

Exmoor National Park  
Historic Environment Report Series No 26

# RAPID COASTAL ZONE ASSESSMENT SURVEY

## PHASE ONE DESK-BASED ASSESSMENT FOR SOUTH-WEST ENGLAND: EXMOOR NATIONAL PARK



Historic England Project Number: 7172



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Exmoor National Park  
Historic Environment Report Series  
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This report series includes interim reports, policy documents and other information relating to the historic environment of Exmoor National Park.

Hard copies of this report can be obtained from the Exmoor National Park Historic Environment Record:  
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### **FRONT COVER:**

**Fish Weirs at Gore Point and coastline to west (©Historic England Archive 2015, 29480\_012, D. Grady)**

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Historic England Project Number: 7172



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# Abbreviations

ALSF	Aggregates Levy Sustainability Fund
CHERISH	Coastal Heritage Risk – Imagery in Support of Heritage Management
CITIZAN	Coastal and Intertidal Zone Archaeological Network
DBA	Desk-Based Assessment
Defra	Department for Environment, Food and Rural Affairs
DTM	Digital Terrain Model
EA	Environment Agency
EH	English Heritage
ELC	European Landscape Convention
ENPA	Exmoor National Park Authority
FCERM	Flood and Coastal Erosion Risk Management
GIS	Geographical Information System
HBSMR	Historic Buildings, Sites and Monuments Record
HE	Historic England
HER	Historic Environment Record
HLC	Historic Landscape Characterisation
HSC	Historic Seascape Characterisation
LAT	Lowest Astronomical Tide
LCA	Landscape Character Assessment
LGS	Local Geological Sites
Lidar	Light Detection and Ranging
MHWM	Mean High Water Mark
MLWM	Mean Low Water Mark
MMO	Marine Management Organisation
MOLA	Museum of London Archaeology
MPS	Marine Policy Statement

NAI	No Active Intervention
NCA	National Character Area
NCERM	National Coastal Erosion Risk Mapping
NGR	National Grid Reference
NHLE	National Heritage List for England
NHPCP	National Heritage Protection Commissions Programme
NHPP	National Heritage Protection Plan
NMP	National Mapping Programme
NPPF	National Planning Policy Framework
NRHE	National Record of the Historic Environment
OS	Ordnance Survey
PAL	Principal Archaeological Landscape
PAO	Project Assurance Officer
PAS	Portable Antiquities Scheme
RCHME	Royal Commission on the Historical Monuments of England
RCZAS	Rapid Coastal Zone Assessment Survey
RIGS	Regionally Important Geological Sites
RSL	Relative Sea Level
SCA	Seascape Character Assessment
SCAs	Seascape Character Areas
SCTs	Seascape Character Types
SMP	Shoreline Management Plan
SWARF	South West Archaeological Research Framework
UKHO	United Kingdom Hydrographic Office
WWI	World War One
WWII	World War Two

## Acknowledgements

Exmoor National Park Authority was commissioned by Historic England to undertake the survey which was carried out by Fiona Pink from AC archaeology working with staff from Exmoor National Park Authority. We are grateful to our Project Assurance Officer, Helen Winton and Marcus Jecock, Coastal Survey Lead for comments and advice throughout the project. Research and interpretations were undertaken by Fiona Pink and Sophie Thorogood. New Historic Environment Records (HER) and enhanced records were created by Catherine Dove, Fiona Pink and Sophie Thorogood. Report revision was undertaken by Fiona Pink and Shirley Blaylock.

The project team are extremely grateful to all those who have shown an interest in the project, especially the members of the project liaison group. We would particularly like to thank Richard McDonnell who provided information and support throughout the project.

HER support was provided by Catherine Dove. The project was managed by Shirley Blaylock, and with project oversight and project assurance provided by Rob Wilson-North. The illustrations for this report were prepared by Matt Sully and Pete Rae. Thanks are due to Historic England staff for comments on the draft report.

The views and recommendations expressed in this report are those of the project team and are presented in good faith, on the basis of professional judgement and on information currently available.

## Summary

*This report has been prepared between April 2016 and November 2017 by Exmoor National Park Authority and represents the results of research carried out for the RCZAS Phase One Desk- Based Assessment for the coastline of Exmoor National Park. The survey covers the entire coastline of the National Park, extending from Combe Martin Bay in the west to just east of North Hill near Minehead, in the east.*

*The overarching aims of the survey are to provide an enhanced Historic Environment Record for coastal heritage assets in order to permit an improved curatorial response to strategic coastal planning or management initiatives at a national and regional level, and to provide a broad assessment of the likely archaeological potential and vulnerability of all stretches of the coast within Exmoor National Park.*

*A total of 350 new Historic Environment Records have been created as a result of research associated with the Exmoor RCZAS project. All monument records created or enhanced by the project are available through the Exmoor National Park HER. Research generated by the project has been used alongside HER data to provide an assessment of the historic assets within the project area. This has included an overview of coastal change along the Exmoor coast from the Palaeolithic period onwards in order for all coastal assets to be understood within their wider historic landscape context. This has also helped to inform the assessment of significance for each of the heritage assets within the project area. The HER data has been assessed against the preferred policy options within the draft Hartland Point to Anchor Head Shoreline Management Plan (SMP), as well as the National Coastal Erosion Risk Mapping (NCERM) data and Environment Agency data relating to Flood Zones 2 and 3. This has informed the assessment of vulnerability and the degree and nature of threat posed to heritage assets along the Exmoor coast.*

*A series of research themes and future research priorities for the Exmoor coast has been identified and developed with reference to the Historic Environment Research Framework for Exmoor 2017-2021; the South West Archaeological Research Framework (SWARF); and the Maritime Archaeological Research Agenda for England. These will help to inform future research, as well as the RCZAS Phase 2 fieldwork project for the Exmoor coast.*

*The results of the Exmoor National Park RCZAS are intended to feed into Defra and the Environment Agency's Shoreline Management Plans. The results will also inform appropriate management strategies and planning decisions and will provide an active management and research tool for those involved with the management of the historic environment along the coastline of Exmoor, including the Exmoor National Park Authority, Historic England and the Marine Management Organisation.*

# 1. INTRODUCTION

## 1.1 Circumstances and Reasons for the Project

Exmoor National Park Authority (ENPA) was commissioned by Historic England (formerly English Heritage) to undertake Phase One of the Rapid Coastal Zone Assessment Survey (RCZAS) for the coastline of Exmoor National Park. This forms part of a national programme designed to inform the Historic England (HE) response to Shoreline Management Planning (SMP) and the developing Defra 'Adaptation Strategy.' This report presents the results of the Phase One Desk-Based Assessment (DBA) of historic assets on the Exmoor Coast and provides an evaluation of their significance and vulnerability. It has been prepared in accordance with an approved Project Design for the work (Blaylock and Thorogood 2015).

## 1.2 Background to the Project

In 1993 Historic England (as English Heritage) commissioned a review of coastal archaeology within England with the aim of developing an agenda for the future. This led to the publication in 1997 of *England's Coastal Heritage* (Fulford *et al.* 1997). One of the subsequent recommendations was for a comprehensive survey of the English coast to be undertaken in order to update and improve archaeological records. This led to the establishment of the RCZAS programme by English Heritage in the late 1990s. RCZAS projects have now been completed, or are underway, for the majority of the English coast, with the coast of Exmoor comprising one of the last areas to be assessed.

Exmoor's coastline plays a major part in its economy and tourism industry, with a high concentration of historic features having an especially significant role in shaping its distinctiveness. ENPA has recognized the importance of understanding the nature and significance of these sites and features and the issues affecting them in key management and research priorities and actions. In particular, Exmoor National Park Partnership Plan 2012-2017 (ENPA 2012) contains an action to "identify the potential impacts of climate change and land management change on Exmoor's historic environment" (Priority A4 Action 6) which concord with the aims and objectives of the RCZAS. In 2014 ENPA historic environment staff made substantial progress on an audit of historic coastal assets within the National Park assessing which sites are potentially at risk. Extending the ENPA audit to fulfil the requirements of the RCZAS

was seen as a logical development to meet the aims of both HE and ENPA, as the methodology followed for the audit adheres to the RCZAS brief.

This report has been prepared between April 2016 and November 2017 and forms part of a suite of projects that constitute the South-West England RCZAS. This Phase One DBA will inform the Phase Two Field Assessment which is yet to be undertaken. The survey was funded via the HE National Heritage Protection Commissions Programme (NHPCP) and carried out by staff from AC archaeology and ENPA.

### ***The National Heritage Protection Plan***

The National Heritage Protection Plan (NHPP) was first published in May 2011, and set out how HE would prioritise and deliver heritage protection during 2011-2015 (English Heritage 2012, revised version). The core of the NHPP is the Action Plan, divided into eight themes called Measures, which are further sub-divided into a series of Topics and Activities that address specific areas of work and which have been identified as priorities for the Plan. The project addresses point 3A2: *Coastal Survey* from the NHPP (English Heritage 2013) and the Strategic Framework for Historic Environment Activities and Programmes (SHAPE), research programme A2 *Spotting the gaps: Analysing poorly understood landscapes, areas and monuments* (sub-programme 11112.110) (English Heritage 2008; English Heritage 2014).

### ***Marine Planning***

The Exmoor National Park RCZAS and associated datasets are also intended to inform Marine Planning within the National Park (see Section 5.3 below). Marine Planning covers all England's inshore and offshore waters, from mean high water to the outer limit of England's Exclusive Economic Zone, and therefore overlaps with terrestrial planning regimes in the inter-tidal zone. The marine planning system contributes to the management of marine activities, and ensures a sustainable use of marine resources (Marine Management Organisation 2014). The project area falls within the south-west inshore region for marine planning which covers an area of coastline stretching from the River Severn border with Wales to the River Dart in Devon (Marine Management Organisation 2016). The Marine Management Organisation (MMO) is currently developing marine plans for the south-west inshore and south-west offshore regions and therefore the Exmoor National Park RCZAS and associated datasets can be used by the MMO to inform the South-West Marine Plan.

## **1.3 Aims and Objectives**

### ***Management***

The aim of the project is to identify historic assets along the Exmoor coast and the type and severity of risks affecting them, highlighting those most 'at risk' with mitigation strategies proposed to include further survey, evaluation and designation. The work is designed to feed into Defra and the Environment Agency's Shoreline Management Plans and enable other bodies including HE, the MMO and ENPA to develop appropriate management strategies and to inform planning decisions. The work will enhance the ENPA Historic Environment Record (HER) and the National Record for the Historic Environment (NRHE) providing an active management and research tool.

### ***Partnership Working***

Producing the required ENPA coastal audit as a RCZAS has avoided the duplication of work and costs by producing one body of work suitable for the purposes of both HE and ENPA.

### ***Outreach***

ENPA will enable active participation in the survey from local interest groups such as Porlock Vision (ENPA 2015) and ensure they are fully aware of all developments so that they can use the findings of the RCZAS to inform their decisions.

### ***Research***

The survey will identify areas of archaeological potential along the coast and suggest priorities for future research which will also inform local research frameworks.

More specific objectives of the DBA are to:

- Provide an enhanced HER and NRHE for coastal heritage assets, to a nationally agreed common minimum data standard, to permit an improved curatorial response to strategic coastal planning or management initiatives at a national and regional level;
- Provide a factual basis for the initial curatorial response to the individual applications for commercial developments or schemes, in advance of more detailed evaluation and mitigation related to Environmental Impact Assessments and/or planning applications;

- Provide data which are compatible with the needs of other coastal managers, parallel coastal surveys, industry and researchers;
- Provide an overview of coastal change from the Palaeolithic onwards;
- Provide an assessment of the degree and nature of threat to coastal historic assets which has regard to the models of future coastal change presented in relevant Shoreline Management Plans;
- Provide a broad assessment of the likely archaeological potential and vulnerability of all stretches of the coast defined in the project scope;
- Provide a sound basis for developing management and research priorities in respect of sites and areas of potential with different levels of importance and under different levels of threat, based on:
  - The identification of areas or sites meriting further survey or evaluation;
  - The identification of areas or sites requiring positive management action;
  - The identification of significant historic assets meriting consideration for protection by means of designation (Scheduled Monuments, Designated Wrecks, Listed Buildings, Conservation Areas, Registered Parks and Gardens and Historic Battlefields, as defined in the NHLE);
  - The identification of areas where heritage assets may be at high risk of damage or destruction;
  - The establishment of future research priorities for the coast.
- Enhance public understanding and enjoyment of the coastal heritage;
- Assist Local Authority curatorial archaeologists in development control.

#### **1.4 Methodology**

The DBA was undertaken in accordance with a project design (Blaylock and Thorogood 2015) based upon a project brief (English Heritage 2014), submitted to and approved by HE prior to commencement of the project. A Project Liaison Group met twice during the course of the project.

Enhancement of the existing HER data held by the ENPA was largely undertaken through an analysis of historic maps. The maps were consulted within one kilometre blocks to ensure that analysis was comprehensive and progress could be easily tracked. The following digitised historic maps were consulted by the project:



- Tithe Maps for the parishes of Combe Martin, Trentishoe, Martinhoe, Lynton and Countisbury within the county of Devon; and the parishes of Oare, Culbone, Porlock, Selworthy, Luccombe and Minehead within the county of Somerset.
- The Ordnance Survey County Series 1:2500 mapping:
  - First Edition 1868 to 1901;
  - Second Edition 1902 to 1907;
  - Third Edition 1933.
- The Ordnance Survey County Series 1:10560 mapping:
  - First Edition 1868 to 1896;
  - Second Edition 1907 to 1908;
  - Third Edition 1930 to 1932;
  - Fourth Edition 1938.

All data generated by the project was recorded directly into the ENPA HER, using the GIS software MapInfo and the HER software HBSMR.

In addition to the above historic maps the following data sources have been consulted by the project:

- Historic Environment Records held by ENPA;
- National Heritage List for England (NHLE) data;
- National Record of the Historic Environment (NRHE);
- National Trust HER records;
- Defence of Britain Project Data;
- Portable Antiquities Scheme (PAS) database;
- Early Admiralty Charts and Surveys held at the UK Hydrographic Office, Taunton;
- Historic maps held by the Devon Heritage Centre and the Somerset Heritage Centre;
- Aerial Photographic transcriptions generated by the Exmoor and Severn Estuary NMP projects;

- The draft Shoreline Management Plan (SMP) for Hartland Point to Anchor Head;
- Environment Agency Flood Zones 2 and 3;
- Ordnance Survey MasterMap;
- Grey literature reports;
- Other relevant documentary sources.

In preparation of the project report tabular and spatial data from the ENPA HER was queried to produce tables as well as maps providing information on the spatial distribution of known archaeological areas by period. In order to determine potential and current threats to the heritage assets the National Coastal Erosion Risk Mapping (NCERM) outputs data was acquired from the Environment Agency (EA) and used to create zones delineating the areas that are likely to be affected by both the Preferred Policy outlined within the SMP as well as a No Active Intervention policy. The EA Flood maps for Zones 2 and 3 were also examined. These flood zones indicate the probability of flooding by rivers and the sea, disregarding current defences. The HER dataset was queried against this data and the level of threat has been recorded in all relevant records. This data was also compared to the draft Hartland Point to Anchor Head SMP and has formed the basis for the discussion of threat within Section 10. The significance of each heritage asset has been considered and recommendations for proposed actions have been provided for those sites considered to be of greatest significance and exposed to the greatest level of threat. Significance will feed directly into the proposed Exmoor Local List, which is in its early stages of development, and the assessment of the coastal Principal Archaeological Landscapes (PALs) which are discussed in greater detail in Section 4.1 below.

## 2 PROJECT AREA

### 2.1 Introduction

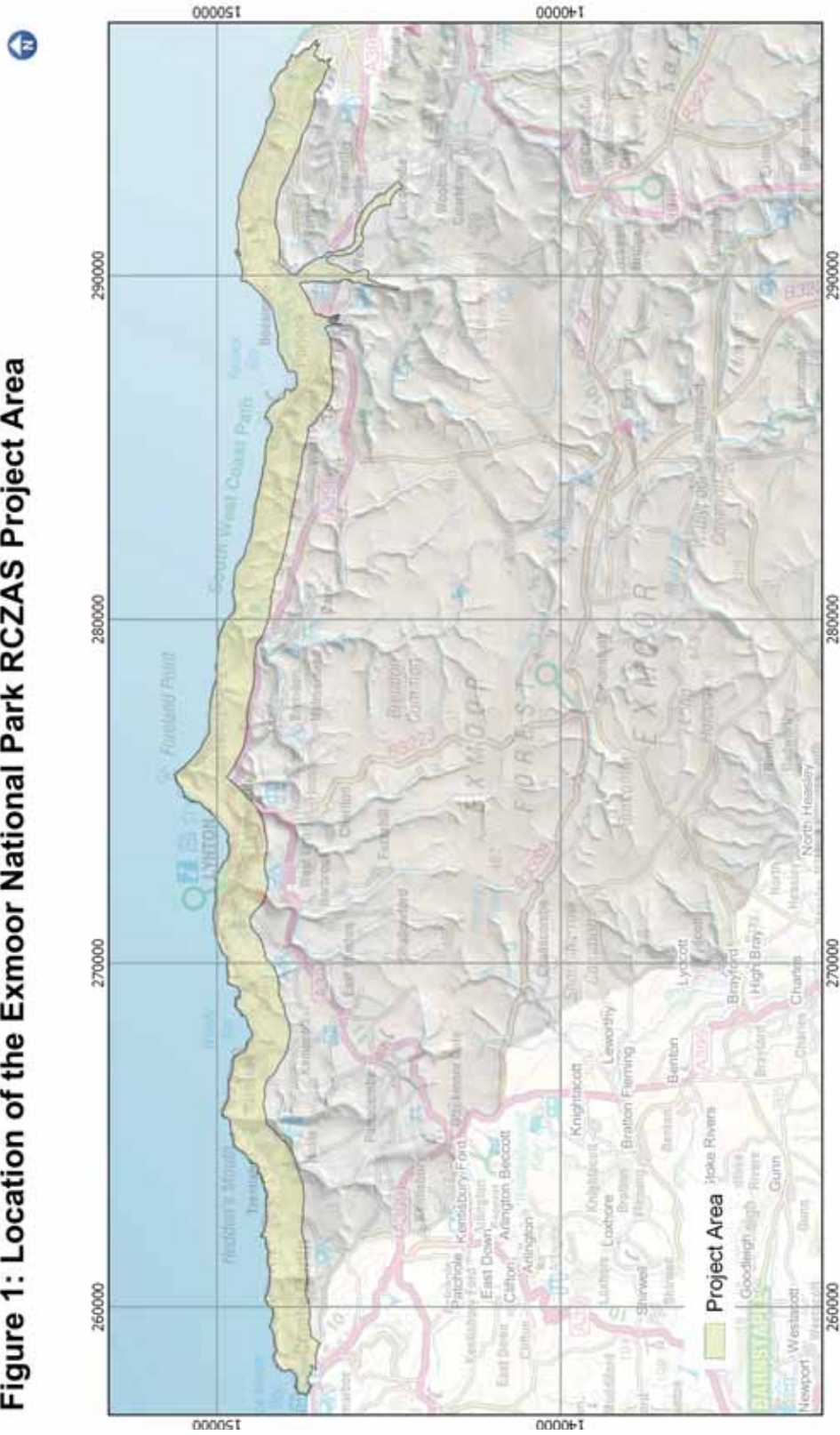
The project area for the Exmoor National Park RCZAS DBA comprised the entire coastline of the National Park, extending from Combe Martin Bay in the west to just east of North Hill near Minehead, in the east (Figure 1). The project extended into the intertidal zone as far as the Mean Low Water Mark (MLWM) and covered an area inland equivalent to a 1km buffer of the Mean High Water Mark (MHWM). The project area was extended inland in one section beyond the 1km buffer to include an area at risk of flooding (EA Zone 2 fluvial flood risk) to the south of Bossington. The project area is consistent with that of the ENPA coastal audit that was undertaken at the commencement of the project (some 73km<sup>2</sup>).

The Exmoor National Park RCZAS lies adjacent to the study area for the Phase One RCZAS of North Devon and North Cornwall which is currently being undertaken by the University of Southampton. To the east, the Severn Estuary RCZAS Phases One and Two have been completed (Mullin *et al.* 2009; Chadwick and Catchpole 2013a, 2013b and 2013c). The survey area for the Severn Estuary RCZAS included part of the coastline of Exmoor National Park, extending from the east as far as Gore Point in Porlock Bay. The project area for the Exmoor RCZAS will overlap slightly with this existing research to ensure that the report meets the RCZAS methodology for the full extent of the National Park in one survey.

### 2.2 Geology

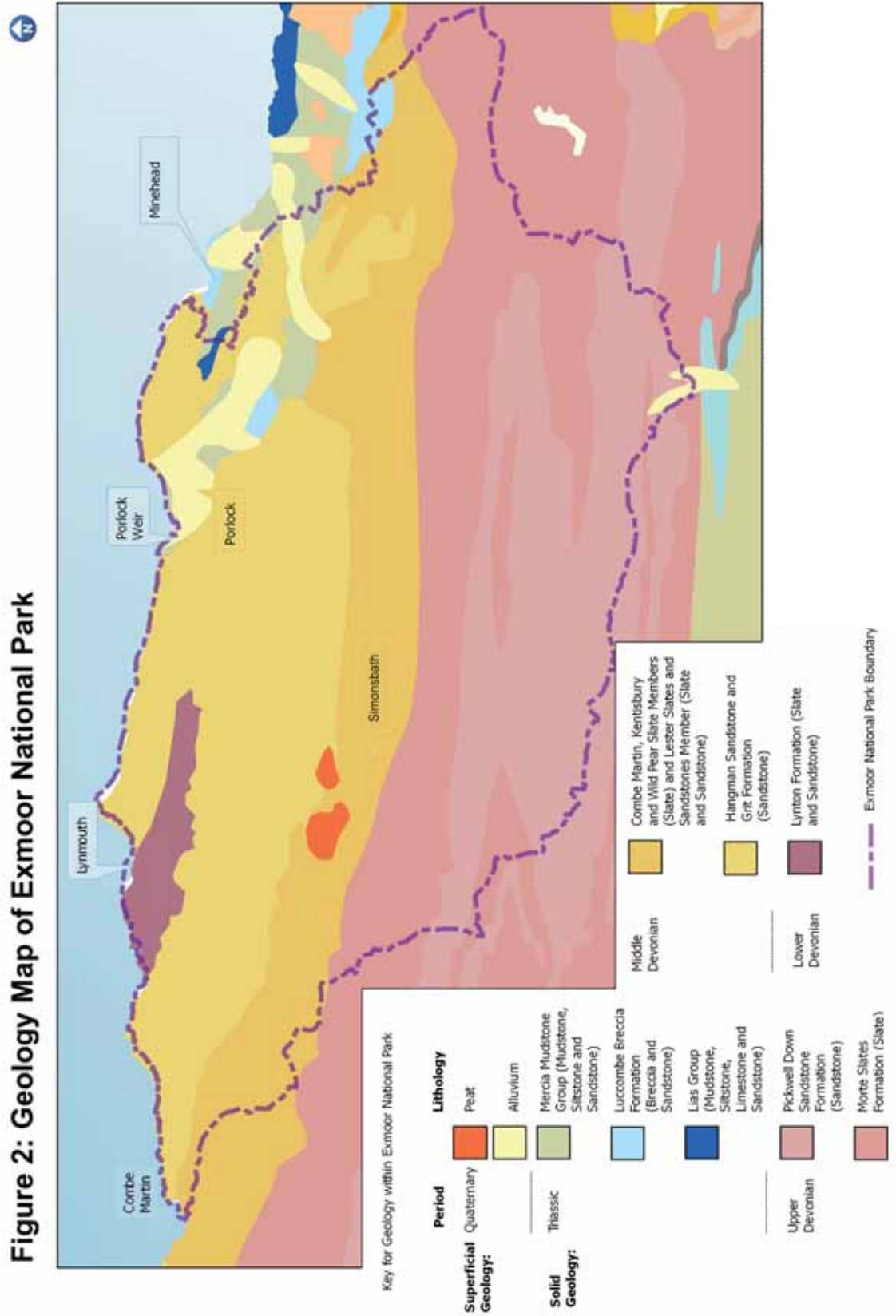
The predominant geology within the project area comprises slates and sandstones dating to the Devonian Period (354-417 million years ago); the exception being the younger Triassic (205.7-248.2 million years ago) and Jurassic (142-205 million years ago) rocks located within the Vale of Porlock (Figure 2). Most of these are sedimentary rocks formed either as layers of mud or sand within environments previously dominated by shallow seas. The following paragraphs provide a more detailed overview of the geology of the Exmoor coast based on data from the British Geological Survey (2016) and with reference to the relevant coastal cell boundaries contained within the draft Hartland Point to Anchor Head SMP (Figure 13; Halcrow Group 2010).

Figure 1: Location of the Exmoor National Park RCZAS Project Area



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Figure 2: Geology Map of Exmoor National Park



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The geology within the far western part of the project area (Policy Units 7d11 and 7d12) is characterised by slate and sandstone of the Devonian period, derived from the Lester Slates and Sandstones Member; Wild Pear Slates Member; Hangman Sandstone Formation; and the Lynton Formation. Localised superficial marine beach deposits of sand and gravel dating to the Quaternary Period are recorded along the shoreline throughout this area. Superficial 'head' deposits of clay, silt, sand and gravel dating to the Quaternary Period are also recorded in linear concentrations to the east of Woody Bay and to the south and east of Combe Martin. These superficial deposits comprise frost-shattered rock fragments that would have been transported downslope within a muddy matrix in response to the melting of ice sheets during the last ice age. These deposits are particularly common on Exmoor as it is believed that Exmoor was situated within the periglacial zone immediately to the south of the ice sheets and was therefore susceptible to the accumulation of deposits associated with the freeze-thaw and weathering of material (Wilson 1995, 27). A superficial deposit of alluvium comprising clay, silt, sand and gravel dating to the Quaternary Period is recorded on either side of the River Heddon, to the south of Heddon's Mouth Beach.

The geology between Lynmouth and Foreland Point (7d13) also dates to the Devonian Period and is characterised by slate and sandstone of the Lynton Formation and the Hangman Sandstone Formation. Localised superficial marine beach deposits of sand and gravel dating to the Quaternary Period are recorded along the shoreline throughout this area and a head deposit comprising clay, silt, sand and gravel is recorded at Foreland Point.

Between Foreland Point and Gore Point (7d14) the geology is largely characterised by sandstone of the Hangman Sandstone Formation. Marine beach deposits comprising sand and gravel are situated immediately to the east of the Foreland, and there are marine beach deposits of gravel situated further to the east. A storm beach deposit of gravel has been identified at Embelle Wood Beach. Superficial head deposits of clay, silt, sand and gravel dating to the Quaternary Period are recorded within the combes throughout this area. The headland at Gore Point comprises mudstone of the Mercia Mudstone Group which dates to the Triassic Period. Numerous superficial deposits are recorded on the western side of Gore Point including marine deposits and storm beach deposits of gravel, as well as a head deposit comprising clay, silt, sand and gravel which extends to the southwest through Worthy Combe.

The geology of Porlock Bay (Policy Units 7d15 to 7d17) comprises mudstone of the Mercia Mudstone Group which dates to the Triassic Period, and abuts the earlier sandstone of the Hangman Sandstone Formation which is situated to the northeast and southwest. Bands of mudstone of the Blue Anchor Formation, as well as interbedded mudstone and limestone of the Langport Member and Blue Lias Formation, extend to the southeast from Allerford. Porlock Bay and Marsh contains a noticeable concentration of superficial deposits dating to the Quaternary Period; marine deposits and storm beach deposits of gravel are recorded along the foreshore, while tidal flat deposits of clay, silt and sand together with river terrace deposits of sand and gravel are recorded on the area of marsh to the south. Head deposits of clay, silt, sand and gravel are recorded within the combes, and deposits of alluvium within the tributaries of the Horner Water.

The geology between Hurlstone Point and Minehead (7d18) is characterised by sandstone of the Hangman Sandstone Formation, which dates to the Devonian Period. Superficial deposits within this area largely comprise marine deposits of sand together with marine beach deposits of sand and gravel that were formed in shoreline environments during the Quaternary Period. Localised storm beach deposits of gravel have been recorded on the shoreline to the north of West Myne, while head deposits comprising clay, silt, sand and gravel are located within the combes.

### **2.3 Coastline and Topography**

The coastline of Exmoor National Park extends for a length of 34 miles from east to west and formed one of the key attributes that led to the designation of the landscape as a National Park in 1954. The coastline is characterised by high cliffs of the hog-back type, which are distinctive in form as the land falls rapidly from a considerable distance inland creating a long steep slope, with only the base of this slope undercut by the sea (Newell Arber 1969, 14). The Exmoor coastline is the highest in England and Wales with coastal hills such as Culbone Hill attaining a height of 433m above sea level, while the cliff at Great Hangman rises to a height of 244m (<http://www.exmoor-nationalpark.gov.uk/Whats-Special/coast>). The prominent summits of Porlock Common and Bossington Hill overlook the largest low lying area of the coastline where the dynamic shingle ridge forms the shore of Porlock Bay, with the fertile farmland of Porlock Vale behind.

Combes and steep-sided valleys are also a characteristic landform of the coastline of the National Park. Three main watercourses flow into the Bristol Channel creating breaks in the coastline. These comprise the UMBER at Combe Martin; the East and West Lyn at Lynmouth; and the River Heddon at Heddon's Mouth (Plate 1). The RCZAS project area is also characterised by a number of smaller streams that flow into the Bristol Channel from minor watersheds near to the coast, for example at Woody Bay and Lee Bay (Newell Arber 1969, 21). A number of these streams flow over the cliffs as coastal waterfalls, for example the Hanging Water Fall at Woody Bay and Coscombe Water Fall at Glenthorne (*ibid*). The river valleys throughout the project area are distinctive for their densely-wooded slopes and dramatic steep-sided topography that have formed as a result of erosion as these watercourses descend towards the coast. The coastline is also distinctive for its extensive areas of coastal woodland, with the woods between The Foreland and Porlock representing the longest stretch of coastal woodland in England and Wales (*ibid*). The following paragraphs provide a more detailed overview of the coastline with reference to the relevant coastal cell boundaries contained within the draft Hartland Point to Anchor Head SMP (Halcrow Group 2010). Further detail from the Local Character Assessment is provided in section 4.2.

The coastline between Combe Martin and Foreland Point (7d11-7d13) is characterised by high cliffs with breaks at Woody Bay, Lee Bay (Plate 2) and Lynmouth (Plate 3). The coastal hinterland comprises areas of moorland at Girt Down, Holdstone Down and Trentishoe Down, as well as areas of woodland to the south of Woody Bay and Lee Bay. The steep-sided valleys of the River Heddon, and the East and West Lyn, are also covered in woodland. Lynton and Lynmouth are the largest settlements along this stretch of coast; smaller hamlets include Trentishoe, Martinhoe and Countisbury. Much of the land surrounding these settlements is in agricultural use, predominantly pastoral in nature.

The coastline between Foreland Point and Hurlstone Point (7d14-7d17) is largely characterised by high cliffs, although there is a noticeable break at Porlock Bay. The coastal hinterland of this area comprises numerous combes that drain to the north towards the Bristol Channel. The area is also characterised by woodland on the steep-sided combes and, running parallel to the coastal cliffs, the largest area of woodland stretching between Glenthorne and Porlock. Much of the land to the south of this woodland is in agricultural use. The low-lying landscape of the Vale of Porlock (Plate 20) is noticeable within a coastline largely characterised by high





Plate 1: View to the south showing Heddon's Mouth and the valley of the River Heddon  
(©Historic England Archive 2016, 29709\_027, D. Grady)



Plate 2: Lee Bay  
(©Historic England Archive 2016, 29708\_024, D. Grady)



**Plate 3: View to the southwest showing Lynmouth and the coastline to the west**  
(©Historic England Archive 2015, 29481\_007, D. Grady)

cliffs and inaccessible beaches (Haslett 2010, 121). The bay is situated between the headlands at Gore Point to the west and Hurlstone Point to the east, and has historically been protected by a natural shingle ridge, beyond which lies an area of reclaimed marshland and low-lying farmland associated with the settlements of Porlock and Porlock Weir, as well as the smaller hamlets of Bossington (Plate 4) and Allerford (Plate 15).

The coastline between Hurlstone Point and Minehead (7d18) is largely characterised by high cliffs and numerous short, steep and narrow combes. The landscape comprises areas of moorland at Bossington Hill and North Hill (Plate 5); agricultural land surrounding the farmsteads at East and West Myne; and areas of woodland to the south of Culver Cliff.



Plate 4: View to the north within the village of Bossington  
(© ENPA 2012, N. Pratt)



Plate 5: View to the east showing North Hill, with Minehead beyond  
(©Historic England Archive 2014, 27988\_036, D. Grady)

## **2.4 Landscape and Seascape Character**

There are numerous areas of unenclosed moorland throughout the project area, which contribute to the 16,000 hectares of moorland within the National Park as a whole (Riley and Wilson-North 2001, 5). The character of the landscape has been much influenced by agriculture from the early medieval period, which is discernible through extant and redundant boundary divisions, farmsteads, routeways, and with associated assets such as lime kilns (Preece 2007, 14). The landscape was further transformed in the 19th century with the development of a series of estates which have had a strong influence on the coastal character of the area, both through building forms and style, but also through landscape design and commercial ambitions. These include the extensive plantations surrounding the estate at Glenthorne which is situated on the border between Devon and Somerset, as well as the distinctive estates at Holnicote, Lee Abbey and Ashley Combe (*ibid*, 15).

The coastline of Exmoor National Park is largely of rural character, with the main settlements located at Lynton and Lynmouth, Porlock and Porlock Weir. A small number of settlements comprising small villages and hamlets are present including Trentishoe, Martinhoe, Countisbury, Bossington and Allerford. The low-lying topography and accessibility to the sea that areas such as Combe Martin, Lynmouth and Porlock afford has meant that they have historically been targeted for settlement and maritime activity. However, the low-lying nature of these areas makes them more susceptible to flooding events (see Section 9.4 below) and they are therefore more dynamic environments. These areas still retain a strong maritime identity and the tourism industry now makes an important contribution to the modern character of these areas. Recent initiatives such as the re-introduction of oyster and mussel beds in Porlock Bay in 2014 help to strengthen the maritime character of the area and support local industry (<http://www.bbc.co.uk/news/uk-england-somerset-27220366>).

Although there are public rights of way throughout the coastal hinterland, most notably the South West Coast Path, the steep geomorphology of the coastline restricts access to the foreshore along much of the project area. The inaccessible nature of the coast and small quantity of settlements within the project area therefore contributes to the protection of the area from erosion as a result of human activity (Wilson 1995, 26). Historical flooding events show the level of threat of flooding from the numerous rivers throughout the project area, as well as the threat from coastal processes.

The unique character of the Exmoor landscape is described in detail within the *Exmoor Landscape Character Assessment* (Preece 2007, a new LCA for Exmoor is in preparation). The Exmoor LCA is used as a tool for managing landscape change within the National Park through the identification, classification and description of elements of the landscape. The LCA is used for a variety of purposes including assisting with the management of protected landscapes, as well as in the preparation of development plans and assessing the impacts of new development.

The LCA for Exmoor was carried out in 2007 and divided the National Park into landscape types based upon areas which share broadly similar patterns and combinations of elements including geology, soils, vegetation, settlement and field pattern. Each of the individual geographic areas that conform to these particular landscape types are referred to as Landscape Character Areas (Preece 2007, 6). The Exmoor LCA identified 9 separate Landscape Types and 26 Character Areas within the National Park (*ibid*, 10). Five of the Landscape Types identified by the assessment occur within the RCZAS project area.

LCA *Type A; High Coastal Heaths* comprise the dramatic, elevated, open and exposed landscapes immediately adjacent to the coast at four locations within the project area: Holdstone Down and Trentishoe; Valley of Rocks; the Foreland; and at North Hill. These areas comprise an open landscape of rich semi-natural heathland and are defined by their “strongly articulated landform, undulating plateaux, rounded moorland hills and steep, rugged coastal cliffs” (Preece 2007, 19). The numerous dramatic and deeply-incised narrow valleys and combes, associated with north flowing rivers that drain into the Bristol Channel, are characterised as LCA Type B: *High Wooded Coast, Combes and Cleaves*. Six of these zones fall within the RCZAS project area: at Heddon’s Mouth; Woody Bay; Lyn; Culbone – Horner; Bossington; and Culver Cliff. These areas are dominated by tree cover, although small-scale field patterns intersperse the woodland; the areas of farmland are typically characterised by pasture (*ibid*, 37-38). Within the southern part of the project area, the land surrounding these combes comprises LCA *Type F: Enclosed Farmed Hills with Commons*. The main characteristics of this landscape type comprise enclosed pasture land, with some areas of open commons, on broad rolling terrain (*ibid*, 90). The land between Porlock and Porlock Bay falls within LCA *Type C: Low Farmed Coast and Marsh*. This dynamic landscape is characterised by open salt marshes which give way further inland to enclosed farmland; these are defined by small fields, divided by pebble faced hedgebanks (*ibid*, 53-54). The land to the south of Porlock

falls within *Type E: Farmed and Settled Vale*. The land here is characterised by a mixture of arable and pasture use, with a greater amount of tree cover compared to the low farmed coast and marsh; fields are bounded by hedge banks that create a sense of enclosure (*ibid*, 79-80).

The *North Devon and Exmoor Seascape Character Assessment* (Parker *et al.* 2015) covers the North Devon and Exmoor coast from Marshland Mouth on the border with Cornwall, to the eastern boundary of the Exmoor National Park on the edge of Minehead, extending offshore to the 12 nautical mile territorial limit. The assessment identified 27 Seascape Character Types (SCTs) and 27 Seascape Character Areas (SCAs) within the North Devon and Exmoor study area, of which eight are relevant to the Exmoor RCZAS project area. In addition to aiding planning decisions and management plans both at sea and on areas of the coast, the North Devon and Exmoor Seascape Character Assessment will also support the development of the future Marine Management Plan for the South West. The study area for the North Devon and Exmoor Seascape Character Assessment overlaps with that of the Landscape Character Assessments thereby allowing a fully integrated resource for the landscape and seascape character of the coast.

Eight SCAs fall within the RCZAS project area. Each of these are further divided into seascape character types (SCTs), reflecting the geomorphology and nature of coastal waters within each of these areas. *High Energy Coastal Waters* are recorded in character areas 04: Gore Point to Countisbury Cove; 05: The Foreland and Lynmouth Bay; and 08: Woody Bay to Little Hangman. *Moderate Energy Coastal Waters* are characteristic of three character areas; 01: Minehead Harbour to Hurlstone Point; 06: Valley of Rocks; and 08: Woody Bay to Little Hangman. Character areas 02: Porlock Bay; 05: The Foreland and Lynmouth Bay; 07: Lee and Woody Bays; and 10: Combe Martin and Ilfracombe Bays are classified as *Sheltered Rocky and Sandy Bays* (Parker *et al.* 2015).

The SCAs also encompass Exmoor National Park SCTs, which largely reflect those of the Landscape Character Assessments. Key characteristics are set out for each of the character areas, along with cultural and social influences, and perceptual and aesthetic influences that have helped to shape the character of these areas. In addition, the forces for change affecting seascape character and condition are outlined to inform management of these areas. Each of the SCAs that fall within the RCZAS project area identify numerous cultural influences that contribute to the

character of the area, reinforcing the positive impact that the historic environment has on both the landscape and seascape character within the project area. These include, but are not limited to the commanding location of prehistoric settlement and Roman fortlets along the coastline; the heritage of small-scale fishing and seafaring; the presence of ancient palaeolandscapes; and individual assets comprising the remains of limekilns and pillboxes, as well as the buildings at Culbone Church, Duty Point Tower and Hurlstone Point (Parker *et al.* 2015).

## 3 HISTORIC ENVIRONMENT PROJECTS RELEVANT TO EXMOOR'S COAST

### 3.1 Research Frameworks

There are a number of research frameworks relevant to the Exmoor RCZAS. *The South West Archaeological Research Framework* (SWARF) (Webster 2008) provides a resource assessment and research agenda covering the historic counties of Cornwall, Devon, Dorset, Somerset, Wiltshire and Gloucestershire. The project was funded by EH and local authorities within these areas, and provides a structure to inform management decisions relating to future archaeological research. SWARF also provides the regional context for the Exmoor Historic Environment Research Framework which seeks to apply research priorities on a more local scale. The current agenda is outlined within *The Historic Environment Research Framework for Exmoor 2017-2021*. This framework has been produced by the Historic Environment Service at ENPA with the aim of assisting with the prioritisation of research into the historic environment of the National Park. In addition to informing those who have a role in the management and curation of the historical and archaeological resource within the National Park, it is also targeted at those with an interest in Exmoor's past and has been created for the benefit of the community of Exmoor (ENPA 2010, 2017b). More specific research priorities have also been created for the moorland landscapes of Exmoor and are detailed within *Exmoor's Moorlands Historic Environment Research Priorities 2011-2015* (ENPA 2011).

Research priorities relevant to the maritime, marine and coastal archaeology within England are contained within *People and the Sea: A Maritime Archaeological Research Agenda for England* (Ransley *et al.* 2013). This research agenda was commissioned by EH and undertaken by researchers and professionals at the Centre for Maritime Archaeology, University of Southampton. The agenda provides a framework to enable long-term strategic planning, as well as informing policy and providing information for researchers.

### 3.2 Historic Characterisation

Historic Characterisation is an approach that has been applied by HE and others to the landscape, the seascape and many other cultural aspects of the environment. It is designed to inform the management of change affecting the historic landscape.



In England the use of historic characterisation allows an integrated and holistic approach to the management and understanding of archaeology and cultural heritage in all its manifold forms and complements the traditional designation system that focuses on the more significant and/or special site-specific elements only.

### ***Historic Landscape Characterisation***

Historic Landscape Characterisation (HLC) is a method of understanding and mapping the historic dimension of the present landscape and is used to inform both landscape management and research associated with the historic environment. HLC allows all parts of the landscape to be assessed and classified according to the cultural processes whose effects dominate their present character, as opposed to the identification of unique and discrete areas of historic landscape or the identification of individual historic sites or monuments. Analysis at landscape level gives an opportunity to show how processes such as enclosure, land reclamation, grazing, defence and recreational activity over centuries and, in some cases, millennia have created the areas familiar to us today and in which we, like our predecessors, seek to accommodate our society's needs. In doing so, patterning within HLC can help give context and understanding to patterns within other environmental datasets and also the atypical historic cultural survivals in the present: why the rare and the special are such and why they are distributed as they are.

An HLC project for Somerset and Exmoor National Park was carried out between 1999 and 2000 in partnership with EH and the Environment and Property Department within Somerset County Council. The project developed a method for identifying historic time depth contained within the present landscape by assigning a series of attributes including the morphology of field boundaries and the extent of past landscape changes (Webster 2001, 1). The 25-inch Ordnance Survey map sheets were used as the main source from which to identify the variety of field patterns in the present-day landscape, with the landscape divided into three main character types comprising enclosed land, unenclosed land and other components.

The HLC for Exmoor and Somerset has revealed the land within the project area as a mosaic of *unenclosed pasture moor and heath; semi-natural ancient woodland*, which is common throughout the combes and river valleys; with smaller areas of other woodland at locations including Glenthorne. Much of the woodland and

moorland of the project area is surrounded by parcels of enclosed land of medieval and post-medieval date, comprising a mixture of *anciently enclosed land modified 17th to 19th century*; *recently enclosed land 17th to 18th century*; *recently enclosed land 18th to 21st century*; and small areas of anciently enclosed land pre-17th century. The HLC shows that most of the enclosed land within the project area has been modified since the 17th century; there is only limited evidence for areas of anciently enclosed land that have not been subsequently modified.

### ***Historic Seascape Characterisation***

Historic Seascape Characterisation (HSC) shares the same principles as HLC in mapping and describing the historic cultural influences that shape present seascape perceptions across marine areas and coastal land. This includes activities that produced remains associated with marine archaeology and cultural heritage, the sites of historic naval battles or former maritime trading routes, as well as coastal land that contains a distinct maritime character, including areas of former land that have become submerged. Like the HLC methodology, the HSC approach allows a holistic view of the historic seascape, and therefore provides the wider context for the site or point specific datasets within the marine zone. It provides an evidence base relating to the historic environment that can be consulted during marine and coastal land planning and in the preparation and implementation of Marine Plans. It is also designed to assist with the implementation of long-term and sustainable measures relating to the management of both the inshore and offshore marine environment. As both the HLC and HSC share common principles they are therefore designed to work in collaboration.

An HSC project was carried out for the Bristol Channel and Severn Estuary in 2011 (Taylor *et al.* 2011) in order to improve awareness and understanding of the historic elements of the coastal and marine resource as well as informing future research agendas relating to the coastal and marine historic environment. The project defined areas that shared similar characteristics as HSC 'Types' and 'Sub-types' and was funded by the Aggregates Levy Sustainability Fund (ALSF). It formed part of a programme of projects contributing to a National HSC Database for England, being consolidated in 2016-2017.

The predominant broad character types assigned to the offshore regions of the project area comprise *navigation* and *recreation*, largely of modern date, although a

number of areas have been assigned an unknown date, particularly within the eastern part of the project area. The intertidal area, and immediate coastal hinterland, is predominantly characterised as *cultural topography* of unknown date. The HSC project has proved particularly useful for identifying character areas that hold a palaeolandscape component. In particular, probable Neolithic palaeolandscape components have been characterised at Lynmouth Bay, Sillery Sands and Porlock Beach. Probable palaeolandscape components of Mesolithic date have been characterised at areas including Woody Bay; Porlock Bay; Bossington Beach; and numerous areas to the north of the project area within the Bristol Channel.

### 3.3 Projects and Surveys

In response to the aims outlined in the *Historic Environment Research Framework for Exmoor 2017-2021* and SWARF the *Exmoor National Park Partnership Plan 2012-2017* (ENPA 2012) contains an action to “identify the potential impacts of climate change and land management change on Exmoor’s historic environment” (Priority A4 Action 6). Action 6 has a milestone to complete an audit of all intertidal and immediately coastal heritage assets that may be affected by sea level rise and identify vulnerable or critical sites and locations (*ibid*). The Exmoor Coastal Audit was commenced in late summer 2014 and involved the compilation of data from a range of sources, including early edition Ordnance Survey maps and georeferenced Tithe Maps, which was used to enhance the ENPA HER. This project formed the foundation for the data gathering phase of this report, which has achieved the above aim in the Exmoor National Park Partnership Plan.

The Exmoor RCZAS has been informed by the results from the preceding Severn Estuary RCZAS reports which comprise the Phase 1 DBA (Mullin *et al.* 2009), Phase 2a Pilot Fieldwork (Catchpole and Chadwick 2010) and the Phase 2 Main Fieldwork (Chadwick and Catchpole 2013a; 2013b and 2013c). The project area for the Severn Estuary RCZAS extended from Maisemore Weir to the north of Gloucester, along both banks of the Severn Estuary in England as far as Beachley Point, Tidenham on the west bank, and as far as Gore Point to the west of Porlock Bay on the south and east bank. The results of these reports are directly relevant to the Exmoor RCZAS as the projects covered the area of coastline between Gore Point and Minehead. The Severn Estuary RCZAS reports and the North Devon and North Cornwall RCZAS, which is currently being undertaken by the University of Southampton, will also provide the wider context for the Exmoor RCZAS.

The Exmoor RCZAS project area includes the intertidal zone to the MLWM, and therefore projects undertaken within the marine zone provide useful information relevant to the marine interface within the project area. An Aggregates Levy Sustainability Fund (ALSF) project undertaken by Museum of London Archaeology (MOLA) has considered the marine zone seawards of MLW, in the area from Gore Point in Porlock Bay to Gloucester (Burton *et al.* 2007). The Severn Estuary and Inner Bristol Channel has become one of Britain's four main extraction areas since the 1980s (*ibid*, 59). The project involved the collation and assessment of the marine archaeological resources within this area, followed by an assessment of the potential impact that the resource may face from current and future marine aggregate extraction (*ibid*, 6).

The West Coast Palaeolandscapes Survey (Fitch and Gaffney 2011) sought to investigate the potential for submerged landscapes within the Irish Sea and Bristol Channel through an analysis of 2D and 3D seismic datasets to explore the landscapes of these areas within the late Quaternary, and more specifically the Holocene. The project also generated a broad scale landscape characterisation mapping for the areas to help inform development and research projects.

In response to the threats posed to the historic environment of intertidal areas and estuaries within England, a national programme named CITiZAN (Coastal and Intertidal Zone Archaeological Network) has been established. This short-term project aims to target nationally important and exposed archaeological sites within the coastal zones that are considered to be most at threat (<http://www.citizen.org.uk/>). The CITiZAN project itself does not offer long-term monitoring, but rather facilitates community-based training to allow volunteers to monitor and record archaeological sites within the coastal zone. The project is run by Museum of London Archaeology (MoLA), financed by the Heritage Lottery Fund, The Crown Estate and the National Trust; other partners are the Council for British Archaeology and the Nautical Archaeological Society and HE.

The National Trust has also responded to the threat posed by rising sea levels and coastal change, initially with the *Shifting Shores* report, published in 2005, and more recently by their *Shifting Shores: Playing our part at the coast report* (2015) which outlines their commitment to looking after special coastal places by adapting to change, identifying long term sustainable plans for the coast, and working with others to ensure policies and strategies can be achieved on the ground. The

breaching of the shingle ridge at Porlock Bay formed one of the case studies for this programme.

A new project named 'CHerISH' (Coastal Heritage Risk – Imagery in Support of Heritage Management) was commissioned by HE in January 2016 and aims to illustrate how historical images can support the planning and management of heritage sites. A regional pilot study was recently undertaken by Coastal and Geotechnical Services with support from the Maritime Archaeology Trust. ENPA provided information from the HER to support the project the results of which are presented in their Case Study Site 22 -Exmoor. The artistic images are strongest in their representation of the changing pattern of the coastal settlements such as Lynmouth in the nineteenth century, rather than illustrative of individual heritage features (McInnes 2017).

Additional national projects relevant to the English coastline include the English Seafront Project which is a research project relating to England's seaside heritage, undertaken by HE. The project seeks to raise awareness of the seaside as a heritage resource by charting the history, development, character and significance of England's seafronts and aims to contribute to the protection of coastal heritage by exploring the issues that they currently face.

## 4 DESIGNATIONS RELEVANT TO THE PROJECT AREA

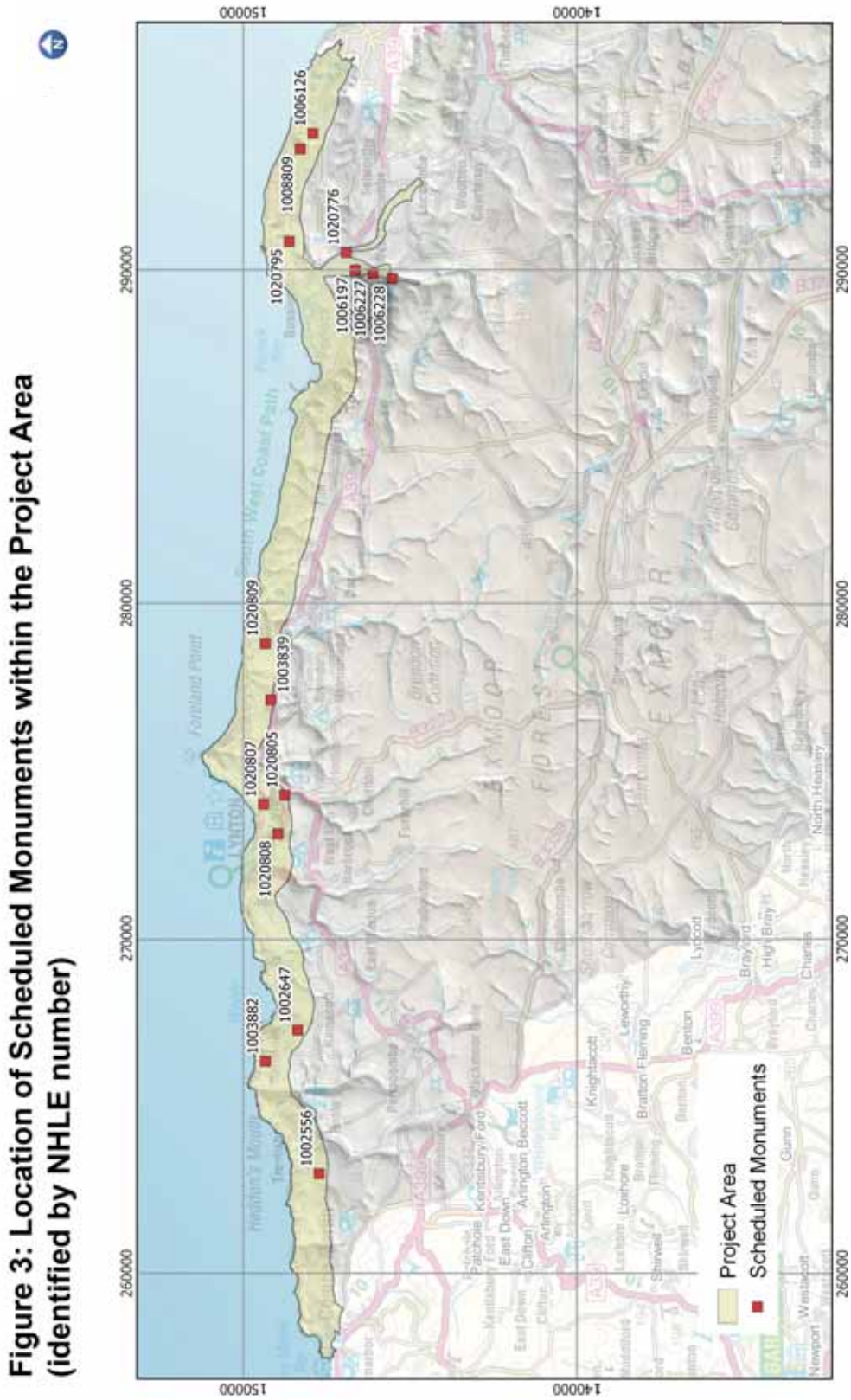
### 4.1 Historic Environment Designations

Exmoor National Park was designated in 1954, and forms one of 15 National Parks within the UK. The statutory purposes of the National Park were originally defined within the 1949 *National Parks and Access to the Countryside Act*. This legislation was revised by the Environment Act of 1995 which set out two main statutory purposes for national parks within England and Wales:

1. Conserve and enhance the natural beauty, wildlife and cultural heritage;
2. Promote opportunities for the understanding and enjoyment of the special qualities of national parks by the public.

Since 1997 the ENPA has also taken over from local government the duty to foster the economic and social wellbeing of local communities within its area. In addition to the overarching designation as a National Park, there are a series of smaller-scale designations that are relevant to the historic environment within the Exmoor RCZAS project area; these are discussed in detail below. The emerging State of the Park Report recognises that there are sites likely to meet the criteria for designation that remain unassessed.

Scheduled Monuments, as defined under the *Ancient Monuments and Archaeological Areas Act* (1979) are archaeological sites which have been deemed on the basis of a set of non- statutory criteria to be of national importance. It is a criminal offence to damage or destroy a Scheduled Monument without the consent of the Secretary of State for the Department of Culture, Media and Sport (DCMS), although no protection is afforded against threats from the natural environment. There are a total of 200 Scheduled Monuments within Exmoor National Park, of which 15 fall within the RCZAS project area. These are listed in Appendix 1 and their distribution within the project area shown on Figure 3. Four of the Scheduled Monuments within the RCZAS project area comprise barrows or cairns of likely Bronze Age date (National Heritage List for England (NHLE) nos. 1003839, 1002647, 1020795, and 1002556), while there are three earthworks/enclosures of likely Iron Age date (NHLE nos 1008809, 1020805, and 1020807). Prehistoric sites of recognised national significance are therefore currently limited to a small number of monument types. Evidence relating to prehistoric settlement and earlier prehistoric



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(Mesolithic and Neolithic) activity is currently under-represented by the existing Scheduled Monuments within the project area. Scheduled Monuments dating to the Roman period comprise the Roman fortlets at Old Burrow (NHLE 1020809) and Martinhoe (NHLE 1003882). These currently represent the only known evidence for Roman activity within the RCZAS project area.

Scheduled Monuments assigned to the medieval period within the RCZAS project area comprise three packhorse bridges (NHLE nos 1020776, 1006228, 1006227) as well as structural and earthwork remains associated with a deserted medieval farmstead to the west of Bramble Combe (NHLE 1006126). Scheduled Monuments of post-medieval to modern date within the RCZAS project area comprise a leat serving the former hydro- electric generating station on the East Lyn River (NHLE 1020808), as well as Allerford New Bridge (NHLE 1006197). The extensive remains associated with medieval and post-medieval field systems throughout the project area are not represented within the current list of Scheduled Monuments.

Buildings of national, regional, or local historical and architectural importance are protected by the *Planning (Listed Buildings and Conservation Areas) Act, 1990*. There are three grades of listing, the highest of which is Grade I, representing buildings of exceptional interest; Grade II\* buildings are particularly important buildings of more than special interest; Grade II buildings are of special interest. Individual buildings can also receive protection through their inclusion within Conservation Areas. Listed Buildings are afforded protection from physical alteration or negative changes to their historical setting. There are currently a total of 184 Listed Buildings within the Exmoor RCZAS project area. These comprise two Grade I Listed Buildings; 14 Grade II\* Listed Buildings; and 168 Grade II Listed Buildings. These are listed within Appendix 2 and their distribution within the project area shown on Figures 4a-c. A total of 104 of the Listed Buildings within the project area fall within settlements designated as Conservation Areas. Within the remainder of Exmoor National Park, beyond the RCZAS project area, there are a further 18 Grade I; 40 Grade II\*; and 499 Grade II Listed Buildings.

Areas of special architectural or historic interest that have a specific character or appearance considered desirable to preserve or enhance can be protected through their designation as Conservation Areas under the Planning Act 1990. These are designated by the ENPA as the local planning authority. There are a total of six Conservation Areas within the Exmoor RCZAS project area, two

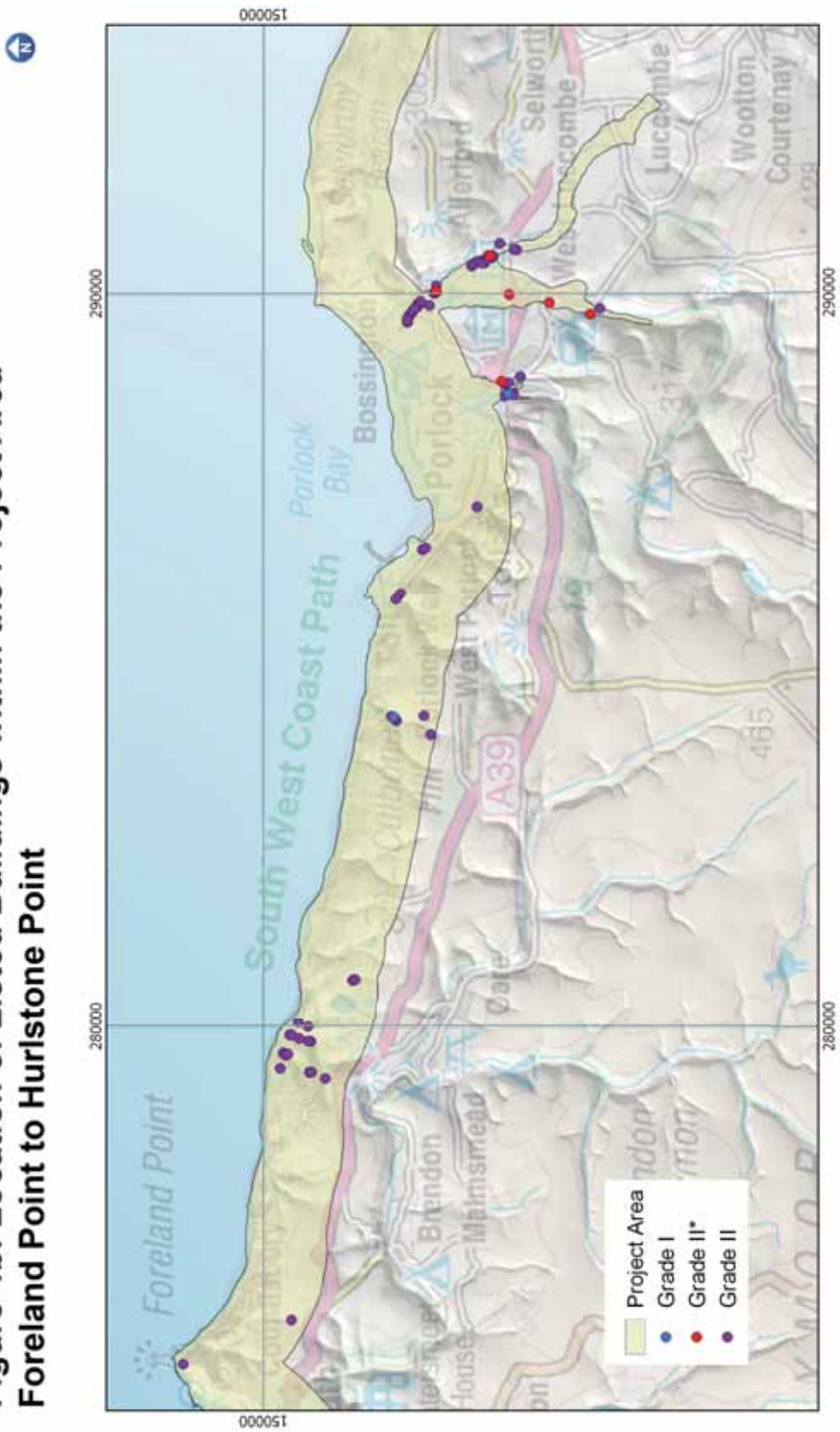


**Figure 4a: Location of Listed Buildings within the Project Area  
Combe Martin to Foreland Point**



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**Figure 4b: Location of Listed Buildings within the Project Area  
Foreland Point to Hurlstone Point**



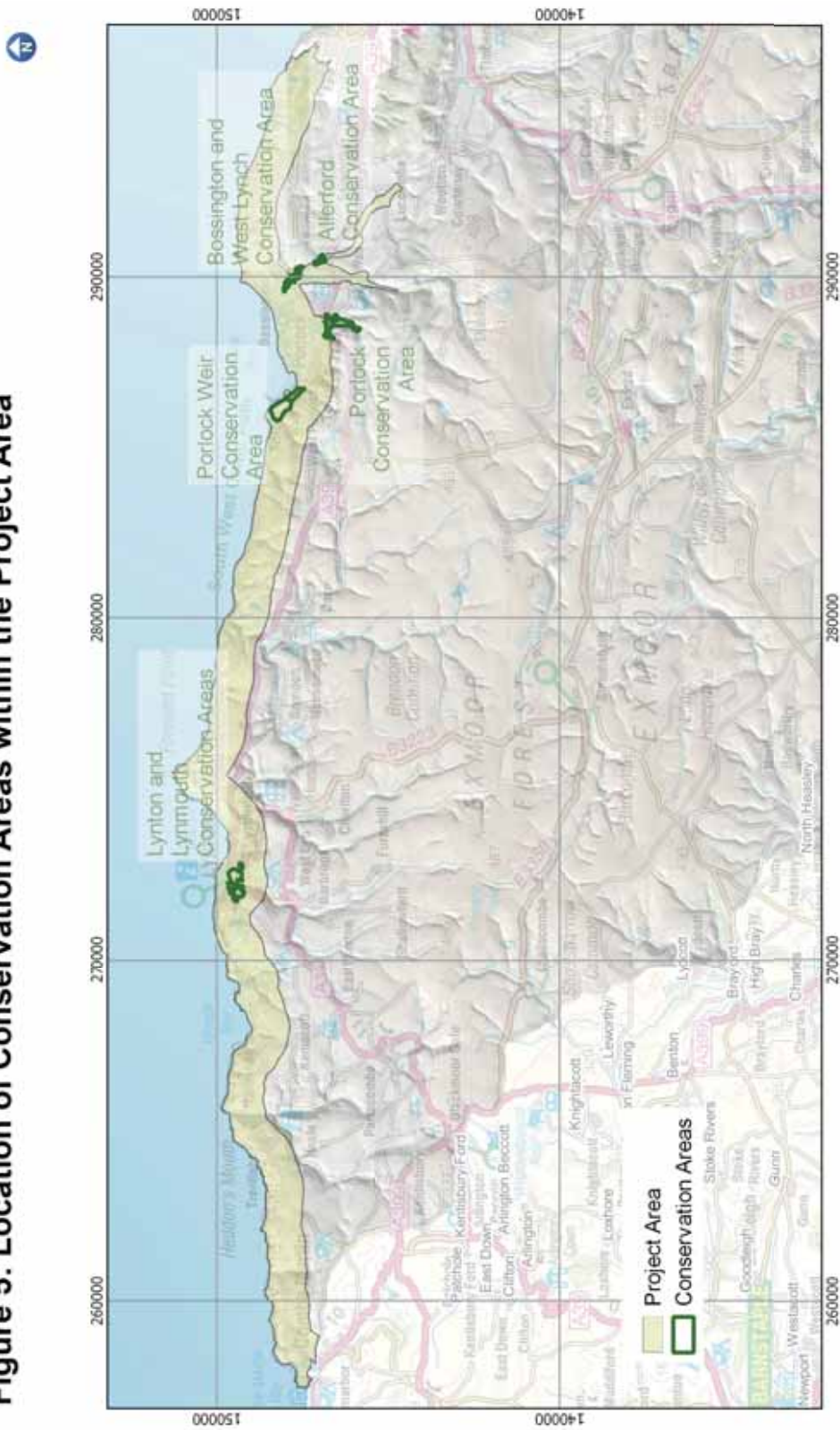
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**Figure 4c: Location of Listed Buildings within the Project Area  
Hurlstone Point to Minehead**



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**Figure 5: Location of Conservation Areas within the Project Area**



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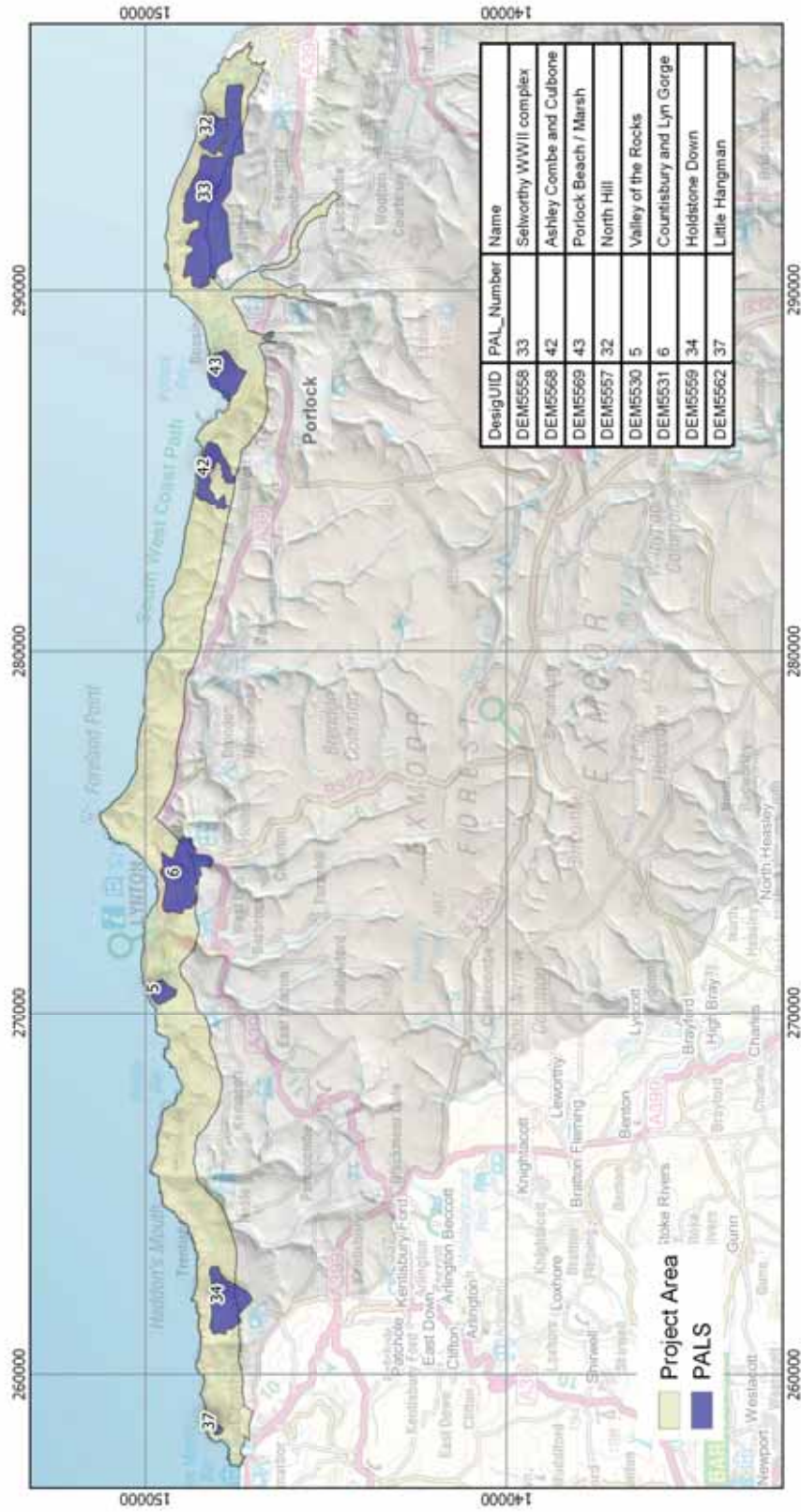
of which are in Devon (Lynmouth and Lynton) and four within Somerset (Porlock, Porlock Weir, Allerford, and Bossington and West Lynch). The distribution of Conservation Areas within the RCZAS project area is shown on Figure 5. There are a further four settlements within the project area that are not currently designated comprising Trentishoe, Martinhoe, Countisbury and West Porlock. An additional ten Conservation Areas lie within the remainder of Exmoor National Park, beyond the RCZAS project area.

The key characteristics of each of the Conservation Areas are set out in the Conservation Area Character Appraisals, which also set out the actions that are required to maintain and enhance these areas in the future. In addition to recognising the significance of Listed Buildings within the Conservation Area, each of the Conservation Area Character Appraisals for Exmoor National Park also has an appendix containing details of additional buildings that are considered to be of local significance. Some of these buildings are of considerable historic and architectural quality and are recommended to be considered as candidates for listing.

There are a total of eight Principal Archaeological Landscapes (PALs) within the RCZAS project area. PALs are a local landscape designation for historic landscapes that are considered to be exceptional examples of their type. This designation allows those bodies involved with their management to place the greatest level of importance on their archaeological character. The PAL designation also allows both designated and non-designated sites to be recognised within their wider landscape context and therefore the designation highlights the significance of extensive landscape-scale remains and group value rather than the site specific designations of listing or scheduling. PALs have been designated in two phases on Exmoor starting with those on moorland. Each of Exmoor's 37 moorland PALs were designated using criteria initially established by Wilson-North and Riley (2004) and developed by Fyfe and Adams (2008). The principal components of the PALs comprise relict prehistoric landscapes; medieval farming systems; parliamentary enclosure/reclamation; military training; and palaeoenvironmental deposits. More recently, ENPA has identified 16 non-moorland PALs, two of which fall within the RCZAS project area. The distribution of PALs within the Exmoor RCZAS project area is shown on Figure 6 and discussed in greater detail in Section 6 below.

The English Heritage Monument Protection Programme survey of Exmoor was suspended in 2004, prior to the assessment of all monuments meeting the required criteria for national protection; there is therefore potential for archaeological remains

Figure 6: Location of PALS within the Project Area (identified by PAL number)



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of national significance to survive on Exmoor without appropriate designation. The PAL designation is of particular value as a way of identifying archaeological landscapes of high significance on Exmoor, not currently protected through other designations. The PAL designation does not, however, offer protection of these landscapes and it excludes individual sites of importance that are not part of a recognised historic landscape.

Some national designations including Registered Parks and Gardens, Registered Battlefields and Protected Wreck Sites are not currently represented within the Exmoor RCZAS project area. Registered Parks and Gardens are afforded protection through their inclusion on the HE *Register of Historic Parks and Gardens of Special Historic Interest in England*, while Registered Battlefields are protected through their inclusion on HE's *Register of Historic Battlefields*. Historic wreck sites in UK territorial waters can be protected under the *Protection of Wrecks Act* of 1973; the *Ancient Monuments and Archaeological Areas Act* of 1979; and the *Protection of Military Remains Act* of 1986. These designations are also uncommon within the wider context of the National Park where there are no Registered Battlefields or Protected Wreck Sites and only two Registered Historic Parks and Gardens. There are no battlefield sites or known wreck sites within the project area, the potential for designed landscapes worthy of consideration for designation is discussed in Section 11 below.

Condition surveys are undertaken to assess Scheduled Monuments and Listed Buildings within the National Park every five years. The most recent survey of Scheduled Monuments was completed in 2015 (Gent and Manning 2015) and the most recent survey of Listed Buildings was completed in 2014 (Lawrence 2014). The Historic Environment team at Exmoor National Park are also in the processes of compiling a list of assets of local significance to better inform management of the historic environment within the National Park and the development of a Local List is under consideration.

The *Exmoor National Park Local Plan 2011-2031* (Publication Draft) recognises that some of the non-designated assets within the National Park are of such complexity or rarity that they are considered to be of regional or national significance and should therefore be considered in the same way as designated assets. This includes the extensive survival of prehistoric archaeology (particularly on moorland areas); widespread evidence of agricultural reclamation; and evidence for early industrial exploitation including iron mining and smelting (Exmoor National Park 2016c, 55).

## **4.2 Natural Environment Designations**

In addition to historic environment designations, there are also a number of designations within the RCZAS project area that relate to the natural environment. The heritage value of these areas often forms part of their designation criteria or part of the consideration relating to their future conservation. This is of particular importance within the context of the Exmoor National Park where there is a need to 'conserve and enhance the natural beauty, wildlife and cultural heritage of the National Park' and to 'promote opportunities for the understanding and enjoyment of its special qualities by the public' (Environment Act 1995).

Natural Environment designations within the RCZAS project area include two Special Areas of Conservation (SACs): the Exmoor Heaths (UK0030040); and Exmoor and Quantock Oakwoods (UK0030148). SACs are protected sites that have been designated under the EC Habitats Directive with the intention of making a significant contribution to the conservation of habitat types and species, excluding birds, identified within the Directive as being most in need of conservation at a European level. SACs falling within terrestrial areas and territorial marine waters out to 12 nautical miles are designated under the *Conservation Regulations 1994*.

A small section of the project area falls within the National Nature Reserve (NNR) at Dunkery and Horner Wood (1006951). NNRs were established to protect important habitats, species and geology and can relate to both natural and semi-natural terrestrial and coastal ecosystems within Great Britain. NNRs are designated under the *National Parks and Access to the Countryside Act* of 1949 and the *Wildlife and Countryside Act* of 1981, and are managed to conserve habitats and to provide opportunities for scientific research to be carried out within these environments.

There are a total of seven areas that are designated as SSSIs within the Exmoor RCZAS project area. SSSIs are a designation providing statutory protection for the best examples of the UK's flora, fauna, or geological or physiographic features. The designation was originally introduced under the *National Parks and Access to the Countryside Act* of 1949, revised under the *Wildlife and Countryside Act* of 1981, and improved provisions were made in the *Countryside and Rights of Way Act* (2000). SSSIs may extend into intertidal areas as far as the jurisdictional limit of local authorities, which is generally taken to be the MLWM. This is the case for five of the SSSIs within the project area. The boundaries of some SSSIs may extend more



widely in estuaries and enclosed waters, as there is a specific provision for marine SSSIs beyond the low water mark within England.

There is a total of 21 Regionally Important Geological Sites (RIGS) within the project area that fall within the county of Devon. The majority of these sites are located on the Devonian Lynton Slates and Hangman Grits, and fall within the parishes of Lynton and Lynmouth; Combe Martin; Martinhoe; and Countisbury. RIGS is a non-statutory designation for geological sites of local, national and regional importance. RIGS are locally designated and are conserved and protected through local and national planning policies. Equivalent sites are referred to as Local Geological Sites (LGS) within Somerset. There is a total of 6 LGS within the project area. The majority of these sites are located on the Devonian Hangman Grits within the eastern part of the project area; the exception being the LGS at Porlock Weir to Bossington Beach.

A 45km stretch of Exmoor's coastline is designated as a Heritage Coast. Heritage Coasts were established to conserve, protect and enhance the best stretches of undeveloped coast within England including their natural beauty, their terrestrial, coastal and marine flora and fauna, and their heritage features. Areas of Heritage Coasts have been defined following consultation between the relevant maritime local authorities and Natural England, and are used as an aid to local authorities in planning and management of coastlines (Land Use Consultants 2006). The Exmoor Heritage Coast encompasses an area of 64km<sup>2</sup> and includes the terrestrial area to the Low Water Mark. The RCZAS project area also abuts the North Devon Heritage Coast to the west which comprises a length of 32km and an area of 87km<sup>2</sup>.

The area between Bideford and Foreland Point is designated as a Marine Conservation Zone (UKMCZ0029). Marine Conservation Zones (MCZs) were established under the *Marine and Coastal Access Act* of 2009 to protect nationally important marine wildlife, habitats, geology and geomorphology and can be designated within both the inshore and UK offshore regions of England and Wales.

The Exmoor RCZAS project area also abuts the North Devon AONB to the west, and is situated within close proximity to the Quantock Hills AONB to the east. AONBs are designated under the *National Parks and Access to the Countryside Act* of 1949, and amended in the *Environment Act* of 1995.

# 5 COASTAL AND MARINE MANAGEMENT

## 5.1 International Conventions

Conventions relevant to the Exmoor RCZAS project area include the *European Landscape Convention* (ELC) which was adopted in 2000 and is an international treaty that provides a series of guidelines for the development of policies relating to the protection, management and planning of landscapes. The Convention encourages the integration of landscape into all relevant areas of policy and ensures European co-operation on landscape issues (<http://www.coe.int/en/web/landscape/home>). The principles of the ELC are particularly promoted for the planning and management within National Parks. The ELC was adopted into UK law in 2007.

The *UNESCO Convention on the Protection of Underwater Cultural Heritage* was adopted in 2001 and sets out the principles for the protection of submerged cultural heritage that is over 100 years old. The Convention was created in response to the threat posed by looting and subsequent destruction of the underwater resource and was formed to define and protect underwater cultural heritage in relation to international laws on maritime salvage. The main principles which state-parties are obliged to follow comprise the preservation of underwater cultural heritage through the in-situ preservation wherever possible. The Convention also requires that underwater cultural heritage should not be commercially exploited, and that state parties should promote training and public awareness of the value and importance of underwater cultural heritage (<http://www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/2001-convention/>). The Convention has not yet been ratified by the UK Government: although consideration is being given to do so, there is currently no firm commitment.

## 5.2 UK Legislation

### ***Marine and Coastal Access Act***

The Marine and Coastal Access Act of 2009 provides the legal mechanism for improved management and protection of the marine and coastal environment. The Marine Act comprises a series of key elements including the introduction of the Marine Management Organisation (MMO) to act as the main authority for marine

planning for English territorial waters and UK offshore waters; as well as a strategic marine planning system involving the production of a Marine Policy Statement (MPS) and a series of subsequent Marine Plans (Marine Management Organisation 2014). Marine Plans interpret and present the policies from the MPS at a sub-national level, allowing national policy to be applied on a local scale. Until the marine plan is adopted the Marine Policy Statement is the relevant document for decision making and proposals. Other key elements include a streamlined marine licensing system; the provision of a coastal access duty; marine nature conservation through the designation of Marine Conservation Zones (MCZs); as well as coastal and estuarine management through the use of a system of Integrated Coastal Zone Management (ICZM) (<http://jncc.defra.gov.uk/page-5230>).

Marine Planning covers all of the inshore and offshore waters of England, stretching from the MHWL to the outer limit of England's Exclusive Economic Zone; marine planning therefore overlaps with terrestrial planning systems within the intertidal zone. Details of the relevant marine plan for the Exmoor coastline are discussed within Section 5.3 below.

### ***National Planning Policy Framework (NPPF)***

General policy and guidance for the conservation of the historic environment are contained within Chapter 12 of the *National Planning Policy Framework* (NPPF; Department for Communities and Local Government 2012). This document sets out the government's planning policies for England and contains details of how they should be applied, with a strong focus on the need for sustainable development. This sustainable development can be achieved within the planning system through a consideration of the economic, social and environmental aspects of a development.

Archaeological sites, buildings, Historic Parks and Gardens, Conservation Areas, Registered Battlefields or other aspects of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest are considered heritage assets under this policy system. Designated heritage assets are afforded protection as either Scheduled Monuments, Listed Buildings or through their inclusion within Conservation Areas. In line with the 12 core planning principles, planning should 'conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations' (paragraph 17, p6). It is now HE's view that a proposal that fails to adhere to historic environment policies is not a sustainable development.

Policies relevant to the historic environment include paragraphs 128, 129, 132-135, 137 and 139. Under NPPF, local planning authorities should set out a positive strategy for the conservation and enjoyment of the historic environment within their Local Plan by recognising that heritage assets are an irreplaceable resource and therefore need to be conserved in a manner appropriate to their significance (paragraph 126, p30). Where assets are to be affected by a planning development local authorities should require a description of the significance of all heritage assets likely to be affected, including impacts on setting. This should be set out with a level of detail proportionate to the assets' importance, and of a sufficient scale to allow the potential impact of the proposed development upon the assets' significance to be understood. Any harm or loss to an asset requires justification; substantial harm to, or loss of, designated assets is considered to be wholly exceptional unless it is demonstrated that the public benefits of a development outweigh the harm or loss (Department for Communities and Local Government 2012, Section 12).

Local plans should set out strategic policies that need to be delivered including policies relating to flood risk and coastal change as well as the conservation and enhancement of the natural and historic environment (*ibid*, paragraph 156 and 157).

Local planning authorities should also give great weight to conserving landscape and scenic beauty in National Parks to ensure the conservation of wildlife and cultural heritage within these landscapes (*ibid*, Section 11, paragraph 115). They should have access to an up-to-date evidence base, such as an historic environment record, in order to assess the significance of heritage assets and to understand the contribution that they make to the environment (*ibid*, Paragraph 169).

### **Local Policy**

The *Exmoor National Park Partnership Plan 2012-2017* sets out the long term vision, objectives and priorities to be achieved within the National Park during the period up to 2017 and provides a framework for ensuring that the purposes for which the National Park was designated are achieved. Objectives relevant to the historic environment within Exmoor National Park are set out within Priority A4 of the Partnership Plan: 'Engage people in understanding, protecting and managing Exmoor's cultural heritage and historic environment'. Priorities for the programme of works to be undertaken within the short-term by the ENPA are set out within the *Exmoor National Park Business Plan 2016/17*.

'Saved' policies relevant to the historic environment are set out within the Exmoor National Park Local Plan 2001-2011 which was adopted by the ENPA in 2005 and forms the development plan which is used to determine planning applications. Policies relevant to the historic environment of Exmoor are set out within Sections 2 and 3. *The Lyn Plan 2013-2028* is the neighbourhood development plan for the area of Lynton and Lynmouth.

A new Local Plan is currently being undertaken with a view to adoption in spring 2017 and, once adopted, will supersede all the saved policies within the current adopted Local Plan. Strategic policies relevant to the historic environment are set out within 'CE-S4 Cultural Heritage and Historic Environment', while strategic policies relating to climate change are set out within 'CC-S1 Climate Change Mitigation and Adaption' (Exmoor National Park 2016c). The new Local Plan has a shared vision and objectives with the *Exmoor National Park Partnership Plan 2012-2017*.

### **5.3 Coastal Management**

#### ***Marine and Coastal Access Act***

Following the *Marine and Coastal Access Act* of 2009 marine planning within the UK is under the control of the MMO which will deliver UK marine policy objectives for English waters through a series of statutory Marine Plans and other measures. HE has worked with Defra to deliver this marine planning system and is currently acting as a specialist advisor to the MMO for the English area of the UK Territorial Sea (Historic England 2016b). The two areas covered by the MMO include the English Inshore (0-12 nautical miles) and the English Offshore Regions (12-c. 200 nautical miles). The RCZAS project area falls within the south-west inshore region for marine planning which covers an area of coastline stretching from the River Severn border with Wales to the River Dart in Devon. The MMO is currently developing marine plans for the south-west inshore and south-west offshore regions, and until the marine plan is adopted the Marine Policy Statement (MPS) is the relevant document for decision making and proposals.

ENPA are currently providing Natural England with advice on how to improve coastal access on the stretch of South West Coast Path between Minehead and Combe Martin (Natural England 2016b). The access is expected to be in place in 2018 and forms part of the work associated with the coastal access duty outlined within the *Marine and Coastal Access Act* of 2009 which seeks to create a new National

Trail around England's coast, known as the England Coast Path. The coastal access scheme (Natural England 2013) is approved by the Secretary of State and sets out how Natural England will deliver the coastal access duty in order to improve access to the whole of the coast path around England.

### ***The Coastal Concordat***

The Coastal Concordat for England provides a framework to co-ordinate the required processes relating to the consent of coastal developments in England to ensure sustainable growth within the coastal zone. The concordat can be applied to projects that span the intertidal area in estuaries and on the coast, as well as in situations where multiple consents relating to both marine and terrestrial planning are required (Defra 2014). National Parks England is a signatory to the concordat (Exmoor National Park 2016c, 34).

### ***Flood and Coastal Erosion Risk Management (FCERM)***

This is a programme run by the Environment Agency, Defra, the Welsh Government and Natural Resources Wales, and aims to serve the needs of all flood and coastal operating authorities in England and Wales. The programme provides evidence, information, tools and techniques to inform the development of FCERM policy and strategy; understand and assess coastal and flood risks and the processes by which these risks arise; manage flood and coastal erosion assets in a sustainable way; and prepare for and manage flood events effectively (Environment Agency 2016).

### ***Shoreline Management Plans (SMPs)***

Historic England have produced guidance to inform the consideration of coastal heritage as part of the SMP process (Murphy 2006). A large-scale assessment of the risks associated with coastal change is facilitated by a SMP, enabling the assessment of risk to the human, developed, historic and natural environments. These plans also provide an important part of the Defra strategy for flood and coastal defence. SMPs are non-statutory policy documents relating to coastal defence management planning, and are intended to inform wider strategic planning. The policies detailed within SMPs aim to achieve long-term objectives for the management of the coastline through a sustainable approach that considers the needs of the environment and local economy. The plans are developed by Coastal Groups with the input of a wide range of stakeholders, including local authorities and are effected by the Environment Agency through FCERM processes, as well as through neighbourhood and local planning (NPPF).

The coastline of Exmoor National Park is included within the draft SMP for Hartland Point to Anchor Head (Halcrow Group 2010). This document identifies policies over a 100 year timescale to manage tidal flooding and coastal erosion risks. The SMP is divided into 91 Policy Units of which eight are relevant to the Exmoor National Park RCZAS (Figure 13): 7d11 Combe Martin to Lynmouth; 7d12 Lynmouth; 7d13 Lynmouth to Foreland Point; 7d14 Foreland Point to Gore Point; 7d15 Gore Point to Porlock Weir; 7d16 Porlock Weir; 7d17 Porlock Weir to Hurlstone Point; 7d18 Hurlstone Point to Minehead (west).

# 6 OVERVIEW OF EXMOOR'S COASTAL HISTORIC ENVIRONMENT AND PREVIOUS INVESTIGATIONS

## 6.1 Introduction

The following overview of the key characteristics of Exmoor's coastal historic environment is based on data held within the Exmoor HER, including information from records and reports. A summary of the whole of Exmoor's coastal zone is followed by more detailed discussion; this discussion is separated into three main divisions within the project area which correspond with the policy statement extents outlined within the SMP and comprise the following areas: Combe Martin to Foreland Point (Policy Units 7d11-7d13); Foreland Point to Hurlstone Point (Policy Units 7d14-7d17); and Hurlstone Point to Minehead (7d18). Designated sites discussed below will be referred to by their designation number given in the National Heritage List for England (NHLE), while non-designated assets will be referred to by their Exmoor HER reference (MEM/MDE/MMO/MSO; see Section 7.2 below). Figures 7-9 illustrate the distribution of heritage assets within the study area, by period.

The archaeological landscape of Exmoor is generally considered well-preserved; relatively little affected by intensive agricultural improvement and other development pressures. Since the 1980s, large-scale landscape surveys undertaken across Exmoor by the RCHME, EH, the National Trust and ENPA, have greatly enhanced our archaeological knowledge. However, only a small proportion of sites have been excavated which presents difficulties with dating chronologies; most of the dating assigned to archaeological monuments and finds is from relative dating, by analogy to sites elsewhere, as opposed to absolute dating. The low level of excavation is partly related to the National Parks status as a protected landscape and the consequent low level of development; less commercial archaeological work is carried out within this landscape compared to other parts of Devon and Somerset.

Much of Exmoor's coastline is held as parts of large estates. Well over 50% of the land within the project area is owned and managed by the National Trust. ENPA has substantial holdings at Culbone Woods to the west of Porlock Weir, and on North Hill west of Minehead. Many of these properties have been covered by archaeological field survey. Other significant holdings lie at Glenthorne, Porlock Manor and Lee Abbey.



### ***Overview of coastal Palaeolithic and Mesolithic evidence***

Records relating to the Palaeolithic period in Devon and Somerset are largely characterised by artefact scatters and findspots reflecting both open-landscape archaeology and cave-based settlement evidence. At present, there are very few archaeological records from the Palaeolithic period along the Exmoor coast, and indeed from the wider landscape of Exmoor (Riley and Wilson-North 2001, 17). Palaeolithic artefacts are commonly displaced from their original context as a result of natural processes: artefacts dating to the Palaeolithic period in Southwest England are often found within head or solifluction deposits. There is a single reference to the findspot of an axe of Acheulian type which may have been derived from the lower gravels exposed in the cliffs at Porlock, although the exact provenance of the artefact remains unknown (Grinsell 1970, 13). The lack of evidence for Palaeolithic activity on Exmoor may be related to problems of access to exposed cliff faces, and the identification of artefacts of this date, as opposed to the real absence of evidence within this area. The evaluation of absence of evidence or genuine evidence of absence for the Southwest is raised in SWARF (Hosfield *et al.* 2008, 35). Monitoring of exposed cliff faces could be fruitful, although much of the Exmoor coast is very difficult to access. In the late-glacial period (12,000-10,000 BC) conditions would have been extremely cold, an arctic-steppe environment, although the nearest palaeo-environmental evidence for this period comes from Exebridge at the southern edge of the National Park (Fyfe and Davies 2011).

The Mesolithic period in Devon and Somerset is characterised by artefact scatters and findspots relating to open-landscape archaeology. Many of the flint artefacts recovered from Exmoor are derived from flint pebbles, likely to have been collected from beaches such as Porlock or elsewhere along the North Devon coast; flint is not native to the National Park. Evidence relating to Mesolithic activity is reliant upon chance finds; from erosion and/or agricultural practices which displace artefacts from their original context. As a result, many of these artefact scatters lack contextual information which could facilitate accurate dating. The only way to date these artefacts is therefore to compare them with other flint assemblages that have been assigned more accurate dates. Increased systematic field walking together with taking opportunities to look at exposed deposits, will increase the potential for finds and sites dating to the Mesolithic period to be discovered. With the warming climate, from the start of the later Mesolithic period, mixed deciduous woodland spread across the former open grassland to become the dominant vegetation cover across Exmoor, with open land becoming extremely limited (Fyfe and Davies 2011).

The largest Mesolithic site known on Exmoor is the extensive late Mesolithic spring-head encampment at Hawkcombe Head and Ven Combe. This lies 3km inland, 1.8km to the south of the study area, on the western edge of Porlock Common. Radiocarbon dates suggest that the site was used over an extensive period of time in the 6th and 7th millennia BC and periodically in later periods (Waddington *et al.* 2011). The rare settlement evidence, palaeoenvironmental potential and lithic artefacts ranging in date from the Mesolithic to the Bronze Age period recovered from this site have led to the designation of the area as a PAL (PAL 14; Balmond 2015, 61).

### ***Overview of coastal Neolithic and Bronze Age activity***

A review of palaeo-environmental evidence indicates that a more open environment on the high uplands with the woodland continuing in the valleys developed during the Neolithic period. This trend increased in the Bronze Age with woodland cover greatly reduced by the end of the period (Fyfe and Davies 2011). Pollen analysis has been carried out at a small number of sites within central Exmoor including The Chains; Hoar Tor; Brendon Common; Hoar Moor; and Codsand Moor. Few studies have been undertaken on the coastal peats of Exmoor; the exception being the peat deposits at Porlock Bay. The pollen sequence at Hoar Moor shows tree and shrub pollen (comprising birch, oak, hazel, pine, alder, elm and lime) is present between 4470-4000 BC (Straker and Crabtree 1995, 50). The pollen sequence from The Chains (Merryfield and Moor 1974; Straker and Crabtree 1995) appears to begin at c. 3000 BC, at which time there is evidence for oak-hazel and alder woodland, as well as areas of heath, but little evidence for human interference at these dates. Here, human influence on the vegetation is visible from c. 1000 BC onwards, at which point there is an increase in open ground indicators, and a decrease in the total of tree pollen values which indicate a period of clearance (Straker and Crabtree 1995, 47). At Hoar Moor, evidence for woodland clearance and an increasingly open landscape dates from c.1000 BC (*ibid*, 50). Whilst these studies provide a useful understanding of environmental change within the Exmoor landscape it is important to recognise that the formation of peat would have been a result of local factors relating to topography and climate; sequences are therefore likely to be most representative of their local landscape (Riley and Wilson-North 2001, 22). Analysis of peat deposits from Porlock Bay provide a more direct comparison for low lying vegetation changes within the project area and are discussed within Section 9.3 below.

Artefact scatters, principally lithic findspots and lithic working sites, indicating the location, extent and potentially the duration of settlement, are typical of the Neolithic and Bronze Age periods within Devon and Somerset, although there are few of this date currently known from the coastal zone of Exmoor. Artefact scatters that have been assigned to the Neolithic and Bronze Age periods are concentrated within the eastern part of the project area, and have been found in the vicinity of known monuments such as the prehistoric enclosure at Furzebury Brake and from the landscape to the south of Old Burrow Roman Fortlet. Monuments of typical Neolithic date, such as chambered tombs or long mounds, are absent from the coastline of Exmoor although a possible, rare, early Neolithic Tor Enclosure has been identified at Little Hangman (see section 6.2 below). Again, lack of secure dating hampers a true understanding of the significance of this site.

There is a conspicuous absence of any stone monuments in the Exmoor coastal zone. These sites: stone circles, stone rows, stone settings and single standing stones, are the earliest man-made structures known on Exmoor. It is not understood whether their apparent absence is significant. Documentary references suggest there may have been a loss of monuments of this type in recent times in areas such as the Valley of Rocks (SEM8168). There are some stone setting sites in near proximity to the study area, such as the stone row between Culbone Hill and Stent Hill (MSO7893) and the Whit Stones on Porlock Hill (NHLE 1014269) perhaps also indicating the potential for stone monuments to have existed closer to the coastline. Although stone settings are absent within the study area, they are well represented in the wider National Park, with a particular concentration within the area of the former Royal Forest, and the majority located on moorland outside the limits of the medieval and later agricultural improvement (Riley and Wilson-North 2001, 24). Some of these stone monuments have been investigated as part of the Miniliths of Exmoor Project (e.g. Gillings *et al.* 2009) but obtaining samples suitable for dating the sites remains problematic. Again, their dating is based upon a comparison with similar sites elsewhere as opposed to any direct dating of the monuments (Riley and Wilson-North 2001, 23). It should be noted that the distribution of surviving stone settings does not necessarily reflect their original extent.

There is a good representation of funerary monuments, in the form of barrows and cairns, along the Exmoor coast; their density reflects the situation within the wider National Park where barrows are the most common prehistoric monument (Riley and Wilson-North 2001, 32). The current data may, however, be misleading; many of

the monuments within the coastal zone are recorded as 'cairns' but with no further information as to whether they represent burial cairns of likely Bronze Age date, or whether they are associated with later land clearance, which may be the case with some in areas such as Trentishoe Hill. Further work is therefore needed to characterise these monuments.

Evidence for more permanent settlement in the form of enclosures, hut circles and field systems also emerges throughout the Bronze Age on Exmoor and is fairly well represented within the coastal zone. Several of these sites, such as the Valley of Rocks near Lynton (Plate 6), have been surveyed but have not been subject to excavation; therefore dating is by analogy with similar sites, as opposed to absolute dating (Riley and Wilson-North 2001, 52). It is possible that some sites currently identified as of Iron Age date are of Bronze Age origin as was found further inland at Holworthy (Green 2009). Knowledge of these sites is reliant upon visibility of remains; factors such as the extent of vegetation cover will influence the potential for discovery of sites (Riley and Wilson-North 2001, 52). Not all archaeological remains are visible from the surface, and it should be recognised that there is potential for previously unidentified below-ground archaeological deposits of prehistoric date to be present beyond these areas (*ibid*). There is currently a lack of contemporary material culture from this landscape: a sherd of pottery of Bronze Age or Iron Age date recovered from Trentishoe Down (MDE1042) was of importance at the time of its discovery in the 1950s as the first example of pottery of this period to be recorded from North Devon; finds of this date are still rare across Exmoor.

Finds of Bronze Age metalwork are also rare along the Exmoor coast, and unfortunately where they do exist their exact provenance is not always recorded: a bronze spearhead (MDE1030) has been recorded from the grounds of Lee Abbey, but the exact location of the findspot remains unknown. Metal objects of Bronze Age date are also rare from the wider National Park, with most of the objects having been recovered as chance finds; this is likely to be a result of the lack of archaeological excavation within this landscape. Future finds of metalwork would enhance understanding of the cultural links between Exmoor and the wider continental mainland during the Bronze Age.

The Neolithic and Bronze Age landscape of Exmoor is the subject of a current collaborative PhD between the ENPA and the University of Leicester (Mitcham 2017).



Plate 6: View to the northwest showing the Valley of Rocks  
(©Historic England Archive 2008, 24932\_010, D. Grady)

### ***Overview of coastal Iron Age Activity***

Exmoor does not provide evidence for the upland abandonment recognised elsewhere in the Late Bronze Age and Iron Age periods. The palaeoenvironmental record appears to indicate continued openness of the upland in this period, presumably reflecting continued grazing and agricultural use. In addition, evidence for increased woodland clearance and species-rich grassland is evident at some sites towards the southern extent of Exmoor indicating possible intensification of activity here (Fyfe and Davies 2011). Despite this evidence from pollen cores at sites further inland, there is limited environmental evidence of this date within the coastal zone; Iron Age presence here is dominated by earthwork evidence.

Hillforts and, more commonly, hillslope enclosures are numerous throughout Exmoor and comprise the main form of settlement evidence for the Iron Age period, although more work is needed to understand their chronology and function (Riley and Wilson-North 2001, 70). Excavation of a hillslope enclosure at Holworthy, previously identified as of probable late prehistoric date, revealed a settlement of Bronze Age date, as well as evidence for re- use of the site within the Iron Age (Green 2009, 39). Conversely, it is also possible that some of the hut circles within the project area currently assigned to the Bronze Age may be of Iron Age date, but this cannot be proved without excavation. There is however, a good representation

of enclosure sites of general Iron Age type along the coast, from the massive embankment of Wind Hill near Countisbury, akin to an inland promontory fort (Plate 11) to the oval enclosure at Furzebury Brake (Plate 17). Finds of Iron Age pottery and metalwork are sparse from the coastal hinterland, and indeed from the wider National Park, where little archaeological excavation has been undertaken.

### ***Overview of coastal Roman activity***

Evidence for Roman activity is limited within the project area and is currently solely represented by the site of two fortlets. Martinhoe Beacon and Old Burrow are both situated on high ground overlooking the Bristol Channel. Both sites have been subject to excavation, as well as surveys by the RCHME.

There is currently no evidence for iron working within the project area in this period, although there are known iron ore deposits around Combe Martin. Within the wider National Park, iron working sites from the 2nd and 3rd centuries AD are recorded (Bray 2010). There is, therefore, the potential that the iron ore deposits near Combe Martin were also exploited at this time, although evidence for this may have been displaced by later medieval and post-medieval mining activity.

Evidence for Romano-British occupation is currently absent from the project area, although it is possible that future investigation of some of the enclosure sites identified as prehistoric may provide evidence for a continued presence into the Romano-British period. Environmental evidence suggests no significant change in land management from the Iron Age during this period (Fyfe and Davies 2011) which suggests that settlement sites are present but not identified.

### ***Overview of coastal Post-Roman and Saxon/Early medieval activity***

Evidence of post-Roman and Saxon activity within the project area is also very sparse, reflecting the situation within the wider National Park. There is a distinct lack of archaeological evidence relating to the transition from prehistoric settlement patterns to the landscape of the medieval period. Evidence for the early medieval period is largely reliant on place names and documentary sources. The coastal area from the Heddon Valley to Bossington may have been part of an early Forest of Exmoor, but it was excluded from the boundaries developed in the thirteenth century (MacDermot 1973, 107-9). The Domesday survey of 1086 provides an

important record relating to settlement within this period and provides a good record for settlements that are likely to have Saxon origins. The Domesday survey indicates that the environment of Exmoor was one of woodland, with pasture and areas for arable cultivation (Riley and Wilson-North 2001, 90). The settlement pattern is of dispersed farmsteads and hamlets which is still apparent today.

There are some potentially early church dedications and Christian memorial stones within the project area (see section 6.3 below). These monuments indicate the presence of an early Christian community for which associated archaeological evidence is currently unknown (Riley and Wilson-North 2001, 87). Examples of early church dedications are to St Bueno at the Grade I Listed (NHLE 1058037) Culbone Church, and a dedication to St Dubricius at the Grade I Listed (NHLE 1173524) Porlock Church, although the dedication may be from a later date. Only three inscribed stones of early medieval date are known from Exmoor National Park; two of these are located immediately to the south of the project area.

### ***Overview of coastal medieval activity***

Evidence for the character of medieval settlement on Exmoor stems mainly from deserted settlement, although place names, historical documents and evidence within extant buildings also contribute to our knowledge of this period. Analysis of field systems can also contribute to the understanding of the duration and extent of settlement within this period. This comprises evidence for medieval field boundaries within existing field systems as well as evidence for relict field systems which survive as earthworks (Riley and Wilson-North 2001, 97).

Environmental analysis suggests that the prevalent open grassland landscape with heath on the higher areas of upland continued through the early medieval period. Evidence from mires around the southern extent of Exmoor indicates an expansion of arable cultivation into the upland at around AD 1100, probably as part of a field-rotation system (Fyfe and Davies 2011).

Most of our knowledge of medieval settlement within the project area derives from the well-preserved remains of deserted settlement and relict field systems on the areas of moorland. There is considerably less information relating to non-moorland settlement. Towns such as Lynmouth, which has its origins within the medieval period when it functioned as a small fishing port, would benefit from

further work. Many farmsteads with early origins continue as working farms. There are likely to be extant buildings as well as buried archaeological remains that contain evidence for medieval origins, which would contribute to the understanding of medieval settlement pattern across the coastal hinterland as a whole.

There is no evidence for medieval castles within the project area, and only three are known within the wider National Park; at Holwell Castle (Parracombe), Bury Castle, and Dunster Castle. Similarly, evidence relating to medieval monasteries on Exmoor is sparse which is likely to be related to the use of much of the centre of the moor as a Royal Forest during the medieval period (Riley and Wilson-North 2001, 107). The Royal Forest covered a large part of Exmoor at the beginning of the 13th century, but this area was reduced following the Magna Carta in 1215; by c. 1400 the Royal Forest comprised a central area of unenclosed land surrounded by the commons of the adjacent parishes (*ibid*, 91).

Some of the churches within the project area contain fabric dating to the medieval period, as well as medieval crosses within their churchyards (Riley and Wilson-North 2001, 90). These include the Grade II\* Listed (NHLE 1106778) Church of St Martin, Martinhoe; the Grade II\* Listed (NHLE 1282837) Church of St Mary the Virgin, Lynton; and Burgundy Chapel (MSO7576). The churchyard cross at Culbone Church dates to the medieval period and is designated as a Grade II\* Listed Building (NHLE 1173301).

At this time the economy of Exmoor was still based on agriculture although fishing and trade may have been of significance to the small coastal ports. Knowledge of medieval industry within the project area is sparse, although documentary evidence and physical remains associated with a concentration of mining remains surrounding Combe Martin show that metal working was an important industry in the medieval period.

### ***Overview of coastal Post-medieval and Modern activity***

The majority of assets dating to the post-medieval period relate to settlement, with individual houses and buildings recorded in large numbers. Large country houses with associated grounds are rare within this landscape, but they do exist at Lee Abbey, Glenthorne and Ashley Combe, reflecting the growing popularity of the area particularly in the 19th century.



The range of post-medieval industries on Exmoor was fairly small and generally consisted of primary activities. Few of the minerals within the Exmoor landscape were present in sufficient quantities to enable the mining industry to become a major area of production with the result that many of the mines were opened for intermittent periods in response to the rise and fall of the price of metals (Atkinson 1997, 11). A significant concentration of post-medieval mining activity has been recorded between Combe Martin and Foreland Point, much of which has been identified from aerial photographic evidence by the Exmoor National Park NMP project as well as from documentary evidence. The Exmoor coastline did, however, allow the transportation of goods through shipping which proved to be one of the most cost efficient forms of transporting the raw material to South Wales and Bristol (*ibid*, 11). There were also a series of industries that served the local market including quarrying for building material and roads.

The lime industry was an important industry on the Exmoor coast especially in the 18th and 19th -centuries, which is attested by the concentration of extant lime kilns throughout the project area. Limestone suitable for burning was fairly sparse across Exmoor and the industry therefore exploited Exmoor's maritime connections, with much of the stone imported from South Wales (Bowman and Tilley 1997, 108). The resulting product is likely to have been transported inland by packhorses or donkeys that were able to navigate the rural landscape in which there were few metalled roads. The industry developed in response to new agricultural practices associated with the use of lime for fertilizer, and was an important resource for improving the acidic soils found on Exmoor (*ibid*).

Remains associated with the fishing industry survive throughout the project area: a remarkable concentration of fishing structures are visible on the foreshore at Gore Point (Plate 7); and fish weirs comprising V-shaped stone structures survive on the foreshore at Lynmouth, Porlock Weir, and Culver Cliff Sand (Plate 8). As these fish weirs are constructed of stone they are difficult to date accurately, and have therefore been broadly assigned to the medieval or post-medieval periods. Within the Severn Estuary, further to the north of the project area, wooden fish weirs and basket traps have been radiocarbon dated to the early medieval period (Godbold and Turner 1994). A find of a wooden fishing structure, or perhaps an organic component to the fish weirs, would provide an opportunity for absolute dating of these structures providing valuable information relating to these fishing practices.



Plate 7: Detail of fish weirs and ground line gullies at Gore Point  
(©Historic England Archive 2015, 29501\_046, D. Grady)



Plate 8: Post-medieval fish weirs at Culver Cliff Sand  
(©Historic England Archive 2015, 29502\_005, D. Grady)

A number of the coastal towns were also important to the fishing industry, with an extensive herring fishery at Lynmouth; herring were also sold at Porlock Weir during the post-medieval period.

The Revolution in France (1789-1799) resulted in the closure of areas on the continent that had previously been visited as part of the Grand Tour. Instead many people explored the unknown landscapes of Britain. Lynton and Lynmouth proved a popular destination for poets and artists seeking inspiration from the dramatic natural landscape (Exmoor National Park 2014b, 1). These areas also became a popular holiday destination for the Victorian middle classes leading to the expansion of these settlements and also resulting in significant transport improvements.

Farming remained the principal occupation for much of this period and this is strongly reflected in the landscape, with continued enclosure and inclosure and adaptation of earlier field systems. To the south of the study area, the land within the Royal Forest was subject to enclosure from 1818 which resulted in the conversion of large areas of moorland to productive agricultural use (Maltby 1995, 36). Enclosure also affected the surrounding commons. Rare evidence for parliamentary inclosure in the 1870s is visible on Holdstone Down (Hegarty and Wilson-North 2014, 98-99; Riley and Wilson-North 2001, 127). A distinctive feature of Exmoor's coombes, and well represented in the coastal area, is the redundant contour leats from the former use of catch-water meadow or field-gutter systems to produce an early spring flush of grass (Hegarty and Wilson-North 2014, 108-119).

The Exmoor coastline contains important evidence for WWII structures relating to defence and training. This includes an extensive tank training range stretching between Bossington, North Hill and Selworthy Beacon that was requisitioned by the army and used for training in advance of the Normandy landings of June 1944. Aerial photographic evidence has shown that areas of accessible coastline were protected by barbed-wire entanglements, and some of the WWII defence structures including anti-glider obstructions and pillboxes, still survive as extant structures. A small number of WWII aircraft crash sites are also known within the project area.

## 6.2 Combe Martin to Foreland Point (7d11-7d13; Figure 7)

### ***Introduction***

Areas of land between Combe Martin and Foreland Point fall within the National Trust property of West Exmoor, and include the Heddon Estate and Watersmeet. Large-scale archaeological surveys have been undertaken by the National Trust to enhance the understanding of the monuments within these estates, and thereby inform management decisions. Surveyed properties include estates such as Watersmeet (Thackray and Thackray 1986), to the south and east of Lynmouth, and individual farms for example West Lyn Farm near Lynton (Berry 2003).

### ***Palaeolithic and Mesolithic***

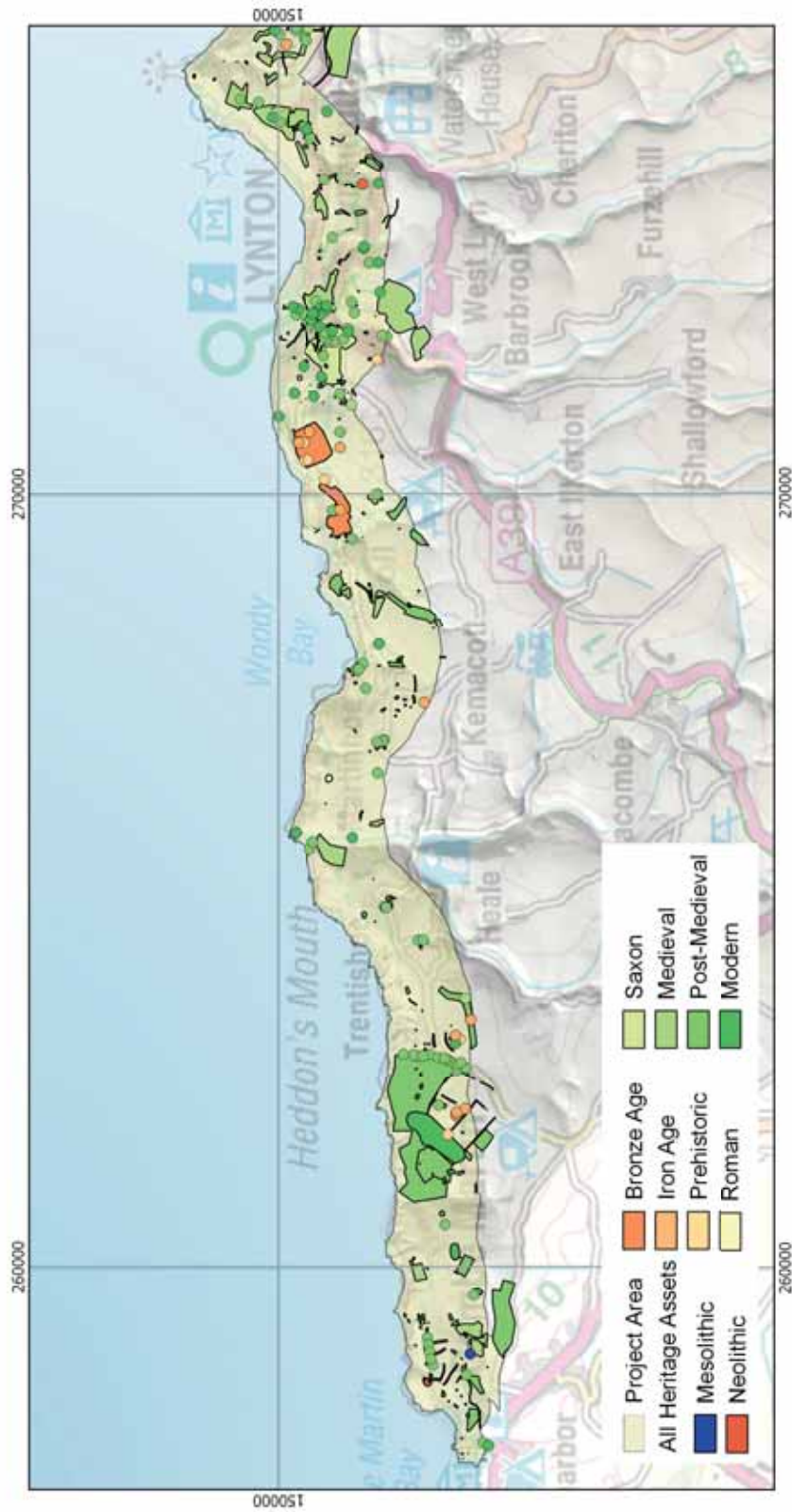
There are numerous concentrations of head deposits along the coastline between Combe Martin and Foreland Point (see Section 2.2 above) that have the potential to preserve artefacts of Palaeolithic date, but which are rarely exposed due to their depth below ground. Although monitoring of exposed cliff faces may provide an opportunity for the identification of artefacts of this date, many of the beaches within this area are difficult to access or are inaccessible from land.

Findspots of Mesolithic artefacts in this area are very rare, with a single artefact representing activity of this date. This comprises a small core of pebble flint of probable late Mesolithic date recovered from an area to the east of West Challacombe Farm (MDE21180). The small proportion of cultivated land within this part of the project area may contribute to the lack of Mesolithic evidence, but may also have helped to preserve remains in-situ, in particular beneath peaty soils or alluvial deposits (Riley and Wilson-North 2001, 17).

### ***Neolithic and Bronze Age***

There is little evidence for Neolithic activity on the coastal hinterland between Combe Martin and Foreland Point. However, a substantial earthwork (MMO1635) was identified from aerial photographic evidence during the Exmoor National Park National Mapping Programme Project (Hegarty and Toms 2009) and is shown to encircle the cliff top at Little Hangman (Plate 9). The site was surveyed by EH in 2009 and has been interpreted as a probable Tor Enclosure dating from the early Neolithic period. If future investigations can confirm a Neolithic date for this monument it will prove to be of great significance, indicating a Neolithic

**Figure 7: Distribution of all heritage assets by period between Combe Martin and Foreland Point**



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Plate 9: View to the east showing Little Hangman and the coastline to the east  
(©Historic England Archive 2008, 24930\_008, D. Grady)

presence within the coastal fringe of the National Park, as well as being one of a small number of monuments dating to this period within the wider National Park; the other being a rectangular enclosure on Challacombe Common (MDE12830). Little Hangman is also significant as one of only 16 similar Tor Enclosures which represent a monument type that are found exclusively within the counties of Devon and Cornwall (Riley 2016, 15). The potential for the site to hold important archaeological deposits of prehistoric date has led to the designation of the area of Little Hangman as a PAL (PAL No 37) by the ENPA (Balmond 2015, 133).

Barrows of Bronze Age date are a characteristic monument along this part of the coastal hinterland. The barrow cemetery on Martinhoe Common comprises seven barrows, six of which are designated as a Scheduled Monument (NHLE 1002647). At least three of these barrows were excavated by Chanter in 1906 when they were all shown to have suffered from previous disturbance (Hansford Worth 1907, 80). There is also a very disturbed barrow group located on the summit of Holdstone Down. The area of Trentishoe Down was surveyed in 1985/6 (McDonnell 1986) and is notable for its concentration of monuments including a group of three barrows, two of which are designated as a Scheduled Monument (NHLE 1002556). Barrows and cairns also appear in isolation: a possible burial cairn has been identified at the northern tip of The Foreland (MDE8690), and possible barrows have been recorded at Trilly (MMO79) and Heddon's Mouth Cleave (MMO324). Further landscape analysis may be worthwhile at these locations in order to determine whether these are in fact isolated monuments, or whether there is potential to suggest that additional contemporary monuments existed within the immediate landscape. Numerous cairns have been recorded on Trentishoe Down, but further work is needed both here and elsewhere on Exmoor to confirm whether they represent burial cairns of likely Bronze Age date, or whether they are associated with later land clearance.

Bronze Age settlement remains and field systems are fairly well represented along the coastline between Combe Martin and Foreland Point, with concentrations of settlement evidence of likely Bronze Age date recorded at Holdstone Down (Plate 10) and particularly in the Valley of Rocks (MDE1241; Plate 6). Both of these areas hold a high concentration of archaeological features including hut circles, clearance



**Plate 10: Hut circles between Holdstone Down and Trentishoe Down**  
(©Historic England Archive 2008, 24931\_018, D. Grady)

cairns, burial cairns, enclosures and associated field systems. This concentration of settlement evidence is unusual for Exmoor and has contributed to the designation of both areas as PALs (PAL Nos 5 and 34) by the ENPA (Balmond 2015, 17). The Valley of Rocks was surveyed by RCHME in 1993, and again in 1999 as part of the Exmoor Project (Jamieson 1999, 8), but none of the sites has been subject to archaeological excavation. Trentishoe Down is also of significance for the preservation of several possible hut circles, one of which is confirmed and well preserved. Associated domestic evidence, may be represented by a sherd of pottery (MDE1042), found by ploughing in the 1950s presumably from a nearby field rather than on Trentishoe Down itself. This was the first example of pottery of this period to be recorded from North Devon, and is still one of very few from Exmoor.

Additional evidence for Bronze Age settlement has been identified from aerial photographic evidence and includes two possible hut circles to the northwest of Bonhill Top (MMO1825). There are a further two possible hut circles near the summit of Butter Hill near Countisbury Common (MMO1857 and MMO1858). Earthworks suggesting field systems and settlement of possible Bronze Age and later date have been identified in the area around Lee Abbey (MDE11247), and may represent a similar landscape to that found in the adjacent Valley of Rocks, but further work is needed to determine their date and form as they are situated within an area that has been affected by 19th and 20th century development.



### ***Iron Age***

There is a remarkable group of sites set mostly on promontories above the steep valleys around Watersmeet, where the East and West Lyn Rivers combine to form the River Lyn. These monuments are currently assigned to the Iron Age period based upon relative dating with similar monuments beyond Exmoor; none of the sites has been excavated with the result that there are no absolute dates for the monuments. These are discussed below in further detail.

The hill-slope enclosure at Myrtleberry North Camp is designated as a Scheduled Monument (NHLE 1020805) and is situated on the western side of the Lyn Valley. The monument is defined by a univallate earthwork on one side, and bounded by the naturally steep slopes of the East Lyn valley on all other sides. A substantial cross-bank and ditch also defines an outer enclosure to the southwest at the foot of the steep slope (Fox 1996, 44). A geophysical survey was undertaken on the monument in 2010-11 and indicated the potential for built architectural remains to exist below ground at the north-eastern end of the enclosure, although these were not clearly defined on the resistivity data (Wolfkamp 2011, 30).

The substantial earthwork at Countisbury Castle/Wind Hill is also designated as a Scheduled Monument (NHLE 1020807) and consists of a bank and ditch or rampart defining an area of isolated hilltop (Plate 11), approximately 400m to the north-northwest of Myrtleberry North Camp. The monument is situated on a west facing spur and the bank extends dramatically for approximately 400m from the steep slopes of the East Lyn Valley to the sea cliff to the north (Fox 1996, 55). The monument has been interpreted as a univallate promontory fort of likely Iron Age date, although further work is needed to understand the exact date and function of the monument; in particular, to explore the reasons for the bank and ditch extending so far down the cliff face to the north when all other sides of the monument utilise the natural topography.

It has been suggested that the univallate earthwork or cross ridge dyke at Horner's Neck is also probably of Iron Age date (MDE11896). Only the far western part of the monument falls within the RCZAS project area, but it is located in very close proximity to both Myrtleberry North Camp and Countisbury Castle. The complex of later prehistoric monuments within this landscape has contributed to the designation of the area as a PAL (PAL No. 6) by the ENPA (Balmond 2015, 37). Further work



**Plate 11: The earthwork at Countisbury Castle**  
(©Historic England Archive 2016, 29711\_011, D. Grady)

is needed at all of these sites to understand the nature of prehistoric activity within this landscape; in particular, to determine whether these monuments are all contemporary, or whether they represent activity over a longer period of time.

Evidence from aerial photography has indicated the site of a possible prehistoric enclosure on Hollerday Hill (MDE11742), transcribed as part of the Exmoor National Park NMP project. The remains of an additional probable prehistoric enclosure have been recorded to the west of Lynton Station (MDE21526). Although the date of these enclosures has yet to be confirmed they lie within close proximity to the concentration of Iron Age sites discussed above and both comprise a form indicative of prehistoric settlement. These sites would need further exploration to determine the date and nature of settlement.

There is currently no evidence for iron working within the project area in this period, although there are known iron ore deposits within the landscape surrounding Combe Martin which may have been exploited.

### **Roman**

The fort at Martinhoe is designated as a Scheduled Monument (NHLE 1003882) and is located on the edge of the sea cliffs on the eastern side of the steep valley of the River Heddon (Plate 12). The fortlet is defined by two concentric enclosures. Observable ridge and furrow to the east of the fort, and the fort's state of preservation, suggest that it has been degraded by ploughing at some point in the past (Wilson-North 1999, 9). This ridge and furrow originally ran much closer to, or even across, the monument, and may provide an explanation for the irregularities in the shape of the monument; both internally and on the eastern side of the outer enclosure (*ibid*). The monument is currently considered to be in a stable condition, and does not fall within the area of predicted coastal erosion within the next 100 year period (see Section 10.2 below), but the loss of the northern bank is evidence that it has suffered from previous coastal erosion, although map regression indicates that this occurred before the 19th century (Figure 11). Excavation between 1960 and 1961 revealed construction trenches for timber buildings and a series of field ovens, suggestive of semi-permanent occupation from the early conquest period up to around AD 70. It is suggested that the fortlet at Martinhoe replaced the more temporary fortlet at Old Burrow further to the east (Fox and Ravenhill 1966; see Section 6.3).

### **Post-Roman and Saxon / Early medieval**

Countisbury Castle is one of the proposed locations for a battle with the Danes in AD 878 at 'Cynuit' which is mentioned in documentary evidence. Although this is widely contested future investigations at Countisbury Castle may help to prove or disprove this association.

Evidence for Saxon activity within this area is limited, although the Domesday survey of 1086 provides an important record of settlement within this period: for example, Caffyns and Six Acre Farm descend from the Domesday manor of 'Hatona.' A combination of documentary and archaeological evidence within this area has indicated the presence of a deserted settlement within the vicinity of Six Acre Farm (MEM22266).



Plate 12: View along the coastline towards Foreland Point, with the earthworks of Martinhoe Roman Fortlet in the foreground (©Historic England Archive 2008, 24932\_004, D. Grady)

### ***Medieval***

Deserted medieval settlements and their associated agricultural remains are well represented on the coastline between Combe Martin and Foreland Point, which reflects the rural nature of this landscape. For example, an extensive area of former medieval strip fields (only part of which falls within the RCZAS project area) have been identified at West Lyn Farm and indicate that the area formerly consisted of a greater number of homesteads (MDE21804). Earthworks comprising trackways, platforms and areas of ridge and furrow have also been identified from aerial photographic evidence to the northeast of the deserted farmstead of Netherton (MDE8289). Field systems of probable medieval or post-medieval date have been recorded on the north facing (MMO2000) and east facing (MMO2001) slopes of Wind Hill. Most of these remains have been identified as earthworks from aerial photographic evidence; little fieldwork has been undertaken within these areas to confirm their date or form.

Evidence for medieval agricultural practices has also been identified on the edge of existing settlements, providing evidence for their former extent. This includes medieval ridge and furrow identified on aerial photographs (MMO2018) to the south and east of Countisbury Village; a lynchet or field boundary of probable medieval date is also visible as a levelled earthwork to the south of the village (MMO2007). A possible medieval field system to the north of Countisbury Church consists of small infield or garden plots along with the remains of a building platform adjacent to the churchyard. There is evidence for additional field systems within this area, although they are likely to range in date from the prehistoric through to the post-medieval period (MDE8687) and include a field system to the west of Countisbury village which may prove to be associated with a nearby abandoned building platform and possible farmstead (MMO2015). This area therefore holds good potential for further research relating to the development of the medieval landscape.

The Combe Martin mines were established by the Crown in the last decade of the 13th century (Claughton 1997, 75). Documentary evidence has shown that the silver and lead deposits near Combe Martin were being worked in the 14th and 15th centuries; remains associated with medieval mining activity survives within this landscape amongst the later mine shafts associated with 19th and 20th century mining activity (Riley and Wilson-North 2001, 110).

Evidence relating to the fishing industry includes the remains of a fish weir of probable medieval or post-medieval date within the intertidal area of Lynmouth Bay. It is visible on aerial photographs and was transcribed as part of the Exmoor National Park NMP project. It is variously described as a timber-or stone- revetted structure. The fish weir has been adapted and is now used as a tidal swimming pool (MDE11714). Additional coastal fish weirs visible as two short and irregularly shaped lengths of earthwork or stone walling have also been identified from aerial photographs on Western Beach at the mouth of the River Lyn (MMO1995).

### ***Post-medieval and Modern***

The gothic mansion of Lee Abbey and its minor designed landscape was built c.1850 on the site of an earlier house (Cherry and Pevsner 1991, 555). It is superimposed on a remnant prehistoric landscape and the later surrounding settlement pattern of hamlets, villages and dispersed farmsteads.

The wider agricultural landscape surrounding the settlements in this section of the coastline contains evidence of disused field systems of post-medieval date. These include the remains of a field system to the north of St John's Church, Countisbury which consists of a series of irregular rectangular fields covering an area of c.15ha and continuing to Foreland Point (MDE11731). Post-medieval 'field gutter' water meadow systems are a distinctive feature of valley sides in the Exmoor landscape and are recorded at a number of locations, for example: to the northwest of Six Acre Farm (MMO1800); northeast of Croscombe Barton (MMO1802); and to the south of Countisbury village (MMO2011).

There is a significant concentration of post-medieval mining activity recorded between Combe Martin and Foreland Point. This includes a series of prospecting pits, adits, extractive pits and mine workings within the vicinity of Great Hangman that are likely to be associated with the Girt Down Mine. Workings on Holdstone Down comprise a series of trial pits across the east side of Sherrycombe that were worked for iron as part of the Holdstone Down Mine between 1872 and 1876 (Claughton 1993, 11). There are a series of adits located in between Lester Point and Hangman Point (MDE8264 and MDE8265) that are likely to be associated with the 19th-century West Challacombe Silver Lead Mine, but may also represent later activity on the site of former medieval mines. There are also a series of adits to the south of Little Hangman that are believed to be associated with Hangman Hill mine: an iron

mine that formed the northern part of the West Challacombe sett that was worked between 1796 and 1802, in 1825, between 1855 and 1856 and again in 1867 (*ibid*, 10). Documentary evidence has shown that Countisbury ironstone mine was in operation between 1874 and 1875 (MDE11757), although its location is uncertain. It is possible that quarries around Countisbury Castle and adits at Foreland Point represent remains associated with this mine (*ibid*). It has also been suggested that there were workings on cliffs within the area of Woody Bay, but these have not yet been identified (*ibid*, 12). There is little further evidence for post-medieval mining activity within the remainder of the coastal hinterland; the landscape around Combe Martin is therefore of significance for improving understanding of post-medieval and earlier extraction processes.

The lime industry is also represented along the coastline between Combe Martin and Foreland Point. The two lime kilns at Lynmouth (MDE11756 and MDE1252) were built alongside the quay, while the majority of the others within this area are situated on the shore above the tide lines: these include lime kilns at Wild Pear Beach (MDE8267); Woody Bay (MDE1027); Heddon's Mouth (MEM22983 and MDE1026); and Lee Bay (MDE1028).

Fishing continued to be an important industry in Lynmouth throughout the post-medieval period where there was an extensive herring fishery (Exmoor National Park 2014b, 7). Remains of a tidal fish weir also survive at East Weir, Lynmouth Eastern Beach (MDE11716). Evidence relating to the fishing industry helps to inform understanding of the development of the settlement of Lynmouth.

Rare evidence for parliamentary inclosure is visible on Holdstone Down, represented by numbered marker stones that divided the land into a series of strips or allotments (MDE21579). In response to the costs incurred by the Inclosure Commissioners parts of Holdstone Down were sold off to private individuals, one of whom attempted to develop the northern part of the Down into a holiday village in the late 19th century. The village was not completed but a number of building platforms survive within this area (MDE8962). The process of inclosure on Holdstone Down was never completed, and this eventually led to the reinstatement of common land in the area in 1965 (Hegarty and Wilson-North 2014; Riley 2015, 4). Evidence relating to both of these events has contributed to the designation of the area as a PAL (PAL No 34) by the ENPA (Balmond 2015, 17).

The quay at Lynmouth dates to the post-medieval period (MEM22783) and Lynmouth pier is of late 18th or early 19th century date, although it was rebuilt in 1954 following the 1952 flood disaster (MDE21537). There are also the remains of a pier at Woody Bay that was constructed in 1895 as part of the proposed Woody Bay tourist resort. The pier was removed in 1902 following storm damage in 1899 and 1900, but stone foundation blocks and iron girder bases remain visible (MDE11241). Additional transport improvements at this time included the Lynton and Barnstaple Branch Railway which was a narrow-gauge railway in operation between 1898 and 1935 (MMO42). The Lynton and Lynmouth Cliff Railway opened in 1890, powered by water from the West Lyn (MDE1255). It is one of only three fully water-powered railways in the world. Lynmouth is also the site of one of the earliest hydroelectric power schemes that opened in March 1890 on the south bank of the East Lyn River (MDE21753).

Lynton and Lynmouth prospered in the late 19th and early 20th centuries with improved communications and the increase in tourism. This is reflected in the character of the two small towns which include many hotels and villas of the period with their associated gardens and landscape plantings, and some now lost buildings such as the mansion on Hollerday Hill (ENPA 2014b, 2014c).

The coastline between Combe Martin and Foreland Point also contains evidence of defence structures of modern date. These include a WWI gun emplacement on Countisbury Hill overlooking the Bristol Channel (MDE11754) and WWII anti-glider obstructions on Martinhoe Common (MMO1820). There is also evidence for assets associated with WWII training activity on Holdstone Down (MDE8963).

### **6.3 Foreland Point to Hurlstone Point (7d14-7d17; Figure 8)**

#### ***Introduction***

The Holnicote Estate is the largest property held by the National Trust on Exmoor and has been subject to extensive archaeological surveys. This countryside property covering 5042ha is located to the east of Porlock within the northeast part of the National Park. Other property-specific surveys have been undertaken by the National Trust such as that for Kipscombe Farm (Berry 2004). ENPA has also undertaken surveys of its holdings here: an archaeological assessment was undertaken in Culbone Woods in 2002 which revealed evidence of historic woodland management practices and associated features (McDonnell and Faxon 2002). Research associated



**Figure 8: Distribution of all heritage assets by period between Foreland Point and Hurlstone Point**



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with the parts of the designed landscape of Ashley Combe and Culbone Woods in ENPA ownership has also been undertaken recently to inform the future management of the woodland (Phibbs 2015). The dynamic landscape of Porlock Marsh was subject to monitoring by R. McDonnell between 1998 and 2009 as part of the Porlock Beach and Marsh Project and is discussed below in greater detail.

### ***Prehistoric***

Evidence for Palaeolithic activity between Foreland Point and Hurlstone Point is sparse, although there is considered to be potential for finds of Palaeolithic date to be preserved within the head deposits along the coastline and within the combes. Evidence for Mesolithic activity is also sparse, and is represented by a collection of flints that were recovered from Hurlstone Point in 1956 (MSO8005). A series of worked flints including scrapers, split and worked beach pebbles and flint debitage have also been recovered from an area to the south of Old Burrow Roman fortlet and indicate a possible flint-working site of likely Neolithic date (MDE1231). Additional flint artefacts that are of unconfirmed prehistoric date have been recovered during fieldwalking at Bossington Farm in 1998 (MEM23571) and Selworthy Farm in 1999 (MEM23573). These artefact scatters are characteristic of Mesolithic and Neolithic archaeology from Devon and Somerset, although this period has low representation on Exmoor. Areas such as Porlock are much more accessible than the beaches further to the west, and therefore provide an opportunity for monitoring of exposed cliff faces within which artefacts of these dates may be visible.

The landscape of Porlock Bay (Plate 13) is significant for its deposits of peat and remains of a submerged forest within the intertidal area; offshore; and within the area of Porlock Marsh (Plates 20 and 27). These deposits have high potential for enhancing our understanding of prehistoric activity within the coastal zone of Exmoor National Park, and indeed of the wider Bristol Channel and Severn Estuary. A submarine forest was first identified within the intertidal zone of Porlock Bay by De la Beche in 1839, and was described as comprising oak and alder resting on a deposit of head (Peat Database Record ID 328; Hazell 2008). Further deposits associated with the submerged forest were identified in 1865 by Godwin and comprised remains of oak and alder woodland with iris roots and leaves. The tree trunks were described as lying on a NW-SE alignment (Peat Database Record ID 327; Hazell 2008). Partial excavation in 1869 revealed flint artefacts of Mesolithic and Neolithic date on the



Plate 13: View to the northwest towards Porlock Weir from Porlock Beach  
(2016, ©F. Pink)

land surface above the forest (Peat Database Record ID 315; Hazell 2008). This highlights the potential for further archaeological deposits to survive within the peat deposits and the potential for finds of Mesolithic and Neolithic date to be recovered with their associated contextual information which will facilitate dating of the sites and may provide further information to support environmental reconstruction of this landscape.

A series of cores have been undertaken at Porlock to enhance understanding of the stratigraphy within the bay, and to explore the palaeoenvironmental evidence. These are discussed in further detail within Section 9.2 below.

The foreshore at Porlock Weir was surveyed by the RCHME, on behalf of the ENPA, in 1991 with the specific intention of determining the extent of the submerged forest within Porlock Bay (Pattison and Wilson-North 1991). The survey identified deposits of peat containing tree stumps, trunks and branches within the intertidal zone (*ibid*, 1). An evaluation of the archaeological and palaeoenvironmental potential of the

area was carried out in 1994-5 in response to the threat from predicted erosion and associated inundation of Porlock Marsh from the potential breaching of the shingle ridge (which was ultimately breached in 1996) (Canti *et al.* 1995, 52). Continued monitoring of this area following the breach of the shingle ridge revealed bones of an aurochs which had been exposed by the erosion of alluvial deposits in 1998. These remains were excavated (McDonnell 1998) and radiocarbon dated to the Early to Mid- Bronze Age (1738-1450 Cal BC). Following this excavation a more structured program of monitoring was established from 1998, including the investigation of a number of intertidal palaeochannels in 2001 in the vicinity of where the Aurochs skeleton was recovered. The palaeochannels are believed to date to the Bronze Age and represent a former salt marsh creek system (McDonnell 2002b, 15). The results of the archaeological monitoring between 1998 and 2000 are outlined by McDonnell (2002a). Archaeological monitoring of this area between 2002 and 2003 revealed a small number of finds from stratified contexts: these include a flint scraper of probable Neolithic or Bronze Age date which was recovered from a cliff of solifluction deposits above the beach; and a flint core of prehistoric date that was recovered from a stratified deposit of alluvium and sealed by a deposit of peat in Red Sand Bay (McDonnell 2003, 2). Monitoring between 2007 and 2008 revealed exposed deposits of peat and material from the submerged forest within Porlock Bay, which although known to have been impacted by erosion, had not been visible during the previous ten years of monitoring (McDonnell 2009a, 2).

There is currently limited evidence for prehistoric settlement on the coastal hinterland between Foreland Point and Hurlstone Point. Upstanding monuments are restricted to barrows or cairns of likely Late Neolithic to Bronze Age date. Individual barrows have been recorded on Countisbury Common (MEM23569) and Combe Hill (MDE21868), and a group of possible barrows have been recorded on Kipscombe Hill. Further work is needed on these sites to confirm whether they represent burial cairns of Late Neolithic to Bronze Age date, or whether they are associated with later land clearance. Additional activity of possible prehistoric date has been identified from aerial photographic evidence and includes a field system comprising an extensive area of rectangular fields on the hillside to the north of the East Lyn River, extending to the north towards Kipscombe Hill (MDE11944). It has been suggested that the form of the earthworks is comparable to the medieval field systems at Old Burrow Hill and Countisbury Common, but the small size and square or rectilinear form of some of the enclosures may indicate that they have origins in the later prehistoric or Romano-British periods. Further work is therefore needed at this site to provide a chronological framework for the field system. If dating confirms the later, it would be of great significance as there is currently limited evidence for Iron Age or Romano-British activity along this stretch of the coastline.

### **Roman**

The Roman fortlet at Old Burrow is designated as a Scheduled Monument (NHLE 1020809) and is situated within an exposed location on the summit of a hill overlooking the Bristol Channel (Plate 14), with far ranging views to the east and west along the channel as well as to the north towards the coast of South Wales. The earthworks survive as a well-defined sub-rectangular double bank and ditch. The monument has been subject to several phases of excavation; firstly by St George Gray in 1911 and later by Fox and Ravenhill between 1960 and 1963 (Fox and Ravenhill 1966). The latter excavation revealed evidence for a gateway represented by four large postholes, as well as evidence for a metalled roadway. Two areas containing evidence of intense burning were identified at the back of the rampart which proved to represent the remains of collapsed field-ovens (*ibid*, 10). Dating of the fortlet to early conquest AD 50-55 was largely based upon numismatic evidence recovered during the excavation, and the small number of post-holes revealed during the excavation led the authors to believe that occupation was likely to be temporary in tents, as opposed to the timber structures identified at Martinhoe which is believed to be its successor (*ibid*, 22).



Plate 14: View to the northwest with the Roman fortlet at Old Burrow  
(©Historic England Archive 2012, 27468\_029, D. Grady)

### ***Saxon/ Early medieval***

Archaeological evidence relating to activity of Saxon date between Foreland Point and Hurlstone Point is limited. There is the evidence of an early church dedication to St Bueno at Culbone Church (NHLE 1058037), which is likely to be pre-Norman in origin. This church is believed to be the smallest complete parish church in England and is designated as a Grade I Listed Building (NHLE 1058037). There is also evidence for two early Christian inscribed stones within the landscape immediately to the south of the project area. These comprise the Cavudus stone at Six Acre Farm (Scheduled Monument NHLE 1003883), which is a memorial stone of likely 5th to 7th century date; the Culbone Stone (Scheduled Monument NHLE 1006141) is situated on Culbone Hill and is a Christian symbol of possible 7th to 9th century date probably inscribed onto a prehistoric stone monument. These sites indicate the presence of an early Christian community near the coast, for which associated archaeological evidence is currently unknown. Evidence for Saxon settlement is limited, although Porlock is first referenced in a document dating to the 9th century where it is recorded as Portloca which has been translated as 'enclosure by the harbour' (MEM15232). The Anglo-Saxon Chronicle records two attacks on the town, the first of which was in 918, and the second in 1052 when Harold, son of the Earl of Kent, sacked the town along with a raiding party from Ireland (Exmoor National Park 2013, 4).

A piece of worked timber dated to the Saxon period was recovered in 2004 from a deposit of alluvium (McDonnell 2004b) during monitoring of work on Porlock Marsh. This find demonstrates the potential for additional archaeological deposits of Saxon date to survive within the landscape of Porlock Marsh.

### ***Medieval***

Deserted medieval settlements and disused field systems are well represented on the coastline between Foreland Point and Hurlstone Point. Earthworks have also been identified to the southwest of Desolate Farm and are thought to represent the remains of a possible hamlet or farmstead together with their associated fields (MDE11943). Elsewhere, documentary evidence indicates the presence of a medieval shrunken settlement for example at the village of Yearnor which is known from cartographic evidence to have reduced in size since the date of the Tithe Map. Earthworks have also been identified within the vicinity of Yearnor from aerial photographic evidence (MSO11555). Cartographic evidence has also shown that the

settlement at West Luccombe has reduced in size (MEM23292) and earthworks have been identified to the north and west of West Luccombe Farm indicating the potential for remains associated with former cottages and a farm to survive well (MEM23292).

There are numerous areas of open moorland and marshland within this area on which archaeological remains associated with relict field systems survive. These include an area of scattered ridge and furrow dating to the medieval or post-medieval period which have been identified as earthworks from aerial photographic evidence within an area between Porlock Bay, Bossington Village and Bossington Beach (MMO1452); and to the east of Ash Farm (MMO1456). Medieval lynchets have also been recorded at the Foreland (MDE8691) and to the northeast of County Gate (MMO1768). The remains of a probable medieval field system also survive on Countisbury Common (MMO1786). The remains of a building to the southeast of Kipscombe Farmhouse (MDE21867) may prove to be contemporary with areas of ridge and furrow cultivation to the northwest (MMO1856). The dates of these field systems are based upon relative dates as few of the sites have been investigated by excavation. These relict field systems would therefore benefit from further work to provide a tighter chronological framework for their periods of use to inform development of this landscape.

In addition to the remains of deserted settlement, some of the extant buildings within this area had origins in the medieval period. Churches of medieval origin include the Grade I Listed Church of St Dubricius at Porlock (NHLE 1173524). Farmsteads with an origin within the medieval period include Kipscombe Farm (MDE21850) and Ash Farm (MSO7964). The farmhouse at West Lynch is also shown to date from the late medieval period (MSO10778), with Doverhay Court in Porlock dating to the 15th century (MSO10681). The packhorse bridges at Allerford Bridge (Plate 15), West Luccombe and Horner Bridge are also of medieval date and are all designated as Grade II\* Listed Buildings (NHLE nos 1058014, 1174852 and 1057326) and as Scheduled Monuments (NHLE nos 1020776, 1006227 and 1006228). There is therefore good potential within this area for extant buildings to contribute further to the understanding of non-moorland medieval settlement within the coastal hinterland.



Plate 15: View to the northeast, Allerford and the packhorse bridge  
(©ENPA 2012, N. Pratt)

Evidence relating to the fishing industry within this area includes a wooden structure that was revealed by erosion on the southern side of the tidal breach across Porlock Marsh and may represent a fence or the remains of an intertidal fish trap (MEM15215). Radiocarbon dating of the posts has revealed a date between the 11th-13th centuries, while another of the posts dates to the 14th-15th centuries. This find demonstrates the potential for additional archaeological deposits of medieval date to survive within the landscape of Porlock Marsh. A possible intertidal fish trap or fish weir constructed of beach pebbles and boulders has also been recorded on the eastern side of Porlock Beach (MEM15241). As this fish weir is constructed of stone it is difficult to date accurately and has therefore been assigned to the medieval or post-medieval periods. The overlying fish traps at Gore Point and on the west side of Porlock Bay indicate a long period of use of these features and adaptations to coastal changes over time. Again it is possible the earliest examples of these undated features originate in the medieval period.



A possible wood-processing site of likely medieval or post-medieval date has been identified in Culbone Wood and comprises a complex of paths, ruins of two structures, and earthworks of a probable sawpit. It has been suggested that a trackway to the south of this group may have provided access to the beach, but it has since been truncated by coastal landslips (MEM15604). This site highlights the potential for further well-preserved archaeological deposits to survive within this woodland location.

### ***Post-medieval***

The majority of assets dating to the post-medieval period on the coastal hinterland between Foreland Point and Hurlstone Point relate to agricultural buildings, agricultural practices and settlement. In addition to field systems such as those on Cosgate Hill and Old Burrow Hill (MDE11951) there are also a large number of post-medieval water meadow systems within this area. Many of these catch-meadow or field-gutter systems, characteristic of Exmoor's steep valleys, were identified as a result of the Exmoor National Park NMP project (Hegarty with Wilson-North 2014).

Large country houses with associated landscaped grounds are rare within this landscape, and therefore the houses at Glenthorne and Ashley Combe are of significance and reflect a growing attraction to the area in the 19th century. Glenthorne, a Grade II Listed Building (NHLE 1212846) was built in 1829-30, and the development of the estate and its buildings had a distinctive impact on the landscape. Ashley Combe House was an Italianate mansion of 1866 (MSO7970), built by Lord Lovelace on the site of a 17th -century house which had also been developed in the 1830s. Although the house was demolished in the 1960s the associated landscaped gardens which comprise a folly with embattled walls, tunnels, bridges, turrets, battlements and extensive earthworks (MSO7973) survive within the area of wooded cliffs and fall within the Ashley Combe and Culbone PAL (PAL No 42).

This area is also of significance for its concentration of sites relating to post-medieval industrial activity, demonstrating the way in which people have exploited the natural resources of the surrounding landscape. Few of these industries are represented within the remainder of the project area, although they are known within the wider

National Park. The village of Porlock is well documented for its tanning industry which most likely developed as a result of its close proximity to oak woods (Warren 1997, 121). The Vale of Porlock is also well known for the growing of barley, with a malthouse recorded in Sparkhayes representing one of a number of such buildings within the town (*ibid*, 125). The site of a brick and tile works has also been recorded on the south side of Porlock Weir dock (MSO7935). The Grade II Listed Piles Mill (NHLE 1296054), which comprises a millhouse and mill with an overshot waterwheel, is located to the southeast of Allerford and represents a former corn mill.

The high concentration of maritime assets is also of significance here. The settlement of Porlock Weir has historically been a focus for maritime industry, largely because its topographical location provides relatively easy access to both the sea and to areas further inland. The settlement therefore provides a good context for some of the industrial activity represented along the Exmoor coastline. Documentary evidence has indicated the presence of a post-medieval fish market at Porlock Weir from which herrings were sold (MEM22247).

The dock at Porlock Weir dates to c. 1855 and comprises a small basin enclosed by pebble banks on one side and land on the other with a single lock gate at the southern end (MEM22878). A hulk assemblage comprising c. 20 vessels was recorded at Porlock Weir in the 19th century (MEM23326), although the precise location of these is unknown and it is unclear whether the vessels have been removed or lie buried by marine deposits. Documentary evidence has indicated that the main cargoes brought to Porlock between 1630 and 1780 were wool, limestone, coal or culm and livestock with many records indicating a strong trade with parts of Wales and Bristol (Ashford 2010, 53). The culm was used to fire the limestone in local kilns situated along the coast, with the processed lime then added to the agricultural land, particularly during the 17th century. Lime kilns are a common monument along the Exmoor coastline, but there is a particular concentration within this area which is likely to reflect the accessibility for boats to beach, particularly within Porlock Bay. Lime kilns are recorded at West Luccombe (MSO7441); Bossington Beach (MSO8056-MSO8059, MSO7928 and MSO8052) (Plates 16 and 26); Porlock Weir (MSO7929 and MSO7930); Countisbury Cove (MDE11675); and there are two Grade II Listed lime kilns and an associated boat house and coach house set into the base of cliffs above a shingle embankment above Glenthorne Beach (NHLE 1173368).



**Plate 16: Post-medieval lime kiln at Bossington Beach**  
(©ENPA 2012, G. Lawrence)

As in other parts of the project area, there is a small number of assets associated with the fishing industry including a post-medieval fish weir comprising an L-shaped shingle bank within the intertidal area near Countisbury Cove (MSO8693). Wooden posts of uncertain date and function have been recorded within the intertidal area of Porlock Bay (MEM15248) and highlight the potential for additional wooden structures to survive within this area. Further inland, fish ponds of post-medieval date are known from cartographic evidence at The Paddock (MSO8071), and a post-medieval fish pond and later duck decoy have been recorded from aerial photographic evidence to the northwest of Porlock (MSO7887). The duck decoy is situated within the Porlock Manor Estate and consists of a five-sided pond with ten pipes that were used to catch and manage wildfowl. It is unclear whether there is any surviving documentary evidence relating to its context or use.

Evidence for coastal management also emerges in this period and is largely confined to this stretch of coastline, with groynes at Porlock Weir (MEM22880); Porlock Beach (MEM22895); and Glenthorne Beach (MEM22843). Remains of a sea wall survive at Bossington (MEM23570), immediately to the south of the pebble ridge. The wall is of varied construction which suggests that it was built, or at least repaired, at different times and it may have had an agricultural as well as a coastal defence function.

A field survey was undertaken within the Culbone Woodlands Estate in 2002 by ENPA in order to characterise the historic resource. The woodland lies on a very steep coastal slope and extends for 190ha between Worthy Combe and the Glenthorne Estate (McDonnell and Faxon 2002, 2). The survey recorded a large number of charcoal burning platforms, sites where wood was slowly burnt in a clamp to produce charcoal. They are concentrated within two main groups; an eastern group comprising 12 sites which lie in Culbone Wood, and a western group of 29 sites that had access to the foreshore and Embelle Wood Beach (*ibid*, 21). The platforms are of unconfirmed date, but are likely to be of post-medieval or modern date, and are in a particularly high concentration when considered against comparable sites within the wider National Park. Their woodland location has contributed to the preservation of these sites, and they would benefit from further work to determine their date and relationship with activity within the wider landscape.

### ***Modern***

There are a large number of assets that relate to WWII defence between Foreland Point and Hurlstone Point. These include former WWII linear barbed wire obstructions across low-lying land at Porlock Weir (MMO1366 and MMO1367); Porlock and Bossington Beaches (MMO1370), which have been identified from aerial photographic evidence. Pillboxes were sited at strategic locations, and WWII infantry sections posts have also been recorded at Porlock Weir; Porlock Beach; Bossington Beach; and to the east of Horner Water. Additional assets of WWII date include the former site of American Army built huts in the field behind Porlock Tannery (MEM22720). The crash site of a WWII Fleet Air Arm Fairy Albacore aircraft is documented at Sparkhayes (MEM15246) and a WWII Halifax crash site is known in Yearnor Wood (MEM15551).

Coastal assets of modern date include the remains of a coastguard station at Hurlstone Point which was built in 1900 and manned until after WWII (MSO8110), as well as the implementation of groynes at Porlock Weir (MEM22871) and on Porlock Beach (MEM22898).

## **6.4 Hurlstone Point to Minehead (7d18; Figure 9)**

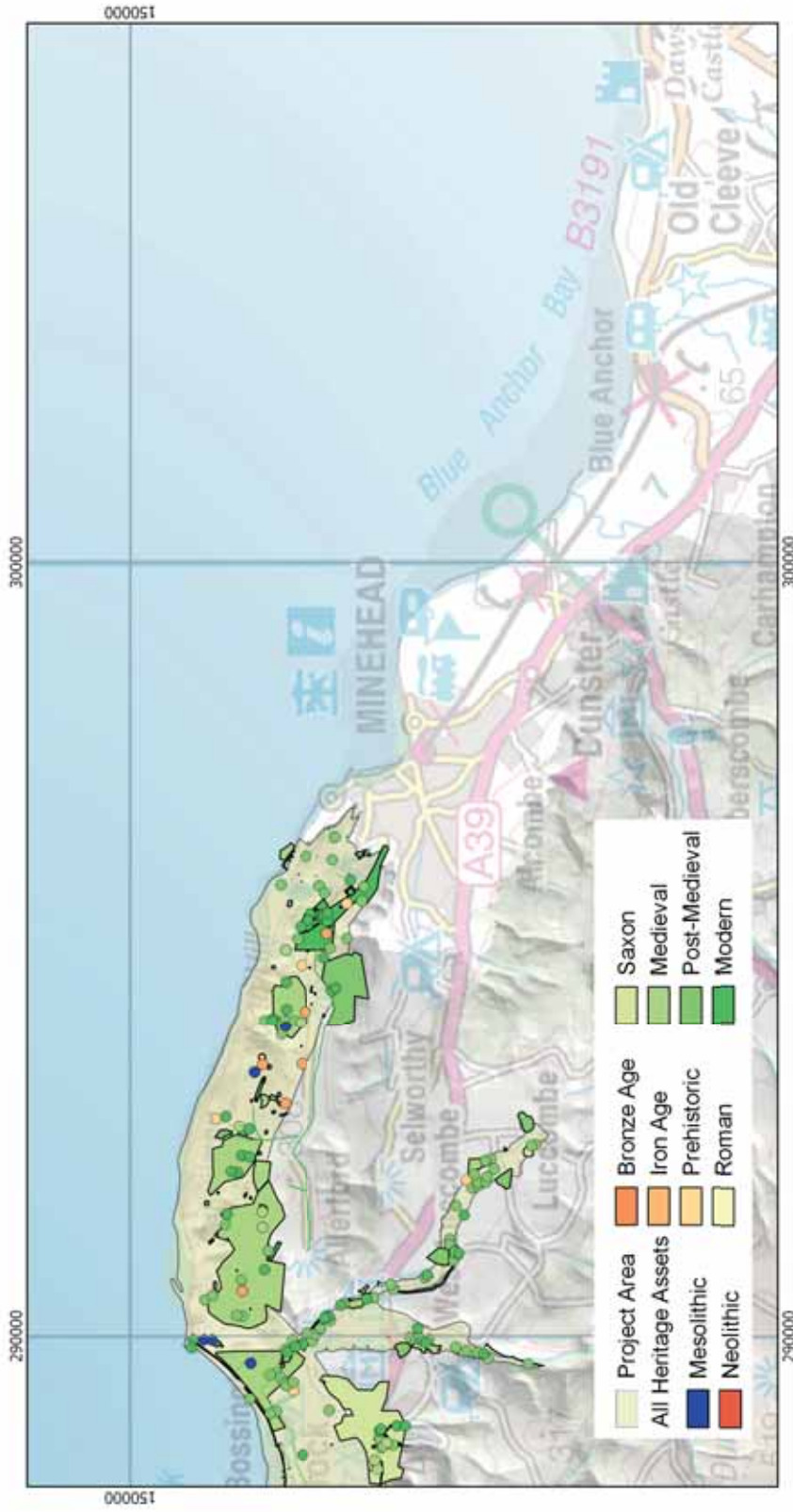
### ***Introduction***

This section of coast is largely characterised by steep cliffs and a narrow foreshore with the exception of a small lower lying area at Greenaleigh. Much of the land here is owned by either the National Trust or ENPA. Landscape surveys include an archaeological survey of North Hill in 1997 (Riley and Wilson-North 1997), carried out by the RCHME in partnership with the ENPA. The National Trust areas have been surveyed as part of the Holnicote Estate (Richardson 2001). Both surveys had the aim of identifying, surveying, recording and interpreting surface archaeological features to aid with the management and interpretation of the archaeological resource.

### ***Prehistoric***

Evidence for Palaeolithic activity between Hurlstone Point and Minehead is sparse, and may be related to problems of access and identification, as opposed to the actual absence of evidence within this area. Mesolithic and Neolithic activity is characterised by a small number of chance finds of flint artefacts from North Hill (MSO7579) and from a field to the west of Grexy Combe (MSO7581). The small number of flint tools are of significance as they provide evidence for hunting and woodland clearance during the Neolithic and Bronze Age periods; most of the other flint finds within the coastal zone have been of undiagnostic flint artefacts. The tools comprise a chipped and ground flint axe, a leaf-shaped arrowhead, a lozenge-shaped arrowhead and a barbed and tanged arrowhead which have been recovered from an area near Furzebury Brake (MSO7580); an arrowhead of Bronze Age date has also been found to the northwest of Wydon Farm (MSO7629) suggesting possible Neolithic and Bronze Age activity within these areas. A flint scatter of possible Bronze Age date has been recovered from an area to the south of North Hill (MSO12429). Additional flint scatters found at North Hill (MSO12433 and MSO7592) have not been assigned an accurate date, and are simply recorded as 'prehistoric.'

**Figure 9: Distribution of all heritage assets by period between Hurlstone Point and Minehead**



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With the exception of the findspots mentioned above, evidence for Bronze Age activity is fairly limited within this study area. Monuments of this date are rare and are restricted to a small number of isolated burial cairns including examples at Bossington Hill (MSO8021), North Hill (MSO7610) and to the northeast of Woodcombe Plantation (MSO7620). The latter could be considered to form part of the barrow cemetery east of Selworthy Beacon, just outside the project area, which would make them more characteristic of areas further to the west where barrows tend to occur in greater concentrations. It has been argued that there may be a correlation here between the lack of prehistoric stone monuments and the use of the landscape for medieval agriculture and 20th-century military activity, which may have destroyed such monuments (Riley and Wilson-North 1997, 5).

Prehistoric settlement evidence is sparse within this area, and therefore the distinctive earthworks of an oval enclosure at Furzebury Brake (Scheduled Monument NHLE 1008809) are of significance to the understanding of prehistoric activity within this landscape. The monument, located to the west of Grexy Combe (Plate 17), is defined by a substantial bank and a slight external ditch, entered from the western side, yet there is little evidence for internal settlement. The monument has currently been assigned to the Iron Age, although this is based upon relative dating with similar monuments beyond Exmoor. More work is needed at this site to determine an accurate date and function of the enclosure.

No finds of prehistoric pottery or metalwork have been recorded within this area.

### ***Roman***

There is no evidence for Roman activity within this area, although it is considered a possibility that future investigation of the enclosure at Furzebury Brake may provide evidence for a continued presence into the Romano-British period.

### ***Post-Roman and Saxon/ Early medieval***

Evidence for post-Roman and Saxon activity within this study area is sparse, which reflects the situation within the wider National Park.



Plate 17: View to the northwest showing the earthwork at Furzebury Brake and the coastline beyond  
(©Historic England Archive 2014, 27988\_027, D. Grady)

### ***Medieval and Post-medieval***

A small number of deserted farmsteads have been identified within the study area, of which the Scheduled Monument at Grexy Combe (NHLE 1006126) presents excellent preservation. The farmstead is visible as earthworks comprising at least four building platforms defined by stony banks (MSO7583) and may be associated with the extensive field system on North Hill to the east (MSO7627). There is also evidence for a deserted medieval farmstead on the western side of Bramble Combe (MMO213), which may be associated with a nearby field system (MSO7627). The presence of these well-preserved deserted settlements together with the remains of the medieval Burgundy Chapel (MSO7576) have led to the designation of this area as a PAL (PAL No 32) by the ENPA (Balmond 2015, 115).

The remains of a medieval and or/post-medieval farmstead at East Myne were considered within a gazetteer of deserted farmsteads on Exmoor (Aston 1983). The site is one of three potential candidates for the deserted site of Myne which was mentioned in Domesday. The farmstead at East Myne was taken over by the army and used for tank training during WWII (MMO215).



Field systems of likely medieval to post-medieval date have been identified as earthworks and from aerial photographic evidence, although little fieldwork has been carried out in this area to confirm their dates. A medieval open field system is recorded to the south of West Myne Farm (MSO7636); a post-medieval field system at Woodcombe is defined by banks and lynchets and represents an attempt to enclose and improve the land (MMO648). Other examples have been affected by later agricultural activity, and comprise the remains of an extensive field system to the northwest of Selworthy Beacon (MSO8050); a field system comprising a large lynchet at Henners Combe (MSO8092); and a field boundary forming part of a wider field system at Western Brockholes (MSO12579).

Assets associated with medieval and post-medieval industry include the site of three stone fish weirs at Culver Cliff Sand (MSO7684). Fishtraps or breakwaters have also been identified from aerial photographic evidence within the intertidal zone (MMO1563).

### ***Modern***

Assets of WWII date are well represented on the coastline between Hurlstone Point and Minehead due to the presence of a tank training range (MMO627). The land was requisitioned by the army at the beginning of WWII for military training; specifically the training of tank crews in advance of the Normandy landings of June 1944 (Balmond 2015, 119). The dense concentration of military remains representing a relict military training landscape is of particular significance and has led to the designation of the area as a PAL (PAL 33) by the ENPA. The RCHME Exmoor Project Field Survey and Exmoor National Park NMP project identified a number of assets related to the function of the range, including: a tank marshalling area (MMO626); a tank maintenance building (MSO12470); a tank washing platform (MSO7593); and a tank range bunker (MMO825). The tank training range comprised three circuits: at Bossington (circuit A), North Hill (circuit B) and Selworthy Beacon (circuit C); three target railways; and a large number of observation buildings (Balmond 2015, 119). A WWII gun emplacement between East Combe and Henners Combe functioned as part of the Bossington tank training range (MSO8101). There are also a number of assets associated with WWII defence including an extant WWII radar station southwest of Greenleigh Farm (MSO12288), and a series of slit trenches across North Hill and at eastern Brockholes.

Additional assets of WWII date include an extant pillbox at Bratton, to the west of Minehead (MEM23315). The site of a now demolished WWII army camp has been identified from aerial photographic evidence, and was located on the south side of Hill Road (MMO1489). A former Cold War military installation known as RAF West Myne was also located on North Hill, and was in existence between the 1950s and 1960s in response to the threat from nuclear weapons (Webster 2010). The site was demolished in the 1960s.

## 7 ASSESSMENT OF SOURCES

### 7.1 Historic Sources

#### *Historic Maps*

There are a small number of historic maps relevant to the Exmoor RCZAS project area which were consulted at the Devon Heritage Centre, Exeter and the Somerset Heritage Centre, Taunton. These are discussed below and listed within Appendix 3.

Large-scale cartographic surveys of Devon were undertaken by Saxton in 1575, Benjamin Donn in 1765, and C. and J. Greenwood in 1827. Surveys of Somerset were undertaken by William Day and Charles Harcourt Masters in 1782 and Christopher Greenwood in 1822. These maps are useful for providing a broad indication of the historic landscape of Devon and Somerset as well as the main transport routes and settlements present at these dates. The maps are generally of insufficient scale to provide detailed information relating to heritage assets, although they do provide a good overview of topography and woodland extents within the project area.

The two volumes of *Devon Maps and Mapmakers: Manuscript Maps Before 1840* (Ravenhill and Rowe 2002) identify a 'Plan of the Port of Lynmouth' dated to 1824, but there is little else of relevance to the RCZAS project area listed within these volumes. The Devon Heritage Centre holds a large volume containing a 'Survey and Valuation of Part of the Manor of Holnicote, Somerset' dated from 1809-1812. The volume contains a series of maps with an accompanying survey schedule providing details of the field names, landowners, and landuse. The depiction of the coastline at Porlock is also valuable, as are depictions of a small number of historic features such as lime kilns.

The Somerset Heritage Centre holds a small number of early maps relevant to the RCZAS project area. These include a range of cartographic styles such as the map showing the 'Inclosure of Porlock Common' on which the outlines of land parcels are depicted but with little further detail. In contrast, the 'Plan of the Manor and Parish of Minehead in the County of Somerset in which the Lands belonging to John Fownes Luttrell Esq are particularly delineated' contains a much larger amount of

detail including historic structures, as well as an alphabetic or numeric reference to a survey book or table. Few of the maps consulted at the Somerset Heritage Centre were archived with their associated survey books and are therefore limited in the amount of information that even the most detailed of these surveys can provide. Similarly, survey books relating to large scale surveys and valuations were identified, but again their accompanying maps were missing and they are therefore also limited in their use.

The tithe maps of the 1840s contain a greater amount of detail. Individual buildings, fields and boundaries are represented on these maps, and they are labelled with a numerical reference to their associated tithe apportionment where details of land ownership, field names and the use of the land are recorded. These tithe maps often form the earliest complete maps of parishes and were produced in order to assess the amount payable in cash, in lieu of tithes, to the parish church for the support of the church and its clergy. Varying proportions of eleven tithe maps fall within the Exmoor RCZAS project area: five within Devon and six within Somerset. These had previously been digitised by both Devon and Somerset County Councils and are routinely used for enquiries, planning consultations and HER enhancement by the Historic Environment Team at ENPA. The majority of the digitised tithe maps are accurately geo-referenced and can therefore be compared with the digitised later historic Ordnance Survey maps.

Tithe maps were a valuable resource; in particular for the identification of buildings and structures present c. 1840. When considered with tithe apportionments it is possible to identify features of potential archaeological interest through field-name evidence, and consideration of land use c. 1840. Tithe apportionments were not studied in detail as part of this study, though the project team carried out a rapid assessment of transcribed tithe apportionments for some parishes in Somerset. This exercise demonstrated that there is good potential for the identification of features of potential archaeological interest through place-name and field-name evidence, although it was considered that this would be best undertaken in conjunction with a fieldwork element to assess the value of using this information for the identification of archaeological sites.

By the end of the 18th century, standards in mapping were being raised as a result of greater awareness, better instrumentation and the stimulus of the Napoleonic wars (Carr 1962, 137). The subsequent need for an official survey resulted in the founding of the Ordnance Survey in 1791. Large scale 25-inch Ordnance Survey maps were surveyed from the 1860s-1880s. First, Second and Third Edition 25-inch georeferenced Ordnance Survey maps, as well as First, Second, Third and Fourth Edition 6-inch Ordnance Survey maps, were consulted through the Exmoor HER and compared to the Ordnance Survey 2014 MasterMap. Regression of Ordnance Survey maps facilitated comparison of features identified on earlier Tithe and estate maps, enabling the identification of features not previously recorded within the Exmoor HER. Buildings and features falling within the historic core of a town or village were not individually recorded as part of the Exmoor RCZAS, as most of these settlements are recorded in far greater detail within the relevant Conservation Area Appraisals. Records were, however, created to define the extent of the historic cores of settlements within the project area and were largely based upon the evidence from the tithe maps.

### ***Admiralty Charts and Surveys***

A range of historic charts and surveys held at the UK Hydrographic Office (UKHO), Taunton were examined, including those providing an overview of large areas of coast such as the 1771 'Survey of Part of the Bristol Channel from Lundy Isle, and Worms Head to Watchet, and Barry Isle.' There is also a series of localised charts for the ports of the Exmoor coast including Minehead, Lynmouth and Porlock. All charts and surveys consulted by the project are listed in Appendix 4.

Admiralty charts were created primarily for navigational purposes, and therefore tend to focus on mapping the depth and position of the channel, as opposed to detailing land-based assets. The potential of Admiralty charts is generally considered to be low, although they often include a detailed outline of the coast and occasionally depict coastal assets such as fishing structures and harbours. The 'England – West Coast. Anchorages on the South Shore of the Bristol Channel' chart depicted a number of coastal assets including an outer post and weir which are marked in the channel at Lynmouth; a lifeboat station labelled to the west of the channel; a possible fishing structure and possible groynes on the beach to the east of Porlock Weir; limekilns to the northwest of Bossington; and a pier and quay at Minehead. Most of these features were already recorded on the Exmoor HER based on evidence from other sources, but a small number of them, such as the possible

fishing structure at Porlock, had not previously been identified. Whilst these charts can be useful for identifying heritage assets it is difficult to determine the accuracy of their locations, for example a 'Roman Camp' is labelled on this chart to the east of Lynmouth but no earthworks are depicted within this location on the chart. It is likely that this relates to the earthwork at Wind Hill, slightly further to the east, and which is thought to represent a promontory fort of Iron Age date, but it is impossible to determine with any certainty. It is also, therefore, difficult to determine the accuracy with which the coastline has been depicted on some of the early charts; the potential for using these charts to depict coastal erosion is considered to be low.

### **Literary Associations**

The high cliffs, steep wooded valleys and dramatic geomorphology of Exmoor proved appealing to artists and romantic poets during the post-medieval and modern periods, who drew inspiration from the landscape. Poets including Shelley, Coleridge and Wordsworth all visited Exmoor at the turn of the 19th century (Lauder 1993). *Lyrical Ballads* and *The Ancient Mariner* were originally conceived by Wordsworth and Coleridge while they were walking one of their favourite routes to the Valley of Rocks. The poem *Kubla Khan* was written by Coleridge while he was staying near Culbone (<http://www.exmoorher.co.uk/the-romantic-poets>). The landscape which inspired Coleridge to produce some of his best work has been commemorated with the creation of the Coleridge Way: a 51-mile route that extends between Nether Stowey and Lynmouth, passing through the Quantock Hills, the Brendon Hills and Exmoor (Visit Exmoor 2016).

The poet Robert Southey was also inspired by the Exmoor landscape, composing a sonnet dedicated to the town of Porlock, and likening the village of Lynmouth to a Swiss village. One of the most famous novels relating to Exmoor is *Lorna Doone* by R.D. Blackmore which was first published in 1869 and is set on the area of moor between Porlock and Lynton. Blackmore also wrote a short story named *Jennifried's Story* which was based on Lee Abbey near Lynton. The novelist Marie Corelli also drew inspiration from the coastal landscape of Exmoor, with her novel *The Treasure of Heaven* set in Porlock Weir, and *The Mighty Atom* set in Combe Martin (<http://www.exmoor-nationalpark.gov.uk/Whats-Special/culture/literary-links>).

Travellers' accounts prove a useful source for studying the historic environment of Exmoor, and comprise a combination of both written and illustrative evidence.

John Leland is the earliest recorded visitor to Exmoor. Leland was the keeper of Royal libraries under Henry VIII and his visit formed part of a wider tour of the whole country between 1534 and 1543. His comments on Exmoor mainly relate to the topography of the area but describe a few key areas including Exford and Simonsbath in more detail (Lauder 1993, 2).

A large collection of journals and topographic illustrations relating to a tour of Devon by John Swete are held at the Devon Record Office and Royal Albert Memorial Museum, Exeter. The collection provides an illustrated topographical commentary of the tours undertaken by Swete at the end of the 18th century. These comprise several locations within the Exmoor RCZAS project area including a trip to Combe Martin and Lynton, and a tour of Countisbury, Lynton, Martinhoe and Combe Martin. As well as a useful source for assessing change on the coastline of Exmoor from the late 18th century, many of Swete's illustrations include heritage assets such as a drawing of a lime kiln at Lynmouth (DRO564/W/F10/130) and bridges over the West Lyn River (DRO564/W/F10/120) and East Lyn River (DRO564/W/F10/126), all of which are dated to 1796 (Gray and Rowe 1999).

### ***Topographic Illustrations and Art***

The potential for understanding issues relating to long-term coastal change from historic works of art has been highlighted within *A Coastal Historical Resources Guide for England* (McInnes and Stubbings 2011), published by The Crown Estate. The guide aims to promote the use of historic works of art by identifying those artists who illustrated aspects of the coastline with the greatest topographical accuracy in order to determine which resources may have the most significant contribution to the understanding of rates of coastal change. A list of the paintings, watercolours and prints relating to south-west England from 1770-1940 is provided within this guide. This subject is further illustrated within *British Coastal Art 1770-1930* (McInnes 2014).

The value that historical images hold as supporting evidence relating to the planning and management of heritage sites in south-west England is explored by the CHERISH project (McInnes 2017), mentioned within Section 3.3 above. This regional pilot study looked at how depictions of heritage assets may be used to better inform a wide range of stakeholders on approaches to coastal heritage management, and to identify those heritage assets along the coast that have been most sensitive to coastal change over the last 250 years.

## 7.2 Data Sets

### ***Exmoor HER Data***

The Exmoor HER holds a total of 1426 records for the project area. 350 of these are new records that have been created as a result of research associated with the coastal audit, carried out by the ENPA at the beginning of the Phase One Exmoor RCZAS DBA. Records within the Exmoor HER contain the prefixes MEM, MDE, MMO and MSO which reflect the origin of the record (e.g. MDE are external records created by Devon County HER for sites in Devon (up to 2009), while MSO relates to records created by Somerset County HER for sites in Somerset (up to 2009); MMO relates to NMP data). All records created by the RCZAS project are included within the prefix MEM as these are records specifically created by ENPA HER.

The Exmoor HER derives monument period data from a 'Period From' date and a 'Period To' date. Where monuments cannot be accurately dated they are assigned a broader period and are therefore inevitably given a longer date range than those that can be specifically dated. This may give a misleading impression that those monuments dating to the middle or later prehistoric and historic periods may be under-represented within the record. The monument data is assessed here on the basis of the 'Period From' date, considered to be the most representative of a monuments interpreted date. For HER interrogation purposes all monument records created or amended by the project are associated with Source Record EEM14294.

### ***Prehistoric and Roman records in the project area***

The Palaeolithic period is represented by a single record of a hand axe being discovered in Porlock. It is likely that this was recovered from head deposits eroding out of the cliff at Porlock (Richard McDonnell *pers. comm.*), but the exact location of the findspot is unknown. Five records have been assigned to the Mesolithic period. These comprise a record relating to the submerged forest and associated peat deposits and flint finds at Porlock Bay; two records of artefact findspots; and two records of artefact scatters of unconfirmed Early Mesolithic through to Late Mesolithic date. The coastal audit did not add any new records of Palaeolithic or Mesolithic date.



The HER holds a single record specifically assigned to the Neolithic period: this relates to a lithic working site at Old Burrow Hill. A further 20 records are assigned a date ranging from the Late Neolithic through to the Late Bronze Age periods. These records largely relate to round barrows/burial cairns and hut circles. Research associated with the Exmoor coastal audit created three new records which have been assigned to these broad dates. A further five records relating to field systems and marker stones have been assigned a much broader date range, which reflects the uncertainty over their date.

There is a single record assigned to the Early-Mid Bronze Age within the RCZAS project area: this relates to the bones of an aurochs found in Porlock Bay, and which have been radiocarbon dated to 1738-1450 Cal BC. A further 31 records have been assigned to the broader Bronze Age period. These records predominantly relate to barrows/burial cairns and hut circles, although there is also a record of a findspot of pottery sherds of likely late Bronze Age to Early Iron Age date. There are five records relating to earthworks of likely Iron Age date. The Exmoor coastal audit did not add any new records of Bronze Age or Iron Age date to the HER.

The HER holds 20 records of unconfirmed prehistoric date within the RCZAS project area: three of these were added as a result of research associated with the Exmoor coastal audit. These include records relating to cairns, hut platforms and flint findspots.

There are two records of Roman date within the project area which relate to the Roman fortlets at Martinhoe and Old Burrow. No new records of Roman date were added.

### ***Saxon and Medieval records in the project area***

Eleven records of Saxon date largely relate to settlements and farmsteads. There are an additional 18 records that have been assigned specifically to the medieval period and largely comprise agricultural remains. A further 47 records relate to assets ranging in date from the medieval through to the post-medieval periods, while a further 42 assets range in date from the medieval to modern periods. Six of the records ranging in date from the medieval through to the modern period were added to the HER as a result of research associated with the Exmoor coastal audit.

***Post-medieval to modern records in the project area***

As expected most of the recorded sites are from the most recent periods. There are a total of 832 records within the project area that have been assigned to the post-medieval period, and a further three assets that have been assigned a more specific date ranging from the Civil War to modern periods. A total of 280 records of post-medieval date have been added to the Exmoor HER as part of the research associated with the Exmoor coastal audit.

There are a further 281 records of modern date within the RCZAS project area, of which 60 records dating to the 20th century have been added to the Exmoor HER as part of the research associated with the Exmoor coastal audit.

There are a total of 105 assets that have been assigned an unknown date within the RCZAS project area. None of the new sites added as part of the Exmoor coastal audit have been assigned an unknown date.

***NMP Projects***

The Exmoor RCZAS project area is covered by two National Mapping Programme (NMP) projects. These surveys facilitated interpretation, syntheses and enhancement of information for archaeological sites and landscapes identified on aerial photographs, developing a greater understanding of past anthropogenic activity and settlement in Exmoor National Park. The Severn Estuary RCZAS NMP project (Crowther and Dickson 2008) was undertaken as part of Phase 1 of the Severn Estuary RCZAS and assessed the coast within the eastern part of the Exmoor RCZAS project area up to Gore Point in Porlock Bay. The remainder of the Exmoor coastline was covered by the Exmoor National Park NMP project (Hegarty and Toms 2009).

Across the NMP project area, a total of 928 new monument records were identified by the Severn Estuary RCZAS NMP project and a further 373 records were enhanced (Crowther and Dickson 2008, 2). Analysis of aerial photographs within the intertidal zone proved particularly productive, with 35% of the new sites identified by the project relating to the fishing industry within these areas. Features identified within the coastal hinterland were largely dominated by assets of medieval and post-medieval date (*ibid*).

Over 2200 previously unrecorded archaeological features were transcribed and recorded across Exmoor National Park by the Exmoor National Park NMP project, and a further 580 records were enhanced (Hegarty and Toms 2009, 1). The project area was divided into five blocks, of which Block One falls within the Exmoor RCZAS project area.

The NMP surveys created digital transcriptions of the form and extent of all archaeological sites and landscape features that were visible on aerial photographs within the project area. These transcriptions have been integrated into the Exmoor HER and were available to view as a layer which allowed them to be considered alongside the HER monument data. The transcriptions proved to be a very useful resource for defining the extent and form of features, which are otherwise only represented by a point or an area-defined polygon within the HER.

The Exmoor National Park NMP Project (Hegarty and Toms 2009) identified a number of factors that affected the results of their survey. The steep angle of the cliffs resulted in shadows on a number of the aerial photographs consulted, and it is considered possible that this may account for the small number of intertidal features that were recorded by the survey (*ibid*, 12). The narrow combs of the project area contain a large amount of woodland which also proved to be an obstacle to aerial survey during the NMP work (*ibid*, 13). It has been suggested that future analysis of Lidar data within these wooded areas may prove beneficial (*ibid*, 81). Moorland areas also proved to be a constraint to parts of the survey due to the seasonal vegetation cover and irregular topography, with the result that few earthworks were visible within these areas (*ibid*, 41). The results of the NMP survey showed that the data set within the National Park was dominated by earthwork or levelled earthwork remains. Few sites were identified as cropmarks, which reflects the absence of intense arable cultivation in this landscape (*ibid*, 34). Evidence of structures was largely restricted to deserted settlements of post-medieval date as well as former military structures of 20th century date (*ibid*).

The NMP component of the Severn Estuary RCZAS also identified a number of factors that affected the results of their survey. These include the build-up of marine silts which may restrict identification of sites within the intertidal areas (Crowther and Dickson 2008, 49). It was also considered that the large amount of medieval and post-medieval agricultural features that were visible on aerial photographs may restrict visibility of earlier activity beneath these (*ibid*, 47). Factors limiting the

visibility of archaeological features on the intertidal areas of Porlock Bay include the fact that much of the photographic coverage of the area was not taken at the optimum time for mapping intertidal features, which would have been at the lowest tide ebb with the maximum area of mudflats exposed. Also features such as wooden posts are difficult to identify from vertical aerial photographs alone. It is better to compare vertical and oblique aerial photographs to get a better understanding of features within the intertidal areas (*ibid*, 49). It is therefore likely that the full extent of features within the intertidal areas have not been identified by the NMP projects.

### **NRHE Data**

Data from the NRHE was fed into the project GIS and cross-referenced with existing data held by the Exmoor HER. Most of this data was already integrated into the HER since updates are routinely applied as they are sent from the HE Data Management Team. The data was checked for the latest updates and amendments, and new records were created for those sites that were held by the NRHE but were not referenced in the Exmoor HER. 528 of the HER records within the project area relate to records derived from the NRHE.

### **Wrecks**

The Exmoor HER holds records relating to 11 wrecks/known losses within the RCZAS project area. Nine of these records relate to records of post-medieval date while the other two are of modern date. Eight of these records have been derived from maritime records held within the NRHE, one has been identified as a submerged structure identified from aerial photographic evidence, and the other two records are from information detailed within Lloyd's lists. Only one of these records therefore relates to the site of a wreck, with the remaining ten records derived from information relating to known losses for which the exact location of a vessel remains unknown.

All of the records relating to wreck sites and known losses within the Exmoor HER are currently represented by point data, and six of the records comprise point data at the same location near Heddon's Mouth. Most documentary sources up to the 19th century recorded the location of a loss in general terms, and therefore these records share a similarity for their location 'near' Heddon's Mouth, but the exact location of the vessels remain unknown. Information relating to known losses was often reported in contemporary documents, but not accurately located, resulting

in these sites being assigned less accurate grid references within the NRHE. One example of this is a record relating to a ship that is described as having foundered 7 miles to the north of Foreland, but has been assigned a grid reference inland on the NRHE (MDE21515), to the nearest named location.

There are also a number of additional records relating to wreck sites and known losses beyond the northern boundary of the project area, within the Bristol Channel, which have been enhanced as a result of cross-referencing with data from the NRHE. A number of the records derived from the NRHE cite the *Shipwreck Index of the British Isles* and the *Hydrographic Office wreck index* within their list of sources. Few of these records, however have accurate grid references and it is therefore impossible to determine whether they fall within or beyond the RCZAS study area. Offshore records, located to the north of the RCZAS project area, include a concentration of 12 records relating to known losses/wrecks within Lynmouth Bay, and a concentration of seven to the northwest of Gore Point.

There is a single record relating to a 19th-century hulk assemblage at Porlock Weir (MEM23326) which has been derived from NRHE data. The assemblage was thought to comprise approximately 20 vessels, although the exact location is uncertain.

The limited data resource relating to wrecks within the Exmoor HER shows that there is potential for future research. As many of the records within the NRHE are derived from the *Shipwreck Index of British Isles*, it is considered that future work should focus on additional sources such as local newspaper archives. It may also be beneficial to cross-reference the maritime data held by the NRHE with that held by the UKHO data on wrecks in order to provide more accurate records relating to maritime data within this area. This documentary evidence can be compared to available bathymetric survey data to help identify the location of known losses, and to identify previously unknown wreck locations; bathymetry data covering the intertidal area between the MHW and up to 1km offshore collected at the Plymouth Coastal Observatory as part of the Southwest Strategic Regional Coastal Monitoring Programme is freely available for consultation through the Channel Coast Observatory website (<http://southwest.coastalmonitoring.org/our-data/bathymetry/>).

***Aircraft crash sites***

Documentary evidence has indicated the crash site of a WWII aircraft on the marsh at Sparkhayes (MEM15246), while a combination of documentary evidence and in-situ evidence have revealed the crash site of a WWII aircraft in Yearnor Wood (MEM15551).

A recent scoping study for aircraft crash sites at sea (Wessex Archaeology 2008) recognises the need for urgent national and local enhancement of records relating to these sites in order to address the imbalance between records and the number of known losses (*ibid*, 63). It is proposed that the wealth of unpublished research relating to aircraft crash sites should be consulted as a priority for the enhancement of records (*ibid*, 64). The study recognises that the known resource relating to aircraft crash sites is relatively small and there is therefore potential for a number of currently unknown crash sites to exist.

***National Trust HBSMR Data***

The National Trust HBSMR holds a total of 405 records for the project area, which were supplied to the project as an excel spreadsheet and shapefiles. These comprised a single polygon relating to Countisbury Castle, with the remainder of the records comprising point data. The National Trust HBSMR holds information relating to archaeological sites, structures and historic landscapes owned by the National Trust and is used by their archaeologists when providing advice to the Trust's property managers. A large proportion of these records are associated with the Holnicote Estate, while other records within the project area are associated with the National Trust properties at Watersmeet and the West Exmoor Coast.

Of the records held by the National Trust HBSMR, 316 were already recorded on the Exmoor HER, although the records often differed or contained additional information to the Exmoor HER. The reference numbers for the National Trust data were therefore added to the existing Exmoor HER data to ensure the records could easily be cross-referenced. Eleven new records were created for sites that were identified from the National Trust data and that had not been previously recorded within the Exmoor HER. This included assets related to cairns, quarries and artefact findspots. Time constraints and other priorities for the RCZAS project meant that new records could not be created for all of the National Trust data and therefore buildings were not included as these are likely to have been considered within the Exmoor National Park Conservation Area Appraisals. Assets relating to paths, tracks and lanes were also excluded.

### **Portable Antiquities Scheme**

The Exmoor HER did not hold Portable Antiquities Scheme (PAS) data relevant to the project area. The project team therefore registered for research level accounts in order to access relevant PAS data which was exported from the PAS as an excel spreadsheet and shapefile, and loaded in the project GIS so that the distribution of artefacts could be analysed. The PAS was established in 1997 with the aim of encouraging and facilitating the recording of archaeological objects uncovered by members of the public. The data is largely the product of metal-detector users as well as field walkers. Data generated by the PAS is therefore subject to a range of interpretational issues and biases, which have been identified within the *Portable Antiquities Scheme. A Guide for Researchers* (Robbins 2014).

At the time of the acquisition of PAS data in May 2016 there was a total of 233 records relating to finds from within the boundary of Exmoor National Park. Of these only 15 records fell within the RCZAS project area (see Table 1 below). A concentration of 14 finds have been recorded from the landscape at Horner which falls within SMP unit 7d17 Porlock Weir to Hurlstone Point. These comprise a single flint of Neolithic/Bronze Age date, sherds of pottery, brick and tile of likely medieval and post-medieval date as well as a single lead object likely to represent a loom weight and a fragment of slag of unknown date. A single metal object of post-medieval date has been recovered from the landscape to the west of North Hill within the Hurlstone Point to Minehead (west) SMP unit (7d18).

<b>Period</b>	<b>Pottery</b>	<b>Lithics</b>	<b>Brick/Tile</b>	<b>Metal</b>	<b>Slag</b>	<b>TOTAL</b>
Neolithic to Bronze Age	-	1	-	-	-	1
Medieval	3	-	4	-	-	7
Post-medieval	4	-	-	1	-	5
Unknown	-	-	-	1	1	2
<b>TOTAL</b>	<b>7</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>15</b>

**Table 1: PAS finds recorded within the Exmoor RCZAS project area**

The geographic distribution of finds on the PAS database is largely affected by topography and land-use constraints, such as where metal detecting is and is not allowed, while there is also a tendency for detectorists to concentrate on areas with known archaeology (Robbins 2014). Although metal detecting is not universally prohibited within Exmoor National Park there are a series of landscape and heritage designations which define areas where metal detecting is not permitted without licence, as well as on land owned by certain landowners such as the National Trust. Few metal artefacts have been recorded from the RCZAS project area indicating that the majority of these finds have been recovered as stray finds from fieldwalking rather than metal detecting. Although the PAS dataset for the RCZAS project area is small, it differs from other datasets by facilitating a means of recording object-specific detail which can be used alongside other datasets to inform research and management associated with the historic environment of Exmoor National Park.

### ***Defence of Britain***

The Defence of Britain Project (1995-2001) aimed to record the 20th -century militarized landscape of the UK through a combination of fieldwork and documentary study. Project data was distributed to the NMR and local HERs, and is also available as a searchable database. Five new records were added to the Exmoor HER from the Defence of Britain data. Relevant data was also cross-referenced with existing HER data. 19 of the HER records within the project area include data derived from the Defence of Britain Project. These records largely relate to assets between Bossington Hill and North Hill as well as pillboxes and other assets at Porlock Beach and Bossington Beach.

### ***Historic England Aerial Photographs***

In collaboration with HE, ENPA financially supported a series of aerial photographic surveys at targeted locations within the National Park (2004-2015). The surveys, largely undertaken by Damian Grady, relate to project work which was being undertaken at the time by both HE and the ENPA. The photographs relate to both individual sites and their wider landscape context, with the result that a large number of the survey photographs include areas of the coastline. The intertidal area and breach at Porlock Marsh are particularly well represented by the surveys. ENPA aerial photographs dating to November 2006 targeted the area of Porlock Weir and included detailed photographs of the fish weirs, the foreshore and the duck decoy (MSO7887); as well as the medieval fields at Bossington Hill; the



earthworks at Furzebury Brake (NHLE 1008809); and the landscape of North Hill. The photographs, which update aerial photographs taken in Devon by Griffith in the 1980s, constitute a valuable resource, enabling recent changes to the coastline within the project area to be mapped. Aerial photographs from the 1980s survey targeted a number of sites within the RCZAS project area, including an earthwork enclosure on Hollerday Hill (MDE11742); the earthworks at Wind Hill (NHLE 1020807) and Myrtleberry Camp (NHLE 1020805); and a barrow at Kipscombe Hill (NHLE 1003839). The Roman fortlet of Old Burrow (NHLE 1020809); earthworks of the deserted settlement at Twitchen Combe (MSO7747); and earthworks at Furzebury Brake (NHLE 1008809) are also represented.

The 2015 survey by Damian Grady specifically targeted areas along the coastline of the National Park including Culver Cliff to support the RCZAS; Greenaleigh Sand; Porlock Bay; Gore Point; and Lynmouth were covered. This survey highlighted the potential for previously unidentified intertidal remains associated with fish weirs and fishing practices to survive at areas including Gore Point and Porlock Bay. Investigation and recording of these areas is therefore considered to be a priority for the Phase 2 fieldwork. It also provides a record of the current condition of these monuments and allows any large-scale threats to be identified.

### ***Lidar***

Lidar data has not been analysed as part of the Exmoor RCZAS DBA, although Exmoor National Park does have access to the Environment Agency 1m resolution data. Additional data collected at the Plymouth Coastal Observatory as part of the South West Strategic Regional Coastal Monitoring Programme is also freely available for consultation through the Channel Coast Observatory website (<http://southwest.coastalmonitoring.org/our-data/lidar-light-detection-and-ranging/>). The programme, which supports coastal management and engineering, provides a standard method for the monitoring of the coastal environment of the south-west and is funded by Defra, with Teignbridge District Council acting as the lead authority. Lidar data for the Southwest region is captured every five years, although vulnerable areas are targeted more frequently. The data is captured at 1m resolution during a low spring tide to ensure it represents the largest area of coast, as well as during winter months when vegetation cover is low (Plymouth Coastal Observatory [no date]). Aerial photographs for the Southwest region are also taken every five years and have proved to be an effective tool for monitoring coastal

change. The photographs are high resolution images that are taken at low water spring tides, but are taken during the summer months when vegetation cover is high (<http://southwest.coastalmonitoring.org/our-data/aerial-photography/>). Additional data sets available through this programme include topographic beach profile surveys; habitat mapping; and wave and tidal data. The programme covers an area between Portland Bill, Dorset and Sharpness, Gloucestershire and is the result of a collaboration between maritime local authorities, the Environment Agency and the Coastal Groups of the Southwest.

Lidar data is a useful resource as the data can be captured quickly and can be used within areas that are inaccessible or dangerous to survey on foot. It is therefore considered to be a useful resource for the identification of archaeological features that may not be visible on aerial photographs, and can also be used to map changes in sediment movement at low tide within intertidal areas. There is therefore good potential for future surveys to use this data to help inform coastal management.

## 8 ASSESSMENT OF RESULTS AND POTENTIAL

### **8.1 Areas of Greatest Significance and Potential**

Previous fieldwork has identified archaeological deposits of possible national significance at a small number of locations within the Exmoor RCZAS project area, but there are also areas that hold strong potential for further work. These are discussed below in greater detail.

The landscape to the east of Combe Martin is an area of high potential for the concentration of archaeological features and deposits relating to mining activity of 19th-century and earlier date. Some of the remains associated with the mining industry are at threat from coastal erosion and would therefore benefit from fieldwork to complement the documentary evidence relating to the mines (see 6.2 above; Policy unit 7d11). There are also remains of a deserted settlement at Netherton that have the potential to contribute to understanding of deserted settlement patterns within the project area. The possible prehistoric enclosure at Little Hangman (PAL 37) is also located within the landscape to the east of Combe Martin and has the potential to hold archaeological deposits of Neolithic date, a period for which archaeological remains are rare across the National Park. The site requires further fieldwork investigation to confirm its date. Where there is evidence for good preservation of archaeological deposits the monuments should be considered as candidates for designation assessment.

Holdstone Down has been designated as a PAL (34) for its concentration of archaeological deposits including evidence of prehistoric settlement; parliamentary inclosure; the remains of a 19th -century holiday village; and WWII military training (see 6.2 above; Policy Unit 7d11). The concentration of remains associated with prehistoric settlement are considered to be of particular significance and should be investigated further by fieldwork to confirm their dates. Where there is evidence for good preservation of archaeological deposits the sites should be considered as candidates for designation assessment.

The Roman fortlets at Martinhoe and Old Burrow are already designated as Scheduled Monuments (NHLE 1003882 and NHLE 1020809) and represent the only known evidence for Roman activity within the project area. Both have been subject to archaeological excavation although there has been no work undertaken on the areas outside the defences to assess their apparent isolation. Martinhoe Beacon has suffered historic erosion of its coastal side although the site appears to have been relatively stable for the last 150 years.

The landscapes of Martinhoe Common and Countisbury Common are of significance for their concentration of Bronze Age barrows. All seven barrows on Martinhoe Common are designated as a Scheduled Monument (NHLE 1002647), but only one of the barrows on Countisbury Common is so designated (NHLE 1003839). The remaining barrows in this area have been identified from aerial photographic evidence and would therefore benefit from field survey. Where there is evidence for good preservation of archaeological deposits these monuments should also be considered as candidates for designation assessment.

The Valley of Rocks (PAL 5) is an area of significance for its extensive prehistoric field systems and settlements in proximity to apparent burial sites. The area could be investigated further by fieldwork to confirm the dates of the remains, and as there is good evidence for the preservation of archaeological deposits the area should be considered as a candidate for designation assessment (see 6.2 above; Policy unit 7d13).

Between Lynmouth and Countisbury (PAL 6), a concentration of prehistoric sites of likely Iron Age date lie within the spectacular landscape of the East and West Lyn river valleys centred at Watersmeet. The earthworks at Myrtleberry North Camp and Countisbury Castle/Wind Hill are designated as Scheduled Monuments (NHLE 1020805 and NHLE 1020807) and believed to be of Iron Age date although neither has been subject to excavation. The earthworks at Horner's Neck, of likely Iron Age and medieval date, as well as the possible prehistoric enclosures at Hollerday Hill and Lynton Station hold good archaeological potential for further investigation by fieldwork to confirm the dates of the monuments. Where there is good evidence for the preservation of archaeological deposits these sites should be considered as candidates for designation assessment (see 6.2 above; Policy unit 7d13). Lynmouth is also an area of high potential because of the medieval origins of the settlement and remains associated with the fishing industry (see 6.2 above; Policy unit 7d13).

The settlements of Trentishoe, Martinhoe, Lynton, Countisbury, Porlock and West Luccombe are of significance for their potential to contain evidence of early Saxon settlement within the project area.

The area between Countisbury and Foreland Point is of significance for its remains of multi-period field systems, and is of local interest for its post-medieval quarries (see 6.2 above; Policy unit 7d13).

Culbone Woods (PAL 42) holds good potential for further work to understand the context of the small medieval chapel, which is designated as a Grade I Listed Building (NHLE 1058037); the later designed landscape; and the exceptional concentration of charcoal-burning platforms. Further work in this area may help to confirm the date of these features as well as improve understanding of the relationship between activity in Culbone Wood and the beach to the north. The settlement at Yearnor, to the south of Culbone Woods, also holds good potential for the preservation of remains associated with a former shrunken settlement (see 6.3 above; Policy unit 7d14).

The landscape of Ashley Combe (PAL 42) is of significance as one of a small number of designed landscapes within the project area and for its association with the mathematician Ada Lovelace. Elements of the landscaped gardens comprising a folly with embattled walls, tunnels, bridges, turrets, battlements and extensive earthworks survive within the area of woodland at Ashley Combe. There are also a series of associated assets including a 19th or 20th-century boathouse on the beach to the north (see 6.3 above; Policy Unit 7d14). There is considerable potential for a greater understanding of the landscape and buildings associated with the Glenthorne estate which may also have significance for having a landscape-design element.

Porlock (PAL 43) is an area of high archaeological potential for its evidence of prehistoric, Saxon and later settlement, maritime and intertidal assets associated with fishing and industry, and important remains of lime kilns and pillboxes at Bossington Beach. Porlock Bay has a proven high palaeoenvironmental potential for its organic peat deposits and remains associated with a submerged forest (Canti *et al.* 1995, 52; Bell 2007, 3). Previous investigations have confirmed that these organic deposits continue offshore, as well as further inland on the area of Porlock Marsh. Radiocarbon dating has shown the peat deposits at Porlock Bay to pre-date those

investigated at Minehead Bay, further to the northeast, which further highlights their significance and national importance for contributing to the understanding of the submerged palaeolandscape of the Bristol Channel (see 6.3 above; Policy unit 7d17).

Bossington Hill and North Hill (PAL 33) are areas of high archaeological significance for their concentration of WWII military training and defence assets, as well as the deserted settlements at East Myne and West Myne (Plate 18). There is also potential for findspots of prehistoric artefacts based upon previous finds of flint scatters within this landscape. North Hill (PAL 32) also holds high potential for the survival of remains associated with medieval field systems and deserted farmsteads (see 6.4 above; Policy unit 7d18).

## 8.2 Areas of Low Record Density

In general there is a good coverage of HER data throughout the project area and, although gaps in the distribution of HER records do exist, they are fairly small in scale. The most noticeable areas of low record density within the project area are the wooded combes. The steep valleys make these locations fairly inaccessible for field survey, and the dense tree cover has also restricted visibility during analysis of aerial photographs (Crowther and Dickson 2008; Hegarty and Toms 2009). Little work has therefore been carried out in these areas, but recent surveys, such as that undertaken within Culbone Woods (McDonnell and Faxon 2002), have highlighted the potential for the wooded landscapes of the project area to hold evidence of historic woodland management practices as well as archaeological features. Future



Plate 18: View to the northwest showing the remains of the deserted settlement at West Myne  
(©Historic England Archive 2016, 29706\_038, D. Grady)

assessment of woodland areas may be possible through Lidar survey as readings can be taken through vegetation cover to create a digital terrain model (DTM) on which earthworks and features can be identified.

Intertidal zones within the project area also contain a noticeable area of low monument density which is most likely a result of the short, steep foreshores along much of the coastline. There are however, exceptions to this, with concentrations of assets recorded within the intertidal areas at Porlock Bay, Culver Cliff Sand and Gore Point. These areas all have a larger foreshore with a gentler gradient on the beaches. These three areas formed part of the study area of the Severn Estuary RCZAS and identification of features within these areas is largely a result of work associated with Phase One and Phase Two of the Severn Estuary RCZAS project. There is also a concentration of assets within the intertidal area at Lynmouth that has been identified as a result of research associated with the Exmoor National Park NMP project (Hegarty and Toms 2009). A small concentration of assets has been recorded at Countisbury Cove and Woody Bay from cartographic evidence associated with monument enhancement during the Phase 1 Exmoor RCZAS.

Additional areas of low monument density are visible within the landscape between Trentishoe and Martinhoe. A concentration of records relate to these two settlements, but there are very few records within the immediate landscape beyond. The coastal hinterland between The Foreland and Glenthorne (Plate 19) also show an area of low monument density in relation to the remainder of the project area.



Plate 19: View to the southeast towards Glenthorne from The Foreland  
(2016, ©F. Pink)

## 9 COASTAL CHANGE FROM THE PALAEOLITHIC TO THE PRESENT

### 9.1 Lower, Middle and Upper Palaeolithic

Signs of human activity in this period are currently almost absent on Exmoor and we have to look elsewhere in Britain for indications of what the situation may have been here. Evidence of early human footprints has recently been revealed within Early Pleistocene estuarine muds, following erosion of the overlying cliffs, at Happisburgh, Norfolk. The footprints, together with finds of flint artefacts within the area of Happisburgh, provide direct evidence of the earliest known human activity in northern Europe and were preserved within estuarine sediments that date to between c. 780,000 and 1,000,000 years BP (Ashton *et al.* 2014, 1). This evidence is therefore currently used to mark the beginning of the Lower Palaeolithic within Britain.

The Quaternary period is the most recent geological period, extending up to the present day, and is divided into the Pleistocene and Holocene epochs (Lowe and Walker 1997, 1). The British Lower Palaeolithic falls within the Pleistocene, an epoch that was characterised by fluctuations between glacial and interglacial conditions, resulting in dramatic rises and falls in sea level as a result of the recession and advance of the northern ice cap. Investigations undertaken at the Punchbowl on Winsford Hill, Exmoor have demonstrated evidence for cirque basin glaciation within an area that lies approximately 30km to the south of the accepted limit of the Anglian ice cover (Harrison *et al.* 1998, 149). The evidence is believed to relate to a single episode of glaciation, most likely having been formed during severe conditions associated with the southerly advance of ice sheets during the Anglian cold stage (478,000 – 423,000 BP) or the Dimlington stadial (during the late Devensian glaciation). Subsequent investigations have revealed evidence to indicate a more extensive glacial cover of the area, and has led the authors to consider that this example may suggest other plateau surfaces on Exmoor that lie at a similar altitude to the Punchbowl may have also developed ice caps during the Quaternary period (Harrison *et al.* 2001, 4).



Britain formed a peninsula of Europe during much of the Palaeolithic period, although it became temporarily isolated during interglacial periods as a result of melting ice and rising sea-levels (Westley and Bailey 2013, 10). Human activity within Britain during the Palaeolithic also reflected these changing environmental conditions, with periods of inward migration and colonisation from Europe as well as periods of depopulation and localised extinction (*ibid*, 10). The geomorphology of the British coastline also varied throughout the Palaeolithic in response to the glacial and interglacial conditions and it should therefore be recognised that current coastal sites may be a reflection of terrestrial sites during periods of low sea-level, with areas of Palaeolithic coastline now likely to be submerged (*ibid*). The extent of shoreline change was dependent upon the local bathymetry and sediment availability, as well as the rate of sea level rise; gentler gradients are likely to have experienced rapid retreat, while slower rates of sea level rise would have promoted the formation of marshes (*ibid*). At the height of the last Pleistocene cold stage (the Devensian) c. 21,000-18,000 BP glacial conditions covered much of northern Europe, with the exception of southern Britain. During the Late Glacial period it is believed that Exmoor was situated within the area immediately to the south of the ice sheets. At this time the mean sea level was 130-140m lower than that of the present day as a result of the large amount of water contained within the ice sheets (Hosfield *et al.* 2008, 24). During the Late Pleistocene and Early Holocene much of the area below the current MLWM of the Severn Estuary and Bristol Channel would therefore have been a terrestrial and riverine landscape (Sturt *et al.* 2013, 42).

Towards the end of the Pleistocene, the Late Glacial period (c. 18,000 BP) was generally characterised by a period of warming, although there were a series of climatic fluctuations within this prior to the start of the Holocene (Hosfield *et al.* 2008, 25). These changing environments are sub-divided further, with the Windermere interstadial (c. 13,000 BP to c.10,800 BP) and the Loch Lomond stadial (c. 10,800 BP to 10,000 BP) falling within the Late Upper Palaeolithic period (*ibid*, 25). Freeze/thaw cycles and solifluction of material in response to the movement of the ice sheets during the Devensian and Late Glacial periods resulted in the accumulation of periglacial head deposits across the Exmoor landscape (Wilson 1995, 27). These head deposits are very thick in places, with up to 60m beneath the floor of the Valley of Rocks near Lynton (Edwards 2000, 16). Within other parts of the project area, however, these deposits have since been eroded and transported in an easterly direction along the coast as a result of the post-glacial rise in sea level (Wilson 1995, 28). The rising sea levels of the Late Glacial and Mesolithic resulted in the isolation of the mainland of Britain from Ireland and then continental Europe (Bell and Warren 2013, 35).

## 9.2 Mesolithic

The Late Upper Palaeolithic to Early Mesolithic transition (c. 10,000 BP) roughly corresponds with the start of the Holocene epoch (Hosfield *et al.* 2008, 23-24). The beginning of the Holocene was characterised by a period of increased temperatures leading to the retreat of the northern ice sheets and a subsequent rapid rise in sea level of c. 1cm per year, with a drop in rate after c. 7,000-6,500 BP (*ibid*, 41).

It is possible that the Valley of Rocks had obtained its current form as a dry valley filled with deposits of head, by this time. The valley is situated to the west of Lynmouth and runs parallel to the Bristol Channel. The origin of the valley is uncertain, although there are two main ideas relating to its formation: firstly that it represents the marine erosion and dissection of a river valley; and secondly that it represents an overflow channel from an ice marginal lake (Dalzell and Durrance 1980, 66). A study of the depth of solifluction deposits that exist within the valley has indicated that the origin of the valley is most likely to be related to the dissection of the East Lyn River as a result of coastal retreat during the Ipswichian interglacial (128,000-117,000 BP). The resultant dry valley system was then subject to marine dissection (*ibid*, 79). This is likely to have occurred during the Ipswichian interglacial period as the head deposits would not have formed if the river had been active during the Devensian (*ibid*, 76). The geomorphology of the valley has since been modified by periglacial processes during the Devensian cold stage (Keene 1996, 44).

During the Holocene, relative sea-level rise in the Bristol Channel was characterised by a rapid rise from -35m MHWST (Mean High Water Spring Tides) c. 9000 BP to -8m MHWST by c. 6000 BP (Jennings 1995, 62). Increases in sea level within this period led to both the erosion of solifluction deposits as well as the submergence of areas that were formerly dry land (Edwards 2000, 21). One of the consequences of the increased erosion of solifluction deposits on the Exmoor coast during the early Holocene was the release of sediment into the coastal system. Movement of this sediment through longshore drift is likely to have contributed to the formation of the gravel barrier at Porlock Bay, which at the time of its formation (most likely the mid-Holocene c. 8000 BP) would have been located seaward and down-channel of the present coast (Jennings *et al.* 1998, 178-180).

Variable sea levels during the Holocene resulted in the formation of estuarine silts, comprising salt marshes with creek networks, on the margins of the Severn Estuary and the formation of peats including reed swamp, fen carr and woodland from intertidal and terrestrial marshes (Allen 2000, 13, 26). Evidence for these changing environmental conditions can be found within the deposits of mud, sand and peat within both the offshore and intertidal areas of the Severn Estuary and Bristol Channel (Sturt *et al.* 2013, 43).

Geophysical and geotechnical surveys within the sub-tidal Bristol Channel offshore from Hinkley Point, further to the northeast of the project area, have revealed evidence for an extensive area of Early Holocene submerged landscape (Sturt *et al.* 2013, 41). Although the peat deposits were shown to be fragmentary, radiocarbon dates have shown the formation of peat began c. 7500 cal BC, forming in response to rising sea levels (*ibid*). Analysis of plant macrofossil remains has shown evidence for a freshwater marsh/fen environment, with organic silts and peats, and species including reeds, sedges and grasses (*ibid*, 59). The presence of burnt plant material within the organic deposits has also shown a possibility for human activity within this sub-tidal area during the Mesolithic period c. 7000 cal BC (*ibid*, 59). Few investigations have been undertaken on the submerged landscapes within offshore parts of the Bristol Channel. The results of the surveys at Hinkley Point are therefore important for highlighting the potential for further evidence of submerged landscapes to exist offshore within other parts of the Bristol Channel and Severn Estuary.

Datable evidence for Early Holocene submerged palaeolandscape also exists within the study area at Porlock and comprises deposits of peat and the remains of a submerged forest, together with marine alluvium on the foreshore (McDonnell 1995, 6). Comparable deposits of peat have been exposed within intertidal areas further to the north of the study area at Minehead Bay, Brean Down, Burnham-on-Sea and Stolford, and have been dated to the late Mesolithic/Early Neolithic period (Sturt *et al.* 2013, 44).

A programme of coring was undertaken on Porlock marsh and the intertidal area of Porlock Bay in 1995; the work comprised 71 logged cores; 17 radiocarbon dates; four pollen diagrams and one diatom diagram (Jennings *et al.* 1998, 167). The cores have helped to define the area of Holocene infill as well as the extent and depth of solifluction deposits which were found to be situated beneath the base of the Holocene sequence (*ibid*, 168). Approximately 10m of Holocene deposits are present within the bay at Porlock, having formed between two major solifluction lobes which were an important source for sediment supply during the Holocene when sea levels were lower (*ibid*). Organic beds were found in two stratigraphic contexts: intercalated with fine clastic sediments; and as thin basal deposits overlying soliflucted material (*ibid*, 168). Results from radiocarbon dating and stratigraphic relationships has shown three main periods of organic deposition within Porlock Marsh: c. 8300-7900 cal BP, c. 7400-7200 cal BP and 6450-5490 cal BP (*ibid*).

Analysis of pollen and macrofossil remains from the intertidal peats, together with sediments from Porlock Marsh, has shown alternating episodes of alder carr, freshwater swamp and salt marsh which would have developed in response to changing sea levels during the Mesolithic period (Jones *et al.* 2005, 65). Advancing marine conditions are recorded at Porlock from c. 8500 cal BP with the establishment of a salt marsh with tidal channels, followed by a regressive phase of fine clastic deposition, and then the first recorded establishment of alder carr; this would have occurred during periods of organic deposition associated with periods of more rapid sea level rise (Jennings *et al.* 1998, 178; Jennings 1995, 62). Subsequent marine transgression soon after 7937-7727 cal BP resulted in the re-establishment of salt marsh with tidal channels (Jennings *et al.* 1998, 178). The position of the shoreline would have alternated between c. 8500 cal BP and c. 6000 cal BP in response to the opening and closing of tidal inlets within this area (*ibid*). The evidence for Porlock is discussed in greater detail within Jennings *et al.* (1998).

Documentary evidence together with archaeological monitoring (McDonnell 2009a, 2) has shown the submerged forest at Porlock Bay to have been exposed within the intertidal area of Porlock Bay on intermittent occasions associated with extreme low tides or storm events. Coring has also shown that organic layers associated with the submerged forest survive immediately below the MLW mark at Porlock Bay and it is therefore likely that these deposits continue offshore. Evidence comprising worked flints of Mesolithic and Neolithic date have been recovered from stratified

deposits associated with the submerged forest. These artefacts provide an indication of the date at which the landscape at Porlock Bay became submerged, but also highlights the potential for deposits associated with earlier prehistoric activity to exist within former coastal areas that have since been submerged, both within Porlock Bay and at other locations along the Exmoor coast that have a gentler beach profile.

A series of peat beds and remains of a submerged forest in Minehead Bay were investigated between 1996 and 1999 as part of works associated with the construction of a new sea wall (Jones *et al.* 2005). Although the town of Minehead is beyond the extent of the Exmoor RCZAS, the eastern boundary of the RCZAS project area abuts Minehead Bay, and deposits associated with the submerged forest at Minehead provide a good comparison to those at Porlock. In particular, both Minehead Bay and Porlock have similar topography, with a range of habitats (coastal, saltmarsh, freshwater marsh) focused around a gently sloping shoreline; these areas are likely to have been favoured for hunting in the Mesolithic period (Hosfield *et al.* 2008, 42-43). Comparison of peat deposits investigated at Minehead Bay and Porlock has revealed that the dates for the peat deposits at Porlock Bay are significantly earlier than those from Minehead (Jones *et al.* 2005, 65).

The exposure of peat deposits within Minehead Bay is fragmentary, although they have been shown to extend over an area of 7.56ha from below MLWM to the lower part of the Strand (Jones *et al.* 2005, 49). Radiocarbon dating of the peat deposits at Minehead has revealed a later Mesolithic date associated with two main periods in which the peat was formed on the current foreshore; the earliest formation on the lower foreshore, and the later formation on the upper foreshore near the current MLWM (*ibid.*, 52). Detailed analysis of the palaeoecology from peat deposits within this area has revealed evidence for upper saltmarsh, reed beds and alder carr woodland on different altitudes within what is now the intertidal area of Minehead Bay; these have been dated to between c. 5670 and 4360 cal BC (Hosfield *et al.* 2008, 42). Analysis of peat and clay deposits on the lower foreshore of Minehead Bay has shown evidence for a transitional brackish swamp/freshwater meadow community that was likely to have been influenced by variations in sea level and the addition of freshwater from surrounding terrestrial areas (Jones *et al.* 2005, 60, 63). Pollen evidence has shown the presence of woodland including oak, hazel and occasional lime and ash at the time that peat deposits were forming on the lower foreshore; these tree species require well-drained soils and are therefore likely to have originated on the steep slopes behind Minehead Bay (*ibid.*, 62-63).

Like Porlock, a small number of flint tools have been recovered from Minehead Bay which provide evidence for human activity within this landscape during the Mesolithic period. This is further supported by the presence of burnt environmental remains within the organic deposits, possibly representing evidence for camp fires or a deliberate attempt to manage the environment for hunting (*ibid*, 49).

### **9.3 Neolithic to Romano-British**

The Neolithic and Early Bronze Age periods in Britain fall within the middle of the Holocene, while the Middle Bronze Age, Iron Age and later periods fall within the later part of the Holocene (known as the Flandrian).

After c. 6,000 BP the rate of sea-level rise slowed down dramatically, although the Neolithic period saw a substantial change in the coastline of Southwest Britain as a result of inundation and subsequent burial by marine and intertidal deposits (Wilkinson and Straker 2008, 63). New sea-level index points from Porlock have been radiocarbon dated and confirm this trend between 7,800 BP to 5,000 BP (Jennings 1995, 62). The amount of material supplied to the beach barrier through longshore drift is likely to have reduced during the Holocene as solifluction deposits are likely to have been buried or released in lower volumes as a result of the reduction in relative sea level rise (*ibid*). This allowed the development of tidal inlets leading to the formation of a salt marsh in the area of Porlock Marsh (*ibid*, 65). There is also evidence for an increase in finer clastic sediment which had accumulated in the back-barrier area in the period post-6,000 cal BP (Jennings *et al.* 1998, 179). Analysis of peat deposits from The Chains and from Hoar Moor, within central Exmoor, has shown that prior to the development of blanket peat, woodland was present on the moorland summits (Straker and Crabtree 1995, 47; Fyfe and Davies 2011). The reduction of woodland as a result of forest clearance, and the subsequent development of peat within these areas, is likely to have increased run off and may have increased the sediment within river catchments leading to the collection of sediment at areas such as Porlock (Jennings *et al.* 1998, 177). Analysis of peat deposits from Porlock has shown the most recent date for peat development at Porlock Marsh c. 5700 cal BP to be roughly contemporary with the earliest growth of blanket mire on the upland areas of Exmoor (*ibid*).

The gravel barrier on the beach at Porlock Bay has slowly retreated inland during the period of slow relative sea-level rise and in doing so has resulted in the exposure of deposits, including former land surfaces, which had historically been sealed behind the barrier (Bray and Duane 2004, 9). Evidence from flora and fauna remains within these deposits has contributed to the understanding of the evolution of the barrier within Porlock Bay (Jennings *et al.* 1998). Evidence relating to both saline and freshwater conditions within the deposits behind the barrier has indicated that frequent breaching of the barrier is likely to have occurred historically (Bray and Duane 2004, 10).

#### **9.4 Medieval to Modern**

Although the major part of the post-glacial rise in sea level was achieved by c. 5,000 BC, subsequent changes including high tides and storm events, have had a major impact on the shape of the coastline in Southwest Britain (Straker *et al.* 2008, 105). The converging shorelines of the Bristol Channel cause a reduction in sea-surface area and therefore an increase in the strength of the incoming tide, with the result that the Bristol Channel has the highest tidal range in Europe (Wilson 1995, 26). These tides are, however, slightly lower on the north Devon coast in comparison to the remainder of the Bristol Channel, where they average 10 to 7 metres at springs (McGrail 1992, 36).

Storm events have had a dramatic impact on localised areas of the Exmoor coast. Some of these events have been recorded in documents such as an account relating to a flooding event occurring on 20th January 1607. Previous interpretations of this account have suggested that the flooding was caused by a storm, although Bryant and Haslett (2003) consider that some of the evidence suggests the flooding may have been a result of a tsunami. The area affected by the flood stretched from Barnstaple on the Devon coast and the Carmarthenshire coast within the Bristol Channel, to the head of the Severn Estuary at Gloucester (Bryant and Haslett 2003, 163).

The best known flood occurred in 1952 when over 100 buildings were destroyed and 34 people were killed in Lynmouth by fluvial flooding of the River Lyn. This catastrophic event was initiated by an intense period of rainfall across Exmoor onto already saturated ground. The steep gradient of the north-flowing rivers on Exmoor, together with their narrow floodplains increased the speed of water which

moved large boulders, trees and other debris downstream. In a number of places accumulation of this debris resulted in the formation of dams which, when breached, created surge events leading to the re-routing of the river Lyn and subsequent devastation to the town of Lynmouth (Kidson 1953, 7). The gravel beach at Lynmouth is likely to have formed through accumulation of material transported downstream from the River Lyn during numerous flood events as well as material derived from erosion of the cliffs on either side of Lynmouth (Edwards 2000).

Properties in Porlock Weir were damaged during a severe gale in 1910 when much of the town was affected by marine flooding (Gilman 1999, 20). In *Porlock in Those Days*, Corner mentions an occasion in 1859 and another in 1963 when sheep grazing on Porlock Marsh were drowned as a result of flooding associated with storm events (Corner 1992, 12). There have previously been attempts to reduce the impact of flooding on areas of Porlock Marsh, most notably in 1825 and 1910, through the use of outlets and sluice gates (*ibid*, 11). Later attempts to drain the marsh were made in the 1960s by the Somerset River Board, although these proved unsuccessful (*ibid*, 11). Management strategies were also introduced in the middle of the 19th century with the aim of protecting the gravel barrier at Porlock Bay. This has included the restoration of the shingle ridge when it was breached by the sea in the 1950s, 1981 and in 1990 (Corner 2014, 101). The development of sustainable approaches to coastal management within England in recent years has led to the relinquishment of management activities relating to the barrier since 1994.

This change in thinking and lack of intervention at Porlock Bay resulted in the natural breach of the shingle barrier during a severe storm in 1996, and the creation of a new tidal channel and intertidal lagoon within the area of Porlock Marsh (Plate 20), to the south of the barrier (Bray and Duane 2004, 9). The form of the barrier has also changed since the relinquishment of management, with a much lower and wider form situated approximately 20-50m further inland near the area of New Works. In other places the barrier has remained stable and retained its steeper form (*ibid*, 11). Although there is evidence for the expansion of the area of salt marsh behind the shingle ridge together with the erosion of a channel following the breach in 1996, the shingle ridge is still an effective dissipater of wave energy. There is evidence, however, that the shingle ridge has increased in length since the policy of no intervention, with the result that the gravels are being spread over a wider area and may therefore result in a more rapid movement of the shingle ridge landward in the future (*ibid*, 13). It has also been suggested that the shingle ridge may be susceptible to a second breach in the near future (McDonnell *pers. comm.*).





**Plate 20: Porlock Bay showing the intertidal area and breach**  
(©Historic England Archive 2015, 29480\_009, D. Grady)

There are also continuing changes to the form of the beach at the eastern end of Porlock Bay near Bossington Beach, where the Horner Water ends at Avon Pool. The presence of the gravel ridge restricts the outlet of the river to the sea, and the river therefore seeps through the pebbles of the shingle ridge towards Bossington Beach. As a consequence of this, channels have been eroded through the ridge at times when the river has transported a particularly large volume of water (Corner 1992, 11).

A 'Vision for Porlock Marsh' has been created in response to these changes and aims to develop a future vision for the area as well as a plan for its development, management and use (ENPA 2015). The project is led by a steering group including the Porlock Manor Estate, National Trust, Porlock Parish Council, Exmoor National Park and Natural England.

Other parts of the Exmoor coastline have also been susceptible to coastline change within the modern period as a result of coastal landslips. The narrow profiles of the beaches on the Exmoor coast are a result of the restriction of their movement landwards by the resistant geology of the cliffs. High tide events and storm surges can therefore have a significant effect on the foot of these cliffs. Documented high tide events include December 1981 and February 1990 when waves removed previously slipped debris from the foot of the cliffs to the west of Porlock. This exposed the base of the cliffs to wave erosion leading to the partial collapse of the cliff face (Wilson 1995, 27).

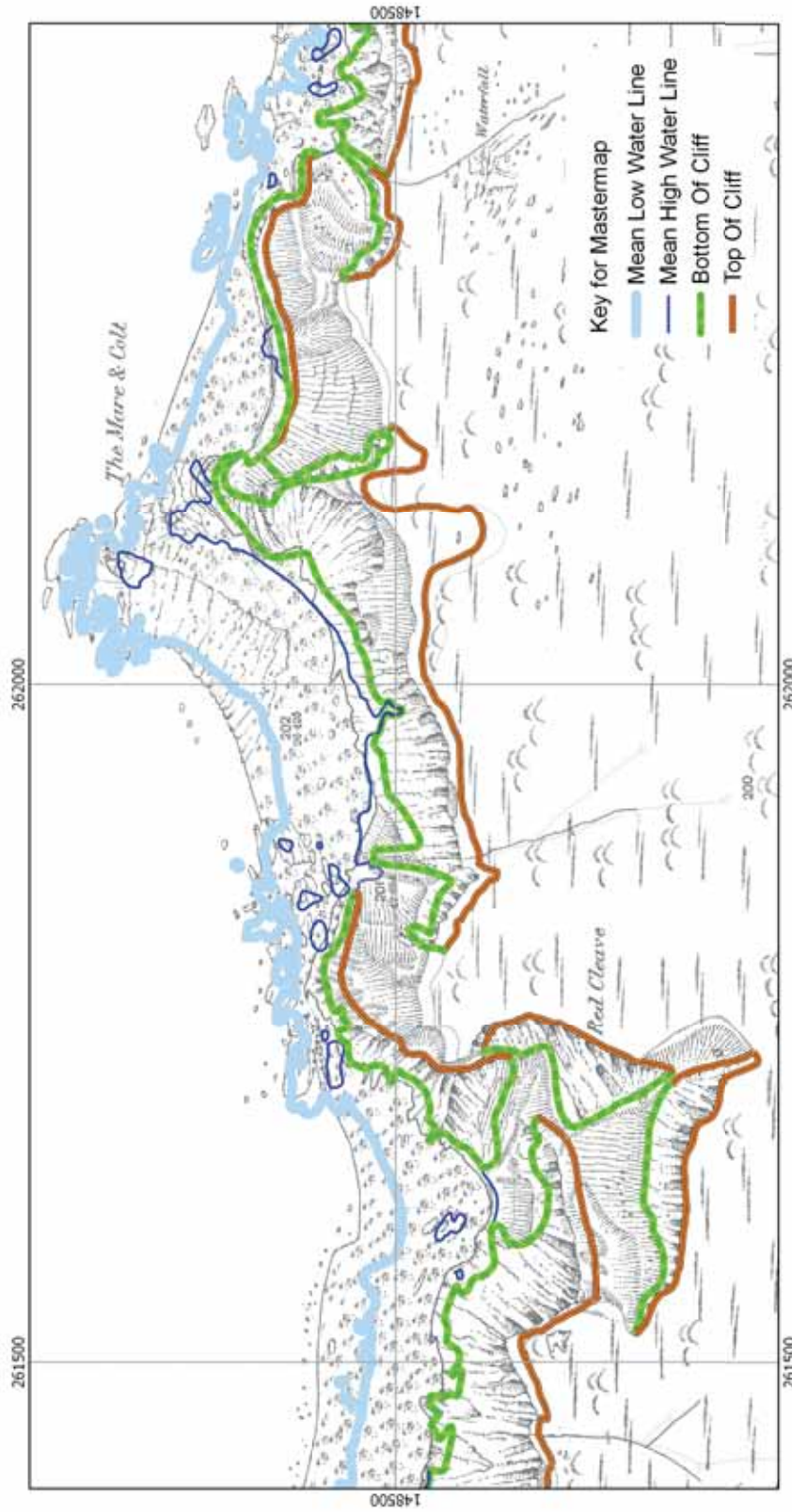
The cliffs between Glenthorne and Porlock Weir have been affected by both historic and active landslips, the latter resulting in the diversion of the coast path (Edwards 2000, 53). There is also evidence for old landslips which extend up to a quarter of a mile inland between Hurlstone Point and Greenaleigh Point (*ibid*, 46). These landslips have affected the historic coastal routes to Burgundy Chapel and Culbone Church. More localised landslips have also occurred at Wild Pear Beach (*ibid*, 68). Landslides within these areas have been partially attributed to the steeply inclined bedding planes of the underlying geology (Wilson 1995, 26), and are initiated during high tide or storm events during which areas of previously slipped debris are removed from the base of the cliffs (Edwards 2000, 54). Although the landslides to the west of Porlock Bay have all happened where the bedding planes are inclined steeply towards the beach, historical records indicate that the cliffs had been relatively stable for over a century until 1978. One explanation for this may be the increased frequency of exceptionally high tides since this date (Wilson 1995, 26).

### **9.5 Comparison of Coastline to Historic Maps**

A comparison of the coastline depicted on the 2016 Ordnance Survey MasterMap to that shown on the First Edition 25-inch Ordnance Survey map of 1868 to 1901 reveals a small number of areas where there is evidence for localised changes to the form of the cliffs, most likely as a result of erosion or possible landslide events. There are also noticeable changes to the levels of the MLW and MHW marks throughout the project area as depicted on the First Edition 25-inch Ordnance Survey map and the Ordnance Survey MasterMap, although these need to be assessed with caution as the conventions for the mapping of tidelines have varied over the years. Maps pre-dating 1868 tend to depict the high and low water marks of ordinary spring tides, whereas on later maps a mid-point between the spring and neap tides is depicted (Oliver 1993, 72). Accessibility of the foreshore as well as survey techniques have also had an impact on the level of accuracy with which tide lines are depicted on historic maps (*ibid*).

The cartographic evidence shows there have been relatively few changes to the layout of the coastline between Combe Martin and Foreland Point since the First Edition 25-inch Ordnance Survey map. Small scale, localised changes include an area of retreated cliff top on the coastline immediately to the east of the Laver Stone. The top and bottom of the cliff immediately to the west of Red Cleave appears to have retreated inland since the First Edition 25-inch Ordnance Survey map. More substantial changes are visible to both the top and bottom of the cliff to the east of Red Cleave indicating that these areas have been affected by coastal erosion or landslide events (Figure 10). It is also interesting to note that despite evidence

**Figure 10: Red Cleave, showing changes to the coastline since the late 19th century** 

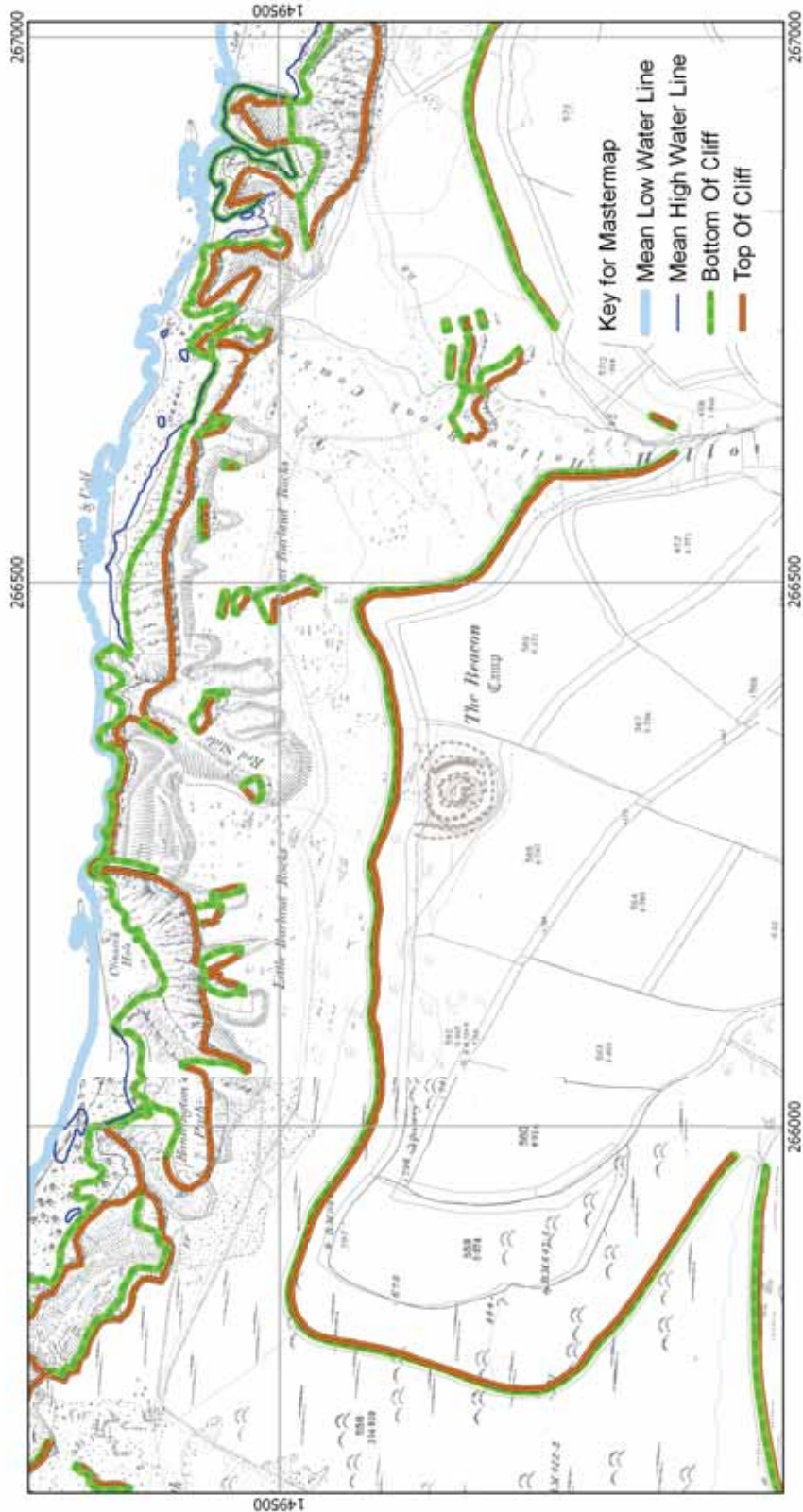


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 Extracts from the Ordnance Survey First Edition 25 inch map 1868-1901 and the 2016 Ordnance Survey Mastermap

for the Roman fortlet at Martinhoe having been historically affected by erosion, a comparison of the First Edition 25-inch Ordnance Survey map and the Ordnance Survey MasterMap reveals little change to the coastline since the late 19th century (Figure 11). The effects of the 1952 floods at Lynmouth are reflected in the changes to the size and course of the East Lyn and West Lyn Rivers, as well as to the location of the MHWL on Eastern Beach since the First Edition 25-inch Ordnance Survey map.

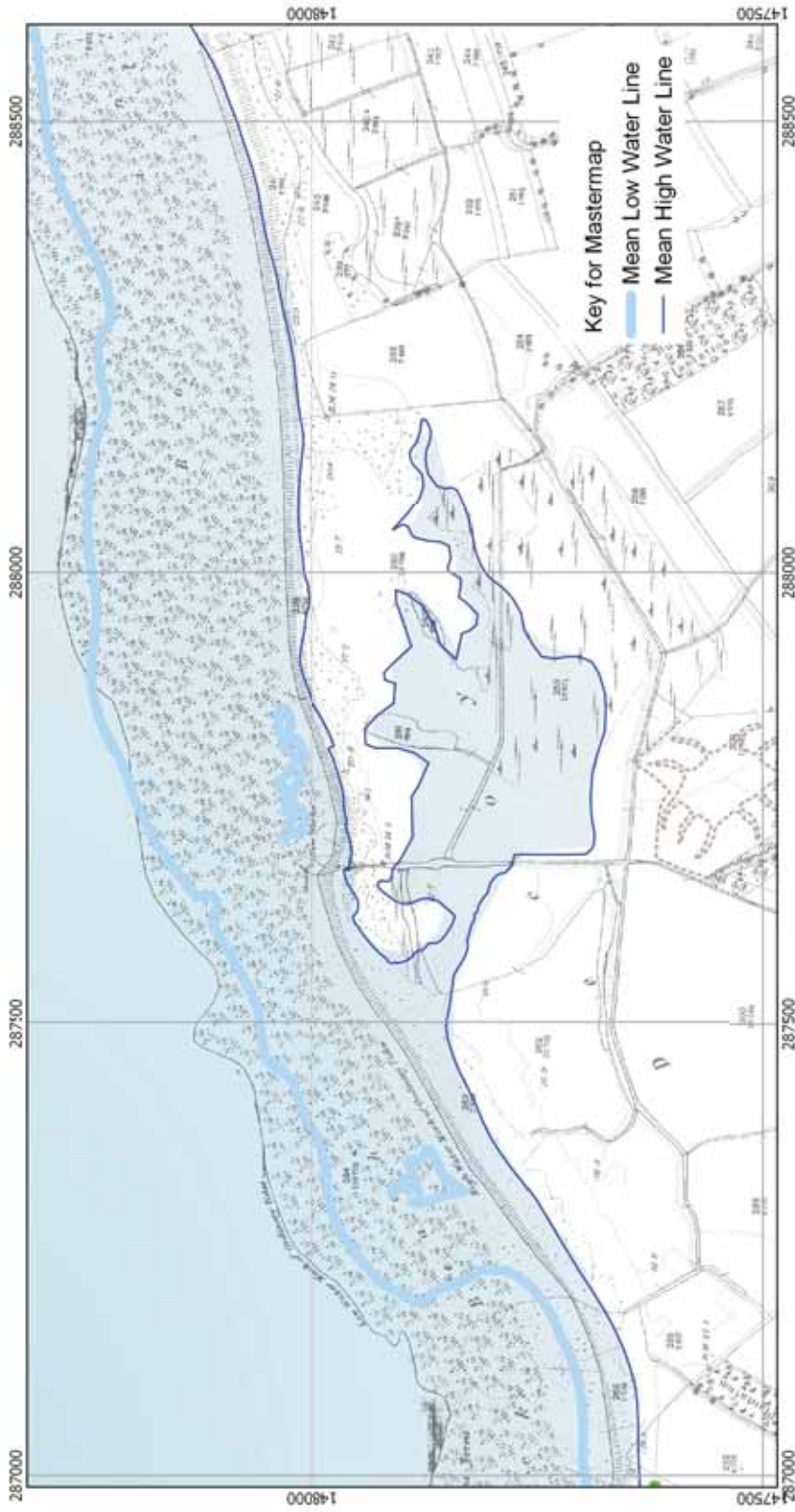
The cartographic evidence shows that there have been few changes to the layout of the coast between Foreland Point and Minehead, with the main exception to this being at Porlock Bay where the Ordnance Survey MasterMap depicts the MHWL now extending into Porlock Marsh through the breach in the shingle barrier (Figure 12). In contrast, the MHWL at the far eastern end of Porlock Bay is further north in comparison to that shown on the earlier First Edition 25-inch Ordnance Survey map.

**Figure 11: Martinhoe Roman Fortlet, showing little change to the coastline since the late 19th century**



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 Extracts from the Ordnance Survey First Edition 25 inch map 1868-1901 and the 2016 Ordnance Survey Mastermap

**Figure 12: Porlock Bay, showing changes to coastline and tidal breach since the late 19th century**



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# 10 ASSESSMENT OF THREATS TO THE COASTAL HISTORIC ENVIRONMENT

## 10.1 Introduction

The historic environment of the coastal zone is under threat from both natural processes related to sea level rise and coastal erosion, as well as from increasing pressures relating to social and economic development. Historic flooding events at Lynmouth and Porlock have shown that the Exmoor coastline also faces a threat from fluvial flooding associated with the north-flowing rivers throughout the project area.

The *Exmoor National Park Local Plan 2011-2031 (Publication Draft)* recognises that many of the heritage assets within the National Park are at risk from the effects of climate change: 'Sea level rise is likely to directly impact on sites and structures and archaeological deposits in the inter-tidal and coastal environment, including Scheduled Monuments and Listed Buildings, archaeological and palaeoenvironmental deposits; industrial structures (such as limekilns, fish weirs); military structures and sites; and features from Exmoor's 18th- and 19th-century estates. Where such sites are likely to be lost to sea-level rise, the National Park Authority will seek to ensure that they are preserved through record' (Exmoor National Park 2016c, 59).

SMPs provide a large-scale assessment of the risks associated with coastal change, and present a policy framework to assess these risks to people and to the developed, historic and natural environments. For the initial development of SMPs the shoreline of England and Wales was divided into 11 sediment cells based upon natural coastal processes. Each of these cells was further divided into sub-cells defined by coastal type and process in order to create management areas for the SMPs. The Exmoor coastline falls within the area covered by the draft Hartland Point to Anchor Head SMP (Halcrow Group 2010). This document represents a first revision to the original Bridgwater Bay to Bideford Bay SMP adopted in 1998, as well as the original Severn Estuary SMP adopted in 2000, the area covered being amended to include the area of Weston Bay that was considered to be under threat as a result of the potential breach of the dunes to the south of Brean Down (*ibid*, 1).

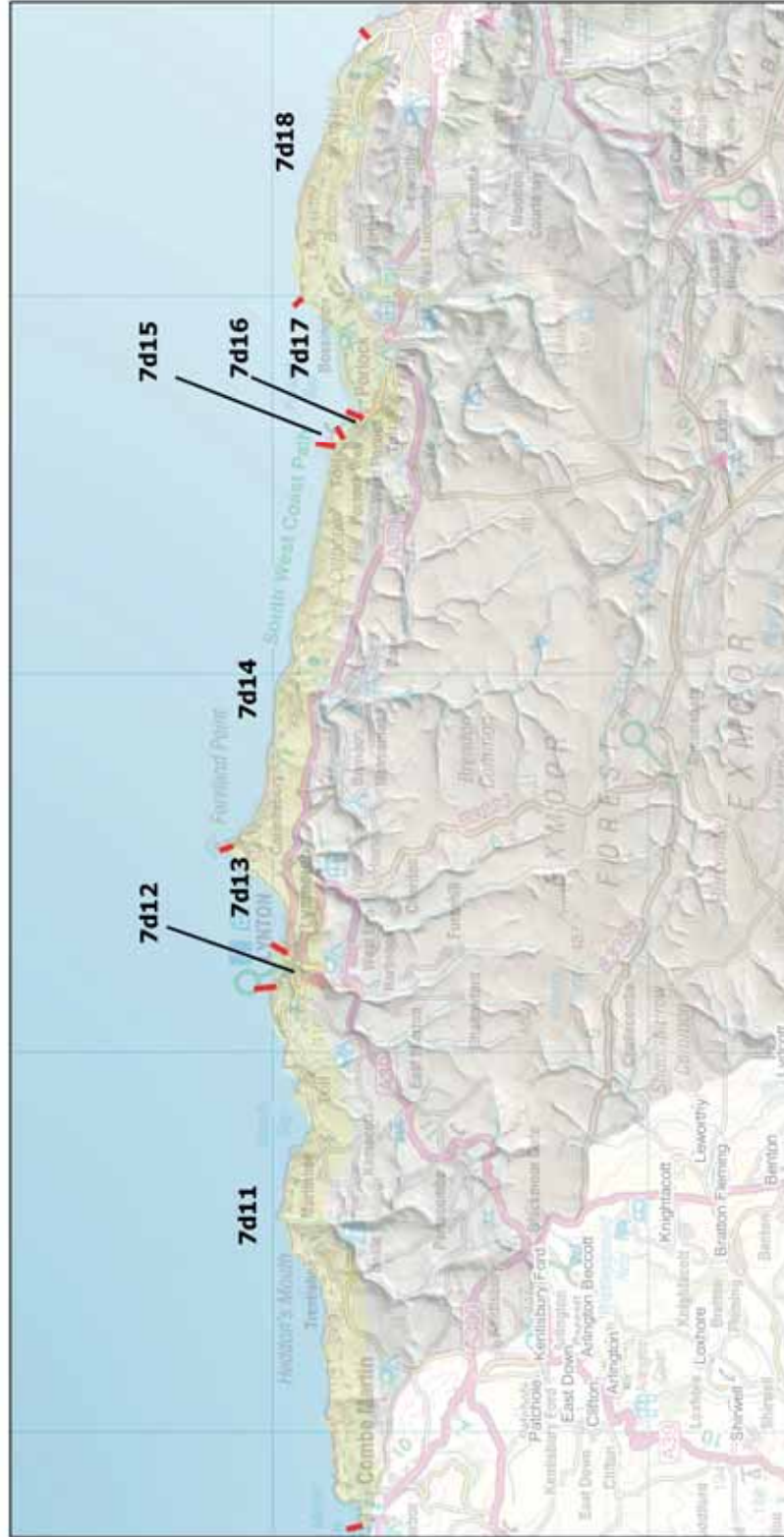
The draft Hartland Point to Anchor Head SMP encompasses coastal process sub-cells 7c, 7d and 7e which are further divided into 91 Policy Units, of which eight are relevant to the Exmoor National Park RCZAS. The location of Policy Units within the Exmoor RCZAS project area is shown on Figure 13. For ease of discussion, these have been separated into three main divisions within the project area which correspond with the policy statement extents outlined within the SMP and comprise the following areas: Combe Martin to Foreland Point (Policy Units 7d11-7d13); Foreland Point to Hurlstone Point (Policy Units 7d14-7d17); and Hurlstone Point to Minehead (7d18). The 100 year timeframe considered within the SMP is divided into 3 epochs: 0-20 years which relates to the 'short term'; 20-50 years which relates to the 'medium term'; and 50-100 years which is the 'long term.' All of the designated and non-designated heritage assets located within areas identified by the SMP as being at risk of either erosion or flooding within the 0-100 year period are discussed below. This information is also included on Figures 14-21.

The following discussion is based upon the results outlined within this SMP which considered the potential impacts of coastal policy on designated heritage assets, but here seeks to expand this discussion to include non-designated heritage assets that may be affected. This will allow a consideration of the impact that the policies outlined within the plan may have on all aspects of the historic environment along the Exmoor coastline.

The NCERM outputs data was acquired from the EA and used to create zones delineating the areas that are likely to be affected by both the Preferred Policy outlined within the SMP and a No Active Intervention policy. The 5%-ile data set was used to create the erosion zones for the project as this displayed the greatest erosion extent from which to assess the threat within the project area. All HER records within the project area were queried against this dataset and the level of threat from erosion (0-20 years, 20-50 years, 50-100 years) recorded within the relevant records.



Figure 13: Policy Units within Hartland Point to Anchor Head SMP (7d11 - 7d18)



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The four shoreline management policies considered within the plan are those defined by Defra (2006):

**Hold the existing defence line.** Maintain or change the level of protection provided by defences in their present location.

**Advance the existing defence line.** Build new defences on the seaward side of the existing defence line to reclaim land.

**Managed realignment.** Allow the shoreline position to move backwards (or forwards) with management to control or limit movement.

**No active intervention.** A decision not to invest in providing or maintaining defences.

The EA Flood map for Planning (Rivers and Sea) was also acquired from the EA and used to create zones (based upon EA Flood Zones 2 and 3) delineating the areas that are likely to be affected by flooding from rivers and the sea, disregarding current defences. The information is indicative of flood risk to areas of land rather than specific locations and is not detailed enough to provide information on specific properties. Flood Zone 3 relates to a flood from the sea that has a 1 in 200 or greater chance of happening each year as well as a flood from rivers that has a 1 in 100 or greater annual chance of occurring. Flood Zone 2 shows the additional extent of an extreme flood from rivers or the sea with a 1 in 1000 chance of occurring each year. The majority of England falls within Zone 1 in which there is a very low risk of flooding (less than 1 in 1000 chance of flooding each year). All HER records within the project area were queried against this dataset and where records fell within either Zones 2 or 3 the threat was recorded within the relevant records.

## **10.2 Policy Statement for Combe Martin to Foreland Point (units 7d11-7d13)**

The western edge of the project area at Combe Martin falls within the wider policy statement extent of Morte Point to Foreland Point (7d01-7d13). This is an area of largely undefended coastline and the long term plan for this area is to continue to allow it to evolve naturally in order to conserve the important landscape character of the area (Halcrow Group 2010). The hard cliffs and defence structures within this area may however, restrict the landward movement of the beaches as sea levels rise which would ultimately result in a loss of beaches (*ibid*, 127), although presumably landslips in susceptible areas could replenish them or create new beaches. There are a small number of localised defences within this area, such as Lee Bay, for which there may not be future funding for their maintenance, although the SMP identifies that if funding were to be found retention of these defences is unlikely to impact upon the wider coastal processes within this area (*ibid*). There is

also a need to protect key socio-economic assets within this area through a policy of Hold the Line, including at Lynmouth. The SMP identifies that the preferred policies may result in the loss of Scheduled Monuments, Listed Buildings and non-designated assets (*ibid*).

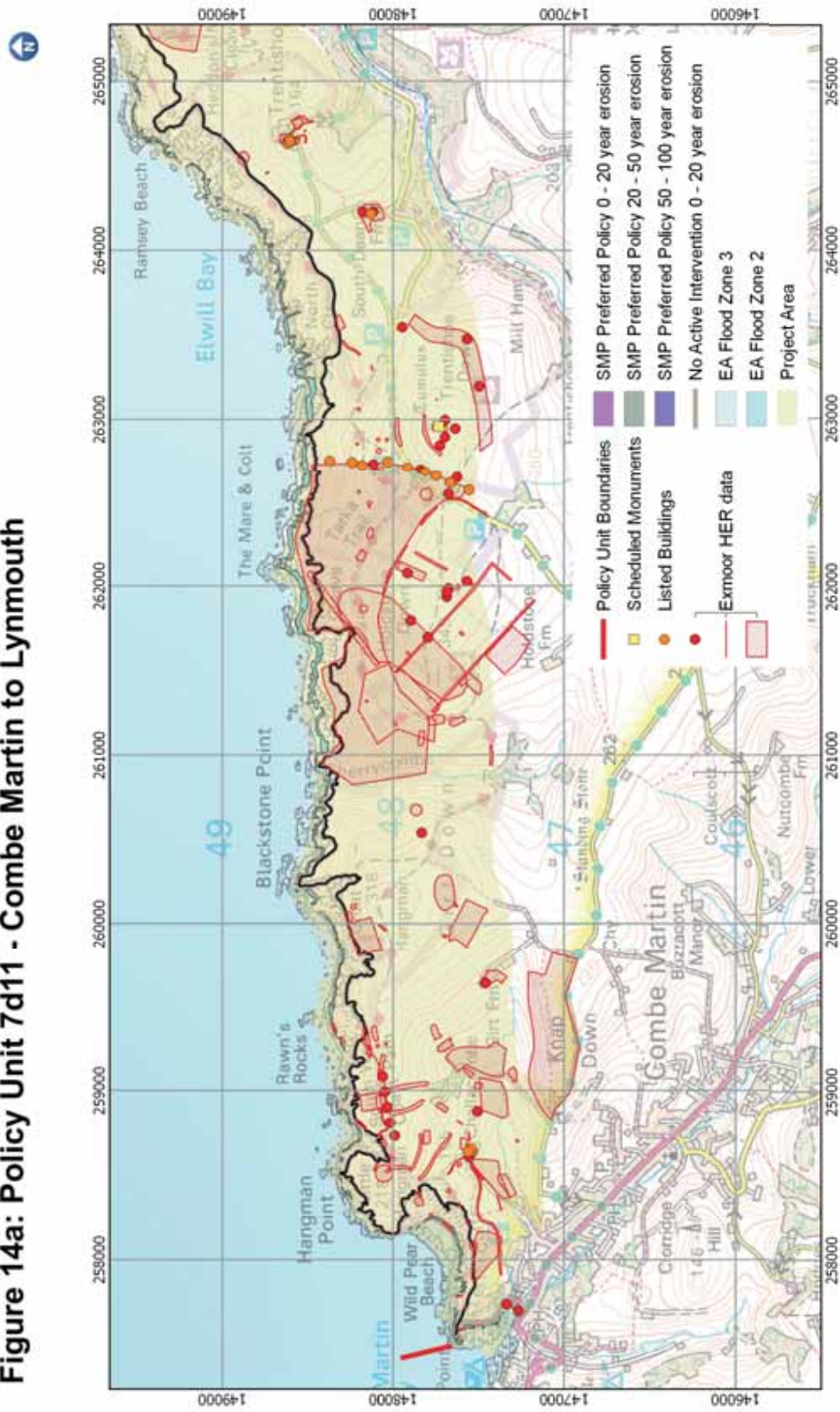
### **7d11 Combe Martin to Lynmouth (Figure 14)**

The short, medium and longer term preferred policy is to continue to allow existing localised defences to be maintained if funding is available in order to reduce the risk of flooding and erosion. If funding is not available then a policy of No Active Intervention is recommended (Halcrow Group 2010).

In those areas of No Active Intervention predicted coastal erosion within the next 0-20 year period is likely to impact upon a concentration of non-designated assets of local importance related to coastal mining activity between Combe Martin and Foreland Point. This includes a group of adits and shafts to the southwest of Little Hangman (MDE8288) as well as the site of a possible mine shaft at the foot of Lester Cliff (MDE8265). Adits of post-medieval date above Wild Pear Beach (MDE8266) and at the foot of The Rawns (MDE8290) may also be affected. Remains associated with mining activity above The Rawns (MDE8280 and MDE8281) and in the vicinity of Great Hangman (MDE8274), together with a series of post-medieval extractive pits to the northwest of Town Farm (MMO1759) may be affected by erosion within the short, medium and longer term. The EA zones of predicted flooding indicate that a number of assets associated with mining activity may also be affected by tidal flooding within the area between Combe Martin and Blackstone Point. Additional assets of local importance that are likely to be affected by erosion within the short term include remains associated with a lime kiln at Lee Bay (MDE1028) and a lime kiln and possible counting house above Wild Pear Beach (MDE8267). The lime kilns at Heddon's Mouth Cleave (MDE1026 and MEM22983) may also be affected by erosion within the short and medium terms, while a small group of assets of local importance to the west of Lee Abbey may be affected by fluvial flooding.

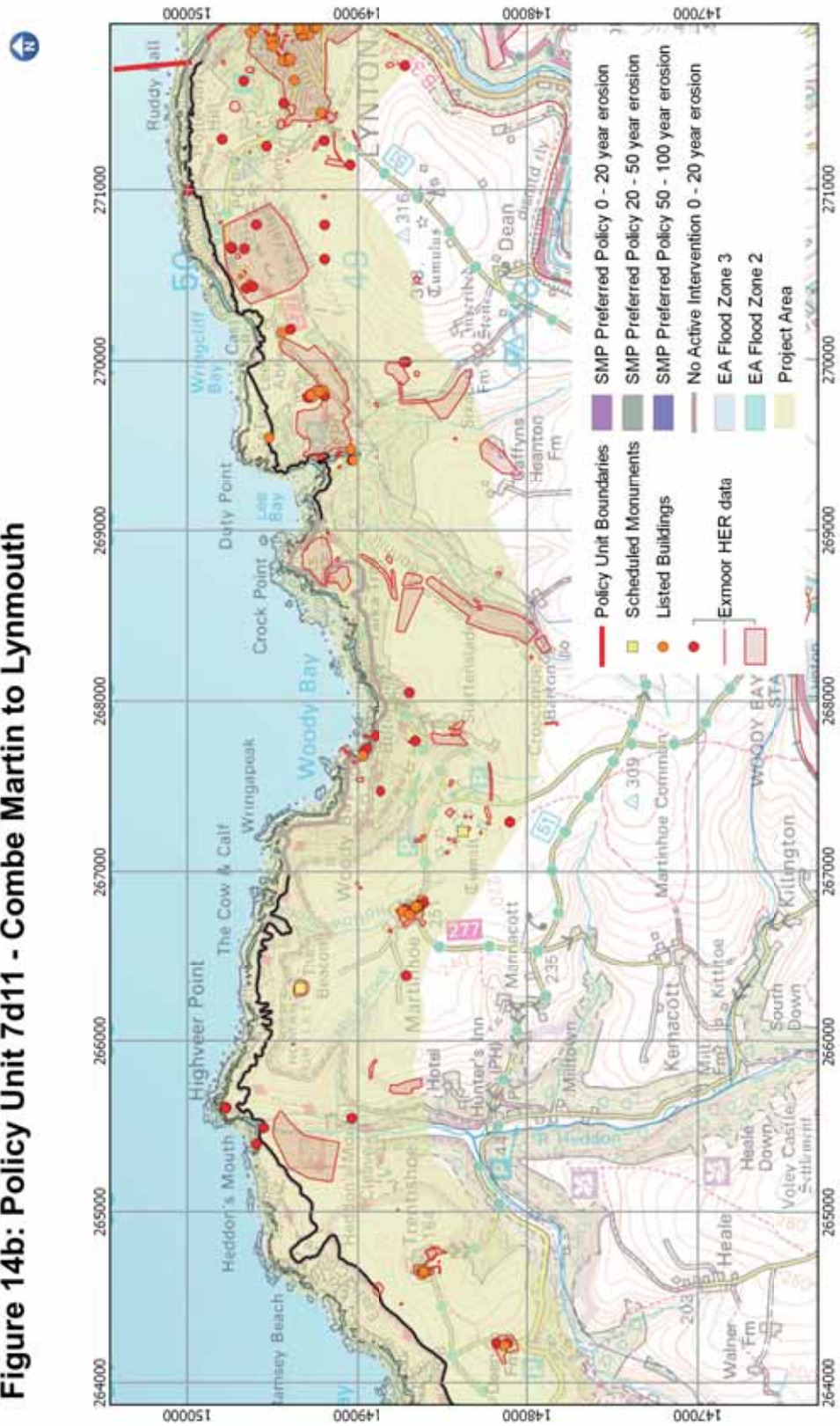
Remains of unknown significance associated with post-medieval agricultural activity within the area of Wild Pear Beach and Little Hangman may be affected by erosion in the short, medium and longer terms. Remains associated with a multi-period field system at Lee Abbey (MDE11247) may be affected by erosion within the medium term.

Figure 14a: Policy Unit 7d11 - Combe Martin to Lynmouth



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**Figure 14b: Policy Unit 7d11 - Combe Martin to Lynmouth**



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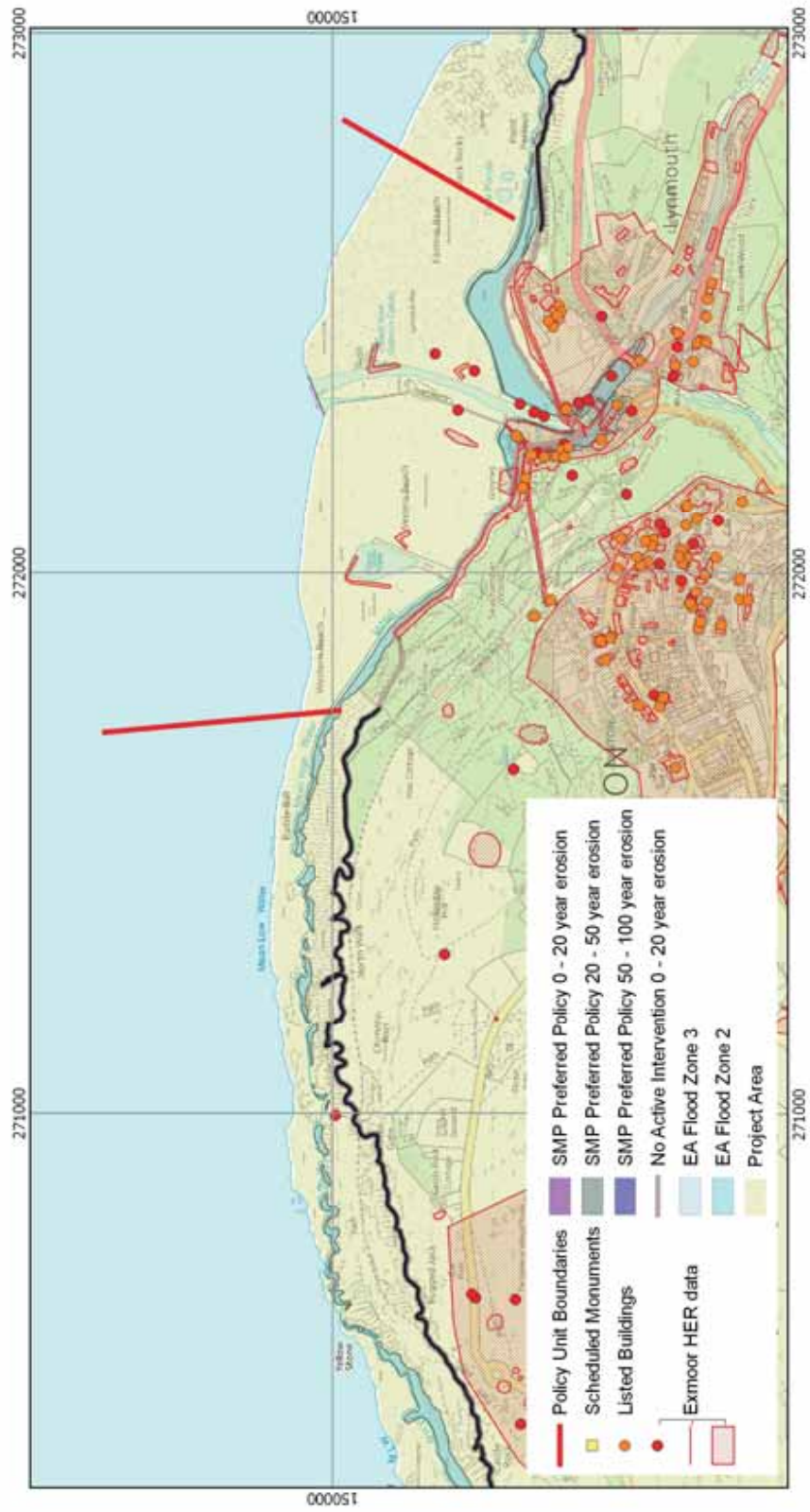


**Plate 21: View to the east showing the woodland setting of Duty Point Tower, with Wringcliff Bay beyond**  
(©Historic England Archive 2016, 29708\_015, D. Grady)

There is a concentration of assets within the intertidal area at Woody Bay Beach that may be affected by erosion and flooding resulting from a No Active Intervention Policy. This comprises a group of non-designated maritime assets, including the remains of a 19th-century pier (MDE11241) and the site of former mooring posts; and there is a Grade II Listed lime kiln (NHLE 1306651) at the back of the beach. Remains associated with clay workings at Crock Pits (MDE11210) on the eastern side of Woody Bay may be at risk of erosion within the short term.

Assets of regional importance that may be affected by erosion and flooding within the next 100 years includes the northern end of the Little Hangman PAL (PAL 37; Figure. 6) as well as the northern part of the Valley of Rocks PAL (PAL 5; Figure. 6). The Grade II Listed Duty Point Tower (Plate 21), to the north of Lee Abbey, is at threat from erosion within the medium and longer term (NHLE 1280231). The SMP document recommends that the likely impact of the preferred SMP policy on these assets should be investigated further at scheme or project level and, where the policy may result in their damage or loss, mitigation could include a programme of investigation and recording (Halcrow Group 2010, 43). It should, however, be noted that in the area of No Active Intervention there is currently no formal process for funding this mitigation as the threat is not directly caused by the effects of a development scheme.

Figure 15: Policy Unit 7d12 - Lynnmouth



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Plate 22: View to the west towards Lynmouth from Butter Hill (2016, ©F. Pink)

### **7d12 Lynmouth (Figure 15)**

The short, medium and longer term preferred policy is to Hold the Line at Lynmouth through the maintenance of existing seawall defences with a view to replacing these defences with larger structures in the medium term. This would allow the continued protection of the Conservation Area and Listed Buildings at Lynmouth from flooding in the short, medium and longer terms (Halcrow Group 2010).

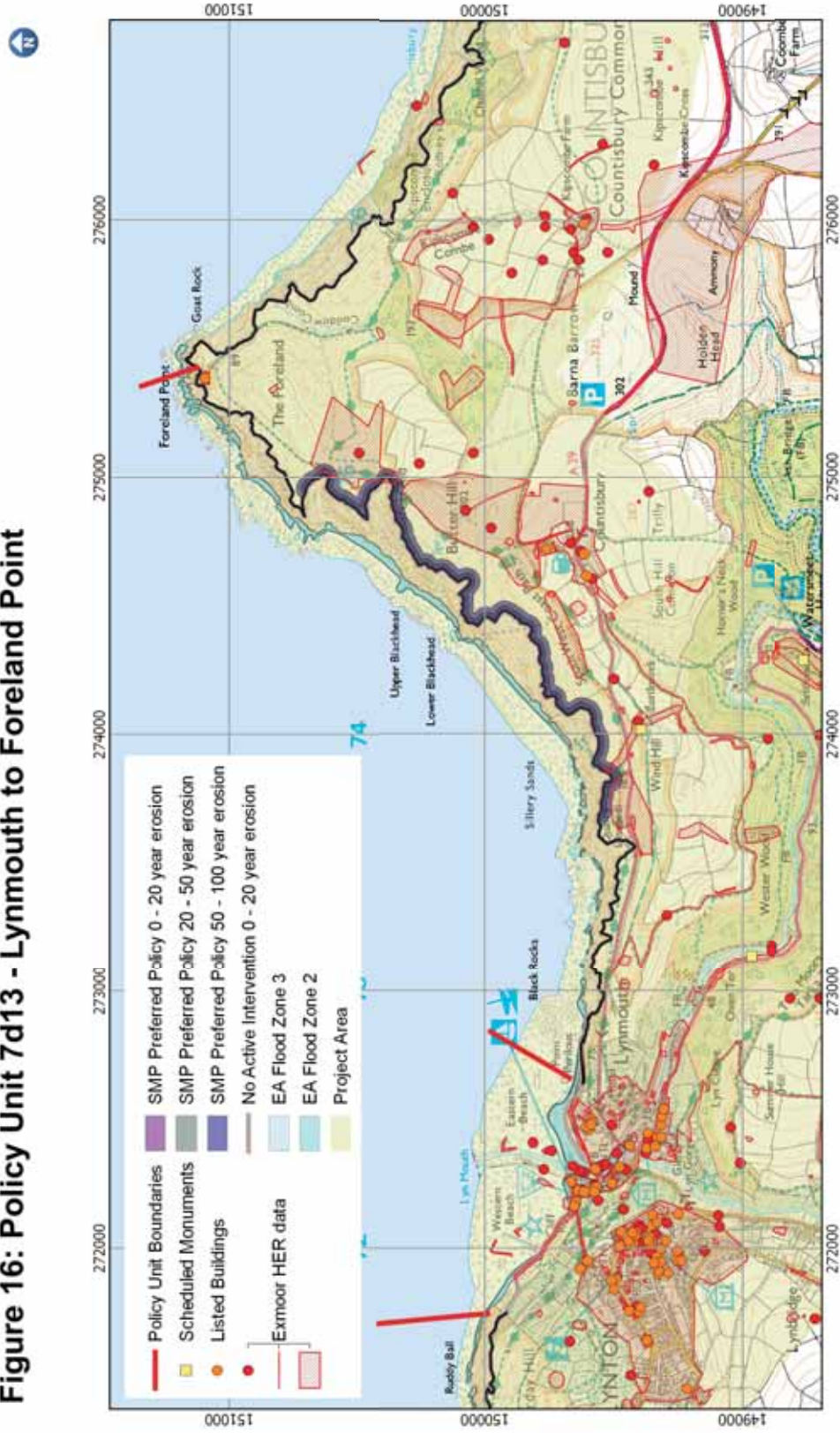
There is a concentration of assets within the intertidal area at Lynmouth that are likely to be affected by sea level rise. These include remains of national importance comprising the Grade-II Listed pier (NHLE 1201156) as well as assets of local importance associated with medieval or post-medieval fish weirs and oyster beds. The settlement of Lynmouth has origins in the medieval period and it is therefore possible that additional remains of medieval date may be exposed by erosion within this area. Where assets may be at risk as a result of Hold the Line policies, further studies will be necessary to identify the impacts upon these areas as part of the management of change (Halcrow Group 2010, 43).

### **7d13 Lynmouth to Foreland Point (Figure 16)**

The short, medium and longer term preferred policy is for No Active Intervention between Lynmouth and Foreland Point (Plate 22) in order to allow the natural



Figure 16: Policy Unit 7d13 - Lynmouth to Foreland Point



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evolution of the coast. The SMP identifies that this policy may result in the partial loss of the defences at Wind Hill (Scheduled Monument NHLE 1020807; Halcrow Group 2010).

In those areas of No Active Intervention predicted coastal erosion is likely to impact upon the remains of non-designated assets including an area of medieval lynchets and post-medieval banks on The Foreland (MDE8691) which are likely to be affected within the short, medium and longer terms. Remains associated with a medieval or post-medieval field system on the north-facing slopes of Wind Hill, which fall within the Countisbury and Lyn Gorge PAL, are likely to be affected by erosion within the medium and longer terms. A small section at the northern end of the field system on Butter Hill (MDE8687) is at risk of erosion within the longer term. The SMP document recommends that the likely impact of the preferred SMP policy on these assets should be investigated further at scheme or project level and, where the policy may result in their damage or loss, mitigation could include archaeological recording of the more significant assets (Halcrow Group 2010, 43). It should, however, be noted that in those areas of No Active Intervention there is currently no formal process of funding for this mitigation.

### **10.3 Policy Statement for Foreland Point to Hurlstone Point (units 7d14-7d17)**

The stretch of coastline between Foreland Point and Gore Point is characterised by high rocky cliffs with no defences. This coastline is recognised for its landscape and environmental value: the long term plan is to allow the natural retreat of the coast in order to maintain these features (Halcrow Group 2010, 147). Immediately to the east of Gore Point there is a break in the cliff line at Porlock Bay, with the low-lying landscape of Porlock Vale to the south. The risk within Porlock Bay is from fluvial as opposed to tidal flooding and it is considered that historic environment features at Bossington are potentially at risk. The settlement at Porlock Weir is currently defended by a range of structures which reduce the risk of flooding and erosion to the settlement and harbour, but there is unlikely to be future funding for their maintenance, especially if it is shown that the defences impact on the movement of sediment to other parts of Porlock Bay (*ibid*). It is considered that the policy will allow the protection of the Conservation Areas at Porlock and Bossington from flooding in the short term, but the Conservation Area at Bossington is considered to be at risk of flooding in the medium term as a result of the lack of secondary defences. Both Conservation Areas are at risk from flooding within the longer term.

**7d14 Foreland Point to Gore Point (Figure 17)**

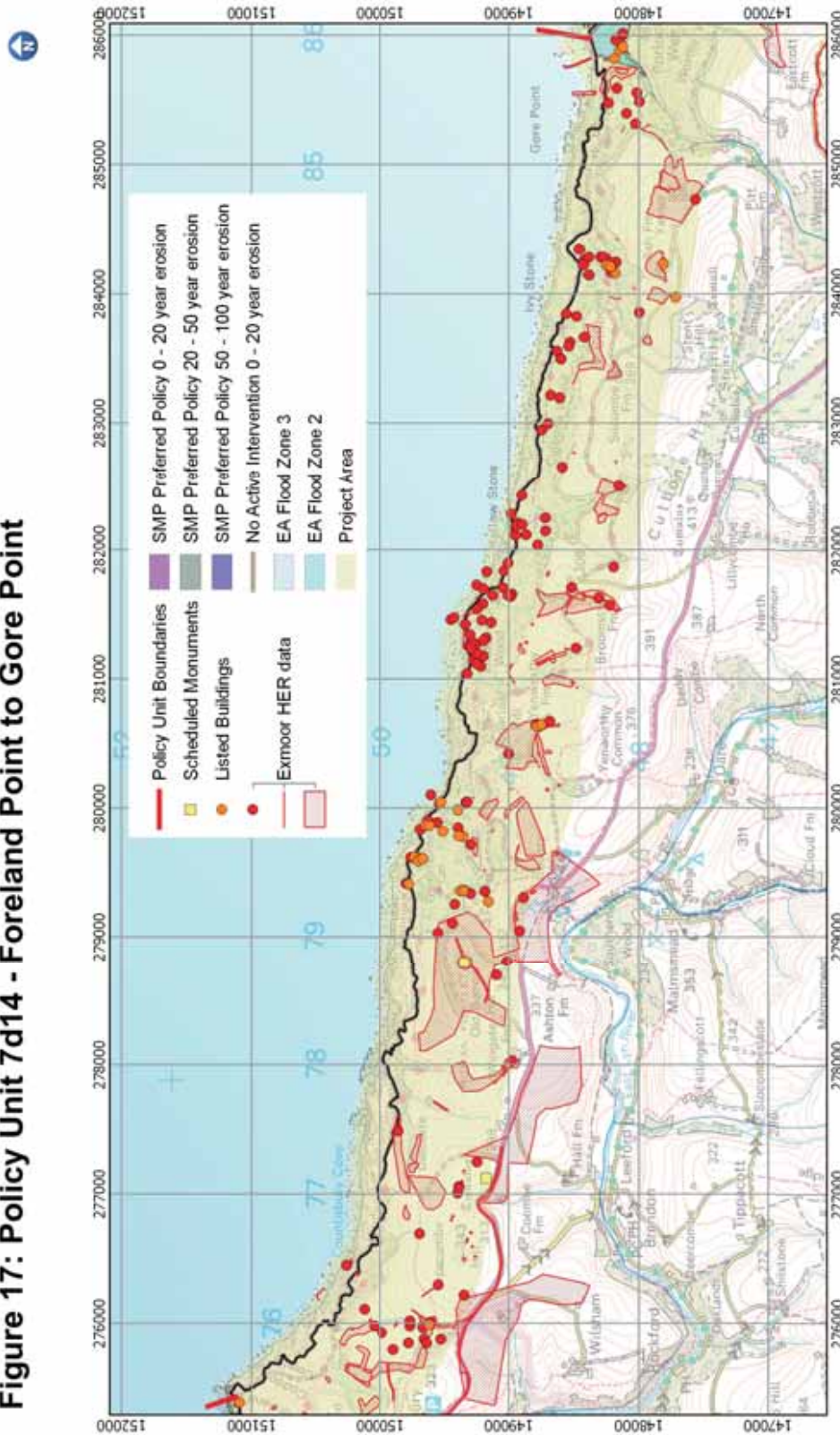
The short, medium and longer term preferred policy is to allow the continued natural evolution of the coast between Foreland Point and Gore Point through a policy of No Active Intervention (Halcrow Group 2010).

Maritime assets of local importance that are situated within the intertidal areas are likely to be at risk of erosion. This includes remains associated with a post-medieval fish weir near Countisbury Cove (MDE8693) as well as remains associated with groynes and mooring posts on Glenthorne Beach. There are also a number of lime kilns of local importance along this coastline that are likely to be affected by erosion at locations including Countisbury Cove, Embelle Wood Beach and Worthy. The Grade-II Listed lime kilns above Glenthorne Beach (NHLE 1173368), which are of national significance, are also likely to be affected by erosion.

A small concentration of assets in the vicinity of Glenthorne may be affected by coastal erosion within the next 100 years and include the Grade-II Listed stone gateway at Glenthorne (NHLE 1289230), as well as an area of field banks that may be associated with an area of former medieval settlement at Desolate (MMO1790). There are also a small number of non-designated assets of local importance that are located immediately to the south of Embelle Wood Beach that may be affected by coastal erosion. These include the site of possible mineral prospection pits, charcoal-burning platforms and stone structures within Embelle Wood. The remains of a possible wood-processing site in Culbone Wood (MEM15604) may also be affected by erosion in the short term.

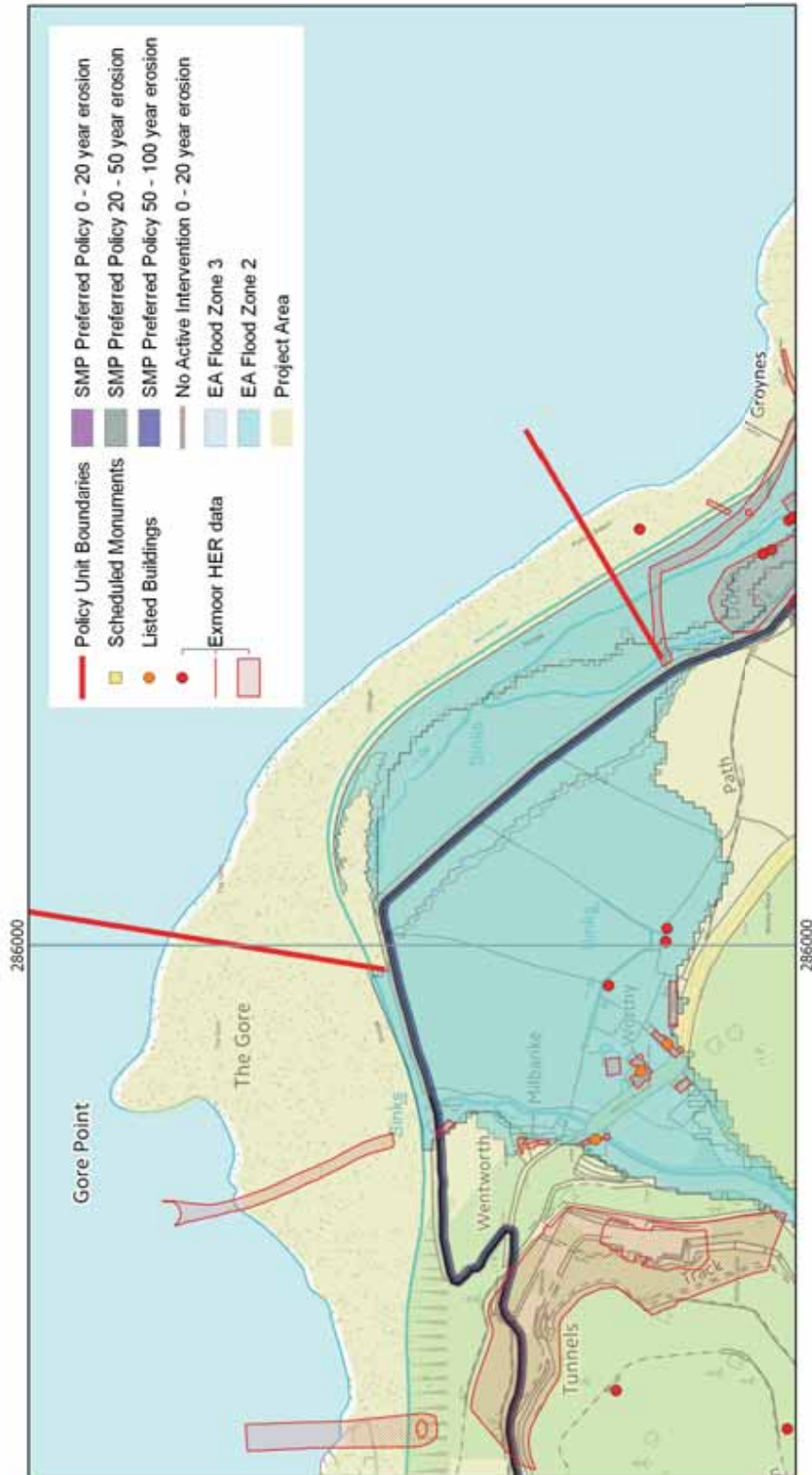
A substantial strip along the northern edge of the Ashley Combe and Culbone PAL lies within an area of predicted erosion within the next 0-20 years, and includes the northern extent of the landscape gardens at Ashley Combe (MSO7973). To the northeast of this are a group of maritime assets of local significance which are located within the intertidal area at The Gore and are likely to be affected by erosion within the next 0-20 years. These include two post-medieval hards/slipways as well as the remains of a 19th- or early 20th-century boathouse. The EA flood zones indicate that a group of assets at Worthy are in an area that may also be at risk of flooding. The SMP document recommends that the likely impact of the preferred SMP policy on these assets should be investigated further at scheme or project level and, where the policy may result in their damage or loss, mitigation could include

Figure 17: Policy Unit 7d14 - Foreland Point to Gore Point



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Figure 18: Policy Unit 7d15 - Gore Point to Porlock Weir



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archaeological recording of the more significant assets (Halcrow Group 2010, 43). It should, however, be noted that in those areas of No Active Intervention there is currently no formal process of funding for this mitigation.

### **7d15 Gore Point to Porlock Weir (Figure 18)**

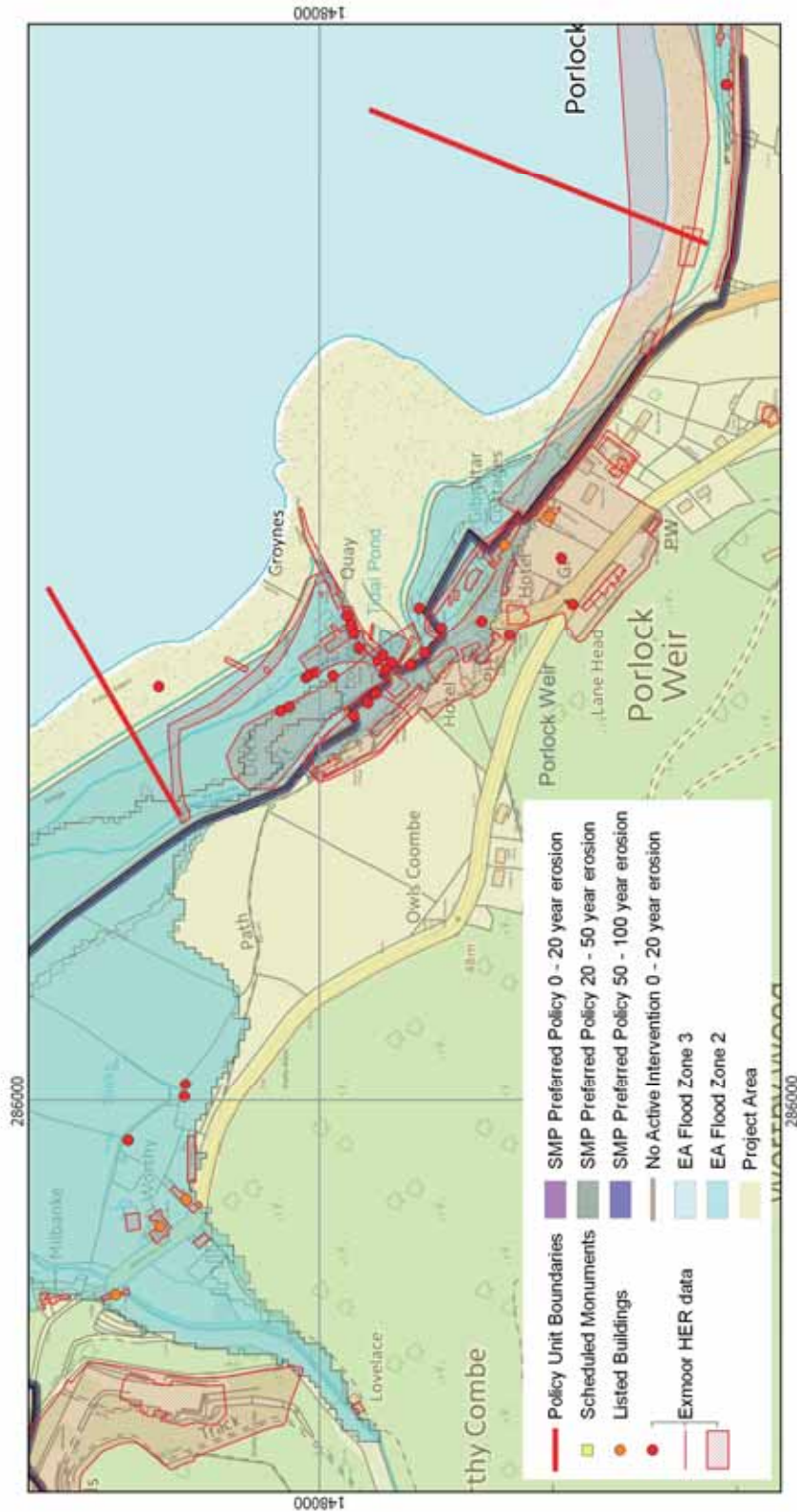
The short, medium and longer term preferred policy is to allow the continued natural evolution of the coast through a policy of No Active Intervention (Halcrow Group 2010). With a No Active Intervention policy at Porlock Weir assets within the northern tip of the Porlock Weir Conservation Area are at risk of flooding and erosion. Assets within the intertidal area could also be affected by erosion and flooding within the short term and include any surviving remains associated with the site of the former WWII barbed wire obstructions (MMO1366) and dock (MSO7927). The SMP document recommends that the likely impact of the preferred SMP policy on these assets should be investigated further at scheme or project level and, where the policy may result in their damage or loss, mitigation could include archaeological recording of the more significant assets (Halcrow Group 2010, 43). It should, however, be noted that in those areas of No Active Intervention there is currently no formal process of funding for this mitigation.

### **7d16 Porlock Weir (Figure 19)**

The short, medium and longer term preferred policy is to continue to maintain existing localised defences if funding is available in order to reduce the risk of flooding and erosion. If funding is not available then a policy of No Active Intervention is recommended (Halcrow Group 2010).

A No Active Intervention policy at Porlock Weir would affect the northern tip of the Porlock Weir Conservation Area and, within the longer term the Grade II Listed Building at 1-5 Gibraltar Cottages (NHLE 1252283; Plate 23) may be at risk of erosion and flooding. Assets associated with WWII defence may also be affected by erosion and flooding and include the site of the former barbed wire obstructions and three pillboxes (Plate 24). Maritime assets of local significance comprising any surviving remains associated with the site of a possible hulk assemblage (MEM23326) as well as remains associated with a dock and former groynes may also be at risk of erosion and flooding. Remains associated with the site of structures present c.1840 but since demolished may be exposed by erosion within this area and include the site of former lime kilns (MEM23533) and the site of a former brick and tile works

Figure 19: Policy Unit 7d16 - Porlock Weir



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Plate 23: View to the southwest showing Gibraltar Cottages, Porlock Weir  
(©ENPA 2012, N. Pratt)



Plate 24: View to the southeast towards Porlock Marsh, showing the pillbox and groynes at Porlock Weir  
(2016, ©F. Pink)



(MSO7935). The SMP document recommends that the likely impact of the preferred SMP policy on these assets should be investigated further at scheme or project level and, where the policy may result in their damage or loss, mitigation could include archaeological recording of the more significant assets (Halcrow Group 2010, 43). It should, however, be noted that in those areas of No Active Intervention there is currently no formal process of funding for this mitigation.

### ***7d17 Porlock Weir to Hurlstone Point (Figure 20)***

The short, medium and longer term preferred policy is to allow the continued natural evolution of the coast between Porlock Weir and Hurlstone Point (Plate 25) through a policy of No Active Intervention (Halcrow Group 2010).

The northern part of the Porlock Beach/Marsh PAL is at risk of erosion within the short, medium and longer terms placing assets of regional and national significance associated with organic peat deposits and the submerged forest (MSO7880) at threat. Previous investigations of the organic deposits at Porlock Bay has shown the potential for these deposits to continue both offshore and within the area of Porlock Marsh. Sediment movement within Porlock Bay, together with the continued landward migration of the shingle barrier, has the potential to further expose and erode these deposits. This may result in the exposure of additional flints or artefacts of early prehistoric date associated with both head deposits and the submerged forest in Porlock Bay.

Intertidal remains of local importance including the site of possible fish traps, post-alignments, and remains associated with unknown wooden structures are also at risk of erosion. Assets of local and regional importance that are at risk of erosion and tidal flooding include a group of lime kilns on Bossington Beach (Plate 26); an area of ridge and furrow immediately to the south of the beach (MMO1452); and the site of a large coastal duck decoy (MSO7887) on Porlock Marsh. There is also a concentration of assets related to WWII defence along Porlock Beach that may be affected by erosion. Assets of local importance relating to groynes and sluices associated with the former coastal management of Porlock Bay are likely to be affected by erosion within the next 0-20 years. In addition to the natural threats posed by erosion and flooding, some of the assets within the intertidal areas of Porlock Bay may also be at risk of erosion and damage by human activity. This has

Figure 20: Policy Unit 7d17 - Porlock Weir to Hurlstone Point



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Plate 25: View to the northeast towards Hurlstone Point from Porlock Beach  
(2016, ©F. Pink)



Plate 26: View to the southwest showing the remains of pillboxes and lime kilns at Bossington Beach  
(2016, ©F. Pink)

included past activity associated with mussel farming and coastal management in Porlock Bay, as well as more recent activity associated with the re-introduction of oyster and mussel beds in the Bay in 2014. The SMP document recommends that the likely impact of the preferred SMP policy on these assets should be investigated further at scheme or project level and, where the policy may result in their damage or loss, mitigation could include archaeological recording of the more significant assets (Halcrow Group 2010, 43). It should, however, be noted that in those areas of No Active Intervention there is currently no formal process of funding for this mitigation.

The EA flood zones also indicate that a group of both designated and non-designated assets at Porlock, Horner, Bossington and Allerford are situated in an area that may be at risk of fluvial flooding. The National Trust is undertaking works to reduce the flow of water down the valley to try to address this (National Trust 2015b).

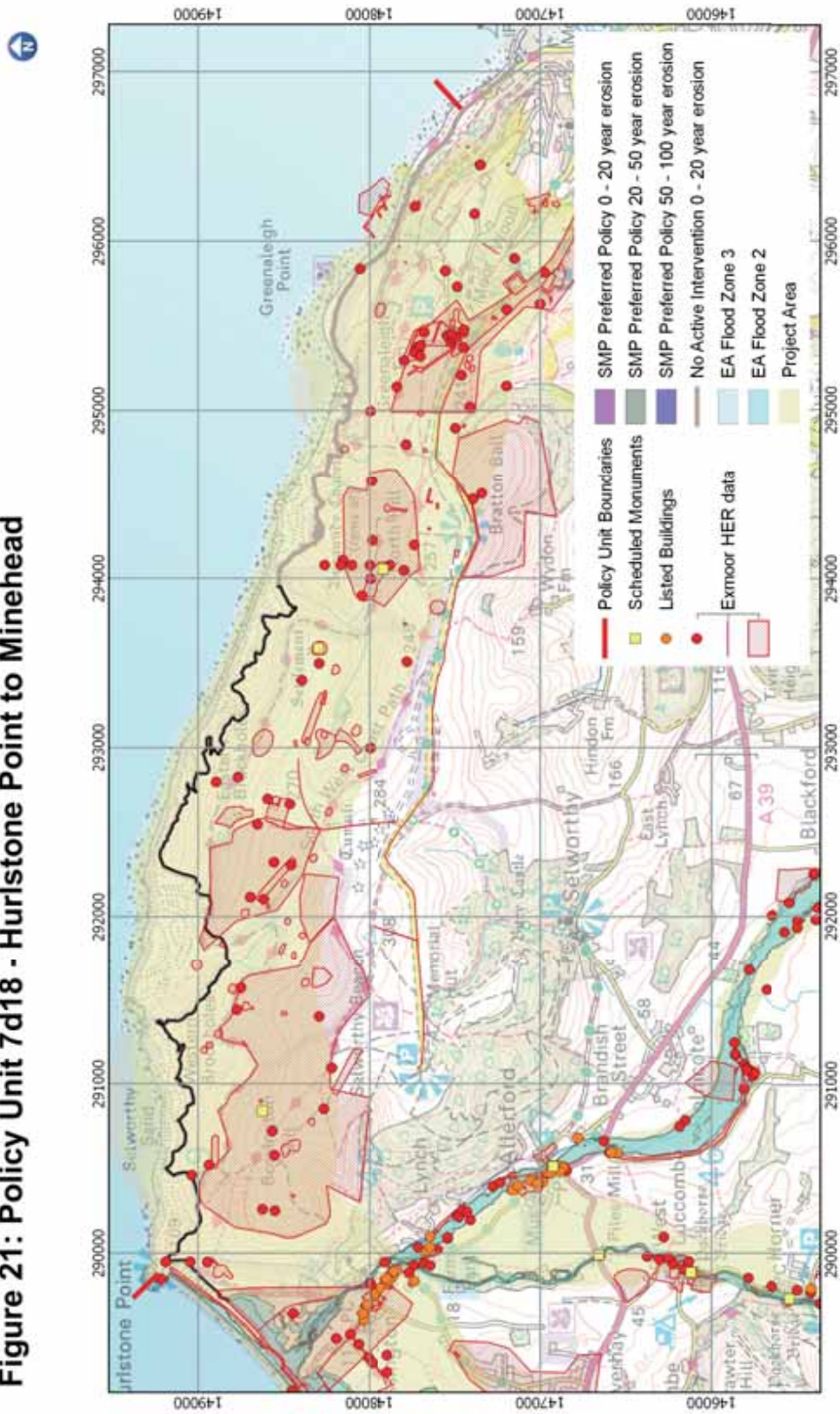
#### **10.4 Policy Statement for Hurlstone Point to Minehead (west)**

##### **(unit 7d18; Figure 21)**

This is an area of undefended slowly eroding cliffs and the long term plan is therefore to allow this coastline to naturally evolve. The SMP also considers that erosion will benefit the geological designations along the coast (Halcrow Group 2010, 156).

The preferred policy for Hurlstone Point to Minehead (west) is No Active Intervention within the short, medium and longer term. The SMP identifies that this may result in a risk of flooding even within the short term to the Minehead Conservation Area that lies to the east of the RCZAS project area. However, non-designated assets of local and regional importance including the northern tip of the PAL at North Hill may also be affected by erosion as a result of a No Active Intervention policy. Maritime assets associated with fish weirs of local importance within the intertidal area at Culver Cliff Sand may also be at risk of erosion. Any surviving remains associated with the coastguard station on Hurlstone Point (MSO8110) together with stone quarries at Western Brockholes and evidence of a medieval or post- medieval field system at Western Brockholes (MSO12579) may also be at risk from erosion within the short term. In this area the coastal route

Figure 21: Policy Unit 7d18 - Hurlstone Point to Minehead



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to Burgundy Chapel has been affected in the recent past and may continue to be affected. The SMP document recommends that the likely impact of the preferred SMP policy on these non-designated assets should be investigated further at scheme or project level (Halcrow Group 2010, 43). It should, however, be noted that in areas of No Active Intervention there is currently no formal process of funding for such mitigation.

## **10.5 Mitigation**

*The Exmoor National Park Local Plan 2011-2031* (Publication Draft) recognises that where changes to the management of coastal policy units has been recommended within the SMP, the risk of flooding and erosion will increase. This is particularly the case at Porlock Weir where the SMP recommends a change from a 'Hold the Line' approach to that of 'No Active Intervention' policy. In response to the threat of coastal change posed by a 'No Active Intervention' approach at Porlock Weir a Coastal Change Management Area (CCMA) has been designated at Porlock Weir. CCMA's are identified within local plans as areas that are likely to be affected by coastal change, and are only defined where the rates of a shoreline change are significant over the next 100 year period (Department for Communities and Local Government 2014). The Porlock Weir CCMA provides a strategy for development within Porlock Weir, and is set out within strategic policy 'CC-S3 Porlock Weir Coastal Change Management Area' of the Local Plan (ENPA 2016c, 91).

The CITiZAN project is also addressing the threat posed to the archaeology of coastal areas in England by raising awareness of the important and exposed archaeological sites that are at risk of erosion. The project promotes community-based training to allow volunteers to monitor and record those archaeological sites that are considered to be most at threat. The ENPA and CITiZAN Southwest office held a training event for volunteers in late September/early October 2016 that targeted exposed remains associated with the submerged forest at Porlock Bay (Plate 27). However, CITiZAN presently only has funding up to the end of 2017.



Plate 27: Recording tree stump exposed within Porlock Bay with volunteer and CITiZAN Project  
(©ENPA 2016, S.J. Blaylock)

# 11 RECOMMENDATIONS AND PROPOSED FURTHER WORK

## 11.1 Overview of Research Priorities and Themes

The following discussion provides an overview of research priorities and themes that have developed as a result of research associated with the Exmoor RCZAS DBA. These are set out by theme with reference to local research priorities within the *Historic Environment Research Framework for Exmoor 2017-21*; regional research aims from SWARF (Webster 2008); and national research themes from *People and the Sea: A Maritime Archaeological Research Agenda for England* (Ransley *et al.* 2013).

### **Coastal Change**

Areas that are threatened by sea level rise, coastal erosion and climate change have been identified as a priority for research within the ENPA *Historic Environment Research Framework for Exmoor 2017-21* (ENPA Research Priority 2). Opportunities should also be undertaken to understand the scale and nature of sea level change within the region (SWARF Research Aim 23a) and this report contributes to achieving these aims. Previous palaeoenvironmental work undertaken within Porlock Bay has highlighted the high potential for the survival of Holocene deposits within the intertidal areas, offshore areas and within Porlock Marsh. Consideration therefore needs to be given to whether further work, in particular the application of new methodologies and the investigation of additional areas (Westley and Bailey 2013, 14), may provide new information relating to this dynamic environment. Improving understanding of the changing palaeoshoreline is considered to be a key research question relating to Neolithic and Early Bronze Age activity (Sturt and Van de Noort 2013, 53).

Further work within the offshore areas of Porlock Bay could help to improve understanding of the landscapes occupied by Upper Palaeolithic and Mesolithic communities that have since become submerged (SWARF Research Aim 23c). Research into offshore areas may also improve the integration of offshore and onshore records and provide information to enhance landscape reconstructions for the region (Dix and Sturt 2013, 8). This could also help to address regional biases such as those relating to the paucity of archaeology dating to the Lower and Middle Palaeolithic (SWARF Research Aim 3b).



Future work within the Vale of Porlock could also address the current gap in knowledge relating to Neolithic and Bronze Age archaeology by targeting areas such as coastal plains that are currently under-represented within the Southwest region (SWARF Research Aim 3b). Further work should also target the areas of submerged forests and peat bed resources within Porlock Bay which, although they are non-designated assets, are of high significance and are at increased threat from coastal change (SWARF Research Aim 23d). Systematic investigation of the submerged resource throughout the project area would allow an assessment of the potential for survival of deposits associated with submerged forests to exist within other parts of the project area (Westley and Bailey 2013, 14). Investigation of these areas may offer opportunities for the controlled excavation of stratified Palaeolithic and Mesolithic sites (SWARF Research Aim 1c).

### ***Prehistoric Landscapes***

Exmoor's prehistoric landscapes have received little attention in the past and are identified as a research priority within the ENPA *Historic Environment Research Framework for Exmoor 2017-21* (ENPA Research Priority 3). Many of the monuments within the project area are assigned broad date ranges within the prehistoric period indicating the lack of precise chronologies, and future research should therefore seek to improve site-specific chronologies. In particular the origin and evolution of Iron Age enclosures and their landscape context is a research priority for the Exmoor landscape (ENPA Research Priority 7ii). Coastal hillforts and promontory forts are also recognised nationally as an understudied resource (Hill and Willis 2013, 79). Future research relating to relict prehistoric landscapes should comprise selective excavation and palaeoenvironmental sampling in order to focus on the form and function of the monuments as well as providing dating evidence (ENPA Research Priority 3). Where scientific dating has shown that monument forms are not comparable with other parts of the Southwest region further analysis is needed to explore the differences and to aid understanding (ENPA Research Priority 1).

Future work should also investigate the landscape surrounding Neolithic sites (SWARF Research Aim 28a). In particular there is potential for further work relating to the potential Tor enclosure as well as the landscape surrounding Little Hangman in order to establish its character and chronology (SWARF Research Aim 54f). More accurate dating of monuments would also help to determine whether any of the burial mounds/cairns date to the Neolithic period (SWARF Research Aim 54h).

The project area also holds potential for work associated with prehistoric landscapes of Neolithic and Bronze Age date, in particular to target areas such as river valleys that are currently under-represented within the Southwest region (SWARF Research Aim 3b). These environments should also be considered for their potential to hold evidence of Palaeolithic and Mesolithic activity (SWARF Research Aim 25a).

### ***Settlements and Field Systems***

The origins and development of settlements on Exmoor has been identified as a key research priority within the ENPA *Historic Environment Research Framework for Exmoor 2017-21* (ENPA Research Priority 7). Future work should explore the development of these settlements and the regional and local variations that help to define them (SWARF Research Aim 4f). In the context of prehistoric settlements, research should seek to confirm dating of settlement evidence in order to understand when field systems and traditions of roundhouse settlements developed on Exmoor (SWARF Research Aim 10c).

The origin of villages and their associated field systems is an area of work that requires more research, in particular through targeting appropriate areas for fieldwork (SWARF Research Aim 33). The landscape surrounding the medieval village at Countisbury holds evidence of contemporary field systems and would benefit from future research. In addition, there are a large number of field systems of unconfirmed date throughout the RCZAS project area that would benefit from further work. The ENPA *Historic Environment Research Framework for Exmoor 2017-21* identifies the need for future research to prioritise evidence relating to medieval field systems and areas of reclamation (ENPA Research Priority 9). The landscape of Porlock Marsh may also hold potential for research relating to this theme.

### ***Exploitation of Resources***

Evidence relating to the Combe Martin silver mines has been identified as a priority for further research so that they can be considered in conjunction with their historical documentation (SWARF Research Aim 3n; SWARF Research Aim 47b). A number of assets associated with the mining industry within the landscape surrounding Combe Martin have been identified as at risk of coastal erosion, and evidence from aerial photographic analysis has shown that some sites have already been lost due to erosion within these areas. There is therefore an opportunity for additional research and recording to be carried out at these sites prior to their

further damage, which would contribute to an understanding of technological change within the Exmoor landscape (SWARF Research Aim 38b). Research at these sites would also help to increase knowledge of post-medieval mining, processing and manufacture of materials as well as the quarrying, processing and transportation of aggregate within the period 1550-1750 (SWARF Research Aim 45a).

The ENPA *Historic Environment Research Framework for Exmoor 2017-21* also identifies the need for future research to investigate the exploitation of marine resources and woodlands within the project area, as well as industry-specific research relating to the lime industry, harbours, woodland industry, and the iron industry (ENPA Research Priority 8). In particular, future research should concentrate on the development of the medieval economy through a study of industry and the development of market towns and ports (SWARF Research Aim 47a). Future research could also explore the interaction between the coastal industries (Dellino-Musgrave and Ransley 2013, 170) as well as considering the impact that the development of recreation and tourism had on areas that were formerly defined by maritime industries (Parham and Maddocks 2013, 187). This evidence could also be used to explore the importance of ports, harbours, coast and maritime archaeology and how it relates to their role in social and economic change (SWARF Research Aim 47c; Carver and Loveluck 2013, 113). The Exmoor coastline also has potential for research associated with coastal settlement zones and the relationship between maritime communities situated on either side of a body of water, in particular the maritime connections between Exmoor, Wales and Bristol (Carver and Loveluck 2013, 113) as well as research associated with the identities of coastal communities (*ibid*, 137).

### ***Military Sites***

The use of the Exmoor landscape by the military is a research priority identified within the ENPA *Historic Environment Research Framework for Exmoor 2017-21* due to the presence of extensive military remains within the landscape (ENPA Research Priority 15). Important archaeological features relating to WWII training and defence have been identified at various locations within the project area, in particular at Bossington and North Hill.

The landscape and coastal context of Roman forts has also been identified as a key research area in relation to maritime networks (Walsh 2013, 109).

### ***Designed landscapes***

The ENPA *Historic Environment Research Framework for Exmoor 2017-21* identifies designed landscapes on Exmoor as a research priority. In particular, three designed landscapes fall within the project area: Ashley Combe, Lee Abbey and Glenthorne. Future work is needed to characterise the estates through a combination of historical research and fieldwork in order to inform future management decisions (ENPA Research Priority 12).

### **11.2 Identification of Specific Sites and Areas that would benefit from Further Work**

All of the sites identified as areas of greatest significance and potential within Section 8 above, as well as those identified as being at threat of erosion as a result of policies outlined within the draft Hartland Point to Anchor Head SMP within Section 10 above, should be considered as priorities for further work. The following themes are also recommended for future work, although it should be noted that some of the following recommendations may lie beyond the scope of the RCZAS Phase 2 fieldwork.

### ***Scheduled Monuments***

Part of the earthwork defences of Countisbury Castle or Wind Hill (NHLE 1020807) are at risk of coastal erosion within the short term, while the packhorse bridges at West Luccombe (NHLE 1006227) and Allerford (NHLE 1020776) are at risk of fluvial flooding. Both of these sites are on the HE Heritage at Risk register: the principal recorded vulnerability at Countisbury Castle is from plant growth, while Allerford packhorse bridge is deteriorating and in need of management. Targeted phases of excavation and/or recording on these sites should therefore be a priority.

There is also potential for research and fieldwork to be carried out on a smaller number of Scheduled Monuments within the project area that are not currently at direct risk of coastal erosion, but which are likely to hold archaeological deposits of significance that have not been previously subject to detailed investigations. These comprise the prehistoric enclosures at Myrtleberry North Camp (NHLE 1020805) and Furzebury Brake (NHLE 1008809), and the deserted medieval farmstead west of Bramble Combe (NHLE 1006126). In addition, the Scheduled Monument at Martinhoe Beacon (NHLE 1003882) does not fall within the area of predicted erosion or flooding, although the monument has suffered from erosion in

the past. It is therefore recommended that regular monitoring is carried out to better understand the impact that changes to the coastline are having on assets within clifftop locations throughout the project area. All of the Scheduled Monuments that are recommended for further work are detailed within Appendix 5.

### ***Listed Buildings***

There are four Grade-II Listed Buildings at threat of erosion within the project area as identified within the draft Hartland Point to Anchor Head SMP. All four of these buildings are recommended for targeted phases of recording due to their threat from coastal erosion within the next 0-20 years and are detailed within Appendix 5.

The two Grade II\* Listed Packhorse Bridges that are at risk of fluvial flooding are also designated as Scheduled Monuments (NHLE 1174852 and NHLE 1058014). There is a single Grade I, two Grade II\* and 23 Grade II Listed Buildings that are situated within areas that are at risk of fluvial flooding within the areas of Porlock, Allerford, Bossington and West Lynch (see Appendix 5). Work is being undertaken by the National Trust to reduce the flow of water across the Holnicote catchments to try to address the threat of flooding to these areas (National Trust 2015b). The results of this work will therefore inform the level of further work required on designated assets within these areas in the future. It is considered that a programme of recording may be appropriate for those Listed Buildings at greatest risk that have not been covered by detailed National Trust surveys.

### ***Areas at Greatest Risk***

An analysis of the extent of predicted erosion and flooding within the project area has shown that the low-lying areas of Lynmouth and Porlock contain the greatest concentration of assets that are at risk of either coastal erosion or flooding. These areas should therefore be targeted by fieldwork in the future. The coastline immediately to the east of Combe Martin also contains a small concentration of assets that are under threat. A combination of fieldwork and prospection within these areas is therefore seen as a priority for future work.

In addition, four of the conservation areas, and six of the areas designated as PALs are at risk of erosion and flooding (see Appendix 5). These are areas that contain a high concentration of heritage assets of significance and should therefore also be

targeted as a priority for further work. The conservation areas at Porlock Weir, and Bossington and West Lynch are at greatest risk from coastal erosion within the short term, as well as a threat from fluvial flooding. The PALs at Holdstone Down (PAL 34); Little Hangman (PAL 37); Countisbury and Lyn Gorge (PAL 6); Porlock Beach/Marsh (PAL 43); and Selworthy WWII complex (PAL 33) should be investigated to monitor the extent of erosion within the short term and to assess the potential for heritage assets within these areas to be considered as candidates for designation assessment. Similarly, non-designated buildings that have been highlighted within the Conservation Area Appraisals as being of local and wider significance should also be targeted for record enhancement and consideration as candidates for designation assessment. These have not been individually listed within Appendix 6 as they are detailed within the relevant Conservation Area Appraisals.

### ***Submerged Forests and Prehistoric Landscapes***

Deposits associated with submerged forests and palaeochannels of prehistoric date have been identified within Porlock Bay and are at high risk of erosion within the short term (see Appendix 6) as the shingle ridge within Porlock Bay is gradually moving in a landward direction. This is also likely to expose additional organic deposits that had previously been protected behind the ridge within the area of Porlock Marsh. The marsh should therefore also be targeted for future investigation, such as test pits, in particular to investigate the potential for the survival of deposits relating to medieval and later settlement (R. McDonnell *pers. comm.*). Although these organic peat deposits and remains associated with the submerged forest at Porlock are not currently protected through historic environment designations, they are considered to be of national significance for the contribution that they can make to the understanding of Holocene coastal change and areas of former palaeolandscape within the Bristol Channel, and should therefore be considered a priority for further work. Peat deposits and organic deposits associated with the submerged forest are occasionally exposed during storm events or particularly low tides. These events may therefore allow an opportunity for further recording and sampling.

Due to the inaccessible nature of much of the foreshore within the RCZAS project area it is considered possible that previously unidentified remains associated with areas of submerged forest may exist beyond those identified at Porlock. For example, the HSC has indicated the presence of a palaeolandscape component within the area of Woody Bay. Other areas of potential may include the bays at Lynmouth Bay, Wringcliff Bay, Lee Bay and Wildpear Beach, and, if accessible,

these areas should be targeted for investigation following storm events or at low tides to assess their potential.

A small number of prehistoric sites of high significance should be targeted by fieldwork for record enhancement as well as to assess the potential of the sites as candidates for designation assessment. These sites are listed within Appendix 6.

### ***Intertidal Areas and Maritime Sites***

A large proportion of the sites that are likely to be affected by erosion within the short term, as identified within the draft Hartland Point to Anchor Head SMP, relate to assets within the intertidal areas (see Appendix 6). The Severn Estuary RCZAS Phase 2 fieldwork targeted a number of areas relevant to the Exmoor RCZAS. These included intertidal areas at Greenleigh Point and Selworthy Sand; intertidal areas along the edges of Porlock Bay; and intertidal areas at Gore Point (Chadwick and Catchpole 2013a, 12). A large number of fish weirs that had been identified by the NMP survey were also recorded by the Phase 2a and Phase 2 fieldwork. However, some areas such as the submerged forest in Porlock Bay could not be surveyed at this time due to the presence of drifting sand deposits (*ibid*, 59). It is therefore recommended that opportunities are taken for additional surveying at these locations during low tide or following storm events as part of the Exmoor RCZAS Phase 2 fieldwork. The complex of fish weirs and possible ground line gullies at Culver Cliff Sand were also identified as requiring further study during very low spring tides (*ibid*, 116). Field investigation should also target intertidal remains at additional locations within the project area that were not covered by the Severn Estuary RCZAS Phase 2 fieldwork, particularly Lynmouth.

As the intertidal areas face the highest level of threat, localised parts of coastline that have good access to the intertidal areas could be targeted for walkover surveys to assess the potential for identification of new sites within these environments. Areas of coastline that contain exposed solifluction deposits, such as Porlock, could also be monitored regularly to determine the potential for the recovery of Palaeolithic finds.

It is considered that future analysis of Lidar data relating to the intertidal areas could help to identify additional assets situated within intertidal areas that were not visible on aerial photographs assessed by the NMP projects.

Recent aerial photographic surveys have shown the high potential for surveys of this nature to identify assets within the intertidal zones of the project area. Regular aerial photographic surveys should therefore be undertaken at low spring tides within those areas of the coast that may prove to be inaccessible for a walkover survey. These surveys could also be very useful for monitoring the state of coastal assets as well as the change in the geomorphology of the coast, particularly of the dynamic landscape at Porlock Marsh.

### ***Relict Field Systems and Deserted Farmsteads***

The RCZAS project area contains a large number of relict field systems ranging in date from the prehistoric to post-medieval periods. An analysis of policies within the draft Hartland Point to Anchor Head SMP has shown that some of the field systems within the project area are at risk of coastal erosion within the short and medium term (see Appendix 6). These areas should therefore be targeted for further fieldwork, in particular to confirm the dates and extents of the field systems.

There are a large number of multi-period field systems of unconfirmed significance throughout the project area that have been identified by work associated with the Exmoor National Park and Severn Estuary RCZAS NMP projects. Although not all of these are at risk of erosion or flooding, they would benefit from fieldwork to determine their level of survival. In particular, areas that contain evidence relating to deserted medieval settlements, both structures and field systems, within the project form part of a research theme that would benefit from further work. Records associated with settlements and field systems of potential medium/high significance that could be enhanced by fieldwork are included in Appendix 6.

### ***Coastal Industry***

Analysis of the sites that are most likely to be affected by erosion have shown that a number of the recorded remains associated with the silver industry within the landscape surrounding Combe Martin are at risk of coastal erosion within the short term (see Appendix 6). Assets associated within mining and quarrying on the Exmoor coast form part of a research theme that would benefit from future work. These sites should therefore be targeted for further work, as well as a walkover survey of the wider area to determine the potential for survival of previously unrecorded remains associated with this industry.



A number of the surviving coastal lime kilns are also shown to be situated within areas at risk of erosion and flooding, and these should therefore be targeted by field investigation to determine their present condition and potential for further work. These lime kilns form an important contribution to the historical development of the Exmoor coast, and it is recommended that the best examples are identified through fieldwork and considered as candidates for designation assessment. Potential sites that should be investigated as part of the RCZAS Phase 2 fieldwork are included within Appendix 6.

Although individually the charcoal platforms within Culbone Woods are considered to be assets of local significance, the landscape in which they are situated would benefit from further work. The charcoal-burning platforms need to be explored in the context of their woodland location and associated resources on the beaches to the north, and should be targeted by fieldwork and environmental dating to help to understand their function as well as an indication of where the resources were being sent following production.

### ***Military Sites***

A small number of pillboxes are shown to be at risk of erosion and would benefit from record enhancement (see Appendix 6). Few military sites along the Exmoor coast are designated, and these sites should therefore be assessed for their potential to be considered as candidates for designation assessment.

Further work should be undertaken within the immediate landscapes surrounding the Roman fortlets at Martinhoe and Old Burrow to increase understanding of the nature of Roman activity within this area.

The extensive remains of WWII military training and defence at Bossington Hill and North Hill also form part of a research theme that would benefit from further work.

### ***Surveys within Areas of Low Monument Density***

Section 8 above has considered those areas of low record density within the project area, and an analysis of HER data by period has shown a number of 'gaps' within the current evidence. There is therefore potential for further work relating to period-specific evidence within the project area to address these current gaps in greater detail which would also help to address SWARF Research Aims 2 and 3.

## Summary

In summary, therefore, the following theme specific sites are recommended for further work:

- Coastal Scheduled Monuments under threat of erosion;
- Coastal Listed Buildings under threat of erosion and flooding;
- Designed landscapes;
- Submerged forests and prehistoric landscapes;
- Intertidal areas and maritime sites under threat of erosion;
- Relict field systems and deserted farmsteads;
- Coastal industry;
- Military sites;
- Areas of low monument density.

## 12 ARCHIVE

**12.1** The project archive is currently held at the offices of the Exmoor National Park Authority, Exmoor House, Dulverton, Somerset, TA22 9HL. All of the data produced by the project is directly available within the monuments records of the Exmoor National Park Historic Environment Record (<http://www.exmoorher.co.uk/>).

**12.2** Copies of the project report will be supplied to Historic England on completion of the project. Project GIS layers will also be provided to Historic England and ADS.

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# Appendices:

## Appendix 1: Scheduled Monuments within the Project Area

NHLE Number	Heritage Assets Name	Monument Type	Period	NGR
1003839	Bowl barrow 230m north east of School House	Bowl Barrow	Late Neolithic to Late Bronze Age	SS 77119 49174
1002647	Barrows SE of Martinhoe	Bowl Barrows	Late Neolithic to Late Bronze Age	SS 67293 48232
1020795	Cairn on Bossington Hill, 1.12 km north east of Lynch Mead	Round Cairn	Late Neolithic to Late Bronze Age	SS 90839 48625
1002556	Trentishoe barrows	Round Cairns	Late Neolithic to Late Bronze Age	SS 62964 47764
1020807	Earthwork defences of Countisbury Castle promontory fort	Promontory Fort	Iron Age	SS 73909 49477
1008809	Iron Age defended settlement, Furzebury Brake	Univallate Enclosure	Iron Age	SS 93590 48299
1020805	Myrtleberry North Camp, a late prehistoric multiple enclosure fort 200m north west of Watersmeet House	Multiple Enclosure Fort	Late Iron Age	SS 74282 48748
1003882	Martinhoe Castle (Roman signal station)	Roman Signal Station	Roman	SS 66308 49338
1020809	Old Burrow	Roman Fortlet	Roman	SS 78798 49344
1020776	Allerford packhorse bridge, immediately north of Cross Lane Farm	Packhorse Bridge	Medieval	SS 90512 46923
1006126	Deserted medieval farm, W of Bramble Combe	Deserted Farmstead	Medieval	SS 94045 47920
1006228	Horner packhorse bridge	Packhorse Bridge	Medieval	SS 89733 45541
1006227	West Luccombe Packhorse Bridge	Single Span Bridge	Late Medieval	SS 89886 46119
1006197	Allerford New Bridge	Single Span Bridge	Post-medieval	SS 89989 46655
1020808	Remains of leat serving former hydro-electric generating station, on the south bank of the East Lyn River, 210m east of Oxen Tor	Leat	Post-medieval to modern	SS 73138 48985

## Appendix 2: Grade I and II\* Listed Buildings within the Project Area

NHLE Number	Grade	Heritage Assets Name	Period Name	NGR
1058037	I	Culbone Church	Early Medieval/ Medieval/Modern	SS 84216 48226
1173524	I	Church of St Dubricius	Medieval/Post-medieval	SS 88639 46664
1058050	II*	Allerford New Bridge	Medieval/Post-medieval	SS 8999 4666
1106778	II*	Church of St Martin	Medieval/Post-medieval/Modern	SS 66802 48659
1282837	II*	Church of St Mary the Virgin	Medieval/Post-medieval/Modern	SS 72062 49436
1325745	II*	Church of St Peter	Medieval/Post-medieval/Modern	SS 64652 48609
1173301	II*	Churchyard Cross about 3m Southeast of Porch, Culbone Church	Medieval/Modern	SS 84209 48218
1296210	II*	Doverhay Reading Room and Cottage abutting North end	Medieval/Post-medieval	SS 88809 46755
1057997	II*	Lynch Chapel of Ease	Medieval/Post-medieval	SS 90036 47648
1058014	II*	Packhorse Bridge	Medieval/Post-medieval/Modern	SS 9051 4691
1057326	II*	Packhorse Bridge	Late Medieval	SS 8974 4554
1174852	II*	Packhorse Bridge	Late Medieval	SS 89877 46107
1306692	II*	West Challacombe Manor	Medieval/Post-medieval	SS 58647 47567
1289192	II*	Church of Saint John	Post-medieval	SS 74715 49769
1206608	II*	Town Hall	Post-medieval/Modern	SS 71880 49514
1201144	II*	Methodist Church	Modern	SS 71842 49507

Appendix 3: Estate Maps Relevant to the Project Area

SW Heritage Trust ref.	Parish	Title	Date	Surveyor	Notes	Assessment
DD\SC\H/2 (Somerset)	Porlock	Survey and Valuation of the Manor of Porlock	1796	-	Small survey book with map numbers, tenants, field names, acreages and valuation. No map.	Negligible
DD\BR\bn/22 (Somerset)	Porlock	Porlock Manor Surveys	1796-1820	-	Survey book with five volumes containing map numbers, tenants, and particulars of premises and acreage. No map.	Negligible
1148W\add9/6/24 (Devon)	Porlock	A Survey and Valuation of Part of the Manor of Holnicote.  The manors of Bossington, Wilmersham, West Luckham, Stock Pero, East Luckham, and Blackford. Also the Barton of East Luckham and Eastcotts and Goodwins Lands, Situated in the several parishes of Selworthy, Porlock, Stock Pero, Exford, Minehead and Carhampton in the county of Somerset. Property of Sir Thomas Dyke Acland Bart.	Surveyed and mapped in 1809 and 1812	Alex Law and Mess. Bradley and Summers	The coastline is depicted and land is portrayed in colour according to manor. Buildings depicted in plan.  Fields depicted with an alpha-numeric reference to a survey book giving details of field name and content.	Medium - High
DD\297/2 (Somerset)	Minehead	Plan of the Manor and Parish of Minehead in the County of Somerset in which the Lands belonging to John Fownes Luttrell Esq are particularly delineated	1822	-	Large map. The coastline is depicted and land is portrayed according to land use, with a key at the bottom of the map. Buildings are depicted in plan. Fields are depicted with a numerical reference.	Medium - High
5846Z/E4 (Devon)	Lynmouth	Plan of the Port of Lynmouth in the County of Devon	1824	William Bright	The Lyn River is shown with some buildings depicted on the edge of the river at Lynmouth. A limekiln is labelled and depicted to the NW at Merhill.	Low
DD\BR\bn/26 (Somerset)	Selworthy and Luccombe	A Map of Intermixed lands in the property of Sir T Dyke Acland bt, G E Blathwayt Esq, situate in the parishes of Selworthy and Luccombe in the County of Somerset	1851	-	Land is portrayed in colour according to landowner. Buildings are depicted in plan. Fields are depicted with a numerical reference to a survey schedule containing details of field name and content.	Medium
Q/RDE/153 (Somerset)	Oare	Map of the Oare Inclosure in the County of Somerset	1862	-	Buildings are depicted in plan. Fields are shown with a numeric reference. The house and land surrounding Glenthorne is depicted, but the remainder of the map is beyond the project area.	Medium
DD\XCWN/1 (Somerset)	Porlock	Inclosure of Porlock Common in the Parish of Porlock County of Somerset	1868	-	Map showing land of Porlock Common. Very little detail is shown.	Low

## Appendix 4: Admiralty Charts Relevant to the Project Area

UKHO ref.	Title	Date	Surveyor	Notes	Assessment
Surveys					
640	Part of Bristol Channel from Lundy Isle, and Worms Head to Watchet, and Barry Isle.	1808	Murdock Mackenzie Junr. 1771.	Settlements are labelled and some buildings depicted in stylised form.	Low
H628	The South Shore of the Bristol Channel between Combe Martin Little Stoke Spit including the deep water soundings across to the North Shore.	1832	Lieut. Denham R.N. with the assistance of Lieut. C.G. Robinson and Mr E.J. Bedford. Mate.	Settlements are labelled and some buildings depicted in plan. Topography of coastline is shown. Two possible fishing structures are shown within the channel at Lynmouth. Lime kilns are labelled and depicted to the NE of Porlock/NW of Bossington. Also includes views of Foreland Point, Capstone Hill and Little Hangman.	Medium
L5026	Sketch of the Coast in the neighbourhood of Minehead from Greenaley Point, to the Old Pier with soundings taken at Low Water Spring Tides, and marked in fathoms.	1845?	-	Outline of coast is shown at Minehead. The plan also shows site of a proposed new pier and line of the railway.	Low
D8046	Bristol Channel. South Coast. Sounding sheet between Watchet and Combe Martin.	1864	Commander David Aird. R.N. Daniel Hall Esquire Master R.N. William Quin, Quarter M.	Settlements are labelled and some buildings depicted in plan. A weir and a pier are labelled at Lynmouth. Stables are labelled to the north of Glenthorne and a boat house is labelled to the east of Glenthorne. A hut is labelled on the cliff to the NW of Porlock and lime kilns are labelled to the NE of Porlock. Minehead Pier is labelled and depicted.	Medium
A6586	Bristol Channel. Lynmouth Anchorage.	1879	Staff Comm. G. Stanley (in charge), C.H. Langdon, and Mr Jamieson.	Settlements are labelled and some buildings depicted in plan. Topography of coastline is shown. An outer post and weir are labelled in Lynmouth channel and a lifeboat labelled to the west of the channel. Roman camp labelled to the east of Lynmouth.	Low-medium
A6587	Bristol Channel. Porlock Anchorage.	1879	Staff Comm. G. Stanley (in charge), C.H. Langdon, and Mr Jamieson.	Farms and settlements are labelled and depicted in plan. Topography of coastline is shown. Limekilns are labelled to the north of Bossington.	Low-medium
A6588	Bristol Channel. Minehead Anchorage.	1879	Staff Comm. G. Stanley, C.H.C. Langdon and Mr G. Jamieson R.N.	Settlements are labelled and buildings depicted in plan. Labelled buildings include a chemical works and gas works. A pier and quay are also labelled to the north of Minehead.	Low-medium



Appendix 4: continued

UKHO ref.	Title	Date	Surveyor	Notes	Assessment
OCB1179 A2	England – West Coast. Sheet III. Bristol Channel Outer Part.	Published 1839.	Lieut. Denham and C.G. Robinson R.N. 1832.	Settlements are labelled and the topography of the coast is shown.	Low
OCB1181 A1	Bristol Channel. Minehead, Watchet, Lynmouth, Porlock.	Published 1839.	Surveyed by Lieut. H.M. Denham. 1831.	Settlements are labelled and some buildings are depicted in plan. The topography of the coast is shown. A Roman Camp is labelled to the east of Lynmouth. Porlock quay is labelled and depicted, and lime kilns are labelled to the NW of Bossington. Minehead pier is labelled and depicted.	Low-medium
OCB2682 A1	England – West Coast. Bristol Channel. Nash Point to New Passage.	Published 1860.	Captain F.W. Beechey and Commander Alldridge, R.N. 1848. The outer part West of Culver sand by Lieut. Denham and C.G. Robinson, R.N. 1832. Bridgewater Bay by Commander Alldridge, R.N. 1853.	Settlements are labelled and some buildings are depicted in plan. The topography of the coast is shown. Minehead pier is labelled and depicted.	Low-medium
OCB1179 B1	England – West Coast. Bristol Channel.	Published 1867.	Compiled from the Admiralty Surveys of Lieutenant Denham, Captain F.W. Beechey, F.R.S. Commanders Alldridge and Aird and Captain E.J. Bedford, R.N. 1867.	Settlements are labelled and the topography of the coast is shown.	Low
OCB1181 B1	England – West Coast. Anchorages on the South Shore of the Bristol Channel.	Published 1884.	Staff Commander G. Stanley. Assisted by Staff Commander C.H. Langdon and Mr G. Jamieson, R.N. 1879.	Settlements are labelled and some buildings are depicted in plan. The topography of the coast is shown. An outer post and weir are marked in the channel at Lynmouth and a lifeboat station is labelled to the west of the channel. A Roman Camp is labelled to the east of Lynmouth. A possible fishing structure and possible groyne are shown on the beach to the east of Porlock Weir and limekilns are labelled to the NW of Bossington. A pier and quay are labelled at Minehead. Some buildings are labelled within the wider landscape to the north and east of Minehead and the railway to Taunton is depicted and labelled.	Medium
OCB2682 B1	England – West Coast. Bristol Channel. Nash Point to New Passage.	Published 1888.	Surveyed by Staff Commander W.E. Archdeacon, R.N. Assisted by Staff Commander W. Tooker and Mr G. Jamieson, R.N. 1886.	Settlements are labelled and some buildings are depicted in plan. The topography of the coast is shown. Minehead pier is labelled and depicted.	Low-medium
OCB1179 C1	England – West Coast. Bristol Channel.	Published 1906.	Compiled from the latest Admiralty Surveys.	Settlements are labelled and the topography of the coast is shown.	Low
OCB2682 C1	England – West Coast. Bristol Channel. Nash Point to New Passage.	Published 1920.	Surveyed by Staff Commander W.E. Archdeacon, R.N. Assisted by Staff Commander W. Tooker and Mr G. Jamieson, R.N. 1886.	Settlements are labelled and some buildings are depicted in plan. The topography of the coast is shown. Minehead pier is labelled and depicted and a lifeboat is labelled within the town.	Low-medium

Appendix 5: Designated heritage assets recommended for further work

Exmoor HER Reference	Name	Monument Type	Period	Designation	NHLE Reference	Significance	Level of Priority	SMP Unit	SMP Policy	Threat	Recommendations
MDE1236	Earthwork defences of Countisbury Castle promontory fort	Promontory fort	Iron Age	Scheduled Monument	1020807	High	High	7d13	NAI	0-20, 20-50, 50-100	Preliminary site visit to establish extent of erosion and assess access for fieldwork (the area at risk is the defence that runs steeply down the cliff edge)
MSO7319	West Luccombe packhorse bridge	Packhorse Bridge	Medieval to Modern	Scheduled Monument Grade II* Listed Building	1006227 1174852	High	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and record
MSO8018	Allerford packhorse bridge, immediately north of Cross Lane Farm	Packhorse Bridge	Medieval	Scheduled Monument Grade II* Listed Building	1020776 1058014	High	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and record
MDE1020	Martinhoe Castle	Roman Signal Station	Roman	Scheduled Monument	1003882	High	Medium/High	7d11	HTL/ NAI	Evidence for historic erosion	Fieldwork for record enhancement
MDE1247	Myrtleberry North Camp	Enclosure	Iron Age	Scheduled Monument	1020805	High	Medium	7d13	NAI	-	Fieldwork for record enhancement
MSO7577	Iron Age defended settlement, Furzebury Brake	Enclosure/Hillfort	Iron Age	Scheduled Monument	1008809	High	Medium	7d18	NAI	-	Fieldwork for record enhancement
MSO7583	Deserted medieval farm, W of Bramble Combe	Deserted Farmstead	Medieval	Scheduled Monument	1006126	High	Medium	7d18	NAI	-	Fieldwork for record enhancement
MSO7874	St Dubricius' Church and churchyard, Portlock	Church	Medieval to Modern	Grade I Listed Building	1173524	High	Medium/High	7d17	NAI	Flood Zone 2 (fluvial)	Condition Assessment
MSO10681	Doverly Court, Doverhay, Portlock	Manor House?	Medieval to Modern	Grade II* Listed Building	1296210	High	Medium/High	7d17	NAI	Flood Zone 2 (fluvial)	Condition Assessment
MSO12027	Chapel of Ease, West Lynch	Chapel of Ease	Post-medieval to modern	Grade II* Listed Building	1057997	High	Medium/High	7d17	NAI	Flood Zone 2 (fluvial)	Condition Assessment
MDE1027	Limekiln on west side of Woody Bay, southeast of Woody Bay Cottages	Lime kiln	Post-medieval to modern	Grade II Listed Building	1306651	Medium	High	7d11	HTL/ NAI	0-20	Preliminary site visits to establish extent of erosion and potential for further phases of building recording
MDE20953	Duty Point Tower	Folly	Post-medieval to modern	Grade II Listed Building	1280231	Medium	Medium/High	7d11	HTL/ NAI	20-50, 50-100	Preliminary site visits to establish extent of erosion and potential for further phases of building recording

Appendix 5: *continued*

Exmoor HER Reference	Name	Monument Type	Period	Designation	NHLE Reference	Significance	Level of Priority	SMP Unit	SMP Policy	Threat	Recommendations
MSO10690	Old Rose and Crown and Cape's Stores, High Street, Porlock	Inn	Post-medieval to modern	Grade II Listed Building	1296181	Medium	Medium/High	7d11	HTL/ NAI	Flood Zone 2 (fluvial)	Condition Assessment and building recording
MSO10691	Porlock Rectory, Parson Street, Porlock	Vicarage	Post-medieval to modern	Grade II Listed Building	1058048	Medium	Medium/High	7d11	HTL/ NAI	Flood Zone 2 (fluvial)	Condition Assessment and buildings recording
MDE21306	The Towers at SS 7942 4978	Gateway	Modern	Grade II Listed Building	1289230	Medium	High	7d14	NAI	0-20, 20-50, 50-100	Preliminary site visits to establish extent of erosion and potential for further phases of building recording
MSO7767	Limekiln at NGR SS 8005 4954 and raised platform fronting site	Lime kiln	Post-medieval	Grade II Listed Building	1173368	Medium	High	7d14	NAI	0-20, 20-50, 50-100	Preliminary site visits to establish extent of erosion and building recording
MSO10269	Gibraltar Cottages	Row of cottages	Post-medieval to modern	Grade II Listed Building	1252283	Medium	Medium/High	7d16	HTL/ NAI	50-100; Flood Zones 2 and 3 (tidal)	Condition Assessment and potential for further phases of building recording
MSO10676	Ashley Combe Lodge	Lodge and tollhouse	Post-medieval to modern	Grade II Listed Building	1058042	Medium	Medium/High	7d18	NAI	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO7878	Worthy Manor	Manor house	Medieval to modern	Grade II Listed Building	1173436	Medium	Medium/High	7d18	NAI	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO10678	Range of Outbuildings about 20m southeast of Worthy Manor	Outbuildings	Post-medieval to modern	Grade II Listed Building	1345382	Medium	Medium/High	7d18	NAI	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO10679	Doverhay Cottage and Wall Fronting Road	Cottage	Post-medieval to modern	Grade II Listed Building	1173456	Medium	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO10680	Doverhay House and Doverhay Lodge	Pair of thatched cottages	Post-medieval to modern	Grade II Listed Building	1058043	Medium	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO10682	The Gables Hotel	Cottage, now hotel	Medieval to modern	Grade II Listed Building	1345383	Medium	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO10683	Higher Doverhay Farmhouse	Farmhouse	Medieval to modern	Grade II Listed Building	1058044	Medium	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO10696	Allerford House	House	Medieval to modern	Grade II Listed Building	1058009	Medium	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO10698	Cherry Trees	Cottage	Early medieval to modern	Grade II Listed Building	1058010	Medium	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording

Appendix 5: continued

Exmoor HER Reference	Name	Monument Type	Period	Designation	NHLE Reference	Significance	Level of Priority	SMP Unit	SMP Policy	Threat	Recommendations
MSO10699	Cross Lane House Hotel	Farmhouse, now hotel	Medieval to modern	Grade II Listed Building	1345403	Medium	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO10701	Hill View and Woodside	Cottage	Post-medieval to modern	Grade II Listed Building	1058012	Medium	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO10702	Linhay about 35m northeast of Hill View and Woodside	Linhay	Post-medieval to modern	Grade II Listed Building	1345404	Medium	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO10703	Kent and Son, Agricultural Engineers The Smythy	Smithy	Modern	Grade II Listed Building	1173680	Medium	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO10704	Meadowside and Packhorse Cottage	House	Post-medieval to modern	Grade II Listed Building	1058013	Medium	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO10729	Piles Mill and Millhouse	Millhouse and mill	Medieval to modern	Grade II Listed Building	1296054	Medium	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO10730	Barn and Adjoining Outbuildings to South of Piles Mill and Millhouse	Barn, linhay, stable, shippon, pigsty	Post-medieval to modern	Grade II Listed Building	1058022	Medium	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO10770	Malthouse and Building Abutting to south at NGR SS 9010 4764	Malthouse	Post-medieval to modern	Grade II Listed Building	1057998	Medium	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO10771	Stables and Linhay Abutting West Lynch Farmhouse Returned to South	Stable block and linhay	Post-medieval to modern	Grade II Listed Building	1345398	Medium	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO10772	Barn and Round House at West Lynch Farm Park	Threshing barn	Post-medieval to modern	Grade II Listed Building	1174150	Medium	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
MSO10778	West Lynch Farmhouse	Farmhouse	Medieval	Grade II Listed Building	1295903	Medium	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and potential for further phases of building recording
-	Portlock Weir Conservation Area	-	-	Conservation Area	-	Medium/High	High	7df6	HTL/ NAI	0-20; 20-50; 50-100; Flood Zones 2 and 3	Condition Assessment and assess potential for sites within the conservation area to be considered as candidates for designation assessment
-	Bossington and West Lynch Conservation Area	-	--	Conservation Area	-	Medium/High	Medium/High	7df7	NAI	0-20; 20-50; 50-100; Flood Zones 2 and 3	Condition Assessment and assess potential for sites within the conservation area to be considered as candidates for designation assessment
-	Portlock Conservation Area	-	-	Conservation Area	-	Medium/High	Medium/High	7df7	NAI	Flood Zones 2 and 3 (fluvial)	Condition Assessment and assess potential for sites within the conservation area to be considered as candidates for designation assessment

Appendix 5: *continued*

Exmoor HER Reference	Name	Monument Type	Period	Designation	NHLE Reference	Significance	Level of Priority	SMP Unit	SMP Policy	Threat	Recommendations
-	Allerford Conservation Area	-	-	Conservation Area	-	Medium/High	Medium/High	-	-	Flood Zones 2 and 3 (fluvial)	Condition Assessment and assess potential for sites within the Conservation area to be considered as candidates for designation assessment
-	Holdstone Down	-	-	PAL 34	-	Medium/High	High	7d11	HTL/ NAI	0-20, 20-50, 50-100; Flood Zones 2 and 3	Site visits to establish extent of erosion and assess potential for sites within the PAL to be considered as candidates for designation assessment
-	Little Hangman	-	-	PAL 37	-	Medium/High	Medium/High	7d11	HTL/ NAI	20-50, 50-100	Site visits to establish extent of erosion and assess potential for sites within the PAL to be considered as candidates for designation assessment
-	Countisbury and Lyn Gorge	-	-	PAL 6	-	Medium/High	High	7d13	NAI	0-20, 20-50, 50-100; Flood Zones 2 and 3	Site visits to establish extent of erosion and assess potential for sites within the PAL to be considered as candidates for designation assessment
-	Porlock Beach / Marsh	-	-	PAL 43	-	Medium/High	High	7d17	NAI	0-20, 20-50, 50-100; Flood Zones 2 and 3	Site visits to establish extent of erosion and assess potential for sites within the PAL to be considered as candidates for designation assessment
-	Selworthy WWII complex	-	-	PAL 33	-	Medium/High	High	7d18	NAI	0-20, 20-50, 50-100	Site visits to establish extent of erosion and assess potential for sites within the PAL to be considered as candidates for designation assessment

## Appendix 6: Non-designated heritage assets recommended for further work

Exmoor HER Reference	Name	Research Theme	SMP Unit	SMP Policy	Threat	Recommendations
MSO7880	Submerged forest and flint finds at Porlock Weir	Coastal change/ Prehistoric Landscapes	7d17	NAI	0-20/Flood Zone 2 tidal	Site visits during low tide or following storm events to determine extent of erosion and potential for further sampling and inclusion as part of a wider landscape assessment of Porlock Marsh
MEM15214	Bronze Age palaeochannels in Porlock Bay	Coastal Change/ Prehistoric Landscapes	7d17	NAI	0-20	Site visits during low tide or following storm events to determine extent of erosion and potential for further sampling and inclusion as part of a wider landscape assessment of Porlock Marsh
MEM15239	Palaeochannels on Bossington Beach	Coastal Change/ Prehistoric Landscapes	7d17	NAI	0-20; Flood Zone 3 fluvial and tidal, Flood Zone 2 fluvial and tidal	Site visits during low tide or following storm events to determine extent of erosion and potential for further sampling and inclusion as part of a wider landscape assessment of Porlock Marsh
MMO1635	Earthwork Enclosure at Little Hangman	Prehistoric Landscapes	7d11	HTL/NAI	-	Fieldwork for record enhancement and assess potential for site to be considered as a candidate for designation assessment
MDE1241	Prehistoric settlement and field system in the Valley of Rocks	Prehistoric Landscapes	7d11	HTL/NAI	-	Fieldwork for record enhancement and assess potential for site to be considered as a candidate for designation assessment
MDE8574	Prehistoric remains on Holdstone Down	Prehistoric Landscapes	7d11	HTL/NAI	-	Fieldwork for record enhancement and assess potential for site to be considered as a candidate for designation assessment
MMO324	Bronze Age cairn above Heddon's Mouth Cleave	Prehistoric Landscapes	7d11	HTL/NAI	-	Fieldwork for record enhancement and assess potential for site to be considered as a candidate for designation assessment
MDE11742	Prehistoric enclosure on Hollerday Hill	Prehistoric Landscapes	7d11	HTL/NAI	-	Fieldwork for record enhancement and assess potential for sites to be considered as a candidate for designation assessment
MDE21526	Possible prehistoric enclosure west of Lynton Station	Prehistoric Landscapes	7d12	HTL	-	Fieldwork for record enhancement
MDE11896	Cross Ridge Dyke at Horner's Neck	Prehistoric Landscapes	7d13	NAI	-	Fieldwork for record enhancement and assess potential for site to be considered as a candidate for designation assessment
MSO7986	20th Century boathouse at Ashley Combe	Maritime Sites	7d14	NAI	0-20	Preliminary site visits to establish extent of erosion and fieldwork for record enhancement including building record
MSO8110	Coastguard station on Hurlstone Point	Maritime Sites	7d18	NAI	0-20	Preliminary site visits to establish extent of erosion and fieldwork for record enhancement including building record

Appendix 6: continued

Exmoor HER Reference	Name	Research Theme	SMP Unit	SMP Policy	Threat	Recommendations
MDE8691	Medieval lynchets and post-medieval banks on The Foreland, Countisbury	Settlements and Field Systems	7d11	NAI	0-20, 20-50, 50-100	Preliminary site visits to establish extent of erosion and fieldwork for record enhancement
MMO2000	Medieval or post-medieval field system on the north facing slopes of Wind Hill	Settlements and Field Systems	7d13	NAI	20-50, 50-100	Preliminary site visits to establish extent of erosion and fieldwork for record enhancement
MEM22243	Cottages adjacent to the Shingle, Porlock Weir	Settlements and Field Systems	7d16	HTL/NAI	0-20, 20-50/Flood Zone 3 tidal	Preliminary site visits to establish extent of erosion and potential of site for further research relating to settlement
MMO1452	Medieval or post-medieval ridge and furrow in Porlock Bay	Settlements and Field Systems	7d17	NAI	0-20, 20-50, 50-100/ Flood Zone 3 fluvial and tidal	Preliminary site visits to establish extent of erosion and assess potential for site to be considered as a candidate for designation assessment
MDE8687	Field System, Butter Hill	Settlements and Field Systems	7d13	NAI	50-100	Preliminary site visits to establish extent of erosion and assess potential for site to be considered as a candidate for designation assessment
MEM22266	Possible abandoned medieval settlement of "Hantona", Six Acre Farm	Settlements and Field Systems	7d11	-	-	Fieldwork for record enhancement
MDE8289	Settlement earthworks northeast of Netherton	Settlements and Field Systems	7d11	-	-	Fieldwork for record enhancement
MDE21804	Medieval field system at West Lyn Farm	Settlements and Field Systems	7d13	-	-	Fieldwork for record enhancement and assess potential for site to be considered as a candidate for designation assessment
MMO2015	Possible medieval or post-medieval field system west of Countisbury Village	Settlements and Field Systems	7d13	-	-	Fieldwork for record enhancement
MDE11943	Settlement remains southwest of Desolate Farm	Settlements and Field Systems	7d14	-	-	Fieldwork for record enhancement and assess potential for site to be considered as a candidate for designation assessment
MDE11944	Possible field system around Wellfield	Settlements and Field Systems	7d14	-	-	Fieldwork for record enhancement
MSO7636	Medieval field system south of West Myre Farm	Settlements and Field Systems	7d18	-	-	Fieldwork for record enhancement

Appendix 6: continued

Exmoor HER Reference	Name	Research Theme	SMP Unit	SMP Policy	Threat	Recommendations
MMO213	Deserted medieval farmstead on western side of Bramble Combe	Settlements and Field Systems	7d18	-	-	Fieldwork for record enhancement
MMO215	East Myne farmstead	Settlements and Field Systems	7d18	-	-	Fieldwork for record enhancement
MDE8288	Late 18th Century mining remains southwest of Little Hangman	Exploitation of Resources	7d11	HTL/NAI	0-20	Preliminary site visits to establish extent of erosion and potential of site for further research relating to mining
MDE8290	19th Century adits at the foot of The Rawns	Exploitation of Resources	7d11	HTL/NAI	0-20/Flood Zone 3 tidal	Preliminary site visits to establish extent of erosion and potential of site for further research relating to mining
MDE8281	19th Century mine workings above The Rawns	Exploitation of Resources	7d11	HTL/NAI	0-20, 20-50, 50-100	Preliminary site visits to establish extent of erosion and potential of site for further research relating to mining
MDE8274	Girt Down Mine	Exploitation of Resources	7d11	HTL/NAI	0-20, 20-50, 50-100	Preliminary site visits to establish extent of erosion and potential of site for further research relating to mining
MDE8265	Possible 19th Century mine shaft at the foot of Lester Cliff	Exploitation of Resources	7d11	HTL/NAI	Flood Zones 2 and 3 (tidal)	Preliminary site visits to establish extent of threat and potential of site for further research relating to mining
MDE1026	Post-medieval lime kiln at Heddon's Mouth Cleave	Exploitation of Resources/ Maritime Sites	7d11	HTL/NAI	0-20, 20-50	Preliminary site visits to establish extent of erosion and assess potential for site to be considered as a candidate for designation assessment
MDE1028	Post-medieval lime kiln in Lee Bay	Exploitation of Resources/ Maritime Sites	7d11	HTL/NAI	0-20/Flood Zone 3 fluvial	Preliminary site visits to establish extent of erosion and assess potential for site to be considered as a candidate for designation assessment
MDE8267	Post-medieval lime kiln and possible counting house above Wild Pear Beach	Exploitation of Resources/ Maritime Sites	7d11	HTL/NAI	0-20	Preliminary site visits to establish extent of erosion and potential of site for further research relating to mining
MMO1759	Post-medieval extractive pits northwest of Town Farm	Exploitation of Resources	7d11	HTL/NAI	0-20, 20-50, 50-100	Preliminary site visits to establish extent of erosion and potential of site for further research relating to mining



Appendix 6: continued

Exmoor HER Reference	Name	Research Theme	SMP Unit	SMP Policy	Threat	Recommendations
MEM22983	Ruined lime kiln at Heddon's Mouth	Exploitation of Resources/ Maritime Sites	7d11	HTL/NAI	0-20, 20-50, 50-100	Preliminary site visits to establish extent of erosion and assess potential for site to be considered as a candidate for designation assessment
MMO1760	Post-medieval extractive pits southeast of Neck Wood Gut	Exploitation of Resources	7d11	HTL/NAI	20-50, 50-100	Preliminary site visits to establish extent of erosion and potential of site for further research relating to mining
MDE11714	West Weir, Lynmouth Western Beach	Exploitation of Resources/ Maritime Sites	7d12	HTL	0-20	Condition assessment and site visit at low spring tides to establish potential for further work relating to maritime industry
MDE11716	East Weir, Lynmouth Eastern Beach	Exploitation of Resources/ Maritime Sites	7d12	HTL	0-20	Condition assessment and site visit at low spring tides to establish potential for further work relating to maritime industry
MMO1995	Medieval or post-medieval coastal fish weir on Western Beach	Exploitation of Resources/ Maritime Sites	7d12	HTL	0-20	Condition assessment and site visit at low spring tides to establish potential for further work relating to maritime industry
MDE8693	Post-medieval fish weir near Countisbury Cove	Exploitation of Resources/ Maritime Sites	7d14	NAI	0-20	Condition assessment and site visit at low spring tides to establish potential for further work relating to maritime industry
MDE11675	Post-medieval lime kilns at Countisbury Cove	Exploitation of Resources/ Maritime Sites	7d14	NAI	0-20	Preliminary site visits to establish extent of erosion and assess potential for site to be considered as a candidate for designation assessment
MSO7779	Post-medieval lime kiln above Embelle Wood Beach	Exploitation of Resources/ Maritime Sites	7d14	NAI	0-20	Preliminary site visits to establish extent of erosion and assess potential for building recording and site to be considered as a candidate for designation assessment
MSO7985	Lime kiln on the beach at Worthy	Exploitation of Resources/ Maritime Sites	7d17	NAI	0-20, 20-50, 50-100/ Flood Zone 3 fluvial	Preliminary site visits to establish extent of erosion and assess potential for building recording and site to be considered as a candidate for designation assessment
MSO7887	Duck decoy and fishponds north-west of Porlock	Exploitation of Resources	7d17	NAI	0-20/Flood Zone 3 fluvial and tidal	Site visits during low tide or following storm events to determine extent of erosion

Appendix 6: continued

Exmoor HER Reference	Name	Research Theme	SMP Unit	SMP Policy	Threat	Recommendations
MEM15231	Decoy Linhay	Exploitation of Resources	7d17	NAI	Flood Zones 2 and 3 (tidal)	Fieldwork for record enhancement
MSO8052	19th Century lime kiln at Bossington Beach	Exploitation of Resources/ Maritime Sites	7d17	NAI	0-20/Flood Zone 3 tidal	Preliminary site visits to establish extent of erosion and assess potential for further record and for site to be considered as a candidate for designation assessment
MSO8057	Post-medieval lime kiln at Bossington Beach	Exploitation of Resources/ Maritime Sites	7d17	NAI	Flood Zone 2 and 3 (tidal)	Preliminary site visits to establish extent of threat and fieldwork for record enhancement
MEM15241	Medieval or post-medieval fish trap on the eastern side of Porlock Beach	Exploitation of Resources/ Maritime Sites	7d17	NAI	0-20	Condition assessment and site visit at low spring tides to establish potential for further work relating to maritime industry
MSO7684	Post-medieval fish weirs at Culver Cliff Sand	Exploitation of Resources/ Maritime Sites	7d18	NAI	0-20	Condition assessment and site visit at low spring tides to establish potential for further work relating to maritime industry
MMO1563	Medieval and post-medieval fishtraps or breakwaters at Culver Cliff	Exploitation of Resources/ Maritime Sites	7d18	NAI	0-20	Condition assessment and site visit at low spring tides to establish potential for further work relating to maritime industry
MSO7973	Landscape gardens at Ashley Combe	Designed Landscapes	7d14	NAI	0-20, 20-50, 50-100/ Flood Zone 3 fluvial	Site visit to determine extent of erosion and potential for site to increase understanding of designed landscape
MSO7931	World War Two pillbox overlooking Porlock Beach	Military sites	7d16	HTL/NAI	0-20, 20-50/Flood Zone 3 tidal	Preliminary site visit to establish extent of erosion and assess potential for further record and for site to be considered as a candidate for designation assessment
MSO7932	World War Two pillbox at Porlock Beach	Military sites	7d16	HTL/NAI	0-20, 20-50/Flood Zone 3 tidal	Preliminary site visits to establish extent of erosion and assess potential for further record and for site to be considered as a candidate for designation assessment

Appendix 6: continued

Exmoor HER Reference	Name	Research Theme	SMP Unit	SMP Policy	Threat	Recommendations
MSO8054	World War Two pillbox on Bossington Beach	Military sites	7d17	NAI	0-20/Flood Zone 3 tidal	Preliminary site visits to establish extent of erosion and assess potential for further record and for site to be considered as a candidate for designation assessment
MSO12292	Royal Ordnance Corps observation post north of Porlock	Military sites	7d17	NAI	Flood Zones 2 and 3 (fluvial)	Preliminary site visits to establish extent of threat and fieldwork for record enhancement
MDEM23314	Royal Observer Corps monitoring post on Hurlistone Point	Military sites	7d17	NAI	0-20/ Flood Zones 2 and 3 (tidal)	Preliminary site visits to establish extent of threat and fieldwork for record enhancement
MSO8053	World War Two pillbox overlooking Bossington Beach	Military sites	7d17	NAI	Flood Zones 2 and 3 (tidal)	Preliminary site visits to establish extent of threat and assess potential for site to be considered as a candidate for designation assessment

