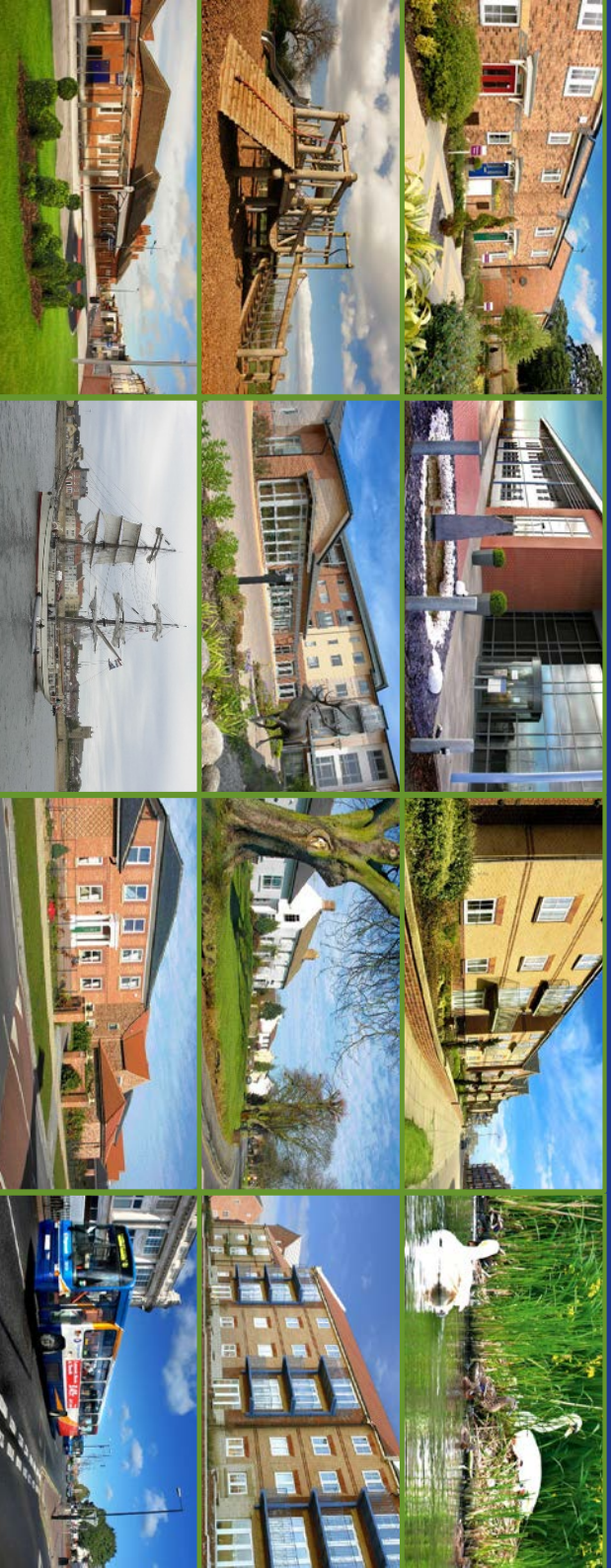


Hartlepool Local Planning Framework

Local Plan

Publication Stage

Habitat Regulations Assessment Consultation Document



December 2016





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1. Summary

Hartlepool Borough Council (HBC) is currently preparing a new Hartlepool Local Development Framework which, once adopted, will replace the 2006 Local Plan. Hartlepool BC is currently at Preferred Options Stage and there was a public consultation which invited comment on the Local Plan Preferred Options document /Proposal Map and associated Sustainability Appraisal and Habitats Regulations Assessment (HRA) between Friday 27 May and Friday 22 July 2016.

A comprehensive response was received from the RSPB (dated 22/07/2016) and this version of the HRA has addressed many of the issues raised.

This document is the public consultation version of the HRA stage 1 (screening) and HRA stage 2 Appropriate Assessment (AA) on the consultation Hartlepool Local Plan. In this document, the Hartlepool Local Plan has been assessed for its impact on European Sites (Nature 2000 Sites, often referred to as N2K sites).

All of the 86 emerging Local Plan policies have been screened using the 'Natural England guidance on scoring policies from The Habitats Regulations Assessment of Local Development Documents (2009)'. A total of 57 policies were initially screened out, leaving 29 policies requiring further assessment. The RSPB proposal of examining Likely Significant Effect (LSE) through the source-pathway-receptor method was used.

Each of the 29 policies was assessed in more detail, employing the precautionary principle and both spatial and in-combination tests, to assess for LSE. Where necessary policy wording was recommended and implemented by the Planning Policy Team in order to avoid LSE. Following screening, seven housing policies could not be ruled out of causing LSE.

Seven housing policies were subjected to a HRA stage 2 Appropriate Assessment. The possibility of a direct adverse impact was ruled out for all policies and all N2K sites. The possibility of indirect LSE was examined. For each issue, evidence is presented and analysed and the Council's conclusions given. The following indirect issues are ruled out for all N2K sites: atmospheric pollution and nutrient enrichment from dog faeces.

The most complex issue was the possibility of indirect LSE through recreational disturbance. N2K sites other than the Teesmouth and Cleveland Coast SPA/ Ramsar are ruled out. Evidence and analysis regarding the Teesmouth and Cleveland Coast SPA/ Ramsar are

discussed. The report presents evidence that overall bird numbers on the SPA have fallen since the site was designated in 1995. It also gives evidence of recreational disturbance to N2K birds, in particular by dogs off the lead. In line with neighbouring local authority areas, the likelihood of LSE through increased disturbance as a direct result of new housing is identified.

Mitigation is required for indirect recreational disturbance (facilitated by the housing policies) and the report discusses that these will be delivered through three pathways:

- Stronger, strategic policy guidance from Hartlepool BC
- Hartlepool BC day to day Foreshore Services provision
- Developer contributions

Changes to policy wording has been recommended and implemented by the Planning Policy Team and this has ensured that developers are given clear guidance which steers them away from potential adverse impacts. As a result, policies are much stronger regarding how mitigation (should it be necessary) must be mitigated. Mitigation is required through Planning Obligations and this will be addressed in greater detail through a SPD. Developers will be expected to provide mitigation and this will mainly be in the form of the maximum provision of Suitable Alternative Natural Green Space (SANGS) for the application site and/ or a financial developer contribution. The financial developer contribution will be made to the Council and spent through Foreshore Services (the current mechanism by which Hartlepool BC manages issues on the coast) or one of the existing coastal management plans (eg: Durham Heritage Coast; T&CC European Marine Site)'.

Hartlepool BC assesses that with the above precautions and mitigation in place, LSE for the Teesmouth & Cleveland Coast SPA/ Ramsar is negated.

The report reviews neighbouring Local Authority and sub-regional plans and policies in terms of in-combination LSE. Each of the coastal Local Planning Authorities have (or will) conclude LSE through indirect recreational disturbance alone and each is developing mitigation to deal with it.

The Hartlepool Local Plan is assessed as not having an adverse effect on the integrity of internationally designated sites and is, therefore, consistent with achieving sustainable development in accordance with the NPPF. There is no need for the Local Plan to go to HRA stage 3.

2. Introduction

Hartlepool BC is currently preparing a new Hartlepool Local Development Framework (HLDF), which brings together and integrates policies for the use and development of land with other policies and programmes which influence the nature of places and how they function. Documents within the HLDF will ensure the most efficient use of land by balancing competing demands in accordance with a clear, distinctive and realistic vision of how the area will develop and change within a demonstrable context of sustainable development.

The Local Development Framework will comprise a number of documents:

- A Local Plan setting out the spatial vision, spatial objectives and core strategic policies for the area;
- DPDs containing waste and minerals policies; and
- A Proposals Map.
- A Sustainability Appraisal
- A Habitats Regulations Assessment

Once adopted, the new Local Plan will replace the 2006 Local Plan. Hartlepool BC is currently at Preferred Options Stage and there was a public consultation which invited comment on the [Local Plan Preferred Options document /Proposal Map](#) and associated [Sustainability Appraisal](#) and [Habitats Regulations Assessment](#) between Friday 27 May and Friday 22 July 2016.

A comprehensive response was received from the RSPB (dated 22/07/2016) and this version of the HRA has addressed many of the issues raised. Other formal and informal comments have been noted, including from Natural England as well as Local Authority Ecologists of neighbouring Councils.

One key concern was reliance in version 1 to defer mitigation to the development control stage. This was done through a heavy reliance on Policy LS1 – the Locational Strategy. Policy LS1 is linked to all policies which allocate types of development in particular locations. It conditions that 'New development will be located or designed so as not to have either directly or indirectly an adverse impact on the integrity of internationally designated nature conservation sites. The impact of a development must be considered both alone as well as in-combination with other plans and programmes. Where impacts would otherwise have an adverse effect, mitigation measures will be required in advance of the development that meet the Habitats Regulations'. In addition certain policies, such as EMP4 Specialist Industries explicitly quote the wording of this part of Policy LS1. While LS1 is legitimate and still applies, HBC agrees that it should not be the main vehicle for mitigation.

3. Habitat Regulations Assessment (HRA)

3.1 Legislation

The EC Habitats Directive (92/43/EEC) and Birds Directive (2009/147/EC) have established a network of protected areas which comprise:

- Special Protected Areas (SPAs). These are designated under Article 3 (2) of the Birds Directive in particular for species listed under Annex 1 of the Directive and migratory species.
- Special Areas of Conservation (SACs). These are designated under the Habitats Directive in order to ensure the restoration or maintenance of natural habitats and species of Community interest.

These sites have been combined to form the Natura 2000 (N2K) network and are collectively known as European Sites.

The Habitats Directive is translated into UK legislation through The Conservation of Habitats and Species Regulations 2010 also known as the Habitats Regulations.

Within the context of local planning, Regulation 102(1) applies (Chapter 8 - Land Use Plans)

Regulation 102(1) of the Habitats Regulations require that where a land use plan:

(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in-combination with other plans or projects), and

(b) is not directly connected with or necessary to the management of that site,

The plan-making authority for that plan must, before the plan is given effect, undertake an appropriate assessment of the implications in view of the site's conservation objectives."

In addition to SPAs and SACs, a suite of wetland sites of international importance has been designated under the Ramsar Convention. Although these are not European Sites, as a matter of law, the UK Government has chosen to apply the same procedures to them as to European Sites. In the case of the Ramsar sites considered in this assessment, Teesmouth & Cleveland Coast and Northumbria Coast, their boundaries coincide with the respective SPAs though the Ramsar designation cites some additional species as interest features. The

assessment of Likely Significant Effect (LSE) on both of these sites considers both the SPA and Ramsar site interest features. The term European Site or N2K site, used throughout this assessment, covers both European and Ramsar sites.

The purpose of this document is to ensure that Hartlepool BC complies with the requirement of the Habitat Regulations. This document is a Habitats Regulations Assessment of the Local Plan of the Hartlepool Local Development Framework. HRA provides an assessment of the effect of a plan or project, alone or in-combination with other plans or projects, on sites considered to be of European importance for their nature conservation value.

Whilst many European Sites overlap with Sites of Special Scientific Interest (SSSIs), HRA relates only to the qualifying interest features of the European site. HRA is only considered for plans that are not connected with or necessary to the management of European Sites. The LDF Core Strategy is not connected with or necessary to the management of any European Sites, and hence under Article 6 (3) of the Habitats Directive, requires consideration for its likely effects on such sites.

A HRA is required where *significant* effects upon the notified interest features of a European site are likely. Significance is defined in terms of the designated interest features and conservation objectives of the site. Natural England guidance indicates that any effect that compromises a site's ability to support and sustain the features for which it has been designated is likely to be considered significant, excluding trivial or inconsequential effects. In determining the likely "significance" of an effect, the EC recommends considering "*the probability, of the impact; the duration, frequency and reversibility of the impact*". If it is not possible to clearly rule out a significant effect, based on objective information, then further assessment is required, in line with the precautionary principle. This view has been supported by recent European case law. That is, it is necessary to demonstrate that significant effects are *not* likely.

Plans should aim to avoid any adverse impacts on European Sites. This can best be achieved by identifying sources of possible impacts early in the planning process, and wording the plan to avoid these. Where adverse effects on European Sites are identified during the HRA process, it is necessary to apply adequate mitigation measures to remove these.

Neither the Habitats Directive nor the Habitats Regulations specify how the stages of HRA should be undertaken, or the depth of analysis of issues that is required; it must, however, be fit for purpose. The DCLG (2006) draft guidance suggests that the comprehensiveness of the work should be "*proportionate to the geographical scope of the option and the nature and extent of any effects identified.*" It further states: "*An AA need not be done in any more detail, or using more resources, than is useful for its purpose. It would be inappropriate and impracticable to assess the effect in the degree of detail that would normally be required for the Environmental Impact Assessment (EIA) of a project.*"

3.2 HRA - the four stages

A Habitats Regulations Assessment is a step-by- step process.

- Stage 1 – Screening: To test whether a plan or project either alone or in-combination with other plans and projects is likely to have a significant effect on an international site;
- Stage 2 – Appropriate Assessment: To determine whether, in view of an international site's conservation objectives, the plan (either alone or in-combination with other projects and plans) would have an adverse effect (or risk of this) on the integrity of the site with respect to the site structure, function and conservation objectives. If adverse impacts are anticipated, potential mitigation measures to alleviate impacts should be proposed and assessed;
- Stage 3 – Assessment of alternative solutions: Where a plan is assessed as having an adverse impact (or risk of this) on the integrity of an international site, there should be an examination of alternatives (e.g. alternative locations and designs of development); and,
- Stage 4 – Assessment where no alternative solutions remain and where adverse impacts remain: In exceptional circumstance (e.g. where there are imperative reasons of overriding public interest), compensatory measures to be put in place to offset negative impacts.

The first stage in this process is screening for a Likely Significant Effect (LSE). Screening evaluates the potential for a plan, in this case the Local Plan of the Hartlepool Local Development Framework, to have a significant effect on the interest features for which a European Protected Site (hereafter referred to as European Sites) is designated. A significant effect is defined as: 'any effect that may reasonably be predicted as a consequence of a plan or project that may affect the conservation action objectives of the features for which the site was designated, but excluding trivial or inconsequential effects'.

This document will be issued to Natural England for formal advice, as required by the Habitats Directive. Other interested bodies will also be invited to provide comments on the issues raised in this document.

4. HRA Stage 1 Screening, European Sites

4.1 European Sites considered

In carrying out the screening process all internationally designated sites, which may be affected either directly or indirectly by the Local Plan need to be considered. In deciding which internationally designated sites should be considered as to a Likely Significant Effect of the Local Plan on them it should be born in mind that policies within a plan could have effects outside of the geographical area to which the plan pertains. For example environmental variables such as changes in air quality or water table levels may have effects some distance beyond their source. For this reason it is general practice to consider at the screening stage internationally designated sites within 15km of the geographical boundary to which a plan pertains. In this HRA all internationally designated sites within 15km of the boundary of Hartlepool Borough have been considered in the screening process for LSE from the Hartlepool Local Plan. However, it is better to work to ecological units and cause and effect relationships, rather than hypothetical boundaries and so some more distant sites have been included. This more closely follows the RSPB's preferred ecosystem method of following through each LSE in terms of 'source, pathway and receptor'. That is, LSE is 'development (source) and any adverse consequence (pathway) on a European Site (receptor)'. Local Plan policies must control these consequences to remove LSE.

The European Sites to be considered in this assessment are listed in Table 1.

Table 1. European Sites considered in the screening process

Site Name	Primary reason for designation	Distance from Hartlepool Borough boundary
Teesmouth and Cleveland Coast SPA / Ramsar	Total wintering populations of waterbirds; populations of migratory species of Redshank, Knot and Ringed Plover; populations of Annex 1 species, Little Tern and Sandwich Tern.	Part of the SPA/ Ramsar is situated within the borough of Hartlepool with the remainder immediately adjacent or within 15km
North York Moors SPA	Breeding populations of Golden Plover and Merlin	13km.
North York Moors SAC	European Dry Heath; North Atlantic Wet Heath.	13km
Castle Eden Dene SAC	The most northerly occurrence of Yew Woods in the UK	4km
Thrislington SAC	Semi-natural dry grasslands and scrublands on calcareous substrates	10km

Durham Coast SAC	Para-maritime vegetated sea cliffs on Magnesian limestone exposures	1km
Northumbria Coast SPA/ Ramsar	Breeding Little Tern; wintering Turnstone and Purple Sandpiper.	1km.
North Pennine Moors SPA	Breeding populations of Hen Harrier, Merlin, Peregrine and Golden Plover.	32 km
North Pennine Moors SAC	Blanket bog, heath and grassland communities.	32 km

NB: The Northumbria Coast Ramsar, Northumbria Coast SPA and Durham Coast SAC, all stop 1 km north of the HBC boundary. The Teesmouth and Cleveland Coast Ramsar and Teesmouth and Cleveland Coast SPA extend 1km north of the borough boundary. The Durham Coast SSSI extends 800m south into Hartlepool borough and includes the little tern colony.

In carrying out the screening process on the sites in Table 1 it is necessary to assess any potential effects on them in terms of the interest features for which they are designated and the vulnerabilities of those sites. The qualifying interest features and vulnerabilities are given on the Joint Nature Conservation Committee website and listed for the above sites in Table 2 (NB: vulnerabilities are not stated for Ramsar sites but as their qualifying interest features are similar to those of their respective SPAs then these are considered to be the same for the purposes of this assessment.

Consideration of the vulnerabilities of the various internationally designated sites will give an indication of the types of activity that have the potential to have an adverse effect on the integrity of those sites. This can then be related to the types of effects that are anticipated from the Hartlepool Local Plan and from that the likelihood that the Hartlepool Local Plan will have an adverse effect on each of the sites. In making this assessment an important factor to take in to consideration is the distance of the internationally designated site from the source of any potential adverse effects. It has already been stated that policies within a plan could have effects outside of the geographical area to which the plan pertains however, depending on the nature of the effect and the receptor, the potential for an adverse effect is likely to diminish with distance.

Of the European Sites listed in Table 1, only the Teesmouth & Cleveland Coast SPA/ Ramsar is (partially) situated within the borough of Hartlepool.

4.2 Underlying SSSIs and condition status of units

European Sites are underlain by SSSIs and Natural England has split these into management units. The habitat of each unit is described and its condition assessed. The condition status (using different colours) of units is displayed on the Magic mapping tool, see:

<http://magic.defra.gov.uk/MagicMap.aspx> .

Each European Site is underpinned by one or more SSSIs. Natural England periodically undertakes an assessment of the condition status of SSSIs. This information is helpful in assessing the vulnerability of the different interest features to likely Local Plan policy outcomes. In most cases the underpinning SSSIs are split into units and each is assessed separately. The condition status SSSI units has been scrutinised for those N2K sites which are most vulnerable to Local Plan policy LSE. Selected data (mainly bird related) is given as Appendix 1. NB: Some European Sites are made up of many SSSIs and not all of these are applicable, eg: some for the North Pennine Moors SPA/ SAC are in Cumbria. HBC has made a decision based on geography, geology, distance and ecosystems, in order to decide which SSSIs it is reasonable to assess. No attempt has been made to assess the condition status of functional European Sites within other EU countries (eg: for migratory shorebirds). Details of those that have been considered are included in Appendix 1. Some of the reports are long. All can be viewed via the Natural England website by searching for a named SSSI and then following the condition status link.

It would be logical to say that if all SSSIs underpinning a European Site are in Favourable and/ or Unfavourable-Recovering condition, that this indicates that there is no current LSE on the European Site. This would apply to Northumbria Coast SPA and Ramsar, Durham Coast SAC, Castle Eden Dene SAC and Thrislington SAC.

4.3 HRA Stage 1 European Sites – interest features, vulnerabilities & potential for adverse effects from Hartlepool Local Plan policies

In order to properly assess the Local Plan, the impact of policies on the ‘interest features’ (habitats and species) of each European Site needs to be analysed. Natural England has provided an account of the vulnerabilities of each European Site to aid this process. Tables 2 to 12 give the interest features and the vulnerabilities of the European Sites covered by this HRA.

The Teesmouth and Cleveland Coast SPA/ Ramsar, Northumbria Coast SPA/ Ramsar, Durham Coast SAC, Castle Eden Dene SAC, Thrislington SAC, North York Moors SPA, North York Moors SAC, North Pennine Moors SPA and North Pennine Moors SAC need to be assessed under this HRA.

The section in each table that covers ‘Hartlepool’s relationship to the European Site’ flags up some of the issues which are considered late in the process.

Tables 2 to 12. Interest features, vulnerabilities and potential for adverse effects from Local Plan policies of each European Site covered by this HRA.

Table 2. Teesmouth and Cleveland Coast SPA

Site Name	Teesmouth and Cleveland Coast SPA
List of interest features	<p>ARTICLE 4.1 QUALIFICATION (79/409/EEC)</p> <p>During the breeding season the area regularly supports:</p> <p>Little tern <i>Sternula albifrons</i> (Eastern Atlantic - breeding), 1.7% of the population in Great Britain, four year mean for 1995 to 1998.</p> <p>On passage the area regularly supports:</p> <p>Sandwich tern <i>Sterna sandvicensis</i> (Western Europe/Western Africa), 6.8% of the population in Great Britain. Five year mean for 1988 to 1992.</p> <p>NB: The 2001 SPA review identified an internationally important passage of Ringed plover <i>Charadrius hiaticula</i>.</p> <p>ARTICLE 4.2 QUALIFICATION (79/409/EEC)</p> <p>Over winter the area regularly supports:</p> <p>Knot <i>Calidris canutus</i> (North-eastern Canada/Greenland/Iceland/Northwestern Europe), 1.6% of the population, Five year peak mean for 1991/92 to 1995/96</p>

	<p>On passage the area regularly supports: Redshank <i>Tringa tetanus</i> (Eastern Atlantic - wintering), 1.1% of the East Atlantic Flyway population, 5 year peak mean, 1987 - 1991 Article 4.2 qualification (79/409/EEC): An internationally important assemblage of birds. Over winter the area regularly supports: 21,312 waterfowl (5 year peak mean 01/03/2000), including: Knot, <i>Calidris canutus</i>.</p>
Vulnerability	<p>The natural incursion of coarse marine sediments into the estuary and the eutrophication of sheltered mudflats leading to the spread of dense Enteromorpha beds may impact on invertebrate density and abundance, and hence on waterfowl numbers. Indications are that the observed sediment changes derive from the reassertion of natural coastal processes within the context of an estuary much modified by human activity. An extensive long-term monitoring programme is investigating the effects of the Tees Barrage, while nutrient enrichment from sewage discharges should be ameliorated by the planned introduction of improved treatment facilities and the Environment Agency's acceptance of Seal Sands as a candidate Sensitive Area to Eutrophication.</p> <p>Aside from the eutrophication issue, water quality has shown considerable and sustained improvement, leading to the re-establishment of migratory fish populations and the growth of cormorant and common seal populations. The future development of port facilities in areas adjacent to the site, and in particular of deep water frontages with associated capital dredging, has the potential to cause adverse effect; these issues will be addressed through the planning system/Habitats Regulations, as will incompatible coastal defence schemes.</p> <p>Other issues on this relatively robust site include scrub encroachment on dunes (addressed by Site Management Statements with owners) and recreational, bait-gathering and other disturbance/damage to habitats/species (addressed by WCA 1981, NNR Byelaws and the Tees Estuary Management Plan).</p>
Potential for adverse effects	<p>Policies must be screened for effects, either directly or indirectly, which would result in an adverse effect via: land take; damage to habitats/species; dredging; disturbance; increased eutrophication. Housing and increased recreational disturbance is a potential issue.</p>
Condition status of underlying SSSIs	<p>Durham Coast SSSI extends into Hartlepool borough – 1 unit which is Unfavourable-Recovering. Tees & Hartlepool Foreshore & Wetlands SSSI has 7 units (3 are in Favourable condition, 3 are Unfavourable-Declining and 1 is Unfavourable-No change). See Appendix 1. Seaton Dunes & Common SSSI has 7 units (3 are Favourable, 3 are Unfavourable-No change and 1 is Unfavourable-Declining). See Appendix 1. Seal Sands SSSI has 5 units (2 are Destroyed, 1 Favourable, 1 Unfavourable-No change and 1 in Unfavourable-Declining condition). See Appendix 1.</p>

Hartlepool's relationship to European Site	Partially lying within the borough of Hartlepool, the Teesmouth and Cleveland Coast SPA needs to be assessed. In terms of human population, the 2011 national census gives the population of Hartlepool as 92,000. Due to the geographical location of the town, the majority of the population lives within 6 km of the coast and there is therefore an existing pattern of usage. HBC has data on the distance that users travel to access the site or on their means of travel – covered below in the AA section.
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Table 3. Teesmouth & Cleveland Coast Ramsar

Site Name	Teesmouth & Cleveland Coast Ramsar
List of interest features	<p>Ramsar criterion 5</p> <p>Assemblages of international importance:</p> <p>Species with peak counts in winter:</p> <p>9528 waterfowl (5 year peak mean 1998/99-2002/2003)</p> <p>Ramsar criterion 6 – species/populations occurring at levels of international importance.</p> <p>Qualifying Species/populations (as identified at designation):</p> <p>Species with peak counts in spring/autumn:</p> <p>Redshank , <i>Tringa totanus totanus</i>, 883 individuals, representing an average of 0.7% of the GB population (5 year peak mean 1998/9- 2002/3)</p> <p>Species with peak counts in winter:</p> <p>Knot, <i>Calidris canutus islandica</i>, W & Southern Africa (wintering), 2,579 individuals, representing an average of 0.9% of the GB population (5 year peak mean 1998/9-2002/3)</p>
Potential for adverse effects	Policies must be screened for effects, either directly or indirectly, which would result in an adverse effect via: land take; damage to habitats/species; dredging; disturbance; increased eutrophication. Housing and increased recreational disturbance is a potential issue.
Condition status of underlying SSSIs	<p>Durham Coast SSSI extends into Hartlepool borough – 1 unit which is Unfavourable-Recovering.</p> <p>Tees & Hartlepool Foreshore & Wetlands SSSI has 7 units (3 are in Favourable condition, 3 are Unfavourable-Declining and 1 is Unfavourable-No change - see Appendix 1).</p> <p>Seaton Dunes & Common SSSI has 7 units (3 are Favourable, 3 are Unfavourable-No change and 1 is Unfavourable-Declining. See Appendix 1).</p> <p>Seal Sands SSSI has 5 units (2 are Destroyed, 1 Favourable, 1 Unfavourable-No change and 1 in Unfavourable-Declining condition) – see Appendix 1.</p>
Hartlepool's relationship to	Partially lying within the borough of Hartlepool, the Teesmouth and Cleveland Coast SPA needs to be assessed. In terms of human population, the 2011 national census gives the population of Hartlepool as 92,000. Due to the geographical

European Site	location of the town, the majority of the population lives within 6 km of the coast and there is therefore an existing pattern of usage. HBC has data on the distance that users travel to access the site or on their means of travel – covered below in the AA section.
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Table 3a. Further detail of the Teesmouth and Cleveland Coast SPA and Ramsar, SSSI units.

Underpinning SSSIs	Condition of units includes
Durham Coast	Unfavourable-Recovering.
Tees & Hartlepool Foreshore & Wetlands	Favourable, Unfavourable-No Change, Unfavourable-Declining, Destroyed.
Seaton Dunes & Common	Favourable, Unfavourable-Recovering, Unfavourable-No Change.
South Gare & Coatham Sands	Favourable, Unfavourable-Recovering.
Redcar Rocks	Favourable, Unfavourable-Recovering.
Cowpen Marsh	Unfavourable-Recovering.
Seal Sands	Favourable, Unfavourable-No change, Unfavourable-Declining, Destroyed.

Table 4. Durham Coast SAC

Site Name	Durham Coast SAC
List of interest features	<p>Annex I habitats that are a primary reason for selection of this site</p> <p>Vegetated sea cliffs of the Atlantic and Baltic coasts.</p> <p>The Durham Coast is the only example of vegetated sea cliffs on Magnesian limestone exposures in the UK. These cliffs extend along the North Sea coast for over 20 km from South Shields southwards to Blackhall Rocks. Their vegetation is unique in the British Isles and consists of a complex mosaic of paramaritime, mesotrophic and calcicolous grasslands, tall-herb fen, seepage flushes and wind-pruned scrub. Within these habitats rare species of contrasting phytogeographic distributions often grow together forming unusual and species-rich communities of high scientific interest. The communities present on the sea cliffs are largely maintained by natural processes including exposure to sea spray, erosion and slippage of the soft Magnesian limestone bedrock and overlying glacial drifts, as well as localised flushing by calcareous water.</p>
Vulnerability	Vegetated sea cliffs range from vertical cliffs in the north with scattered vegetated ledges, to the Magnesian limestone grassland slopes of the south. Parts of the site are managed as National Nature Reserve, and plans provide for the non-interventionist management of the vegetated cliffs. The majority of the site is in public ownership and an agreed management plan is being developed to protect nature conservation interests.

Potential for adverse effects	Part of the Durham Coast SAC is situated as close as 1km from Hartlepool borough's northern boundary. Major housing development on or near the northern boundary could potentially have an adverse effect on site integrity through increased dog fouling contamination and vegetation trampling.
Condition status of underlying SSSIs	It is underlain by one SSSI – Durham Coast, comprising of 37 units. 23 are in Favourable condition and 14 are in Unfavourable-Recovering condition. Internet link given in Appendix 1. The units are littoral sediment, littoral rock and calcareous grassland.
Hartlepool's relationship to European Site	The site is 1km away from Hartlepool boundary. The Durham Coast SAC covers the vegetated sea cliffs and an area of shore that extends beyond the Mean High Water mark. A public footpath runs along the top of the cliffs but outside the SAC boundary and due to this site management trampling of sensitive cliff vegetation is minimised. Trampling impacts on intertidal areas are unlikely to be significant given the dynamic nature of this environment. The area is already well used by dog walkers and the potential adverse biological effects of dog faeces are managed by a series of Council run dog waste bins. There are a number of regularly emptied dog waste bins at the Crimdon Dene car parking area (managed by Durham CC). This issue is covered in more detail in the AA below. No studies have been done to assess overall use by dog walkers or the split between on and off lead and on and off path.

Table 5. Northumbria Coast SPA

Site Name	Northumbria Coast SPA
List of interest features	<p>ARTICLE 4.1 QUALIFICATION (79/409/EEC) During the breeding season the area regularly supports: <i>Little tern Sterna albifrons</i> (Eastern Atlantic - breeding) 1.7% of the GB breeding population 5 year peak means 1992/3-1996/7</p> <p>ARTICLE 4.2 QUALIFICATION (79/409/EEC) Over winter the area regularly supports:+ Turnstone <i>Arenaria interpres</i> (Western Palearctic - wintering) 2.6% of the East Atlantic Flyway population 5 year peak means 1992/3-1996/7 Purple sandpiper <i>Calidris maritime</i> (Eastern Atlantic - wintering) 1.6% of the East Atlantic Flyway population 5 year peak means 1992/3-1996/7</p>
Vulnerability	Little terns are vulnerable to disturbance by tourists in the summer causing reduced breeding success. The National Trust employs wardens each summer to protect the little tern colony at Beadnell Bay.
Potential for adverse effects	Part of Northumbria Coast SPA lies within 1km from Hartlepool's northern boundary though the breeding little tern colony is situated over 50miles to the north. Major housing and recreational developments on or near the northern boundary

	could have an adverse effect on site integrity via recreational disturbance.
Condition status of underlying SSSIs	Part of site is adjacent to Hartlepool district. The Northumberland Shore SSSI has 21 units, all littoral sediment or littoral rock. All 21 are in Favourable condition. Not in Appendix 1.
Hartlepool's relationship to European Site	<p>The site is 1km away from Hartlepool boundary. The Northumbria Coast SPA / Ramsar sites have been classified because of the populations of wintering purple sandpiper and turnstone and breeding little tern that they support. The nearest breeding little tern colony within the SPA / Ramsar is in Northumberland and is sufficiently distant that impacts are not likely to arise from any policy-led development. Surveys also indicate that the Durham Coast is poor for purple sandpiper, with no birds recorded in the nearest sections of the Northumbria Coast SPA / Ramsar (Cadwallender & Cadwallender, 2012 & 2013). The same surveys also indicated that the nearest section of the SPA / Ramsar utilised by turnstone is Blackhall Rocks, which is not as easily accessible to people as the section of beach at Crimdon Dene. Crimdon is the closest section of beach, there is good parking and there is an extensive section of beach that is readily accessible.</p> <p>The most recent winter bird data is the Wintering bird survey to enable condition assessment of the wintering bird features of Durham Coast SSSI & co-located areas of SPAs: final report 2015-16 (Ecology Consulting 2016). The closest low tide foraging area was at Blackhall Rocks. The report gives Steetley's Beach and Steetley's Pier as important roost sites (the jetty being the southern extent of the survey area and therefore not covering the rocky foreshore of the T&CC SPA). The peak count for Steetley's Beach was 150 oystercatcher and HBC assumes that this is the regularly occurring population also picked up in previous surveys. The report concludes that 'It is clear from this winter's surveys that the southern part of the survey area held lower numbers of most waterbird species (apart from night-roosting gulls). This area of lower bird numbers is also an area of high disturbance, but the northern part of the survey area too is well-used by dog-walkers and people generally using the beaches and other areas of shoreline, so it is difficult to conclude that disturbance alone is causing the low numbers. Rather the comparatively low numbers in the southern part of the survey area may be related primarily to resource availability. Much of the shoreline here is narrow, with few areas of extensive rocky shore'.</p> <p>The various bird disturbance reports all indicate that there is a residual high level of recreational use of the shore and by implication new users following the source to site pathway can only add to, rather than create, issues. It has been suggested that birds may be, to some degree, habituated to some disturbance but nowhere is this quantified or qualified.</p> <p>HBC has data on the distance that users travel to access the site or on their means of travel – covered below in the AA section.</p>

Table 6. Northumbria Coast Ramsar

Site Name	Northumbria Coast Ramsar
List of interest features	<p>Ramsar criterion 6 – species/populations occurring at levels of international importance.</p> <p>Qualifying Species/populations (as identified at designation):</p> <p>Species regularly supported during the breeding season:</p> <p>Little tern, <i>Sterna albifrons albifrons</i>, W Europe, 43 apparently occupied nests, representing an average of 2.2% of the GB population (Seabird 2000 Census)</p> <p>Species with peak counts in winter:</p> <p>Purple sandpiper, <i>Calidris maritima maritima</i>, E Atlantic –wintering, 291 individuals, representing an average of 1.6% of the GB population (5 year peak mean 1998/9- 2002/3)</p> <p>Turnstone, <i>Arenaria interpres interpres</i>, NE Canada, Greenland/W Europe & NW Africa, 978 individuals, representing an average of 1% of the population (5 year peak mean 1998/9- 2002/3)</p>
Potential for adverse effects	Part of Northumbria Coast Ramsar lies within 1km from Hartlepool's northern boundary though the breeding little tern colony is situated over 50miles to the north. Major recreational developments on or near the northern boundary could have an adverse effect on site integrity. This includes housing with its associated increase in recreational use of the coast.
Condition status of underlying SSSIs	Part of site is adjacent to Hartlepool district. The Northumberland Shore SSSI has 21 units, all littoral sediment or littoral rock. All 21 are in Favourable condition. Not in Appendix 1.
Hartlepool's relationship to European Site	<p>The site is 1km away from Hartlepool boundary. The Northumbria Coast SPA/ Ramsar sites have been classified because of the populations of wintering purple sandpiper and turnstone and breeding little tern that they support. The nearest breeding little tern colony within the SPA/ Ramsar is in Northumberland and is sufficiently distant that impacts are not likely to arise from the proposed development. Surveys also indicate that the Durham Coast is poor for purple sandpiper, with no birds recorded in the nearest sections of the Northumbria Coast SPA/ Ramsar (Cadwallender & Cadwallender, 2012 & 2013). The same surveys also indicated that the nearest section of the SPA/ Ramsar utilised by turnstone is Blackhall Rocks, which is not as easily accessible to people as the section of beach at Crimdon Dene. Crimdon is the closest section of beach, there is good parking and there is an extensive section of beach that is readily accessible. It is therefore concluded that residents coming from new housing sites are unlikely to have a significant effect on populations of purple sandpiper, turnstone and little tern within the Northumbria Coast SPA/ Ramsar.</p> <p>The most recent winter bird data is the 'Wintering bird survey to enable condition assessment of the wintering bird features of Durham Coast SSSI & co-located areas of SPAs: final report 2015-16' (Ecology Consulting 2016). The closest low tide foraging area was at Blackhall Rocks. The report gives Steetley's Beach and Steetley's Pier as important roost</p>

	<p>sites (the jetty being the southern extent of the survey area and therefore not covering the rocky foreshore of the T&CC SPA). The peak count for Steetley's Beach was 150 oystercatcher and HBC assumes that this is the regularly occurring population also picked up in previous surveys. The report concludes that 'It is clear from this winter's surveys that the southern part of the survey area held lower numbers of most waterbird species (apart from night-roosting gulls). This area of lower bird numbers is also an area of high disturbance, but the northern part of the survey area too is well-used by dog-walkers and people generally using the beaches and other areas of shoreline, so it is difficult to conclude that disturbance alone is causing the low numbers. Rather the comparatively low numbers in the southern part of the survey area may be related primarily to resource availability. Much of the shoreline here is narrow, with few areas of extensive rocky shore'.</p> <p>The various bird disturbance reports all indicate that there is a residual high level of recreational use of the shore and by implication, new users following the source to site pathway can only add to, rather than create, issues. It has been suggested that birds may be, to some degree, habituated to some disturbance but nowhere is this quantified or qualified.</p> <p>HBC has data on the distance that users travel to access the site or on their means of travel – covered below in the AA section.</p>
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Table 7. Castle Eden Dene SAC

Site Name	Castle Eden Dene SAC
List of interest features	<p>Annex I habitats that are a primary reason for selection of this site</p> <p>Yew <i>Taxus baccata</i> woods of the British Isles</p> <p>Castle Eden Dene in north-east England represents the most extensive northerly native occurrence of yew <i>Taxus baccata</i> woods in the UK. Extensive yew groves are found in association with ash-elm <i>Fraxinus-Ulmus</i> woodland and it is the only site selected for yew woodland on Magnesian limestone in north-east England.</p>
Vulnerability	Yew woodlands are distributed throughout the site in a matrix of other woodland types. The site is managed as a National Nature Reserve and the Management Plan provides for regeneration of this special woodland type.
Potential for adverse effects	Castle Eden Dene SAC is situated some 4km from Hartlepool and is not directly connected to it via transport or other links. However part of the SAC is located some 200m from the A19 and an increase in road traffic and associated pollution might potentially have an adverse effect on site integrity if it were of sufficient magnitude to affect the yew woodlands. Housing and increased recreational disturbance is a potential issue, although site visitors are encouraged and managed on site.
Condition status	There are 18 SSSI units - 15 woodland ones are Unfavourable-Recovering and 3 grassland ones are Favourable

of underlying SSSIs	condition. Not in Appendix 1.
Hartlepool's relationship to European Site	The site is within 4km of Hartlepool district. Castle Eden Dene SAC is 5.2 km away from the nearest of the housing applications. This site is within the town of Peterlee and therefore has a high potential for local recreational visits and indeed is promoted as a site which the public can visit and enjoy. It has clear signposting, site interpretation panels and a good network of well-maintained paths.

Table 8. Thrislington SAC

Site Name	Thrislington SAC
List of interest features	Annex I habitats that are a primary reason for selection of this site Semi-natural dry grasslands and scrubland: on calcareous substrates (<i>Festuco-Brometalia</i>) Thrislington is a small site but nonetheless contains the largest of the few surviving stands of CG8 <i>Sesleria albicans</i> – <i>Scabiosa columbaria</i> grassland. This form of calcareous grassland is confined to the Magnesian Limestone of County Durham and Tyne and Wear, north-east England. It now covers less than 200 ha and is found mainly as small scattered stands.
Vulnerability	These grasslands are dependent upon continuous management by seasonally-adjusted grazing and no fertilizer input. The site is now a National Nature Reserve and management on these traditional lines has been reintroduced.
Potential for adverse effects	Thrislington SAC is situated 10km away from Hartlepool and is not particularly well connected with transport links. Any adverse effect on site integrity from the Hartlepool Local Plan could only potentially arise through a major increase in air pollution, of such magnitude that it would increase the fertility of the soils. However, given the distances involved and the prevailing winds, any such pollution would likely be of such magnitude that it also had a severe adverse effect on human health and such increases in pollution would not be permitted under other legislation.
Condition status of underlying SSSIs	Thrislington Plantation SSSI has two units, both in Favourable condition in 2013. Not in Appx 1.
Hartlepool's relationship to European Site	Thrislington SAC is 16.4 km away from the nearest of the housing applications. This SAC is small and has public access via a car park and internal footpaths. There are numerous closer areas of publically accessible greenspace for new residents in Hartlepool to access.

Table 9. North York Moors SPA

Site Name	North York Moors SPA
List of interest features	ARTICLE 4.1 QUALIFICATION (79/409/EEC) During the breeding season the area regularly supports: Merlin, <i>Falco columbarius</i> at least 2.7% of the GB breeding population 1996 Golden plover <i>Pluvialis apricaria</i> (North-western Europe - breeding) at least 2.3% of the GB breeding population 1996
Vulnerability	The value of the North York Moors in providing suitable habitat for breeding merlin and golden plover is dependent on the moorland management that is carried out by farmers and gamekeepers to maintain the moorland plant communities and grouse populations. The most vulnerable plant communities are the heaths and mires which are susceptible to overgrazing, gripping and too frequent heather burning leading to species impoverishment and a loss of structural diversity. A lack of keeping and undergrazing on some moors has resulted in large areas of undermanaged old heather lacking structural diversity which reduces the suitability of the habitat for merlin and golden plover. This is being addressed by looking at payments for positive heather management, such as cutting and burning. The majority of the site is being managed in a desirable way with pressures being largely restricted to small areas.
Potential for adverse effects	The North York Moors SPA is situated a minimum of 13km away from Hartlepool and is not particularly well connected with transport links. Any adverse effect on site integrity from the Hartlepool Local Plan could only potentially arise through a major increase in air pollution that was sufficient to affect the habitats that the SPA birds are dependent on. However, given the distances involved and the prevailing winds, any such pollution would likely be of such magnitude that it also had a severe adverse effect on human health and such increases in pollution would not be permitted under other legislation.
Condition status of underlying SSSIs	NYMNPA visitor details at too coarse a scale to identify Hartlepool visitors. Both bird species probably winter/ pass through Hartlepool district. Not in Appendix 1.
Hartlepool's relationship to European Site	The North York Moors SPA is 19.6 km away from the nearest of the Hartlepool housing applications and parts of the unitary council areas of Stockton-on-Tees, Middlesbrough and Redcar and Cleveland lie between. The Local Plan housing policies for those LPAs should have been or will be assessed with regard to the SPA and these should consider the cumulative impact of the Hartlepool Local Plan housing policies. From a Hartlepool Local Plan HRA perspective the distance involved and the fact that there are numerous closer areas of publically accessible greenspace are considered. Neither HBC nor the North York Moors National Park Authority (NYMNPA) has any data on visitor statistics.

Table 10. North Yorks Moors SAC

Site Name	North Yorks Moors SAC
List of interest features	<p>Annex I habitats that are a primary reason for selection of this site</p> <p>Northern Atlantic wet heaths with <i>Erica tetralix</i></p> <p>This site in north-east Yorkshire within the North York Moors National Park contains the largest continuous tract of upland heather moorland in England. M16 <i>Erica tetralix</i> – <i>Sphagnum compactum</i> wet heath is the second most extensive vegetation type on the site and is predominantly found on the eastern and northern moors where the soil is less free-draining. Purple moor-grass <i>Molinia caerulea</i> and heath rush <i>Juncus squarrosus</i> are also common within this community. In the wettest stands bog-mosses, including <i>Sphagnum tenellum</i>, occur, and the nationally scarce creeping forget-me-not <i>Myosotis stolonifera</i> can be found in acid moorland streams and shallow pools.</p> <p>European dry heaths</p> <p>This site in north-east Yorkshire within the North York Moors National Park contains the largest continuous tract of upland heather moorland in England. Dry heath covers over half the site and forms the main vegetation type on the western, southern and central moors where the soil is free-draining and has only a thin peat layer. The principal NVC type present is H9 <i>Calluna vulgaris</i> – <i>Deschampsia flexuosa</i>, with some H10 <i>Calluna vulgaris</i> – <i>Erica cinerea</i> heath on well-drained areas throughout the site, and large areas of H12 <i>Calluna vulgaris</i> – <i>Vaccinium myrtillus</i> heath on steeper slopes. Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site</p> <p>Blanket Bogs</p>
Vulnerability	<p>The North York Moors supports an intimate mosaic of dry and wet heath interspersed in parts with smaller amounts of blanket bog, mainly on the higher plateau, between river valley catchments. The majority of the moorland is managed for both sheep farming (by farmers) and for the sporting shooting of grouse (by estates and their gamekeepers). Most of the moors are grazed, as well as burnt (on a rotational basis), and this provides a diversity of heather which favours high numbers of grouse, moorland waders and merlin.</p> <p>Overgrazing is generally not a problem although localised winter-feeding and lack of traditional shepherding has led to some small losses of heather. The wetter communities, particularly blanket bog, are vulnerable to drainage and over burning, leading to the loss of structural diversity as well as the loss of mosses and lichens.</p> <p>The current poor economic return from sheep management is leading to a loss of sheep flocks from the moors, which is of concern. Various ongoing schemes are/have been in place to help support continued moorland management.</p>
Potential for adverse effects	<p>The North York Moors SAC is situated a minimum of 13km away from Hartlepool and is not particularly well connected with transport links. Any adverse effect on site integrity from the Hartlepool Local Plan could only potentially arise through a major increase in air pollution that was of sufficient scale to alter the plant communities. However, given the distances involved and the prevailing winds, any such pollution would likely be of such magnitude that it also had a severe adverse</p>

	effect on human health and such increases in pollution would not be permitted under other legislation.
Condition status of underlying SSSIs	No connection between ecosystems and Hartlepool district. NYMNPA visitor details at too coarse a scale to identify Hartlepool visitors. Not in Appendix 1.
Hartlepool's relationship to European Site	The North York Moors SPA is 19.6 km away from the nearest of the housing applications and parts of the unitary council areas of Stockton-on-Tees, Middlesbrough and Redcar and Cleveland lie between. The Local Plan housing policies for those LPAs should have been or will be assessed with regard to the SPA and these should consider the cumulative impact of the Hartlepool Local Plan housing policies. From a Hartlepool Local Plan HRA perspective the distance involved and the fact that there are numerous closer areas of publically accessible greenspace needs to be considered. Neither HBC nor the North York Moors National Park Authority (NYMNPA) has any data on visitor statistics.

Table 11. North Pennine Moors SPA

Site name	North Pennine Moors SPA
	This site is 32 km to the west of Hartlepool boundary.
List of interest features	Qualifying species: The site qualifies under article 4.1 of the Directive (79/409/EEC) as it is used regularly by 1% or more of the Great Britain populations of the following species listed in Annex I, in any season: Hen Harrier <i>Circus cyaneus</i> , 11 pairs - breeding season, count as at 1993 and 1994, 2.3% of GB pop. Merlin <i>Falco columbarius</i> , 136 pairs - breeding season, estimated population during 1993 and 1994, 10.5% of GB pop. Peregrine <i>Falco peregrinus</i> , 15 pairs - breeding season, count as at 1991, 1.3% of GB pop. Golden Plover <i>Pluvialis apricaria</i> , 1,400 pairs – breeding season, minimum based on densities recorded 1960 – 1993, 6.2% GB pop.
Vulnerability	Persecution of raptors, especially of Hen Harrier and especially on driven grouse moor estates. Wild fire. Climate change (especially temperature and precipitation levels).
Potential for adverse effects	None or <i>de minimus</i> at most. Small possibility that increased recreational could cause disturbance to breeding birds of wildfire.
Condition status of underlying SSSIs	All four bird species probably winter/ pass through Hartlepool district. Not in Appendix 1.
Hartlepool's relationship to European Sites	The site is 32km away. The likely number of additional visits (leading to increased risk) is low given the distance and the proximity of alternative recreational destinations.

Table 12. North Pennine Moors SAC

Site name	North Pennine Moors SAC
	This site is 32 km to the west of Hartlepool boundary.
List of interest features	<p>Qualifying Features:</p> <p>H4010. Northern Atlantic wet heaths with <i>Erica tetralix</i>; Wet heathland with cross-leaved heath H4030. European dry heaths.</p> <p>H5130. <i>Juniperus communis</i> formations on heaths or calcareous grasslands; Juniper on heaths or calcareous grasslands</p> <p>H6130. Calaminarian grasslands of the <i>Violetalia calaminariae</i>; Grasslands on soils rich in heavy metals.</p> <p>H6150. Siliceous alpine and boreal grasslands; Montane acid grasslands.</p> <p>H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>FestucoBrometalia</i>); Dry grasslands and scrublands on chalk or limestone.</p> <p>H7130. Blanket bogs.</p> <p>H7220. Petrifying springs with tufa formation (<i>Cratoneurion</i>); Hard-water springs depositing lime.</p> <p>H7230. Alkaline fens; Calcium-rich springwater-fed fens.</p> <p>H8110. Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>); Acidic scree</p> <p>H8210. Calcareous rocky slopes with chasmophytic vegetation; Plants in crevices in base-rich rocks.</p> <p>H8220. Siliceous rocky slopes with chasmophytic vegetation; Plants in crevices on acid rocks.</p> <p>H91A0. Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles; Western acidic oak woodland.</p> <p>S1528. <i>Saxifraga hirculus</i>; Marsh saxifrage.</p>
Vulnerability	Wild fire. Climate change (especially temperature and precipitation levels). Atmospheric pollution.
Potential for adverse effects	None or <i>de minimus</i> at most. NB: prevailing wind is SW meaning the likelihood of increased atmospheric pollution generated in Hartlepool is insignificant.
Condition status of underlying SSSIs	Site is 32km away. No connection between ecosystems and Hartlepool district. NPA visitor details at too coarse a scale to identify Hartlepool visitors. Not in Appendix 1.
Hartlepool's relationship to European Site	Any development taking place will be downwind of prevailing wind direction (and downstream) so there will be little or no direct atmospheric or watercourse pollution. Any industrial development proposing atmospheric discharges will need permissions via existing consenting regimes and robust safeguarding rules. The chemical impacts caused by increased traffic from increased road use will be minimal given the distance and the proximity of alternative recreational destinations.

5. The Hartlepool Local Plan, HRA Stage 1 screening

5.1 Part A: Initial analysis of the Hartlepool Local Plan policies for Likely Significant Effects on European Sites.

Each of the policies in the Hartlepool Local Plan has been screened as to its potential to have a significant effect on each of the internationally designated sites listed in Table 1.

Hartlepool BC has followed Natural England scoring guidance in undertaking the initial screening, based on advice given in the Habitats Regulations Assessment of Local Development Documents (2009) document. Any policies not screened out in Part A are further assessed in part B (See 5.2).

In carrying out this initial screening the precautionary principle has been followed such that policies are taken forward for further assessment if there is any likelihood of any aspect of the policy having a direct or indirect effect on internationally designated sites, even if it was considered that the likelihood of the effect or the magnitude of its impact was low. A development controlled by a policy may have an adverse consequence on one or more European Sites.

This section was updated in Nov 2016 following post-consultation revisions to policies and policy wording. Greater consideration has been given to the spatial impacts of each policy and also in-combination effects.

Analysis of the potential impacts of the Hartlepool Local Plan on internationally designated sites is presented in Table 13. This table has been updated to take account of some policy re-numbering, the addition of two new policies and some policy re-wording.

Key:

A=No negative effect

B=No significant effect

C=Likely Significant Effect alone

D=Likely Significant Effect in-combination

NB: In some cases where no LSE is stated, this is based on a judgement that further research would not be proportionate to the geographical scope of the option and the nature and extent of any effects identified.

Table 13. Screening analysis of Hartlepool Local Plan policies for potential adverse effects on the integrity of European Sites. See also Appendix 2.

Policy (86 policies in total)	Purpose of the Policy	Initial screening – does the policy prevent the development from causing LSE or is further assessment required?	Assessment category (see notes from NE Appx 1)	Any in-combination LSE triggered for this Plan (applies for A & B)?	Is Appropriate Assessment Required?
SUS1 The Presumption In Favour of Sustainable Development	To ensure that a positive approach is taken towards development proposals that reflect the presumption in favour of sustainable development contained in the National Planning Policy Framework.	Sustainable development by definition cannot have an adverse effect on site integrity.	A	No	No
LS1 Locational Strategy	To determine the location of development in the borough in relation to a series of material considerations.	The location of development could have an adverse on site integrity.	C	-	Yes
CC1 Minimising and Adapting to Climate Change	To outline ways in which the Council will work with partner organisations to help minimise and adapt to climate change.	Encouraging adaptation to climate change could have a positive effect on site integrity. Conversely, inappropriately located renewable energy generation developments could have an adverse effect on site integrity.	C	-	Yes
CC2 Reducing and Mitigating Flood Risk	To focus new development in areas of lower flood risk.	The location of new development could have an adverse effect on site integrity.	A	-	Yes
CC3 Renewable	To encourage new renewable energy	Inappropriately located renewable	C	-	Yes

and Low Carbon Energy Generation Previously INF6	developments.	energy generation developments could impact on site integrity.			
CC4 Strategic Wind Turbine Developments Previously INF7	To identify areas suitable for wind turbine developments and set out the criteria for considering planning applications.	Wind turbines could have a direct effect on the bird features of an SPA/ Ramsar by causing bird strike and making functional land un-usable.	C	-	Yes
CC5 Large Scale Solar Photovoltaic Developments Previously INF8	To provide criteria for considering planning applications for large scale solar photovoltaic developments.	Glare from panels could impact upon birds, especially if within the T&CC SPA/ Ramsar or on a flight path	C	-	Yes
INF1 Sustainable Transport Network	To work with partners to deliver an effective, efficient and sustainable transport system which improves connectivity within and beyond Hartlepool and improves accessibility for all.	The policy focuses on strategic aims rather than specific objectives or projects. More specific guidance on how this policy's aims will be achieved is given in Policy INF2.	B	No	No
INF2 Improving Connectivity in Hartlepool	To improve access via a sustainable transport network.	The location and operation of transport links could impact on site integrity.	C	-	Yes
INF3 University Hospital of Hartlepool	To retain the existing hospital site for health services and provision.	No LSE. The site is some distance from all European Sites.	B	No	No
INF4 Community facilities	To ensure access to a community services by improving existing facilities and providing new facilities as part of new developments.	Community facilities (education, leisure, health) are unlikely to have an adverse effect on site integrity, either directly or indirectly.	B	No	No
INF5 Telecommunications	To list criteria which proposals for telecommunications criteria should meet.	Works to upgrade infrastructure or introduce new infrastructure could impact on site integrity.	C	-	Yes

INF6 Renewable and Low Carbon Energy Generation Now CC3	To encourage new renewable energy developments.	Inappropriately located renewable energy generation developments could impact on site integrity.	G	-	Yes
INF7 Strategic Wind Turbine Developments Now CC4	To identify areas suitable for wind turbine developments and set out the criteria for considering planning applications.	Wind turbines could have a direct effect on the bird features of an SPA/ Ramsar by causing bird strike and making functional land un-usable.	G	-	Yes
INF8 Large Scale Solar Photovoltaic Developments Now CC5	To provide criteria for considering planning applications for large scale solar photovoltaic developments.	Glare from panels could impact upon birds, especially if within the T&CC SPA/ Ramsar or on a flight path	G	-	Yes
QP1 Planning obligations	To identify the planning obligations that may be required from developers to ensure that a development can be made acceptable and mitigates or compensated for any impacts.	No LSE. This policy relates to design or other qualitative criteria.	A	No	No
QP2 Compulsory Purchase Orders	To use compulsory purchase powers if necessary to facilitate proper planning and address amenity issues arising from vacant and derelict land and buildings.	No development could occur through this policy itself. This policy would lead to development that would be covered by other policies, such as EMP, RC or LT policies.	D	Yes. In-combination with RC & LT policies.	Yes
QP3 Location, Accessibility, Highway Safety and Parking	To ensure that new development reflects sustainable design principles and is in a sustainable location	No LSE. This policy relates to design or other qualitative criteria.	A	No	No
QP4 Layout and Design of New Development	To ensure that all developments are designed to high quality and enhance location and setting.	No LSE. This policy relates to design or other qualitative criteria.	A	No	No

QP5 Safety and Security	To ensure that all developments adhere to national security standards, incorporate Secured by Design principles, and protect users from climatic effects.	No LSE. This policy relates to design or other qualitative criteria.	B	No	No
QP6 Technical Matters	To ensure that new development satisfactorily addresses external influences and the presence of features and services on site.	No LSE. This policy relates to design or other qualitative criteria.	A	No	No
QP7 Energy Efficiency	To ensure high levels of energy efficiency in all development, including minimising energy consumption through layout, orientation etc., optimising green infrastructure, and sustainable construction.	No LSE. This policy relates to design or other qualitative criteria.	A	No	No
QP8 Advertisements	To ensure that advertisements are appropriate taking in to consideration size, location and potential for impact on public safety.	No LSE. The policy relates to the nature of advertisements and does not allocate locations for them.	A	No	No
HSG1 New Housing Provision	To identify locations for new housing provision	The location of new housing could have an adverse effect on site integrity.	D	-	Yes
HSG2 Overall Housing Mix	To ensure that the range of new housing stock meets local needs.	No LSE. The policy confines itself to the broad types of housing to be provided and does not include factors that could potentially affect site integrity such as locations or access.	A	No	No
HSG3 Urban Local Plan Sites	To covers housing opportunities in locations within the existing urban area.	This includes one greenfield location, which is within 1km of the SPA and could hold birds which are features of the SPA and Ramsar.	C	-	Yes

HSG4 The South West Extension Strategic Housing Site	To identify criteria which development on the South West housing site must meet.	Development could have an indirect adverse effect on site integrity alone or in-combination with other housing developments.	C,D	-	Yes
HSG5 High Tunstall Strategic Housing Site	To allocate High Tunstall for housing development and identify the key features of the development to be taken into account in determining the planning application.	Development could have an indirect adverse effect on site integrity alone or in-combination with other housing developments.	C,D	-	Yes
HSG6 Wynyard Housing Developments	To identify land for further housing development at Wynyard and identify the key features of the development to be taken into account in determining planning applications.	Development could have an indirect adverse effect on site integrity alone or in-combination with other housing developments (including within Stockton-on-Tees BC).	C,D	-	Yes
HSG7 Elwick Village Housing Development	To identify land for housing development at Elwick village and identify the key features of the development to be taken into account in determining planning applications.	Development could have an indirect adverse effect on site integrity alone or in-combination with other housing developments.	C,D	-	Yes
HSG8 Hart Village Housing Developments	To identify land for housing development at Hart village and identify the key features of the development to be taken into account in determining planning applications.	Development could have an indirect adverse effect on site integrity in-combination with other housing developments.	C,D	-	Yes
HSG9 Affordable Housing	To set a figure for affordable housing provision.	No LSE. The policy confines itself to housing types and does not include factors that could potentially affect site integrity such as locations or access.	A	No	No
HSG10 Housing Market Renewal	To tackle the imbalance of supply and demand in the existing housing	No LSE. The policy prioritises development in existing housing	A	No	No

	stock.	regeneration areas in central Hartlepool. This would locate the housing renewal away from European Sites and with no significant linkages to them.			
HSG11 Extensions to Existing Dwellings	To set conditions which extensions to existing dwellings must meet.	No LSE. The policy is limited to existing dwellings and there are no existing dwellings on or immediately adjacent to European Sites, such that an extension might affect site integrity	A	No	No
HSG12 Residential Annexes	To set conditions which residential annexes to existing dwellings must meet.	No LSE. The policy is limited to existing dwellings and there are no existing dwellings on or immediately adjacent to European Sites, such that a residential annexe might affect site integrity.	A	No	No
HSG13 Gypsy and Traveller Provision	To set criteria which proposals for gypsy and traveller sites must meet.	The location of gypsy and traveller sites could have an adverse effect on site integrity.	C	-	Yes
EMP1 Prestige employment Site Wynyard Business Park	To safeguard land at Wynyard for development as a prestige business park.	No LSE. There is no bird data which suggests there may be birds functionally linking this site to European Sites.	B	No	No
EMP2 Queen's Meadow Business Park	To reserve Queens Meadow as higher quality employment sites.	The potential for Queen's Meadow to have a functional role for SPA birds outside of the SPA needs to be assessed.	C	-	Yes
EMP3 General Employment Land	To identify sites for business use and warehousing.	All of these sites are currently being operated for such uses although there are some vacant lots within some of the sites.	D	-	No

EMP4 Specialist Industries	To accommodate various specialist industries.	The location and operation of the specialist industries could have an adverse effect on site integrity.	C	-	Yes
EMP5 Safeguarded Land for new Nuclear Power Station	To safeguard land in SE Hartlepool for the potential construction of a new nuclear power station, including consideration of impact on the SPA/Ramsar site. The site is identified in the National Policy Statement for Nuclear Power Generation. NB: EDF has said that the expected decommissioning date of 2024 is <u>not</u> linked to the need for a replacement power station on the site.	The location of a new nuclear power station would directly damage a European site. However, the policy is only to safeguard the land.	C	-	No
EMP6 Underground Storage	To set out criteria to protect amenity and safety when considering proposals for the use of the former brine cavities for underground storage.	Underground brine cavities have the potential to be used for storage (non-toxic substances) without the need for large above ground structures on the 'Brinefields' (Greenabella Marsh), which are within the SPA and Ramsar. However, there could be above ground structures which while 'minimal in scale' would destroy SPA habitat. The same applies in Stockton borough.	B	Yes, alone & with SBC Local Plan policy	Yes
RUR1 Development in the Rural Area	To protect the open countryside from unnecessary development and to provide criteria for assessing development proposals in the rural area.	No LSE. This is a policy which seeks to protect the natural environment.	A	No	No
RUR2 New	To restrict the construction of new	No LSE. The policy concentrates new	A	No	No

Dwellings Outside of Development Limits	dwellings outside of development limits.	dwellings within development limits defined by other policies, therefore it will not of itself have an adverse effect on site integrity. The policies dealing with development limits will be assessed on their own merits.			
RUR3 Farm Diversification	To support the rural economy and identify criteria for the consideration of farm diversification proposals.	Farm diversification may have an adverse effect on site integrity, eg: through recreation.	C	-	Yes
RUR4 Equestrian Development	To support the rural economy through equestrian schemes and set out the criteria for consideration of proposals.	Equestrian development along the coast may have an adverse effect on site integrity.	C	-	Yes
RUR5 Sustainable Rural Tourism	To support proposals for rural tourist and leisure attractions and identify criteria for the consideration of such proposals.	As the coast is predominantly a European Site, and tourist and leisure developments are attracted to the coast, there is the likelihood of a direct negative impact.	C	-	Yes
RUR6 Rural Services	New policy at version 2. This policy restricts Change of Use of facilities in villages, such as pubs & shops, in order to protect local services.	No LSE. The policy controls Change of Use of existing buildings in villages.	A	No	No
RC1 Retail and Commercial Centre Hierarchy	To define the hierarchy of existing retail and commercial centres.	No LSE. The policy is concerned with establishing the hierarchy of existing centres rather than establishing new centres therefore it would not produce adverse effects on site integrity.	A	No	No
RC2 The Town Centre	To identify the town centre as the primary commercial centre in the Borough.	No LSE. The policy encourages commercial development in the existing town centre therefore no adverse effect on the integrity of	B	No	No

		European Sites is anticipated.			
RC3 Innovations and Skills Quarter	To promote the development of an Innovation and Skills Quarter.	No LSE. The policy is only concerned with promoting development of an area already identified as an innovation and skills quarter, which is located away from European sites and with no linkages to them.	B	No	No
RC4 Avenue Road / Raby Road Edge of Town Centre Area	To support and protect appropriate retail, business and other uses at the edge of the town centre.	No LSE. The policy encourages commercial development in the existing town centre therefore no adverse effect on the integrity of European Sites is anticipated.	B	No	No
RC5 The Brewery and Stranton Edge of Town Centre Area	To support and protect appropriate retail, business and other uses at the edge of the town centre.	No LSE. The policy encourages commercial development in the existing town centre therefore no adverse effect on the integrity of European Sites is anticipated.	B	No	No
RC6 East of Stranton Edge of Town Centre Area	To support and protect appropriate retail, business and other uses at the edge of the town centre.	No LSE. The policy encourages commercial development in the existing town centre therefore no adverse effect on the integrity of European Sites is anticipated.	B	No	No
RC7 Lynn Street Edge of Town Centre Area	To support and protect appropriate retail, business and other uses at the edge of the town centre.	No LSE. The policy encourages commercial development in the existing town centre therefore no adverse effect on the integrity of European Sites is anticipated.	B	No	No
RC8 Mill House Edge of Town Centre Area	To support and protect appropriate retail, business and other uses at the edge of the town centre.	No LSE. The policy encourages commercial development in the existing town centre therefore no adverse effect on the integrity of European Sites is anticipated.	B	No	No

RC9 Park Road West Edge of Town Centre Area	To support and protect appropriate retail, business and other uses at the edge of the town centre.	No LSE. The policy encourages commercial development in the existing town centre therefore no adverse effect on the integrity of European Sites is anticipated.	B	No	No
RC10 West Victoria Road Edge of Town Centre Area	To support and protect appropriate retail, business and other uses at the edge of the town centre.	No LSE. The policy encourages commercial development in the existing town centre therefore no adverse effect on the integrity of European Sites is anticipated.	B	No	No
RC11 York Road South Edge of Town Centre Area	To support and protect appropriate retail, business and other uses at the edge of the town centre.	No LSE. The policy encourages commercial development in the existing town centre therefore no adverse effect on the integrity of European Sites is anticipated.	B	No	No
RC12 The Marina Retail and Leisure Park	To develop the Marina area as a major tourist and leisure attraction, and encourage tourist related development; also identifies acceptable uses at Jacksons Landing and Trincomalee Wharf.	No LSE. The policy encourages commercial retail development and therefore no adverse effect on the integrity of European Sites is anticipated.	C	-	Yes
RC13 West of Marina Way Retail and Leisure Park	To identify and support suitable retail and leisure uses at Marina Way.	No LSE. The policy encourages commercial retail development and therefore no adverse effect on the integrity of European Sites is anticipated.	B	No	No
RC14 Trincomalee Wharf Retail and Leisure Park	To identify and support suitable retail and leisure uses at Trincomalee's Wharf.	The policy encourages commercial retail and leisure development and therefore an increased number of visitors is likely. This could lead to LSE.	C	-	Yes
RC15 Tees Bay	To identify and support suitable retail	No LSE. The policy encourages	B	No	No

Retail and Leisure Park	and leisure uses at Tees Bay.	commercial retail development and therefore no adverse effect on the integrity of European Sites is anticipated.			
RC16 The Local Centres	To protect, support and diversify local centres in providing a service to local communities.	No LSE. The policy is concerned with regulating the types of activity within the existing Local Centres therefore no adverse effect on the integrity of European Sites is anticipated.	B	No	No
RC17 Late Night Uses Area	To limit night time economy activities to specific locations.	No LSE. The policy confines these activities to existing locations centre therefore no adverse effect on the integrity of European Sites is anticipated.	B	No	No
RC18 Hot Food Takeaway Policy	To promote opportunities for more healthy lifestyles and to protect amenity of residents, by identifying criteria for consideration of proposals for hot food takeaways in all retail and commercial centres.	No likelihood of a significant adverse effect on European Sites.	B	No	No
RC19 Main Town Centre Uses on Employment Land	To protect and enhance the role of the town centre by restricting development of main town centre uses on land identified for industrial uses.	No likelihood of a significant adverse effect on European Sites.	B	No	No
RC20 Business Uses in the Home	To protect amenity of neighbours and neighbouring properties by setting out criteria for consideration of proposals by residents who wish to run businesses from home.	No LSE. No development could occur through this policy itself.	B	No	No
RC21 Commercial	To protect the amenity of residents by specifying when commercial or	No LSE. No development could occur through this policy itself.	B	No	No

Uses in Residential Areas	businesses will be acceptable in residential areas.				
LT1 Leisure and Tourism	To encourage major leisure and tourism developments in the town centre, Marina, Seaton Carew and the Headland, subject to environmental and other amenity considerations.	The Headland is within the SPA and Seaton Carew is within 1 km of the SPA and therefore there is the potential for LSE on the European Site.	C	-	Yes
LT2 Tourism Development in the Marina	To identify the type of tourism and related uses acceptable in the Marina, including Jacksons Landing.	The policy encourages tourism related development at an existing site which could have an adverse effect on the integrity of European Sites.	C	-	Yes
LT3 Development of Seaton Carew	To promote tourism and leisure developments that are in keeping with the character of the area and its role as a seaside resort.	Seaton Carew is within 6 km of the SPA and therefore there is the potential for an indirect effect on the European Site.	C	-	Yes
LT4 Tourism Accommodation	To encourage further tourism accommodation in the key tourist centres – town centre, Marina, Seaton Carew, Headland, and also the rural area.	No likelihood of a significant adverse effect on European Sites.	B	No	No
LT5 Caravan Sites and Touring Caravan Sites	To set out criteria for the consideration of proposals for touring caravan and camping sites.	Coastal sites could have the potential for an indirect effect on the European Site.	C	-	Yes
LT6 Business Tourism, Events and Conferencing	To promote new, and improvements to existing, facilities for conferences and events.	No likelihood of a significant adverse effect on European Sites.	B	No	No
HE1 Heritage Assets	To protect and enhance all heritage assets; provide guidance for the	No LSE. This policy is concerned with conserving or enhancing	A	No	No

	assessment of proposals affecting a heritage asset; protect and enhance archaeological heritage, and provide guidance for proposals likely to affect archaeology or its setting.	archaeological heritage and therefore is not likely to lead to an adverse effect.			
HE2 Archaeology	To protect, enhance and improve archaeological sites, and to seek an assessment when development proposals may affect sites.	No likelihood of a significant adverse effect on European Sites.	B	No	No
HE3 Conservation Areas	To conserve the distinctive character of Conservation Areas through a constructive conservation approach, setting out criteria to achieve this.	No LSE. The policy is concerned with maintaining the character of Conservation Areas rather than encouraging new development therefore no adverse effect on the integrity of European Sites is anticipated.	A	No	No
HE4 Listed Buildings and Structures	To seek to conserve the town's listed buildings by preventing unsympathetic alterations and restoration.	No LSE. There are no existing listed buildings on or immediately adjacent to European Sites	A	No	No
HE5 Locally Listed Buildings and Structures	To provide a level of protection for locally listed buildings.	No LSE. The policy only deals with protection to such buildings rather than encouraging physical works therefore it would produce no adverse effects on site integrity	A	No	No
HE6 Historic Shopping Parades	To support the retention of historic shop fronts at Stranton, Seaton Carew and Church Street.	No LSE. This policy is concerned with conserving or enhancing historic shopping parades including at Seaton Carew. It is not likely to lead to an adverse effect.	B	No	No
HE7 Heritage at Risk	To retain and improve heritage assets identified as 'at risk'.	No LSE. This policy is concerned with conserving or enhancing at risk	A	No	No

		heritage features and therefore is not likely to lead to an adverse effect.			
NE1 Natural Environment	To protect, manage and actively enhance the biodiversity, geodiversity, landscape character and green infrastructure assets of the Borough.	No LSE. The policy is specifically concerned with avoiding or reducing issues that could have an effect on site integrity	A	No	No
NE2 Green Infrastructure	To safeguard green infrastructure from inappropriate development. To address the identified shortfall in the amount or quality of green infrastructure. To improve the quality and quantity of green infrastructure.	No LSE. Green Infrastructure is likely to have a positive effect on site integrity	A	No	No
NE3 Green Wedges	To identify and protect green wedges within existing and new development and ensure that they are retained for open land uses.	No LSE. Green wedges are likely to have a positive effect on site integrity	A	No	No
NE4 Ecological Networks	To develop an ecological network throughout the Borough by enhancing/ creating habitats that connect existing wildlife site allowing species to move and migrate and adapt to changing conditions.	No LSE. Ecological networks are likely to have a positive effect on site integrity	A	No	No
NE5 Playing Pitches	To protect playing conditions and identify conditions where any loss would be acceptable.	No LSE. Some functional usage by SPA birds of playing fields, so this policy will have an indirect benefit to European Site features.	A	No	No
NE6 Protection of Open Amenity Space	To protect amenity open space, identify where any loss might be acceptable and seek compensatory provision if necessary.	No LSE. Some functional usage by SPA birds of amenity open space so this policy will have an indirect benefit to European Site features.	A	No	No

NE7 Landscaping along main transport corridors	New policy at version 2. To ensure a high standard of landscaping along main transport corridors, as these form part of the green infrastructure network and present a good impression to residents & visitors.	No LSE. Ensuring a high standard of design for landscaping around developments on key routes will not impact European Sites.	A	No	No
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5.2 Part B: Further analysis of the Hartlepool Local Plan policies for LSE on European Sites.

Four of the policies - SUS1 the Presumption In Favour of Sustainable Development, CC2 Reducing and Mitigating Flood Risk, RUR1 Development in the Rural Area and NE2 Natural Environment - are assessed as having a positive effect on European Sites.

HRA stage 1 screening, Part A, identified 29 policies that potentially have LSE on one or more European Sites. Part B involves a closer review of each, applying the precautionary principle. This examines policy detail, explores any mitigation that is planned and says whether the policy still has the potential to cause LSE. Changes to policy wording that have been applied since version 1 are detailed as evidence of the HRA process. Policies are looked at alone, but also in-combination where appropriate. Policies are looked at in-combination, to capture if neutral or negative policies become positive, or if neutral or positive ones become negative. For example, all of the Retail & Commercial Development policies and all of the Leisure & Tourism Development policies may have a negative impact through recreational disturbance when implemented together.

Where a LSE cannot be ruled out, the policy moves to a HRA stage 2, Appropriate Assessment.

Policy LS1 Locational Strategy

This policy is principally concerned with outlining the preferred location for various types of development. The policy also supports the protection and enhancement of built and natural heritage assets and the development of renewable energy schemes. No allocations for development are on any area of land designated as an internationally designated site. However the allocations for development or for renewable energy schemes have the potential to have an adverse effect on site integrity of internationally designated sites through direct effects such as disturbance from the proximity of development or through indirect effects such as causing increased visitor disturbance or the use of land that is outside of such sites but which has functional use for the interest features of those sites.

Each of the issues or types of development outlined in LS1 is covered by its own, more detailed, policy within the Local Plan and effects on site integrity are therefore considered for each of those policies where this has been flagged up in the screening exercise. The Locational Strategy itself contains the guiding principle that: 'New development will be located or designed so as not to have either directly or indirectly an adverse impact on the integrity of internationally designated nature conservation sites. The impact of a development must be considered both alone as well as in-combination with other plans and programmes. Where impacts would otherwise have an adverse effect, mitigation measures will be required in advance of the development that meet the Habitats Regulations'. Given the inclusion of the above statement, the policy of itself is assessed as not having an adverse effect on the integrity of any internationally designated sites.

Hartlepool BC has taken advice from the RSPB following consultation on version 1 of this report and has taken the emphasis off of this policy for mitigating LSE and has embedded mitigation within the appropriate policies. In version 1 there was a general presumption that mitigation would be sought via the HRA process at the detailed development control planning application stage. This has been changed.

LS1	Likely Significant Effect.
Locational Strategy	No

Policy CC1 Minimising and adapting to Climate Change

The policy outlines a number of ways in which the Hartlepool BC will work with partner organisations to help minimise and adapt to climate change.

One of the policy's aims is "encouraging environments that are resilient and adaptive to the effects of climate change and protect, promote and enhance biodiversity, including maintaining and enhancing habitat networks and green infrastructure, and managing (changed from 'preventing') coastal squeeze." This aspect of the policy will have a positive effect on the Teesmouth & Cleveland Coast SPA/ Ramsar by helping to facilitate its adaptation to climate change. Although one aspect of the policy is to encourage developments that generate renewable energy or utilise such technologies, the policy does not address locations for such developments or for associated infrastructure or other operational factors. As such the policy of itself would not have an effect on site integrity, rather the policy states that any proposals for developments that generate renewable energy would need to be in line with Policy CC3.

Section 8.7 looks at Policy CC1 in-combination with the Shoreline Management Plan. Both documents talk about coastal squeeze and the need to manage it. Therefore **Policy CC1 wording has been amended** to say '...and managing coastal squeeze' (as opposed to preventing coastal squeeze). Mitigation for coastal squeeze has been delivered by the Environment Agency through the creation of approximately 25 Ha of inter-tidal habitat in Hartlepool on the Saltern Wetlands Local Wildlife Site.

CC1	Likely Significant Effect
Minimising and adapting to Climate Change	No
In-combination with SMP	No

Policy CC2 Reducing and Mitigating Flood Risk

The policy focuses development in the area of Flood Zone 1, as identified in the borough's Strategic Flood Risk Assessment (SFRA). See: https://www.hartlepool.gov.uk/downloads/file/455/sfra_level_1_-_volume_2_-_appendix_-_set_d_-_flood_risk_management_measures

Flood Zone 1 is the majority of the inland area of the borough, away from the coast and riparian corridors. As this policy focuses development away from the coast it is likely to have a positive effect on the Teesmouth & Cleveland Coast SPA/ Ramsar as those sites are situated in Flood Zone areas other than Zone 1.

CC2	Likely Significant Effect
Reducing and Mitigating Flood Risk	No

Policy INF2 Improving Connectivity in Hartlepool

The policy refers to the package of measures that will be required to achieve the aims of Policy INF1. Most of these measures are concerned with improvements to specified existing roads and to improved pedestrian and cycling links between key locations. None of these links are in an European Site. Only one link, 'Hartlepool to Durham Heritage Coast', is adjacent to the Teesmouth & Cleveland Coast SPA/ Ramsar site but this particular link is considered to have the potential to divert visitor pressure from the SPA/ Ramsar, rather than increase it. Two new developments are proposed; a western distributor road and park and ride facilities at Greatham in association with a new rail halt as part of the Tees Valley metro development.

The western distributor road would run through the South West strategic housing site, which is the subject of Policy HSG4. The road would run from the A689 to Brierton Lane and would be 2km from the Teesmouth & Cleveland Coast SPA/ Ramsar site at its nearest point so would not have a direct effect on those sites. The land that it would cross is currently arable and there is no evidence that it is used by birds that form the interest features of the SPA/ Ramsar. The policy also reserves corridors of land, along three roads, for road improvements. These have no value for SPA birds and none are adjacent to the SPA where construction works might cause disturbance. LSE can be ruled out.

INF2	Likely Significant Effect
Improving Connectivity in Hartlepool	No

Policy INF5 Telecommunications

The policy includes the wording: 'Where appropriate, and having regard to any technical and operational constraints and the significance of the proposal as part of the national network, the Borough Council will seek to protect areas of environmental importance, including conservation areas, areas of Special Landscape Value and nature conservation sites, particularly sites designated for international or national importance. Where the operator can demonstrate that there are no suitable alternative locations, proposals within areas of environmental importance should be designed and located to minimise visual and other impacts. Where there is likely to be an adverse impact on an internationally designated nature conservation site, either directly or indirectly, suitable mitigation measures will be required in advance of the development that meet current habitat regulations'. With this wording in place, the policy is assessed as not having an adverse effect on site integrity.

INF5	Likely Significant Effect
Telecommunications	No

Policy CC3 INF6 Renewable and Low Carbon Energy Generation

New policy number. The policy gives a presumption in favour of renewable energy developments provided that their effects, including cumulative effects, are assessed. Guidance is for small scale schemes (mainly associated with buildings), larger ones are dealt with in the following policies. It does not allocate any sites for renewable energy developments but states that it will encourage renewable energy developments that are in accordance with Policy LS1 Locational Strategy (see above). To comply with Policy LS1, any proposals for renewable energy developments would have to be located and designed so as not to have, either directly or indirectly, an adverse impact on the integrity of European Sites. Therefore this policy would not have an adverse effect on the integrity of any internationally designated sites.

INF6 CC3	Likely Significant Effect
Renewable and Low Carbon Energy Generation	No

Policy CC4 INF7 Strategic Wind Turbine Developments

New policy number. Policy INF7 identifies an area in the north-west of the borough and the industrial area around Brenda Road as suitable for a maximum of four wind turbines. The former is in a rural, farmed landscape and could have an adverse impact on SPA birds such as lapwing and curlew. Similarly, loss of foraging or roosting habitat on industrial land in the Brenda Road area could have a negative impact. Further there is the potential for bird strike in turbines having a direct effect on SPA birds, particularly for those which would be closer to the SPA. The risk of bird strike was explored as part of the Environmental Statement for the three separate 175m wing turbine planning applications in the

Brenda Road area and found to be insignificant. The Hartlepool BC was satisfied with the conclusion of the surveys and analysis that there was only a minimal impact, which was not of significance to the integrity of European Sites.

The policy states that proposals in the Brenda Road area will be subject to consideration of the 'impact, either individually or cumulatively, on internationally, nationally or locally important species and habitats'. It is considered that there is enough evidence showing no significant impact on functional areas or SPA birds and that with this wording in place, the policy is assessed as not having an adverse effect on site integrity.

INF7 CC4	Likely Significant Effect
Strategic Wind Turbine Developments	No

Policy INF8 Large Scale Solar Photovoltaic Developments

Policy INF8 guides the development of large scale (over 0.5MW) ground based solar, photovoltaic installations. Developments should use previously developed or non-agricultural land and as such may be within or close to the Teesmouth & Cleveland Coast SPA/ Ramsar. There is a potential adverse impact of glint and glare on birds of the SPA/ Ramsar particular on flight lines. Large areas of reflected light may appear to be water to birds. Therefore the policy specifically references the need to avoid sites within the Teesmouth & Cleveland Coast SPA/ Ramsar and to assess the impact of glint and glare on SPA/ Ramsar birds. This includes under known flight lines and over functional land.

INF8	Likely Significant Effect
Large Scale Solar Photovoltaic Developments	No

Policy HSG1 New Housing Provision

The policy identifies a number of locations for new housing and allows for a total of 6,199 new homes over the next 15 years (see Table 14). Of these, 3,792 are existing permissions, which will have been subject to a Habitats Regulations Assessment where appropriate. A number of new housing sites are proposed on Greenfield land, including at Wynyard, Quarry Farm, High Tunstall and the South West extension. The Wynyard site is west of the A19 and several kilometres away from the Teesmouth & Cleveland Coast SPA/ Ramsar and is a mixture of woodland and arable. The site is not used by birds that form part of the interest feature of the SPA/ Ramsar site. The North West extension, Quarry Farm and High Tunstall are on areas of land that are currently arable and which are situated immediately west of the existing town. These sites are not known to be used by birds that form part of the interest feature of the Teesmouth and Cleveland Coast SPA/ Ramsar site. A total of 153 houses are ear marked for villages (Hart and Elwick). However, because the policy allows for significant housing within 6km of the SPA/ Ramsar and the cumulative number of new dwellings will lead to a significant increase in the recreational use of land on or adjacent to the Teesmouth & Cleveland Coast SPA/ Ramsar this assessment concludes that the policy could lead to LSE.

HSG1	Likely Significant Effect
New Housing Provision	Yes

Policy HSG3 Urban Local Plan sites

To complement existing planning permissions which exist within the urban area and to protect green spaces, other potential sites for development have been proposed. All are relatively small scale.

~~These include three sites which are adjacent or close to the SPA:~~

- ~~• Britmag South – approximately 30 dwellings~~
- ~~• Coronation Drive – approximately 100 dwellings~~
- ~~• Seaton Coach Park – approximately 30 dwellings~~

~~There is potential for an indirect impact through the building on land used by SPA birds for foraging and roosting. There is no formal bird data on the use of these three areas of land by SPA birds. The Britmag South is located in the north of the borough and lies to the south of the Britmag housing estate which is on the former Steetley industrial site. This small site is an unkempt, rough grassland plateau with regular disturbance and anti-social behaviour including fly tipping. Seaton Coach Park (Seaton Carew) is at the top of the beach and adjacent to an existing beach car park, which is an area that is heavily disturbed.~~

A number of HSG3 sites have been removed from the Local Plan, leaving just the following four:

- South of John Howe gardens (20 dwellings)
- Carr and Hopps (70 dwellings)
- Briarfields (14 dwellings)
- Coronation Drive (65 dwellings)

The first three are well within the built up area of the town and two of these are very small scale. Briarfields, at approximately 70 dwellings has the potential of increasing recreational disturbance on European Sites in-combination with other housing policies, despite being within the town.

The Coronation Drive site is at the northern end of Seaton Carew close to existing housing. Close by, the area of short, windswept grassland with an open aspect on both sides of the A178 road between Seaton Carew and Newburn Bridge is used by foraging oystercatcher, turnstone and redshank as well as two species of gull (anecdotal reports, pers com). This usage occurs at high tide and provides additional feeding time for SPA birds when their preferred feeding habitats of rock, mud or sand are covered by the tide. However, there is no published bird data for use by birds on the Coronation Drive housing allocation site and this evidence would be useful in order to assess the scale, timing and importance.

This policy is combined with HSG1 and triggers the need for a HRA stage 2 Appropriate Assessment.

HSG3	Likely Significant Effect
Urban Local Plan sites	Yes

Policy HSG4 The South West Extension Strategic Housing Site

See HSG1.

HSG4	Likely Significant Effect
The South West Extension Strategic Housing Site	Yes

Policy HSG5 High Tunstall Strategic Housing Site

See HSG1.

HSG5	Likely Significant Effect
High Tunstall Strategic Housing Site	Yes

Policy HSG6 Wynyard Housing Developments

See HSG1.

HSG6	Likely Significant Effect
Wynyard Housing Developments	Yes

Policy HSG7 Elwick Village Housing Development

See HSG1.

HSG7	Likely Significant Effect
Elwick Village Housing Development	Yes

Policy HSG8 Hart Village Housing Developments

See HSG1.

HSG8	Likely Significant Effect
Hart Village Housing Developments	Yes

Policies HSG3-8 could cause LSE either alone or in-combination.

Policy HSG13 Gypsy and Traveller Provision

The policy does not identify a specific site(s) for Gypsy and Traveller provision but does commit to allocating a site(s). Among the criteria that such a site(s) must meet is that it should comply with Policy LS1, the Location Strategy and Policy NE2, the Natural Environment. The policy also says that any site should avoid any detrimental impact upon the Teesmouth & Cleveland Coast SPA/ Ramsar.

HSG13	Likely Significant Effect
Gypsy and Traveller Provision	No

Policy EMP2 Queen's Meadow Business Park

Queens Meadow is situated on the south west urban fringe of Hartlepool. Most of the site is covered in 'Open mosaic habitats on previously used land', notably grassland but towards its southern end a number of shallow pools have formed; these pools are generally full of jointed rush and there is relatively little open water. This southern end of the site is designated as a Local Wildlife Site on account of its amphibian populations. It supports very small numbers of birds for which the Teesmouth & Cleveland Coast SPA/ Ramsar site is designated, typically low single figures of snipe and duck. The scarcity of open water and the lack of short grassland or open mud render the site largely unsuitable for other species for which the Teesmouth & Cleveland Coast SPA/ Ramsar is designated.

EMP2	Likely Significant Effect
Queen's Meadow Business Park	No

Policy EMP3 General Employment Land

The location and operation of businesses within what is called the Southern Business Zone (SBZ) could have an adverse effect on site integrity. This is because the SBZ partly borders the Teesmouth & Cleveland Coast SPA/ Ramsar. The policy wording states that industrial development here may be restricted or required to provide appropriate mitigation and/or compensation measures. This negates any LSE.

EMP3	Likely Significant Effect
General Employment Land	No

Policy EMP4 Specialist Industries

This policy allocates land for port-related development and for chemical, potentially polluting and hazardous industry. While new development will largely replace existing plants and will be more efficient in terms of environmental issues, new and additional plants cannot be ruled out. However, these will be controlled by strict regulations imposed and monitored by the Environment Agency, Local Planning Authority and others. Further evidence will be collected, such as environmental pollution data from the regulatory authorities.

The land at Hartlepool Port (Victoria Harbour area) can hold a flock of lapwing ranging from around 50-300 birds during the winter in periods when the land is not being used for operational reasons (pers obs). The birds merely rest on the large open area of tarmac and as they only use the tarmac area they do not feed on the site. Their use of this site is not considered to be integral to the functionality of European Sites as the land is only intermittently available to flocks of birds when not operational. Nevertheless it is recognised that compensatory provision needs to be made should this land be further developed and it has been discussed with Natural England that a suitable compensatory measure would be to enhance the bird island which currently forms a small, isolated compartment of Teesmouth & Cleveland Coast SPA.

The allocated West of Seaton Channel site around Huntsman Tioxide takes in the majority of Greenabella Marsh. It extends to the boundary with the part of Greenabella Marsh that is within the Teesmouth & Cleveland Coast SPA/ Ramsar but excludes the SPA/ Ramsar itself. The habitats in the areas of Greenabella Marsh that are not within the SPA/ Ramsar are mainly rank grassland or swamp comprising dense stands of reedmace (*Typha latifolia*) or common club-rush (*Schoenoplectus lacustris*) and as such are not of use to the bird species that form part of the interest feature of Teesmouth & Cleveland Coast SPA/ Ramsar. However, there are four ponds within the site that are used by waterbirds to some extent. Hartlepool BC has conducted surveys of these ponds to establish the extent to which they are used by SPA/ Ramsar birds. Results indicate that they are used by relatively low numbers of duck with one pond in particular being used by shoveler.

Any development in proximity to the SPA/ Ramsar could therefore have an adverse effect on site integrity. Any development will need to accommodate and where possible enhance the SPA/ Ramsar bird interest of the site as identified in the above surveys. The policy itself states in this respect: "Where appropriate, proposals will need to demonstrate that there will be no adverse impact on the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar site, or other European designated nature conservation sites, either alone or in-combination with other plans and programmes. Any necessary mitigation measures must be secured in advance of the development in order to meet the requirements of the Habitat Regulations." With this proviso in place the policy for this site is assessed as not having an adverse effect on the integrity of European Sites.

Phillips Tank Farm is land allocated approximately 600m from the Teesmouth and Cleveland Coast SPA/ Ramsar at its nearest point. The southern part of the allocated land, ie: that outside the perimeter of the current operational site has been set aside to be managed as mitigation for the loss of habitat for SPA birds, as part of a development of a Liquefied Natural Gas (LNG) plant in the neighbouring borough of Stockton-on-Tees. It currently has some functional use for birds for which the Teesmouth & Cleveland Coast SPA/ Ramsar is designated and this is anticipated to increase significantly once mitigation proposals are implemented. Any proposals for development on this part of the site allocated under this policy would therefore need to provide mitigation not only for its current use by SPA/ Ramsar birds but also provide such alternative mitigation for the development of the LNG plant as is allowed under that permission.

South Works is in an area containing existing steel works. North Graythorp and Graythorp Waste Management sites are industrial in nature, but relatively close to the SPA/ Ramsar or could accommodate SPA birds. Able Seaton Port is the existing Able UK site and is industrial and adjacent to the SPA/ Ramsar.

The recognition that development at any of the sites allocated under this policy has the potential to have an adverse effect, either directly or indirectly on the Teesmouth & Cleveland Coast SPA/ Ramsar is addressed in the wording of the policy which states: "All proposals for specialist industry will need to demonstrate that there will be no adverse impact on the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar site, or other European designated nature conservation sites, either alone or in-combination with other plans and programmes. Any necessary mitigation measures must be secured in advance of the development in order to meet the requirements of the Habitat Regulations." With the inclusion of this wording, LSE will be negated and this policy is assessed as not having an adverse effect on the integrity of internationally designated sites.

EMP4	Likely Significant Effect
Specialist Industries	No

Policy EMP5 Safeguard Land for New Nuclear Power Station

The land for a potential new nuclear power station is safeguarded rather than allocated. It will not be progressed in the Plan period, but must be kept in reserve for a possible future Government decision. NB: it is expected that the existing nuclear power station will be de-commissioned in 2024. If this was to occur there could be a period of time when there is no active power station. Further, EDF Energy has said that the building of a new power station is not dependent on the decommissioning of the existing one.

EMP5	Likely Significant Effect
Safeguard Land for New Nuclear Power Station	Not Applicable in Plan period

Policy EMP6 Underground Storage

Former brine extraction on an industrial scale has left a number of underground caverns which are suitable for large scale storage. However, these are beneath land designated as Teesmouth & Cleveland Coast SPA/ Ramsar and land that is proposed by Natural England to be part of the SPA extension. For that reason, the policy points to NE1 (Natural Environment) and states that only non-toxic substances would be considered. There are further brinefield caverns to the west of Greatham Creek in Stockton-on-Tees borough and this policy should be assessed in-combination with Stockton Local Plan policies. The policy steers away from 'large above ground structures' but allows for above surface structures which are 'limited in scale'. It follows that any above ground structure within the SPA must cause direct LSE through land take and would need to be compensated. Additional wording was recommended for the policy which will provide adequate compensation for any loss. **The policy has been amended to include under the phrase 'will only be considered where:' the words: 'any above surface structures are limited in scale, not visually prominent and will be designed with flat roofs to replicate any habitat lost'.** This may also be relevant to the Stockton on Tees Local Plan, although no policy is currently available.

EMP6	Likely Significant Effect
Underground Storage	No

Policy RUR3 Farm Diversification

The policy encourages activities that support the rural economy. Included in this is the potential for new development though the policy includes certain guidelines for new development such as re-using existing buildings and being located near to existing local service centres. This policy promotes the countryside rather than the coast.

HBC can find no published bird counts to provide evidence that particular rural areas are regularly used by SPA/ Ramsar birds. Therefore, no assessment can be made of the functionality of any land to the European Site.

Were development to take place on sites that have functional use for birds for which the SPA/ Ramsar is designated then there could be an adverse effect on site integrity. However, the Natural Environment policy (NE1) refers to minimising adverse impacts of recreational disturbance where European Sites, their features or functional land may be affected in the section: 'A precautionary approach will be taken towards developments that may have indirect impacts on internationally designated sites and appropriate mitigation measures or contributions to avoid detrimental impacts will be sought'. Therefore the policy is assessed as not having an adverse effect on site integrity.

RUR3	Likely Significant Effect
Farm Diversification	No

Policy RUR4 Equestrian Development

The policy provides guidance for the equestrian industry, including commercial breeding and leisure, chiefly targeting the countryside rather than the coast. The published County Durham Plan contains Policy 36 'Equestrian Development', but does not specifically refer to the coast or beaches. It includes the wording '...in addition to demonstrating how their requirements under the Water Framework Directive will be met.' The issue appears not to have been assessed by HRA.

HBC can find no published bird counts to provide evidence that particular rural areas are regularly used by SPA/ Ramsar birds. Therefore, no assessment can be made of the functionality of any land to the European Site.

There is a possibility of increased disturbance at coastal locations, especially in-combination with the County Durham Plan should the developing Plan encourage equestrian development in the Crimdon Dene area. There is already an established riding stable at Crimdon Dene with riders accessing the beach to the north and south, penetrating into two SPA/ Ramsar sites. The Hartlepool BC recreation study (Ashley Godfrey Associates, 2015) does not include horse riding as a significant factor. Linaker (2012) in her recreational disturbance study of the Teesmouth and Cleveland Coast European Marine Site, logged 1,128 recreational events of which only seven involved horse riders (on North Gare Sands). This compares to 907 events involving dogs. Bond (2015) noted surprise that no horse riders were encountered in his 2014-15 winter study. Hartlepool BC assesses that any increased use of the shore of the SPA/ Ramsar by horse riders would not amount to a significant increase when combined with existing levels of recreational usage. The policy is assessed as not having an adverse effect on site integrity.

RUR4	Likely Significant Effect
Equestrian Development	No

Policy RUR5 Sustainable Rural Tourism

Sustainable Rural Tourism aims to provide opportunities within the countryside, rather than on the coast. There is a potential but un-quantified risk of areas with functional importance to SPA/ Ramsar birds being adversely impacted, but this is unlikely and would be minor given that Hartlepool BC is not aware of any concentrations of relevant birds in the countryside. One of the most likely pathways to LSE is through proposals for caravan, holiday lodges and camp sites leading to increased recreational disturbance, should visitors choose to visit the coast or inland European Sites (particularly in-combination with Durham County Council Local Plan policies). Tourism accommodation should accord with policies LT4 (Tourism Accommodation) and LT5 (Caravan Sites and Touring Caravan Sites). See Policies LT4 and LT5. In its own right, policy RUR5 does not lead to LSE.

RUR5	Likely Significant Effect
Sustainable Rural Tourism	No

RUR3-5 in-combination	No
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RUR policies in-combination

When the three policies RUR3-5 are looked at in-combination, the scale of potential development and its associated risks to European Sites remains small and LSE is assessed as being insignificant.

Policy RC12 The Marina Retail and Leisure Park

The Council seeks to diversify, support and protect The Marina Retail and Leisure Park. Visually improving the waterfront is one aim and businesses such as water taxis are mooted as acceptable. An increase in visitor numbers (brought in by the diverse attractions) and the possible use of water-born vehicles could impact upon SPA birds using the marina water body. This could include disturbance in the outer marina (West Harbour) which is likely to become a pSPA (proposed extension) and the existing SPA bird roost island in the outer harbour. It is relatively difficult to mitigate impacts resulting from a deliberate policy to increase visitor numbers. However, **the policy has been altered with the statement 'Where appropriate the Council will seek the provision of interpretation to increase public understanding of the Teesmouth and Cleveland Coast SPA and Ramsar'.**

RC12	Likely Significant Effect
The Marina Retail and Leisure Park	No

Policy RC14 Trincomalee Wharf Retail and Leisure Park

The Council seeks to diversify, support and protect the Trincomalee Wharf Retail and Leisure Park. An increase in visitor numbers (brought in by the diverse attractions) could impact upon SPA birds using the marina water body. This could include disturbance in the outer marina (West Harbour) which is likely to become a pSPA (proposed extension) and the existing SPA bird roost island in the outer harbour. It is relatively difficult to mitigate impacts resulting from a deliberate policy to increase visitor numbers. **However, the policy has been altered to with the statement 'Where appropriate the Council will seek the provision of interpretation to increase public understanding of the Teesmouth and Cleveland Coast SPA and Ramsar'.**

RC14	Likely Significant Effect
Trincomalee Wharf Retail and Leisure Park	No

Policy LT1 Leisure and Tourism

The policy confirms the locations for major leisure and tourism facilities as being the existing ones of the Town Centre; the Marina; Seaton Carew and The Headland. The policy will also promote and encourage green tourism through the provision of facilities for the observation and interpretation of wildlife, habitats and the natural environment.

The provision of facilities for interpretation is expected to have a positive effect on the internationally designated sites through facilitating a greater understanding and appreciation of them. The provision of facilities for observation could also have a beneficial effect by directing visitors to areas where they would cause fewer disturbances. Conversely inappropriately situated observation facilities could cause more disturbance, however the policy also states that all developments must be in conformity with Policy LS1 Locational Strategy. Therefore the effects of the part of the policy regarding green tourism are likely to have a positive effect on internationally designated sites.

Concentrating major leisure and tourism facilities in the existing centres will in general draw people away from internationally designated sites however it is acknowledged that both the Headland and Seaton Carew are in close proximity to parts of the Teesmouth & Cleveland Coast SPA/ Ramsar. Under this policy, tourism on the Headland would focus on its historic value rather than its natural environment and in any case the main areas used by SPA birds are not very accessible to the public. Increased activity at the Headland is unlikely to significantly increase adverse impacts on the SPA as changes are likely to be relatively minor compared to existing use. The Headland is relatively robust in that the rocky shores favoured by SPA birds are not very accessible to people. Increased activity at Seaton Carew will be focussed in the existing core area within the town. Therefore this policy is not considered to have an adverse effect on the SPA/ Ramsar site.

LT1	Likely Significant Effect
Leisure and Tourism	No

Policy LT2 Tourism Development in the Marina

See Policy LT1 Leisure and Tourism (above). The Marina is already a busy area and to some extent birds using the area have become habituated to activity, such as boat traffic and quay based tourism activities.

LT2	Likely Significant Effect
Tourism Development in the Marina	No

Policy LT3 Development of Seaton Carew

Increased activity at Seaton Carew will be focussed in the existing core area within the town, particularly on the bathing beaches and the existing centre. The bathing beach, Seaton Sands extends for approximately 1km in front of Seaton Carew and has no designations for nature conservation interests but at its southern end it meets an inter tidal component of the SPA/ Ramsar and at its northern limit it merges with Carr House Sands, which is designated for supporting a proportion of the birds which form the interest feature of the Teesmouth & Cleveland Coast SPA/ Ramsar. An increase in number of visitors to Seaton Carew could increase the visitor pressure on the adjacent European Site. However any increase in tourism based around the bathing beaches is likely to be during the summer periods when most SPA shorebirds are absent. The promotion of specific activities which might take place during the winter, such as wind surfing and sand yachting is not a feature of this policy and any promotion of such activities would need to be the subject of a separate strategy, given the potential for conflict with other users. The adjacent National Nature Reserve has byelaws covering some forms of recreation, such as paragliding, which cause disturbance and SSSIs have lists of 'Operations likely to damage the special interest' which require NE written approval. In-combination with Policy LS1 Locational Strategy means that developments resulting from this policy would be required to demonstrate no adverse impact on internationally designated nature conservation sites.

LT3	Likely Significant Effect
Development of Seaton Carew	No

Policy LT5 Caravan Sites and Touring Caravan Sites

The Tourist Accommodation section states that there may be opportunities for a touring caravan site in the rural area. Hartlepool BC assesses that such a site is unlikely to create LSE alone. There are static caravan sites just to the north of the Hartlepool boundary at Crimdon Dene and towards Blackhall. While there is no space for such sites on the Hartlepool part of the coast (due to the Hart Warren golf course in the north and the protected Teesmouth National Nature reserve in the south), there may be more capacity in the Crimdon to Blackhall area. There is currently no consultation Durham Local Plan, but this issue will need to be assessed in the HRA for that document. The existing County Durham Plan (Local Plan Submission Draft) has a relevant policy under 'A Prosperous Economy' (Policy 28 Visitor Accommodation). This does not specifically refer to the coast or beaches and the issue appears not to have been assessed by HRA.

The only likely impacts are direct loss of functional land used by N2K species or significantly increased recreational disturbance to shorebirds when caravaners visit the beach. In terms of the former, Hartlepool BC can find no published bird counts to provide evidence that particular rural areas are regularly used by SPA/ Ramsar birds. With respect to the latter, the additional number of visitors is likely to be low as there is already an established high level use. The text identifies that there is no shortage of low-end tourist accommodation, reducing the likelihood of expansive caravan sites. Further, the policy demands that proposals are in line with a number of other policies including the Natural Environment ones. Natural Environment policy (NE1) refers to minimising adverse impacts of recreational disturbance where European Sites,

their features or functional land may be affected in the section: 'A precautionary approach will be taken towards developments that may have indirect impacts on internationally designated sites and appropriate mitigation measures or contributions to avoid detrimental impacts will be sought'.

In order to mitigate against increased recreational disturbance caused by holiday makers who have been encouraged to visit the coast, the **policy wording in Policy QP1 - Planning Obligations has been strengthened so that a financial developer contribution is required.** This will apply to static caravan site berths and will be used for wardening (see Section 7).

As it stands Hartlepool BC is not promoting a static caravan site and when assessed alone and in-combination with the County Durham Plan and housing policies, this policy has no LSE.

LT5	Likely Significant Effect
Caravan Sites and Touring Caravan Sites	No

5.3 Part C: Analysis findings

Any policies where LSE cannot be ruled out need to be taken to HRA Stage 2. This is an Appropriate Assessment of the potential impacts on the integrity of the relevant European or Ramsar sites either alone or in-combination with other plans or projects. Following on from the comprehensive screening process, the following seven policies are assessed as needing a stage 2 Appropriate Assessment.

HSG1 - New Housing Provision
HSG3 - Urban Local Plan sites
HGS4 - The South West Extension Strategic Housing Site
HSG5 - High Tunstall Strategic Housing Site
HSG6 - Wynyard Housing Developments
HSG7 - Elwick Village Housing Development
HSG8 - Hart Village Housing Developments

The potential cause of LSE is the same for all of the Housing policies and equally applies in-combination.

While the above policies are identified as having a likely negative effect, the majority of Local Plan policies will have a neutral impact on European Sites. A few have positive impacts, namely RUR1, and the seven Natural Environment policies. RUR policies are concerned with protecting, managing and enhancing the rural area. RUR1 seeks to ensure that the rural area is protected and enhanced to ensure that its

natural habitat is not lost. The seven Natural Environment (NE) policies are positive or neutral. NE1 specifically targets internationally designated sites to be protected and enhanced. NE2 (green infrastructure) and NE3 (green wedges) will provide alternative destinations for outdoor recreation, which will reduce use of and potential disturbance of European protected habitats and species. They will also, along with NE4 (ecological networks), provide semi-natural and 'green' corridors which could be beneficial for designated species. NE5 (playing pitches) and NE6 (protection of incidental open space) are positive in that such sites provide functional land used by birds which are designated as N2K site qualifying features. NE7 promotes high quality landscaping along main transport routes.

6. The Hartlepool Local Plan, HRA Stage 2 Appropriate Assessment of Policies HSG1, 3, 4, 5, 6, 7 and 8

These Appropriate Assessments apply to the Teesmouth and Cleveland Coast SPA/ Ramsar, Northumbria SPA/ Ramsar, Durham Coast SAC and Thrislington SAC.

6.1 Direct LSE

6.1.1 Direct LSE on European Sites. Issue 1 Habitat loss

Possible source of LSE, evidence and analysis

There will be no loss of SPA habitat as a result of any of the housing allocations in policies HSG1, 3, 4, 5, 6, 7 and 8.

HSG6 covers Wynyard Housing Developments of 732 dwellings. The site is 6.6 km away from the nearest SPA/ Ramsar boundary.

HSG7 covers Elwick Village Housing developments of 35 dwellings. The site is 6.3 km away from the nearest SPA/ Ramsar boundary.

The High Tunstall site (HSG5) is a greenfield site allocated for 1,200 dwellings. It is 4 km in a direct line from the European Sites at the closest point. This rural site is currently largely arable farmland.

The two sites allocated in Hart Village (HSG8) cover 50 dwellings and are Glebe Farm and Nine Acres. These are approximately 3 km from the Teesmouth & Cleveland Coast SPA/ Ramsar in a direct line. Urban sites in policy HSG3 are within 6 km of the European Sites but are mostly within or adjacent to existing built up areas.

The South West extension strategic housing site (HSG4) is for 1,620 dwellings an area of land immediately adjacent to the south west of the existing urban area and about 4 km from the European Sites. The land is currently almost entirely used for arable production though until recently parts of the land have been under various environmental stewardship options including the creation of one pond and large margins and

headlands. This area has been the subject of a report by Teesmouth Bird Club 'Brierton Area, Hartlepool – Ornithological Data' prepared for WSP consultants in March 2010. The report highlights the importance that this area has had for birds. In particular it has supported a range of breeding farmland birds and also wintering populations of farmland birds such as grey partridge and various passerine species. The report makes no mention of the use of the site by birds for which the Teesmouth & Cleveland Coast SPA/ Ramsar is designated. Being immediately adjacent to the urban fringe, the site is quite well observed and anecdotally there are no records of SPA/ Ramsar birds using the site.

6.1.2 Direct LSE Conclusion

It is concluded that there is no direct LSE on any N2K site from Local Plan policies.

6.2 Indirect LSE

6.2.1 Indirect LSE on European Sites. Issue 1 Atmospheric pollution

The increase in the number of dwellings could lead to an increase in traffic growth and a resulting increase in air pollution. The potential for LSE to the Durham Coast SAC and Thrislington SAC is considered below.

Evidence

Increase in traffic growth is based on the assumption that an increase in the number of households is automatically followed by an increase in the number of vehicle journeys in the area.

A Natural England report referred to as NECR199 states: Biodiversity 2020, identifies air pollution as a direct threat to biodiversity in England. Many habitats of nature conservation importance in the UK are adapted to low nutrient conditions and/or are vulnerable to acidification and are sensitive to additional airborne nitrogen oxides (NOx), sulphur dioxide (SO2) and ammonia (NH3), as well as to nitrogen deposition and acid deposition. Pollutants come from a range of different sources, but transport is known to be the single largest source of NOx emissions. The findings of this literature review include: further evidence of the impacts on individual species from exposure to nitrogen oxides (NOx) and nitrogen dioxide (NO2) associated with vehicle emissions. These impacts are greatest within the first 50-100m from roads but may be discernible at greater distances. The studies also evidence that traffic emissions are a significant source of metal contamination. Recent

fumigation studies using vehicle exhaust highlight that diesel exhaust emissions not only have potential to lead to changes in competitive advantage between plant species due to species-specific responses but also changes in interactions across wildlife food chains, with implications for habitats and communities close to roads. NO_x is the key phytotoxic component of exhaust emissions. New road building and road expansion should avoid a buffer zone of up to 100–200m from sensitive sites. This report unequivocally shows that nitrogen oxides could impact upon SSSI and SAC habitats. However, it concentrates on road network improvements rather than increased road use. See Appendix 3 for further information.

Analysis

People moving into new housing in Hartlepool are mostly moving location within the borough. The Hartlepool Borough Council Strategic Housing Market Assessment 2015 says that 80.1% of new housing take-up will be Hartlepool people re-locating (rather than population growth) https://www.hartlepool.gov.uk/downloads/file/423/strategic_housing_market_assessment_2015_-_march_2015. Hartlepool BC is planning for 6,199 new houses and planning 35 demolitions/ year for the 15 year Local Plan period. If 80.1% of house moves are to new properties then this leaves 4,965 existing houses vacant, of which 525 will be demolished in the Plan period. A 4% vacancy factor is normal. It is predicted that the additional vacant houses will be used by the existing population, reducing the average number of persons per house.

The Tees Valley Combined Authority (see: <https://teesvalley-ca.gov.uk/partners-portal/>) notes that Hartlepool is not a significant growth area and HBC agrees that the Tees Valley wide population statistics are robust for this assessment. The recreational habits of this group will, broadly, remain the same and their number of journeys will be the same or very similar. Neither of the European SACs are close to the new housing sites and both lie greater than 200m distance from the major road network. While pollutants from roads are considered to have the greatest impacts between 50 and 100m from the roadside, this is already occurring and the additional road usage is assessed as not tipping the balance of LSE. Hartlepool BC assesses that car users from their new homes are only marginally likely to increase visits to (or drive within 100m) of the SACs of Castle Eden Dene or Thrislington.

Conclusion

The increase is considered to be minor in comparison to existing levels and therefore to be *de minimus* in terms of an adverse effect on any European Site. It is assessed as having no significant effect.

6.2.2 Indirect LSE on European Sites. Issue 2 Nutrient enrichment via dog faeces

Durham Coast SAC (due to proximity) and to a lesser extent Thrislington SAC and Castle Eden Dene SAC have vegetation communities of European importance and these could suffer LSE through nutrient enrichment through the pathway of dog faeces. The quantity of pollution will be greater due to the increased number of dog walkers accessing N2K sites from new housing developments.

Evidence

The main piece of research studies regarding behavioural attitudes of dog walkers is Lowe (2014). Key findings based on a survey of 933 people found that 97% of dog walkers claimed to pick up faeces, though 8% only picked up if it was on a path. The remaining 3% were classed as disengaged, not picking up even though knowing the health risks. See Appendix 4 for an abstract of the research.

Analysis

It is likely that not all respondents were truthful when claiming that they always pick up their dog's faeces. However, even given an error factor, the percentage is high. Managed dog waste bins are positioned at the main car park entry point for the Durham Coast SAC. While it is not known whether dog waste bins are provided at Castle Eden Dene and Thrislington, Durham CC state on their website that 'We provide dog waste bins throughout County Durham, at locations such as parks, grass verges, pedestrian areas, footpaths, larger open spaces and coastal promenades' and it is therefore assumed that they are.

Conclusion

The analysis above gives a high degree of confidence that the issue is minor and that LSE is unlikely.

6.2.3 Indirect LSE on European Sites. Issue 3 Recreational disturbance

6.2.3.1 Discussion

This section analyses the evidence gathered for the issue of LSE caused by recreational disturbance.

6.2.3.2 Source of LSE.

Housing supply for the Local Plan period is given in Policy HSG1 New Housing Provision - Future Housing Supply over the Next 15 Years.

Table 14. Future Housing Supply over the Next 15 Years

Housing Site Source	Approximate Additional Dwelling Capacity	Land Type	% Provision
Existing Urban Area			
Existing Planning Permissions	1283	Mixed	20.7%
Urban Local Plan Sites	169	Mixed	2.7%
Existing Urban Area Sub Total	1452		23.4%
Urban Edge Extensions			
Existing Planning Permissions	2040	Greenfield	32.9%
High Tunstall Extension	1200	Greenfield	19.4%
Quarry Farm 2	220	Greenfield	3.5%
Urban Edge Extensions Sub Total	3460		55.8%
Wynyard			
Existing Permissions	402	Greenfield	6.5%
Wynyard Park Sites	732	Greenfield	11.8%
Wynyard Extension Sub Total	1134		18.3%
Villages			
Existing Permissions	68	Mixed	1.1%
Elwick Sites	35	Greenfield	0.6%
Hart Sites	50	Greenfield	0.8%
Villages Sub Total	153		2.5%
Total Dwelling Delivery	6,199		100%

Hartlepool BC is planning for 6,199 new houses in the Local Plan period, including schemes which have existing planning consent but which have not been substantially completed. There are no major housing developments planned immediately to the north of Hartlepool borough in the Durham County Council area. Stockton on Tees BC is planning for further new housing in the Wynyard area, with the Regeneration and Environment Local Plan Publication draft (Feb 2015) covering this in policy H33 – Wynyard Village. It says 'The planning commitment for a western extension to Wynyard Village comprising up to 500 dwellings is re-affirmed'.

A number of planning applications for housing schemes, dealt with by Durham County Council and Hartlepool BC, which have had planning permission granted in 2015-2016 or are currently working through the application process, have been studied to ascertain how ecological issues were dealt with. A number of HRAs and submitted Environmental Statements have included ecology chapters that have assessed the recreational disturbance issue both alone and in-combination.

A list of 14 historic and current housing developments in Hartlepool along with a further three developments within the Durham CC area has been produced (Betts, 2016) for the Seaview Park housing development of 195 dwellings. However, this demonstrates that HRAs were not routinely provided prior to 2015. The Britmag site housing development (594 dwellings) to the north of Hartlepool Headland, triggered an Appropriate Assessment. This application included the restoration of a contaminated brownfield site (the former Steetley Magnesite works) adjacent to the Teesmouth and Cleveland Coast SPA/ Ramsar. Planning permission was granted in 2010 by the Secretary of State and the site is currently being developed. The Hartlepool Local Plan housing policies are considered in-combination.

6.2.3.3 Threats to the receptor sites.

The key European Site potentially impacted is the Teesmouth and Cleveland Coast SPA/ Ramsar. Table 15 shows the Conservation Objectives (bird populations) at designation.

Table 15. T&CC SPA/ Ramsar Conservation Objectives

Species	Number	%
Little tern	40 pairs	1.7% of GB pop
Sandwich tern	1,900	4.0% of GB pop
Knot	5,509	1.6% of East Atlantic flyway
Redshank	1,648	1.1% of East Atlantic flyway
Assemblage	21,312 (excluding gulls & terns). Including 5,509 knot, 1,228 shelduck, 1,351 teal, 1,133 redshank & 259 sanderling.	

It should be noted that the latest publication of the BTO report 'Waterbirds in the UK 2014/15, The Wetland Bird Survey' (available on-line at <https://www.bto.org/volunteer-surveys/webs/publications/webs-annual-report/waterbirds-in-the-uk>) shows that the Tees Estuary has fallen out of the five year rolling assemblage statistic of 20,000 waterbirds (page 13).

The Natural England Favourable Condition report for the Teesmouth and Cleveland Coast European Marine Site identifies that 'non-physical disturbance resulting from noise and visual disturbance' needs to be managed by the competent authorities, who should manage human activities within their remit such as they do not result in deterioration or disturbance of habitats and species for which the site has been selected. This includes internationally important populations of regularly occurring Annex 1 species, internationally important populations of regularly occurring migratory species and internationally important assemblage of waterbirds.

The Teesmouth and Cleveland Coast European Marine Site Management Scheme (Spring 2009) gives further details – see: <http://www.inca.uk.com/wp-content/uploads/2009/08/marine-site.pdf> .

Section 6.11 covers dog walking:

Location - Beaches

Interest features and sub features affected - Wading birds, Sand and shingle; Inter tidal sand flat and mud flat,

Issues - Byelaws are predominantly concerned with dog fouling, not protection of the marine environment.

Significant Effect Potential - Disturbance to nesting, feeding and roosting birds particularly in the winter period; Disturbance to roosting flocks of terns at North Gare Sands in late summer.

Current Regulation & Competent Authority - Hartlepool BC, Redcar & Cleveland BC and Natural England.

Statutory Advisors - Natural England.

Regulatory Instruments - Countryside & Rights of Way Act 2000.

Supporting/ Advising Organisations - Natural England.

Current Management - Countryside & Rights of Way Act 2000 disturbance of nesting birds is an offence; Byelaws are in force on some beaches to protect public health.

Gaps in Management - Enforcement is inadequate.

Possible Management Actions - Awareness raising initiatives by local authorities; Quantifying the degree of disturbance.

Comments - A recommendation was to improve dog management signage. Public health byelaws do not cover the winter period when disturbance of birds is a more serious problem. Wright (2005) prepared a draft final report on a Foreshore Strategy for Hartlepool Borough Council in June 2005 (Cass Associates).

The Natural England Site Improvement Plan for the Teesmouth and Cleveland Coast N2K sites (IPENS – Improvement Programme for England's Natura 2000 Sites) identifies 'Public access/ disturbance' as a priority issue. The measure given is to 'Create/ restore safe roosts and manage recreational use' and an action refers to preparing and delivering a Foreshore Management Plan. Hartlepool BC already manages foreshore services through its day to day service delivery.

6.2.3.4 Pathway

The population of Hartlepool is 92,670 (2013). The Plan allows for 6,199 new dwellings. Planning applications for individual dwellings and extensions to existing properties have not been considered as they will not result in a significant change in baseline conditions, either alone or in-combination with other proposals. The average number of people per household in the Tees Valley (2013) is 2.3 and therefore there will be approximately 14,258 people living in the 6,199 new dwellings when they are all occupied. The Hartlepool Borough Council Strategic Housing Market Assessment 2015 says that 80.1% of new housing take-up will be Hartlepool people re-locating (rather than population growth). This alters the initial precautionary principal position of 100% population growth. If 80.1% of houses are occupied through re-location, this equates to approximately 11,414 people. This gives a (19.9%) growth figure of 2,836 people. This is a Hartlepool population increase of 2,836, from 92,670 to 95,506 – an increase of 3.06%.

Based on these statistics a population increase of 2,836 will lead to 624 additional adults walking for 30 minutes every four weeks (22% of the population). This does not account for children. It is reasonable to assume that this does not include dog exercising. With household dog ownership at 24%, then 1,488 of the 6,199 new households will own one or more dogs. Of these, 80.1% (1,191) of will be re-locations and 19.9% (296) will be new. This suggests that there would be approximately 296 new dog-owning households.

There is a desire for at least some residents to walk on the coast and they largely access convenient seafront areas by walking or driving. There are convenient seafront car parks and a number of locations where visiting is actively encouraged.

The increase in the number of dwellings will lead to an increased number of people and dogs and as these will be living within relatively close to a European Site there is a potential indirect effect likely to occur through a single impact pathway – namely increased recreational pressure leading to increased disturbance of features of the Teesmouth and Cleveland Coast SPA/ Ramsar, Northumbria SPA/ Ramsar and Durham Coast SAC, with particular reference to dog walking impacting on qualifying bird species of the two SPAs. Even given that 80.1% of housing moves will be internal within the borough, indirect LSE cannot be ruled out.

6.2.3.5 Evidence and analysis

Recreational walking. The following statement is made by the Ramblers Association <http://www.ramblers.org.uk/advice/facts-and-stats-about-walking/participation-in-walking.aspx> . 'According to Britain's most comprehensive survey of sport and recreation participation, 9.1million adults in England, or 22% of the population, walk recreationally for at least 30 minutes in four weeks'. This would appear not to account for children.

The walk for life website suggests that people on average walk at a speed of 3mph (4.8kmh) <http://www.walk4life.info/> .

Information on recreation behaviour is given in the Hartlepool Borough Council Open Space, Sport & Recreation Assessment Report (Ashley Godfrey Associates, 2015) – accessed from Hartlepool Borough Council website:

https://www.hartlepool.gov.uk/downloads/file/417/open_space_sport_and_recreation_assessment_-_january_2015 .

Family size has been considered using data from the Office for National Statistics

<http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/families/bulletins/familiesandhouseholds/2015-11-05#household-size> . This gives the following household make up for 2015: 1 person = 29%, 2 people = 35%, 3 people = 16% and 4+ people = 20%. The average number of people per household in the Tees Valley (2013) is 2.3.

The following website for the Tees Valley Combined Authorities provides Tees Valley wide statistics.

<https://teesvalley-ca.gov.uk/partners-portal/> . See the Population tab and the Instant Atlas tab.

Tees Valley Internal Migration – (moves to and from Tees Valley to the rest of the UK) are as follows: inflows of 22,300, outflows of 23,700, so an overall net flow out of the Tees Valley of 1,400. (Source: Office of National Statistics (ONS) using NHS Central Register incorporating Student Adjustment). This statistic is contrary to the one in the paragraph above, which may relate more to inflow into Hartlepool from the rest of the Tees Valley.

Dog ownership has been considered using the 2014 Pet Population Report: <http://www.pfma.org.uk/pet-population-2014> . This indicated that 24% of home owners have a dog.

6.4.3.6 Hartlepool Borough Council Open Space, Sport & Recreation Assessment Report, Ashley Godfrey Associates, Jan 2015.

Evidence for recreational behaviour, including visiting beaches and visiting natural and semi-natural greenspace, is presented in the Ashley Godfrey report available on line at: https://www.hartlepool.gov.uk/downloads/file/417/open_space_sport_and_recreation_assessment_-_january_2015 . This study surveyed 1,113 Hartlepool people.

Visits to beaches

The following table shows beach visiting behaviour.

Table 16. Beach visiting behaviour

Frequency of visiting	Proportion of respondents who visit (%)
Every day	4
Once or twice a week	22
Two or three times a month	22
Once a month	13
Once every two or three months	17
Once or twice a year	10
Less often	4
Never	8
N = 1,113	100

The beaches most visited are as follows.

Table 17. Popular beaches

Beach	Proportion of respondents who visit (%)
Seaton Carew	72
Headland, Fish Sands and Block Sands	18
Crimdon, Hart Warren, North Sands, Brus	6
Hartlepool Beach, Marina	3
Other local beaches	1
Out of area beaches	1
N=947	100

NB: The percentages for beach preference show the preferred shore and does not mean that other beaches are not visited by that person.

The common visiting pattern is to visit a beach on a weekly or fortnightly basis. The 8% proportion of people, who never visit, is small and indicates the importance of these spaces to the overall mix of open space.

By far the most popular beach is that at Seaton Carew, which is the preferred beach for three-quarters of all those who visit a local seashore. No other beach even approaches Seaton Carew in popularity, though different sites around the Headland account for one in five beach visitors, and the north shore beaches between the Headland and Crimdon account for a further 6%. Use of other local beaches is more limited and there are a handful of people who prefer to go elsewhere, for instance to Saltburn, Whitby or Bamburgh, rather than visit the seashore locally.

Visits to Natural and semi-natural greenspace

The report surveyed Hartlepool people regarding their recreational behaviours, patterns and preferences. The following table shows how often people visit any natural and semi-natural greenspace. The definition excludes green corridors which were assessed separately.

Table 18. Frequency of greenspace visits.

Frequency of visiting	Proportion of respondents who visit (%)
At least once a month	57
Less often	28
Never	15
N = 1,090	100

Almost three in five local residents visit a natural green space at least once a month, and as the data below shows some go much more often than this. Just over a quarter are occasional visitors, leaving just one in seven who never go to any kind of natural space at all. Natural space is thus a prominent and significant element in the Borough's spatial provision.

Natural spaces vary widely in their nature and this has an effect on the frequency of visiting, as the table below shows. NB: green corridors are included in the survey.

Table 19. Preference for types of greenspace.

Frequency of visiting	Proportion of respondents who visit (%)					
	Green corridor	Country walk	Nature reserve	Woodland	Country Park	Lake or river
Every day	6	9	1	1	2	1
Once or twice a week	11	16	5	6	7	2
Two or three times a month	11	13	9	9	11	6
Once a month	7	9	8	9	12	6
Once every two to three months	10	12	14	13	14	8
Once or twice a year	11	7	17	16	18	15
Less often	9	6	15	12	12	15
Never	35	28	31	34	26	47
N ^o respondents	1,065	1,067	1,067	1,053	1,0691	1,053

The most frequently visited sites are the undefined spaces where people go for country walks; half (47%) of local residents go to an informal natural space of this nature at least once a month. The question referred to spaces suitable for walks, jogs, cycles or rides, and clearly this type of space has a wide appeal. Green corridors, which might also be used for similar purposes, attract a third (35%) of local people at least once a month, while country parks (Summerhill) attract a similar proportion (31% visit at least monthly). The least visited sites are those involving inland water; just one in seven local people visit a lake or riverbank at least once a month and almost half never go to a space like this. Nature reserves and woodland are also less widespread in their appeal, although each attract around a quarter of residents at least once a month. It is not surprising that rivers and lakes are not well visited as there are minimal opportunities in the borough.

The survey assessed types and examples of natural space most often visited and the results are tabulated below.

Table 20. Preference of sites visited.

Natural space	Proportion of respondents who visit (%)
Summerhill CP	51
Hart to Haswell Walkway LNR	6
Saltholme RSPB	6
Seaton	5
Beach	3
Crimdon Dene	3
Other local space	18
Out of area	8
N = 613	100

NB: Low numbers in this table do not indicate non-use, but rather that other sites are used more often. By far the most popular natural space in this locality is Summerhill. For half of all residents who use natural space, this is the space they visit most often, and this popularity demonstrates the importance of this site to local people. Apart from the country park, the other sites used are diverse both in location and nature; walkways, beaches and dunes, and a wide variety of other spaces are all mentioned as people's preferred natural space. One in twelve of those who visit natural space make their most frequent visits outside the Borough. Two sites are especially popular in this group: Castle Eden and Hardwick Hall.

Means of travel to natural space

Table 21. Means of travel.

Travel	Proportion of respondents who visit (%)
Walk or jog	34
Car	58
Bus	2
Cycle	5
Other (eg: motorised scooter & wheelchair)	1
N = 846	100

The most common means of accessing natural space is by car; three out of five residents use the car to access their preferred space. Most of the rest, a third of all who use this type of space, walk to get there. Only a few use any other form of transport, though cycling is more prominent for this type of space than for others in the Borough.

6.2.3.7 Analysis of recreation behaviour

Bearing in mind that the statistics give people's preference and does not mean they do not visit other sites, the importance of Summerhill Country Park to absorb recreational use is very high. The Hart to Haswell Walkway LNR absorbs more visitors than the beach and Crimdon Dene (NB: no definition of Crimdon Dene is given and it may include the area of beach as well as the non-shore parts). RSPB Saltholme which has a pro-active promotional strategy, attracts more Hartlepool residents than the local beaches. Of the 8% who visit sites out of the area (in addition to RSPB Saltholme) at least some visit Castle Eden Dene (named in the survey). However, there are other favoured sites such as Hardwick Hall, so clearly Castle Eden Dene is only a proportion of the 8% statistic. In terms of LSE on Castle Eden Dene, Thrislington, the North Pennine Moors National Park and the North York Moors National Park, from Local Plan housing policies (recreational disturbance) there will be a proportion of a value of 8% of the maximum of 14,258 new people (if every new house is occupied by someone moving into the borough) to a minimum of 2,836 new people (if 19.9% of new houses are occupied by someone moving into the borough). Assuming that the proportion of the 8% is half, then at the end of the Local Plan period we could expect between 100 and 500 additional visitors to any of the N2K sites outside of the borough. This magnitude of visitor pressure could be achieved within a 15 year period with no housing provision, simply through the dynamics of outdoor recreation. For example, RSPB Saltholme has created visitor demand in the last five years through a targeted strategy. Government bodies are encouraging greater use of outdoor locations for health and wellbeing and environmental education. Many national conservation organisations including Natural England is actively seeking to increase public engagement with nature at its sites – Castle Eden Dene and Teesmouth NNR being local examples.

6.2.3.8 Hartlepool BC review of bird and recreational disturbance studies covering Hartlepool beaches.

Hartlepool BC has assessed the key findings from a disparate collection of bird, recreation and recreational disturbance studies covering the NE coast of England. The aim of the report (Megson, 2016) is to focus thinking around the management of recreational pressures on the coast, particular where the interest feature birds of European Sites (SPAs and Ramsars) are potentially adversely affected. The following reports were reviewed.

Table 22. Table of reports available which cover bird and/or recreational surveys in NE England.

Report	Author	Year
Wintering bird and disturbance survey, North Sands, Hartlepool, Co Durham, 2005-06 (to inform the Britmag application).	Tim Outlaw	2006
A study of over-wintering waterbirds of the Durham Coast.	Cadwallender & Cadwallender	2012
Hartlepool SPA bird disturbance studies, 2009-13 (miscellaneous counts, no report).	Hartlepool BC	2013
Recreational disturbance at the Teesmouth & Cleveland Coast European Marine Site, 2011-12.	Rachel Linaker	2013
A second year review of over-wintering waterbirds of the Durham Coast.	Cadwallender & Cadwallender	2013
Britmag Site, Bird Disturbance Study 2014-15.	Bond I, Hartlepool BC	2015
Sunderland & South Tyneside Bird Surveys 2014-15, non-breeding season report.	Arcus	2015
Wintering bird survey to enable condition assessment of the wintering bird features of Durham Coast SSSI & co-located areas of SPAs: final report 2015-16.	Ecology Consulting	2016
South Tyneside, Sunderland & Durham Coastal Visitor Survey 2016 (PowerPoint).	Bluegrass	2016
Little tern reports (various)	INCA	

One of the studies above is a piece of research that Hartlepool BC undertook and is a bird and recreational disturbance study on North Sands, Hartlepool (Bond 2015). This study was carried out over the winter of 2014-15 to determine levels of use of an area of the Hartlepool coast by SPA birds as part of the Section 106 agreement for the application to develop Britmag Magnesia Works. The study also recorded recreational activity and disturbance of SPA birds. Results were noted as broadly comparable with the study carried out over the winter of 2005-06 (which informed the planning application – Outlaw 2006). The survey area was split into a northern sector and a southern sector. Eighty three survey hours were carried out between November and March and identified that SPA bird numbers had notably declined since 2005-06. Levels of recreational use had declined by two events per hour from 7.2/hr in 2005-06 to 5.07/hr in 2014-15. Rates of disturbance were little changed after adjustment to remove counts where no birds were present and therefore no disturbance could occur. Before adjustment the rates were 1.25/hr in 2005-06 and 0.55/hr in 2014-15. After adjustment the rates were 1.25/hr in 2005-06 and 1.07/hr in 2014-15.

Dog walking was the most common recreational activity recorded during the study, with all but two dogs recorded as being off lead. One record of a dog on a lead was noted as causing disturbance events. Out of 421 recreational events recorded, 292 involved dog walking (69.4%). Out of 421 recreational events recorded, 66 involved walking (15.7%). The rate of dog walkers (4/hr in 2005-06 and 3.7/hr in 2014-15) is similar between the two studies, as well as the disturbance levels caused by dogs (72% compared to 70%). The following table shows data regarding dog walking from five studies.

Table 23. Percentage of recreation made up by dog walking and percentage of disturbance caused by dogs.

Study	Dog walking as a % of recreational events (%)	Disturbance caused by dogs (%)
2005-06, Britmag	57	72
2011-12, EMS	52	34
2014-15, Sunderland & S Tyneside	45	49
2014-15, Britmag	73	70
2016, S Tyneside, Sunderland & Durham	65	?

Surveys found that neither section of the survey area was used by significant numbers of SPA birds at low tide. Where birds were present in the northern sector, this was typically low numbers (ca: 30) of oystercatcher. Both sectors were used for high tide roosting, although numbers of SPA birds were typically in single figures. It was concluded that disturbance is unlikely to be the primary reason for low SPA bird numbers on this part of the coast. Despite this, the Hartlepool shoreline (including sandy and rocky beaches) does have the capacity to be used more by N2K birds and this needs to be encouraged through actions to mitigate disturbance.

The British Trust for Ornithology (with partner support) organises the national Wetland Bird Survey (WeBS) counts and collects coordinated, high tide counts of waterbirds through a largely voluntary network of counters. The North Sands section falls within the Durham Coast WeBS region where the consistency of counts is low. The remainder of Hartlepool falls within the Tees estuary where there is a very high level of coverage. WeBS data has not been specifically analysed as the key finding is that there is recreational disturbance of birds and there is no immediate need to know numbers and patterns of bird usage. Such analysis will be needed when delivering site management actions.

Prior to 1995 the main little tern colony was in the southern portion of the T&CC SPA at Coatham Sands near Redcar. The little tern colony at Crimdon Beach has been present since 1995 and the level of breeding success has fluctuated since this time, thought largely to be due to egg theft, human disturbance, insufficient food and mammal and avian predation – see <http://www.inca.uk.com/2016/08/little-tern-end-of-season-update/>. The nesting site is fenced between April and September every year and guarded by a warden and volunteers. A secondary post and wire fence has been erected in some years in order to encourage walkers not to hug the enclosure. Casual observation (pers comm) show that walkers and dog walkers skirt the outside of the post and wire enclosure and that on occasions this puts the terns up. However, the little terns frequently ‘dread’ even when there is no nearby human presence. A dread is thought to occur when stress levels in the birds reach a collective peak and all at once, without any kind of obvious impetus, the birds lift off as one, leaving their nests. The flight off is usually silent, with the return including the usual calling.

The 2008 little tern breeding season report, refers to disturbance and notes (amongst other things) the following: ‘The most common disturbance this year was from dogs and dog walkers. Recent changes to the adjacent caravan sites have meant a much larger use by holiday

makers who bring their dogs and walk them on the beach. The difference between these “dog walkers” and local “dog walkers” is the turn over. Talk to a local “dog walker” and he understands the need to prevent disturbance and is likely to become an ally for ever more. The holiday makers change every week and each new batch needs to be informed of the likely disturbance they and their dogs can cause making the task endless’. This suggests that as far as little tern disturbance is concerned, it is holiday makers rather than residents from housing that are the main negative factor.

Although human disturbance (not defined) is listed as a cause of breeding success fluctuation, Hartlepool BC makes the presumption that there is no correlation between little tern breeding success and recreational disturbance as the former is relatively constant while the latter is highly variable. Other ecologically limiting factors must be involved. The little tern colony lies between the Crimdon Dene car park and North Sands, meaning that anyone intending to walk south must pass close to the enclosure. It is assessed that any increase in the frequency of people taking this route (caused by housing development) will not cause an additional impact, ie, maximum disturbance has already been reached at a lower level of usage. Hartlepool BC makes this assessment on the assumption that the colony is annually enclosed and this is a management action that could be part of a suite of actions funded through Planning Obligations.

It is widely acknowledged that the coast provides a strong attraction for recreation. The most accessible coastal locations in Hartlepool borough are already significantly used, particularly during favourable periods of weather and longer daylight hours (mainly spring to autumn). [See the Hartlepool Borough Council Open Space, Sport & Recreation Assessment Report]. These include Seaton Carew beaches, Newburn Bridge, Hartlepool Headland and Crimdon Dene. Recreational disturbance is already at or near 100% some of the time. For example, if 50 people prevent a flock of birds from settling on a stretch of beach, then that is LSE and 100% disturbance. If an extra ten people arrive on the beach, the disturbance is still 100%. In this scenario, an increase in visitors cannot increase LSE. However, it is important going forward to target reducing the rate of disturbance.

The Durham County Council Local Plan HRA found that increased human recreational disturbance within N2K sites can impact on bird assemblages either directly or indirectly through behavioural changes such as changes to feeding behaviour and physiological changes resulting from movement responses generated from disturbance which may have an impact on the local population. Recreational visitors to the Northumbria Coast SPA/ Ramsar and Teesmouth and Cleveland Coast SPA/ Ramsar are causing adverse indirect effects on the qualifying species recorded there (LSE). This is an issue during the breeding season, when a colony of little terns breed at Crimdon Dene and during the winter when disturbance can reduce feeding opportunities for other SPA qualifying species. Species which utilise sandy beach and mud habitats, such as sanderling and redshank are likely to be at particular risk, given these areas will be most easily accessed by members of the public. Traditional roost sites for species including oystercatcher are also at risk where they occur with zones of heavy recreational use.

While the beach undoubtedly has an attraction to some people, others will find inland sites as attractive and/ or more convenient, depending on where they live, the time they have and site accessibility. There are a number of alternative recreational sites within a few kilometres of each of the preferred housing application sites. These will absorb a proportion of the new recreational demand, probably comparative to the proportion of existing recreational use they attract.

Alternative recreational areas away from European Sites

- Hart to Haswell Local Nature Reserve (LNR)
- Greatham Beck LNR
- Summerhill Visitor Centre
- Family Wood (Burn Valley)
- The Public Right of Way (PROW) network.

Some parts of European Sites are promoted for visiting, including:

- Teesmouth National Nature Reserve (NNR)
- Durham Coast NNR
- Castle Eden Dene NNR
- Seaton Dunes and Common LNR
- Hart Warren Dunes LNR
- Many other areas within the European Sites are open to public access and serviced by the England Coast Path National Trail.

6.2.3.9 Conclusion

There is existing recreational use of the Teesmouth and Cleveland Coast SPA/ Ramsar and a similar percentage of new householders are likely to also recreationally use the site. The fact that SPA bird numbers appears from local studies to have decreased between 1995 and 2015 has been considered, but is not in itself a relevant factor under the precautionary principle. However, it is noted that recreational disturbance is likely to be only one factor in this decline, others being the reduced availability of prey on beaches polluted with coal deposits, climate change and adverse factors effecting birds elsewhere on the East Atlantic Flyway. The fact that different qualifying bird species utilise different parts of the shore for feeding, eg: sanderling on sandy beaches and purple sandpipers on rocky shores is an ecological fact. However, these species may roost away from their preferred substrate. The recent installation of anti quad bike/ motorbike barriers at the Brus tunnel and the landscaping of the coast linked to the development of the Britmag site in 2016, has already reduced the number of illegal motorised incursions (pers comm.).

Additional recreational use leading to disturbance **is assessed as causing LSE** for the Teesmouth and Cleveland Coast SPA/ Ramsar. The additional recreational use of all of the other N2K sites assessed, is concluded as being insignificant and does not trigger LSE.

6.3 Indirect LSE Conclusion

Analysis of the evidence leads to a number of conclusions. However, it is worth noting that evidence is rarely comprehensive and the assumptions made using statistics can never be perfect. Hartlepool BC has undertaken this assessment using the precautionary principle proportionate to the geographical and social scope of the Local Plan policies. Hartlepool BC assesses that:

- There is no direct LSE on any N2K site from Local Plan policies.
- The indirect impact of atmospheric pollution is insignificant for all N2K sites.
- The indirect impact of nutrient increase through dog faeces is insignificant for all N2K sites.
- The indirect impact of recreational disturbance is insignificant on all N2K sites except the Teesmouth and Cleveland Coast SPA/ Ramsar.
- The source (new housing) to receptor (SPA) pathway is established and **there is indirect LSE** of recreational disturbance on the Teesmouth and Cleveland Coast SPA/ Ramsar and requires mitigation.

7. Mitigation

7.1 Actions to avoid and mitigate recreational disturbance.

Avoidance and mitigation will be provided through three pathways:

- Strategic guidance from Hartlepool BC
- Hartlepool BC day to day service provision
- Planning obligations/ Developer contributions

7.2 Strategic guidance

The need for mitigation has been written into all relevant Hartlepool Local Plan policies including Quality of Place and Housing policies following consultation responses received to version 1 of this HRA. This puts mitigation onto a strategic basis.

Policy QP1 - new wording added to the policy pre-amble. The following paragraph has been added: 'The Habitat Regulations Assessment (HRA) stage 1 screening identified a likely significant adverse effect on the Teesmouth and Cleveland Coast Special Protection Area and Ramsar European Protected Site. This adverse impact would be caused through recreational disturbance of birds which are the interest features of the site, including a breeding colony of little terns in the summer and shorebirds in the autumn, winter and spring. The HRA established that at least some new residents of housing developments would visit the SPA/ Ramsar and that these additional visits would cause harm. Each housing development is responsible for mitigating potential harm and developers can ensure this through Planning Obligations by providing an adequate provision of Suitable Alternative Green Space (SANGS) to absorb new recreation, such as daily dog walking, on site and/or by providing a financial contribution to be spent on managing recreational pressures on the European Protected Site'.

The amended policy has a list of 17 issues for which Planning Obligations may be required and the following two have been added to ensure mitigation:

- Suitable Alternative Natural Green Space
- Mitigation for recreational disturbance on the Teesmouth and Cleveland Coast SPA/ Ramsar.

Policy LT5: Caravan Sites and Touring Caravan Sites. The need for Planning Obligations for static caravans has been added, as it is acknowledged that they are a pathway for recreational disturbance and will need to mitigate any negative impact. While no static caravan site is being actively sought, it is possible that one may come forward during the lifetime of the Local Plan.

Policy HSG4 (South West Extension) requires 50.92 Ha of multi-functional green infrastructure to be provided. Some of this will form SANGS which will encourage householders undertaking outdoor recreation (including dog walking) to stay on site.

Policy HSG5 (High Tunstall) plans for approximately 13.5 Ha of greenspace.

Policy HSG6 (Wynyard) plans for 8.99 Ha of greenspace. HSG7 (Elwick Village) plans for 0.4 Ha of greenspace. HSG8 (Hart Village) plans for 1.23 Ha of greenspace.

7.3 Hartlepool BC day to day service provision

7.3.1 Foreshore Management

Hartlepool BC maintains the beach and foreshore through Foreshore Management services. The Coast Protection Act 1949, established the regulatory framework for England's coastline and the Coast Protection Authorities. The Council is the designated Coast Protection Authority which 'shall have such powers and perform such duties in connection with the protection of land' to ensure the adequate 'coast protection' of the Borough. Foreshore management services include leisure activities, public events, a lifeguard service, paddling pools, dog control, beach cleaning and wildlife and countryside (NB: the Countryside & Rights of Way (CROW) Act 2000 places a duty on Local Authorities to conserve and enhance special interest features of Sites of Special Scientific Interest (SSSI) under Section 28 of the Wildlife and Countryside Act).

7.3.2 Controlling dogs

Some Dog Control Orders (DCO) [to be replaced by Public Open Space Orders (POSO)] have been put in place by Hartlepool BC to manage dog related issues. There are current Dogs on Leads Orders covering Seaton Dunes and Common LNR, Spion Kop LNR, the Lower Promenade on the Headland and the Headland Fish Quay gates area.

There are Dogs Exclusion Orders, for Seaton Carew Beach (May to September inclusive), Headland Fish Sands (May to September inclusive) and the area called Headland Block Sands, Lower Promenade and Paddling Pool (all year).

There are a number of locations where dogs are largely permitted to exercise freely and these include Hart to Haswell LNR, Greatham Beck LNR, Summerhill Visitor Centre and Family Wood (Burn Valley).

However, experience has shown that DCOs tend to be ineffective at preventing LSE as they are chiefly aimed at dog fouling issues and/or target the summer months rather than the critical SPA autumn, winter and spring period. They need to be backed up by robust enforcement and this has not always been the case as HBC responds to on-going budget pressures. Public awareness and education will be one of the actions that developer contributions will fund.

Hartlepool BC will investigate whether a PSPO could be legitimately used to control dogs. This will form part of the review of all DCOs in the borough which is required under the new legislation by 2017.

7.3.3 Public awareness

In order to mitigate recreational disturbance, beach users need to be aware of the importance of the coast for SPA/ Ramsar birds, need to understand the crucial times for birds and to understand how they can avoid disturbance. A Code of Conduct leaflet has already been produced and distributed as an action in the Teesmouth and Cleveland Coast European Marine Site Management Plan (through INCA). This needs to be publicised and distributed more widely. The Teesmouth National Nature Reserve has a number of information panels on site (managed by Natural England).

Hartlepool BC has received a Section 106 developer contribution for the Britmag housing development, for three interpretation panels to be erected north of Hartlepool Headland. These will be erected and additional developer contributions will be used to erect further information panels where necessary.

7.3.4 Monitoring: bird disturbance study

In 2014-2015, Hartlepool BC undertook a baseline survey to establish incidences of SPA bird disturbance along North Sands (Bond 2015). This was a requirement of the planning approval for a housing development at the Britmag site. A second disturbance survey will be undertaken once 75% of the new houses are occupied (or five years from the first resident moving in which was August 2016).

7.4 Planning obligations

Having accepted that there will be some level of LSE through recreational disturbance, housing developments of a significant size will need to provide and/or fund mitigation in the form of (at least) on-site SANGS provision and a financial developer contribution. A Supplementary Planning Document (SPD) is being prepared on Planning Obligations including developer contributions. This will include the need for financial contributions to mitigate for recreational disturbance.

7.4.1 Financial contributions

Amongst other things, developer financial contributions will be used to fund existing coastal management plans to the legal maximum of five contributions per project. These projects include:

- Durham Heritage Coast (which extends south to Hartlepool Headland and already manages the little tern wardening project at Crimdon Dene).
- Tees Estuary Partnership – Tees Estuary Management Plan/ Master Plan.
- Teesmouth and Cleveland Coast European Marine Site Management Plan (managed by INCA).
- Hartlepool BC Foreshore Management Services

7.4.1.1 Little tern wardening

Currently, the protection of the little tern breeding colony at Crimdon Dene is managed by the Durham Heritage Coast Project, relying on Heritage Coast and funding sourced by INCA. A number of reports are available on the INCA website at <http://www.inca.uk.com/>. The breeding colony (on the upper beach) is enclosed with 400m of post and mesh fencing. In some past years, an additional outer barrier of post and wire fencing has been erected to create a buffer. A warden's hut is erected each summer on the route from the Crimdon Dene car park to the beach. This is provided by the Durham Heritage Coast Project with planning permission granted by Easington Borough Council. A warden is employed, generally on an expenses only basis. A team of volunteers is recruited to help warden the colony. Hartlepool BC classes the continuation of wardening as an essential element of the mitigation package.

7.4.1.2 Wider SPA wardening

While the little tern wardening project addresses the issue of protecting the breeding colony, there is a further need to protect the site's shorebird interest which covers autumn and spring passage and wintering birds. Therefore financial contributions from developers should be used to fund year-round wardening which would include duties such as public engagement, enforcement of byelaws and PSPOs if appropriate, monitoring and reporting. As the Teesmouth and Cleveland Coast SPA/ Ramsar site extends beyond the southern limit of the Durham Heritage

Coast, such a scheme would need to be delivered through a different mechanism, such as the Teesmouth and Cleveland Coast European Marine Site Management Plan or a Hartlepool Foreshore Management Plan.

7.4.2 Suitable Alternative Natural Green Space

Recent guidance on Suitable Alternative Natural Green Space (SANGS) by Hampshire County Council, reports that dog owners travel up to an average distance of 400-500m to reach greenspace for dog-walking, where a suitable space is available as opposed to travelling by car to the coast (Hampshire County Council 2013). While it is acknowledged that this guidance is based on the situation in Hampshire and on the Thames Basin Heaths N2K sites, it is a useful indication in the absence of more local information. Hartlepool BC makes the presumption that the desire for dog owners to find a convenient dog exercising area is the same. However, Hartlepool BC also accepts that there is a strong pull towards beaches and that at least some dog owners will occasionally or regularly utilise coastal open spaces for exercising dogs. It is considered likely that residents of new housing will walk and/or exercise dogs regularly on cliffs and beaches if there are convenient walking routes with which to access the beach and because convenient parking areas exist near the shore. However, Hartlepool BC sees SANGS as a key tool to help with the management of recreational disturbance LSE.

7.4.3 Example of how mitigation has been secured to date (in the absence of appropriate policy wording).

Under HRA, individual development applications are classed as 'projects' and the onus is on the landowner promoting the site for development to demonstrate that there will be no harm to European Sites. The competent authority is responsible for producing a HRA and for securing adequate mitigation. The securing of SANGS and developer financial contributions (guided by policy QP1) is a mechanism applied in the development control planning process and Hartlepool BC has a number of recent examples.

The following mitigation has been proposed by applicants who have inquired about or submitted pre-application and planning applications to Hartlepool BC and Durham CC in the last few years.

- Creation of SANGS within housing schemes.
- SPA wide funding for wardening (including funding a specific little tern warden).
- Household information packs to inform new house owners of the European Sites and to tell them about alternative recreational options.
- Information boards at strategic locations adjacent to European Sites.
- Information boards at strategic locations within housing developments to encourage use of SANGS.

HRA (stage 1) and where required an AA (stage 2) have been submitted by Hartlepool BC and approved by Natural England for the housing applications below. All were able to demonstrate that the impacts could be mitigated to a point where there was no LSE. The fact that Natural England has approved the HRAs for these projects demonstrates that housing developments can be HRA compliant.

Table 24. Hartlepool housing applications.

Site	Houses	Planning Ref	Status
Nelson Farm	50	H/2015/0283	Submitted
Seaview Park	195	H/2015/0281	Submitted
Britmag	484	H/2013/0573	Granted at Public Inquiry
Land South of Elwick Rd, High Tunstall	1,200	H/2014/0428	Submitted
Hart Reservoir housing	52	H/2015/0354	Submitted

7.5 Mitigation Proposals Conclusion

Hartlepool BC assesses that with the above precautions and mitigation in place, LSE for the Teesmouth & Cleveland Coast SPA/ Ramsar is negated.

8. In-combination Assessment with Neighbouring Local Authority Local Plans

The HRA process requires that a plan or project is not just assessed on its own merits, but also in-combination with other plans and projects. This is particularly important as the N2K sites cover more than one local authority area and plans and projects outside of the immediate area may have an impact. This includes the Local Plans of neighbouring authorities. As direct LSE has been ruled out for all Hartlepool Local Plan policies, there can be no in-combination direct LSE with similar policies in other Local Authority Local Plans. However, indirect causes of LSE do need to be assessed with similar policies in other Local Authority Local Plans, to assess combined outcomes.

Each of the earlier Core Strategies of Stockton-on-Tees BC, Middlesbrough BC and Durham CC have been subject to a Habitats Regulations Assessment which have concluded, in each case, no adverse effect on internationally designated sites, either alone or in-combination, subject to mitigation within the plans. These in-combination assessments have taken into consideration the effects from the Hartlepool Local Plan (2006) which preceded the current consultation draft Hartlepool Local Plan. These HRAs probably did not adequately take into account the issue of indirect recreational disturbance on European Sites and none of these authorities have current Local Plans (see below).

8.1 The Tees Valley Joint Minerals & Waste DPD

The Hartlepool Local Plan should be read in conjunction with the Tees Valley Joint Minerals & Waste DPD, as this provides the policy guidance for the borough of Hartlepool on mineral and waste issues.

8.1.1 Policy EC4 Waste Transfer and Treatment

Land has already been allocated, through the Tees Valley Joint Minerals & Waste DPD, for large scale waste management facilities at Graythorpe and this DPD has itself been the subject of a Habitats Regulations Assessment. Policy EC4 confirms that no new waste management facilities will be approved beyond that allocation. The policy then sets out conditions that new facilities within the allocated area must meet including being contained within buildings and adequate screening. The policy also contains the condition that: 'Where appropriate, proposals will need to demonstrate that there will be no adverse impact on the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar site, or other European designated nature conservation sites, either alone or in-combination with other plans and programmes. Any necessary mitigation measures must be secured in advance of the development in order to meet the requirements of the policy'.

8.2 Sunderland City Council

Sunderland Local Plan: Core Strategy and Development Management Policies Draft Revised Preferred Options August 2013. Over 15,000 new homes are planned over the next 20 years.

8.2.1 City of Sunderland LDF Core Strategy, Draft Revised options, HRA Screening Report July 2013

This HRA covers the Sunderland Local Plan. It screens out all of the strategic policies as no LSE.

8.2.3 South Sunderland Growth Area

Sunderland City Council, through the Core Strategy, is proposing to bring forward a new growth area between Doxford Park, Tunstall and Ryhope known as South Sunderland Growth Area (SSGA). The South Sunderland area contains the largest proportion of the city's housing stock and has the potential capacity to meet a significant proportion of the city's future housing requirement. The SSGA has the potential to accommodate 2,800 - 3,300 new dwellings over the next 15-20 years and meet 20% of the city's future housing need, providing much needed family and executive housing within a high quality environment and setting. The SSGA has identified recreational disturbance as an indirect LSE and that there is little opportunity for SANGS within the allocated housing sites. The approach has been to set a 'Developer contribution' per house which will be used to fund mitigation.

8.3 Durham County Council

Durham County Council (DCC) has returned to the 'Regulation 18' stage of the Town and Country Planning (Local Planning) (England) Regulations 2012 (re-consultation) and as a consequence there is no current information to assess. In its earlier County Durham Plan work and subsequent HRA, LSE was identified and mitigation mechanisms including the provision of SANGS and developer financial contributions were recommended (detailed in a SPD). This HRA was approved by the Inspector.

8.4 Stockton-on-Tees Borough Council

Following a Duty to Cooperate meeting between HBC and Stockton-on-Tees Borough Council (SBC) it was noted that SBC has begun to review its evidence base with the intention to consult on preferred options later in 2016 and therefore there is little current information to assess. Stockton on Tees BC is planning for further new housing with the Regeneration and Environment Local Plan Publication draft (Feb 2015) covering this in policy H1 'New Housing Sites'. H1 says that the total number of dwellings, including new sites, safeguarded land for housing and re-affirmed commitments, is 8,789.

Barkers consultants have been engaged to undertake the HRA and this will need to assess the issue of increased recreational disturbance and mitigate for any increase in visitors to the coasts of both Redcar and Cleveland and Hartlepool boroughs. Each Local Authority should mitigate its own impacts.

8.5 Middlesbrough Borough Council

Middlesbrough Borough Council (MBC) is at an early stage with its Local Plan and so there is no information to assess. There has been long-term population decline in Middlesbrough since the 1960s and MBC wish to reverse this trend. The majority of the housing stock is low grade and there is a demand for middle and upper market sector housing. As at 2014, a net housing requirement of 6,970 dwellings were proposed for Middlesbrough for the period 2012 to 2029. A HRA has not been prepared but needs to assess the issue of increased recreational disturbance and mitigate for any increase in visitors to the coasts of both Redcar and Cleveland and Hartlepool boroughs. Each Local Authority should mitigate its own impacts.

8.6 Redcar and Cleveland Borough Council

It is noted that Redcar and Cleveland Borough Council (R&BC) is currently preparing a consultation draft Local Plan with the intention to consult on preferred options later in 2016. Policy H3 covers Housing Allocations and details a total supply needed of 1,050 houses. Initial work on the HRA has identified LSE caused by increased recreational disturbance and mitigation mechanisms, including the provision of SANGS and developer financial contributions, are likely to be recommended (detailed in a SPD). Financial contributions will be used to fund actions based on a Foreshore Management Plan. Each Local Authority should mitigate its own impacts.

8.7 Shoreline Management Plan 2

The Defra/ Environment Agency Shoreline Management Plan 2 for Hartlepool is the NE SMP2. In this report, the Hartlepool coastline is broken into three sections and three epochs are planned for – from 2005 to 2025, from 2025 to 2055 and from 2055 to 2105. The aspirations of the NE SMP2 are supported by the Hartlepool Local Plan policy CC1 'Minimising and adapting to climate change'.

Table 25. Shoreline management options.

SMP2 Management area policy unit	2005-2025	2025-2055	2055-2105
Crimdon Valley	NAI	NAI	NAI
North Sands	HTL	HTL	MR
Headland	HTL	HTL	HTL
Hartlepool	HTL	HTL	HTL
Seaton Carew North	HTL	HTL	HTL
Seaton Carew	HTL	HTL	HTL
Seaton Sands	NAI	NAI	NAI
North Gare	HTL	HTL	HTL
North Gare Sands	NAI	R	R



Key:

Inner line – policy up to 2025
Middle line – policy up to 2055
Outer line – policy up to 2105

Green - NAI – No Active Intervention
Red - HTL – Hold the Line
Blue - MR – Managed Realignment
None – R – Retreat or Realignment

Within the Local Plan period the two shoreline management options are No Active Intervention and Hold the Line (see map above).

The Hold the Line policy for the urban frontages, will lead to coastal squeeze and pressure on the SPA/ Ramsar birds as the area of foreshore is reduced. The SMP acknowledges that this is an inevitable consequence, but plans to allow the shore to expand elsewhere by following the policy of No Active Intervention in undeveloped areas of the coast. Mitigation for coastal squeeze has been delivered by the Environment Agency through the creation of approximately 25 Ha of inter-tidal habitat in Hartlepool on the Saltern Wetlands Local Wildlife Site. The Environment Agency has plans for a further 8 Ha of inter-tidal habitat creation to the NW of Salterns at NZ 503-262.

No Active Intervention will allow coastal erosion to bite into the dunes of North Sands and North Gare, although to some extent this dynamic system will provide a degree of control as well as evolving as dune systems.

As a project example, the cliff edge adjacent to the northern portion of the Britmag housing development has been shaped to encourage dune creation; the erection of chestnut paling fencing will allow for the capture of loose sand to build new dunes. This is an example of how the Local Plan policy CC1 'Minimising and adapting to climate change' will work – the relevant paragraph says 'The Council will work closely with key agencies including the Environment Agency and Natural England to ensure that appropriate solutions are identified to address such issues'.

8.8 Marine Management Organisation (MMO), North East Inshore and Offshore Marine Plan Areas, 2016.

The Marine Planning framework was set out under the Marine and Coastal Access Act 2009. Hartlepool falls within the North East area. Marine planning guides what happens in the marine area, making sure the right activities are carried out in the right place. It enables sustainable economic growth whilst protecting the environment and heritage, recognising the needs of all. This process is at an early stage. In due course issues, visions and objectives, options and policies will be drafted and consulted on. A Sustainability Appraisal and HRA will be undertaken. The Marine Plan is not at the stage of needing an in-combination assessment at this stage.

9. Overall Conclusion

All 86 policies in the Hartlepool Local Plan have been assessed for their potential to have an adverse 'LSE' on European Sites. The policies have been assessed against the documented conservation objectives, current condition of SSSI units and management plan actions for nationally and internationally designated sites.

While the distance of 6km from a European Site has frequently been used in some HRAs for projects, HBC has only used this as a guide. Rather, HBC has used the source-pathway-receptor model to assess for LSE – regardless of the distance. However, it is true to say that LSE is weakened over greater distances, for example when assessing the impact of Hartlepool generated vehicular emissions on the North York Moors National Park N2K sites.

Where appropriate, policies with similar issues or combining to potentially produce a greater adverse impact were considered together. Where appropriate, reference was also made to neighbouring plans and projects, for example the Stockton-on-Tees BC as well as the HBC housing allocations for the Wynyard Estate were assessed in-combination.

All of the consultation Local Plan policies have been screened through the HRA stage 1 assessment process. Screening has been done in two parts – an initial screening (A) to dismiss clear-cut cases, followed by a second screening (B) which looked at more complex cases. Some of the latter were subsequently screened out following changes or additions to policy wording - recommendations for these have been applied by the Planning Policy Team.

Wording was amended or added to the following policies (Section 5.2):

- Policy CC1 – wording changed from '... preventing coastal squeeze' to '...managing coastal squeeze'.
- Policy EMP6 - Additional wording recommended for the policy which will provide adequate compensation for any loss. The policy has been amended to include under the phrase 'will only be considered where:' the words: 'any above surface structures are limited in scale, not visually prominent and will be designed with flat roofs to replicate any habitat lost'.
- Policy RC12 - the policy has been altered with the statement 'Where appropriate the Council will seek the provision of interpretation to increase public understanding of the Teesmouth and Cleveland Coast SPA and Ramsar'.

- Policy RC14 - the policy has been altered to with the statement 'Where appropriate the Council will seek the provision of interpretation to increase public understanding of the Teesmouth and Cleveland Coast SPA and Ramsar'.
- Policy LT5 - policy wording in Policy QP1 - Planning Obligations has been strengthened so that a financial developer contribution is required.

Following stage 1, LSE could not be ruled out for seven policies. These seven policies were then subjected to a HRA stage 2 Appropriate Assessment. The AA examined the issues, assessed and analysed evidence, drew conclusions and identified mitigation.

A number of direct and indirect adverse impacts were investigated. No direct LSE (habitat loss/ species deaths) was established. Indirect LSE impacts of increased air pollution (due to the increase in road traffic predicted to occur as a result of Policy HSG1, New Housing Provision) and nutrient increase from dog faeces were both assessed as not causing LSE.

One indirect effect (disturbance caused by increased recreational use) was assessed to lead to LSE. LSE has been mitigated through policy wording changes which were discussed with and implemented by the Planning Policy Team.

Wording was amended or added to the following policies (Section 7):

Policy QP1 - new wording added to the policy pre-amble. The following paragraph has been added: 'The Habitat Regulations Assessment (HRA) stage 1 screening identified a likely significant adverse effect on the Teesmouth and Cleveland Coast Special Protection Area and Ramsar European Protected Site. This adverse impact would be caused through recreational disturbance of birds which are the interest features of the site, including a breeding colony of little terns in the summer and shorebirds in the autumn, winter and spring. The HRA established that at least some new residents of housing developments would visit the SPA/ Ramsar and that these additional visits would cause harm. Each housing development is responsible for mitigating potential harm and developers can ensure this through Planning Obligations by providing an adequate provision of Suitable Alternative Green Space (SANGS) to absorb new recreation, such as daily dog walking, on site and/or by providing a financial contribution to be spent on managing recreational pressures on the European Protected Site'.

The amended policy has a list of 17 issues for which Planning Obligations may be required and the following two have been added to ensure mitigation:

- Suitable Alternative Natural Green Space
- Mitigation for recreational disturbance on the Teesmouth and Cleveland Coast SPA/ Ramsar.

Policy LT5: Caravan Sites and Touring Caravan Sites. The need for Planning Obligations for static caravans has been added, as it is acknowledged that they are a pathway for recreational disturbance and will need to mitigate any negative impact. While no static caravan site is being actively sought, it is possible that one may come forward during the lifetime of the Local Plan.

Policy HSG4 (South West Extension) requires 50.92 Ha of multi-functional green infrastructure to be provided. Some of this will form SANGS which will encourage householders undertaking outdoor recreation (including dog walking) to stay on site.

Policy HSG5 (High Tunstall) plans for approximately 13.5 Ha of greenspace.

Policy HSG6 (Wynyard) plans for 8.99 Ha of greenspace. HSG7 (Elwick Village) plans for 0.4 Ha of greenspace. HSG8 (Hart Village) plans for 1.23 Ha of greenspace.

HRA finding

Subsequent to the above process, the Hartlepool Local Plan is assessed as not having an adverse effect on the integrity of internationally designated sites and is, therefore, consistent with achieving sustainable development in accordance with the NPPF. This ends the HRA process and there is no need for the Local Plan to go to HRA stage 3.

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Appendix 1. SSSI condition statement tables

Tees & Hartlepool Foreshore & Wetlands SSSI, Natural England report on condition.

Habitat	Sector	Date assessed	Condition status	Comments
LITTORAL SEDIMENT	001 North Sands & Headland	31/03/2014	Unfavourable - Declining	There has been a significant decline in the population of Sanderling. The latest WeBS Alerts analysis for Teesmouth and Cleveland Coast SPA suggests that site-specific factors are driving the decline. There has also been a significant decline in the population of Purple Sandpiper. There is no WeBS Alert analysis for Teesmouth and Cleveland Coast SPA, but there is one for Northumbria Coast SPA. It is not clear whether the decline in Purple Sandpiper trend is following the regional and national trends (or it is more or less severe). Further investigation is required.
SUPRALITTORAL SEDIMENT	002 West harbour roost island.	31/03/2014	Unfavourable - No change	There has been a significant decline in the population of Purple Sandpiper. There is no WeBS Alert analysis for Teesmouth and Cleveland Coast SPA, but there is one for Northumbria Coast SPA. It is not clear whether the decline in Purple Sandpiper trend is following the regional and national trends (or it is more or less severe). Further investigation is required.
INSHORE SUBLITTORAL SEDIMENT - CL	003 Greenabella Marsh.	31/03/2014	Unfavourable - Declining	The assessment was made using baselines for Shelduck, Teal and Redshank from Leahey (1996). These are not recognised in the current Favourable Condition Table, but a new version is being developed. There has been a significant decline in Shelduck and this appears to be the result of site-specific factors.
FEN, MARSH AND SWAMP - Lowland	004 Dormans Pool.	20/03/2009	Favourable	The unit was viewed from its eastern boundary and the western access track to the Teesmouth Bird Club hide. Water levels remain high and areas of swamp have increased, especially along the southern and eastern boundaries. There has been no cattle grazing since FMD in 2001. Despite this the unit was assessed as favourable due to the level of bird usage

				supported. Across units 4 and 5 shoveler populations have fallen marginally; teal, wigeon and lapwing numbers have also fallen, but golden plover numbers have doubled and gadwall numbers have risen 5-fold (figures based on Wetlands Bird Survey (WeBS) maxima bird counts August 2004 - March 2009)
FEN, MARSH AND SWAMP - Lowland	005 Saltholme Pools.	20/03/2009	Favourable	The unit was assessed from the A178 which bisects it, and from the Saltholme Pools hide on RSPB Saltholme. The site continues to be grazed, which is clearly beneficial. The clay island on Back Saltholme has been recently refurbished to combat erosion caused by wave swell, and supports significant numbers of breeding common tern. The unit continues to support significant numbers of waterbirds. Across units 4 and 5 shoveler numbers have fallen marginally (8% to 122.8); teal, wigeon and lapwing numbers have also fallen (-43% to 291.4; -18% to 770.6 and -28% to 2633.4 respectively). However, golden plover numbers have doubled to 1446.8 and gadwall numbers have increased 5-fold to 168.8. All numbers are taken from WeBS 5yr means August 2004 - March 2009.
FEN, MARSH AND SWAMP - Lowland	006 Haverton Hole.	20/03/2009	Favourable	The unit was viewed from the capped, grassed over former tip mound immediately to the south. The mosaic of shallow pools and reedbeds was in good condition, and water levels were high. The unit was therefore assessed as being in favourable condition.
LITTORAL SEDIMENT	007 North Tees Mudflats.	31/03/2014	Unfavourable - Declining	The assessment was made using baselines for Shelduck, Redshank and Total Waterbirds that have been developed for a new version of the Favourable Condition Table. There has been a significant decline in Shelduck and this appears to be the result of site-specific factors.

Seal Sands SSSI, Natural England report on condition.

LITTORAL SEDIMENT	001 Seal Sands.	06/01/2016	Unfavourable - Declining	<p>Knot and shelduck. The high tide counts for knot and shelduck have declined significantly and are now well below the 50% condition threshold. The low tide (foraging) counts for knot and shelduck have also declined significantly and are less than 50% of the threshold counts in both datasets (NNR and WeBS low tide counts). BTO WeBS alerts were consulted. The Seal Sands shelduck decline is clearly at odds with regional and national trends so it is likely that there are local factor(s) driving the decline. The decline appears to be continuing, so shelduck is considered to be in unfavourable, declining condition. It is not so clear that local factors are driving the decline in knot, because knot has also declined across the North East. However, the decline on Teesmouth is more severe than the regional trend, which suggests that there are additional pressure(s) operating. The numbers of knot appear to be continuing to decline, so knot is also considered to be in unfavourable, declining condition. Redshank. The high tide count is currently very similar to the FCT baseline (95% of baseline), although this statistic masks population changes in the intervening years. Low tide redshank counts have declined in both datasets, but much less strongly in the NNR dataset. The NNR low tide data is based on many more seasons of data. In addition it includes autumn counts, which is the season of peak redshank numbers (typically between August and October). Although NNR low tide data do not include the intertidal project, this unit of the SSSI (Unit 3) only supports a small proportion of the total Seal Sands population. It is therefore considered that the NNR low tide data provides the most reliable overall trend. Unfortunately redshank has not been evaluated for WeBS alerts at Teesmouth and Cleveland Coast, but regional and national trends are available. The national trend is broadly stable, but recent numbers are down from those in the 90s. The regional trend shows a slight increase overall, with recent numbers lower than peaks in the 80s and 2000s. Redshank currently meets the population threshold target and is assessed as being in favourable condition. However, the number of redshank recorded on NNR low tide counts has declined</p>
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				throughout the dataset and this looks to be continuing. Numbers are approaching the 50% threshold and this should be closely monitored.
LITTORAL SEDIMENT	002 Seal Sands Reclamation.	16/07/2010	Destroyed	This unit comprises the Seal Sands Emergency Access Road, owned and maintained by PD Ports for the purposes of evacuating vehicles and staff from the Seal Sands industrial area in the event of emergency. The notified habitat type listed in the FCT is littoral sediment; none is present in this unit and there is no possibility of reinstatement. Denotification of the unit is therefore recommended.
LITTORAL SEDIMENT	003 Intertidal Project.	06/01/2016	Favourable	See full report The high tide data show that shelduck numbers have remained broadly stable on the intertidal project in contrast to the significant decline on Seal Sands. Given this stability and that no obvious habitat changes have occurred on the intertidal project it is considered that unit 3 is favourable for shelduck. The trend in redshank numbers on the intertidal project is similar to that on the main mudflat and is therefore considered to have the same condition, i.e. favourable, but with recent decline. Knot have never regularly used the intertidal project.
LITTORAL SEDIMENT	006 Seal Sands Reclamation.	20/11/2009	Unfavourable - No change	The Unit does not support populations of the notified species (shelduck, knot and redshank), having been reclaimed from tidal influence in the 1970s and 1980s.
LITTORAL SEDIMENT	007 Seal Sands Reclamation.	16/07/2010	Destroyed	This unit is entirely occupied by the BP CATS natural gas processing facility. The notified habitat type featured within the FCT for Seal Sands SSSI is littoral sediment; none of this habitat exists within the unit, and there is no possibility of reinstatement. The unit should therefore be considered for de-notification.

Seaton Dunes and Common SSSI Natural England report on condition

SUPRALITTORAL SEDIMENT	TOM CHARMAN	001	1010041	69.4569	0.16	01/11/2013	Unfavourable - No change	Sanderling and Turnstone have decreased by 75% and 86% respectively from levels at notification. While short-stopping may be contributing to the decline it appears that other factors are likely to be significant. Potential factors include recreational disturbance, sediment changes and algal blooms.	
SUPRALITTORAL SEDIMENT	TOM CHARMAN	002	1010035	43.6501	0.00	17/09/2012	Unfavourable - Recovering	Sea buckthorn (<i>Hippophae rhamnoides</i>) clearance programme under CES agreement is ongoing.	
LITTORAL SEDIMENT	TOM CHARMAN	003	1028178	69.794	0.00	05/03/2013	Favourable	Appropriate management in place to ensure FCT criteria is being met - monthly WeBS counts show a significant increase in numbers of curlew,	

								lapwing and wigeon in comparison to 2011/12 season.	
LITTORAL SEDIMENT	TOM CHARMAN	004	1028179	26.788	26.79	17/09/2012	Favourable	Meeting botanical objectives <i>Festuca rubra</i> and <i>Juncus gerardii</i> abundant. <i>Carex flacca</i> and <i>Glaux maritime</i> frequent. Also found <i>Carex distans</i> present at 3 stops which is typical of SM16 community. Other species include <i>Dactylorhiza purpurella</i> and <i>Dactylorhiza fuchsia</i> . Figures for sanderling and turnstone have significantly decreased.	
SUPRALITTORAL SEDIMENT	TOM CHARMAN	005	1028180	24.2724	24.27	17/09/2012	Favourable	Meeting botanical objectives on fixed dune with 8 target species recorded at occasional or higher frequency. Failed on saltmarsh vegetation composition; however 2 species were found to be dominant and one abundant, therefore species diversity is more of an	

								issue than quantity. Figures for sanderling and turnstone have decreased significantly.	
SUPRALITTORAL SEDIMENT	TOM CHARMAN	006	1028181	71.2563	71.26	01/11/2013	Unfavourable - No change	Sanderling and turnstone have decreased by 75% and 86% respectively from levels at notification. While short-stopping may be contributing to the decline it appears that other factors are likely to be significant. Potential factors include recreational disturbance, sediment changes and algal blooms.	lack of corrective works inappropriate scrub control
SUPRALITTORAL SEDIMENT	TOM CHARMAN	007	1028182	8.3681	0.00	01/11/2013	Unfavourable - No change	Sanderling and turnstone have decreased by 75% and 86% respectively from levels at notification. While short-stopping may be contributing to the decline it appears that other factors are likely to be significant. Potential factors include recreational disturbance, sediment changes and	

								algal blooms.	
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Durham Coast SSSI – condition status:

<https://designatedsites.naturalengland.org.uk/SiteUnitList.aspx?SiteCode=S1000255&SiteName=durham%20coast&countyCode=&responsiblePerson=>

The only one of the 37 sectors of the Durham Coast SSSI that is in Hartlepool Borough is N° 43.

SSSI Sector	Sector name	Condition status	Condition threat	Habitat type	Area (Ha)	OS grid ref
43	Hart Warren Dunes	Unfavourable-Recovering	No Identified Condition Threat	Supralittoral Sediment	15.71	NZ 491-364

Appendix 2. Natural England guidance on scoring policies from: The HRA of Local Development Documents (2009).

NB: to simplify this complicated scoring system, HBC has used single A, B, C and D categories.

Only negative effects need to be considered here because the European Court of Justice ruled that only effects that could undermine the conservation objectives of a European site are considered likely to have significant effects. There are likely to be five types of options, policies and proposals in the plan that could have **no negative effect at all** on any European site, either alone or in-combination with other policies, plans or projects, as shown in Table 1 below. Deciding which policies, if any, can be assigned to A4 in Table 1 will be a matter of judgement on a case by case basis, where the assessor is sure that they would not have an adverse effect on any European site. Examples of such policies may be those that steer development away from the coast, or from rivers and their floodplains, or away from other concentrations of European Sites and associated sensitive areas. Elements of the plan can only be assigned to A5 in Table 1 where no development could occur through the policy itself, because the development is implemented through later policies in the same plan, which are more specific and therefore more appropriate to assess for their potential effects on European Sites. These kinds of policies may be found in a plan's Strategy, for example, where it states that there is a need for a broad quantity of housing or employment development but makes no proposal as to how or where the

development is to be provided, delegating this to a more specific policy in a later chapter or section of the plan, which of course, will be subject to more detailed appraisal.

Category A: No negative effect

Table 1

A1 Options / policies that will not themselves lead to development e.g. because they relate to design or other qualitative criteria for development, or they are not a land use planning policy.

A2 Options / policies intended to protect the natural environment, including biodiversity,

A3 Options / policies intended to conserve or enhance the natural, built or historic environment, where enhancement measures will not be likely to have any negative effect on a European Site,

A4 Options / policies that positively steer development away from European Sites and associated sensitive areas

A5 Options / policies that would have no effect because no development could occur through the policy itself, the development being implemented through later policies in the same plan, which are more specific and therefore more appropriate to assess for their effects on European Sites and associated sensitive areas.

Category B: No significant effect

Secondly, the screening process may identify an option or policy or proposal that could have an effect but would not be likely to have a significant (negative) effect on a European site (alone or in-combination with other plans or projects) because the effects are trivial or 'de minimis', even if combined with other effects. Identifying such policies or proposals needs to be approached with caution, so as to ensure compliance with the requirements for 'in-combination' effects and the application of the precautionary principle, but such policies may be identified.

Category C: Likely significant effect alone

Thirdly, the screening process identifies any options, policies or proposals that would be likely to have a significant effect alone. Once identified, such options, policies or proposals should be removed from the plan, or the plan otherwise changed, to avoid the likelihood of significant effects, see further below. If not, the plan must be taken forward for an appropriate assessment. The reasons why options, policies or proposals may affect a European site alone are shown in Table 2. As indicated in C5 in Table 2, this analysis will check for any proposals that could have the effect of **blocking options or alternatives** to future proposals that would then have a negative effect on a European site, which could have been avoided if the option or alternative was still available, for example a development allocation that may eliminate a possible alternative route for a new road or pipeline. The assessor should ask a question along these lines where a development proposal is anywhere in the vicinity of a European site "*Are there any other known development or infrastructure projects, at any stage of consideration, that may need to be located on or close to this location, either as a preferred or alternative option, that could be blocked, precluded or impeded by this proposal?*"

Table 2

Category C: Likely significant effect alone

C1 The option, policy or proposal could **directly affect** a European site because it provides for, or steers, a quantity or type of development onto a European site, or adjacent to it.

C2 The option, policy or proposal could **indirectly affect** a European site e.g. because it provides for, or steers, a quantity or type of development that may be very close to it, or ecologically, hydrologically or physically connected to it or it may increase disturbance as a result of increased recreational pressures.

C3 Proposals for a **magnitude of development** that, no matter where it was located, the development would be likely to have a significant effect on a European site.

C4 An option, or policy that makes provision for a quantity / type of development (and may indicate one or more broad locations e.g. a particular part of the plan area), but the effects are uncertain because the detailed location of the development is to be selected following **consideration of options in a later, more specific plan**. The consideration of options in the later plan will assess potential effects on European Sites, but because the development could possibly affect a European site a significant effect cannot be ruled out on the basis of objective information.

C5 Options, policies or proposals for developments or infrastructure projects that could **block options or alternatives** for the provision of other development or projects in the future, which will be required in the public interest, that may lead to adverse effects on European Sites, which would otherwise be avoided.

C6 Options, policies or proposals which **depend on how the policies etc are implemented** in due course, for example, through the development management process. There is a theoretical possibility that if implemented in one or more particular ways, the proposal could possibly have a significant effect on a European site.

C7 Any other options, policies or proposals that would be **vulnerable to failure** under the Habitats Regulations at project assessment stage; to include them in the plan would be regarded by the EC as 'faulty planning'.

C8 Any other proposal that may have an adverse effect on a European site, which might try to pass the tests of the Habitats Regulations at project assessment stage by arguing that the **plan provides the imperative reasons** of overriding public interest to justify its consent despite a negative assessment.

As indicated in C7 above, the analysis will check for any proposals that are doomed or vulnerable to failure at a later stage. The assessor should ask a question along these lines: *"is this proposal vulnerable to failure because of its actual or possible adverse effects on a European site and, if so, is it in the public interest to retain it in the plan, given the prospect of it being incapable of implementation?"*

Category D: Likely significant effects in-combination

Fourthly, the screening process identifies any options, policies or proposals that would be likely to have a significant effect in-combination. The policies or proposals should be removed from the plan, or the plan otherwise changed, to avoid the likelihood of significant effects. If not, the plan must be taken forward for an appropriate assessment, including the relevant combination. The combination could be the cumulative effects of proposals, in the plan itself, and/or in other plans or projects. Any element of the plan that could have an effect but would not be likely to have a significant effect alone should be assessed in-combination with other elements of the plan (internally) for its cumulative effects and other relevant plans and projects (externally) that may add to the effects of the plan in a relevant way. Reasons why policies or proposals may affect a European site in-combination are shown in Table 3.

Table 3

Category D: Likely significant effect in-combination

D1 The option, policy or proposal alone would not be likely to have significant effects but if its effects are combined with the effects of other policies or proposals **provided for or coordinated by** the LDD (internally) the **cumulative** effects would be likely to be significant

D2 Options, policies or proposals that alone would not be likely to have significant effects but if their effects are **combined with the effects of other plans or projects**, and possibly the effects of other developments provided for in the LDD as well, the combined effects would be likely to be significant

D3 Options or proposals that are, or could be, part of a **programme or sequence of development** delivered over a period, where the implementation of the early stages would not have a significant effect on European Sites, but which would dictate the nature, scale, duration, location, timing of the whole project, the later stages of which could have an adverse effect on such sites.

Appendix 3. Further information on atmospheric pollution from the Natural England report NECR199.

Recent transect studies provide further evidence of the impacts on individual species from exposure to nitrogen oxides (NO_x) and nitrogen dioxide (NO₂) associated with vehicle emissions. These impacts are greatest within the first 50-100m from roads but may be discernible at greater distances. The studies also evidence that traffic emissions are a significant source of metal contamination, although it is unlikely to present a significant immediate toxic risk to plants.

The findings of many studies, undertaken since 2004, of the effect of nitrogen emissions from road traffic on habitats suggest that NO₂, rather than other forms of nitrogen deposition, is the likely driver of changes in roadside plant communities. All of the studies reinforce that differential effects may lead to changes in competitive advantage between species affecting the composition of vegetation, management of roadside sites and nature conservation. The targeted literature search did not find any recent studies of the impact of road traffic emissions on below-ground

biodiversity. However, a number of field studies have sampled and analysed soils, and consistently demonstrate that heavy metal concentrations from vehicle emissions decline within 5–10m and may not be discernible beyond 50m from roads.

The targeted literature search only located one additional study that specifically addressed impacts on plant-insect interactions. While other studies evidence that vehicle emissions are a significant source of metal contamination for roadside vegetation, they do not add weight to concerns about the impact of heavy metals on the wildlife food chain.

Appendix 4. Report of dog waste (abstract)

Lowe, Christopher Nathan, Williams, Karl S, Jenkinson, Stephen and Toogood, Mark (2014) *Environmental and social impacts of domestic dog waste in the UK: investigating barriers to behavioural change in dog Walkers*. International Journal of Environment and Waste Management, 13 (4). pp. 331-347. ISSN 1478-9876

Abstract

This study sought to investigate the behaviour and attitudes of dog walkers to picking up and disposing of dog foul, with a specific focus on bagged dog waste. Two research methods were utilised. The first explores locational and social factors influencing dog walkers' behaviour in picking up and disposing of dog faeces. Dog waste audits were conducted on popular dog walking paths in Lancashire. Secondly, the results were used to deliver an online national dog walking survey. Results of the audits suggested that availability of bins, path morphology, visibility, and path location are key factors in determining the occurrence of dog faeces. In the survey a key factor influencing behaviour was the belief that clearing up after dogs is the "right thing to do" and this was associated with an awareness of health risks. Typologies of dog walker are also proposed heuristically, ranging from those dog walkers that are 'proud to pick up' who will pick up in any location, through those who make contextual judgements about where and when it could be permissible to leave dog waste, to the 'disengaged' who will not pick up even if they are aware of the health and environmental consequences. The study advocates active engagement of dog walkers in tackling this contested, potentially environmentally damaging issue.