



Archaeological
Research
Services Ltd

North East Rapid Coastal Zone Assessment (NERCZA)

Executive Summary



The Fort on the Heugh, Holy Island

ARS Ltd Report 2009/22
March 2009

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Contents

1.	Summary statement.....	3
2.	Criteria for assessing special interest of historic assets	6
3.	Historic assets of special interest by SMP unit.....	11
3.1	SMP1 Policy Units: summary statements referring to those sites considered of most significance.....	14
3.2	SMP2 Policy Units: summary statements referring to those sites considered of most significance.....	33

List of figures

1.	SMP1 Policy Units.....	54
2.	SMP2 Policy Units.....	55

List of tables

Table 1:	SMP Policy Unit locations, numbers and policy.....	11
Table 2:	SMP2 Policy Unit locations, numbers and policies for three different time intervals.....	12
Table 3:	Northumberland County Council HER entries	24
Table 4:	Tyne and Wear HER entries in SMP 1 area.....	27
Table 5:	NMR entries for SMP 1 area.....	28
Table 6:	Tyne and Wear HER entries in SMP 2 area.....	44
Table 7:	Durham County Council HER entries.....	44
Table 8:	Tees Archaeology HER entries.....	45
Table 9:	North York Moors National Park HER entries.....	46
Table 10:	North Yorkshire County Council HER entries.....	47
Table 11:	NMR entries for SMP 2 area.....	47

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1. Summary statement

- 1.1 Between March 2007 and December 2008 Archaeological Research Services Ltd carried out, on behalf of English Heritage, a desk based rapid coastal zone assessment of the threat posed to heritage assets on the North East coast by rising sea level and consequential coastal erosion. The North East Rapid Coastal Zone Assessment, or NERCZA, is one of a series of projects initiated by English Heritage around the coasts of England. The brief specifically required that the assessment be undertaken with reference to Defra's Shoreline Management Plans (SMPs). The area assessed, which extends from Whitby in North Yorkshire to the border with Scotland north of Berwick-upon-Tweed falls within SMP Cell 1. The first phase of the SMPs was completed in the 1990s (SMP1) and a second phase study (SMP2) is currently underway; the SMP2 for the coast south of the Tyne having been completed by the time the NERCZA began, while work to the north is underway at the time of writing. This has led to the assessment of the threat in the two areas being undertaken in relation to slightly different criteria. However, both the SMP1 and SMP2 documents make essentially similar policy recommendations which in most cases amount to either Hold the Line or No Active Intervention. The former case involves various mitigation strategies such as the construction of sea defences while in the latter nature is allowed to take its course. Heritage assets may be considered to be under threat from both the above mitigation strategies and from coastal erosion where no action is to be taken.
- 1.2 The NERCZA study area consists of approximately 200km of coastline between the Lowest Astronomical Tide (LAT) and 1km inland from Mean High Water Springs (MHWS), and includes Coquet Island and the Farne Islands which lie offshore and Holy Island, joined to the mainland at low tide by a causeway. The review of the heritage assets has been based on a consideration of two data sets. The first consists of the Historic Environment Records (HERs) maintained by or for the Local Authorities with curatorial responsibilities for this section of the coast, namely North Yorkshire County Council, the North York Moors National Park Authority, Tees Archaeology (for Redcar and Cleveland, Middlesbrough, Stockton-on-Tees and Hartlepool), Durham County Council, Tyne and Wear Specialist Conservation Team (for South Tyneside and North Tyneside) and Northumberland County Council. The second data set consists of the aerial photograph coverage of the study area from which all archaeological features visible have been mapped to the standards of English Heritage's National Mapping Programme. Within the context of the NERCZA, this has been referred to as the Aerial Photograph Transcription Exercise (APTE). The aerial photograph coverage for 400km² has been examined and 968 new records have been added to the NMR while 270 existing records have been enhanced. These two main data sets have been supplemented by reference to the Historic Environment Records maintained by the local authorities of Northumberland, Tyne and Wear, County Durham, Teeside, North Yorkshire and the North Yorkshire Moors National Park.
- 1.3 At the time of writing the study zone is divided into two by the level of information available on the Shoreline Management Plans. SMP2 for the area from the centre of the River Tyne north is still being produced and the

NERCZA data have to be assessed against the less detailed SMP1 criteria. The policy units defining the area assessed against SMP1 criteria is from Marshall Meadows Point on the Anglo-Scottish border to the centre of the River Tyne (Fig. 1). The policy units defining the area assessed under SMP2 criteria runs from the centre of the River Tyne to Whitby Harbour (Fig. 2).

- 1.4 In assessing the threat to heritage assets posed by sea level rise, major sites and groups of sites are discussed individually and the threats they face evaluated. Categories of more numerous types of site are also discussed but the issue of threat is dealt with in a series of tables in which the SMP policy unit is noted, the importance of individual sites and the degree of threat are rated as high, medium or low. Nearly 75% of the sites recorded in the APTE date from the Second World War and consist of numerous categories of site such as pillboxes or anti-tank obstacles or ephemeral features such as minefields. These sites are listed in tables 3 – 5 for SMP1 and table 6 – 11 for SMP2 and the relevant SMP policy unit noted. Many are no longer extant.
- 1.5 The NERCZA study has established that many heritage assets in the coastal zone are under threat from rising sea level and/or the mitigation strategies proposed. The threat is particularly acute in the case of those sites currently situated between LAT and within 200m inland of MHWS. Many of these sites specifically relate to what has been defined in this document as the Coastal/Maritime Landscape such as port and harbour facilities, aids to navigation, shipwrecks and the military defence of the coast, but also includes features of the Terrestrial Landscape which happen to be close to the coast such as the North Yorkshire alum works, two multivallate forts in Northumberland, Bronze Age burials at Low Hauxley and Trow Point and early prehistoric flint scatter sites in County Durham and Northumberland. It is also the case that important inter-tidal peat deposits and old ground surfaces below coastal dunes are particularly vulnerable such as those at Hartlepool Bay, Creswell and Druridge Bay.
- 1.6 In carrying out the assessment it has been noted that a number of categories of asset are as yet poorly understood making an evaluation of the threat difficult. Examples include the archaeology of pre-industrial shipbuilding, the development of small harbours, the fishing and whaling industries, early land reclamation and the recreational use of the 'sea side'. It has also been noted that while on a national level over 3% of sites recorded in HERs have a measure of statutory protection this falls below 2% in the coastal zone, a discrepancy that needs to be addressed. A separate project design has been prepared for a Phase 2 of the NERCZA which includes priorities for reconnaissance as required by the Phase 2 brief supplied by English Heritage.
- 1.7 This Executive Summary supercedes the Project Report circulated in December 2008. It does not provide information on every heritage asset but provides details of the sites considered by the project team to be most significant. Exhaustive lists of all the heritage assets are present within the project GIS.

1.8 The following sources of information have been consulted during the preparation of this study and to compile this report:

- Ordnance Survey modern mapping
- Aerial photographic transcriptions produced for the project
- Shoreline Management Plan 1 documentation produced by Posford Duvivier
- Shoreline Management Plan 2 documentation produced by Royal Haskoning
- English Heritage's National Monument Record
- Historic Environment Records maintained by
 - Northumberland County Council
 - Newcastle City Council Historic Environment Section for Tyne and Wear
 - Durham County Council
 - Tees Archaeology
 - North Yorkshire County Council
 - North York Moors National Park Authority
- Seazone bathymetry data
- British Geological Service geology data including bedrock, superficial and mass movement
- National Soils Research Institute soil data
- Historic cartography
- Published and unpublished textual sources

2. Criteria for assessing special interest of historic assets

2.1 Assessment of special interest has been based on the professional judgement of the project team with reference to the criteria set out in section 2.2 below. The different levels of special interest are defined as *High*, *Medium* and *Low* and no stipulation has been made for sites which either no longer exist or for which a field visit is required to assess the level of special interest.

2.2 The following criteria (which are not in any order of ranking), have been taken into account for assessing the special interest of the archaeological features present within the NERCZA study area and are based on those found in Annex 4 of PPG16. The criteria should not, however, be regarded as definitive; rather they are indicators which have contributed to the judgment given which is based on the individual circumstances of each site.

- **(i) *Period***: all types of monuments that characterise a category or period should be considered for preservation.
- **(ii) *Rarity***: there are some monument categories which in certain periods are so scarce that all surviving examples which still retain some archaeological potential should be preserved. In general, however, a selection must be made which portrays the typical and commonplace as well as the rare. This process should take account of all aspects of the distribution of a particular class of monument, both in a national and a regional context.
- **(iii) *Documentation***: the significance of a monument may be enhanced by the existence of records of previous investigation or, in the case of more recent monuments, by the supporting evidence of contemporary written records.
- **(iv) *Group Value***: the value of a single monument (such as a field system) may be greatly enhanced by its association with related contemporary monuments (such as a settlement and cemetery) or with monuments of different periods. In some cases, it is preferable to protect the complete group of monuments, including associated and adjacent land, rather than to protect isolated monuments within the group.
- **(v) *Survival/Condition***: the survival of a monument's archaeological potential both above and below ground is a particularly important consideration and should be assessed in relation to its present condition and surviving features.
- **(vi) *Fragility/Vulnerability***: highly important archaeological evidence from some field monuments can be destroyed by a single ploughing or unsympathetic treatment; vulnerable monuments of this nature would particularly benefit from the statutory protection which scheduling confers. There are also existing standing structures of particular form or complexities whose value can again be severely reduced by neglect or careless treatment and which are similarly well suited by scheduled monument protection, even if these structures are already listed historic buildings.
- **(vii) *Diversity***: some monuments may be selected for scheduling because they possess a combination of high quality features, others because of a single important attribute.
- **(viii) *Potential***: on occasion, the nature of the evidence cannot be specified precisely but it may still be possible to document reasons anticipating its existence and importance and so to demonstrate the justification for scheduling.

This is usually confined to sites rather than upstanding monuments.

- 2.2 Sites of high special interest are described in detail within Section 3 with specific reference to threats facing them. Sites of less interest or those for which a field visit is considered necessary are summarised within each SMP policy unit. A general description of the lesser special interest of these monument types is presented here rather than duplicating the information within each policy unit that holds the monument category.
- 2.3 Mesolithic and Neolithic activity is well documented along the NE coast but the evidence consists mostly of *flint scatter* sites, although important residential sites have been noted at Filpoke Beacon and Howick for example. The flint scatters may comprise high proportions of primary and secondary flakes indicating the collection and processing of raw material, whilst others contain greater proportions of finished tools, often in lower densities, often indicative of coastal occupation. These sites can range from high special interest in the case of sites such as Howick, Filpoke Beacon and Crimdon Dene, to medium and low special interest.
- 2.4 **Round barrows** or **cairns** are the most numerous and principal type of Bronze Age monument found in the coastal zone. They consist of circular mounds of earth and stone and usually cover one or more burials which may be either inhumations or cremations or both. The mounds are usually surrounded by a ditch from which the material has been quarried. Where excavations have occurred, the mounds may overlie concentric rings of post holes which would originally have held timber uprights. In the coastal zone the mounds survive either as upstanding earthworks or, where denuded by ploughing, the surrounding ditches may show as cropmarks. They may occur singly or in groups and, if closely spaced, may be described as forming a cemetery. In the NERCZA study area most of the round barrows identified lie in the coastal strip of the North York Moors, several substantial cemeteries having been identified. Elsewhere they are rare. This may reflect regional variability in funerary practices, but it is also likely to be the case that a number of round barrows have been destroyed during the course of urban and industrial development. Their special interest varies but has been ascribed to either medium or low, unless specifically mentioned within the SMP Policy unit as being of high interest and where described as such the sites are usually Scheduled Ancient Monuments.
- 2.5 Bronze Age **cists** are regularly encountered in the coastal zone, especially in the area north of the Tyne, and comprise a stone-lined grave within which may lie an inhumation or cremation accompanied by grave goods. Like round mounds, cists are often found in cemetery groups, sometimes within a barrow. However, cists were also a feature of funerary practices in later periods and caution needs to be exercised in interpreting examples without diagnostic grave goods. Depending upon their level of preservation, potential and association with other funerary monuments there level of special interest can vary from high to low.
- 2.6 **Multivallate forts** are considered to be defensive sites and regarded as small scale versions of hillforts. As the name suggests they usually consist of several concentric circuits of ditches surviving as cropmarks. Originally there were probably ramparts between the ditches but these have usually been levelled. In

some cases timber palisades were employed instead of ramparts and some sites might have experienced more than a single phase of development, with palisades being replaced by ramparts. Depending upon their location, preservation, potential and other factors they are described as being of high or medium special interest.

- 2.7 The **farmstead enclosure** is the most widespread type of site of Iron Age date, usually formed by a bank and ditch and containing one or more hut circles. Generally rectilinear in plan these enclosures are regarded as an Iron Age phenomenon, although many remained in use into the Romano-British period and some may have originated then, emphasising the thread of continuity in the rural landscape. Farmstead enclosures rarely survive as upstanding monuments in the coastal zone and have mostly been identified as cropmarks on aerial photographs. These site types are described as being of medium special interest.
- 2.8 Many villages in the NE had their origins in the medieval period, either as planned developments by major lay or ecclesiastical landlords or as a result of organic growth around early centres. Those that did not survive or thrive into more recent times can be identified today as **deserted medieval villages (DMVs)**. These abandoned settlements usually survive as earthworks and are defined as being of medium special interest.
- 2.9 A major medieval and later industrial activity on the coast was the production of salt at various **saltworks** and **salterns**. As well as documentary references to this activity, physical traces survive in the form of the various salt mounds, especially on either side of the Tees Estuary. With the growth of the fishing industry, particularly the herring fishery in the late C18 and C19, the demand for salt for curing increased exponentially. The evidence for salt-making mostly consists of mounds of debris in the case of 'sleeching' which involved the extraction of salt from salt marsh deposits, and documentary references to the existence of salt pans in which the brine was evaporated. These sites are of low special interest.
- 2.10 The construction of purpose built **lighthouses** began in the latter part of the C17 and was undertaken by enterprising individuals such as Sir John Clayton who built a lighthouse tower on the Farne Islands. A light had previously been shown in the ruins of the priory church at Tynemouth and when this collapsed in 1659 a purpose-built lighthouse was erected on the headland in 1664. These sites are of medium and low interest, unless specifically mentioned with an SMP policy unit. Other features include **Lifeboat Stations**, buildings associated with the various **Life Brigades** including **Watch Houses** and **Rocket Stations** as well as **Coastguard Stations**. These sites are of medium and low special interest.
- 2.11 There are numerous **shipwrecks** lying off the coast of the study area, most of which date from the industrial period. In most cases the locations are not precisely defined and are recorded with a general NGR. All lie within the intertidal deposits and these sites are of unknown importance and at high risk of erosion.
- 2.12 The term **harbour** covers a wide range of structures from simple quay walls, through formally built **piers**, **docks**, and **jetties** some of which with gated access to mitigate the effects of tides. **Coal staithes** were specialist structures developed

mainly in the NE to facilitate the loading of colliers. They were usually timber jetties of two or more levels. Coal wagons moved along the upper levels and discharged directly into the holds of vessels moored alongside. Whilst these sites are all of low special interest they are all at high risk of erosion.

- 2.13 From the earliest times ships had simply been built at the head of the beach and launched over rollers down to the shoreline, but the increasing size of vessels and the industrialisation of the process led to the provision of purpose-built **shipyards**. A vast range of ancillary structures are also to be found in shipyards including sheds for timber storage, iron forges, ropewalks and chain lockers. These are of medium and low interest depending upon their age and location.
- 2.14 Alum, from aluminium sulphate, is a chemical important in the tanning and dyeing industries. In the Middle Ages it had to be imported from the Continent but in 1607 suitable deposits were discovered within the Jurassic Shales at Belman Bank, Guisborough and this led to the foundation of the Yorkshire alum industry, evidenced by the **alum houses**. All these monuments are of medium interest in the development of this industry and all are at high risk of erosion.
- 2.15 The processing of lime often took place on the coast, to facilitate onward transport by ship and **limekilns** are prominent features at a number of localities. Kilns for lime burning can be sub-divided into ‘intermittent’ or ‘continuous’ types. In the former case the kiln was charged with limestone, which was then burned and the resulting lime drawn down in a single episode. In the case of continuous kilns, they were charged and burned for weeks at a time. These sites are of medium and low special interest.
- 2.16 Coal and iron has been taken from **mines** from the Medieval period although those recorded here are all from the Industrial and modern periods, with all the collieries having closed by the end of the C20, with the sites cleared for other developments. The surviving works lie underground and may be vulnerable to exposure as the cliff face erodes. They are therefore assessed as being of low interest.
- 2.17 The history of coastal defence in the region begins with the reign of Henry VIII when Tynemouth Castle was converted into an artillery fort and the Spanish Battery was established to command to the mouth of the River Tyne. Lindisfarne Castle also dates from this period, built to protect the anchorage and naval base at Holy Island. The town of Berwick-upon-Tweed is justly famous for its C16 artillery fortifications, which rank among the best surviving examples in northern Europe. However, these bastions and massive curtain wall replaced a system of earlier Medieval fortifications which enclosed an area 50% larger. The development of defensive enclaves continued in the C17 with the establishment of a series of gun batteries on the Headland at Hartlepool during the Civil War, the erection of The Fort on the Heugh on Holy Island in 1675 and Clifford’s Fort at North Shields in 1672 while a battery had been erected at Hartley (later Seaton Sluice) by 1670. These **batteries** mounted muzzle loading cannons until breach loading ordinance was introduced in the late C19. In the late C18 the threat of war with the French and attacks by American privateers such as John Paul Jones led to a renewed interest in coastal defence and in the provision of gun batteries to defend the major ports of the NE coast and the concept began

to emerge of 'defended ports'. While Tynemouth Castle, Spanish Battery and Clifford's Fort guarded the mouth of the Tyne, Wearmouth was protected by a series of gun batteries on the south bank of the river and probably by one to the north at Roker. No defences as early as this are known from the Teesmouth but the North Battery on the Headland at Hartlepool was brought back into commission at this time while Whitby Harbour was protected by at least two batteries. These sites are of medium and low interest, depending on their age and level of preservation and some are discussed in further detail in the relevant SMP policy unit.

- 2.18 Features that can be dated to WWII can be divided into those that were designed for defence against bombardment or to confront an invasion, though the two categories are not mutually exclusive. The sites include ***gun batteries, anti-aircraft batteries, searchlight batteries, bombing decoys, pillboxes, air raid shelters, anti-invasion obstacles*** and others. Most of these sites were short-lived in nature and have been transcribed from aerial photographs from World War II and immediately afterwards. It is thought necessary that a field visit is necessary to assess whether the majority of these sites are still extant and therefore it is not possible to reasonably ascribe a level of interest and a level of risk to them. These columns within the tables are therefore filled with a dash (-). Where it has been possible to ascribe a level of interest and a level of risk this has been done in the relevant table. None of the World War II sites recorded within the NERCZA area has been ascribed more than a medium level of special interest.

3. Historic assets of special interest by SMP unit

- 3.0.1 Almost all of the SMP units contain at least one feature related to World War II defensive activity and these details are not summarised within the text but can be found in the tables. Details of all the sites, listed by SMP policy unit, with associated HER or NMR number can also be found in sections 3.2 and 3.4. The data in the ‘Special Interest’ and ‘Risk’ columns are based upon our professional judgement which has been guided by the criteria for assessing the importance of archaeological sites as outlined in Annex 4 of Planning Policy Guidance 16, presented above. Where these cells are left blank, mainly in the case of shipwrecks and WWII anti-invasion features, it is felt a field visit is necessary before either the importance or risk can be determined. Sites known to have been destroyed are marked n/a.
- 3.0.2 At the time of writing the SMP2 for part of the study zone, north of the River Tyne (Fig. 1), is currently being prepared and the NERCZA data have to be assessed against the less detailed SMP1 criteria, produced by Posford Duvivier in 1997. The SMP1 document offers a ‘Preferred Strategic Option’ which is the equivalent of the ‘Policy Recommendations’ of SMP2. These are given as ‘Do Nothing’ (DN), ‘Hold the line’ (HTL) or ‘Selectively hold the line’ (SHTL), and are listed in the following table.

Table 1: SMP Policy Unit locations, numbers and policy

Location	SMP Policy Unit	Policy
Marshall Meadows Point to Neddles Eye	6	SHTL
Neddles Eye to Berwick North Pier	7	DN
Berwick-upon-Tweed	8	HTL
Tweedmouth	9	HTL
Spittal	10	HTL
Dear’s Head to Saltpan Rocks	11	SHTL
Saltpan Rocks to Cheswick Shiel	12	DN
Cheswick Shiel to Beachcomber House	13	SHTL
Beachcomber House to Budle Bay	14	SHTL
Budle Bay to Harkess Rocks	15	SHTL
Harkess Rocks to The Tumblers	16	DN
The Tumblers to Beadnell Harbour	17	SHTL
Beadnell Bay North	18	DN
Beadnell Bay and Football Hole	19	DN
Newton Point - Dunstanburgh	20	DN
Dunstanburgh – Little Carr	21	DN
Craster	22	DN
Craster – Cullernose Point	23	DN
Cullernose Point – Rumbling Kern	24	DN
Rumbling Kern – Boulmer Steel	25	DN
Boulmer Steel – Fluke Hole	26	DN
Fluke Hole - Alnmouth	27	DN
Alnmouth	28	SHTL
Alnmouth – Amble N.Pier	29	DN
Amble	30	SHTL
Amble – Hauxley Haven	31	DN
Hauxley Haven - Cresswell	32	DN
Cresswell - Lynemouth	33	DN

Location	SMP Policy Unit	Policy
Lyne Sands	34	SHTL
Lyne Sands – Newbiggin Point	35	DN
Newbiggin Point – Spittal Point	36	SHTL
Spittal Point – Sandy Bay	37	SHTL
Wansbeck Mouth	38	DN
Wansbeck Mouth –N.Blyth	39	SHTL
North Blyth	40	HTL
Blyth	41	HTL
South Beach, Blyth	42	HTL
Hartley Links	43	HTL
Seaton Sluice	44	DN
Whitley Sands	45	HTL
Whitley Bay	46	HTL
Cullercoats-Long Sands	47	HTL
Tynemouth	48	HTL

3.0.3 The section of the coast south of the Tyne (Fig. 2) falls within Cells 1b to 1d of SMP2, produced by Royal Haskoning in 2007. South of the Tyne the study area spans SMP2 Management Areas 1 to 23. Five main types of mitigation are proposed:

- i) 'Hold the Line' entailing construction works such as the provision of rock armour at the foot of eroding cliffs and the construction of sea defences (HTL).
- ii) Advance the line (A).
- iii) Managed Realignment (MR).
- iv) Hold the line on a retreated alignment (HR).
- v) Retreat (R)

The alternative to these approaches is 'No Active Intervention' (NAI).

The mitigation for each policy unit is presented in the following table.

Table 2: SMP2 Policy Unit locations, numbers and policies for three different time intervals

Location	SMP Policy Unit	Year 2025	Year 2055	Year 2105
South Groyne, S.Shields	1.1	HTL	HTL	HTL
Little Haven, S.Shields	1.2	MR	HR	HR
South Pier, S.Shields	1.3	HTL	HTL	HTL
Herd Sands, (north)	2.1	HTL	HTL	R
Herd Sands, (south)	2.2	HTL	MR	HR
Trow Point	2.3	R	MR	HR
Trow Point, (south)	3.1	R	MR	HR
Trow Quarry	3.2	HTL	MR	MR
Lizard Point (north)	4.1	R	R	NAI
Lizard Point	4.2	NAI	NAI	NAI

Location	SMP Policy Unit	Year 2025	Year 2055	Year 2105
Harbour Quarry	5.1	HTL	R	R
Harbour Quarry to Souter Point	5.2	NAI	NAI	NAI
Whitburn Cliffs	6.1	NAI	NAI	NAI
The Bents	6.2	MR	MR	HR
Parson's Rocks	6.4	HTL	HTL	R
Marine Walk, Sunderland	6.5	HTL	HTL	MR
Harbour Pier, Sunderland	7.1	HTL	HTL	HTL
North Harbour, Sunderland	7.2	HTL	HTL	HTL
South Harbour, Sunderland	7.3	HTL	HTL	HTL
East Bay, Sunderland Harbour	8.1	HTL	HTL	HTL
South face, Sunderland Harbour	8.2	HTL	HTL	HTL
Hendon Seawall	8.3	HTL	HTL	HTL
Hendon to Pincushion	8.4	R	MR	MR
Pincushion to Seaham	9.1	NAI	NAI	NAI
Seaham North Promenade	9.2	HTL	HTL	HTL
Red Acre Cliffs	9.3	R	HR	HR
Seaham Harbour	9.4	HTL	HTL	HTL
Seaham South	9.5	HTL	HTL	HTL
Dawdon Beach	9.6	NAI	NAI	NAI
Blast Beach	9.7	NAI	NAI	NAI
Blackhall Rocks	10.1	NAI	NAI	NAI
Crimdon Dene	11.1	NAI	NAI	NAI
North Sands	11.2	HTL	HTL	MR
Hartlepool Headland	11.3	HTL	HTL	HTL
Hartlepool	12.1	HTL	HTL	HTL
Seaton Carew North	12.2	HTL	HTL	HTL
Seaton Sands	13.2	NAI	NAI	NAI
North Gare	13.3	HTL	HTL	HTL
North Gare Sands	13.4	NAI	MR	MR
Bran Sands	13.5	NAI	NAI	NAI
South Gare	13.6	HTL	HTL	HTL
Coatham Sands	13.7	NAI	NAI	NAI
Coatham East	14.1	HTL	HTL	HTL
Redcar	14.2	HTL	HTL	HTL
Redcar East	14.3	HTL	HTL	MR
Red Howes	15.1	NAI	NAI	NAI
Marske	15.2	HTL	HTL	MR
Marske Sands	15.3	NAI	NAI	NAI

Location	SMP Policy Unit	Year 2025	Year 2055	Year 2105
Saltburn	15.4	HTL	HTL	HTL
Saltburn-Huntcliff	16.1	NAI	NAI	NAI
Cattersty Sands	17.1	R	NAI	NAI
Skinningrove	17.2	HTL	HTL	HTL
Hummersea	17.3	NAI	NAI	NAI
Boulby	18.1	NAI	NAI	NAI
Cowbar Cottages	19.1	HTL	HTL	HTL
Cowbar Nab	19.2	NAI	NAI	NAI
Staithe	19.3	HTL	HTL	HTL
Old Nab	20.1	NAI	NAI	NAI
Port Mulgrave	20.2	R	R	NAI
Lingrow	20.3	NAI	NAI	NAI
Runswick Village	21.1	HTL	HTL	HTL
Runswick Bay	21.2	NAI	NAI	NAI
Kettlesness	21.3	NAI	NAI	NAI
Sandsend Cliffs	22.1	NAI	NAI	NAI
Sandsend Village	22.2	HTL	HTL	HTL
Coastal road	22.3	HTL	R	R
Uppang Beach	22.4	NAI	NAI	NAI
Uppang Beck	23.1	HTL	R	R
Whitby West Cliff	23.2	HTL	HTL	HTL
Whitby Harbour	23.3	HTL	HTL	HTL

- 3.1 SMP1 Policy Units: summary statements referring to those sites considered of most significance** (see also Tables 3, 4, 5 and the Project GIS for a full inventory of sites within each policy unit)
- 3.1.1 **Policy unit 6** contains an Iron Age farmstead enclosure at medium risk of erosion and the possible site of a C13 friary at low risk of erosion.
- 3.1.2 **Policy unit 7** contains the C12 castle of Berwick. This site is of high special interest and was first mentioned in 1180 but the surviving portions date from the late C13. It was an enclosure castle consisting of a curtain wall with towers and turrets. It is at low risk of erosion.
- 3.1.3 **Policy units 8 and 9** contain one wreck site each. **Policy unit 9** also contains a C19 whaling shed, a dock and a jetty. The eastern eight bays of the whaling shed (now known as the Pier Maltings) were built *circa* 1807 as an oil house, associated with the whaling trade. The presence of an oil yard processing whale oil at Berwick is documented in the years between 1807 and 1838, although the main focus of this activity lay on the south side of the river at Tweedmouth. It is

record that Berwick was the base in the early C19 for two vessels engaged in the Greenland whaling trade, the *Norfolk* and the *Lively*. The Pier Maltings is a Grade II Listed Building. A large number of whale bones have been recovered from the area at the rear of the maltings. The site is at low risk of erosion. The jetty and dock, as with all sites of this type, are at high risk of erosion.

- 3.1.4 **Policy unit 10** contains a Roman camp, a temporary structure built by the Roman military to defend short term occupation sites, at low risk of erosion. The unit also contains the site of a possible C13 leper hospital, two coal mine and a C18 fishing shed. The latter is the shiel at Sandstell Road, Spittal. This C18 building was used to store tackle associated with the Tweed salmon fishery. It is the only surviving unmodernised example of this type of structure on the Tweed and is a Grade II Listed Building. All the sites are at low risk of erosion.
- 3.1.5 **Policy unit 11** contains one Iron Age farmstead enclosure and two Romano-British farmstead enclosure sites, one of which is at high risk of erosion.
- 3.1.6 **Policy unit 12** contains one Iron Age farmstead enclosure at low risk of erosion and a Bronze Age cist at medium risk of erosion.
- 3.1.7 **Policy unit 13** contains a deserted medieval village, one wreck site and archaeological sites from World War II.
- 3.1.8 **Policy unit 14** is the largest within the area covered by SMP1 and contains the island of Lindisfarne (Holy Island). The unit contains two Mesolithic flint scatter sites of high special interest at Ross links, one of which also contains material of Bronze Age date. This is an area of sand dune ridges in which episodes of deflation have exposed areas of ancient ground surface revealing finds of varying date including up to 200 Mesolithic flints. *Deflation of the dune system at Ross Links has led to the exposure of archaeological deposits spanning most of the prehistoric period. Study of historic maps by Robertson has shown that the whole dune system is unstable and may only have started to form in the C17 as a result of major storm activity. Any increase in storminess will add to the threat already posed to the archaeological deposits.* A multivallate fort at Middleton, at low risk of coastal erosion, is partially located within the study area.

The Anglo-Saxon monastery of Lindisfarne was given to St Aidan by Oswald of Northumbria in AD 635 and it thrived until the late C8. In AD 793 it experienced the first Viking attack on English shores and repeated harassment led to its abandonment in AD 875. The monastery was re-established in the C11 and very little that is visible at the site today, apart from the collection of C8 cross fragments in the museum, can be dated to the Anglo-Saxon period. However, excavations in 1977 and 2000 have revealed a number of features which might be attributable to the early monastic site. Principal among these is the identification of the monastic boundary, a ditch partly filled with midden material but containing a bone comb of C9 or C10 date. Other finds consist of pits, areas of rough paving and a hearth, though none could be directly dated to the Anglo-Saxon period. The site is a Scheduled Ancient Monument and is at medium risk of erosion. In addition, it has been suggested that some of the remains on St Cuthbert's Isle may date from the Anglo-Saxon period, though it is generally agreed that most of what can be seen today dates from the C13. The site is also a

Scheduled Ancient Monument and is at high risk of erosion. Excavations have also revealed a number of features of Medieval date including a C13 building, cobbled enclosures and rubbish pits. Of particular interest are a complex of late Medieval buildings between the Priory and the harbour and known as 'the palace'). A survey in 1994 established that these remains were part of a trapezoidal enclosure measuring 55m by 45m with buildings along the west, north and east walls. These remains appear on a map of 1548 and have been identified from documentary sources as the C15 Harbottle Place. The Palace, Holy Island is a Scheduled Ancient Monument and is at medium risk of erosion. By 1339 the monastery had established a grange at Fenham which in 1385 was enclosed by a moat and ditch. In 1560 it was described as 'a tower in good repair' and was still standing towards the end of the C18, though by the mid C19 only foundations remained. Today, the remains consist of the foundations of the moated manor house surrounded by a precinct wall with a series of adjoining enclosures containing traces of various agricultural and service buildings. The remains of Fenham are a Scheduled Ancient Monument and are at low risk of erosion.

Five early medieval buildings were located at Green Shiel, Holy Island, three aligned east-west and two north-south, forming a roughly cross-shaped layout. The eastern arm of the cross consisted of buildings 'A' and 'B', which were linked by a common cross wall. Overall, this pair of buildings was nearly 40m long and 5m wide internally. The walls were 1.5m thick and of dry-stone construction. Their thickness suggests they were the footings for turf walls. Centrally placed post holes probably supported a roof ridge. To the west were two buildings, 'E' and 'C', on a north-south alignment. The more southerly, building 'C', measured 18.5m by 4m and was subdivided internally into a series of compartments suggesting a function as a cattle byre. To the north of building 'C' and joined to it by a low wall was building 'E' which measured about 20m by 4m and appeared to be more domestic in function. West of building 'E' and on an east-west alignment was building 'D'. This was about 22m long and 5m wide internally. Buildings 'E' and 'D' both opened onto an irregular shaped yard. Finds included a large number of cattle bones, mostly from immature animals, suggesting that the site may have had a specialist stock rearing function. Dating evidence was provided by 11 C9 coins and an iron spearhead. The lack of any ceramic evidence suggests that the Green Shiel site had been abandoned by the late C11. Few simple agricultural buildings of Early Medieval date are known in Northern England and the Green Shiel site provides important evidence for an aspect of Anglo-Saxon life glimpsed only rarely. The site is a Scheduled Ancient Monument and is at high risk of erosion.

Lindisfarne Castle was built as an artillery fort to protect the anchorage and harbour. The present building dates mainly from 1902 when the castle was substantially rebuilt by Sir Edwin Lutyens as a country residence. It is one of the outstanding houses of the Arts and Crafts Movement and it is a Grade I Listed Building. Only a few original features survived the rebuilding. The castle has an irregular polygonal plan. It mounted gun batteries on two levels while an entrance on the south side is approached by a cobbled ramp leading to a portcullis gate. Lindisfarne Castle remained garrisoned until 1819. It is owned by the National Trust and is at medium risk of erosion. Lying about 600m to the west and on a

rocky Whin Sill promontory on the opposite side of Holy Island Harbour lie the remains of The Fort on the Heugh, also known as Osborne's Fort. Built between 1671 and 1675 its layout can be established from a plan of 1742 and a survey carried out on site in 1986. The fort consisted of a polygonal enclosure, measuring 64m east-west by 32m north-south, surrounding a rectangular blockhouse or redoubt. The north, east and south sides follow the edge of the promontory while that to the west, including the main entrance runs across level ground. The south and east, seaward facing, sides were originally protected by a double wall, but much of the outer wall has collapsed down slope. The space between these walls was occupied by the gun platforms. According to the 1742 plan small turrets stood at the west, north and east corners of the enclosure. The redoubt was 6.6m square and probably of two storeys with a pitched roof. The north and east walls still stand to 4m. The Fort on the Heugh is a Scheduled Ancient Monument and is at medium risk of erosion.

A lighthouse and seamark, at high risk of erosion, as well as three lifeboat stations, a coal mine, two lime kilns and two jetties also lie within this policy unit. All are at low risk of erosion other than one lime kiln on Holy Island, at medium risk of erosion, and the two jetties, at high risk of erosion. The policy unit also contains a number of wreck sites, although the exact number cannot be determined through correlating data from the HER and the NERCZA APTE.

3.1.9 **Policy unit 15** contains three Mesolithic flint scatters, the Iron Age hillfort at Spindlestones Heugh and two deserted medieval villages, as well as archaeological sites from World War II. Spindlestones Heugh stands at 75m OD on an outcrop of Whin Sill and overlooks the head of Budle Bay to the north. The defences consist of an inner, main enclosure supplemented by annexes to the west and north. The inner enclosure measures about 100m by 60m and is defended by two ramparts on the west and north and a single rampart to the east while the south side is defined by the cliffs of the heugh. The inner rampart stands 2m high and is 5m wide. The western annexe is about 60m by 30m and is strongly defended while that to the north is weaker and measures 80m by 28m. There are two entrances into the main enclosure, one on the south close to the cliff edge and one on the west defined by upright stones. Circular areas within the main enclosure may mark the positions of round houses. The Spindlestone Heughs hillfort is a Scheduled Ancient Monument.

3.1.10 **Policy unit 16** contains a round barrow at Bamburgh, an Iron Age farmstead enclosure, a C13 friary, a C6 cemetery, the C13 castle at Bamburgh and a deserted medieval village as well as archaeological sites from World War II. The barrow is irregular in shape and measures 55m by 90m and stands 3m high. Although unusually large, limited excavation in 1928 established that the mound is indeed artificial. There are the remains of a cist, measuring 1.38m by 0.75m, near the summit of the mound which was found to contain the fragmentary skeleton of a male while the HER records the recovery of an 'urn' in the C19. Measurements taken from the APTE transcription of this site, 38m by 50m, suggest that there has been some denudation since the site was originally recorded. The Bamburgh round barrow is a Scheduled Ancient Monument.

In 1817 a severe storm eroded the sand dunes adjoining Bamburgh Castle and exposed an Anglo-Saxon burial ground at a location known as the Bowl Hole.

This site was rediscovered in 1997 and excavations undertaken in 1998 and 1999. A total of 14 graves were excavated including both simple pits and stone-lined cists. Some burials were oriented east-west, suggesting a Christian rite, while others employed a different orientation and may imply the intrusion of pagan Anglo-Saxon burials in a pre-existing Christian C6 burial ground. The site is of high special interest and at high risk of erosion.

The remains of the Dominican Friary at Bamburgh are incorporated within the modern complex of farm buildings known as The Friary. It was established in 1265 and was dissolved in 1539. A survey of 1715 mentions the ruined church and by the late C19 fragments of the church and the wall of the cloister garth still survived. A watching brief in 1969 identified three skeletons. In 1992 and 1993 the farm buildings were converted into residential use and a number of features of the Medieval friary were exposed including sufficient of the church for its dimensions to be established as 37.3m by 6.5m with a north aisle of three bays, measuring 19.5m by 3m. The cloister lay to the south of the church and was about 16m square. The extent of the rest of the complex remains unknown. The remains of Bamburgh Friary are a Grade II Listed Building and is at low risk of erosion.

The castle at Bamburgh occupies a ridge of Whin Sill rising to 46m OD and, although now separated from the shore by a zone of sand dunes, in the Middle Ages the high tide washed the foot of the rock. The castle consists of three baileys and the C12 keep. The latter is the main surviving relic of the Medieval period though the east gatehouse is partly C11. Much of the rest of the castle has been rebuilt and added to many times since the Middle Ages, mainly in the late C18 and C19. However, excavations at the castle in the 1960s, 1970s and from 1996 have revealed a number of features of Medieval date. Bamburgh Castle is a Grade I Listed Building and is at medium risk of erosion

- 3.1.11 **Policy unit 17** contains a Bronze Age enclosure comprised of a series of concentric cropmarks at North Sunderland, Bronze Age cairns, a standing stone, a C13 chapel, a medieval tower house, a deserted medieval village, a harbour, two lime kilns, four coal mines and a wreck site as well as archaeological sites from World War II. The Bronze Age enclosure is recorded as a nearly circular ditched enclosure about 82m across, the ditch being about 10m wide. Placed concentrically within this is a second enclosure 52m across indicated by what appears to be a palisade slot, while a further concentric palisade slot has been identified outside the main ditch on the north, but probably originally continued all the way around. There is an entrance through the inner palisade and the outer ditch on the SE side and outside this two further, short lengths of palisade slot define a forecourt area. The site is undated, but morphological parallels in the region and elsewhere in England suggest a date in the early part of the 1st millennium cal BC. It is at low risk of erosion. The standing stone, probably of Bronze Age date is a stone or boulder deliberately set upright for presumed ritual purposes. These are enigmatic monuments and this example is of low special interest and low risk of erosion.

There is putative Anglo-Saxon site on the small rocky promontory of Ebba's Nook, Beadnell. The remains on the site consist of the foundations of a C13

chapel. This was 17m long and 5m wide and divided into a nave and chancel. The nave had two doors facing each other in the north and south walls, the former having a semi-circular head cut out of two stones. St Ebba's Chapel is a Scheduled Ancient Monument and is at high risk of erosion.

The tower and the coal mines are all at low risk of erosion but the harbour and the lime kilns are at high risk of erosion. *The Beadnell Limekilns have already been partially eroded by the sea. The 'Preferred Strategic Option' is Selectively Hold the Line. The seaward base of the kilns is supported by rock armour.*

- 3.1.12 **Policy units 18 and 19** contain one wreck each as well as archaeological sites from World War II.
- 3.1.13 **Policy unit 20** contains a Bronze Age barrow, a deserted medieval village and one wreck as well as archaeological sites from World War II. The DMV is at high risk of erosion.
- 3.1.14 **Policy unit 21** contains the site of Dunstanburgh Castle, one wreck as well as archaeological sites from World War II. Construction of the fortress at Dunstanburgh, was begun in 1313 by Thomas Earl of Lancaster. A licence to crenellate was granted in August 1316 and it is assumed that work on the castle had largely been completed by the date of Earl Thomas's execution in 1322. It may be described as a roughly quadrangular enclosure castle the fourth, northern, side of which is provided by the 20m high vertical cliffs of the Whin Sill promontory. The main feature evident today is the Great Gatehouse, the result of a late C14 remodelling of the original structure. This work was carried out under the orders of John of Gaunt, Duke of Lancaster. Dunstanburgh saw action and changed hands several times during the Wars of the Roses and was finally and permanently surrendered to the Yorkists in June 1464 from whence it was allowed to fall into decay. In the late C16 the Great Gatehouse was occupied by one of the Craster family. The site is a Scheduled Ancient Monument and is at low risk of erosion.
- 3.1.15 **Policy unit 22** contains a medieval tower house and archaeological sites from World War II. The tower house is at low risk of erosion.
- 3.1.16 **Policy unit 23** contains the Craster Heugh Iron Age enclosure on a prominent ridge of Whin Sill. The settlement, roughly triangular in shape, measures 100m by 70m. It is enclosed by three ramparts and a ditch on the east side but only by a slight bank on the west side where the Heugh offers strong natural defence. The ramparts are built of stone and the innermost stands up to 1.8m high though the outer ramparts are lower, having been damaged by ploughing. The entrance is located on the SE side. This site is a Scheduled Ancient Monument and is at low risk of erosion
- 3.1.17 **Policy unit 24** contains an Iron Age enclosure at Cushat Wood which lies at an altitude of 20m and about 450m from the cliff edge. It was first identified from aerial photographs in 1977 and 1978 and was the subject of an evaluation in 1999. This site is roughly square in shape and consists of three enclosing ditches, which are not necessarily contemporary. They define an area about 130m square. There are traces of an entrance on the east side and indications of at least three

round huts inside. The site is at low risk of erosion. The unit also contains one wreck site and archaeological sites from World War II.

- 3.1.18 **Policy unit 25** contains the Mesolithic Howick Burn occupation site. As well as an assemblage of 18,000 stone tools the excavation of this site uncovered the remains of a circular Mesolithic hut. This was partly sunk into the ground and although some of the structure had already been lost to erosion it was established to be about 6m in diameter. On the basis of radiocarbon dates obtained from successive hearth features, the construction of the hut has been dated to *circa* 7800 cal BC, which makes it the earliest dated evidence for human settlement in Northumberland. As well as stone tools, finds included charred animal bones and hazel nut shells and occasional marine shells. *The Howick Burn site lies in SMP1 Unit 25 for which the 'Preferred Strategic Option' is 'Do Nothing'. This clearly has major implications for the survival of any further archaeological remains in the vicinity and the situation will need to be reviewed once the SMP2 data are available.*

This policy unit also contains the Howick Burn hillfort which lies at 25m OD at the southern end of a wide spur overlooking the Howick Burn and about 300m inland from the foreshore. It is roughly circular in shape and 54m in diameter within a single rampart of earth and stone 8m wide and 1.2m high. There was ditch on the north side whereas the south side was mainly protected by the natural steepness of the slope. The main entrance to the enclosure is on the east side. Fragments of swords and coins are reported to have been found in the early C19, but their present whereabouts is unknown. This site is a Scheduled Ancient Monument and is at low risk of erosion. The unit also contains two wreck sites and archaeological sites from World War II.

- 3.1.19 **Policy unit 26** contains archaeological sites from World War II.
- 3.1.20 **Policy unit 27** contains a DMV, a lifeboat station and a saltworks, all at low risk of erosion.
- 3.1.21 **Policy unit 28** contains archaeological sites from World War II.
- 3.1.22 **Policy unit 29** contains a prehistoric farmstead enclosure (probably Iron Age or Romano-British), a C10 church and a C12 church, a medieval hospital, a medieval bridge, medieval saltworks, a coastguard station, two wrecks and archaeological sites from World War II. There is documentary evidence that St Waleric's Chapel at Alnmouth was not the first church on that site and that when William de Vescy established the new town of St Waleric, as Alnmouth was known in the C12, it was not necessary to build a new church but to enlarge the one already standing at the mouth of the river. It is argued that this is likely to have been an Anglo-Saxon foundation, a view supported by the fact that the fragments of the C10 Alnmouth Cross were found close to the site. Nothing of this early establishment or the later medieval chapel survives above ground level. It is at medium risk of erosion. The C12 church of St Lawrence at Warkworth is a Grade I Listed building at low risk of erosion and the C14 bridge and gate also at low risk of erosion. The medieval saltworks and coastguard station are also at low risk of erosion.

- 3.1.23 **Policy unit 30** contains a monastic grange and archaeological sites from World War II. The fragment of a medieval building has been identified at Amble as a putative monastic grange attached to Tynemouth Priory. The remains consist of 4.6m length of walling standing 3.5m high with a window of two trefoil headed lights. Further foundations were exposed when the Catholic chapel was built on the adjoining site in 1897. The remains of the grange are a Grade II Listed Building and are at low risk of erosion.
- 3.1.24 **Policy unit 31** contained an important series of Bronze Age finds from Amble Quarry, found during quarrying operations in the late C19. The main find consisted of a cairn, situated about 65m from the beach and buried by 1m of blown sand. The cairn was about 12m in diameter and 1.5m high. It contained about 20 cists, several deposits of burnt bone and a number of pottery vessels. The primary interment was in a cist orientated SW-NE about 1.1m by 0.62m and 0.6m deep formed of four slabs and a coverstone. The body was unburnt and accompanied by a small bronze knife, a flint flake and a Food Vessel. A second cist was found about 55m away in 1893. This measured 1.4m by 0.75m. It contained bone fragments, a flint flake and two pottery vessels. The finds made at Amble were dispersed, some going to the British Museum, some to the Museum of Antiquities at Newcastle while some remained in private hands. The full total cannot now be established but the original assemblage included both Beakers and Food Vessels. The site is now destroyed. The unit also contains a deserted medieval village at low risk of erosion, a C17 saltworks at low risk of erosion and archaeological sites from World War II.
- 3.1.25 **Policy unit 32** contains the Mesolithic site of Low Hauxley discovered in 1983 during the rescue excavation of two Bronze Age cairns which were eroding out of the sand dune. The cairns were found to have been erected on a Mesolithic flint scatter site. Marine shells were also recovered from this deposit and it was at first interpreted as a midden, though this interpretation has not been supported by subsequent work at the site. There are also two cairns and three cist burials at this location. *The 'Preferred Strategic Option' for this policy unit is 'Do Nothing'. This clearly has major implications for the survival of any further archaeological remains in the vicinity and the situation will need to be reviewed once the SMP2 data are available.* The C15 tower at Creswell is a rectangular structure measuring 12.5m by 8.5m. It consists of two floor levels over a vaulted basement while the present parapet and turret are probably C18 additions. It is roofless but otherwise well preserved. An C18 house formerly adjoined the tower on the north but this was demolished in the mid C19. The Creswell Tower is both a Scheduled Ancient Monument and a Grade II* Listed Building. It is at low risk of erosion. The unit also contains two deserted medieval villages, at low risk of erosion, and archaeological sites from World War II.
- 3.1.26 **Policy unit 33** contains a coal mine at low risk of erosion and archaeological sites from World War II.
- 3.1.27 **Policy unit 34** contains the excavated Mesolithic site of Lyne Hill. In the space of two days over 3000 flints, including 320 microliths, were recovered from two concentrations each about 14m across and 90m apart. They are reported as having been found at the interface between the boulder clay and overlying blown sand. Lyne Hill is now the site of a local authority rubbish dump. The unit also

- contains a coal mine at low risk of erosion and archaeological sites from World War II.
- 3.1.28 **Policy unit 35** contains two Mesolithic flint scatters at high risk of erosion and archaeological sites from World War II.
- 3.1.29 **Policy unit 36** contains a possible medieval hospital and a C12 church. The site of the medieval hospital at Newbiggin-on-Sea has been tentatively identified with an area currently occupied by tennis courts. It is reported that when the courts were being laid in 1929 three stone coffins and the foundations of a building were exposed. The church of St Bartholomew occupies a prominent site on the promontory at the north end of Newbiggin Bay. Although substantially rebuilt in the C19 some parts of C13 and C14 date remain as well as some reused fragments of C12 date. There is also an important collection of C13 cross slabs, mostly in the internal walls of the north aisle. Both sites are at low risk of erosion. The policy unit also contains archaeological sites from World War II.
- 3.1.30 **Policy unit 37** contains a deserted medieval village and a coal mine, both at low risk of erosion as well as archaeological sites from World War II.
- 3.1.31 **Policy unit 38** contains archaeological sites from World War II.
- 3.1.32 **Policy unit 39** contains two medieval saltworks, a lifeboat station and a coal staith, all low risk of erosion, as well as archaeological sites from World War II.
- 3.1.33 **Policy unit 40** contains four post-medieval and industrial shipyards, a C18 saltworks, three coal mines, a waggonway, a lighthouse and archaeological sites from World War II. The High Light lighthouse at Blyth was initially built in 1788 and further raised in 1888 and 1900 to give a final height of 18.7m. The C18 section is stone built while that added in 1888 is in brick. It worked in conjunction with a Low Light until 1985 when the system was superseded by modern navigational aids. The High Light is a Grade II Listed Building and is at low risk of erosion.
- 3.1.34 **Policy unit 41** contains two wreck sites and archaeological sites from World War II.
- 3.1.35 **Policy unit 42** contains the World War I Electric Light (D.E.L.) emplacements at Blyth Links at high risk of erosion as well as other archaeological sites from World War II.
- 3.1.36 **Policy unit 43** contains two undated enclosures of medium special interest and low risk of erosion, as well as archaeological sites from World War II.
- 3.1.37 **Policy unit 44** contains two undated enclosures of medium special interest and low risk of erosion, coal mines, saltworks, a harbour, a lighthouse and a Life Brigade Watch house as well as archaeological sites from World War II. The harbour and lighthouse are at medium risk of erosion. The Delaval Gun Battery was established sometime before 1670 by Sir Ralph Delaval. It apparently saw action in 1667 when warning shots were fired at a Dutch privateer harassing a

small vessel trying to enter the harbour. The site is of medium special interest and is actively eroding.

- 3.1.38 **Policy units 45 and 46** only contain sites of low special interest and low risk, comprising mining features and World War I and II features. Policy unit 45 contains one wreck sites respectively as well as archaeological sites from World War II.
- 3.1.39 **Policy unit 47** contains a coal mine, harbour, Life Brigade Watch house and rocket site and archaeological sites from World War II. The Rocket House at Cullercoats was where the Cullercoats Life Brigade stored its rocket apparatus. This building, now the Rocket Garage, was built in 1867 and is a Grade II Listed Building. The brigade's Lookout House, built 1877-79, is situated on the cliff overlooking the harbour. Both sites are at low risk of erosion and the harbour is at high risk of erosion.
- 3.1.40 **Policy unit 48** contains Anglo-Saxon monastery and later castle at Tynemouth, a C17 gun battery, two saltworks, a pier, three lighthouses, a Life Brigade watch house and a lifeboat station, as well as archaeological sites from World War II. The promontory at Tynemouth was the site of an important Anglo-Saxon monastery and the burial place of King Oswine. The monastery was sacked by the Vikings in 800 and the Viking army occupied the site in the 870s. In 1085, Robert Mowbray, Earl of Northumberland, founded a Benedictine Priory on the site of the earlier Anglo-Saxon monastery. The main upstanding element of the priory is the church which exhibits two main phases of development, in the late C11 and the early C13. The cloistral buildings, most of which do not survive above foundation level, lay to the south while the monks cemetery was situated to the south and east of the church. Tynemouth Priory was dissolved in 1539. The remains of the priory are situated within the walls of an enclosure castle, the origins of which also lie in the late C11. Early documents record that the castle at Tynemouth was besieged in 1095 during the rebellion of Robert Mowbray against William Rufus and it has been suggested that the remains of this early castle may survive in the large earth mound, known as the Mount, situated at the south-west corner of the headland. This early castle would have been of the motte-and-bailey type. However, in 1296 the Prior of Tynemouth was granted a licence to crenellate and work began on the construction of walls and towers around a circuit of nearly 1000m, one of the largest castles in England at the time. The visible remains are mainly of C13 and C14 date and include the massive gatehouse and barbican, the main strong point of the castle. After the dissolution of the priory the castle remained in use as part of Henry VIII's scheme of coastal defence and this aspect will be considered below. Tynemouth Priory and Castle is a Scheduled Ancient Monument and are at medium risk of erosion.

An artillery battery was established at North Shields in the C17. This became known as Clifford's Fort, was designed by the Swedish engineer Martin Backman and built in 1672. It consists of an irregular, sub-rectilinear enclosure 150m N-S and 57m E-W. The long, eastern side faces the open river. The original armament consisted of thirty 18 pdr culverins and ten 9 pdr demi-culverins, or ten 24 pdrs. By the mid C18 this had been reduced to eighteen 18 pdrs facing the river and nine 9 pdrs facing towards the land and it was in this phase that the ashlar faced seaward curtain wall with its multiple embrasures was built. Buildings within the

enclosure consisted of accommodation for the gunners and stores. The site is at low risk of erosion.

3.2 Tables of archaeological features sorted by SMP1 Policy Unit

3.2.1 The following tables for the HERs of Northumberland and Tyne and Wear as well as the NMR data should be used together as they refer to different datasets. Some NMR records do not have HER records and some HER records do not have NMR records and the NMR records are linked to the HER records in the digital GIS and the original AMIE (NMR) database where concordance has been possible to ascertain. Further work to establish concordance between the datasets is beyond the scope of this project. Given the discrepancies between descriptions and data such as NGRs it is not always clear whether NMR and HER records are referring to the same, or different, sites.

3.2.2 Details are provided for each HER and the NMR for the extent of the study area covered by SMP and are sorted by SMP1 Policy Unit. The policy column refers to the recommendations in the SMPs. These are as follows:

HTL Hold the Line
 SHTL Selectively Hold the Line
 DN Do Nothing

Table 3. Northumberland County Council HER entries

Policy Unit	Policy	HER No.	Site type	Special interest	Risk
6	SHTL	2401	Iron Age enclosure	Medium	Medium
6	SHTL	2392	C13 Hermitage	Low	Low
7	DN	2424	C12 Berwick Castle	High	Low
9	HTL	22025	C19 whaling shed	Medium	Low
9	HTL	4133	Jetty	Medium	High
9	HTL	2722	Dock	Low	High
10	HTL	4131	Roman camp	Medium	Low
10	HTL	4135	C13 Hospital	Low	Low
10	HTL	14258	C18 fishery shed	Medium	Low
10	HTL	4152	Coal Mine	Low	Low
10	HTL	4155	Coal Mine	Low	Low
11	SHTL	3964	Bronze Age cist	n/a	n/a
11	SHTL	3969	Romano-British enclosure	Medium	High
12	DN	3968	Bronze Age cist	Low	Medium
12	DN	3974	Iron Age enclosure	Medium	Low
13	SHTL	4025	DMV	Medium	Medium
13	SHTL	4027	Wreck	-	-
14	SHTL	4114	Wreck	-	-
14	SHTL	4116	Wreck	-	-
14	SHTL	5337	C9 settlement	High	High
14	SHTL	4100	C13 Grange	High	Low
14	SHTL	5338	C13 Chapel	High	High
14	SHTL	5346	C7 Monastery	High	Medium
14	SHTL	5363	C13 buildings	High	Medium

Policy Unit	Policy	HER No.	Site type	Special interest	Risk
14	SHTL	14261	C13 building	Medium	Medium
14	SHTL	5347	Lindisfarne Castle	High	Medium
14	SHTL	5339	C17 Fort	High	Medium
14	SHTL	5340	Lighthouse	Medium	Medium
14	SHTL	5375	Seamark	Medium	High
14	SHTL	20725	Lifeboat station	Low	Low
14	SHTL	20726	Lifeboat station	Low	Low
14	SHTL	14045	Lifeboat station	Low	Low
14	SHTL	20780	Coal Mine	Low	Low
14	SHTL	5353	Lime Kiln	Low	Low
14	SHTL	5351	Lime kiln	Medium	Medium
14	SHTL	5366	Jetty	Low	High
14	SHTL	5355	Jetty	Low	High
14	SHTL	5068	Bronze Age site	High	High
14	SHTL	5068	Mesolithic lithic scatter	High	Medium
14	SHTL	5074	Multivallate fort	Medium	Low
14	SHTL	5078	Mesolithic lithic scatter	High	Medium
14	SHTL	5083	Wreck	-	-
15	SHTL	5087	DMV	Medium	Low
15	SHTL	5091	DMV	Medium	Low
15	SHTL	5092	Mesolithic lithic scatter	Low	Low
15	SHTL	5242	Multivallate hillfort	High	Low
15	SHTL	5246	Mesolithic lithic scatter	Medium	Low
15	SHTL	5283	Mesolithic lithic scatter	Low	Low
16	DN	5251	Bronze Age Barrow	High	Low
16	DN	5905	DMV	Medium	Low
16	DN	5253	C13 Friary	High	Low
16	DN	5258	Tower	n/a	n/a
16	DN	5089	C12 Bamburgh Castle	High	Medium
16	DN	5252	C6 cemetery	High	High
17	SHTL	5781	Bronze Age barrow	High	High
17	SHTL	5784	Bronze Age cist	n/a	n/a
17	SHTL	5795	DMV	Medium	High
17	SHTL	5786	C13 Chapel	High	High
17	SHTL	5782	Tower	Medium	Low
17	SHTL	5807	Wreck	-	-
17	SHTL	5901	Bronze Age cist	n/a	n/a
17	SHTL	5903	Bronze Age burials	n/a	n/a
17	SHTL	5906	Enclosure	Medium	High
17	SHTL	12269	Standing stone	Medium	Low
17	SHTL	5798	Harbour	Low	High
17	SHTL	5790	Lime Kiln	High	High
17	SHTL	5907	Lime Kiln	High	Medium
17	SHTL	21509	Coal Mine	Low	Low
17	SHTL	20363	Coal Mine	Low	Low
17	SHTL	12270	Coal Mine	Low	Low
17	SHTL	5828	Coal Mine	Low	Low
18	DN	5788	Bronze Age Barrow	Medium	Low
18	DN	5806	Wreck	-	-
19	DN	20730	Wreck	-	-
20	DN	5801	DMV	Medium	High
20	DN	5831	Coastguard station	Medium	High
20	DN	5870	Wreck	-	-
21	DN	5878	Wreck	-	-

Policy Unit	Policy	HER No.	Site type	Special interest	Risk
21	DN	20741	Iron Age sword	Medium	Low
21	DN	5872	C14 Dunstanburgh Castle	High	Low
22	DN	5675	DMV	Medium	Low
22	DN	5662	Tower House	Medium	Low
23	DN	5667	Iron Age enclosure	High	Low
24	DN	5671	Prehistoric enclosure	Medium	Low
24	DN	5686	Wreck	-	-
25	DN	5669	Iron Age enclosure	High	Low
25	DN	5674	Mesolithic lithic scatter	High	High
25	DN	5676	Enclosure	Medium	Low
25	DN	5684	C20 Wreck	-	-
25	DN	5685	Wreck	-	-
25	DN	5690	Mesolithic settlement	High	High
26	DN	5770	DMV	Low	Low
27	DN	5768	DMV	Low	Low
27	DN	5769	DMV	Low	Low
27	DN	14178	Lifeboat Station	Medium	Low
27	DN	5766	Saltworks	Low	Low
29	DN	5431	DMV	Medium	Low
29	DN	5704	C10? Church	Medium	Medium
29	DN	5401	Medieval hospital	Medium	Low
29	DN	5411	C14 Bridge	High	Low
29	DN	5413	C14 gateway	High	Low
29	DN	5415	C12 Church	High	Low
29	DN	5593	Medieval Saltworks	Medium	Low
29	DN	14327	Coastguard Station	Low	Low
29	DN	5549	C20 Wreck	-	-
29	DN	5550	Univallate enclosure	Medium	Low
29	DN	5775	Wreck	-	-
30	SHTL	5595	Monastic grange	Medium	Low
31	DN	5594	Bronze Age Barrow	High	High
31	DN	5609	DMV	Low	Low
31	DN	5626	C17 saltworks	Low	Low
32	DN	5604	Mesolithic lithic scatter	High	High
32	DN	5604	Bronze Age Barrows	High	High
32	DN	11924	Tower house	High	Low
32	DN	20354	Lifeboat Station	Medium	Low
32	DN	11887	DMV	Low	Low
32	DN	11927	DMV	Low	Low
33	DN	14355	Coal Mine	Low	Low
34	SHTL	12180	Mesolithic lithic scatter	High	High
34	SHTL	11941	Coal Mine	Low	Low
35	DN	12048	Mesolithic lithic scatter	Medium	High
35	DN	12049	Mesolithic lithic scatter	Medium	High
36	SHTL	12044	Medieval hospital	Medium	Low
36	SHTL	12051	C12 Church	Medium	Low
37	SHTL	11674	DMV	Low	Low
37	SHTL	18091	Coal Mine	Low	Low
39	SHTL	12069	Medieval Saltworks	Medium	Low
39	SHTL	12070	Medieval Saltworks	Medium	Low
39	SHTL	18303	Lifeboat station	Low	Low
39	SHTL	12075	Staithes	Low	Low
40	HTL	12105	Coal Mine	Low	Low
40	HTL	12106	Coal Mine	Low	Low

Policy Unit	Policy	HER No.	Site type	Special interest	Risk
40	HTL	13259	Coal Mine	Low	Low
40	HTL	11491	Waggonway	Low	Low
40	HTL	12124	C18 Saltworks	Low	Low
40	HTL	12077	Lighthouse	Medium	Low
40	HTL	12126	Shipyard	Low	Low
40	HTL	12131	Shipyard	Low	Low
40	HTL	12130	Shipyard	Low	Low
40	HTL	12146	Shipyard	Low	Low
42	HTL	11977	Searchlight battery	High	High
43	HTL	11988	Enclosure	Medium	Low
43	HTL	11994	Enclosure	Medium	Low
44	DN	11969	Enclosure	Medium	Low
44	DN	12004	Mill	Low	Low
44	DN	11956	C17 Gun Battery	Medium	High
44	DN	11958	Salt pans	Low	Low
44	DN	11980	Harbour	Low	Medium
44	DN	1037	Lighthouse	Low	Medium
44	DN	13976	Life Brigade Watch house	Medium	Low
44	DN	20793	Coal Mine	Low	Low
44	DN	20794	Coal Mine	Low	Low
44	DN	20797	Coal Mine	Low	Low
44	DN	20800	Coal Mine	Low	Low
44	DN	20899	Coal Mine	Low	Low
44	DN	20975	Coal Mine	Low	Low

Table 4: Tyne and Wear HER entries for SMP 1 area

Policy Unit	Policy	HER No.	Site type	Special interest	Risk
46	HTL	1192	Coal mine	Low	Low
47	HTL	1196	Mine	Low	Low
47	HTL	5056	Harbour	Low	High
47	HTL	5057	Life Brigade Watch house	Medium	Low
47	HTL	5058	Life Brigade Rocket site	Medium	Low
47	HTL	5558	Searchlight battery	Low	Low
48	HTL	123	Anglo-Saxon Monastery and later castle and priory	High	Low
48	HTL	4552	Salt pans	Low	Low
48	HTL	736	Salt pans	Low	Low
48	HTL	2065	Pier	Low	High
48	HTL	7347	Lighthouse	Medium	High
48	HTL	4556	Lighthouse	Medium	Low
48	HTL	4557	Lighthouse	Low	Low
48	HTL	2214	Life Brigade Watch house	Low	Low
48	HTL	1972	Lifeboat station	Low	Low
48	HTL	150	C17 gun battery	Medium	Low
48	HTL	5526	Searchlight battery	Medium	Medium

Table 5: NMR entries for SMP1 area

Policy Unit	Policy	NMR UID	Site type	Special interest	Risk
8	HTL	1434785	Wreck	-	-
9	HTL	943573	Wreck	-	-
11	SHTL	1348222	Iron Age enclosure	Medium	Low
12	DN	6484	Iron Age enclosure	Medium	Low
13	SHTL	1421608	Anti-tank obstacle	-	-
13	SHTL	1421689	Pillbox	-	-
13	SHTL	1472613	Pillbox	-	-
13	SHTL	1472868	Anti-tank obstacle	-	-
13	SHTL	1472872	Pillbox	-	-
14	SHTL	907657	Wreck	-	-
14	SHTL	907659	Wreck	-	-
14	SHTL	907660	Wreck	-	-
14	SHTL	907661	Wreck	-	-
14	SHTL	1417828	Anti-tank obstacle	-	-
14	SHTL	1421569	Pillbox	-	-
14	SHTL	1472199	Anti-tank obstacle	-	-
14	SHTL	1472273	Pillbox	-	-
14	SHTL	1472668	Anti-tank obstacle	-	-
14	SHTL	1474720	Pillbox	-	-
14	SHTL	1474728	Pillbox	-	-
14	SHTL	1474811	Multivallate fort	High	High
15	SHTL	1472082	Anti-tank obstacle	-	-
15	SHTL	1472105	Pillbox	-	-
15	SHTL	1472251	Pillbox	-	-
15	SHTL	1472261	Pillbox	-	-
16	DN	1421604	Pillbox	-	-
16	DN	1421644	Pillbox	-	-
16	DN	1471461	Iron Age enclosure	Medium	Low
16	DN	1471618	Anti-tank obstacle	-	-
16	DN	1471623	Pillbox	-	-
16	DN	1472288	Pillbox	-	-
16	DN	1472290	Anti-tank obstacle	-	-
16	DN	1472331	Anti-tank obstacle	-	-
16	DN	1472346	Pillbox	-	-
16	DN	1472372	Pillbox	-	-
17	SHTL	8329	Bronze Age enclosure	High	Low
17	SHTL	1417827	Anti-tank obstacle	-	-
17	SHTL	1421651	Pillbox	-	-
17	SHTL	1471507	Anti-tank obstacle	-	-
17	SHTL	1471530	Pillbox	-	-
17	SHTL	1471579	Anti-tank obstacle	-	-
17	SHTL	1471624	Anti-tank obstacle	-	-
18	DN	1471523	Pillbox	-	-
18	DN	1471543	Pillbox	-	-
18	DN	1471657	Anti-tank obstacle	-	-
19	DN	1421652	Pillbox	-	-
19	DN	1471727	Anti-tank obstacle	-	-
19	DN	1471741	Pillbox	-	-
19	DN	1471750	Pillbox	-	-
19	DN	1471755	Pillbox	-	-
19	DN	1471761	Pillbox	-	-
19	DN	1471790	Pillbox	-	-

Policy Unit	Policy	NMR UID	Site type	Special interest	Risk
20	DN	8243	Pillbox	-	-
20	DN	14767	Bronze Age barrow	Medium	High
20	DN	1421602	Anti-tank obstacle	-	-
20	DN	1421655	Pillbox	-	-
20	DN	1421684	Pillbox	-	-
20	DN	1421686	Pillbox	-	-
20	DN	1470685	Pillbox	-	-
20	DN	1470739	Anti-glider obstacle	Low	Low
20	DN	1470753	Anti-tank obstacle	-	-
20	DN	1470758	Pillbox	-	-
20	DN	1470768	Minefield	-	-
20	DN	1470771	Pillbox	-	-
20	DN	1470814	Pillbox	-	-
20	DN	1470818	Pillbox	-	-
20	DN	1470829	Pillbox	-	-
20	DN	1470836	Anti-tank obstacle	-	-
20	DN	1471688	Pillbox	-	-
21	DN	1417824	Pillbox	-	-
21	DN	1470656	Anti-glider obstacle	Low	Low
21	DN	1470660	Pillbox	-	-
21	DN	1470852	Iron Age enclosure	Medium	Low
22	DN	1470138	Pillbox	-	-
22	DN	1470157	Anti-tank obstacle	-	-
22	DN	1470171	Pillbox	-	-
24	DN	1470184	Anti-glider obstacle	Low	Low
24	DN	1470187	Anti-tank obstacle	-	-
25	DN	1470233	Pillbox	-	-
26	DN	1387343	Pillbox	-	-
26	DN	1427712	Anti-tank obstacle	-	-
26	DN	1470217	Anti-glider obstacle	Low	Low
26	DN	1470368	Anti-glider obstacle	Low	Low
26	DN	1470392	Anti-glider obstacle	Low	Low
26	DN	1470413	Anti-tank obstacle	-	-
26	DN	1470418	Pillbox	-	-
26	DN	1470967	Pillbox	-	-
26	DN	1470973	Minefield	-	-
26	DN	1470974	Pillbox	-	-
26	DN	1470983	Pillbox	-	-
26	DN	1471000	Pillbox	-	-
26	DN	1471046	Pillbox	-	-
26	DN	1471049	Pillbox	-	-
26	DN	1471055	Pillbox	-	-
27	DN	1470351	Pillbox	-	-
27	DN	1470416	Anti-tank obstacle	-	-
27	DN	1470417	Anti-tank obstacle	-	-
27	DN	1470420	Pillbox	-	-
27	DN	1470422	Pillbox	-	-
27	DN	1471016	Pillbox	-	-
27	DN	1471019	Anti-tank obstacle	-	-
27	DN	1471061	Pillbox	-	-
27	DN	1471062	Pillbox	-	-
28	SHTL	1469547	Anti-tank obstacle	-	-
28	SHTL	1470350	Pillbox	-	-
29	DN	1047754	Wreck	-	-
29	DN	1469543	Pillbox	-	-

Policy Unit	Policy	NMR UID	Site type	Special interest	Risk
29	DN	1469545	Pillbox	-	-
29	DN	1469550	Pillbox	-	-
29	DN	1469556	Anti-tank obstacle	-	-
29	DN	1469571	Pillbox	-	-
29	DN	1469596	Pillbox	-	-
29	DN	1469633	Anti-tank obstacle	-	-
29	DN	1469634	Pillbox	-	-
29	DN	1469637	Anti-tank obstacle	-	-
29	DN	1469643	Pillbox	-	-
29	SHTL	1469701	Anti-tank obstacle	-	-
29	DN	1469706	Pillbox	-	-
29	DN	1469712	Air raid shelter	-	-
29	DN	1469810	Pillbox	-	-
29	DN	1470340	Pillbox	-	-
30	SHTL	1469714	Pillbox	-	-
30	SHTL	1469717	Pillbox	-	-
31	DN	1469730	Pillbox	-	-
31	DN	1469733	Minefield	-	-
32	DN	1418884	Pillbox	-	-
32	DN	1421444	Pillbox	-	-
32	DN	1421546	Pillbox	-	-
32	DN	1421553	Pillbox	-	-
32	DN	1421560	Pillbox	-	-
32	DN	1443628	Pillbox	-	-
32	DN	1443915	Anti-tank obstacle	-	-
32	DN	1468352	Minefield	-	-
32	DN	1468535	Anti-tank obstacle	-	-
32	DN	1468548	Anti-tank obstacle	-	-
32	DN	1468570	Pillbox	-	-
32	DN	1468573	Pillbox	-	-
32	DN	1468575	Pillbox	-	-
32	DN	1468612	Minefield	-	-
32	DN	1468622	Pillbox	-	-
32	DN	1468645	Pillbox	-	-
32	DN	1468648	Pillbox	-	-
32	DN	1468677	Pillbox	-	-
32	DN	1468697	Anti-tank obstacle	-	-
32	DN	1468707	Anti-tank obstacle	-	-
32	DN	1468716	Minefield	-	-
32	DN	1468718	Anti-tank obstacle	-	-
32	DN	1468763	Anti-tank obstacle	-	-
32	DN	1468774	Pillbox	-	-
32	DN	1468784	Pillbox	-	-
32	DN	1468814	Anti-glider obstacle	Low	Low
32	DN	1468847	Pillbox	-	-
32	DN	1468848	Anti-tank obstacle	-	-
32	DN	1468850	Anti-tank obstacle	-	-
32	DN	1468852	Anti-tank obstacle	-	-
32	DN	1468855	Pillbox	-	-
32	DN	1468910	Pillbox	-	-
32	DN	1468920	Anti-tank obstacle	-	-
32	DN	1468991	Anti-tank obstacle	-	-
32	DN	1469613	Anti-tank obstacle	-	-
32	DN	1469616	Anti-tank obstacle	-	-
32	DN	1469636	Anti-glider obstacle	Low	Low

Policy Unit	Policy	NMR UID	Site type	Special interest	Risk
32	DN	1469642	Anti-glider obstacle	Low	Low
32	DN	1469646	Pillbox	-	-
32	DN	1469650	Anti-tank obstacle	-	-
32	DN	1469657	Pillbox	-	-
32	DN	1469663	Pillbox	-	-
32	DN	1469665	Pillbox	-	-
32	DN	1469671	Pillbox	-	-
32	DN	1469673	Anti-tank obstacle	-	-
32	DN	1469675	Pillbox	-	-
32	DN	1469677	Minefield	-	-
32	DN	1469690	Minefield	-	-
32	DN	1469694	Anti-glider obstacle	Low	Low
32	DN	1469698	Anti-tank obstacle	-	-
32	DN	1469758	Pillbox	-	-
32	DN	1469758	Pillbox	-	-
32	DN	1469761	Pillbox	-	-
32	DN	1469763	Pillbox	-	-
32	DN	1469766	Minefield	-	-
32	DN	1470632	Anti-tank obstacle	-	-
32	DN	1470645	Pillbox	-	-
32	DN	1470674	Pillbox	-	-
32	DN	1470683	Pillbox	-	-
33	DN	1468823	Pillbox	-	-
33	DN	1468840	Pillbox	-	-
33	DN	1470760	Anti-tank obstacle	-	-
34	SHTL	1467433	Pillbox	-	-
34	SHTL	1467434	Anti-tank obstacle	-	-
35	DN	1421564	Pillbox	-	-
35	DN	1467397	Anti-tank obstacle	-	-
35	DN	1467413	Anti-glider obstacle	Low	Low
35	DN	1467417	Pillbox	-	-
35	DN	1467428	Pillbox	-	-
36	SHTL	1467353	Air raid shelter	-	-
36	SHTL	1467358	Air raid shelter	-	-
36	SHTL	1467368	Anti-tank obstacle	-	-
36	SHTL	1467374	Pillbox	-	-
36	SHTL	1467378	Pillbox	-	-
36	SHTL	1467383	Anti-tank obstacle	-	-
37	SHTL	1417826	Pillbox	-	-
37	SHTL	1467346	Anti-glider obstacle	Low	Low
39	SHTL	1421566	Pillbox	-	-
39	SHTL	1421567	Pillbox	-	-
39	SHTL	1466993	Barrage balloon	-	-
39	SHTL	1467003	Barrage balloon	-	-
39	SHTL	1467026	Pillbox	-	-
39	SHTL	1467314	Anti-glider obstacle	Low	Low
39	SHTL	1467320	Anti-glider obstacle	Low	Low
39	SHTL	1470005	Anti-glider obstacle	Low	Low
39	SHTL	1470013	Pillbox	-	-
39	SHTL	1470047	Pillbox	-	-
39	SHTL	1470059	Air raid shelter	-	-
39	SHTL	1470144	Air raid shelter	-	-
40	HTL	1466938	Barrage balloon	-	-
40	HTL	1466959	Air raid shelter	-	-
40	HTL	1470146	Pillbox	-	-

Policy Unit	Policy	NMR UID	Site type	Special interest	Risk
41	HTL	907638	Wreck	-	-
41	HTL	1410079	Wreck	-	-
42	HTL	1427382	Pillbox	-	-
42	HTL	1427391	Anti-tank obstacle	-	-
42	HTL	1442170	Pillbox	-	-
43	HTL	26650	Iron Age enclosure	Medium	Low
43	HTL	1413842	Pillbox	-	-
43	HTL	1421533	Pillbox	-	-
43	HTL	1421534	Pillbox	-	-
43	HTL	1427373	Pillbox	-	-
43	HTL	1427377	Anti-tank obstacle	-	-
43	HTL	1427379	Pillbox	-	-
43	HTL	1427380	Pillbox	-	-
43	HTL	1427383	Pillbox	-	-
43	HTL	1427385	Pillbox	-	-
43	HTL	1427389	Pillbox	-	-
43	HTL	1464848	Iron Age enclosure	Medium	Low
43	HTL	1465425	Iron Age enclosure	Medium	Low
43	HTL	1465492	Anti-tank obstacle	-	-
43	HTL	1465466	Anti-glider obstacle	Low	Low
43	HTL	1465579	Searchlight battery	Low	Low
44	DN	1427370	Pillbox	-	-
44	DN	1465595	Pillbox	-	-
44	DN	1418909	Pill box	-	-
44	DN	1465317	Anti-glider obstacle	Low	Low
44	DN	1465372	Searchlight battery	High	Medium
45	HTL	908667	Wreck	-	-
45	HTL	1464891	Air raid shelter	-	-
45	HTL	1464899	Anti-glider obstacle	Low	Low
45	HTL	1464908	Anti-glider obstacle	Low	Low
45	HTL	1464909	Anti-tank obstacle	-	-
45	HTL	1464911	Anti-glider obstacle	Low	Low
45	HTL	1465044	Anti-tank obstacle	-	-
45	HTL	1465171	Pill box	-	-
45	HTL	1465175	Pill box	-	-
45	HTL	1465324	Pill box	-	-
45	HTL	1465658	Anti-tank obstacle	-	-
46	HTL	1464890	Air raid shelter	-	-
46	HTL	1465183	Pill box	-	-
46	HTL	1465187	Anti-tank obstacle	-	-
47	HTL	1371831	C20 Wreck	-	-
47	HTL	1380514	C20 Wreck	-	-
47	HTL	1465217	Pill box	-	-
47	HTL	1465219	Anti-glider obstacle	Low	Low
47	HTL	1465222	Searchlight battery	Low	Low
47	HTL	1465240	Pill box	-	-
47	HTL	1465247	Pill box	-	-
47	HTL	1465250	Pill box	-	-
47	HTL	1465255	Anti-tank obstacle	-	-

- 3.2 SMP2 Policy Units: summary statements referring to those sites considered of most significance** (see also Tables 6, 7, 8, 9, 10, 11 and the Project GIS for a full inventory of sites within each policy unit)
- 3.3.1 Policy unit 1.1** contains the Roman Fort at South Shields, a shipyard, three lighthouses and a Life Brigade Watch house. The fort at South Shields is known by its ancient name of *Arbeia*. This site is situated at 25m OD on Law Top, a flat topped hill overlooking the mouth of the Tyne on the south side. Excavations over more than a century have shown this to be a complex, multi-period site involving several phases of rebuilding between the earlier C2 and late C4. The first fort, dating from *circa* AD129, was part of the Hadrian's Wall system, although it is situated 6.5km east of the end of the Wall at Wallsend on the north bank of the Tyne. The South Shields fort was garrisoned by units of cavalry and it is assumed that it guarded a small port at the mouth of the Tyne. The original earth and timber fort was replaced in stone *circa* AD160 but a more major reorganisation occurred in the first decade of the C3 when the fort was turned into a supply base both for the garrison of Hadrian's Wall and for military operations north of the frontier. This involved subdividing the fort into northern and southern portions and extending the southern portion by 45m. The barracks in the northern portion were demolished and replaced by 18 granaries. The garrison at this time consisted of units of infantry. Further reorganisation occurred *circa* AD230 when more granaries were added. The fort appears to have been abandoned at the end of the C3 but was reoccupied at the end of the C4 with activity in the post-Roman and Early Medieval periods being recorded. *Arbeia* is included within the Hadrian's Wall World Heritage Site and is a Scheduled Ancient Monument. It is at low risk of erosion. The lighthouse on the South Groyne at the mouth of the River Tyne was built in the 1860s. This is an unusual structure consisting of a hexagonal iron and wood cabin raised on six struts. The cabin is approached by a flight of stairs and surmounted by a lantern chamber. It is at medium risk of erosion. The policy unit also contains two wreck sites.
- 3.3.2 Policy unit 1.2** contains six wreck sites.
- 3.3.3 Policy unit 1.3** contains a C19 pier at high risk of erosion.
- 3.3.4 Policy unit 2.1** contains one wreck site.
- 3.3.5 Policy units 2.2 and 2.3** contain no recorded historic assets of special interest.
- 3.3.6 Policy unit 3.1** contains a round barrow and a C19 gun battery, both at high risk of erosion. The gun battery is an experimental 'floating platform' gun emplacement at Trow Rock. This was designed by Hiram Maxim and used a system of hydraulics to raise and lower a standard naval gun from a concealed position. The site is a Grade II Listed Building.
- 3.3.7 Policy unit 3.2** contains a C19 gun battery which was re-used in World War I.
- 3.3.8 Policy unit 4.1** contains one wreck and archaeological sites from World War II.

- 3.3.9 **Policy unit 4.2** contains a lighthouse and archaeological sites from World War II.
- 3.3.10 **Policy unit 5.2** contains a mine and archaeological sites from World War II.
- 3.3.11 **Policy unit 6.1 – 6.4** contain archaeological sites from World War II. **Policy unit 6.2** also contains a lifeboat station at low risk of erosion.
- 3.3.12 **Policy unit 6.5** contains a C17 gun battery as well as archaeological sites from World War II.
- 3.3.13 **Policy unit 7.1** contains an Anglo-Saxon monastery, a medieval port and ferry, a saltworks, four shipyards, a lifeboat station and two C19 dock, as well as archaeological sites from World War II. One of the most important and well known early medieval sites on the coast is the Anglo-Saxon monastery of St Peter at Monkwearmouth, twinned with that of St Paul at Jarrow. The Monkwearmouth site was established in 674. It originally consisted of two separate churches, St Peter's and St Mary's, and thrived for a little over a century before being sacked by the Vikings in 794. It was refounded in 1075 and became a cell of Durham Priory in 1083. It is situated at 15m OD on a level terrace above the north bank of the River Wear. The only feature visible at the site is the church, though extensive remains of the monastic site have been recorded by excavation. Of the surviving fabric, it has been suggested that the west wall of the nave and the lowest stage of the tower represent the earliest remains and date from the late C7, with further stages being added to the tower *circa* 700 and at the end of the C10. The rest of the church represents a C13 rebuilding. The pre-Conquest monastic buildings were replaced by a standard conventual layout in the late C11 but excavations have shown that the earlier arrangements were more haphazard and similar to those identified at Hartlepool. Monkwearmouth monastic settlement is a Scheduled Ancient Monument and is at low risk of erosion. A medieval port is recorded on the south bank of the River Wear opposite St Peter's monastery, while a medieval ferry is recorded a short distance upstream. Both sites are at low risk of erosion.
- 3.3.14 **Policy unit 7.2** contains a pier and lighthouse, one wreck site and archaeological sites from World War II.
- 3.3.15 **Policy unit 7.3** contains a pier, one wreck site and archaeological sites from World War II.
- 3.3.16 **Policy unit 8.1** contains an Industrial shipyard at low risk of erosion.
- 3.3.17 **Policy unit 8.2** contains a medieval shipyard and a lifeboat station. The shipyard is only known from documentary sources and its risk of erosion is unknown.
- 3.3.18 **Policy unit 8.3** contains archaeological sites from World War II.
- 3.3.19 **Policy unit 8.4** contains two Mesolithic flint scatters as well as archaeological sites from World War II.

- 3.3.20 **Policy unit 9.1** contains one Mesolithic flint scatter, one wreck site and archaeological sites from World War II.
- 3.3.21 **Policy unit 9.2** contains and Anglo-Saxon cemetery and C8 church as well as two coal mines. The Early Christian and Anglo-Saxon cemetery at Seaham lies to the north of St Mary's church and is believed to be about 180m by 100m in extent. Human remains have been reported since the middle of C18 but excavations in 1997 recovered some 10 inhumations, aligned east-west. Radiocarbon dates suggest that the cemetery was in use from the middle of the C7 to the latter part of the C9. Further excavations in 1999 exposed a further 26 inhumations of which 15 were exhumed for further analysis. *This cemetery lies about 130m from the cliff edge on a section of the coast where erosion rates of 0.3m to 0.4m/per year have been recorded. The SMP recommended policy here is one of NAI and although the B1287 lies between the cemetery and the cliff, the long term status of the site should be kept under review.* as a production centre. As well as cores and microliths the assemblage The church of St Mary is itself a partly Anglo-Saxon structure, the nave dating from the C7 or early C8 with the chancel and tower having been added in the C13, while the village of Seaham itself is first recorded in AD 933. The sites are thought to be at high and medium risk of erosion respectively.
- 3.3.22 **Policy unit 9.3** contains three wreck sites.
- 3.3.23 **Policy unit 9.4** contains a harbour and archaeological sites from World War II.
- 3.3.24 **Policy unit 9.5** contains one wreck site.
- 3.3.25 **Policy unit 9.6** contains no recorded historic assets of special interest.
- 3.3.26 **Policy unit 9.7** contains two wreck sites.
- 3.3.27 **Policy unit 10.1** contains two Mesolithic flint scatters, four wreck sites, two Life Brigade rocket sites and two coal mines, as well as archaeological sites from World War II.
- 3.3.28 **Policy unit 11.1** contains 16 lithic scatter sites, of which seven are dated to the Mesolithic period and are of high special interest. The most southerly of these flint scatter sites is that in field 206 at Hart. This site is situated at about 50m OD and lies about 700m to the SW of a major Mesolithic site at the mouth of Crimdon Dene. Flints have been recovered from this location over a number of years and the NGR cited should be regarded as a general indication. More than 9000 artefacts have been collected, most of which are waste flakes and debitage which enable Crimdon Dene to be identified also includes leaf-shaped and barbed-and-tanged arrowheads indicating that activity extended from the Mesolithic period into the Neolithic period and Bronze Age, a common characteristic of flint scatter sites in the area. The Crimdon Dene site is described as occupying a low, flat topped spur of boulder clay partly covered by blown sand. About 1.25km NW of Crimdon Dene and at about 50m OD lie the flint scatters known collectively as Filpoke Beacon. Here, excavations during the 1930s at two locations recovered an assemblage of nearly 2000 artefacts including cores and microliths in addition to flint knapping waste. The microliths are of distinctly narrow blade Late Mesolithic types and hazel nut shells associated with

the assemblage have been dated to 8760± 140 BP. Three further assemblages of Mesolithic flints have been recorded at Blackhall, 1.5km to the north of Filpoke Beacon. They cannot be precisely located but lay in the general area of NZ 472389. Originally referred to as Neolithic, this material was identified by Raistrick as Mesolithic. The last in this group of Mesolithic sites is an assemblage reported from Blue House Gill. *Whereas the Filpoke Beacon sites are situated well inland from the present shoreline the main Crimdon Dene site is close to the MHWs limit while the Blackhall sites are on the cliff edge. The recommended policy for this policy unit is 'No Active Intervention'.* Two prehistoric enclosures are also located in this policy unit as well as archaeological sites from World War II.

- 3.3.29 **Policy unit 11.2** contains one lithic scatter as well as archaeological sites from World War II.
- 3.3.30 **Policy unit 11.3** contains Early Medieval town walls, a church and friary as well as six gun batteries, four dating to the C18 and two to the C19. There is also a C19 lighthouse in the policy unit. The Hartlepool Headland, extending to nearly 1km SE into the North Sea and rising several metres above the low lying land to the west, offered a rare opportunity for creating a defensive stronghold along this exposed section of coast. On the NE and SE sides low but steep cliffs provided adequate defence but on the SW side and to the NW across the landward approaches, the Headland was provided, between 1326 and 1344, with a wall consisting of a curtain provided with towers or bastions and gates. The extant section of the wall runs from near the southern extremity of the Headland in a north-westerly direction for about 500m, including the Sandwell Gate and three bastions. At the last bastion the wall turned NE and ran for 650m across the neck of the Headland to the cliff above Fairy Cove. This section of the wall is no longer extant, some of it having been destroyed by the construction of the Victoria Harbour, but the HER has records of nine bastions and two gates, The North gate and The Water gate, while excavations have revealed a ditch outside the wall. The town walls are at medium risk of erosion and works to the sea defences in this area may have an impact upon their preservation.

The church of St Hilda occupies the highest point on the Headland at 10m OD. The present church, which is not the first on the site, dates from the early C13. Other medieval ecclesiastical establishments include the Franciscan Friary, dating from 1240 to 1538, which was situated to the NE of St Hilda's. Excavations at various locations on the Headland have recorded medieval deposits and a cemetery has been identified at Francis Street. These sites are at low risk of erosion

The threat of a French invasion and the activities of privateers such as John Paul Jones in the late C18 led to the re-establishment of the North Battery on Hartlepool Headland. A chart of 1782 marks the position of batteries at either end of the West Pier at Whitby, that at the landward end mounting five 18 pdr guns with five in reserve and a further five in a battery at the end of the pier. The gun batteries at Hartlepool Headland were also renewed in the C19. The HER records batteries at Fairy Cove, The Heugh and the Lighthouse Battery. The latter two were established during the Crimean War and the Lighthouse Battery was also known as the Sebastopol Gun. The Redcar Battery is recorded as a C19 gun emplacement while a magazine is recorded 70m to SE on the 1898 6 inch

OS map. The area was the site of coastal defence features dating from both WWI and WWII. A second C19 gun battery was sited towards the seaward of the South Gare Breakwater and this site has been identified by the APTE at NZ455642799. Aerial photographs taken between 1940 and 1952 reveal a complex group of remains of more than one period, the main features of which are three gun emplacements one of which is said to date from *circa* 1890. The C17 gun batteries are of high special interest and at medium risk of erosion, whilst the later batteries are of medium special interest and also at medium risk of erosion. The unit also contains archaeological sites from World War II.

- 3.3.31 **Policy unit 12.1** contains a number of sites of special interest dating to the Mesolithic, Roman and Anglo-Saxon periods. Most of these sites are also at high risk of erosion. The southern portion of Hartlepool Bay adjoining Carr House Sands is well known for the extensive submerged forest remains lying between MHWS and LAT and this site has been designated as an SSSI. Since the mid C19 archaeological finds in the form of stone tools, human remains and modified animal bones have also been recovered from these deposits. These include cores, blades, flakes, microliths and a tranchet axe that can be dated to the Mesolithic period. *While finds of prehistoric material have been recovered from the Hartlepool Bay submerged forest beds for over a century recent research has been conducted within the context of work on the sea defences which took place between 1990 and 2003. As a consequence of this work, patterns of sand movement and accumulation within the bay have changed leading to the burial of the submerged forest beds. The recommended policy for this unit is 'Hold the Line' in the face of continuing sea level rise. It is suggested that this could eventually have a negative impact on the inter-tidal peat deposits through an increase in exposure to wave action. This might have to be addressed by reducing the slope of the coastal defence barrier, in effect retreating the crest.* The Roman period is also represented by a number of isolated finds from the Hartlepool area. The main group of finds comes from close to the foreshore at the southern end of Carr House Sands. These finds are described as coming from a 'midden' and testify to occupation in the vicinity. The finds include pottery, brooches and coins, one of the reign of Domitian. *The Roman deposits at Carr House Sands occur in a similar situation to the submerged forest beds and are similarly vulnerable to the effects of wave action and coastal erosion.* Anglo-Saxon archaeology is known from Hartlepool Headland where archaeological research over more than a century has revealed traces of St Hilda's C7 monastery and several Anglo-Saxon cemeteries. The monastery site was located in Church Close and consisted of the postholes and wall trenches of a succession of rectangular timber buildings. Four phases of occupation were identified and a series of radiocarbon dates spans the period from the mid C7 to the mid C8. Historical accounts recall that the monastery was founded by Hieu in AD 640 who was succeeded by St Hilda in AD 649. It appears to have been destroyed in the late C8, an early victim of the Viking raids. Two hundred metres to the north of Church Close lies the Gladstone Street Anglo-Saxon cemetery. Excavations here in 1964 recovered the remains of 29 inhumations. The Baptist Street Anglo-Saxon cemetery lies 185m to the SE of the Church Close site while further Anglo-Saxon burials have been recorded at South Terrace 100m to the south and on the cliff edge. Anglo-Saxon remains have been found at a number of other locations on the Headland and Hartlepool was clearly an important centre during this period. The unit also contains archaeological sites from World War II.

- 3.3.32 **Policy unit 12.2** contained one Neolithic fish trap, now destroyed, and a Roman coin hoard.
- 3.3.33 **Policy unit 13.2** contains archaeological features from World War II.
- 3.3.34 **Policy unit 13.3** contains one wreck site and archaeological features from World War II.
- 3.3.35 **Policy unit 13.4** contains an extensive series of saltworks (the HER records 27 in total), five wreck sites and archaeological features from World War II.
- 3.3.36 **Policy unit 13.5** contains archaeological features from World War II.
- 3.3.37 **Policy unit 13.6** contains one C19 gun battery of medium special interest and at medium risk of erosion, one wreck site and archaeological features from World War II.
- 3.3.38 **Policy unit 13.7** contains an iron working site of low special interest and at low risk of erosion, as well as archaeological features from World War II.
- 3.3.39 **Policy unit 14.1** contains archaeological features from World War II.
- 3.3.40 **Policy unit 14.2** contains one lithic scatter, two wreck sites and archaeological features from World War II.
- 3.3.41 **Policy unit 14.3** contains a C19 gun battery of medium special interest and at medium risk of erosion, an ironstone mine and archaeological features from World War II.
- 3.3.42 **Policy unit 15.1** contains one wreck site and archaeological features from World War II.
- 3.3.43 **Policy unit 15.2** contains a C12 church and archaeological features from World War II. Excavations in 1938 established that the present church of St Germain, Marske, although an early C19 structure, stands on the site of a late C12 predecessor. The site is at low risk of erosion.
- 3.3.44 **Policy unit 15.3** contains an ironstone mine and archaeological features from World War II.
- 3.3.45 **Policy unit 15.4** contains one Bronze Age barrow and a C17 Alum works.
- 3.3.46 **Policy unit 16.1** contains a lithic scatter, a prehistoric enclosure, a Bronze Age barrow cemetery, an unrelated Bronze Age barrow and an ironstone mine as well as archaeological features from World War II. The ironstone mine at Huntcliff is a Scheduled Ancient Monument and is at medium risk of erosion. All the other sites are at low risk of erosion
- 3.3.47 **Policy unit 17.1** contains two ironstone mines at low risk of erosion.

- 3.3.48 **Policy unit 17.2** contains an ironstone mine, two jetties and archaeological features from World War II. The jetties, associated with the transport of industrial goods from local sites, are of low special interest but at high risk of erosion (see 3.3.41 for further details on jetties and dock facilities).
- 3.3.49 **Policy unit 17.3** contains two ironstone mines, one wreck and archaeological features from World War II.
- 3.3.50 **Policy unit 18.1** contains two lithic scatters, a Neolithic long cairn, numerous Bronze Age barrows, one of which is scheduled, a Romano-British enclosure, ironstone mines, jet workings, Alum works, harbours associated with the Alum works and archaeological features from World War II. The Neolithic long cairn at Street Houses, a shallow plough damaged earthwork about 6m in diameter, was excavated between 1979 and 1981 when it was found to be a complex, multi-phase structure. Initially, an east facing timber façade of closely-spaced posts fronted a narrow mortuary structure set between low banks of earth and stone behind which lay a sub-rectangular enclosure defined by a low stone kerb. The mortuary structure contained the burnt remains of several individuals. Radiocarbon dates suggest that the structure was initially constructed in the mid fourth millennium BC but was subsequently converted into a low trapezoidal mound. Further funerary activity took place at this site in the Bronze Age. It is at low risk of coastal erosion. None of the Bronze Age sites are threatened by coastal erosion, although all are damaged by ploughing.

There is extensive evidence for jet mining in this policy unit, mostly extracted from the 1st edition of the Ordnance Survey 25 inch sheets. These records probably refer to C19 drift mining. The main areas recorded are between Hummersea Bank and Rockhole Hill, between Staithes and Port Mulgrave, around Runswick Bay to Kettleness and from Kettleness to Deepgrove Wyke. This latter record refers to a more than 3km long zone of artificial caves at or near the base of the cliffs. *Given that all these sites are located within or at the base of the cliffs they are clearly vulnerable to coastal erosion and the British Geological Survey has identified two areas in the Kettleness to Deepgrove Wyke zone that are particularly susceptible to landslip.*

The remains of the Boulby Alum works and associated features extend for about 3.5km along the coastline. The workings originally extended further north, but substantial areas have been lost to coastal erosion. The Boulby alum works were started in 1672 and continued in production until 1871. There are two discrete areas of quarrying, the earliest being at the east end at Rockhole Hill where a large quarry scoop with three terraces survive. This was served by the alum house at Boulby. In the C18 the works thrived and in 1784 expanded westward with the opening of the New Works situated in Loftus Parish. Surviving large mounds of shale are the remains of the calcining clamps and fragments of steeping pits protrude from the cliff face. Extending west to east are the remains of a stone culvert which supported a wooden liquor trough. Some cisterns, reservoirs, tunnels and shafts also survive as ruined structures. Excavations in the 1960s found several structures including three roomed buildings which are thought to be laboratories or a blacksmiths workshop. There has been a survey by RCHME and is part of the Rockhope Hill complex, a Scheduled Ancient Monument. It is at high risk of further erosion. The alum house at Hummersea Bank was built

c1800 and is recorded on the 1st edition Ordnance Survey sheet for 1857. This particular alum house is believed to have been the third which served the Boulby/Loftus alum quarries. The structural remains consist of a kiln-type structure, a row of four arches and what appears to be the housing for a large metal pan. These remains are visible in the cliff face at Hummersea, some 8m above sea level. The buildings would originally have been located on a platform, to avoid the tides. The structures have been engulfed by a landslip from the cliff above, hence the fragmentary remains in the cliff face. The site is at high risk of further erosion.

The small dock facilities are important in the development of the industry of this section of the North-East coast. The dock at Hole Wyke lies just below the first alum house of the Boulby Alum Works. Production began here in the late C17 and continued until 1871. The dock may date from the period before 1784 when the works were extended to the north and west. The dock is a natural cleft cut into the wave cut platform of the Redcar Mudstone that appears to have been expanded by explosives. It slopes gently up from low water mark to the base of the cliffs. Sets of postholes, still retaining the stumps of posts, have been noted to either side of the dock. These may have served as seamarks to facilitate navigation into the dock or may be mooring posts pre-dating the development of the dock. At the foot of the cliff below the Gallihowe Quarries of there are the remains of a second dock associated with the Boulby Alum Works. The dock does not have any stonework defining its edges, but it is created by a broad cut in the bedrock of Redcar Mudstone. Four post holes were recorded in its eastern edge. The date of this dock is not known but lying below the westward extension of the Boulby Alum Works it is unlikely to be earlier than the late C18. About 1km to the west of this site is 'The Old Gut', a dock which also served the westward extension of the Boulby Alum Works. The eastern edge of the dock is lined with a number of substantially sized stones laid on end, forming a 'wall' some 52m long. As with the dock below Gallihowe, this dock is unlikely to have been needed before the C18 and it is believed to have functioned until c1820. A new alum house was constructed at Hummersea c1800, and this was provided with its own dock, known as 'The New Gut'. This dock, which measures about 80m by 65m does not have any stone revetment and is merely a broad cut in the Redcar Mudstone. Up to 6 post holes have been recorded at the edge of the New Gut. *All the works on the foreshore are, to varying degrees, under threat from coastal erosion and sea level rise. The more ephemeral features, such as the docks and their associated posthole arrangements, are particularly vulnerable.*

- 3.3.51 **Policy units 19.1 and 19.2** contain no recorded historic assets of special interest.
- 3.3.52 **Policy unit 19.3** contains the small harbour of Staithes.
- 3.3.53 **Policy unit 20.1** contains three docks and a mine, as well as one wreck site.
- 3.3.54 **Policy unit 20.2** contains three round barrows, all at low risk of erosion, as well as a mine and a harbour. The harbour at Port Mulgrave was built in the 1880s to serve the local ironstone mines. It was partly demolished in WW II as an anti-invasion measure and further damaged by storms in 1953.

- 3.3.55 **Policy unit 20.3** contains a long mound and an undated enclosure, as well as timber staithes. The long mound at Lingrow Howe which today survives only as a cropmark in an arable field. It is approximately 42m long and 10m wide and is oriented SW-NE. Human remains are reported to have been found in the past. It is a site of medium special interest and is at low risk of erosion.
- 3.3.56 **Policy unit 21.1** contains no recorded historic assets of special interest.
- 3.3.57 **Policy unit 21.2** contains a lithic scatter, two round barrows, a mine and an Alum works. The remains of the Kettleness alum works occupy a promontory projecting into the North Sea, 7.5 kilometres northwest of Whitby. The works comprised quarries, an alum house plus associated processing and transport facilities. The works operated intermittently from 1727 to 1871 and was amongst the last alum works in the region to be opened and the last to close. Quarrying started at the northern end of the promontory and progressed southwards, creating by 1871 a north-facing working face up to 400 metres long and 50 metres deep, from which the grey alum shale was extracted. The first alum house lay on the foreshore in the south-east corner of Runswick Bay and was destroyed in a landslide in December 1829. A new alum house was constructed in 1830 within the quarry and the workers' housing was moved to the cliff top SW of the works (the present Kettleness hamlet). The alum house was demolished in 1875. Processing of the shale took place within the quarry, where calcining places, steeping pits, a liquor-trough tunnel, various conduits and gutters, and a number of buildings, tracks and spoil heaps all survive. The remains within the quarry area are a Scheduled Ancient Monument and are at high risk of further erosion.
- 3.3.58 **Policy unit 21.3** contains a lithic scatter, three round barrows, a mine and archaeological features from World War II.
- 3.3.59 **Policy unit 22.1** contains an alum quarry and two timber staithes as well as four wreck sites and archaeological features from World War II. The most successful alum quarry was that at Sandsend which were in production from 1733 until the 1870s. An extensive area of alum quarries is recorded to the north of Sandsend and extending to Deepgrove. This area is a Scheduled Ancient Monument and includes features associated with the alum industry such as a steeping pit and cisterns.. To the south of the quarrying area lie the remains of the Sandsend Alum House. This was located on the north side of Sandsend Beck and is now partly covered by a car park, with only the front wall surviving. This is constructed of rubble and pierced by two large entrances. A map of 1849 shows the alum works covering the whole area of the car park. The alum house operated from 1733 and processed raw alum liquor produced from the alum quarries to the north. The liquor was transported through wooden channels known as liquor troughs directly to the alum house. Alum production ceased in the late C19 when the nearby alum quarries closed. The site of the Sandsend Alum House is a Scheduled Ancient Monument. Both it and the quarry are at high risk of erosion.
- 3.3.60 **Policy unit 22.2** contains archaeological features from World War II.

- 3.3.61 **Policy unit 22.3** contains an undated farmstead enclosure of low special interest and low risk of erosion, and a pier and lighthouse of high special interest and high risk of erosion as well as archaeological features from World War II.
- 3.3.62 **Policy unit 23.1** contain archaeological features from World War II.
- 3.3.63 **Policy unit 23.2** contains two wreck sites and archaeological features from World War II.
- 3.3.64 **Policy unit 23.3** contains the Goldsborough Roman Signal Station which is situated at 131m above sea level and 500m from the cliff edge with commanding views along the coast to NW and SE. It survives as a square mound about 40m across and up to 1.4m high with rounded corners and a roughly level top. Excavations at this site and others in the series have shown they were built to a common design with a central stone tower 30m high surrounded by a stone wall enclosing an area about of 90m² beyond which was a 'V' shaped ditch. Excavations in 1918 recovered over 300 coins and it is on the basis of these that the site has been precisely dated to AD 368 to 395. Other finds included animal bones, offering an insight into the diet of the garrison, while a well in the enclosure contained three human skulls, one from a woman. Two skeletons were also found within the ruins of the tower and this has been taken to imply that the occupation of the site came to a violent end. The Goldsborough site is a Scheduled Ancient Monument and is at high risk of erosion.

3.4 Tables of archaeological features sorted by SMP2 Policy unit

- 3.4.1 The following tables for the HERs of Northumberland and Tyne and Wear as well as the NMR data should be used together as they refer to different datasets. Some NMR records do not have HER records and some HER records do not have NMR records and the NMR records are linked to the HER records in the digital GIS and the original AMIE (NMR) database where concordance has been possible to ascertain. Further work to establish concordance between the datasets is beyond the scope of this project. Given the discrepancies between descriptions and data such as NGRs it is not always clear whether NMR and HER records are referring to the same, or different, sites.
- 3.4.2 Details are provided for each HER and the NMR for the extent of the study area covered by SMP2 and are sorted by SMP2 Policy Unit. The policy column refers to the recommendations in the SMPs. These are as follows:

NAI No Active Intervention
 HTL Hold the Line
 R Retreat the Line
 MR Managed Retreat

Table 6: Tyne and Wear HER entries in SMP 2 area

Policy Unit	Policy	HER No.	Site type	Special interest	Risk
1.1	HTL	914	Roman Fort	High	Low
1.1	HTL	2334	Shipyards	Medium	Low
1.1	HTL	2346	Lighthouse	Low	Low
1.1	HTL	2347	Lighthouse	Low	Low
1.1	HTL	2431	Lighthouse	Medium	Medium
1.1	HTL	2430	Life Brigade Watch House	Medium	Low
1.3	HTL	2429	Pier	Low	High
3.1	R	832	Barrow	Medium	High
3.1	R	870	C19 Gun Battery	Medium	High
3.2	HTL	869	C19 Gun battery	Low	Low
4.1	R	5538	Searchlight battery	Low	Low
4.2	NAI	2489	Lighthouse	Medium	Medium
5.2	NAI	2493	Coal Mine	Low	Low
6.1	NAI	5539	Searchlight battery	Low	Low
6.2	MR	2575	Lifeboat station	Low	Low
6.4	HTL	5540	Searchlight battery	Low	Low
6.5	HTL	2	Burial	Low	Low
6.5	HTL	372	Cist	Medium	Low
6.5	HTL	86	C17 Gun Battery	Medium	Low
7.1	HTL	421	Anglo-Saxon Monastery	High	Low
7.1	HTL	76	Medieval Ferry	Low	Low
7.1	HTL	1989	Medieval Port	Medium	Low
7.1	HTL	80	Salt pans	Low	Low
7.1	HTL	4692	Shipyards	Medium	Low
7.1	HTL	2744	Shipyards	Medium	Low
7.1	HTL	2864	Shipyards	Medium	Low
7.1	HTL	4694	Shipyards	Medium	Low
7.1	HTL	2712	Lifeboat station	Low	Low
7.1	HTL	2717	C19 Dock	Medium	Low
7.1	HTL	2874	C19 Dock	Low	Low
7.2	HTL	4800	Pier	Medium	High
7.2	HTL	4974	Lighthouse	Low	Medium
7.3	HTL	4973	Pier	Low	High
8.1	HTL	4695	Shipyards	Medium	Low
8.2	HTL	81	Medieval Shipyards	Low	Low
8.2	HTL	2892	Lifeboat station	Low	Low
8.3	HTL	5568	Searchlight battery	Low	Low
8.4	R	225	Mesolithic Lithic Scatter	Medium	Medium
8.4	R	226	Mesolithic Lithic Scatter	Medium	Medium
8.4	R	2947	Coal Mine	Low	Low
9.1	NAI	227	Mesolithic Lithic Scatter	Low	Medium

Table 7: Durham County Council HER entries

Policy Unit	Policy	HER	Site type	Special interest	Risk
9.1	NAI	281	Wreck	-	-
9.2	HTL	4713	Anglo-Saxon cemetery	High	High
9.2	HTL	762	C8 Church	High	Medium
9.2	HTL	3841	Coal mine	Low	Low

Policy Unit	Policy	HER	Site type	Special interest	Risk
9.2	HTL	4809	Coal mine	Low	Low
9.3	R	279	Wreck	-	-
9.3	R	280	Wreck	-	-
9.3	R	282	Wreck	-	-
9.4	HTL	12602	Harbour	Low	High
9.5	HTL	278	Wreck	-	-
9.5	HTL	285	Wreck	-	-
9.6	NAI	3844	Coal mine	Low	Low
9.7	NAI	277	Wreck	-	-
9.7	NAI	6571	Wreck	-	-
10.1	NAI	81	Mesolithic lithic scatter	Low	Medium
10.1	NAI	105	Mesolithic lithic scatter	Low	Medium
10.1	NAI	3843	Coal mine	Low	Low
10.1	NAI	6572	Wreck	-	-
10.1	NAI	8312	Coal mine	Low	Low
10.1	NAI	3850	Life Brigade rocket site	Low	Low
10.1	NAI	2851	Life Brigade rocket site	Low	Low
10.1	NAI	10276	Wreck	-	-
10.1	NAI	10284	Wreck	-	-
10.1	NAI	10285	Wreck	-	-
11.1	NAI	109	Mesolithic lithic scatter	High	Low
11.1	NAI	112	Mesolithic lithic scatter	Low	Low
11.1	NAI	114	Mesolithic lithic scatter	Low	Low
11.1	NAI	115	Mesolithic lithic scatter	Low	Low
11.1	NAI	118	Mesolithic lithic scatter	High	High
11.1	NAI	120	Mesolithic lithic scatter	High	Low
11.1	NAI	154	Lithic scatter	High	High
11.1	NAI	959	Lithic scatter	Low	Low
11.1	NAI	960	Lithic scatter	Low	Low
11.1	NAI	961	Lithic scatter	Low	Low
11.1	NAI	963	Lithic scatter	Low	Low
11.1	NAI	8276	Mesolithic Lithic scatter	Low	Low
11.1	NAI	8281	Prehistoric enclosure	Medium	Low
11.1	NAI	8282	Prehistoric enclosure	Medium	Low
11.1	NAI	8303	C20 gun battery	Medium	High
11.1	NAI	8318	Wreck	-	-
11.1	NAI	9632	Lithic scatter	Low	Low

Table 8: Tees Archaeology HER entries

Policy Unit	Policy	HER No.	Site type	Special interest	Risk
11.1	NAI	2860	Lithic Scatter	Low	Low
11.1	NAI	2861	Lithic Scatter	Low	Low
11.1	NAI	2862	Lithic Scatter	Low	Low
11.2	HTL	2866	Lithic Scatter	Low	Low
11.3	HTL	704	C14 Town Walls	Medium	Medium
11.3	HTL	1404	C13 Church	Medium	Low
11.3	HTL	692	C13 Friary	Medium	Low
11.3	HTL	713	C19 Lighthouse	Low	Low
11.3	HTL	716	Cemetery	High	Low
11.3	HTL	698	C19 gun battery	High	Medium

Policy Unit	Policy	HER No.	Site type	Special interest	Risk
11.3	HTL	4753	C17 gun battery	High	Medium
11.3	HTL	4754	C17 gun battery	High	Medium
11.3	HTL	4755	C17 gun battery	High	Medium
11.3	HTL	4756	C17 gun battery	High	Medium
11.3	HTL	4758	C19 gun battery	Medium	Medium
12.1	HTL	335	Anglo-Saxon monastery	High	Low
12.1	HTL	660	Roman Midden	High	High
12.1	HTL	689	Roman coin hoard	n/a	n/a
12.1	HTL	703	Anglo-Saxon cemetery	Low	Low
12.1	HTL	712	Roman Midden	High	High
12.1	HTL	715	Anglo-Saxon cemetery	Low	Low
12.1	HTL	725	Roman Midden	High	High
12.1	HTL	786	Submerged forest with Mesolithic flint scatter	High	High
12.1	HTL	801	Roman Midden	High	High
12.1	HTL	1201	Romano-British burial	n/a	n/a
12.1	HTL	1289	Roman Midden	High	High
12.1	HTL	1290	Roman Midden	High	High
12.1	HTL	1305	Roman Midden	High	High
12.1	HTL	1489	Mesolithic site	High	High
12.1	HTL	4721	Anglo-Saxon cemetery	Low	Low
12.1	HTL	4725	Anglo-Saxon site	Low	Low
12.1	HTL	4726	Anglo-Saxon site	Low	Low
12.1	HTL	4757	C17 gun battery	High	Medium
12.1	HTL	4760	Cannon	Medium	Medium
12.2	HTL	242	Roman Midden	High	High
12.2	HTL	785	Submerged forest with Mesolithic flint scatter	High	High
12.2	HTL	788	Roman coin hoard	Low	Low
12.2	HTL	3284	Neolithic fish trap	n/a	n/a
13.2	NAI	3582	C20 gun battery	Medium	High
13.2	NAI	3583	C20 gun battery	Medium	High
13.4	NAI	993	C20 gun battery	n/a	n/a
13.4	NAI	1710 - 1736	Salterns	Low	Low
13.6	HTL	3562	C19 Battery	High	High
13.7	NAI	760	C20 gun battery	High	High
13.7	NAI	5709	Iron working site	Low	Low
14.1	HTL	3589	C20 gun battery	Medium	Medium
14.1	HTL	3590	C20 gun battery	Medium	Medium
14.2	HTL	572	Wreck	-	-
14.2	HTL	1264	Wreck	-	-
14.2	HTL	4869	Lithic scatter	Low	Low
14.3	HTL	3588	C19 gun battery	Medium	Medium
15.2	HTL	274	C12 Church	Medium	Low
15.3	NAI	3563	Ironstone mine	Low	Low
15.4	HTL	15	Bronze Age barrow	Medium	Low
15.4	HTL	4415	C17 Alum works	Medium	High
16.1	NAI	11	Bronze Age barrow	Low	Low
16.1	NAI	16	Roman signal station	n/a	n/a
16.1	NAI	1049	Bronze Age Barrow cemetery	Low	Low
16.1	NAI	1120	Ironstone mine	High	Medium

Policy Unit	Policy	HER No.	Site type	Special interest	Risk
16.1	NAI	4348	Lithic scatter	Low	Low
16.1	NAI	4779	Prehistoric enclosure	Medium	Low
16.1	NAI	5959	Ironstone mine	Low	Low
17.1	R	1170	Ironstone mine	Low	Low
17.1	R	5975	Ironstone mine	Low	Low
17.2	HTL	1131	Ironstone mine	Low	Low
17.2	HTL	3565	Pier	Low	High
17.2	HTL	5982	C19 Jetty	Low	High
17.3	NAI	1130	Ironstone mine	Low	Low
17.3	NAI	1141	Ironstone mine	Low	Low-
18.1	NAI	32	Bronze Age barrow	Medium	Low
18.1	NAI	33	Bronze Age barrow	High	Low
18.1	NAI	40	Bronze Age barrow	Medium	Low
18.1	NAI	43	Bronze Age barrow	Medium	Low
18.1	NAI	44	Bronze Age barrow	Medium	Low
18.1	NAI	45	Bronze Age barrow	Medium	Low
18.1	NAI	46	Bronze Age barrow	Medium	Low
18.1	NAI	494	Bronze Age barrow	Medium	Low
18.1	NAI	495	Bronze Age barrow	Medium	Low
18.1	NAI	496	Bronze Age cist	n/a	n/a
18.1	NAI	545	Neolithic Long cairn	Medium	Low
18.1	NAI	548	Bronze Age barrow	Medium	Low
18.1	NAI	1114	Ironstone mine	Low	Low
18.1	NAI	1269	Field system	Low	Low
18.1	NAI	1741	Lithic Scatter	Low	Low
18.1	NAI	1742	Lithic Scatter	Low	Low
18.1	NAI	3446	Bronze Age barrow	Medium	Low
18.1	NAI	3447	Bronze Age barrow	Medium	Low
18.1	NAI	3596	C17 harbour	Medium	High
18.1	NAI	3684	C19 harbour	Medium	High
18.1	NAI	5229	Romano-British Enclosure	Medium	Low
18.1	NAI	6004	C19 Alum House	Medium	High
18.1	NAI	6012	Jet workings	Low	High
18.1	NAI	6014	Jet workings	Low	High
18.1	NAI	6019	Jet workings	Low	High
18.1	NAI	1164	Jet workings	Low	High
18.1	NAI	6018	C19 Alum House	Medium	High
18.1	NAI	6024	C19 Alum House	Medium	High
18.1	NAI	6237	Romano-British Enclosure	Medium	Low

Table 9: North York Moors National Park HER entries

Policy Unit	Policy	HER No.	Site type	Special interest	Risk
18.1	NAI	2777.01	Mine	Low	Low
18.1	NAI	2777.01006	Mine	Low	Low
18.1	NAI	2777.021	Mine	Low	Low
18.1	NAI	4966	Round Barrow	Medium	Low
18.1	NAI	4967	Round Barrow	Medium	Low
18.1	NAI	4968	Alum house	Medium	High
18.1	NAI	7327	Dock	Medium	High
18.1	NAI	7328	Dock	Medium	High
18.1	NAI	7329	Alum cistern	Medium	High

Policy Unit	Policy	HER No.	Site type	Special interest	Risk
18.1	NAI	58753	Searchlight battery	Low	Low
18.1	NAI	58781	Searchlight battery	Low	Low
19.3	HTL	2777.01007	Pier	Low	High
20.1	NAI	2777.01004	Dock	Medium	High
20.1	NAI	2777.02002	Dock	Medium	High
20.1	NAI	2777.02003	Dock	Medium	High
20.1	NAI	2777.03	Mine	Low	Low
20.2	R	2772.01	Round Barrow	Medium	Low
20.2	R /NAI	2772.02	Round Barrow	High	Low
20.2	R	2772.03	Round Barrow	Medium	Low
20.2	R	2777.0312	Harbour	Low	High
20.2	R	2777.04	Mine	Low	Low
20.3	NAI	2777.04401	Timber staithes	Low	High
20.3	NAI	4399	Enclosure	Low	Low
20.3	NAI	7448	Long mound	Medium	Low
21.2	NAI	4576	Mine	Medium	High
21.2	NAI	7446	Round Barrow	High	Low
21.2	NAI	7452	Alum Works	Medium	High
21.2	NAI	7458	Round Barrow	Medium	Low
21.3	HTL	4662	Flint scatter	Low	Low
21.3	HTL	7332	Mine	Low	Low
21.3	HTL	7400.06	Round Barrow	High	Low
21.3	NAI	7400.07	Round Barrow	Medium	Low
21.3	NAI	7400.14	Round Barrow	Medium	Low
21.3	HTL	58826	Searchlight battery	Low	Low
22.1	NAI	4657	Timber staithes	Low	High
22.1	NAI	7318	Timber staithes	Low	High
22.1	NAI	7460	Alum quarry	Medium	High
22.3	HTL	7462.01	Timber staithes	Low	High
23.3	HTL	7444	Roman Signal Station	High	High

Table 10: North Yorkshire County Council HER entries

Policy Unit	Policy	HER No.	Site type	Special interest	Risk
22.1	NAI	478	Alum House	Medium	High
22.3	HTL	8836	Enclosure	Low	Low
22.3	HTL	12112	Pier	High	High
22.3	HTL	12113	Lighthouse	Low	High
22.4	NAI	4441	Enclosure	Low	Low

Table 11: NMR entries for SMP 2 area

Policy Unit	Policy	NMR UID	Site type	Special interest	Risk
1.1	HTL	973326	C19 Wreck	-	-
1.1	HTL	1387150	C19 Wreck	-	-
1.2	MR	908652	Wreck	-	-
1.2	MR	908746	C20 Wreck	-	-
1.2	MR	908748	Wreck	-	-
1.2	MR	971596	C19 Wreck	-	-

Policy Unit	Policy	NMR UID	Site type	Special interest	Risk
1.2	MR	1434819	C19 Wreck	-	-
1.2	MR	1438910	C18 Wreck	-	-
2.1	HTL	1366333	C18 Wreck	-	-
4.1	R	908641	Wreck	-	-
4.1	R	1462950	Pill box	-	-
4.2	NAI	1403238	Anti-glider obstacle	Low	Low
5.1	HTL	1462979	Pill box	-	-
5.2	NAI	1462987	Pill box	-	-
5.2	NAI	1463014	Pill box	-	-
6.1	NAI	1462995	Anti-tank obstacle	-	-
6.1	NAI	1462995	Pill box	-	-
6.2	NAI	1463000	Pill box	-	-
6.3	HTL	1454847	Air raid shelter	-	-
6.3	HTL	1454847	Pill box	-	-
6.4	HTL	1463032	Air raid shelter	-	-
6.4	HTL	1463033	Air raid shelter	-	-
6.4	HTL	1463040	Pill box	-	-
6.5	HTL	1429211	Air raid shelter	-	-
6.5	HTL	1463031	Air raid shelter	-	-
6.5	HTL	1463046	Air raid shelter	-	-
7.1	HTL	956440	Pill box	-	-
7.1	HTL	1462943	Air raid shelter	-	-
7.1	HTL	1462955	Anti-tank obstacle	-	-
7.1	HTL	1462956	Air raid shelter	-	-
7.1	HTL	1462959	Air raid shelter	-	-
7.1	HTL	1462962	Air raid shelter	-	-
7.1	HTL	1462963	Air raid shelter	-	-
7.1	HTL	1462980	Air raid shelter	-	-
7.1	HTL	1462982	Air raid shelter	-	-
7.1	HTL	1462983	Barrage balloon	-	-
7.1	HTL	1462988	Air raid shelter	-	-
7.1	HTL	1462989	Air raid shelter	-	-
7.1	HTL	1463003	Air raid shelter	-	-
7.1	HTL	1463006	Air raid shelter	-	-
7.1	HTL	1463013	Pill box	-	-
7.1	HTL	1463021	Air raid shelter	-	-
7.2	HTL	908710	Wreck	-	-
7.3	HTL	1406252	C19 Wreck	-	-
8.1	HTL	1462656	Air raid shelter	-	-
8.1	HTL	1462657	Barrage balloon	-	-
8.1	HTL	1462944	Air raid shelter	-	-
8.1	HTL	1462990	Air raid shelter	-	-
8.1	HTL	1462991	Anti-tank obstacle	-	-
8.1	HTL	1462996	Pill box	-	-
8.2	HTL	1462615	Air raid shelter	-	-
8.2	HTL	1462622	Air raid shelter	-	-
8.2	HTL	1462623	Air raid shelter	-	-
8.2	HTL	1462626	Air raid shelter	-	-
8.2	HTL	1462628	Air raid shelter	-	-

Policy Unit	Policy	NMR UID	Site type	Special interest	Risk
8.2	HTL	1462634	Barrage balloon	-	-
8.2	HTL	1462643	Air raid shelter	-	-
8.2	HTL	1462644	Air raid shelter	-	-
8.2	HTL	1462650	Air raid shelter	-	-
8.3	HTL	1462319	Air raid shelter	-	-
8.3	HTL	1462332	Air raid shelter	-	-
8.3	HTL	1462351	Pill box	-	-
8.3	HTL	1462361	Anti-glider obstacle	Low	Low
8.3	HTL	1462362	Anti-glider obstacle	Low	Low
8.3	HTL	1462609	Barrage balloon	-	-
8.3	HTL	1462612	Air raid shelter	-	-
8.3	HTL	1462620	Pill box	-	-
8.4	R	1462372	Air raid shelter	-	-
8.4	R	1462405	Air raid shelter	-	-
8.4	R	1462409	Air raid shelter	-	-
9.1	NAI	1462466	Air raid shelter	-	-
9.4	HTL	1456315	Anti-glider obstacle	Low	Low
10.1	NAI	1421118	Anti-tank obstacles	-	-
10.1	N AI	1461282	Pill box	-	-
10.1	NAI	1461284	Pill box	-	-
10.1	NAI	1461286	Air raid shelter	-	-
10.1	NAI	1461287	Air raid shelter	-	-
10.1	NAI	1461296	Pill box	-	-
10.1	NAI	1461298	Pill box	-	-
10.1	NAI	1461303	Air raid shelter	-	-
10.1	NAI	1461910	Pill box	-	-
10.1	NAI	1461915	Pill box	-	-
10.1	NAI	1461946	Pill box	-	-
10.1	NAI	1461953	Pill box	-	-
10.1	NAI	1461966	Anti-tank obstacles	-	-
10.1	NAI	1461969	Anti-tank obstacles	-	-
11.1	NAI	73179	C19 Wreck	-	-
11.1	NAI	94426	C19 Wreck	-	-
11.1	NAI	1461538	Pill box	-	-
11.1	NAI	1461555	Anti-tank obstacles	-	-
11.1	NAI	1461570	Searchlight battery	-	-
11.1	NAI	1461571	Pill box	-	-
11.1	NAI	1461572	Anti-tank obstacles	-	-
11.1	NAI	1461592	Pill box	-	-
11.1	NAI	1461603	Anti-tank obstacles	-	-
11.1	NAI	1461609	Anti-tank	-	-

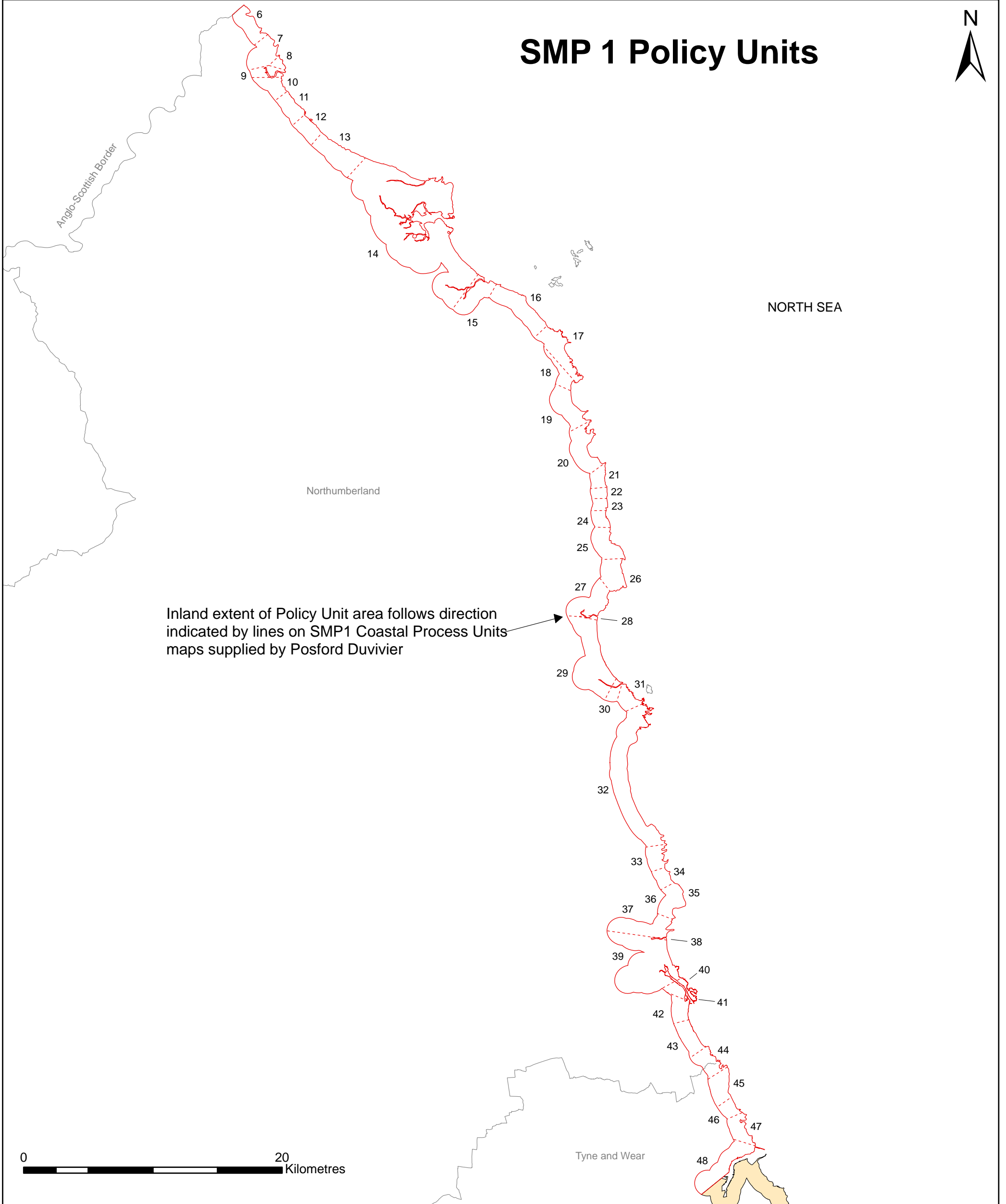
Policy Unit	Policy	NMR UID	Site type	Special interest	Risk
			obstacles		
11.1	NAI	1461612	Anti-tank obstacles	-	-
11.1	NAI	1461781	Pill box	-	-
11.1	NAI	1461606	Pill box	-	-
11.1	NAI	1461614	Pill box	-	-
11.1	NAI	1461633	Pill box	-	-
11.2	HTL	1460807	C20 gun battery	-	-
11.2	HTL	1460810	Pill box	-	-
11.2	HTL	1461724	Pill box	-	-
11.2	HTL	1461760	Pill box	-	-
11.2	HTL	1461762	WWII gun battery	n/a	n/a
11.2	HTL	1461763	Anti-tank obstacle	-	-
11.2	HTL	1461765	Anti-tank obstacle	-	-
11.3	HTL	908867	C19 Wreck	-	-
11.3	HTL	1460743	Air raid shelter	-	-
11.3	HTL	1460752	Anti-tank obstacle	-	-
11.3	HTL	1460766	Searchlight battery	Low	Low
11.3	HTL	1460796	Air raid shelter	-	-
12.1	HTL	1460726	Anti-tank obstacle	-	-
12.1	HTL	1460728	Pill box	-	-
13.2	NAI	1312495	C18 Wreck	-	-
13.2	NAI	1459371	Pill box	-	-
13.2	NAI	1459382	Pill box	-	-
13.2	NAI	1460712	Anti-tank obstacle	-	-
13.2	NAI	1467010	WWII gun battery	n/a	n/a
13.3	HTL	908179	Wreck	-	-
13.3	HTL	1459350	Anti-tank obstacle	-	-
13.3	HTL	1459360	Pill box	-	-
13.4	NAI	908835	Wreck	-	-
13.4	NAI	1421321	Pill box	-	-
13.4	NAI	1443947	Pill box	-	-
13.4	NAI	1459282	Anti-tank obstacle	-	-
13.4	NAI	1459341	Wreck	-	-
13.4	NAI	1459342	Wreck	-	-
13.4	NAI	1459343	Wreck	-	-
13.4	NAI	1459344	Wreck	-	-
13.4	NAI	1459346	Wreck	-	-
13.4	NAI	1459347	Anti-tank obstacle	-	-
13.5	NAI	1424501	Pill box	-	-
13.5	NAI	1424507	Pill box	-	-
13.5	NAI	1425096	WWII gun battery	n/a	n/a
13.5	NAI	1443948	Pill box	-	-
13.5	NAI	1459189	Searchlight battery	Low	Low
13.5	NAI	1459509	Anti-tank obstacle	-	-
13.5	NAI	1459510	Pill box	-	-

Policy Unit	Policy	NMR UID	Site type	Special interest	Risk
13.5	NAI	1459521	Pill box	-	-
13.6	HTL	908832	C20 Wreck	-	-
13.6	HTL	1424496	Pill box	-	-
13.6	HTL	1424516	Pill box	-	-
13.6	HTL	1425093	Pill box	-	-
13.6	HTL	1459454	Pill box	-	-
13.7	NAI	900047	Pill box	-	-
13.7	NAI	1424668	Pill box	-	-
13.7	NAI	1459543	Pill box	-	-
13.7	NAI	1459718	Pill box	-	-
13.7	NAI	1459746	Pill box	-	-
13.7	NAI	1459747	Anti-tank obstacle	-	-
13.7	NAI	1459760	Pill box	-	-
13.7	NAI	1459765	Pill box	-	-
13.7	NAI	1459774	Pill box	-	-
13.7	NAI	1459784	Pill box	-	-
14.1	HTL	1424479	Pill box	-	-
14.1	HTL	1459773	Pill box	-	-
14.1	HTL	1459785	Pill box	-	-
14.2	HTL	936611	C19 Wreck	-	-
14.2	HTL	1458395	Anti-tank obstacle	-	-
14.2	HTL	1458422	Anti-tank obstacle	-	-
14.3	HTL	908828	C20 Wreck	-	-
14.3	HTL	1424638	Anti-tank obstacle	-	-
14.3	HTL	1424639	Anti-tank obstacle	-	-
14.3	HTL	1424760	Anti-tank obstacle	-	-
14.3	HTL	1424761	Anti-tank obstacle	-	-
14.3	HTL	1424762	Anti-tank obstacle	-	-
14.3	HTL	1424763	Anti-tank obstacle	-	-
14.3	HTL	1458414	WWII gun battery	Medium	Medium
14.3	HTL	1458416	Anti-tank obstacle	-	-
14.3	HTL	1458464	Air raid shelter	-	-
15.1	NAI	1311295	C19 Wreck	-	-
15.1	NAI	1424631	Anti-tank obstacle	-	-
15.1	NAI	1424633	Anti-tank obstacle	-	-
15.1	NAI	1424634	Anti-tank obstacle	-	-
15.1	NAI	1424696	Pill box	-	-
15.1	NAI	1424764	Anti-tank obstacle	-	-
15.1	NAI	1458474	Pill box	-	-
15.1	NAI	1458487	Anti-tank obstacle	-	-
15.1	NAI	1458498	Anti-tank obstacle	-	-
15.1	NAI	1458532	Pill box	-	-
15.1	NAI	1458534	Pill box	-	-
15.2	HTL	1424629	Anti-tank obstacle	-	-
15.2	HTL	1425226	Pill box	-	-
15.2	HTL	1458509	Anti-tank obstacle	-	-

Policy Unit	Policy	NMR UID	Site type	Special interest	Risk
15.2	HTL	1459508	Searchlight battery	Low	Low
15.3	NAI	1424439	Pill box	-	-
15.3	NAI	1424454	Pill box	-	-
15.3	NAI	1424616	Anti-tank obstacle	-	-
15.3	NAI	1424618	Anti-tank obstacle	-	-
15.3	NAI	1424620	Anti-tank obstacle	-	-
15.3	NAI	1424623	Anti-tank obstacle	-	-
15.3	NAI	1424624	Anti-tank obstacle	-	-
15.3	NAI	1424625	Anti-tank obstacle	-	-
15.3	NAI	1424873	Pill box	-	-
15.3	NAI	1458455	Pill box	-	-
15.3	NAI	1458461	Pill box	-	-
15.3	NAI	1458462	Pill box	-	-
15.3	NAI	1458511	Anti-tank obstacle	-	-
15.3	NAI	1458521	Anti-tank obstacle	-	-
15.3	NAI	1458543	Pill box	-	-
15.3	NAI	1458544	Pill box	-	-
15.3	NAI	1458546	Pill box	-	-
15.3	NAI	1424426	Pill box	-	-
15.4	HTL	1424688	Anti-tank obstacle	-	-
15.4	HTL	1424692	Anti-tank obstacle	-	-
15.4	HTL	1424774	Anti-tank obstacle	-	-
16.1	NAI	1424416	Pill box	-	-
16.1	NAI	1458563	Pill box	-	-
16.1	NAI	1458600	Pill box	-	-
16.1	NAI	1458605	Pill box	-	-
16.1	NAI	1458645	Pill box	-	-
17.2	HTL	1320424	C20 Gun battery	Medium	High
17.2	HTL	1424598	Anti-tank obstacle	-	-
17.2	HTL	1424604	Anti-tank obstacle	-	-
17.3	NAI	937920	C20 Wreck	-	-
17.3	NAI	1424388	Pill box	-	-
18.1	NAI	1458656	Searchlight battery	Low	Low
19.1	HTL	1424597	Anti-tank obstacle	-	-
20.1	NAI	938694	C19 Wreck	-	-
21.3	NAI	1453229	Neolithic enclosure	High	High
22.1	NAI	909219	C20 Wreck	-	-
22.1	NAI	938414	C20 Wreck	-	-
22.1	NAI	1385804	Modern Wreck	-	-
22.1	NAI	1385806	Modern Wreck	-	-
22.1	NAI	1424596	Anti-tank obstacle	-	-
22.1	NAI	1453234	Pill box	-	-
22.1	NAI	1453239	Anti-tank obstacles	-	-
22.2	HTL	58909	Beach defence battery	Medium	High

Policy Unit	Policy	NMR UID	Site type	Special interest	Risk
22.2	HTL	1458592	Anti-tank obstacles	-	-
22.3	HTL	1424595	Anti-tank obstacles	-	-
22.3	HTL	1453241	Pill box	-	-
22.4	NAI	1453248	Pill box	-	-
22.4	NAI	1458583	Anti-tank obstacles	-	-
22.4	NAI	1458584	Pill box	-	-
23.1	HTL	1424687	Anti-tank obstacles	-	-
23.1	HTL	1458585	Anti-tank obstacles	-	-
23.2	HTL	909210	C20 Wreck	-	-
23.2	HTL	984141	C18 Wreck	-	-
23.2	HTL	1458579	Pill box	-	-

SMP 1 Policy Units



Archaeological Research Services Ltd
 Baltic Business Centre
 Saltmeadows Road
 Gateshead
 NE8 3DA

Site Code: NERCZA
 Drawing Ref: Exec Summary Fig. 1
 Date: 05 March 2009
 Drawn: BJ
 Scale: n/a

Key:



SMP 1 Policy Unit area



SMP 2 area

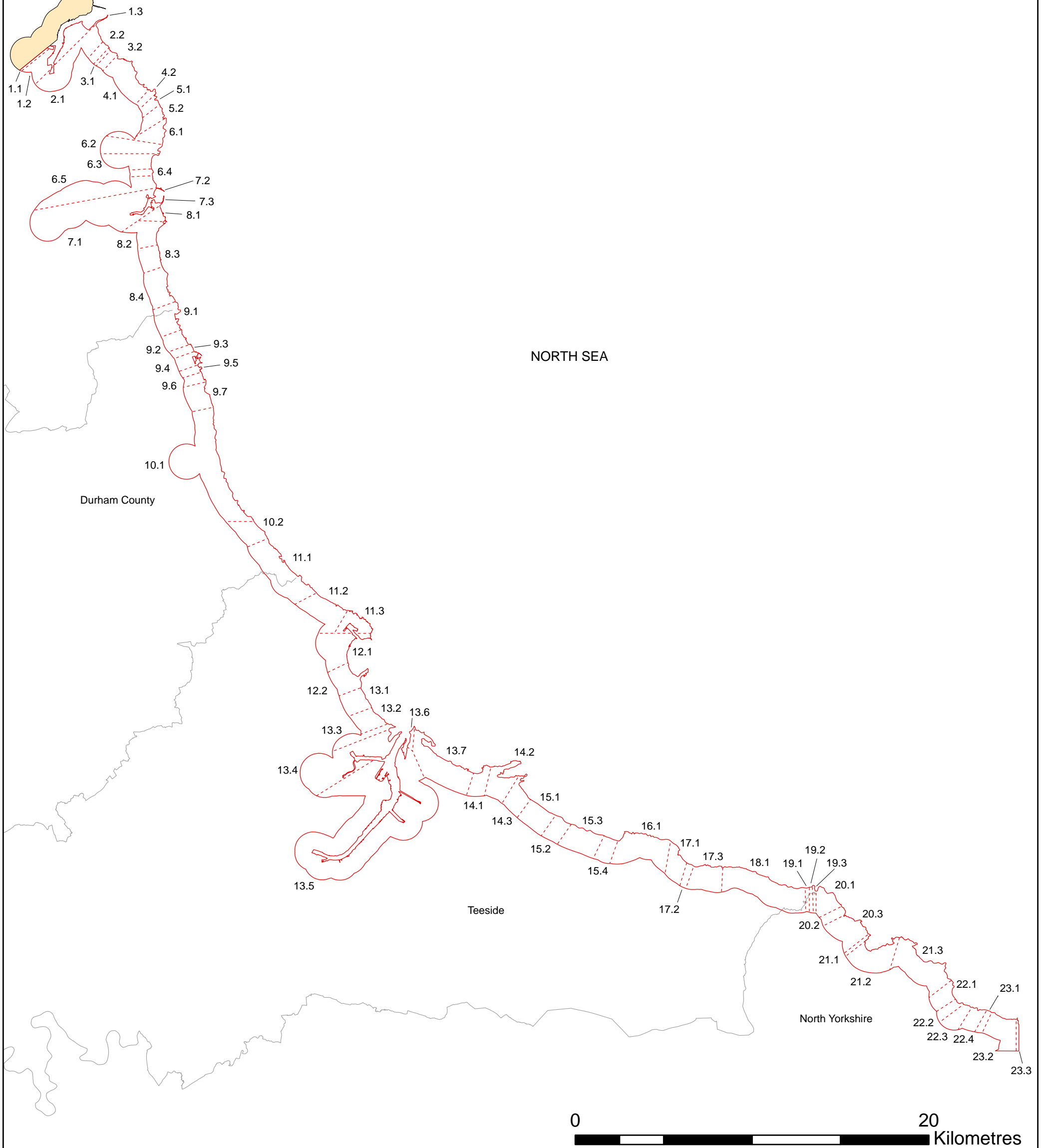
10

SMP 1 Policy Unit number

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SMP 2 Policy Units



Archaeological Research Services Ltd
 Baltic Business Centre
 Saltmeadows Road
 Gateshead
 NE8 3DA

Site Code: NERCZA
 Drawing Ref: Exec Summary Fig. 2
 Date: 05 March 2009
 Drawn: BJ
 Scale: n/a

Key:



SMP 2 Policy Unit area



SMP 1 area

10.1 SMP 2 Policy Unit number

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