge	FS35k	A1.1	High energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Plympton to Spanish Ledge	FS35k	A1.2	Moderate energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Plympton to Spanish Ledge	FS35k	A2.2	Intertidal sand and muddy sand	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Plympton to Spanish Ledge	FS35k	HOCI_10	Intertidal underboulder communities	HOCI	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Plympton to Spanish Ledge	FS35k	SOCI_24	Spiny lobster (*Palinurus elephas*)	SOCI	Recover	Recover	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Isles of Scilly: Smith Sound Tide Swept Channel	FS35l	A1.1	High energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Smith Sound Tide Swept Channel	FS35l	A1.2	Moderate energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Smith Sound Tide Swept Channel	FS35l	SOCI_7	Burgundy maerl paint weed (*Cruoria cruoriaeformis*)	SOCI	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Smith Sound Tide Swept Channel	FS35l	SOCI_11	Giant goby (*Gobius cobitis*)	SOCI	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Smith Sound Tide Swept Channel	FS35l	SOCI_19	Stalked jellyfish (*Lucernariopsis cruxmelitensis*)	SOCI	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Smith Sound Tide Swept Channel	FS35l	SOCI_24	Spiny lobster (*Palinurus elephas*)	SOCI	Recover	Recover	No change	Low	More certain
Isles of Scilly: Tean	FS35m	A1.1	High energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Tean	FS35m	A1.2	Moderate energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Tean	FS35m	A2.1	Intertidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Tean	FS35m	A2.2	Intertidal sand and muddy sand	BSH	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Tean	FS35m	HOCI_10	Intertidal underboulder communities	HOCI	Maintain	Maintain	No change	Low	More certain
Isles of Scilly: Tean	FS35m	SOCI_14	Stalked jellyfish (*Haliclystus auricula*)	SOCI	Maintain	Maintain	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Isles of Scilly: Tean	FS35m	SOCI_20	Stalked jellyfish (*Lucernariopsis campanulata*)	SOCI	Maintain	N/A	No confidence in feature presence and extent	N/A	N/A
Padstow Bay and Surrounds	FS38	A1.1	High energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Padstow Bay and Surrounds	FS38	A1.2	Moderate energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Padstow Bay and Surrounds	FS38	A2.1	Intertidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
Padstow Bay and Surrounds	FS38	A2.2	Intertidal sand and muddy sand	BSH	Maintain	Maintain	No change	Low	More certain
Padstow Bay and Surrounds	FS38	A2.3	Intertidal mud	BSH	Maintain	Maintain	No change	Low	Less certain
Padstow Bay and Surrounds	FS38	A3.1	High energy infralittoral rock	BSH	Maintain	Maintain	No change	Low	More certain
Padstow Bay and Surrounds	FS38	A3.2	Moderate energy infralittoral rock	BSH	Maintain	Maintain	No change	Low	More certain
Padstow Bay and Surrounds	FS38	A4.1	High energy circalittoral rock	BSH	Maintain	Maintain	No change	Low	More certain
Padstow Bay and Surrounds	FS38	A4.2	Moderate energy circalittoral rock	BSH	Maintain	Maintain	No change	Low	More certain
Padstow Bay and Surrounds	FS38	A5.1	Subtidal coarse sediment	BSH	Maintain	Maintain	No change	Low	More certain
Padstow Bay and Surrounds	FS38	SOCI_3	Ocean quahog (*Arctica islandica*)	SOCI	Maintain	Maintain	No change	Low	More certain
Padstow Bay and Surrounds	FS38	SOCI_8	Pink sea-fan (*Eunicella verrucosa*)	SOCI	Maintain	Maintain	No change	Low	More certain
Padstow Bay and Surrounds	FS38	SOCI_14	Stalked jellyfish (*Haliclystus auricula*)	SOCI	Maintain	Maintain	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Padstow Bay and Surrounds	FS38	SOCI_19	Stalked jellyfish (*Lucernariopsis cruxmelitensis*)	SOCI	Maintain	Maintain	No change	Low	More certain
Padstow Bay and Surrounds	FS38	SOCI_24	Spiny lobster (*Palinurus elephas*)	SOCI	Recover	Recover	No change	Low	More certain
Lundy	FS41	HOCI_13	Mud habitats in deep water	HOCI	Recover	Maintain	The conservation objective was incorrectly recorded in the Defra consultation document. The SNCB 2012 advice has also incorrectly assigned this feature to Recover, but this was corrected in the amendments report. The assessment this year agreed with the amendments report that the conservation objective should be Maintain	Low	More certain
Lundy	FS41	SOCI_24	Spiny lobster (*Palinurus elephas*)	SOCI	Recover	Recover	No change	Low	More certain
Fylde Offshore	ISCZ08	A5.2	Subtidal sand	BSH	Maintain	Maintain	No change	Low	More certain
Fylde Offshore	ISCZ08	A5.3	Subtidal mud	BSH	Not assessed	Maintain	New feature proposed	Low	More certain
Fylde Offshore	ISCZ08	HOCI_21	Subtidal sands and gravels	HOCI	Maintain	Maintain	No change but feature no longer recommended as covered by feature A5.2	Low	More certain
Cumbria Coast	ISCZ11	A1.1	High energy intertidal rock	BSH	Maintain	Maintain	No change	Low	More certain
Cumbria Coast	ISCZ11	A2.2	Intertidal sand and muddy sand	BSH	Maintain	Maintain	No change	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Cumbria Coast	ISCZ11	A2.7	Intertidal biogenic reefs	BSH	Recover	Maintain	Available evidence indicates only very low levels of exposure. No commercial mussel fisheries present and hand picking of other species unlikely to take place on the honeycomb worm reef, rather the open boulder/cobble scars eg for periwinkles. Verification survey M_00312 was commissioned to identify sources of anthropogenic impact on features recommended for the site and did not identify any impact to *Sabellaria alveolata* reefs. In the context of our improved understanding of the scale of natural variation/change and the large scale of these features the exposure is likely to be *de minimis*	Low	More certain
Cumbria Coast	ISCZ11	A3.1	High energy infralittoral rock	BSH	Recover	Maintain	More detailed assessment of potting activity on this feature shows a low sensitivity and therefore a CO of Maintain is most appropriate. However this feature is no longer recommended as should be replaced by A3.2	Low	Less certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Cumbria Coast	ISCZ11	A3.2	Moderate energy infralittoral rock	BSH	Not assessed	Maintain	New feature proposed to replace A3.1. A summer commercial potting fishery has taken place for many years close inshore in the area between Seascale and Tarn Bay/Selker, which includes the Barn Scar and Kokoarrah Rocks areas of Moderate energy infralittoral rock. Several hundred pots may be set in the wider area, with 150–200 in the area off Barn Scar and Kokoarrah. There is a smaller-scale fishery around St Bees Head North, from Fleswick Bay to Saltom, with 50–60 pots. The fisheries move offshore to deeper water, in calm weather, in the winter. We are not aware of any characteristics of the feature which would increase its local sensitivity to this pressure/activity. The feature is likely to be exposed to considerable natural wave action due to its shallow depth	Low	More certain
Cumbria Coast	ISCZ11	HOCI_1	Blue mussel beds	HOCI	Maintain	Maintain	No change	Low	Less certain
Cumbria Coast	ISCZ11	HOCI_8	Honeycomb worm reefs (*Sabellaria alveolata*)	HOCI	Recover	Maintain	Available evidence indicates only very low levels of exposure. No commercial mussel fisheries present and hand picking of other species unlikely to take place on the honeycomb worm reef, rather the open boulder/cobble scars eg for periwinkles. Verification survey M_00312 was commissioned to identify sources of anthropogenic impact on features recommended for the site and did not identify any impact to *Sabellaria alveolata* reefs. In the context of our improved understanding of the scale of natural variation/change and the large scale of these features the exposure is likely to be *de minimis*	Low	More certain

`	Site code	Feature code	Feature name	Feature type	2012 conservation objective (consultation document)	2013 recommended conservation objective	Rationale for conservation objective changes in 2013	2013 confidence in condition	2013 certainty of conservation objective
Cumbria Coast	ISCZ11	HOCI_10	Intertidal underboulder communities	HOCI	Maintain	Maintain	No change	Low	More certain
Cumbria Coast	ISCZ11	HOCI_15	Peat and clay exposures	HOCI	Maintain	Maintain	No change	Low	More certain
Cumbria Coast	ISCZ11	non-ENG_18	Black guillemot (*Cepphus grille*)	non-ENG	Recover	Maintain	Photographic evidence of only one incident in last few years where a speedboat resulted in putting birds to flight. RSPB have no additional evidence of exposure. No evidence for significant displacement of birds or impact from disturbance. Extensive rocky intertidal zone means that boating activity does not present risk of disturbance to birds whilst on their nests. One historical incident in which static fishing nets set off St Bees Head resulted in entanglement and drowning of a number of seabirds. Since then the Cumbria SFC and now NW IFCA has instructed staff to remove any nets from around St Bees Head. There is no evidence of any subsequent entanglement events. There is no evidence of current exposure to static netting ie Not exposed. The NWIFCA have indicated that it would bring in a byelaw to regulate this and avoid any future risk of exposure. Revert to RSPB vulnerability assessment /ISCZ recommendation of Maintain CO	Low	More certain
Hilbre Island	ISCZ14	HOCI_1	Blue mussel beds	HOCI	Recover	Recover	No change	Low	More certain
Hilbre Island	ISCZ14	HOCI_15	Peat and clay exposures	HOCI	Recover	Recover	No change	Low	More certain

4.6 Assessment of risk to sites

Risk to sites was assessed using Protocol G as described in Section 3.3.

Table 7 Site risk assessments lists the pMCZs according to their 2013 site risk score (highest to lowest). It is important to note that site risk is a function of the number of features in a site, and thus sites with a low number of features may achieve higher risk scores than others as a result of this, rather than because they are at higher risk of damage.

For the total number of features considered for each site (column 4) see Section 3.3 for the explanation of how this has been calculated. Column 6, which shows whether the features with a Recover conservation objective have low confidence in extent, has been included as such features might not be selected by Defra for designation; this would lower the number of features in the site and thus change its risk score. Protocol G states that inshore sites with risk scores exceeding 50% should be considered at higher risk of damage or deterioration; in 2012, a site with a risk score of 50% was also considered to be at higher risk of damage or deterioration, and so the same approach has been taken here.

A total of seven sites are thus considered to be at higher risk of damage or deterioration according to the site risk equation. All of these, apart from Lundy, were assessed as being sites at higher risk of damage or deterioration in 2012. Lundy's risk score has increased as a result of a number of features being dropped (see site-specific advice in Annex 4). The risk score for Hilbre Island Group pMCZ has increased as both features now have a Recover conservation objective (in the 2012 advice, only one feature had a Recover conservation objective). However, the relative risk of the site is in practice reduced by the overlap of the pMCZ and a Special Area of Conservation (SAC), and the fact that this site has a degree of protection already (see site-specific advice for this site).

Of the other sites with large changes in risk scores between 2012 and 2013 (Tamar Estuary Sites pMCZ dropped from 100% to 33%, Folkestone Pomerania pMCZ dropped from 50% to 30%; and Cumbria Coast dropped from 44% to 0%), all are because in 2013 there are a lower number of features within the site with a recommended conservation objective of Recover.

All sites other than Hythe Bay contain highly sensitive features, 76% of which have Recover conservation objectives.

Table 7 Site risk assessments

pMCZ name	Risk score in 2012 (%)	Risk score 2013 (%)	Number of features in pMCZ	Number of features with Recover conservation objective	Is a higher risk (>50%) triggered by features with low confidence in extent?	Highly sensitive features present in pMCZ. (R) denotes a Recover objective; (M) denotes a Maintain objective
Hythe Bay	100	100	3	3	Yes	
Hilbre Island Group[13]	50	100	2	2	Yes	Peat and clay exposures (R)
Isles of Scilly Bristows to the Stones	78	78	9	7	Yes	Fragile sponge and anthozoan communities on subtidal rocky habitats (R) Pink sea-fan (*Eunicella verrucosa*) (R) Spiny lobster (*Palinurus elephas*) (R)
Chesil Beach and Stennis Ledges	71	71	7	5	Yes	Native oyster (*Ostrea edulis*) (R) Pink sea-fan (*Eunicella verrucosa*) (R)
Kingmere	75	75	4	3	Yes	Subtidal chalk (R) Native oyster (*Ostrea edulis*) (M)
South Dorset	60	60	5	4	Yes	Subtidal chalk (R)
Lundy	17	50	2	1	No	Spiny lobster (*Palinurus elephas*) (R)
Poole Rocks	40	40	5	2		Native oyster (*Ostrea edulis*) (R)
Folkestone Pomerania	50	38	8	3		Fragile sponge and anthozoan communities on subtidal rocky habitats (R) Honeycomb worm reefs (*Sabellaria alveolata*) (R) Ross worm reefs (*Sabellaria spinulosa*) (R)
The Manacles	16	35	17	6		Maerl beds (R) Pink sea-fan (*Eunicella verrucosa*) (R) Spiny lobster (*Palinurus elephas*) (R) Stalked jellyfish (Haliclystus auricula) (M) Sunset cup coral (*Leptopsammia pruvoti)* (M) Sea-fan anemone (*Amphianthus dohrnii)* (M)
Tamar Estuary	100	33	6	2		Native oyster (*Ostrea edulis*) (R)
Blackwater, Crouch, Roach and Colne Estuaries[14]	14	29	7	2		Native oyster (*Ostrea edulis*) (R) Native oyster beds (*Ostrea edulis*) (R)
Stour and Orwell Estuaries	36	27	11	3		Native oyster beds (*Ostrea edulis*) (R) Honeycomb worm reefs (*Sabellaria alveolata*) (R) Ross worm reefs (*Sabellaria spinulosa*) (R) Peat and clay exposures (M) Sheltered muddy gravels (R)
Torbay	14	23	13	3		Seagrass beds (R) Long snouted seahorse (*Hippocampus guttulatus*) (R) Honeycomb worm reefs (*Sabellaria alveolata*) (M) Native oyster (*Ostrea edulis*) (M) Peacock's tail (*Padina pavonica*) (M)

[13] The site is shown as at higher risk of damage or deterioration due to a risk score over 50%. However, Natural England is of the opinion that the relative risk of the site is functionally reduced by the overlap of the pMCZ and the SAC as discussed in Annex 5 (Section A2.2.4.1). It is not possible for this to be reflected in the risk score, which is calculated according to Protocol G, and the score therefore overstates the risk level of the site.

[14] This site was not listed as being at risk due to the presence of highly sensitive features in the 2012 advice, although native oysters were present.

pMCZ name	Risk score in 2012 (%)	Risk score 2013 (%)	Number of features in pMCZ	Number of features with Recover conservation objective	Is a higher risk (>50%) triggered by features with low confidence in extent?	Highly sensitive features present in pMCZ. (R) denotes a Recover objective; (M) denotes a Maintain objective
Isles of Scilly – all sites except Bristows to the Stones[15]	9	15	54	8		Spiny lobster (*Palinurus elephas*) (R) Stalked jellyfish (*Haliclystus auricula*) (M) Peat and clay exposures (M) Ocean quahog (*Arctic islandica*) (M) Burgundy maerl paint weed (*Cruoria cruoriaeformis*) (M)
Skerries Bank and Surrounds	12	13	15	2		Spiny lobster (*Palinurus elephas*) (R) Short snouted seahorse (*Hippocampus hippocampus*) (M) Pink sea-fan (*Eunicella verrucosa*) (M)
Upper Fowey and Pont Pill	0	13	8	1		Coastal saltmarshes and saline reedbeds (M) Sheltered muddy gravels (M)
Whitsand and Looe Bay	12	12	16	2		Seagrass beds (M) Pink sea-fan (*Eunicella verrucosa*) (R) Sea-fan anemone (*Amphianthus dohrnii*) (R) Stalked jellyfish (*Haliclystus auricula*) (M) Long snouted seahorse *(Hippocampus guttulatus)* (M) Ocean quahog *(Arctica islandica)* (M)
Medway Estuary	20	10	10	1		Sheltered muddy gravels (R) Tentacled lagoon-worm (*Alkmaria romijni*) (R) Peat and clay exposures (M)
Thanet Coast	17	8	12	1		Ross worm reefs (*Sabellaria spinulosa*) (R) Peat and clay exposures (M) Subtidal chalk (M) Stalked jellyfish (*Haliclystus auricula*) (M)
Padstow Bay and Surrounds	5	7	15	1		Spiny lobster (*Palinurus elephas*) (R) Stalked jellyfish (*Haliclystus auricula*) (M) Ocean quahog (*Arctica islandica*) (M) Pink sea-fan (*Eunicella verrucosa*) (M)
Beachy Head West[16]	6	7	15	1		Subtidal chalk (M) Long snouted seahorse (*Hippocampus guttulatus)* (M) Short snouted seahorse *(Hippocampus hippocampus)* (M) Native oyster *(Ostrea edulis)* (M)
Cumbria Coast	44	0	9	0		Honeycomb worm reefs (*Sabellaria alveolata*) (M) Peat and clay exposures (M)
Pagham Harbour	0	0	4	0		Seagrass beds (M) Defolin's lagoon snail (*Caecum armoricum)* (M) Lagoon sand shrimp *(Gammarus insensibilis)*(M)
Fylde Offshore	0	0	2	0		
Aln Estuary	0	0	6	0		Coastal saltmarshes and saline reedbeds (M) Sheltered muddy gravels (M)

[15] For the Isles of Scilly, the Bristows to the Stones subsite has been considered separately as it is geographically isolated. The other subsites have been combined. These sites were considered separately in 2012, but the number of features involved then was much higher as features already protected by the overlapping SAC were included, in line with the recommendations made by the Finding Sanctuary project.

[16] Beachy Head West was considered at higher risk of damage or deterioration in 2012 due to the presence of native oyster, a highly sensitive feature; however, new evidence indicates that there is no confidence in the presence of this feature.

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6 Glossary

Accuracy: The degree to which a measured value (either spatial resolution/precision or attribute) conforms to a true or accepted value. Accuracy is a measure of correctness. It is distinguished from precision, which measures exactness. In a habitat-mapping context, accuracy describes how closely a map predicts the actual habitat observed on the seabed at a given location (MESH, 2007).

Activity: Human social or economic actions or endeavours that may have an effect on the marine environment, for example fishing or energy production.

Anthropogenic: Caused by humans or human activities; usually used in reference to environmental degradation (JNCC, 2009b).

Appropriate authority: The appropriate authority is Welsh Ministers (for an area in Wales), Scottish Ministers (for an area in the Scottish offshore region) and in any other case the Secretary of State.

Benthic: A description for animals, plants and habitats associated with the seabed. All plants and animals that live in, on or near the seabed are benthos (for example sponges, crabs and seagrass beds) (Defra, 2007).

Best available evidence: This is one of the Defra MPA network design principles and is described as 'Network design should be based on the best information currently available. Lack of full scientific certainty should not be a reason for postponing proportionate decisions on site selection.' (Defra, 2010).

Biogenic reef: Any structure that has been formed from living material. It is normally used to describe living structures such as those created by the cold-water coral *Lophelia pertusa*, colonial worms such as *Sabellaria* spp and molluscs, including the horse mussel *Modiolus modiolus* (Anon, 2001).

Biotope: The physical habitat with its associated, distinctive biological communities. A biotope is the smallest unit of a habitat that can be delineated conveniently and is characterised by the community of plants and animals living there (for example, deep sea, *Lophelia pertusa* reef) (Anon, 2001). Usually, several biotopes will constitute an ecosystem.

Broad-scale habitat (BSH): These are taken from the EUNIS Level 3 classification (Davies, Moss, & Hill, 2004) and are listed in the Ecological Network Guidance (Natural England and JNCC, 2010).

Catadromous: Fish which spend most of their lives in fresh water and then migrate to the sea to breed.

Circalittoral: The subtidal zone characterised by animal-dominated communities. The depth at which the circalittoral zone begins is directly dependent on how much light reaches the seabed.

Confidence (of a habitat map): A statement about how reliable a map user thinks the map is given its purpose. This is not a mathematical definition like accuracy or uncertainty, but is a judgement made by the map user and may therefore vary for any map. However, this judgement can be supported by evidence from:

- accuracy measures
- supporting maps show underlying evidence used to interpret map
- evaluation of all contributing data
- independent validation
- expert opinion
- user support: Generally found to be acceptable by stakeholders and the map has stood the test of time (MESH, 2007).

Conservation objective: A statement of the nature conservation aspirations for the feature(s) of interest within a site and an assessment of those human pressures likely to affect the feature(s).

Defra: The UK Government department responsible for the environment, for food and farming, and for rural matters.

Defra marine area: This is defined as English inshore waters and the offshore waters of England, Wales and Northern Ireland.

Environment: The physical surroundings and climatic conditions that influence the behaviour, growth, abundance and overall health of a population or species (Anon, 2001).

EUNIS: A European habitat classification system developed by the European Topic Centre on Biological Diversity, covering all types of habitats from natural to artificial, terrestrial to freshwater and marine.

Exposure: The level that an interest feature or the habitat that supports it is open to a distressing influence resulting from the possible/likely effects of operations arising from human activities currently occurring on the site. The assessment of exposure can include the spatial extent, frequency, duration and intensity of the pressure(s) associated with the activities, where this information is available.

Extent: The area covered by a habitat or community.

European marine site: The marine areas of both Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

Favourable condition: The state of MCZ features (habitats, species, geological and geomorphological) within a site when all requirements to meet site-specific conservation objectives have been achieved.

For MCZ habitat FOCI and BSHs, favourable condition occurs when, **within the site:**

i. its extent/area is stable or increasing; and
ii. the specific structure and functions, such as ecological and physico-chemical structure and functions, which are necessary for its long-term maintenance exist; and
iii. biological diversity of its characteristic communities is maintained such that the quality and occurrence of habitats and the composition and abundance of species are in line with prevailing physiographic, geographic and climatic conditions[17].

For MCZ species features favourable condition occurs when, **within the site**:

i. population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its habitat; and
ii. there is sufficient habitat to maintain its population on a long-term basis.

For geological and geomorphological features favourable condition occurs when, **within the site**:

i. the extent, component elements and integrity of geological and geomorphological features are maintained or able to evolve within the parameters of natural change; and
ii. the structure, integrity and/or inherent functioning of these features are unimpaired and remain unobscured other than through natural processes[18].

[17] This definition is aligned with the Marine Strategy Framework Directive's biodiversity descriptor
[18] In the marine environment, recovery generally refers to natural recovery through the removal of unsustainable physical, chemical and biological pressures, rather than direct intervention (as is possible with terrestrial features).

- In applying the term ‘favourable condition’ to MCZ features, Natural England and JNCC are developing draft attributes specific to MCZ features which represent the generic elements above. It is Natural England and JNCC’s goal to eventually develop targets for each feature’s attributes, against which favourable condition will be assessed. These targets will be closely linked to the targets for Good Environmental Status being developed for Marine Strategy Framework Directive implementation.
- The adoption of the term ‘favourable condition’, which is being used for other sites in the MPA network, will encourage consistency in the use of terminology for conservation objectives and facilitate the implementation of a common approach across the MPA network. Achieving and sustaining favourable condition of MPA features will ensure their appropriate contribution to the progress towards the achievement of Good Environmental Status by 2020 (under the EU Marine Strategy Framework Directive), and of Favourable Conservation Status (under the EU Habitats Directive).

Feature: A species, habitat, geological or geomorphological entity for which an MPA is identified and managed.

Feature of conservation importance (FOCI): A habitat or species that is rare, threatened or declining in our waters.

Geographic Information System (GIS): A system of hardware, software, and procedures designed to support the capture, management, manipulation, analysis, modelling, and display of spatially referenced data for solving complex planning and management problems (NOAA, 2013).

Geo-referencing: Aligning geographic data to a known coordinate system so it can be viewed, queried, and analysed with other geographic data.

Geological or geomorphological features of interest: Geological and geomorphological features of interest may include areas of international geological importance, areas containing exceptional geological features, or areas that represent a geological or geomorphological feature or process. The Marine and Coastal Access Act allows for the designation of such features.

Ground truthing: Direct observations and samples of the seabed provide information that can be used to interpret remotely sensed images; the observations are the 'truth' with regard to the habitats actually present on the seabed. Observations used in this way provide ground truth data. The process of using ground truth data for interpretation is often termed ‘ground truthing’. During this process the relationship between properties of the remote images at the observation/sample sites (in the form of points, irregular digitised areas or buffer areas around points) is determined. These relationships are then applied to the whole image to predict the distribution of habitat types (MESH, 2007).

Habitat: The place where an organism lives, as characterised by the physical features. For example rocky reefs, sandbanks and mud holes all provide particular habitats that are occupied by animals or algae adapted to live in or on one of them but that probably cannot thrive, or even survive, in others (Anon, 2001).

Habitat of conservation importance (HOCI): A habitat that is rare, threatened or declining in our waters.

Impact: The consequence of pressures (for example habitat degradation) where a change occurs that is different to that expected under natural conditions (Robinson, Rogers, & Frid, 2008).

Impact Assessment: An Impact Assessment reports on the anticipated environmental, economic and social costs, benefits and impacts of a proposed policy or range or policies. These impacts are assessed against a baseline scenario in which the proposed policy interventions do not take place. It is a process for

analysing and selecting policy options and a tool for communicating how preferred options have been chosen.

Infralittoral zone: The shallowest subtidal zone (closest to the shore) characterised by plant-dominated communities.

Intertidal: The foreshore or area of seabed between high water mark and low water mark which is exposed each day as the tide rises and falls. Also called the 'littoral zone' (Anon, 2001).

Joint Nature Conservation Committee (JNCC): The statutory adviser to Government on UK and international nature conservation. Its specific remit in the marine environment ranges from 12–200 nautical miles. JNCC delivers the UK and international responsibilities of the four country nature conservation agencies of the devolved regions, including Natural England.

Littoral: The edge of the sea, but particularly the intertidal zone (Anon, 2001).

Maerl: Twig-like, calcified red algae that act as keystone species and form a particular habitat (Anon, 2001).

Management measures: Management measures are ways to manage activities in a Marine Protected Area in order to maintain or improve the condition of its features. Specific measures may include legislative measures, financial, administrative (for example permits), practical and planning measures, physical modifications (such as buoys and signs), voluntary codes of practice, and education.

Mapping European Seabed Habitats Project (MESH): The MESH Project ran between 2004 and 2008 and was made up of a consortium of twelve partners from five European countries led by the JNCC, with financial support from the EC's INTERREG IIIB NWE Programme. The MESH partnership drew together scientific and technical habitat-mapping skills, expertise in data collation and its management, and proven practical experience in the use of seabed-habitat maps for environmental management within national regulatory frameworks.

Marine Aggregates Levy Sustainability Fund (MALSF): From 2002 to 2011, the Government imposed a levy on all primary aggregates production (including marine aggregates) to reflect the environmental costs of winning these materials. A proportion of the revenue generated was used to provide a source of funding for research aimed at minimising the effects of aggregate production. This fund, delivered through Defra, was known as the Aggregate Levy Sustainability Fund (ALSF). The Marine ALSF supported a wide range of projects exploring ecology, geology and heritage of the seabed around the UK.

Marine Conservation Zone (MCZ): A type of MPA to be designated under the Marine and Coastal Access Act. MCZs will protect nationally important marine wildlife, habitats, geology and geomorphology and can be designated anywhere in English and Welsh inshore and UK offshore waters.

Marine Conservation Zone (MCZ) Project: A project established by Defra, Natural England and the JNCC to identify and recommend MCZs to Government. The MCZ Project was delivered through four regional MCZ projects covering the South-West, Irish Sea, North Sea and Eastern Channel and worked with sea-users and interest groups to identify MCZs.

Marine Protected Area (MPA): A generic term to cover all marine areas that are a *clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values* (Dudley, 2008). MPAs may vary in their objectives, design, management approach or name (for example marine reserve, sanctuary, marine park) (IUCN-WCPA, 2008). See also 'Protected Area' and 'OSPAR MPA'.

Marine Protected Area (MPA) network: A system of individual MPAs operating cooperatively and synergistically, at various spatial scales, and with a range of protection levels, in order to fulfil ecological aims more effectively and comprehensively than individual sites could acting alone. The system will also display social and economic benefits, though the latter may only become fully developed over long time frames as ecosystems recover (IUCN-WCPA, 2008).

Metadata: Information about the identification, the extent, the quality, the spatial and temporal schema, spatial reference, and distribution of digital geographic data.

Natural England: The statutory adviser to Government established to conserve and enhance the natural environment, for its intrinsic value, the wellbeing and enjoyment of people and the economic prosperity that it brings. Natural England has a statutory remit for England out to 12 nautical miles offshore.

Network: Collection of individual MPAs or reserves operating cooperatively and synergistically, at various spatial scales and with a range of protection levels that are designed to meet objectives that a single reserve cannot achieve (IUCN-WCPA, 2008).

Non-ENG feature: habitats or species which are not listed in the Ecological Network Guidance as features for which MCZs should be selected. However, the Marine and Coastal Access Act allows for all habitats and species to be designated within MCZs.

OSPAR: The Convention for the Protection of the Marine Environment of the North-East Atlantic (http://www.ospar.org).

Parent feature: The EUNIS Level 2 habitat to which the BSH belongs (e.g. the BSH 'High-energy circalittoral rock' belongs to the EUNIS Level 2 habitat 'Circalittoral rock' (Natural England and JNCC, 2012a).

Presence (of feature): Refers to a species, habitat, geological or geomorphological entity being located within a site.

Pressure: The mechanism through which an activity has an effect on any part of the ecosystem (e.g. physical abrasion caused by trawling). Pressures can be physical, chemical or biological and the same pressure can be caused by a number of different activities (Robinson, Rogers, & Frid, 2008). The nature of the pressure is determined by activity type, intensity and distribution.

Recovery: The absence of pressures to which the feature is sensitive, combined with evidence of ongoing improvement of the condition of the feature until a favourable stable state has been reached.

Regional MCZ project: Any one of the four projects that have been set up to deliver the MCZ Project (covering English inshore and English, Welsh and Northern Irish offshore waters), namely Finding Sanctuary (south-west), Irish Sea Conservation Zones (Irish Sea), Net Gain (North Sea) and Balanced Seas (south-east).

Regional stakeholder group: A group of sea-users, regulators and interest groups that will decide upon the MCZ recommendations of the regional MCZ projects. (Note. Finding Sanctuary calls its regional stakeholder group the 'Steering Group'; Net Gain calls its regional stakeholder group the 'Stakeholder Advisory Panel'.)

Risk: The concept of the current level of possible loss, damage or deterioration of an interest feature, habitat and a site caused by an anthropogenic activity.

Risk Assessment: A judgement and statement on the expected loss, damage or deterioration of an interest feature, habitat or site caused by anthropogenic activity.

Science Advisory Panel (SAP): The SAP was employed to provide the scientific knowledge, advice and judgement necessary to assist the regional MCZ projects in identifying MCZs and the Secretary of State in designating these sites as a contribution to an ecologically coherent network. Members and the chair of the SAP were appointed by Defra.

Sensitivity: A measure of tolerance (or intolerance) of a species or habitat to damage from an external factor and the time taken for its subsequent recovery. See http://www.marlin.ac.uk/sensitivityrationale.php for further information.

Site of Special Scientific Interest (SSSI): Sites designated under the Wildlife and Countryside Act 1981 (as amended 1985, and superseded by the Countryside and Rights of Way Act 2000, and the Nature Conservation (Scotland) Act (2004)).

Special Area of Conservation (SAC): A protected site designated under the European Habitats Directive for species and habitats of European importance, as listed in Annex I and II of the Directive.

Species of conservation importance (SOCI): Habitats and species that are rare, threatened or declining in our waters.

Stakeholders: Individuals (including members of the public), groups of individuals, organisations, or political entities interested in and/or affected by the outcome of management decisions. Stakeholders may also be individuals, groups, or other entities that are likely to have an effect on the outcome of management decisions.

Statutory Nature Conservation Body (SNCB): A collective term for the Countryside Council for Wales, the JNCC, Natural England, Northern Ireland's Council for Nature Conservation and the Countryside (which generally works through the Northern Ireland Environment Agency) and Scottish Natural Heritage.

Substrate: The surface or medium on which an organism grows or is attached (e.g. seabed sediment).

Subtidal: Depths greater than the intertidal zone (Anon, 2001).

UK Biodiversity Action Plan (UK BAP): The UK BAP was the Government's response to the Convention on Biological Diversity (CBD) signed in 1992. The UK BAP included a number of specific plans for species and habitats afforded priority conservation action. More recently devolution has meant that country level strategies have been produced (e.g. the England Biodiversity Strategy (Defra, 2011b)).

Uncertainty: The degree to which the measured value of some quantity is estimated to vary from the true value. Uncertainty can arise from a variety of sources, including limitations on the precision or accuracy of a measuring instrument or system; measurement error; the integration of data that uses different scales or that describe phenomena differently; conflicting representations of the same phenomena; the variable, unquantifiable, or indefinite nature of the phenomena being measured; or the limits of human knowledge. Uncertainty is the opposite of confidence (MESH, 2007).

Unfavourable status: The state of the feature is currently unsatisfactory and management may be required to enable favourable condition to be achieved.

Viability: The ability of an MPA to maintain the integrity of the features (i.e. population of the species or condition and extent of the habitat), for which it is designated, and to ensure individual sites are self-sustaining throughout natural cycles of variation.

Vulnerability: A measure of the degree of exposure of a receptor to a pressure to which it is sensitive.

Annex 1

Natural England MCZ Post-consultation Evidence Panel Terms of Reference

Terms of Reference – agreed as of 7th June 2013

The Natural England Marine Conservation Zone (MCZ) Evidence Panel has been established to review new and other pertinent biological and physical evidence arising through the public consultation and from other sources on the initial tranche of MCZs. This evidence could potentially change the confidence in and therefore decisions on recommended MCZ features or boundaries. The processing, interpretation of evidence and final recommendations must be done formally, and must be accompanied by a robust audit trail.

The Evidence Panel will review all consultation responses supplied by Defra that contain physical and biological evidence as well as any new sources of information, identified through other mechanisms, that have previously not been included as data sources for the proposed site features within or close to the proposed boundary. Evidence for consideration must be auditable and transparent.

New evidence will be assessed for its ability to inform presence or absence of site features and, if considered suitable[19], by the Evidence Panel, included in Natural England's advice to Defra as a data source. Suitability of evidence will be determined by a combination of data quality assessments (MESH) and expert judgement from members of the Evidence Panel against agreed criteria. Only physical and biological evidence will be considered by the Panel. The Evidence Panel may need to seek expert advice or opinion from outside of the Panel to ensure they are able to provide the robust scientific advice required. This may be particularly pertinent if new evidence sources seem to conflict.

The Evidence Panel will:

- Agree criteria on the suitability of evidence (the criteria will be published as part of the advice submitted to Defra).
- Review all physical and biological evidence submitted in consultation responses forwarded by Defra and all other physical and biological evidence not used for MCZ confidence assessments to date (i.e. not used for July 2012 advice).
- Maintain a list of all evidence considered and not considered by the Panel.
- Provide clear advice with a rationale for whether evidence will be included in the confidence assessment and further advice to Defra.
- Maintain clear records of the meetings of the Panel, with attendees listed. If additional expert advice is sought from outside the Panel then this advice will be recorded.
- The Panel will provide reports to the Natural England MCZ designation project manager and Defra as required.

Membership

Members of the Evidence Panel have been selected for their skills and experience with regards to analysing, interpreting and using evidence for site designations.

The Evidence Panel consists of:

- Richard Wright (Chair)
- Robert Enever (Senior Specialist Marine Evidence)

[19] Criteria on the suitability of evidence to inform feature extent and presence have been defined by Natural England and will be agreed by the Panel at the first meeting.

- Ian Saunders (Senior Adviser Marine Data)
- John Bleach (WS3 Work Stream Lead, Data and Evidence)
- Mike Young (Marine Monitoring Senior Specialist)
- Paul Ivory and Charlotte Moffat (Secretariat)
- Alice Ramsay (JNCC)
- Ollie Payne (JNCC)
- Dave Limpenny (Cefas)

Additional support from Natural England's Senior Specialists will be sought if required on fisheries issues, JNCC for cross 12nm site issues, and regional advisers on local site issues, if required. Members of the Evidence Panel may enter into dialogue with individual stakeholders who have provided data, as appropriate.

There may be a need to co-opt deputies if members are unavailable – nominated deputies will be agreed with the Chair of the Panel.

Reporting structure

The Secretariat will provide a single point of contact for the formal disclosure of advice from the Panel to its customer organisations. Individual Panel members should not disclose partial or incomplete advice being developed by the Panel without written permission from the Chair.

The Panel will commence on 21 May 2013 and close on 22 May 2013, unless at this first meeting it is considered that further work is required.

Annex 2

Natural England MCZ Evidence Panel 21st and 22nd May 2013

Minutes

Location: Hercules House, London

In attendance:

- Richard Wright (Chair, Marine Manager)
- David Limpenny (Cefas, MPA Programme Manager)
- Ian Saunders (Senior Adviser Marine Data)
- Alice Ramsey (JNCC, MPA Adviser)
- Ollie Payne (JNCC, Senior MPA Adviser)
- Rob Enever (Senior Specialist Marine Evidence)
- John Bleach (WS3 Work Stream Lead, Data and Evidence)
- Mike Young (Marine Monitoring Senior specialist)
- Paul Ivory (Secretariat)
- Charlie Moffat (Secretariat)

Session 1: Introductory session

Introductory presentation by Paul Ivory

Notes from discussions during this presentation

The remit of the Evidence Panel was discussed and the difference between JNCC and Natural England's approach identified. JNCC used their Evidence Panel process to review the expert judgement applied at the confidence assessment stage. Due to the large number of features and data sets in inshore sites, Natural England will use an automated process for the confidence assessment stage with an internal Quality Assurance (QA) process. Therefore, Natural England's Evidence Panel is restricted to assessing the suitability of new evidence for inclusion in the process for developing revised confidence assessments. The Panel agreed that the rationale for this should be clearly documented in both the Natural England and JNCC advice reports on Tranche 1 sites to Defra.

- Action 1: Evidence Panel Secretariat to ensure rationale is clearly documented in advice documentation.

The Evidence Panel discussed the approach used by Natural England for screening new evidence and agreed that this should be clearly detailed in the advice documentation. The Panel agreed that it is also necessary to provide a definitive list of consultation responses forwarded by Defra before the agreed cut-off date outlined in the Natural England MCZ Evidence Panel audit log.

The Panel did not review any consultation responses containing only socio-economic information as these fall outside the remit of the Panel.

The Panel did not review any consultation responses containing boundary queries unsupported by non new ecological data as these fall outside the remit of the Panel.

The Panel agreed that the cut-off date for new evidence to be provided to Natural England was 15 May 2013. New evidence received after this cut-off date will be used at the sense-checking stage of the MCZ process as appropriate.

- Action 2: Evidence Panel Secretariat to ensure an evidence screening approach and a table of the consultation responses that contain evidence and that were forwarded by Defra is included in the advice documentation.

- Action 3: Defra to be informed that a cut-off date for receiving new evidence was applied, and that evidence provided past this deadline will not be included within the confidence assessments but will be included as a sense check in the July workshops.

- Agreed: The results of eight MCZ verification surveys will not be included as the data will not be available until July. This means that they will be too late to include in the revised confidence assessment. If reports from these remaining surveys become available before 7 July there maybe scope for this evidence to be considered at the sense-checking stage of the process.

The Evidence Panel discussed how evidence that was initially screened out but which was still considered at the sense-checking stage should be recorded in the advice to Defra. Due to the small number of offshore sites, JNCC has completed a narrative on the data used for each site, but it will be difficult to do this for the inshore sites due to the automated approach Natural England are using.

- Agreed: Data not used for the 2012 advice or by the Regional Projects will be referred to as "evidence which Natural England is aware of, but have not been able to use for the 2012 advice" (and refer to Table 29 in JNCC and Natural England's advice to Defra on rMCZs (2012a)).

- Agreed: Cut-off of 15 May for the submission of new evidence must be observed to enable data handover to Marine Mapping, the consultants who are doing the confidence assessment analysis, on 3 June.

- Action 4: Secretariat to ensure that Natural England's advice to Defra on Tranche 1 MCZs clearly lists those data sets that ABPmer MB0116 identified as 'new' evidence but which have since been identified by Natural England as evidence already used, as per approach taken by JNCC.

Evidence Panel discussed the screening of the new evidence that has been carried out by the evidence team. Up to 19 of the new evidence data sets (comprising of verification surveys and consultation responses) cannot be converted into GI by the deadline. These evidence data sets will be considered at the sense-checking stage.

- Action 5: Evidence Panel Secretariat to ensure the use of data sets that cannot be converted to GI form for the sense check is explained clearly in Natural England's advice.

- Agreed: The Panel agreed that the spreadsheet provided to Natural England by Defra on 13th May 2013 was the definitive list for use by the Evidence Panel. The spreadsheet was described by Defra as containing an up-to-date list of all consultation responses sent to Natural England.

- Action 6: Paul to circulate copy of his presentation to the Panel members.

Session 2: Terms of Reference

The Panel reviewed and discussed the Natural England MCZ Evidence Panel Terms of Reference (ToR).

- Agreed: "Ecological evidence that will inform the presence or extent of recommended ENG features..." will be amended to "physical and biological evidence..."

- Action 7: Sue Wells to look into whether the ToR and minutes from the Natural England MCZ Evidence Panel should be included as part of Natural England's advice.

The criteria used to screen new evidence by Natural England were discussed by the Panel. The Panel agreed that all types of physical and biological evidence should be screened using the same set of criteria.

The Panel discussed the potential need for additional guiding principles related to QA procedures to further screen new evidence, and agreed that further screening criteria would be hard to define due to the variety of evidence types. However it was also agreed that the Panel should try to identify commonalities between evidence sets (e.g. QA/data standards) as they review them. If suitable, additional screening criteria would be retro-fitted at the end of the meeting.

The Panel discussed whether including this list of all consultation responses received by Natural England in the advice would be a breach of data confidentiality. The Panel agreed that since the data would not specifically be listed, it would be acceptable to include a list.

The Panel agreed that any evidence that cannot be turned into GI format by 3rd June should be excluded from the automated revision of the confidence assessments.

- Action 8: Secretariat to update the ToR and to circulate these with the meeting minutes for the Panel to sign off.

Criteria for suitability of evidence

Following their own screening process, Defra forwarded to Natural England consultation responses which fell into two different categories: those which included ecological evidence, and those including socio-economic responses. Responses falling under the former category, i.e. containing ecological evidence, were then screened against the six criteria below.

7. The evidence had been submitted by 15 May 2013.
8. The evidence had not been used for production of the 2012 SNCB Statutory Advice on recommended MCZs.
9. The evidence contains information on a Tranche 1 feature.
10. The evidence contains ecological information pertinent to a site proposed in the current tranche.
11. The evidence could be converted into a Geographic Information System (GIS) format by 3 June 2013.
12. The evidence is suitable for use in revising the confidence assessments in feature presence and extent.

- Agreed: The Panel agreed the six criteria.

The Panel discussed the need for principles for application of the screening criterion number six above: “The evidence is suitable for use in revising the confidence assessments in feature presence and extent”. It was agreed to use the five following guiding principles when reviewing the new evidence.

1. MCZ verification surveys commissioned by Natural England are considered suitable for inclusion due to the standard of their QA processes.
2. New evidence identified through the ABPMer MB0116 report is considered suitable for inclusion, due to the QA standards detailed in the MB0116 Report, and the fact that this was a Defra-approved piece of work.

3. Photographic evidence: Using the example of the Isles of Scilly, for which over 5,000 photos had been submitted as evidence for features, the Panel agreed that for photos to be considered for any sites, information would need to be provided by the consultee detailing:

    - the recommended feature for which the photo provides evidence

    - geo-referencing of the photograph

    - date of the photograph.

This evidence (i.e. a photograph including complete metadata) will then go through a QA process conducted by a team of Natural England staff to verify the presence or absence of the feature.

- Action 9: Secretariat to ensure the photographic evidence QA process is documented in Natural England's advice.

The Panel discussed the difficulty of distinguishing between relatively similar features through photographs (e.g. of low vs. moderate vs. high-energy circalittoral rock). It was agreed that in some cases these can be identified by the species present, and that a moderate confidence can be given if the parent feature is present.

4. Video evidence would need to be provided as "interpreted video data" in order for it to be accepted into the confidence assessment.

5. Data collection method and data analysis should undergo QA to ensure it is of appropriate standard.

The Panel discussed the need to consider the results of the eight outstanding MCZ verification surveys to increase confidence in Natural England's advice to Defra.

The Panel discussed whether confidence assessments are needed for presence and extent of all ENG features found in the 25 proposed MCZ sites, not just for the features that were recommended by the Regional Projects. The Panel discuss the need for this information to help identify change and conflict in the presence of features. The Panel agreed that this information is necessary for the sense-checking stage so that a full picture of all ENG features within a site is available.

The Panel discussed the circumstances under which features not recommended by the Regional Projects might be included in Natural England's advice. The Panel agreed further clarification from Defra would be required, as JNCC consider that this might be possible in certain situations.

- Agreed: If the additional analysis does not impact the delivery timeline, Natural England should run the confidence assessment for all ENG features in each site.

- Agreed: If conflicts with T1 features or change in features are identified, a narrative should be provided in our advice to Defra.

It was acknowledged that there will be some differences in approach taken in the advice provided by JNCC and Natural England, since the majority of the data used by JNCC for their 2012 advice was modelled, and the new verification survey data for the offshore sites is providing information on features that were not recommended by the Regional Projects.

- Agreed: A steer from Defra is required as to whether Natural England is to include 'new' (i.e. non-recommended features) in its advice document, given that these were not included in the consultation document.

Session 3: Non-consultation evidence

The Panel reviewed the evidence sets contained in the new evidence non-consultation audit log 1.3, which lists the surveys that Natural England were aware of during preparation of their 2012 advice but for which the data were not available at the time, as well as the MCZ verification surveys commissioned by Natural England and the data sets identified in the ABPmer MB116 report.

Comments and the screening decisions made by the Panel for each data set are recorded in the Evidence Panel audit log[20].

General comments and actions relating to these data sets:

- Action 10: Protocol E requires the QA status of evidence sets to be noted. Secretariat to include a QA column on the audit log to record this information.
- Agreed: Referencing the survey report containing methodology/QA procedures is sufficient information for the QA status column in the audit log.
- Action 11: Ollie to follow up with Defra to confirm QA process for MB116 data sets.
- Agreed: QA status must be recorded for all data sets not just new data sets. However, the Panel agreed that the QA process used by the Regional Projects is sufficient for 'old' data sets.
- Action 12: Assign all data sets a survey ID (Rob Enever).

The Panel discussed how photo evidence is being used as point data and the fact that this may give rise to duplicate records.

- Action 13: Secretariat to ensure that details of the photo QA process are included in Natural England's Advice and that the criteria for the weighting of point data are clearly explained.

Agreed amendments to the log of non-consultation data sets

- Agreed: Each entry will be given a unique ID.
- Agreed: Error - column 6 "says no according to...", should be "yes....".
- Action 14: Rob to update MB0116 datasets with Used/New data screening .
- Action 15: Secretariat to check if data set A33 is wrongly recorded on the sheet.

Session 4: Consultation responses

The Panel reviewed the evidence sets contained in consultation responses audit log 2.3 which lists all the responses that Defra had provided to Natural England by 15 May 2013. The Panel reviewed each of the responses that were provided to Natural England as containing ecological data.

The comments and screening decisions made by the Panel for each data set are recorded in the audit log.

[20] This supporting information is available on request from Natural England

General comments and actions from the session:

- Agreed: There is a risk to us delivering our advice by 2 August if Defra require us to provide confidence assessments for two different boundary scenarios for a single site.
- Action 16: The Panel agreed there is a need for a steer from Defra on whether there is a requirement to provide advice on evidence relating to non-ENG features. Secretariat to follow up with Sue/Defra.
- Action 17: Secretariat to ensure that it is clearly stated in Natural England's advice that the Panel only reviewed consultation responses forwarded to Natural England by Defra by 15 May 2013.

The Panel discussed the possibility of responses containing evidence being accidentally screened out by Defra and not being forwarded to Natural England.

- Action 18: Richard to raise this concern with Caroline.

Session 5: Review

The Panel reviewed the process they had used and discussed potential improvements for equivalent activities in the future. The lessons learned will be passed on to relevant Natural England staff.

Action Log

Action Number	Complete (Y/N)	Action Comments
1	Y	Rationale clearly documented in Section 3.1.4 and inclusion of Evidence Panel Terms of Reference and Minutes in Annexes 1 & 2
2	Y	An Evidence Panel Audit Log was kept detailing the consultation responses, evidence screening approach and panel decisions. Included as supporting evidence and available on request from Natural England.
3	Y	And clearly stated in Section 3.1.4 Evidence Panel Process
4	Y	Data sets listed in Evidence Panel Audit Log
5	Y	Referenced in Evidence Panel Audit Log
6	Y	
7	Y	Terms of Reference and minutes included as Annexes 1 & 2 in NE Advice
8	Y	Terms of Reference circulated, updated and agreed on 7 June 2013
9	Y	Photographic evidence QA process documented in Section 3.1.5.2
10	Y	QA column included in Evidence Panel Audit Log
11	Y	
12	Y	All data sets assigned unique ID
13	Y	Photographic Evidence QA process documented in Section 3.1.5.2
14	Y	"New Evidence" column in Evidence Panel Audit Log
15	Y	Correction Made. Originally listed as not being Tranche 1
16	Y	
17	Y	Clearly stated in Section 3.1.4 Evidence Panel Process
18	Y	

Annex 3

Details of the processes for assessing confidence in presence and extent

A3.1 Details of the processes for assessing confidence in presence and extent

Natural England's assessment of marine evidence was performed through an automated analysis of the data. Natural England and Marine Mapping Ltd used Technical Protocol E and the supplementary paper (Natural England and JNCC, 2012a; JNCC and Natural England, 2013a), to generate confidence assessment flow charts (Figures A3.1 – A3.6). The data were taken from source and where possible did not rely on any previous extractions or manipulations of data. The audit trail associated with the confidence assessment enables the user to follow how data were applied to the protocol questioning, and ultimately how they contributed to a given feature's confidence assessment. In addition to the judgements of high, moderate and low confidence for presence assessments 'no confidence' judgements were determined where there was no evidence of the habitat or species present in the site.

A3.2 Decision trees used during confidence assessment

Figures A3.1 – 3.6 are a visual representation of questions asked of the data during the automated confidence assessment process for each of the feature types under examination: broad-scale habitats, habitats of conservation importance, and SOCI. They represent a clear and structured decision trail in using the best available evidence to determine confidence levels in the presence and extent of each feature.

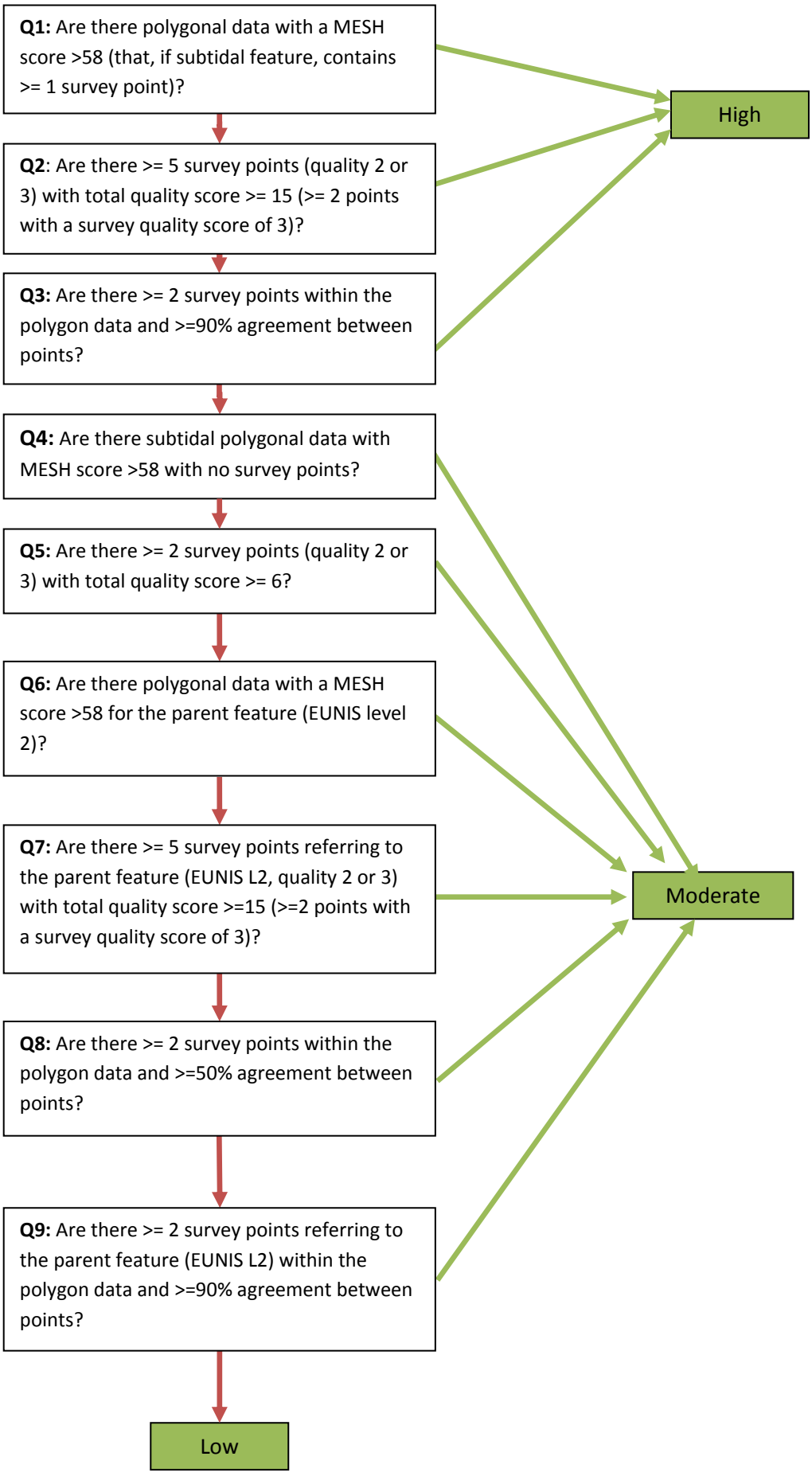

Figure A3.5 Decision tree for determining the confidence in the presence of broad-scale habitat features

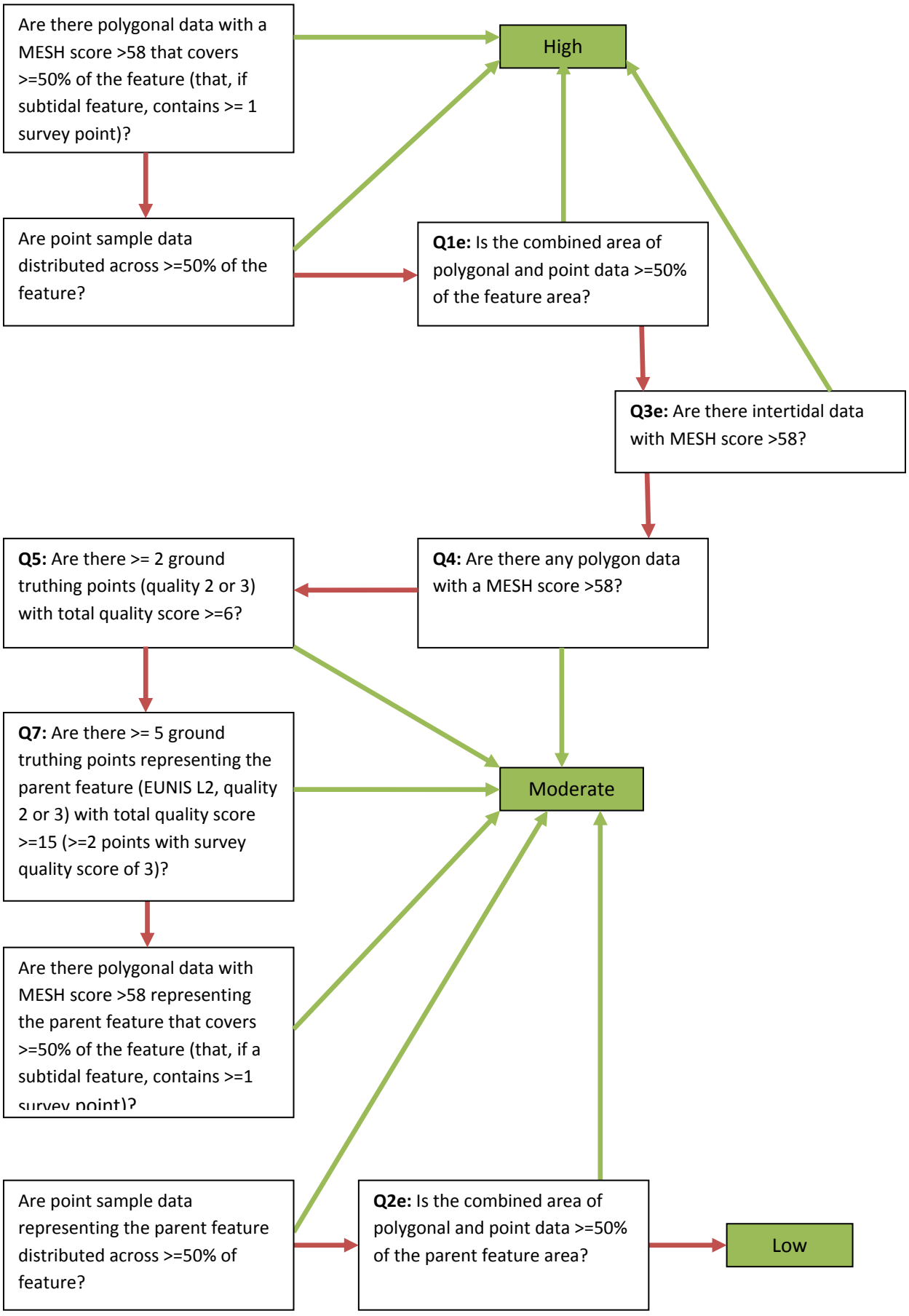

Figure A3.6 Decision tree for determining the confidence in the extent of broad-scale habitat features

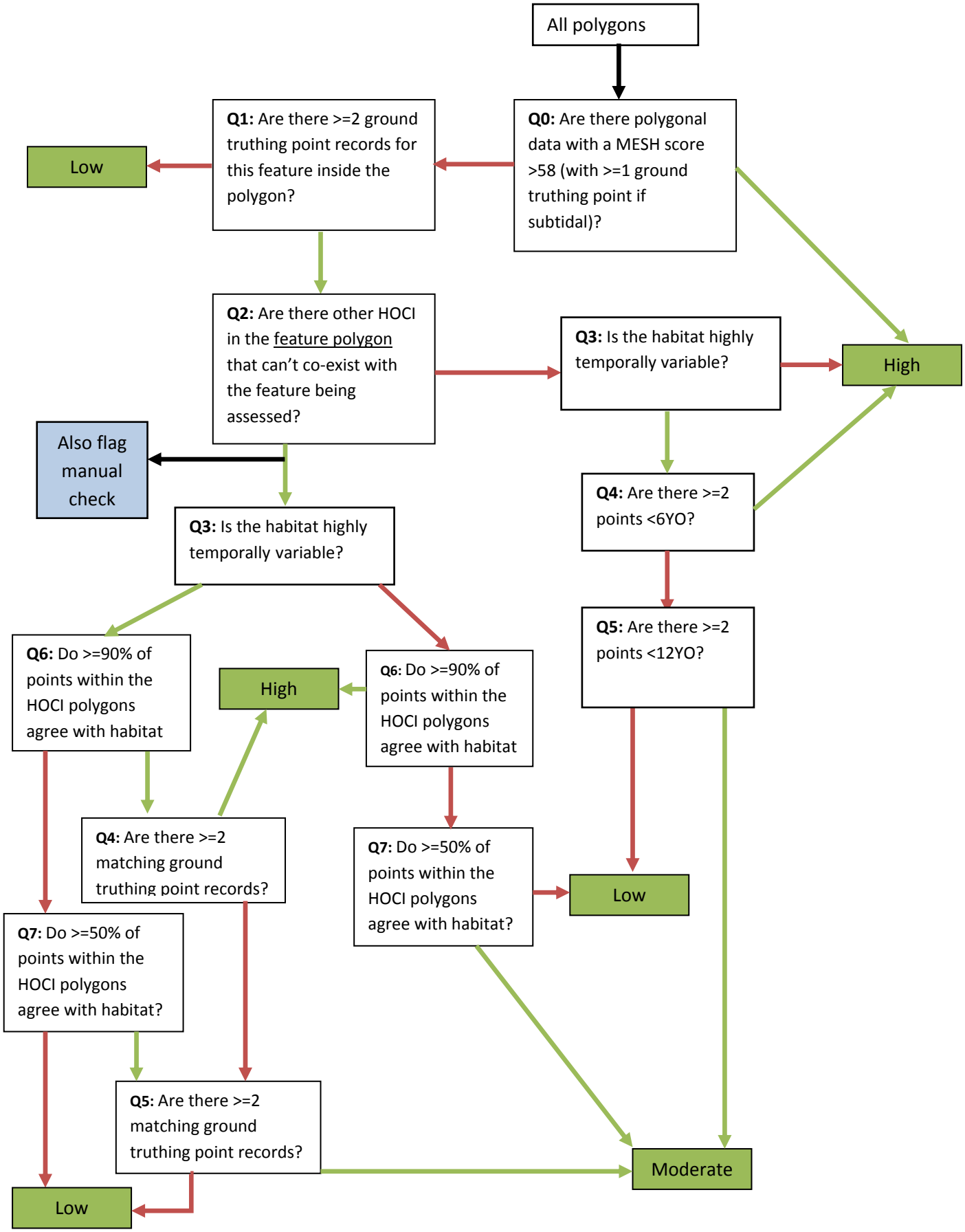

Figure A3.7a Decision tree for determining the confidence in the presence of HOCI using polygonal data

Point and polygon + point data to be assessed separately, then the highest confidence chosen per feature

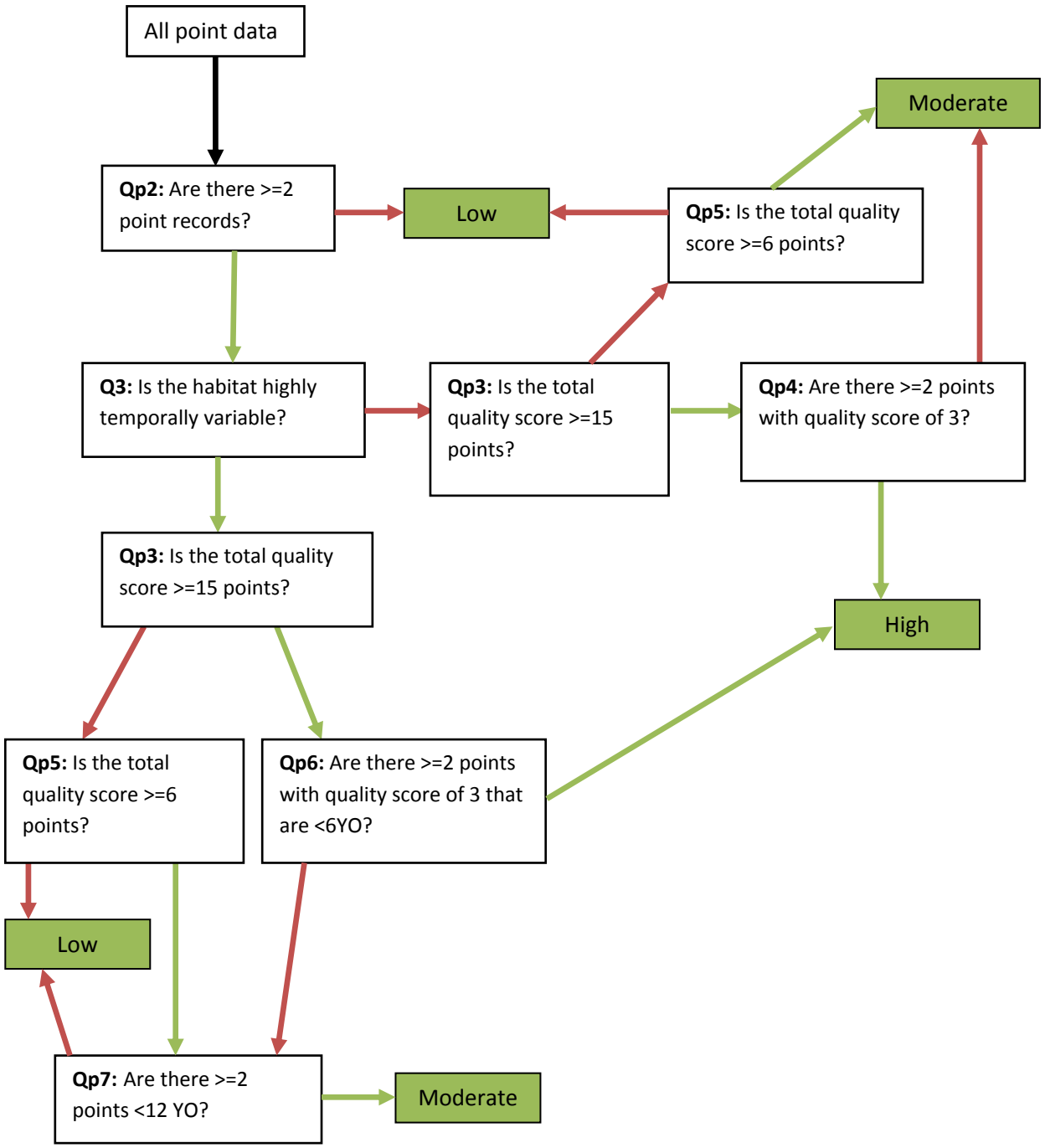

Figure A3.7b Decision tree for determining the confidence in the presence of habitat features of conservation importance (HOCI) using point data

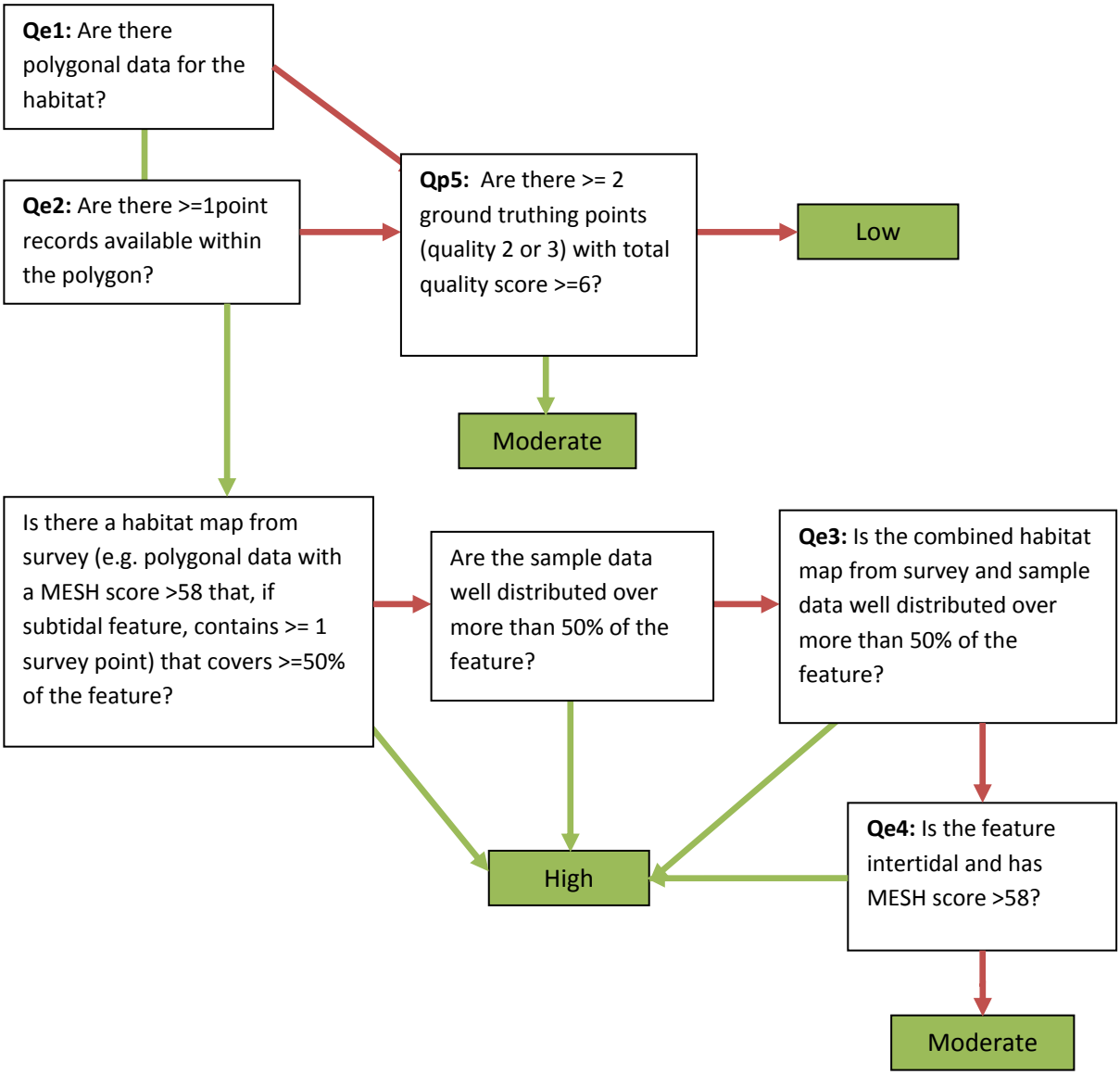

Figure A3.8 Decision tree for determining the confidence in the extent/distribution of habitat features of conservation importance (HOCI)

Note: Protocol E does not mention highly temporally variable habitats in HOCI extent.

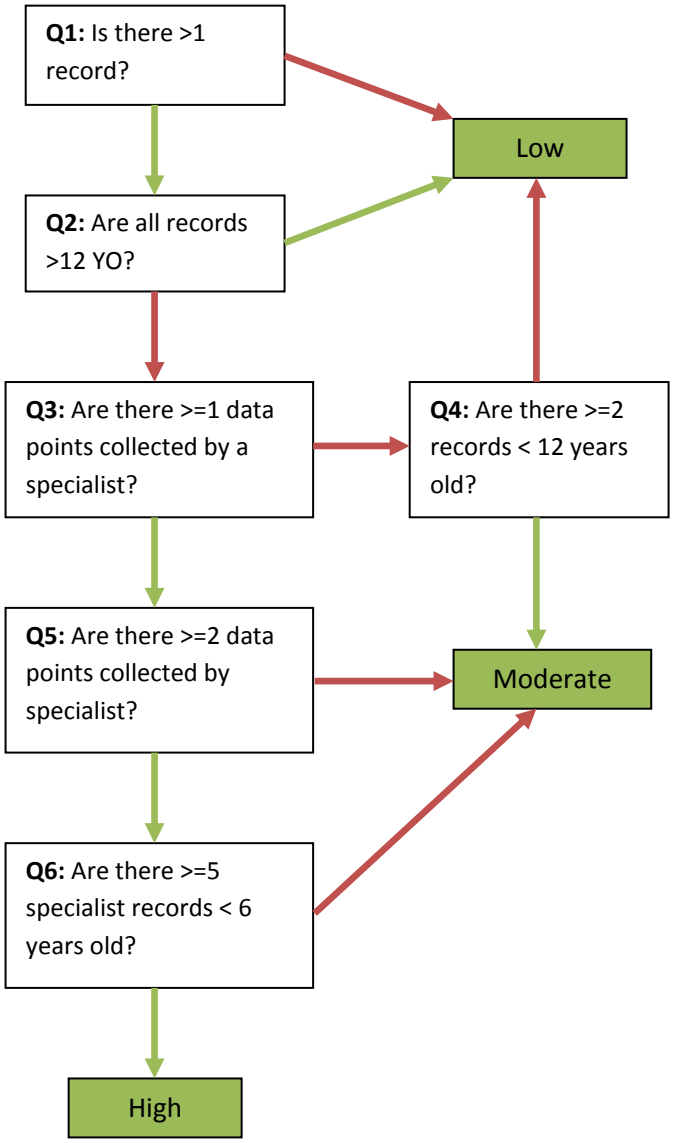

Figure A3.9 Decision tree for determining the confidence in the presence of species features of conservation importance (SOCI)

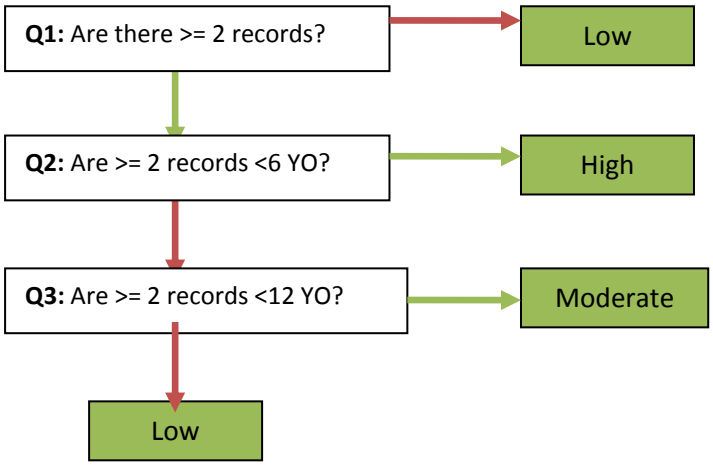

Figure A3.10 Decision tree for determining the confidence in the distribution of species features of conservation importance (SOCI)

A3.4 Descriptions of questions asked during confidence assessment process

Table A3.1 2 Question numbers and their descriptions relate to those questions within the boxes of the decision trees

Feature type	Question number	Column heading	Description
Species FOCI audit	Q1	>1 record?	Is there greater than one record?
	Q2	All >12YO?	Are all records greater than 12 years old?
	Q3	>=1 quality 2 or 3 records?	Is there at least one quality 2 or 3 record?
	Q4	>=2 records <12YO?	Are there at least two records less than 12 years old?
	Q5	>=2 quality 2 or 3 records?	Is there at least two quality 2 or 3 records?
	Q6	>=5 quality 2 or 3 records < 6YO?	Are there at least five quality 2 or 3 records less than 6 years old?
	Q1	>=2 records?	Is there at least 2 records?
	Q2	>=2 records <6YO?	Are there at least two records less than 6 years old?
	Q3	>=2 records <12YO?	Are there at least two records less than 12 years old?
Habitat FOCI audit	Q0	Is there MESH data >58 with >=1 ground truth point?	Is there a habitat map of the feature with a MESH confidence score greater than 58 with at least one supporting ground truth record?
	Q1	Are there >=2 ground truthing points for this polygon?	Are there at least 2 ground truth records for the feature habitat map?
	Q2	Are there FOCI in the polygon that can't co-exist?	Are there feature records within the habitat map that can co-exist?
	Q3	Is the habitat highly temporally variable?	Is the habitat temporally variable?
	Q4	Are there >=2 points in poly <6YO?	Are there at least 2 records less than 6 years old within the feature habitat map?
	Q5	Are there >=2 points in poly <12YO?	Are there at least 2 records less than 12 years old within the habitat map?
	Q6	Do >=90% of the ground truthing points match?	Do at least 90% of the ground truth points within the feature habitat map agree with each other?
	Q7	Do >=50% of the ground truthing points match?	Do at least 50% of the ground truth points within the feature habitat map agree with each other?
	Qp2	Are there >=2 point records?	Are there at least 2 ground truth records?
	Qp3	Is the total quality score >=15?	Is the combined quality score of the ground truth records at least 15?
	Qp4	Are there >=2 points with quality 3?	Are there at least 2 records supporting the feature with a quality score of 3?
	Qp5	Is the total quality score >=6?	Is the total quality score at least 6?
	Qp6	Are there >=2 points of quality 3 <6YO?	Are there at least 2 records of quality score 3 less than 6 years old?
	Qp7	Are there >=2 points <12YO?	Are there at least 2 feature records less than 12 years old?
	Qe1	Is there polygonal data available?	Has the feature been mapped?

Feature type	Question number	Column heading	Description
	Qe2	Are there >=1 ground truthing points?	Is there at least 1 ground truth point supporting the feature habitat map?
	Qe3	Does sample data cover >=50% of feature?	Do the feature ground truth records cover at least 50% of the habitat map?
	Qe4	Is the habitat intertidal and has MESH score >58?	Is the habitat map for an intertidal feature and does it have a MESH confidence score above 58?
Broad-Scale Habitat audit	Q1	Polygonal data with MESH >58 and >=1 survey point if subtidal?	Is there a habitat map of the feature with a MESH confidence score greater than 58 with, if a subtidal feature, at least one supporting ground truth record?
	Q2	Quality score >=15 and >=2 points with quality score 3?	Is the combined quality score of the ground truth records at least 15? And do at least 2 of those records have a quality score of 3?
	Q3	>=2 points in survey data and >=90% agreement?	Are there at least 2 ground truth records and do the records have at least 90% agreement?
	Q4	Is there polygonal data with MESH >58?	Is there a habitat map of the feature with a MESH confidence score greater than 58?
	Q5	Quality score >=6?	Is the combined quality score of the ground truth records at least 6?
	Q6	Parent feature polygon with MESH >58?	Is there a habitat map of the parent feature with a MESH confidence score greater than 58?
	Q7	Quality score >=15 and >=2 points with quality score 3 for parent feature?	Is the combined quality score of the ground truth records at least 15? And do at least 2 of those records, at parent feature level, have a quality score of 3?
	Q8	>=2 points in survey data and >=50% agreement?	Are there at least 2 ground truth records with at least 50% feature agreement?
	Q9	>=2 points in survey data and >=90% agreement for parent Feature?	Are there at least 2 ground truth records with at least 90% parent feature agreement?
	Q1e	Is combined area of MESH58 and points (EUNIS L3) >=50% of area	Is the combined area of the feature habitat map(s) with MESH confidence greater than 58 and feature ground truth point cover greater than 50% of the mapped feature?
	Q2e	Is combined area of MESH58 and points (EUNIS L2) >=50% of area	Is the combined area of the feature habitat map(s) with MESH confidence greater than 58 and parent feature ground truth point cover greater than 50% of the mapped feature?
	Q3e	Is the feature intertidal and has MESH score >58?	Is the habitat map for an intertidal feature, and if so, does it have a MESH confidence score greater than 58?

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A3.5 Co-existing features

Habitat features that are known to co-exist were precluded as data records that would otherwise have, through a computer-based analysis, incorrectly counted as records that conflicted with the feature type being analysed. To that end, Natural England used the co-existence matrix below to ensure that percentage agreement of point data used in habitat feature assessments are correct (See Section 3.1.5.1). Only feature combinations that had strong evidence for co-existence with each other have been assigned a “Yes”. Evidence from site-specific examples or published literature was used to evidence the decisions. A full audit trail underpinning the decisions within the co-existence matrix below can be made available on request to Natural England.

Table A3.2 Habitat features that co-exist (Yes) and do not co-exist (No) together in the marine environment

Feature name	Blue mussel beds	Cold-water coral reefs	Coral garden potential	Deep sea sponge aggregations potential	Estuarine rocky habitats	File shell beds	Fragile sponge & anthozoan communities on subtidal rocky habitats	*Sabellaria alveolata* reefs	*Modiolus modiolus* beds	Intertidal underboulder communities	Littoral chalk communities	Maerl beds	Mud habitats in deep water	*Ostrea edulis* beds	Peat and clay exposures	*Sabellaria spinulosa* reefs	Seagrass beds	Sea pen and burrowing megafauna communities	Sheltered muddy gravels	Subtidal chalk	Subtidal sands and gravels	Tide-swept channels
Blue mussel beds	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes
Cold-water coral reefs	No	Yes	Yes	Yes	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Coral garden potential	No	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No	No	No	No	Yes	No	No	No	No	Yes	Yes	Yes
Deep sea sponge aggregations potential	No	Yes	Yes	Yes	No	No	Yes	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No
Estuarine rocky habitats	No	No	Yes	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	No	No	No	No	No	No	Yes	No	Yes
File shell beds	No	No	No	No	No	Yes	No	No	Yes	No	No	Yes	No	No	No	No	No	No	Yes	No	Yes	Yes
Fragile sponge & anthozoan communities on subtidal rocky habitats	No	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	No	No	No	No	Yes	No	No	No	No	Yes	No	Yes
Sabellaria alveolata reefs	No	No	No	No	No	No	No	Yes	No	Yes	Yes	No	No	No	Yes	Yes	No	No	No	Yes	No	No
Modiolus modiolus beds	No	No	Yes	No	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	No	No	No	Yes	No	Yes	Yes

Feature name	Blue mussel beds	Cold-water coral reefs	Coral garden potential	Deep sea sponge aggregations potential	Estuarine rocky habitats	File shell beds	Fragile sponge & anthozoan communities on subtidal rocky habitats	*Sabellaria alveolata* reefs	*Modiolus modiolus* beds	Intertidal underboulder communities	Littoral chalk communities	Maerl beds	Mud habitats in deep water	*Ostrea edulis* beds	Peat and clay exposures	*Sabellaria spinulosa* reefs	Seagrass beds	Sea pen and burrowing megafauna communities	Sheltered muddy gravels	Subtidal chalk	Subtidal sands and gravels	Tide-swept channels
Intertidal underboulder communities	No	No	No	No	Yes	No	No	Yes	No	Yes	Yes	No	No	No	Yes	No	No	No	No	No	No	Yes
Littoral chalk communities	No	No	No	No	Yes	No	No	Yes	No	Yes	Yes	No	No	No	No	No	No	No	No	No	No	Yes
Maerl beds	No	No	No	No	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No	Yes	No	No	Yes	Yes	Yes
Mud habitats in deep water	No	No	No	No	No	No	No	No	Yes	No	No	No	Yes	Yes	No	No	No	Yes	No	No	No	No
Ostrea edulis beds	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No	Yes	Yes	No	Yes	No
Peat and clay exposures	No	No	Yes	No	No	No	Yes	Yes	No	Yes	No	No	No	No	Yes	No	Yes	No	No	No	Yes	Yes
Sabellaria spinulosa reefs	No	No	No	No	No	No	No	Yes	No	No	Yes	No	No	No	No	Yes	No	No	No	Yes	Yes	No
Seagrass beds	No	No	No	No	No	No	No	No	No	No	No	Yes	No	No	Yes	No	Yes	No	Yes	No	Yes	No
Sea pen and burrowing megafauna communities	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No	Yes	No	No	No	No
Sheltered muddy gravels	Yes	No	No	No	No	Yes	No	No	Yes	No	No	No	No	Yes	No	No	Yes	No	Yes	No	No	No
Subtidal chalk	No	No	Yes	No	Yes	No	Yes	Yes	No	No	No	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No
Subtidal sands and gravels	Yes	No	Yes	No	No	Yes	No	No	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Tide-swept channels	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	No	No	No	No	No	Yes	Yes

Annex 4

IER of Certainty in Conservation Objectives

A4.1 Introduction

In accordance with Protocol B (Natural England and JNCC, 2012c), an Independent Expert Review (IER) of the application of Protocol I to assess the certainty of conservation objectives was undertaken. Natural England commissioned this IER as this assessment was new and not part of the 2012 advice to Government. As required by Protocol B, this annex summarises the conclusions of the IER. The methodology for the assessment of certainty of conservation objectives is given in Section 3.2.4 and the results are summarised in Section 4.5, and given on a site-by-site basis in Annex 5.

A4.2 IER process

In accordance with Protocol B, the reviewers were asked to review the assessment of certainty of conservation objectives against Protocol I and to provide their views on:

- its application in the formulation of the draft advice; and
- the appropriateness and robustness of any additional evidence, analysis and assumptions, whether the rationale and evidence support the conclusions drawn and the objectivity and rigour by which Natural England had formulated its advice.

The IER was undertaken by two reviewers, one each from the Department of Environment Northern Ireland (DOENI), and Cefas. Both representatives of these organisations had participated in the IER of Protocol I when this was being developed. They were thus very familiar with the approach used and could assess whether the protocol had been followed.

Each reviewer was asked to assess a sample of the sites, ensuring that they included at least one site per Natural England regional team (there are six teams and the Northern North Sea team only has one site) and that the samples included both recover and maintain conservation objectives, and both more certain and less certain assessments. They were provided with a template which gave, for each feature in each site: confidence in feature condition, conservation objective, certainty assessment as a result of applying Protocol I, rationale for the result of the assessment, and a blank column for the reviewer's comments. The reviewers were also provided with the vulnerability assessment audit log for each site.

A3.2 Summary of IER comments

DOENI reviewed the results for seven pMCZs: Aln Estuary, Beachy Head West, Torbay, Padstow Bay and Surrounds, Isles of Scilly (Gilstone and Gorregan), Hilbre Island Group, Cumbria Coast and Fylde Offshore. Cefas reviewed the results for three pMCZs: Torbay, Isles of Scilly (Bristow to the Stones), and Hythe Bay.

The general feedback from the reviewers was that, for these samples, Protocol I had been correctly applied on the basis of feature condition confidence, knowledge of feature sensitivities/pressures and direct evidence of activities. The reviewers confirmed that in those cases where expert judgement had been used, this was adequately detailed in the rationale with supporting information provided in the audit logs. For some features, the reviewers suggested that further clarification in the audit log was needed to explain the choice of conservation objective. In particular, further detail was required regarding the decision-making process that was used where the assessments resulted in less certainty in a maintain conservation objective for a feature. The reviewers questioned either the lower certainty related to lack of evidence of presence of the species within the site or some other factor.

The reviewers recognised that the application of Protocol I is a very large and complex task, given the requirement to apply and document expert judgement, and that the timescale for the production of the

advice for the 2013 pMCZs was tight. They identified the importance of addressing each site individually and of ensuring that location-specific knowledge was used.

Due to the timetable for delivery of the advice, the IER of certainty in conservation objectives was undertaken at the same time as Natural England's internal review of the advice as a whole. The recommendation by the independent expert reviewers that further clarification in the audit log was needed to explain the choice of conservation objective in some cases was also identified through the internal review. In accordance with Protocol B, Natural England also considered other relevant comments of the reviewers and addressed these.

As a result of both the IER and the internal review, the Natural England regional staff were asked to revisit their work in those cases where further clarification was needed, to ensure that their expert judgement and site knowledge had been correctly applied, and that adequate documentation had been provided following the protocol. As a consequence, the justifications for the certainty assessments were strengthened where this was required, and in some cases the certainty of the conservation objective was assessed as being 'more certain' where additional information was available to reach this conclusion.

Cefas provided additional comments on the assessment of feature presence and extent, and the sensitivity assessment and pressures. These did not relate to the specific remit of the IER but to the provision of other information supporting the assessments and these issues are addressed as appropriate in the work to assess the confidence of features and to develop conservation objectives.

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