North Tyneside Council

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Hartley Cove to the River Tyne Coastal Strategy Review

Habitats Regulations Assessment
Appropriate Assessment
April 2016

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Quality Management

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Part One - Screening

1. Introduction

1.1 Background

1.1.1 The Hartley Cove to the River Tyne Coastal Strategy is a non-statutory document providing a high-level basis for decision making in relation to the long term management of the coastline. The Strategy appraises a range of coastal defence options to determine; the most sustainable, technically sound, economically viable and environmentally and socially acceptable methods of managing risks such as coastal flooding, erosion and sea level rise.

1.1.2 The Strategy document sits within a larger planning framework for coastal defence management, as illustrated in Figure 1.1 below. It draws on the strategic direction outlined in the Shoreline Management Plan to develop individual coastal defence schemes or projects for works at specific locations along the coast. The Strategy provides a more in-depth appreciation of the risks and requirements for protection, examining the coastal processes in detail and appraising the options against economic, environmental and social criteria.

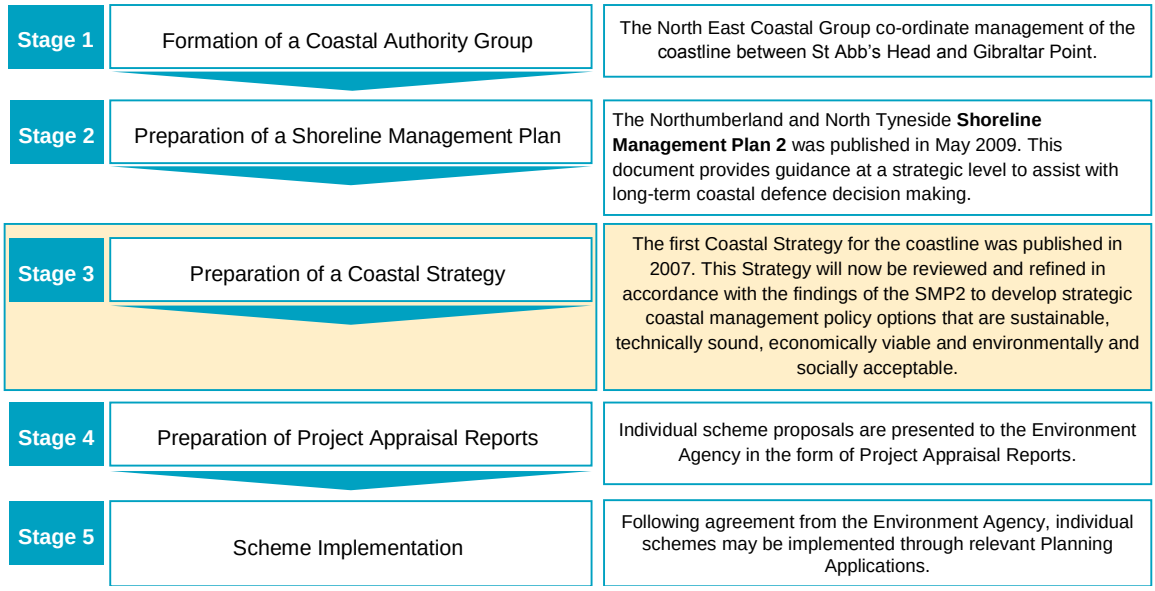

Figure 1.1: Coastal defence planning framework

1.1.3 To ensure environmental sustainability of the Coastal Strategy, a series of environmental appraisals have been conducted as the strategy was developed. These included a Strategic Environmental Assessment (SEA), Water Framework Directive assessment (WFD) and Habitats Regulations Assessment (HRA).

1.2 The Study Area

1.2.1 The Strategy coastline stretches from Hartley Cove in the north to the River Tyne in the south and covers the urbanised areas of Whitley Bay and Tynemouth; a distance of approximately 10km. The coastline falls partly within Policy Development Zone 6 from Seaton Sluice to the River Tyne and Management Areas (MAs) 24 to 27, as defined in SMP2 (see Figure 1.2). The shoreline consists of undefended short sections of rock outcrops, cliffs and shore platform, between which are (mostly) defended or managed beach frontages backed by cliffs and dunes. The coastline can be divided into four principle management sections, as follows:

- **Hartley Cove to Curry's Point (MA 24)** – Cliffed frontage with a rock shore platform. Defences exist at Hartley Cove and St Mary's Island with the remainder of the frontage being undefended and eroding.

- **Curry's Point to Brown's Point (MA 25)** – Defended frontage for most of its length by concrete or masonry sea walls and with a short section of rock armour. There is one short section of undefended cliff.

- **Brown's Point to Tynemouth North Pier (MA 26)** – This frontage consists of three bays between rock headlands; Cullercoats Bay, Tynemouth Longsands and King Edwards's Bay. Cullercoats Bay is mostly defended whilst, Longsands has defences to the north and managed dunes to the south. King Edward's Bay and the adjacent cliffs are heavily defended. Tynemouth North Pier is a large masonry structure which forms the outer navigation structure to the River Tyne and provides protection to North and South Tyneside.

- **Tynemouth North Pier to the Fish Quay (MA 27)** – This frontage extends from the coastal environment adjacent to the pier to the estuarine environment at the Fish Quay. The frontage is defended by a number of different defences including

concrete and masonry sea walls, a masonry groyne, rock armour and the quay walls.

1.2.2 Specific policies for the individual Management Areas (MAs) falling within PDZ6 are defined in Table 1.1 below with descriptions of each management policy detailed in Table 1.2.

Table 1.1: Management Area / Policy Unit Plan Strategy Policies.

Management Area		Policy Unit	Policy Plan		
MA24	Seaton Sluice to Curry's Point	24.2	NAI	NAI	NAI
MA25	Curry's Point to Brown's Point	25.1	HTL	HTL	HTL
		25.2	MR	MR	MR
		25.3	HTL	HTL	HTL
		25.4	HTL	HTL	HTL
MA26	Brown's Point to Tynemouth North Pier	26.1	NAI	NAI	NAI
		26.2	HTL	HTL	HTL
		26.3	NAI	NAI	NAI
		26.4	HTL	HTL	MR
		26.5	NAI	NAI	NAI
		26.6	HTL	HTL	HTL
		26.7	HTL	HTL	HTL
		26.8	HTL	HTL	HTL
MA27	Tynemouth North Pier to Fish Quay	27.1	NAI	NAI	NAI
		27.2	HTL	HTL	HTL

Table 1.2: Coastal Strategy Policies.

Policy	Description
No Active Intervention	There would be no further active intervention. Without intervention the condition of the defences would deteriorate, leading to failure. This would result in increases flood and erosion risk.
Hold The Line	This would involve maintaining the existing defences in their present positions and reducing or maintaining the level of flood and erosion risk.
Advance The Line	This policy involves the construction of new defences in a seaward direction.
Managed Realignment	This policy involves the placement of new defences landward of the existing defences, or realignment to higher ground. This can be achieved through partial or complete removal of existing defences or through tidal exchange.

Figure 1.2 Location of Policy Development Zone and Management Areas

1.3 Structure of the Screening Report

1.3.1 A description of the structure and content of the Environmental Report is provided in Table 1.2 below.

Table 1.3: Structure of HRA Appropriate Assessment Report

Structure of Report	Information to Include
Part One - Screening	
The Habitats Directive	• Policy and legislative context. • Land use planning. • HRA stages.
Approach to Screening	• Approach adopted for screening stage. • Approach to reporting.
European Sites	• Scoping of European Sites to be assessed. • Qualifying criteria and conservation objectives for each site.
Pathways of Significant Effects	• Description and explanation of likely effects. • Links to other international, national, regional and local plans and programmes, and relevant environmental objectives including how these have been taken into account.
Screening Statement.	• Summary of likely significant effects. • Recommendations to progress the HRA.
Part Two – Appropriate Assessment	
Scoping	• Information gathering • Scope and method of assessment • In-combination effects
Significance of Effects	• Appropriate Assessment Pro-forma
Mitigation	• Mitigation measures • Residual effects
Conclusions	• Key findings and recommendations

2. Habitats Regulations Assessment

2.1 The Habitats Directive

2.1.1 European Directive 92/43/EEC on the 'Conservation of Natural Habitats and Wild Fauna and Flora', (hereafter referred to as the '*Habitats Directive*') provides legal protection to habitats and species of Europe. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European interest at a favourable conservation status. Article 3 – 9 provides the legislative means for this. Article 6 (3) of the Directive states that: *"Any plan or project not directly connected with, or necessary to, the management of the European Site, but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives."*

2.1.2 A 'European Site' is a Natura 2000 site and includes Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), Ramsar sites, along with candidate SACs and SPAs receive the same protection. From here on in the term European Site will be used to represent the aforementioned designations.

2.2 Habitats Directive in the Land Use Planning Context

2.2.1 In October 2005, the European Court of Justice ruled that the UK had failed to correctly transpose the provisions of Articles 6 (3) and (4) of the Habitats Directive into national law; in that it had failed to ensure that land use plans were subject to Appropriate Assessment where they may result in a significant effect on a European Site. Following this ruling the Department for Environment, Food and Rural Affairs (DEFRA) published the amended Habitats Regulations 2010 (formerly the Conservation of Habitats & Species Regulations 1994) to transpose the amendments into English legislation. An Appropriate Assessment is required for local, regional and national planning documents, including coastal strategies.

2.2.2 In accordance with this legislation a Habitats Regulations Assessment (HRA) is required to be carried out on the Coastal Strategy to assess the potential for likely significant effects on European Sites. Where Likely Significant Effects are identified, Appropriate Assessment will be undertaken.

2.2.3 It should be noted that the Coastal Strategy outlines general proposals for coastal protection but does not define precise detail. Detail will be defined during the design stage of each individual project which arises as a result of the Coastal Strategy .Figure 1.2 shows how the HRA process is undertaken at each level of land use planning. Any projects which arise from this Coastal Strategy will require a HRA to ensure compliance with legislation. Matters of Imperative Reasons of Overriding Public Interest (IROPI) should be resolved at the highest possible strategic level to avoid delays in implementation of schemes or projects; in this case the schemes could rely on derogations under Article 6 (4) made in the higher level HRA. It is however advised that Defra is consulted with the project detail.

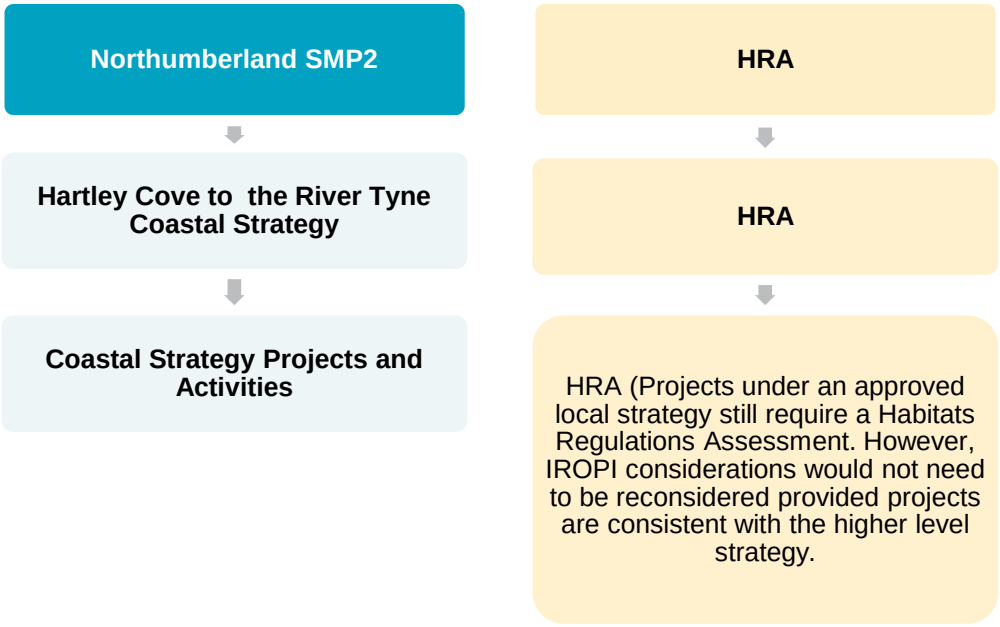

Figure 2.1: Hierarchy of HRA

2.3 Shoreline Management Plan 2 Habitats Regulations Assessment

2.3.1 The Appropriate Assessment conducted for the Northumberland SMP2[1] identified reduction in rocky shore habitat within the Northumbria Coast SPA as a likely significant effect. The Appropriate Assessment states...*"All of the rocky shore that will become lost lies within the Northumbria Coast SPA, where it is designated for its functionality in supporting designated bird species. This functionality is not based on a measure of total*

[1] Northumberland SMP2 Environmental Assessment and Appropriate Assessment *Royal Haskoning May 2009*

length or area of habitat alone but rather a measure of the potential of the habitat to support SPA species..."

2.3.2 Following consultation of the SMP2 Appropriate Assessment, Natural England's view was that *"policies promoted within the SMP2 may result in a 'likely significant effect' upon the interest features of the Northumbria Coast SPA. Given the likely timing of the impacts upon the SPA and the life-span of this SMP Natural England advise that they would support the conclusion that this SMP2 will have 'no adverse effect upon the integrity of the site'. This conclusion will need to be reviewed as part of the SMP3 and in light of any strategy or coastal defence scheme arising from SMP2."*

2.4 HRA Stages

2.4.1 The methodology for this HRA follows the EU guidance *'Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6 (3) and (4) of the Habitats Directive 92/43/EEC'*. Table 2.1 shows the stages of the HRA process.

2.4.2 The responsibility for signing off the HRA and ensuring compliance with the Habitats Regulations falls to the Competent Authority. In this case the lead competent authority is North Tyneside Council.

Stage 1 - Screening

2.4.3 The screening stage determines whether the option for management of each unit of the Coastal Strategy is likely to have a significant effect on any European Site (alone or in combination with other plans or projects) and therefore whether an Appropriate Assessment is required.

2.4.4 For each of the management units, all Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar sites are considered, considering the qualifying designated habitats and species as well as their supporting features.

2.4.5 The output of this stage is the Screening Report which identifies any of the management options which need to be taken forward to Appropriate Assessment. The screening report is also the basis of consultation with the statutory regulatory bodies.

2.4.6 **Only where a plan or project can be determined as not having an adverse effect on any European Site can it be approved by the Competent Authority.**

2.4.7 HRA is based on the precautionary principle and where there is uncertainty of the likelihood of significant effects, an effect is assumed.

Stage 2 – Appropriate Assessment

2.4.8 For options where significant effects cannot be ruled out, these will be subject to an Appropriate Assessment. The Appropriate Assessment will consider the management option against the site conservation objectives to identify whether adverse effects on site integrity are likely.

Stage 3 – Assessment of Alternative Options

2.4.9 If it is not possible to ascertain that there will be no adverse effects at the Appropriate Assessment stage, alternative options must be investigated or measures secured to mitigate these effects.

Stage 4 – Assessment of Imperative Reasons of Overriding Public Interest

2.4.10 Article 6 (4) of the Habitats Directive states that*: "If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for Imperative Reasons of Overriding Public Interest (IROPI), including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the commission of the compensatory measures adopted."*

2.4.11 This stage assesses compensatory measures where Imperative Reasons of Overriding Public Interest deem that a plan or project should proceed. This stage will only be progressed if no alternatives are identified in stage 3.

Table 2.1 Stages of HRA

Stage 1	**Screening**	Assess whether the Coastal Strategy proposals either alone or in combination with other identified plans and projects are likely to have a significant impact on European Sites.	
Stage 2	Appropriate Assessment	2a	Asses the European Sites: reasons for designation and conservation objectives.
		2b	Analyse potential intervention by proposals.
		2c	Analyse other plans and projects for in combination effects.
		2d	Analyse impacts of implementing the proposals and in combination effects.
		2e	Propose and assess mitigation measures to address significant impacts.
		2f	Prepare Appropriate Assessment report for consultation.
Stage 3	Assessment of Alternatives	Assess alternatives where mitigation is not possible. If no alternative exists progress to IROPI.	
Stage 4	Assessment of IROPI	Assess whether a proposal can be justified on the grounds of IROPI. This must be agreed by the European Commission.	

2.5 Approach to Screening

2.5.1 The screening process has been undertaken in six sub-stages:

- Identifying European Sites likely to be effected, the qualifying criteria and the conservation objectives.
- Determining whether the Coastal Strategy is directly linked to or necessary to the management of the European Site – (no further assessment is then required).
- Identifying the potential effects and ascertain whether European Sites are at risk.
- Collate information on other relevant plans and policies that may have in-combination effects.
- Provide matrix of likely significant effects and make recommendations for next stages of HRA.

3. Identification of European Sites

3.1.1 Government advice[2] states that *"when considering whether the plan option is likely to have a significant effect on a European Site, it should be noted that such a site may be located either within or outside the area covered by the plan. Significant effects may be incurred even in cases where the area of the plan is some distance away".*

3.1.2 Sites considered within this assessment include:

- Sites designated under the Birds Directive:
  - Northumbria Coast SPA
- Sites designated under the Habitats Directive:
  - Durham Coast SAC
- Wetlands of International Importance designated under the Ramsar Convention:
  - Northumbria Coast Ramsar

3.1.3 Locations and boundaries of European Sites associated with the Coastal Strategy management units are shown in Appendix A. Table 3.1 below details the qualifying criteria and conservation objectives of the sites.

3.1.4 Due to the large distances from the Coastal Strategy study area; other European Sites have been scoped out through consultation with Natural England. These include:

- Coquet Island SPA
- North Northumberland Dunes SAC
- Lindisfarne SPA / Ramsar
- Berwickshire and North Northumberland Coast SAC

[2] Planning for the Protection of European Sites: Appropriate Assessment *Department for Communities and Local Government, August 2006*

Table 3.1 European Sites likely to be affected by the Coastal Strategy.

Name/location/size	Qualifying Criteria[3]	Conservation Objectives	Threats to Integrity
Northumbrian Coast Ramsar 1107.98ha (within study area)	**Ramsar Criterion 6 – species/populations occurring at levels of international importance.** Little tern , *Sterna albifrons* Purple sandpiper , *Calidris maritima.* Ruddy turnstone , *Arenaria interpres.* **Noteworthy species/populations occurring at levels of national importance.** Great cormorant , *Phalacrocorax carbo.* Black-legged kittiwake , *Rissa tridactyla* Arctic tern , *Sterna paradisaea*, European golden plover , *Pluvialis apricari* Common eider , *Somateria mollissima* Sanderling , *Calidris alba*	Subject to natural change, to maintain in favourable condition the habitats for the internationally important populations of the regularly occurring Annex 1 bird species (Little Tern *Sterna albifrons*), under the Birds Directive and, subject to natural change, maintain in favourable condition the habitats for the internationally important populations of regularly occurring migratory bird species Purple Sandpiper *Calidris maritime* and Turnstone *Arenaria interpres*, under the Birds directive, in particular rocky shores with associated boulder and cobble beaches, and artificial high tide roost sites.	• Food availability • Disturbance • Extent and distribution of habitat • Nesting sites • Vegetation cover • Loss of high tide roost sites
Northumbrian Coast SPA, 1107.98ha (within study area)	**Qualifying criteria:** **Breeding** Little tern , *Sterna albifrons* **Wintering** Purple sandpiper , *Calidris maritima* Turnstone *Arenaria interpres*	Subject to natural change; ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring; • The extent and distribution of the habitats of the qualifying features • The structure and function of the habitats of the qualifying features • The supporting processes on which the habitats of the qualifying features rely • The population of each of the qualifying features, and,	• Food availability • Disturbance • Extent and distribution of habitat • Nesting sites • Vegetation cover • Loss of high tide roost sites

[3] https://www.gov.uk/protected-or-designated-areas#european-sites

Name/location/size	Qualifying Criteria[3]	Conservation Objectives	Threats to Integrity
		• The distribution of the qualifying features within the site.	
Durham Coast SAC, 393.63ha (approx. 2.5km south of study area)	**Annex I habitats that are a primary reason for designation.** Vegetated sea cliffs of the Atlantic and Baltic Coasts. (This is the only example in the UK, extending over 20km)	Subject to natural change, to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; • The extent and distribution of qualifying natural habitats • The structure and function (including typical species) of qualifying natural habitats, and • The supporting processed on which the qualifying natural habitats rely.	• Natural processes of erosion and sedimentation • Constraint on natural processes through development of limiting structures

4. Likely Significant Effects

4.1 Process of Determining Significant Effects

4.1.1 This section considers the preferred options adopted to achieve the aims and objectives of the Coastal Strategy. It is acknowledged that the Coastal Strategy is not necessary for the management of European Sites and as such each management unit option is assessed to determine whether or not significant effects are likely, either alone or in combination with other plans or programmes.

4.1.2 To determine if the Coastal Strategy is likely to have any significant effects on the designated sites the following issues have been considered.

- Could the proposals affect the qualifying interest and are they sensitive to the effect;
- The probability of the effect occurring;
- The likely consequences for the site's Conservation Objectives if the effect occurred;
- The magnitude, duration and reversibility of the effect.

4.2 Northumbria Coast SPA / Ramsar

4.2.1 Although these two constitute separate designations, the features and conservation objectives underlying the two are essentially the same within identical boundaries. They are therefore considered together.

Construction Disturbance

4.2.2 Disturbance as a result of the adopted Coastal Strategy proposals which promote reactive maintenance, repair or replacement of structures will occur as a result of works at the project level. These are likely to be construction activities where repairs or improvements to defences along the coast are supported by the policies within the Strategy.

Recreational Disturbance

4.2.3 If new access or amenity facilities arise as a result of adoption of the Coastal Strategy, this may result in increased recreational disturbance to qualifying bird species, especially if this access is on to the shoreline where birds are likely to roost and feed.

Habitat Loss

4.2.4 Rising sea levels cause inter-tidal habitats to migrate landwards. However, in built up areas where sea defences are present, this landward movement is impossible and results in a net loss of these habitats in a process known as “coastal squeeze”.

4.2.5 The preferred management options for each of the Management Areas under the proposed Coastal Strategy are shown in Table 1.1. *Hold the Line options* where the objective is to maintain the coastline in its current state will be achieved through maintenance and upgrade of existing defence structures. By promoting preservation of these structures the Coastal Strategy is likely to have significant effects on Northumbria Coast SPA / Ramsar as a result of the loss of rocky shore habitat used by the bird species due to coastal squeeze.

4.2.6 Habitat loss may also occur where upgrades to existing defences involve increasing the footprint of the hard defence in to the designated site, therefore reducing the area of the SPA/Ramsar.

4.2.7 Maintenance or upgrading of sea defence structures may result in a loss of high tide roost sites for some bird species.

4.3 Durham Coast SAC

Recreational Disturbance

4.3.1 Disturbance as a result of the adopted Coastal Strategy proposals may occur where works at the project level increase access and amenity at the coast and therefore increase recreational disturbance. It is possible an increase in access to one section will lead to increased recreational use of adjacent areas, i.e. Durham coast. Durham Coast SAC is designated for the presence of vegetated sea cliff habitat and therefore disturbance effects would occur where excessive recreational pressure results in localised habitat changes for example through trampling, nitrification etc.

Habitat Loss

4.3.2 The designated habitats of Durham Coast SAC are dependent upon localised coastal processes and maintenance of localised vegetation communities. As the European Site is located approximately 2.5km south of the Coastal strategy study area and is protected by Tynemouth North and Tynemouth South piers as well as being buffered by the mouth of the River Tyne, coastal changes due to altered erosion and deposition will not be immediately obvious, therefore this pathway is considered no further.

4.4 Summary

4.4.1 A summary of likely significant effects is provided in Table 5.2

Table 4.1 Likely Significant Effects

European Site	Likely Significant Effect	Pathway
Northumbrian Coast Ramsar / Northumbrian Coast SPA	✓	Habitat Loss
	✓	Recreational Disturbance
	✓	Construction Disturbance
Durham Coast SAC	✓	Recreational Disturbance

5. In Combination Effects

5.1 Introduction

5.1.1 The Coastal Strategy will be influenced by, or will influence other plans and strategies. These include European and national policies, as well as regional and local plans such as Local Development Plans and higher level Shoreline Management Plans (SMPs).

5.1.2 Effects of the Coastal Strategy on European Sites must be assessed for significant effects in combination with other relevant plans.

5.1.3 Plans and Policies have been assessed for their relevance to the nature conservation interest of European sites and relevant objectives of each considered in this HRA are shown below.

Name of document	Relevant policies/objectives of the plan or programme
North Tyneside Unitary Development Plan (2002)	Provides a statutory development plan for the borough. Adopted policies will continue to guide development until their eventual replacement by the Local Plan (expected November 2015). A principle concern of the plan is the protection and improvement of the physical environment.
North Tyneside Local Plan (Consultation Draft December 2015)	Protect and enhance green space, wildlife, pedestrian and cycle routes, listed buildings and the Hadrian's Wall World Heritage Site. Implement measures that minimise risk of flooding.
North Tyneside Council's Climate Change Strategy (2010 -2015)	The Climate Change Strategy builds on the principles of sustainable development and puts into place an integrated approach in fulfilling the social, environmental and economic objectives within North Tyneside. Objectives include local dune management to counter both physical effects of the sea and winds and the trampling erosion caused by pedestrian access.
North Tyneside Green Infrastructure Strategy (2011)	Green Infrastructure should be incorporated within both the design and delivery of new land use schemes with developer contributions used to support the creation of sites and their maintenance. A need to develop places of interest within the network, for recreation and tourism, including the coastline. Use of GI assets to enhance biodiversity and green space activity.
North Tyneside Council Local Flood Risk Management Strategy (2014)	North Tyneside Council's strategy for co-ordination of local flood risk management. This includes flood risk from all sources and takes in to account any interactions. The plan has been produced in accordance with the National Flood and Coastal Risk Management Strategy.

5.1.4 In-combination effects would be expected where other plans or policies increased the significance or likelihood of significant effects. In particular promotion of coastal access in close proximity to the site area covered by the Coastal Strategy is likely to result in in-combination effects.

Table 5.1: Likely in-combination effects

European Site	Pathway	Likely In-combination Effect
Durham Coast SAC	Habitat Loss	x
	Recreational Disturbance	✓
Northumbria Coast SPA / Northumbria Coast Ramsar	Habitat Loss	x
	Recreational Disturbance	✓
	Construction Disturbance	✓

6. Screening Statement

6.1.1 It has been concluded that the Coastal Strategy is likely to result in significant effects on Northumbria Coast SPA / Ramsar and Durham Coast SAC as a result of habitat loss through the process of coastal squeeze and increase in footprint of hard defences and through both direct and indirect effects of recreational disturbance upon habitats and species.

6.1.2 There may be in-combination effects due to increases recreational disturbance resulting from promotion of coastal access across a wider area of influence.

6.1.3 Appropriate Assessment is therefore required to assess these effects on site integrity and identify suitable mitigation or compensation measures.

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Part Two – Appropriate Assessment

7. Introduction

7.1.1 Habitats Regulations Assessment (HRA) of the Hartley Cove to the River Tyne Coastal Strategy Review is a requirement of the Habitats Directive (92/43/EEC). This section of the report details the Appropriate Assessment stage of the HRA and sets out the methods, findings and recommendations for mitigation measures to be included at the Strategy level.

7.1.2 The Screening stage of the HRA, through consultation with Natural England, concluded that the Coastal Strategy proposals are likely to result in significant effects on Northumbria Coast SPA / Ramsar and Durham Coast SAC as a result of habitat loss through the process of coastal squeeze and through potential increase in footprint and as a result of increased recreational disturbance. Therefore progression to Appropriate Assessment is necessary.

8. Scoping and Information Gathering

8.1.1 The key tasks employed for the Appropriate Assessment stage of the HRA are set out in Table 8.1.

Table 8.1: Appropriate Assessment key tasks

Task 1 **Scoping and additional information gathering**	• Gathering additional information on European Sites. • Gathering additional data on environmental conditions. Further analysis of plans and projects that have potential for in-combination effects.
Task 2 **Assessing the impacts**	• Consideration of whether effects are direct, indirect or cumulative. • Assessment of scale of significance.
Task 3 **Developing mitigation measures**	• Consider initial opportunity to avoid effects. • Develop mitigation measures – must be deliverable by the plan and have clear delivery and monitoring responsibilities.
Task 4 **Findings and recommendations**	• Conclude the assessment, explain key findings.

8.2 Scoping

8.2.1 As noted in Chapter 7 Screening Statement: Northumbria Coast SPA/Ramsar and Durham Coast SAC are to be considered in the Appropriate Assessment due to the potential for loss of rocky shore habitat through the process of coastal squeeze and disturbance as a result of increased recreational pressure.

8.2.2 This has been agreed with Natural England (Appendix C) who prepared a summary response which states "*...Natural England advises that the screening report follows the sequential process required by the Habitats Regulations and accurately identifies the designated sites and potential impacts. We agree with the conclusion of the report; that the Northumbria Coast Special Protection Area (SPA) and Ramsar Site should be taken forward for Appropriate Assessment (AA)...*"

8.2.3 Further information in support of the Appropriate Assessment has been gathered from the British Trust for Ornithology (BTO) in the form of Wetland Bird Survey (WeBS) data (see Appendix D). This data covers two view points along the stretch of coastline covered by the Coastal Strategy and includes bird data for the past five years (the most recent being from 2012/2013).

8.2.4 As the SPA/Ramsar is underpinned by Northumberland Shore SSSI and there is high correspondence between the features, the SSSI condition assessments undertaken by Natural England can be considered reliable indicators of the conservation status and site integrity of the European sites. Information relating to the corresponding SSSI units was therefore obtained from Natural England's Site Information System (ENSIS) (Appendix E).

8.3 Updates since Screening

8.3.1 Since production of the original screening report, Policy Units have been renamed, however preferred management options have remained the same and thus impact identification remains the same. To aid in cross reference of documents, these are illustrated in Table 10.2 below.

Table 8.2: Updates since screening

Management Area		Previous Policy Unit	New Policy Unit	Policy Plan		
MA24	Seaton Sluice to Curry's Point	24.2	PU1	NAI	NAI	NAI
MA25	Curry's Point to Brown's Point	25.1	PU2	HTL	HTL	HTL
		25.2	PU3	MR	MR	MR
		25.3	PU4	HTL	HTL	HTL
		25.4	PU5	HTL	HTL	HTL
MA26	Brown's Point to Tynemouth North Pier	26.1	PU6	NAI	NAI	NAI
		26.2	PU7	HTL	HTL	HTL
		26.3	PU8	NAI	NAI	NAI
		26.4	PU9	HTL	HTL	MR
		26.5	PU10	NAI	NAI	NAI
		26.6	PU11	HTL	HTL	HTL
		26.7	PU12	HTL	HTL	HTL
		26.8	PU13	HTL	HTL	HTL
MA27	Tynemouth North Pier to Fish Quay	27.1	PU14	NAI	NAI	NAI
		27.2	PU15	HTL	HTL	HTL

9. Assessment of Adverse Effects on Site Integrity

9.1 Northumbria Coast SPA & Ramsar

Habitat Loss (Coastal Squeeze)

9.1.1 Table 9.1 shows the results of a coastal squeeze study[4] undertaken in 2010: no error margins for values are available therefore figures have been assumed as accurate. The data shows the total area (ha) of rocky shore within the study area over three modelled epochs. The results of the study show that there is a predicted loss of 0.3ha (0.5%) of rocky foreshore habitat in the first epoch (baseline to year 2025) and total predicted loss of 2.0ha (3.3%) by epoch year 2055. The overall predicted loss of rocky foreshore habitat between baseline (2010) and the final epoch (year 2105) is 6.92ha (approximately 11.4% of the baseline area within the Coastal Strategy area).

9.1.2 Policy units 25.2, 26.1 and 26.3 – 27.2 show no net loss of rocky shore habitat within the first epoch; with policy unit 24.2 showing an increase in habitat of 0.2ha. During the second epoch, there is no net loss of rocky shore within policy units 26.1, 26.4, 26.5, 26.8 and 27.1; unit 24.2 shows a predicted increase of 0.7ha.

9.1.3 In addition, proposed works may have residual effects on coastal processes and sediment regimes, with corresponding impacts on SPA qualifying features.

[4] Northumberland and North Tyneside Rocky Foreshore Coastal Squeeze study *Royal Haskoning, 2010*

Table 9.1:Net change in area (ha) of rocky foreshore over three modelled epochs. [5]

				Baseline	2025			2055			2105		
Policy Unit	2025	2055	2105	(ha)	(ha)	Gain (ha)	Net (ha)	(ha)	Gain (ha)	Net (ha)	(ha)	Gain (ha)	Net (ha)
24.2	NAI	NAI	NAI	23.9	23.6	0.5	0.2	22.7	1.9	0.7	20.6	3.2	-0.1
25.1	HTL	HTL	HTL	9.7	9.4	0.0	-0.2	9.0	0.0	-0.7	8.0	0.0	-1.7
25.2	MR	MR	MR										
25.3	HTL	HTL	HTL	3.4	3.3	0.0	-0.1	2.8	0.0	-0.6	2.1	0.0	-1.3
25.4	HTL	HTL	HTL	3.7	3.6	0.0	-0.1	3.4	0.0	-0.3	2.9	0.0	-0.8
26.1	NAI	NAI	NAI	1.0	1.0	0.0	0.0	0.9	0.0	0.0	0.9	0.1	-0.1
26.2	HTL	HTL	HTL	3.9	3.8	0.0	-0.1	3.6	0.0	-0.3	3.2	0.0	-0.7
26.3	NAI	NAI	NAI	4.0	3.9	0.1	0.0	3.5	0.1	-0.4	3.2	0.1	-0.6
26.4	HTL	HTL	MR	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	-0.1
26.5	NAI	NAI	NAI	2.6	2.6	0.1	0.0	2.5	0.1	0.0	2.2	0.2	-0.2
26.6	HTL	HTL	HTL	1.6	1.6	0.0	0.0	1.5	0.0	-0.1	1.3	0.0	-0.3
26.7	HTL	HTL	HTL	2.0	1.9	0.0	0.0	1.8	0.0	-0.1	1.6	0.0	-0.4
26.8	HTL	HTL	HTL	0.2	0.2	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0
27.1	NAI	NAI	NAI	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
27.2	HTL	HTL	HTL	4.1	4.1	0.0	0.0	3.9	0.0	-0.2	3.5	0.0	-0.6

[5] (Extract from) Northumberland and North Tyneside Rocky Foreshore Coastal Squeeze Study, *Royal Haskoning 2010*

9.1.4 Table 9.2 shows the total predicated loss of rocky shore from Northumbria SPA both within the Strategy area and within the full extent of the SPA/Ramsar.

9.1.5 The total predicted loss of rocky shore from the Coastal Strategy study area over the 90 year Strategy lifespan is 11.44%, however the Strategy area represents only 5.4% of the total Northumbria SPA/ Ramsar designated area.

9.1.6 When considering the whole area of the SPA which extends from Crimdon Park in the south to Banburgh in the north (of which the Strategy Area comprises 5.4%), the total habitat loss equates to only 0.62%.

9.1.7 Appendix F illustrates the predicted losses within each Policy Unit of the Coastal Strategy. Within the study area, the most significant losses of rocky shore habitat are:

- Policy Unit 25.1 (a total predicted loss of 1.7 ha representing a loss of 2.82% of the study are and 0.15% of the SPA).
- Policy Unit 25.3 (a total predicted loss of 1.3 ha representing a loss of 2.16% of the study area and 0.12% of the SPA).

Table 9.2: Total Percentage Loss of Rocky Shore (Ha)

	2025	2055	2105
% loss between baseline and epoch (ha) (Coastal Strategy study area)	-0.50	-3.32	-11.44
% loss between baseline and epoch (ha) Whole SPA / Ramsar	-0.03	-0.18	-0.62

Habitat Loss (Direct Land Take)

9.1.8 Direct land take may also occur where defence works are advanced into designated sites, thus reducing the footprint of the site.

Disturbance

Little Tern

9.1.9 The little tern is the smallest breeding tern in the UK. It nests exclusively on beaches, spits and inshore islands. Colonies are found around the majority of the UK coastline with the main concentrations in the south and east of England. There are two known colonies in Northumberland; one at Long Nanny (c.40 miles north along the coast) and one at Lindisfarne NNR (c.50 miles north and offshore). Little tern are a summer visitor to Europe, arriving in April and May. Return migration starts in August and continues into September.

9.1.10 Given the distance between the Coastal Strategy study area and known little tern breeding sites, no adverse impacts as a result of the Coastal Strategy are anticipated in the short term, however habitat creation should be incorporated into hard sea defence structures e.g. incorporating ledges into hard sea defences to act as secure high tide roosts to enhance habitat for little tern within the study area.

Purple Sandpiper

9.1.11 The purple sandpiper is a medium-sized wading bird of rocky shores. Small numbers nest in Scotland, but this species is mainly a winter visitor to almost any rocky coast in the UK. Most are found in Orkney, Shetland and along the east coast of Scotland and northern England. Purple sandpiper are often found around piers and groynes, and also on stony beaches and mussel beds at low tide feeding on molluscs and worms.

9.1.12 Small numbers of purple sandpiper have been recorded in the study area with the BTO data showing a peak monthly count of 26 at St Mary's Island in April 2013. Survey findings and existing reports confirm that waders in this area favour areas where disturbance as a result of human interaction is lowest.

9.1.13 Site Condition Assessment data obtained from Natural England indicated that purple sandpiper numbers do not meet the condition threshold of 50% for the site as a whole, however specialist advice from national advisors is that this decline is in line with national trends (index 300 in 1980s, present index 100) and the site is still meeting target condition. Given the low numbers of birds encountered in previous surveys[6] [7] it is likely that the Coastal Strategy study area represents sub-optimal habitat for the species within the SPA as a whole.

9.1.14 Adverse impacts on the species are anticipated as a result of:

- Construction disturbance.
- Loss of supporting habitat as a result of coastal squeeze.
- Loss of supporting habitat where footprint of coastal defences is increased.
- Disturbance due to improved public access to the foreshore. (This is particularly significant as an in-combination effect where many other plans including the Draft North Tyneside Local Plan aim to improve public access)

[6] Habitat Regulations Assessment A Screening Opinion for the Proposed Development at Central Promenade, Whitley Bay, *E3 Ecology, December 2014*

[7] Central promenade Whitley bay Wintering Bird Survey, *URS, October 2014*

Turnstone

9.1.15 Turnstones spend most of their time creeping and fluttering over rocks, picking out food from under stones. They are found all around the UK coastline on rocky shores as well as sandy and muddy ones. They are often to be observed feeding on rocks covered with seaweed, and will feed along seawalls and jetties. Turnstone do not breed locally, but individual birds are present for most of the year, with birds from Northern Europe passing through in July and August and again in spring. Canadian and Greenland birds arrive in August and September and remain until April and May. Non-breeding birds may stay through the summer.

9.1.16 Turnstone have been recorded in the study area with the BTO data showing peak monthly counts between 100-200 at St Marys Island.

9.1.17 Site Condition Assessment data obtained from Natural England indicated that turnstone meet the site condition target thresholds for this designated site.

9.1.18 Adverse impacts on the species are anticipated as a result of:

- Construction disturbance.
- Loss of supporting habitat as a result of coastal squeeze.
- Loss of supporting habitat where footprint of coastal defences is increased.
- Disturbance due to improved public access to the foreshore. (This is particularly significant as an in-combination effect where many other plans including the Draft North Tyneside Local Plan aim to improve public access).

9.2 Durham Coast SAC

Disturbance

Vegetated Sea Cliffs

9.2.1 Vegetated sea cliffs are steep slopes created by past or present marine erosion, and supporting a wide diversity of vegetation types with variable maritime influence. Exposure to the sea and underlying geology are key determinants of the type of sea cliff vegetation. Exposure is another important factor. The prevailing winds deliver salt spray to the cliff face and cliff tops. The most exposed areas support maritime vegetation dominated by a range of salt-tolerant plants. More sheltered cliffs support communities closely related to those found on similar substrates inland, such as grassland and heath, with only a minor maritime element in the flora.

9.2.2 The vegetation of sea cliffs in the UK includes 12 maritime cliff NVC types. The Durham coast contains a unique Permian-age paramaritime Magnesian Limestone vegetation influenced by the cliff structure and geomorphological processes. Notable species include purple milk-vetch *Astralagus danicus*, burnt orchid *Neotinea ustulata*, grass-of-Parnassus *Parnassia palustris,* round-leaved wintergreen *Pyrola rotundifolia* and bird's-eye primrose *Primula farinosa*. Streams and flushes provide a freshwater wetland element, and seepage lines may be rich in orchids. The vegetation of mobile soft cliffs is inadequately described by the NVC at present (reference has been made to the specific plant species included in the SSSI designation).

9.2.3 Adverse impacts on the species are anticipated as a result of:

- Disturbance due to improved public access. (This is particularly significant as an in-combination effect where many other plans including the County Durham Local Plan aim to improve public access).

10. Assessment of Adverse Effects (without mitigation)

Table 10.1: Impact Assessment on SPA & SAC Qualifying Features *before* implementation of mitigation strategies

ACTIVITY	CHARACTERISATION OF UNMITIGATED IMPACT ON FEATURE	FEATURES AFFECTED	DURATION	LIKELIHOOD OF PREDICTION	SIGNIFICANCE WITHOUT MITIGATION	SIGNIFICANCE × LIKELIHOOD
NORTHUMBRIA SPA & RAMSAR						
SHORT-TERM IMPACTS						
Disturbance to wintering turnstone and purple sandpiper due to construction activities	Over-expenditure of energy resulting in weakening of birds during crucial winter period	Wintering birds	Construction period	**4**	**4**	**16**
LONG-TERM IMPACTS						
Disturbance due to increased recreational pressure	Changes in long-term distribution	Wintering birds	Permanent	**5**	**4**	**20**
Loss of foraging habitat due to coastal squeeze	Reduction in available food source Imbalance in energy intake and expenditure in combination with disturbance	Wintering birds	Permanent	**5**	**4**	**20**
Loss of foraging habitat due to increase in footprint of sea defences						
Loss of secure high tide roost	Reduction in secure high tide roost options		Permanent	**5**	**4**	**20**
	Movement of birds outside of area					
POST-DEVELOPMENT & IN-COMBINATION IMPACTS						
Compression of species range into non-developed areas of coastline	Changes in long-term distribution	Wintering birds	Permanent	**5**	**5**	**25**
Reduction in wintering numbers	Crash in population			**5**	**5**	**25**

ACTIVITY	CHARACTERISATION OF UNMITIGATED IMPACT ON FEATURE	FEATURES AFFECTED	DURATION	LIKELIHOOD OF PREDICTION	SIGNIFICANCE WITHOUT MITIGATION	SIGNIFICANCE × LIKELIHOOD
DURHAM COAST SAC						
SHORT-TERM IMPACTS						
None identified						
LONG-TERM IMPACTS						
Recreational pressure resulting in changes to vegetation structure	Loss of characteristic species or NVC communities	SAC features	Long-term to Permanent	**3**	**5**	**15**
POST-DEVELOPMENT & IN-COMBINATION IMPACTS						
Recreational pressure resulting in changes to vegetation structure	Loss of characteristic species or NVC communities	SAC features	Permanent	**4**	**5**	**20**

Table 10.2: Significance matrix

LIKELIHOOD		SIGNIFICANCE		SIGNIFICANCE × LIKELIHOOD	
Imminent	5	Severe significant negative impact	5	Likely or imminent severe impacts on feature	**15-25**
Very likely	4		4		
May happen	3	Minor significant negative impact	3	Possible negative impacts on feature	**10-14**
Unlikely	2		2		
Very unlikely	1	No significant negative impact	1	Minimal negative impacts (possible positive impacts)	**1-9**

11. Avoidance & Mitigation

11.1 Strategy

11.1.1 Strategies to limit the impact of works on SAC, SPA & Ramsar Qualifying Features in the short and long term involve 2 elements:

- Avoidance
- Mitigation

11.1.2 The avoidance strategy involves timing of operations, assessment on whether the operations are necessary (the 'do nothing' approach) and avoiding operations where a Qualifying Feature occurs.

11.1.3 The mitigation strategy involves modifying proposals to limit or reduce the impact on a Qualifying Feature and, if this is unavoidable, active compensation for the loss of habitat or resource that supports a Qualifying Feature. A mitigation audit table is provided in Appendix G.

11.1.4 Generic mitigation measures are detailed for the strategy however specific detail will need to be agreed at scheme application. Further project level, specific HRA will be required for schemes arising from the Coastal Strategy which may result in significant effects on the European Sites.

11.2 Northumbria Coast SPA & Ramsar

Habitat Loss (Coastal Squeeze)

11.2.1 Given the predicted impacts as a result of coastal squeeze over the three modelled epochs, it is recommended that actual loss of rocky shore habitat within the designated sites is monitored on a regular basis through mapping and measurement to determine the accuracy of the modelled predictions. This should be linked to the Cell 1 Regional Monitoring Programme[8] as reference in the SMP action plan.

[8] CELL 1 REGIONAL COASTAL MONITORING PROGRAMME NICK COOPER 1 , STEWART ROWE 2 , ANDY PARSONS 3 and TANJA COOPER 1 1Royal Haskoning, 2Scarborough Borough Council, 3Halcrow

11.2.2 Compensation for loss of habitat is required by strategic habitat creation / managed retreat on equivalent substrates elsewhere (this need not be in the immediate vicinity but must be within the range of the individual population). The need for and amount of compensatory habitats will be determined by the on-going programme of monitoring detailed above, however the vehicle for its delivery will be the Environment Agency's Regional Habitat Creation Programme. As this has yet to be detailed, it is recommended that discussions with adjacent Local Authorities and the Environment Agency is undertaken as the earliest possible state after the adoption of the Strategy.

Habitat Loss (Direct Land Take)

11.2.3 Habitat loss as a result of land take to increase the footprint of hard sea defences or through the installation of new defences will be assessed at the project level. This loss of habitat will then be incorporated in to the Habitat Creation Programme (to be secured prior to commencement of construction) to ensure no net loss of habitat within the SPA/Ramsar.

11.2.4 Where hard structures are to be installed or modified, habitat creation should be incorporated into hard structures design, e.g. incorporating ledges into hard sea defences to act as secure high tide roosts to maximise the functionality of the European Site.

Construction Disturbance

11.2.5 The SPA/Ramsar Qualifying Features identified as being affected by proposals (see Table 10.1) are species which winter along the Northumberland coast. Works outside the period when the majority of birds are absent will have no effect on the integrity of the SPA/Ramsar Qualifying Feature (the impact on non-breeding birds over summer is negligible).

11.2.6 Works will have no impact on SPA/Ramsar Qualifying Features if conducted between 31st March & 30th September. It has been observed elsewhere that birds will frequently roost within an enclosed works area because, paradoxically, the disturbance from construction machinery is less than that generated by free-running dogs. Short-term disturbance impacts will also be avoided if the land-take of the works site offers sufficient area to provide safe roosts for birds within it.

11.2.7 Assessment of proposed activities i.e. timing and method statements should be undertaken at the project level to ensure to effects on site integrity. Methods such as silent piling and working at high tide can be adopted to reduce disturbance impacts to bird species.

Recreational Disturbance

11.2.8 Where access or amenity will be improved and therefore an increase in recreational pressure is predicted, access management to areas of habitat within the European Sites to prevent disturbance to roosting or feeding birds (particularly important at high tide), should be incorporated at the project level, this should include:

- Signage to encourage responsible behaviour
- Zoning and / or seasonal restrictions to minimise disturbance in sensitive areas (i.e. the rocky shore platforms at St Marys Island) and at sensitive times (October – March).
- Design of new access points to encourage access away from the most sensitive areas.

11.3 Durham Coast SAC

Recreational Disturbance

11.3.1 Where access or amenity will be improved and therefore an increase in recreational pressure is predicted, access management to areas of habitat within the European Sites to prevent disturbance to sensitive habitats and species should be incorporated at the project level, this should include:

- Signage to encourage responsible behaviour.
- Zoning and / or seasonal restrictions to minimise disturbance in sensitive areas (i.e. when plants are in flower / seed during the summer months).
- Design of new access points to encourage access away from the most sensitive areas.

12. Assessment of Adverse Effects (with mitigation implemented)

Table 12.1: Impact Assessment on Qualifying Features *after* mitigation strategies implemented

ACTIVITY	CHARACTERISATION OF UNMITIGATED IMPACT ON FEATURE	MITIGATION & ENHANCEMENT	REVISED LIKELIHOOD	REVISED SIGNIFICANCE	SIGNIFICANCE × LIKELIHOOD
NORTHUMBRIA SPA & RAMSAR					
SHORT-TERM IMPACTS					
Disturbance to wintering turnstone and purple sandpiper due to construction	Over-expenditure of energy resulting in weakening of birds during crucial winter period	Works undertaken between 31st March and 30th September Larger-than-minimum exclusion zone during construction	**4**	**2**	**8**
LONG-TERM IMPACTS					
Disturbance due to increased recreational pressure	Changes in long-term distribution	Inclusion of education / information boards. Dedicated access points away from key wintering bird areas.	**3**	**2**	**6**
Loss of foraging habitat due to coastal squeeze Loss of habitat due to increase in footprint of defences in to the European Site	Reduction in available food source Imbalance in energy intake and expenditure in combination with disturbance	Provision of compensation habitat elsewhere (but within range of individual population)	**1**	**1**	**1**
Loss of high tide roost	Reduction in secure high tide roost options	Incorporation of roost sites in hard engineered features e.g. ledges	**2**	**4**	**8**
	Movement of birds outside of area	Access management to create secure roosting & feeding sites within MPZ	**2**	**3**	**6**
POST-DEVELOPMENT & IN-COMBINATION IMPACTS					

ACTIVITY	CHARACTERISATION OF UNMITIGATED IMPACT ON FEATURE	MITIGATION & ENHANCEMENT	REVISED LIKELIHOOD	REVISED SIGNIFICANCE	SIGNIFICANCE × LIKELIHOOD
Increased recreational pressure due to national incentive to increase access around the coast.	Changes in long-term distribution Crash in population	Ongoing monitoring and research programme and reactive mitigation i.e. through signage, wardens seasonal restrictions etc.	**2**	**5**	**10**

ACTIVITY	CHARACTERISATION OF UNMITIGATED IMPACT ON FEATURE	MITIGATION & ENHANCEMENT	REVISED LIKELIHOOD	REVISED SIGNIFICANCE	SIGNIFICANCE × LIKELIHOOD
DURHAM COAST SAC					
SHORT-TERM IMPACTS					
None identified					
LONG-TERM IMPACTS					
Recreational pressure resulting in changes to vegetation structure	Loss of characteristic species or NVC communities	Ongoing monitoring and research programme and reactive mitigation i.e. through signage, wardens seasonal restrictions etc.	**3**	**3**	**9**
POST-DEVELOPMENT & IN-COMBINATION IMPACTS					

ACTIVITY	CHARACTERISATION OF UNMITIGATED IMPACT ON FEATURE	MITIGATION & ENHANCEMENT	REVISED LIKELIHOOD	REVISED SIGNIFICANCE	SIGNIFICANCE × LIKELIHOOD
Increased recreational pressure due to national incentive to increase access around the coast.	Loss of characteristic species or NVC communities	Ongoing monitoring and research programme and reactive mitigation i.e. through signage, wardens seasonal restrictions etc.	**3**	**3**	**9**

LIKELIHOOD		SIGNIFICANCE		SIGNIFICANCE × LIKELIHOOD	
Imminent	5	Severe significant negative impact	5	Likely or imminent severe impacts on feature	**15-25**
Very likely	4		4		
May happen	3	Minor significant negative impact	3	Possible negative impacts on feature	**10-14**
Unlikely	2		2		
Very unlikely	1	No significant negative impact	1	Minimal negative impacts (possible positive impacts)	**1-9**

13. Conclusion of Adverse Effects

13.1.1 The information in this document provides information against which it can be assessed whether the Coastal Strategy is likely to have an adverse effect on the integrity of Northumbria Coast SPA / Ramsar and Durham Coast SAC.

13.1.2 It is concluded that the strategy will not have an adverse effect on site integrity for the following reasons:

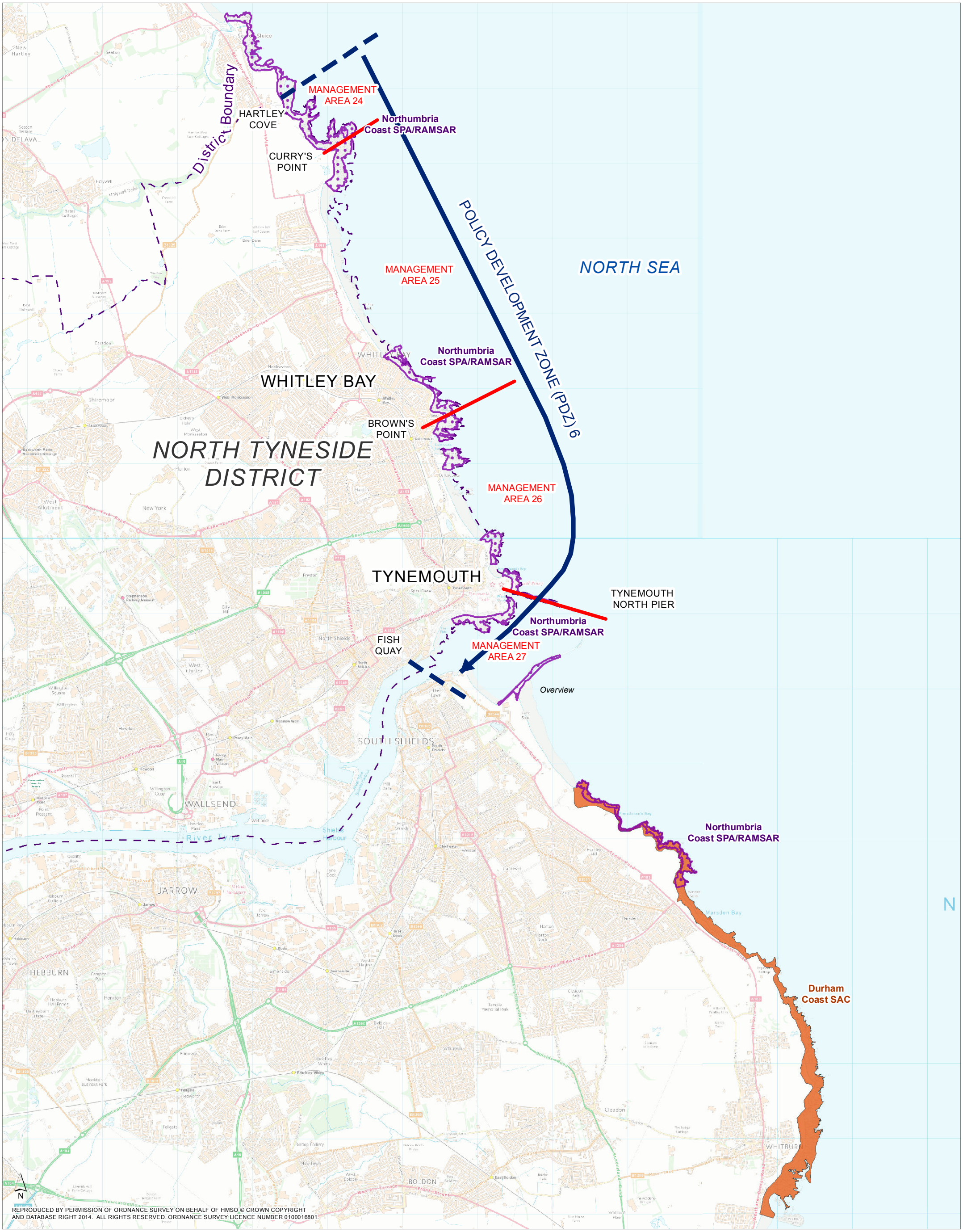
13.1.3 Adverse effects on the integrity of the European Sites resulting from coastal squeeze and direct habitat loss, in combination with other plans and projects, will be compensated for in the wider partnership to be confirmed with the Environment Agency in delivering the Regional Habitat Creation programme.

13.1.4 Habitat enhancement in hard structures at the project level will reduce adverse impacts by providing alternative suitable habitat.

13.1.5 Adverse effects on the integrity of the European Sites are not considered likely to occur from construction disturbance to SPA features provided suitable timing of works and method statements are implemented at the project level. A review of BTO data and existing wintering bird studies have indicated that the Coastal strategy study area is used by a low number of the qualifying species and as such it should be possible to design works to avoid impacts.

13.1.6 Adverse effects as a result of recreational disturbance are not anticipated provided that at the project level mitigation measures are implemented to either reduce or offset recreational pressure.

Appendix A - European Sites Location Plan



North Tyneside Council

Client

NORTH TYNESIDE COUNCIL

Project

NORTH TYNESIDE COASTAL STRATEGY

Drawing

HABITATS REGULATIONS ASSESSMENT (EUROPEAN SITES)

Scale @ A3	Drawn	Checked	Approved
1:45,000	SH	KJ	HC

Project No	Date
CS/062000	14/05/2015

Drawing Identifier — revision

CS062000-CAP-00-EGN-DR-V-0026 01

Key

- Special Protection Area / RAMSAR
- Special Area of Conservation

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Appendix B - HRA Screening Pro-forma

Project Name: Hartley Cove to the River Tyne Coastal Strategy Review		
Natura 2000 Sites under Consideration:	Northumbria Coast Special Protection Area (SPA) Durham Coast SAC	
Date:	**Author (Name/Organisation):**	**Verified (Name/Organisation):**
May 2015	Hannah Carruthers	Richard Birch
Description of Project: The Hartley Cove to the River Tyne Coastal Strategy is a non-statutory document providing a high-level basis for decision making in relation to the long term management of the coastline. The Strategy appraises a range of coastal defence options to determine; the most sustainable, technically sound, economically viable and environmentally and socially acceptable methods of managing risks such as coastal flooding, erosion and sea level rise. **Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans and projects) on the European Site by virtue of:**		
Size and scale	The areas of the SPA / Ramsar comprising rocky shore habitat within the Coastal Strategy study area which is 60.3ha. The majority of this is found in Policy Unit 24.2.	
Land-take	Coastal squeeze will result in the loss of rocky shore habitat.	
Distance from the European Site or key features of the site (*from edge of the project assessment corridor*);	Directly within the study are, although the majority of the rocky shore is located in Policy Unit 24.2	
Resource requirements (*from the* European Site *or from areas in proximity to the site, where of relevance to consideration of impacts*);	N/A	
Emissions (*e.g. polluted surface water runoff – both soluble and insoluble pollutants, atmospheric pollution*);	N/A	
Excavation requirements (*e.g. impacts of local hydrogeology*);	N/A	
Transportation requirements;	N/A	

Duration of construction, operation etc;	The Coastal Strategy is a 100 year strategy for the management of the coast. The strategy is separate in to three epochs: 2025, 2055 and 2105.
Other.	N/A
Characteristics of European Site (s) **A brief description of the European Site should be produced, including information on:**	
Name of European Site and its EU code;	UK9006131 Northumbrian Coast
Location and distance of the European Site from the proposed works;	Directly within study area.
European Site size;	1107.98 Ha
Key features of the European Site including the primary reasons for selection and any other qualifying interests;	1. Little tern (*Sterna albifrons*) 1.7% of UK breeding population; 2. Turnstone (*Arenaria interpres*) 2.6% of migratory population 3. Purple sandpiper (*Calidris maritima*) 1.6% of migratory population
Vulnerability of the European Site – any information available from the standard data forms on potential effect pathways;	The purple sandpiper is a winter visitor to almost any rocky coast in the UK. Purple sandpiper are often found around piers and groynes, and also on stony beaches and mussel beds at low tide feeding on winkles, insects, spiders, crustaceans, and plants. Reduction in rocky shore will reduce habitat availability for the species, in particular as high tide roosts.
European Site conservation objectives – where these are readily available	The Conservation Objectives for the Northumbria Coast SPA are to: 'ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring: • The extent and distribution of the habitats of the qualifying features; • The structure and function of the habitats of the qualifying features; • The supporting processes on which the habitats of the qualifying features rely; • The population of each of the qualifying features, and, • The distribution of the qualifying features within the site.
Assessment Criteria **Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the European Site.**	
Initial Assessment **The key characteristics of the site and the details of the European Site should be considered in identifying potential impacts. Impacts should include; direct, indirect, temporary, permanent or harmful effects.** **Describe any likely changes to the site arising as a result of:**	

Reduction of habitat area;	The total predicted loss of rocky shore from the Coastal Strategy study area over the 90 year Strategy lifespan is 11.44%, however the Strategy area represents only 5.4% of the total Northumbria SPA/ Ramsar designated area. When considering the whole area of the SPA which extends from Crimdon Park in the south to Banburgh in the north (of which the Strategy Area comprises 5.4%), the total habitat loss equates to only 0.62%.
Disturbance to key species;	Construction activities and increased recreational pressure will result in localised disturbance events.
Habitat or species fragmentation;	Not significant issue as habitat loss will be incremental over the 100 year epoch and spread over the entire study area, with some areas experiencing gain in some years. I.e. Policy Unit 24.2.
Reduction in species density;	Loss of habitat will indirectly impact bird species, in particular purple sand piper.
Changes in key indicators of conservation value (water quality etc.)	N/A
Climate change	Climate change has been factored in to the Rocky Shore modelling.
Describe any likely impacts on the European Site as a whole in terms of:	
Interference with the key relationships that define the structure of the site;	
Interference with the key relationships that define the function of the site;	
Indicate the significance as a result of the identification of impacts set out above in terms of:	
Reduction of habitat area;	In terms of the European Site as a whole this is not considered significant: only 0.62% over the 100 year epoch.
Disturbance and disruption to key species;	Construction activities will take place outside of the wintering bird season and access points will be designed to avoid the most sensitive areas therefore reducing the impacts to minor.

Habitat or species fragmentation;	The areas within the Strategy Area which are occupied by the qualifying species are very distinct therefore significant effects as a result of the strategy are not anticipated.
Loss	N/A
Reduction in species density;	The areas within the Strategy Area which are occupied by the qualifying species are very distinct therefore significant effects as a result of the strategy are not anticipated.
Change to key elements of the site (e.g. water quality, hydrological regime etc).	N/A
Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.	
Outcome of screening stage (*delete as appropriate*).	
Are the appropriate statutory environmental bodies in agreement with this conclusion *(delete as appropriate and attach relevant correspondence).*	

Appendix C – Natural England Consultation Response

Date: 05 June 2015
Our ref: 153884
Your ref: North Tyneside Coastal Strategy HRA

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FAO Hannah Carruthers

BY EMAIL ONLY

Dear Hannah

Planning consultation: Hartley Cove to the River Tyne Coastal Strategy Review: Habitats Regulation Assessment: Appropriate Assessment
Location: Hartley Cove to the River Tyne

Thank you for your consultation on the above dated 15 May 2015 which was received by Natural England on 15 May 2015.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

THE CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2010 (AS AMENDED)
Natural England has reviewed the appropriate assessment and advises that additional work is required to demonstrate that the sequential tests and audit trail of decision making required by the Habitats Regulations has been followed. We provide further details below, regarding areas where additional work or clarification is required.

General comments
The tests of the Habitats Regulations have been mixed in section 5, but our main concern is that there is no conclusion in terms of the findings of the HRA. For example, section 15 – summary – states that "*Mitigation measures to manage access in the study area will reduce the impacts to minor adverse value*". This is not an appropriate conclusion for an appropriate assessment (AA). As stated in section 2.4.6, the purpose of the AA is to ascertain whether there will be an adverse effect on site integrity; *"Only where a plan or project can be determined as not having an adverse effect on any European Site can it be approved by the Competent Authority*". It is unclear whether this AA has determined that an adverse effect can be ruled out through the use of mitigation, or whether it is not possible to ascertain that there no will be an adverse effect on site integrity and therefore compensation is required. A plan can only progress to the stage of compensation once a case has been submitted that there are no alternatives and that the plan is of imperative reasons of over-riding public interest.

It is also difficult to keep track of the possible impacts of the strategy on the designated sites as potential impacts are mentioned early in the document and are then omitted without any discussion/ evidence as to why they are no longer being considered. Direct loss of habitat from defence footprints is an example – section 5.2.8.

Specific comments

5.3.2 states that there is no likelihood of significant effects alone on the Durham coast SAC, and so potential impacts on this site are taken through to an in-combination assessment. Table 6.1 then identifies that there is a likelihood of significant effects in combination with other plans and projects due to habitat modification. No explanation is given as to how this modification will occur; whilst the Durham Coast SAC is described in section 11.3 there is no discussion of the potential impacts. This should be clarified.

10.2 Page 27: It is stated that '*Since production of the original screening report, Policy Units have been renamed and preferred management options have been updated, these are illustrated in Table 10.1 below*'. However, there does not appear to be any change to the policies within Table 10.1 from those within Table 1.1. It would therefore be useful to highlight where changes to preferred options have occurred and whether this has any implications for the assessment of impacts.

11.2.10 & 11.2.14 Page 31/32: Impacts could also arise through direct loss of habitat if any increase to the footprint of existing defences is proposed (see 5.2.8).

Table 12.1 Page 33: Direct loss of habitat from any increase to the footprint of existing defences should be added.

Section 13.2

13.2.1. This is the wrong way round i.e. 'works ***within*** the period when the majority of birds are absent will have no short term effect on the integrity of the SPA/Ramsar Qualifying Feature'.

13.2.2 Although it is stated that '*Works will have no short-term impact on SPA/Ramsar qualifying features if conducted between 31st March & 30th September'* there is no actual commitment to restricting works to this period. This should be committed to at the strategy level, although the specific detail can be agreed in any subsequent scheme application. If works are planned outside of this period, then impacts on SPA/ Ramsar birds will need to be further assessed and additional mitigation measures may be required.

13.2.3 – see our comments under general comments.

Natural England understands that the potential impacts from this strategy are:

- Direct habitat loss due to the footprint of schemes
- Construction disturbance
- Increased recreational disturbance
- Coastal squeeze

With the amendments suggested above, we advise that the mitigation is sufficient to rule out an adverse effect on site integrity from construction disturbance and recreational disturbance. Further information is required on direct habitat losses. With regards to coastal squeeze, Natural England understands that the 2010 Royal Haskoning report models predicted coastal squeeze over the 3 epochs. The predicted figures are 0.3ha during the 1st epoch, 2ha over the 2nd epoch and 7ha over the 3rd epoch. Given the scale of these impacts and the uncertainty surrounding modelled predictions over a long period of time, Natural England advises that, in this case, these potential impacts should be monitored to determine their accuracy. This should link in with the cell 1 Regional Monitoring Programme and be subject to regular review, as referred to in the SMP action plan.

We note that paragraphs I6.2.24-I6.2.27 (Page 150) of the Northumberland and North Tyneside Shoreline Management Plan (SMP) 2: Scottish Border to River Tyne SMP2 Habitat Regulations Assessment (HRA) which covers the Management Areas relevant to this strategy states;

'Within this MA compensation must be identified through the establishment of a Regional Habitat Creation Plan. Compensatory habitat can only be used to offset impacts upon Natura 2000 sites once the Secretary State has made a decision that any scheme is necessary for IROPI'.

Given that the work undertaken by Royal Haskoning does indicate there will be habitat loss in the lifetime of the plan, Natural England advises that it will be important to start planning for the identification and implementation of any necessary compensatory habitat at the earliest opportunity. Obviously, the need for, and amount of, compensatory habitat will be determined by the ongoing monitoring work; however the vehicle for delivery of compensatory habitat is the Environment Agency's Regional Habitat Creation Programme. Natural England understands that currently there is no RHCP for this area so this will need to be urgently addressed.

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us.

For any queries relating to the specific advice in this letter only please contact Colin Godfrey on 03000 601164. For any new consultations, or to provide further information on this consultation please send your correspondences to consultations@naturalengland.org.uk.

Yours sincerely

Colin Godfrey
Northumbria Team

Appendix D – BTO WeBS Data

St Marys Island BTO WeBS Data

SpeciesCod	Species	TaxonSort	Visit	Count	SpeciesCover
PS	Purple Sand	26900	Jun-13	0	Good
PS	Purple Sand	26900	May-13	0	Good
PS	Purple Sand	26900	Apr-13	26	Good
PS	Purple Sand	26900	Mar-13	12	Good
PS	Purple Sand	26900	Feb-13	2	Good
PS	Purple Sand	26900	Jan-13	20	Good
PS	Purple Sand	26900	Dec-12	4	Good
PS	Purple Sand	26900	Nov-12	4	Good
PS	Purple Sand	26900	Oct-12	1	Good
PS	Purple Sand	26900	Sep-12	0	Good
PS	Purple Sand	26900	Aug-12	0	Good
PS	Purple Sand	26900	Jul-12	0	Good
PS	Purple Sand	26900	Jun-12	0	Good
PS	Purple Sand	26900	May-12	0	Good
PS	Purple Sand	26900	Apr-12	6	Good
PS	Purple Sand	26900	Mar-12	5	Good
PS	Purple Sand	26900	Feb-12	6	Good
PS	Purple Sand	26900	Jan-12	5	Good
PS	Purple Sand	26900	Dec-11	0	Good
PS	Purple Sand	26900	Nov-11	1	Good
PS	Purple Sand	26900	Oct-11	0	Good
PS	Purple Sand	26900	Sep-11	0	Good
PS	Purple Sand	26900	Feb-11	9	Good
PS	Purple Sand	26900	Nov-10	1	Good
PS	Purple Sand	26900	Oct-10	3	Good
PS	Purple Sand	26900	Sep-10	0	Good
PS	Purple Sand	26900	Mar-10	7	Good
PS	Purple Sand	26900	Feb-10	2	Good
PS	Purple Sand	26900	Jan-10	6	Good
PS	Purple Sand	26900	Nov-09	4	Good
PS	Purple Sand	26900	Oct-09	1	Good
PS	Purple Sand	26900	Sep-09	0	Good
PS	Purple Sand	26900	Aug-09	0	Good
PS	Purple Sand	26900	Mar-09	4	Good
PS	Purple Sand	26900	Feb-09	5	Good
PS	Purple Sand	26900	Jan-09	15	Good
PS	Purple Sand	26900	Dec-08	0	Good
PS	Purple Sand	26900	Nov-08	1	Good
PS	Purple Sand	26900	Oct-08	2	Good
TT	Turnstone	30600	Jun-13	4	Good
TT	Turnstone	30600	May-13	15	Good
TT	Turnstone	30600	Apr-13	88	Good
TT	Turnstone	30600	Mar-13	87	Good
TT	Turnstone	30600	Feb-13	81	Good
TT	Turnstone	30600	Jan-13	150	Good
TT	Turnstone	30600	Dec-12	92	Good
TT	Turnstone	30600	Nov-12	58	Good
TT	Turnstone	30600	Oct-12	80	Good
TT	Turnstone	30600	Sep-12	50	Good

TT	Turnstone	30600	Aug-12	39	Good
TT	Turnstone	30600	Jul-12	18	Good
TT	Turnstone	30600	Jun-12	0	Good
TT	Turnstone	30600	May-12	4	Good
TT	Turnstone	30600	Apr-12	71	Good
TT	Turnstone	30600	Mar-12	54	Good
TT	Turnstone	30600	Feb-12	64	Good
TT	Turnstone	30600	Jan-12	65	Good
TT	Turnstone	30600	Dec-11	55	Good
TT	Turnstone	30600	Nov-11	62	Good
TT	Turnstone	30600	Oct-11	52	Good
TT	Turnstone	30600	Sep-11	101	Good
TT	Turnstone	30600	Feb-11	53	Good
TT	Turnstone	30600	Nov-10	60	Good
TT	Turnstone	30600	Oct-10	70	Good
TT	Turnstone	30600	Sep-10	51	Good
TT	Turnstone	30600	Mar-10	80	Good
TT	Turnstone	30600	Feb-10	80	Good
TT	Turnstone	30600	Jan-10	70	Good
TT	Turnstone	30600	Nov-09	60	Good
TT	Turnstone	30600	Oct-09	60	Good
TT	Turnstone	30600	Sep-09	30	Good
TT	Turnstone	30600	Aug-09	15	Good
TT	Turnstone	30600	Mar-09	10	Good
TT	Turnstone	30600	Feb-09	100	Good
TT	Turnstone	30600	Jan-09	200	Good
TT	Turnstone	30600	Dec-08	120	Good
TT	Turnstone	30600	Nov-08	150	Good
TT	Turnstone	30600	Oct-08	70	Good
AF	Little Tern	35600	May-13	0	Good
AF	Little Tern	35600	Apr-13	0	Good
AF	Little Tern	35600	Oct-12	0	Good
AF	Little Tern	35600	Aug-12	0	Good
AF	Little Tern	35600	Jul-12	0	Good
AF	Little Tern	35600	Jun-12	0	Good
AF	Little Tern	35600	May-12	0	Good
AF	Little Tern	35600	Sep-11	0	Good
AF	Little Tern	35600	Sep-10	0	Good
AF	Little Tern	35600	Aug-09	0	Good

Whitley Bay WeBS Data

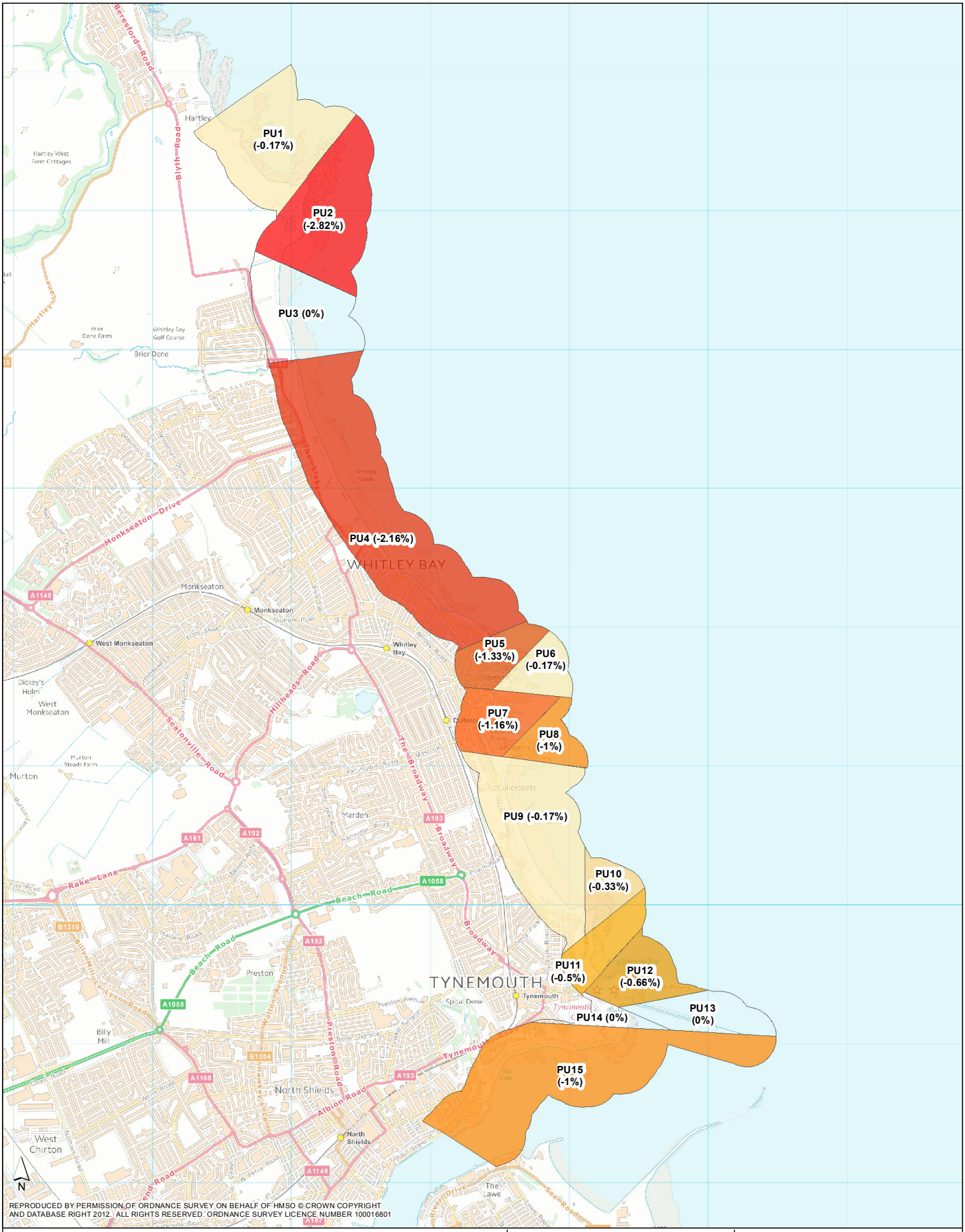
SpeciesCod	Species	TaxonSort	Visit	Count	SpeciesCover
PS	Purple Sand	26900	Apr-13	6	Poor
PS	Purple Sand	26900	Mar-13	5	Poor
PS	Purple Sand	26900	Feb-13	1	Poor
PS	Purple Sand	26900	Jan-13	19	Good
PS	Purple Sand	26900	Dec-12	8	Poor
PS	Purple Sand	26900	Nov-12	10	Good
PS	Purple Sand	26900	Oct-12	11	Good
PS	Purple Sand	26900	Sep-12	1	Good
PS	Purple Sand	26900	Apr-12	8	Good
PS	Purple Sand	26900	Mar-12	10	Good
PS	Purple Sand	26900	Feb-12	11	Good
PS	Purple Sand	26900	Jan-12	4	Good
PS	Purple Sand	26900	Dec-11	6	Good
PS	Purple Sand	26900	Nov-11	6	Good
PS	Purple Sand	26900	Oct-11	11	Poor
PS	Purple Sand	26900	Sep-11	1	Poor
PS	Purple Sand	26900	Apr-11	17	Poor
PS	Purple Sand	26900	Mar-11	6	Good
PS	Purple Sand	26900	Feb-11	10	Good
PS	Purple Sand	26900	Jan-11	9	Good
PS	Purple Sand	26900	Dec-10	8	Poor
PS	Purple Sand	26900	Nov-10	0	Good
PS	Purple Sand	26900	Oct-10	4	Good
PS	Purple Sand	26900	Sep-10	2	Poor
PS	Purple Sand	26900	Mar-10	10	Poor
PS	Purple Sand	26900	Feb-10	5	Good
PS	Purple Sand	26900	Jan-10	4	Poor
PS	Purple Sand	26900	Dec-09	9	Good
PS	Purple Sand	26900	Nov-09	8	Poor
PS	Purple Sand	26900	Oct-09	8	Good
PS	Purple Sand	26900	Sep-09	5	Poor
PS	Purple Sand	26900	Apr-09	1	Good
PS	Purple Sand	26900	Mar-09	5	Poor
PS	Purple Sand	26900	Feb-09	16	Good
PS	Purple Sand	26900	Jan-09	11	Good
PS	Purple Sand	26900	Dec-08	13	Good
PS	Purple Sand	26900	Nov-08	23	Good
PS	Purple Sand	26900	Oct-08	8	Good
PS	Purple Sand	26900	Sep-08	0	Poor
TT	Turnstone	30600	Apr-13	17	Poor
TT	Turnstone	30600	Mar-13	27	Poor
TT	Turnstone	30600	Feb-13	45	Poor
TT	Turnstone	30600	Jan-13	104	Good
TT	Turnstone	30600	Dec-12	87	Poor
TT	Turnstone	30600	Nov-12	59	Good
TT	Turnstone	30600	Oct-12	50	Good
TT	Turnstone	30600	Sep-12	38	Good
TT	Turnstone	30600	Apr-12	66	Good
TT	Turnstone	30600	Mar-12	4	Good

TT	Turnstone	30600	Feb-12	9	Good
TT	Turnstone	30600	Jan-12	62	Good
TT	Turnstone	30600	Dec-11	30	Good
TT	Turnstone	30600	Nov-11	72	Good
TT	Turnstone	30600	Oct-11	31	Poor
TT	Turnstone	30600	Sep-11	65	Poor
TT	Turnstone	30600	Apr-11	18	Poor
TT	Turnstone	30600	Mar-11	49	Good
TT	Turnstone	30600	Feb-11	61	Good
TT	Turnstone	30600	Jan-11	45	Good
TT	Turnstone	30600	Dec-10	36	Poor
TT	Turnstone	30600	Nov-10	55	Good
TT	Turnstone	30600	Oct-10	12	Good
TT	Turnstone	30600	Sep-10	35	Poor
TT	Turnstone	30600	Mar-10	29	Poor
TT	Turnstone	30600	Feb-10	40	Good
TT	Turnstone	30600	Jan-10	41	Poor
TT	Turnstone	30600	Dec-09	125	Good
TT	Turnstone	30600	Nov-09	45	Poor
TT	Turnstone	30600	Oct-09	106	Good
TT	Turnstone	30600	Sep-09	28	Poor
TT	Turnstone	30600	Apr-09	38	Good
TT	Turnstone	30600	Mar-09	44	Poor
TT	Turnstone	30600	Feb-09	58	Good
TT	Turnstone	30600	Jan-09	48	Good
TT	Turnstone	30600	Dec-08	71	Good
TT	Turnstone	30600	Nov-08	91	Good
TT	Turnstone	30600	Oct-08	34	Good
TT	Turnstone	30600	Sep-08	19	Poor

Appendix E – Natural England ENSIS Data

								All species except purple sandpiper meet or exceed the threshold of 50% for the site as a whole. (There is no available data for three units). Specialist advice from national advisors is that as this decline is in line with national trends (index 300 in 1980s, present index 100) the site is still meeting target condition.	
LITTORAL ROCK	BOB CUSSEN	013	1010099	70.14	0.00	08/01/2009	Favourable	Raw data from BTO (2002/3-2007/8) was translated into 5-yr peak means for the species of interest (ringed plover, golden plover, sanderling, purple sandpiper, redshank, turnstone and little tern) and compared with the baseline data (1983/4-1989/90 in brackets): Ringed plover 530 (370) Golden plover 5645 (3500) Sanderling 896 (240) Purple sandpiper 206 (600) Redshank 2306 (1100) Turnstone 1267 (1300) Little tern 41 prs (47 prs) All species except purple sandpiper meet or exceed the threshold of 50% for the site as a whole. (There is no available data for three units). Specialist advice from national advisors is that as this decline is in line with national trends (index 300 in 1980s, present index 100) the site is still meeting target condition.	
LITTORAL ROCK	BOB CUSSEN	014	1010100	83.16	0.00	08/01/2009	Favourable	Raw data from BTO (2002/3-2007/8) was translated into 5-yr peak means	

Appendix F – Predicted Loss of Rocky Shore



Key

% Loss of Rocky Shore Habitat

- -2.82
- -2.16
- -1.33
- -1.16
- -1
- -0.66
- -0.5
- -0.33
- -0.17
- 0

Project
HARTLEY COVE TO THE RIVER TYNE COASTAL STRATEGY REVIEW HABITATS REGULATIONS ASSESSMENT

Drawing
PERCENTAGE LOSS OF ROCKY SHORE HABITAT WITHIN THE STUDY AREA FROM BASELINE TO EPOCH 2105.

Purpose of Issue	Status
PRELIMINARY	DRAFT

Scale @ A3	Drawn	Checked	Approved
1:0	SH	HC	PW

Project No	Date
CS/62000	27/04/2015

Drawing Identifier: CS062000-CAP-00-EGN-DR-V-0025 Revision: P01

North Tyneside Council

Working in partnership with CAPITA

Capita Property and Infrastructure Ltd - T:\CS062000 North Tyneside Coastal Strategy\Stage File\Work Packages\WP6_Environmental Appraisal\3_HRA\CS062000-CAP-00-EGN-DR-V-0025 HRA_Loss of Rocky Shore Habitat.mxd

Appendix G – Mitigation Audit Table

DATE_____ **AUDITOR**_____

No.	FEATURE	MITIGATION PROPOSAL	AUDIT POINTS	CHECKLIST	COMMENTS
1	SPA /Ramsar Qualifying Features	Compensation for loss of roosting habitat (0.7ha) locally or by consultation with neighbouring LA's?	• Has consultation with neighbouring bodies been undertaken? • Has land been identified within range of species? • Does area conform to principle of no net loss?		
2	Purple sandpiper	Roosting opportunities incorporated into hard structures (ledges in sea walls)?	• Do mitigation proposals feature in design? • Are proposals featured in final construction?		
3	Purple sandpiper, Ruddy turnstone	Access management: signs erected to reduce disturbance?	• Has an access proposal been considered in line with SPA/Ramsar requirements? • Is signage used?		
		Access management: seasonal restrictions to sensitive area (October-March?	• Have seasonal restrictions been incorporated? • Do they conform to the requirements of SPA/Ramsar Qualifying Features?		
		Access management: routes designed to discourage access to sensitive areas?	• Has access been considered in design? • Does it conform to the requirements of SPA/Ramsar Qualifying Features?		
4	SAC Qualifying Features (downstream erosion)	Beach recharge programme?	• Has consultation with neighbouring bodies been undertaken? • Has a programme of beach recharge been discussed or implemented?		
5		Soft engineering (brushwood breakwaters)?	• Has this been considered in the design? • Has consultation with neighbouring bodies been undertaken?		

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