



Northumberland
County Council

**HABITATS REGULATIONS
ASSESSMENT REPORT
JANUARY 2021**

OF

**THIRSTON NEIGHBOURHOOD DEVELOPMENT
PLAN 2020 - 2036
REGULATION 15 SUBMISSION PLAN**

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Habitats Regulations Assessment Report, January 2021 of Thirston Neighbourhood Development Plan 2020 - 2036 Regulation Submission Plan		
Version & Date	Assessing Officer	Supervising Officer
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1. Introduction

Purpose of the Habitats Regulations Assessment Report

- 1.1 Thirston Parish Council are leading the preparation of a neighbourhood development plan (the Plan) to provide locally specific planning policies intended to address issues identified as being important to the local community, particularly where those issues are perceived as not being adequately addressed through existing planning policies.
- 1.2 As the 'competent authority' under the Conservation of Habitats and Species Regulations 2017, Northumberland County Council is required to assess development plans through the HRA process. The purpose of a HRA is to assess possible effects of development plans on the nature conservation interests of sites designated under the Habitats and Wild Birds Directives. These sites consist of Special Areas of Conservation, Special Protection Areas and also include Ramsar Sites. The HRA process is an iterative process and the integration of the HRA process as part of the preparation of development plans is fundamental to the plan making process as policies in the plan can potentially affect designated sites.
- 1.3 HRA is an iterative process and the remaining stages will be completed alongside and will inform preparation of the Plan. The screening opinion provided in this Report will be reviewed once the Plan is submitted to the County Council to ensure that any revisions to policies arising following the any additional stages do not result in any variation to this opinion.

Format of the Habitats Regulations Assessment Report

- 1.4 This HRA Report establishes the scope of and the process for completing the HRA of the Thirston Neighbourhood Development Plan 2020 - 2036 Regulation 15 Submission Plan (January 2021) and undertakes an assessment of the Plan. The HRA Report includes the following:
 1. HRA requirements and process.
 2. Stage 1A: Identifies the European sites.
 3. Stage 1B: Identifies the Trend Analysis.
 4. Stage 1C: Analysis of proposals and policies in the Thirston Neighbourhood Development Plan - Identification of Likely Significant Effects
 5. Stage 1D: Consideration of other plans and projects
 6. Stage 2: Appropriate Assessment
 7. Conclusion
 8. BibliographyAppendices

Habitats Regulations Assessment Consultation

- 1.5 It is a requirement of the Habitats Regulations to consult the appropriate nature conservation statutory body (Natural England). Consultation has taken place and Natural England confirm their agreement with the County Council, in their letter dated 17th February 2021 that the Thirston Neighbourhood Development Plan can be screened out of further stages of assessment. The letter is attached at Appendix 1. Further consultation may be undertaken subject to the inclusion of modifications to the Plan. The comments of Natural England at this stage relate solely to the Habitats Regulations Assessment. Further comments may be provided in relation to Sites of Special Scientific Interest.
- 1.6 This HRA report will be issued to Thirston Parish Council and the Steering Group to assist in supporting the submission of their Plan to the County Council and to assist the independent examination of the Plan in due course.

2. Habitats Regulations Assessment Requirements and Process

- 2.1 As a member of the European Union, the UK is bound by the terms of the Council Directive 79/409/EEC on the Conservation of Wild Birds (the Birds Directive) and the Council Directive 92/43/EEC on the conservation of natural habitats and wild flora and fauna (the Habitats Directive). These are implemented in the UK through the Conservation (Natural Habitats &c) Regulations which provide for the protection of areas of European importance for wildlife, in the form of Special Areas of Conservation (SACs), designated under the Habitats Directive, and Special Protection Areas (SPAs), designated under the Birds Directive. Collectively, these are termed European sites, and the overall network of European sites is termed Natura 2000.
- 2.2 The UK is also a signatory to the Convention on wetlands of international importance especially as waterfowl habitat, which was signed in Ramsar, Iran in 1971. Areas designated under this Convention are called Ramsar sites. Although Ramsar sites are not European sites as a matter of law, the Government has chosen as a matter of policy to protect and manage them by applying the same procedures to them. Consequently, Ramsar sites are treated as European sites in practice.
- 2.3 Articles 6(3) and 6(4) of the Habitats Directive states the following concerning European sites:

“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”

If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.”

2.4 Regulation 105(1) of the Conservation of Habitats and Species Regulations 2017 states that

“Where a land use plan -

(a) is likely to have a significant effect on a European site in Great Britain 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 the site, the plan-making authority for that plan shall, before the plan is given effect, make an appropriate assessment of the implications for the site in view of that site’s conservation objectives.”

Regulation 106 of the Regulations states;

“106.—(1) A qualifying body (i.e. Parish Council, or body designated as a Neighbourhood Forum) which submits a proposal for a Neighbourhood development plan must provide such information as the competent authority may reasonably require for the purposes of the assessment under regulation 105 or to enable it to determine whether that assessment is required.”

2.5 The purpose of an HRA is to demonstrate that a land-use plan (or other plan or project) will not have any adverse effects on the integrity of any European sites. The assessment determines whether the plan would adversely affect the integrity of any European site in terms of its conservation objectives. Where adverse effects are identified alternative solutions should be identified and the plan modified to avoid any adverse effects. The Planning Authority can adopt the plan only after having ascertained that it will not adversely affect the integrity of a European site.

2.6 When preparing a suite of development plan documents, it is important that the HRA is undertaken in a way that is proportionate to the level of the document. The European Commission’s own guidance on the application of the test of likely significant effect accepts that policies in a plan that are no more than general policy statements or which express the general political will of an authority cannot be likely to have a significant effect on a site.¹

2.7 This issue (for Local Plans) has also been addressed in the High Court case of Feeney, in which the judge stated that:

“A Local Plan is a high level strategic document and the detail falls to be worked out at a later stage. Each appropriate assessment must be

¹ European Commission, 2000, *Managing Natura 2000 Sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC* section 4.3.2 at

http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/provision_of_art6_en.pdf

commensurate to the relative precision of the plans at any particular stage and no more. There does have to be an appropriate assessment at the Local Plan stage, but such an assessment cannot do more than the level of detail of the strategy at that stage permits”²

- 2.8 Therefore, there is a balance to be struck between being sufficiently rigorous in the assessment of potential effects, and undertaking a lot of unnecessary work or even causing a plan to fail the appropriate assessment test of ‘adverse effect on site integrity’ on the basis of risks that are more hypothetical than real, or risks that are too poorly defined at the Plan stage to be meaningfully assessed at this stage. Therefore some potential effects may be noted at this stage as requiring more detailed assessment at another stage of plan-making.
- 2.9 The Feeney case has also provided helpful guidance concerning the role of protective policies for European sites or protective wording within policies. It is clear that a general protective policy in itself cannot be regarded as adequate mitigation for any significant effects, because planning applications must be determined in accordance with the Development Plan. Therefore relying too heavily on a general protective policy can just create internal conflicts with other policies within the Plan.
- 2.10 However, an element of a policy that safeguards European sites or a policy qualifying a particular proposal so as to avoid likely significant effect has been found to be permissible³, as has adopting something in principle that will not actually happen if the protective condition or qualification is not being satisfied⁴. However, it is essential that such safeguards are sufficiently specific that they are not just general safeguards apply to a range of European sites and a range of effects.
- 2.11 In the case of Neighbourhood Plans, in many cases the plan will identify the acceptability criteria for developments in a plan area, relating to location, design or the composition of types of development; with the exact detail of the resulting developments agreed via the development management process (where they are determined in accordance with the Neighbourhood Plan, the Local Plan and the National Planning Policy Framework). In most cases, the neighbourhood plan will not identify additional housing or land allocations to the Local Plan, but will set acceptability criteria. Therefore, in many cases it would be appropriate to rely on a more detailed Habitats Regulations Assessment, with more detailed mitigation measures, at a later stage or lower level of plan making. This is particularly relevant within Impact Risk Zones for European sites where certain developments are likely, alone or in combination, to have a likely significant effect on the site without mitigation.

The Habitats Regulations Assessment Handbook states “*It may be possible and appropriate for the higher level plan to outline some aspects of mitigation measures,*

² Sean Feeney v Oxford City Council and the Secretary of State CLG para 92 of the judgment dated 24 October 2011 Case No CO/3797/2011, Neutral Citation [2011] EWHC 2699 Admin <http://www.oxford.gov.uk/Library/Documents/Barton%20AAP/Barton%20AAP%20CD%207.20.1%20Appendix%20Feeney%20v%20OC%202011.pdf>

³ Feeney; paragraphs 88, 90 and 92

⁴ Feeney; paragraph 96

*which must be provided at the later stage or lower level plan, in order to be able to conclude that there would be no adverse effects on site integrity”.*⁵

“In order to ascertain that there would be no adverse effect on the integrity of a European site, a plan-making body may only rely on mitigation measures in a later stage or lower level of plan making if the following three criteria are all met:

- a) The earlier stage or higher level plan assessment cannot reasonably predict any effect on a European site in a meaningful way; whereas*
- b) The later stage or lower level plan, which will identify more precisely the nature, timing, duration, scale or location of development, and thus its potential effects, will have the necessary flexibility over the exact nature, timing, duration, scale and location of the proposal to enable an adverse effect on site integrity to be avoided; and*
- c) The Habitats Regulations Assessment of the plan at the later stage or lower level is required as a matter of law or Government policy.”*

Assessment Methodology to meet the requirements of the Habitats Directive

- 2.11 The Council has adopted the following assessment methodology to meet the requirements of the Habitats Directive:

Stage One – Screening

This comprises an initial analysis to determine whether the Thirston Neighbourhood Development Plan is likely to have a significant effect on any European sites. The Thirston Neighbourhood Development Plan will require appropriate assessment unless it is certain that it will not have a significant effect on any European sites.

- Stage 1A: Identification of European sites relevant to the assessment, and analysis of them in terms of reasons for designation, factors affecting their integrity and trends affecting them.
- Stage 1B: Identification of underlying trends that could affect the integrity of sites.
- Stage 1C: Analysis of the Thirston Neighbourhood Development Plan objectives, proposals and proposed policies in terms of their possible adverse effects on the integrity of European sites, examination of options and alternatives to avoid or reduce these effects.
- Stage 1D: Identification of other plans and projects relevant to the assessment, to identify any likely in-combination effects. Article 6(3) of the Habitats Directive requires that plans and projects likely to have a significant effect on a European site *alone or in combination with other plans or projects* shall be subject to appropriate assessment.

The ruling of the Court of Justice of the European Union in case C-323/17 *People over Wind* in given in April 2018 has had a profound effect on the approach to screening. Prior to this ruling it was established practice to take account of mitigation measures included in a plan or project when determining if that plan or project was likely to have a significant effect. However, paragraph 40 of the ruling states that:

⁵ Tyldesley, D. and Chapman, C. (2013) *The Habitats Regulations Assessment Handbook* (February 2019 update) DTA Publications Ltd section F.10.1.5

Article 6(3)... must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerning, of a plan or project, it is not appropriate, at the screening stage, to take account of measures intended to avoid or reduce the harmful effects of the plan or project on that site'

Accordingly, the benefit of measures intended to avoid or reduce the harmful effects of a plan or project must be disregarded when determining whether it is likely to have a significant effect on a European site.

Where required:

Stage Two – Appropriate Assessment

Determination of whether any proposals or policies in the Neighbourhood Plan identified at the screening stage as having a likely significant effect would have an adverse effect on the integrity of any European sites, in view of the conservation objectives for those sites and the nature of the likely significant effect that has been identified. Modifications to those proposals or policies are identified to avoid any adverse effects on site integrity.

If mitigation is not possible and adverse effects on site integrity remain, the process must proceed to Stage Three

Stage Three – Alternative Solutions

The identification of alternative solutions to the relevant proposals or policies so as to avoid adverse effects on the integrity of European sites. The plan must then be modified in light of these findings.

Stage Four – Imperative Reasons of Overriding Public Interest and Compensatory Measures

If a plan or project has adverse effects on the integrity of a European site which cannot be avoided or mitigated for and there are no alternative solutions, consideration must be given to whether there are imperative reasons of overriding public interest for proceeding with the plan or project. This stage involves central Government and must be notified to the European Commission. If there are imperative reasons of overriding public interest, compensatory measures must be identified to maintain and enhance the overall coherence of the Natura 2000 network. This will only be in exceptional circumstances and must be supported by strong justification.

3. Stage 1A: Identification of European sites

- 3.1 The following European sites are wholly or partly within 10km of the plan boundary or are considered to have the potential to be affected by the Plan, and so are within the scope of the Habitats Regulations Assessment:

Special Areas of Conservation

- North Northumberland Dunes

Special Protection Areas

- Northumbria Coast
- Northumberland Marine
- Coquet Island SPA (not considered further as offshore with no access permitted).

Ramsar Sites

- Northumbria Coast

Site Analysis

- 3.2 This stage of the assessment details the reasons that relevant European sites have been designated (the qualifying features), the objectives intended to be achieved by designating and managing the sites, and the environmental conditions that are key to maintaining the integrity of the site. Guidance from the European Commission states that ‘a site can be described as having a high degree of integrity where the inherent potential for meeting site conservation objectives is realised, the capacity for self-repair and self-renewal under dynamic conditions is maintained, and a minimum of external management support is required’ (EC, 2000; para 4.6.3)

An asterisk * beside a qualifying feature indicates that the feature is listed as a priority habitat on Annex I of the Habitats Directive.

Site	Qualifying Features	Conservation Objectives	Key Environmental Conditions to Support Site Integrity
North Northumberland Dunes SAC	Fixed dunes with herbaceous vegetation * Dunes with creeping willow Embryonic shifting dunes Humid dune slacks Shifting dunes with marram Petalwort	Subject to natural change, to maintain in (or restore to) favourable condition the listed habitats. To maintain in (or restore to) favourable condition, the habitats for the population of petalwort.	Fixed dunes – appropriate grazing levels to maintain species and structural diversity, no increase in area occupied by invasive species e.g. Dunes with creeping willow – maintain active successional processes. Embryonic shifting dunes – sufficient area between high water mark and stable dunes to allow development of embryonic dunes, presence of beach plain at low tide to supply blown sand Humid dune slacks – maintenance of hydrological regime Shifting dunes with marram -sufficient area between high water mark and stable dunes to allow development of embryonic dunes, presence of beach plain at low tide to supply blown sand, no increase in linear extent or area constrained by introduced structures or landforms, no increase in

Site	Qualifying Features	Conservation Objectives	Key Environmental Conditions to Support Site Integrity
			area where vegetation establishment is prevented by human activity. Petalwort – maintenance of very short vegetation in dune slacks
Northumbria Coast SPA	Internationally important breeding populations of little tern and arctic tern Internationally important wintering populations of purple sandpiper and turnstone	To maintain in (or restore to) favourable condition the sand dunes for the breeding populations of little tern and arctic tern; To maintain in (or restore to) favourable condition rocky shores with boulder and cobble beaches for wintering purple sandpiper and turnstone.	All features – no significant increase in human disturbance or that caused by off-lead dogs. Maintenance of sparsely vegetated dunes for nesting (little tern). Extent and quality of rocky shore feeding and roosting habitat (purple sandpiper and turnstone)
Northumberland Marine SPA	Internationally important breeding populations of Annex 1 species: Sandwich tern Roseate tern Common tern Arctic tern Little tern Common guillemot Atlantic puffin	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring; <ul style="list-style-type: none"> • The extent and distribution of the habitats of the qualifying features • The structure and function of the habitats of the qualifying features • The supporting processes on which the habitats of the qualifying features rely 	Not available yet

Site	Qualifying Features	Conservation Objectives	Key Environmental Conditions to Support Site Integrity
	An internationally important seabird assemblage of over 20,000 birds	<ul style="list-style-type: none"> The population of each of the qualifying features, and, The distribution of the qualifying features within the site.	
Northumbria Coast Ramsar Site	Internationally important breeding population of little tern Internationally important wintering populations of purple sandpiper and turnstone	To maintain in (or restore to) favourable condition the sand dunes for the breeding population of little tern; To maintain in (or restore to) favourable condition rocky shores with boulder and cobble beaches for wintering purple sandpiper and turnstone.	All features – no significant increase in human disturbance maintenance of sparsely vegetated dunes for nesting (little tern). extent and quality of rocky shore feeding and roosting habitat (purple sandpiper and turnstone)

4. Stage 1B: Analysis of Trends

- 4.1 Trends are influences on a European site other than other plans and projects, which have influenced it and are likely to continue to influence it. It is important that relevant trends are considered alongside the plan that is subject to Habitats Regulations Assessment and other plans and projects, in order to identify the factors which, in combination, may be affecting a European site.
- 4.2 The following trends have been identified as being relevant to this Habitats Regulations Assessment:
- Air quality
 - Water quality and hydrology
 - Tourism and recreation
 - Large scale development
 - Climate change
 - Non-native invasive species

Air Quality

- 4.3 The most significant pollutants in the UK are as follows:

Sulphur Dioxide SO₂

- 4.4 The main sources of SO₂ are power stations and industrial combustion processes burning large quantities of fossil fuels.
- 4.5 Wet and dry deposition of SO₂ acidifies soils and fresh waters, thereby altering the composition of plant communities by causing a decline in species intolerant of more acid conditions. The significance of impacts depends on the levels of deposition and the buffering capacity of the receiving environment; basic environments have a higher buffering capacity while acid soils and waters have a much lower buffering capacity and so are more severely affected.

Nitrogen Oxides NO_x (nitrate (NO₂), nitrogen oxides (NO₃) and nitric acid (HNO₃))

- 4.6 NO_x are mainly produced by combustion, with about a quarter of UK emissions from power stations, half from vehicle exhausts and the rest from industrial and domestic combustion.
- 4.7 Deposition of NO_x can lead to acidification of soils and freshwater. As with SO₂, the degree of harm depends on the level of deposition and on the buffering capacity of these environments. NO_x can also lead to the eutrophication of soils and waters, leading to the competitive exclusion of sensitive species as more vigorous ones take advantage of the increased nutrient levels.

Ammonia (NH₃)

- 4.8 Ammonia is released during the decomposition of animal wastes, and adverse effects are caused by eutrophication, mainly within or near intensive livestock rearing environments in the lowlands.

4.9 Levels have been greatly increased by the development of intensive livestock rearing systems during the twentieth century. However recent agricultural policy reforms and the introduction of agri-environment schemes are likely to facilitate a reverse in this trend.

Low Level Ozone O₃

4.10 A secondary pollutant generated by photochemical reactions from NO_x and volatile organic compounds.

4.11 Concentrations of O₃ exceeding 40 ppb are toxic to humans and wildlife, altering the species composition of semi-natural habitats.

Underlying Trends in Air Pollution

4.12 The National Expert Group on Transboundary Air Pollution report of 2001 *Transboundary Air Pollution: Acidification, Eutrophication and Ground-Level Ozone in the UK* reported the following findings:

1. Total SO₂ emissions have decreased substantially in recent decades due to a decline in heavy industry, a decreasing contribution of coal burning in electricity generation, selection of lower sulphur coals for this purpose and cleaner burning of fossil fuels in power stations. Direct effects on vegetation have been virtually eliminated
2. Critical loads for acidification were exceeded in 71% of UK ecosystems in 1997, but this is forecast to drop to 47% by 2010, by which time NO_x will have replaced SO₂ as the major contributor.
3. Critical loads for eutrophication were exceeded in 25% of sensitive grasslands and 55% of heathland in 1995-97. This is expected to drop to 20% and 40% respectively, due to decreasing NH₃ and NH₄ emissions.
4. Overall, current deposition of nitrogen is probably changing the composition of vegetation in many nutrient-poor (acidic) habitats, and these changes may not be readily reversible.

4.13 Although technological advances have reduced NO_x emissions from vehicle engines, increasing traffic levels are likely to cause NO_x levels to start to increase again, and NO_x levels are identified as a problem for sensitive sites adjacent to major transport routes.

4.14 Vehicle use is likely to continue to increase in Northumberland for a number of reasons; rising levels of car ownership, increasing levels of economic activity, increasing levels of tourism, population growth (albeit at a very modest level). The Design Manual for Roads and Bridges⁶ includes an equation describing the characteristic decrease in pollutant concentrations with increasing distance from roads. Based on this and other research, it is considered that NO_x emissions generated within 200m of a European site which has interest features which are vulnerable to nitrogen deposition need to be considered in Habitats Regulations Assessments.

⁶ <http://www.dft.gov.uk/ha/standards/dmr/vol11/section3/ha20707.pdf>

European sites currently receiving acid deposition, nitrogen deposition or both above their critical loads

4.15 Based on the UK Air Pollution Information System (APIS) and the Environment Agency study *Impact of atmospheric emissions from JEP coal and oil-fired power stations on sites protected by the Habitats Directive* (February 2006), the following table shows European sites where acid deposition, nitrogen deposition or ozone are above their critical loads. The figures show air pollution levels divided by the critical load that the site can carry, so a figure in excess of 1.0 shows that the critical level is being exceeded.

European Site	Acid Deposition	Nitrogen Deposition	Ozone	Features most sensitive to N and acid deposition	Largest non-agricultural source
North Northumberland Dunes SAC	0.25	1.01	0.90	Fixed dunes Embryonic shifting dunes	Acid – LCP N - LCP

NB

1. Marine and intertidal features were not considered to be at risk due to the buffering effects of seawater.
2. Information was not available for freshwater sites, but the risk presented from atmospheric nitrogen was considered to be de *minimus* compared to inputs from surface and groundwater runoff.

4.16 The table shows that the North Northumberland Dunes SAC is at risk from increased nutrient loads.

Water Quality

- 4.17 Maintaining high water quality is central to the wellbeing of a number of European sites in Northumberland; most obviously the Roman Wall Loughs SAC, the River Eden SAC and the River Tweed SAC. However, other sites such as Newham Fen SAC and Ford Moss SAC could be adversely affected by raised nutrient inputs from agricultural fertilizer and manure or sewage, reaching these sites via aquatic pathways. Parts of rural Northumberland are not served by mains sewerage, resulting in the usage of non-mains systems such as septic tanks and package treatment plants. Their proper functioning is dependent on appropriate maintenance by their owners, which isn't always kept up, potentially resulting in a large number of small sources of pollution that can be hard to trace and manage.
- 4.18 Increased algal growth is of concern in Budle Bay, where it is adversely affecting the intertidal sand and mudflats which are an interest feature of the Berwickshire and North Northumberland Coast SAC and, by displacing eelgrass beds, adversely affecting Lindisfarne SPA by reducing the quality and quantity of feeding habitat of grazing wildfowl such as light-bellied Brent goose, wigeon and whooper swan. The reasons for the increased algal growth in this area have not been clearly determined; however, nutrient input from diffuse agricultural pollution in the Tweed catchment is likely to be a significant factor.

Hydrology

- 4.20 The supply of water in Northumberland is divided into two water resource zones, Kielder WRZ and Berwick and Fowberry WRZ. The Kielder WRZ serves most of the population of Northumberland and is supplied via river systems and reservoirs. For the most part, there are no water availability issues within this WRZ, primarily due to the very substantial supplies at Kielder Reservoir; however, both the rivers Coquet and Font have been identified as experiencing water availability issues. The Berwick and Fowberry WRZ is supplied primarily from an underlying aquifer, and supply shortages have been experienced during periods of high demand. Water abstraction for agriculture occurs from the Tweed catchment rivers, potential impacts on the SAC are being managed through abstraction licence reviews.

Tourism and Recreation

- 4.21 Tourism is concentrated in certain areas of the county, especially the coast. Disturbance can be a significant impact arising from coastal recreation, with potential adverse impacts on nesting and feeding tern species, feeding and roosting migratory and winter waders and wildfowl and on fragile dune communities. Dogs, especially off-lead animals, increase the effect of casual disturbance of birds by walkers.
- 4.22 European sites at particular risk of disturbance impacts include the Northumbria Coast SPA and Ramsar Site, Lindisfarne SPA and Ramsar Site and the North Northumberland Dunes SAC. European sites vulnerable to disturbance from increasing visitor numbers include the North Pennines SPA.
- 4.23 Improvements in treatment of sewage arising from coastal settlements in order to meet Urban Waste Water Treatment Directive obligations will help to ensure that

increasing visitor numbers do not contribute to the eutrophication of intertidal and subtidal habitats.

Large Scale Development

- 4.24 Development of land is occurring at a comparatively modest pace in Northumberland, with the bulk of housing and industrial development occurring in and adjacent to the settlements of south-east Northumberland, on the periphery of the Tyneside conurbation. New development causes a range of impacts that can affect European sites, including increased or changing patterns of air pollution from changing or increasing vehicle uses, and increases in water demand and in waste arisings. Urban expansion can also cause loss of or increased disturbance to land which is used as high tide and night time roosts by bird species which are key features of the coastal SPAs, and it can increase disturbance within these SPAs, for example through increased recreational use of the intertidal zone and through light pollution. Recreational disturbance such as dog walking can be a particular problem when new residential development occurs close to the Northumbria Coast SPA and Ramsar Site; feeding opportunities for turnstone and purple sandpiper are already restricted by the tides and the limited daylight of winter, so lost feeding time and increased energy use evading perceived predators could be significant. Some high tide and night time roost sites used by these species are known to occur in close proximity to development, but overall knowledge of the location of roost sites is incomplete. There is currently a high degree of uncertainty about the breeding locations of the golden plover that winter on the Northumberland Coast; however, adverse effects on the wintering populations could affect the integrity of the North Pennines Moors SPA or other SPAs that they breed in.
- 4.25 Demand for particular types of building stone, for markets within and outwith Northumberland, can create demand for particular sites to be quarried. In Northumberland, demand for dimensional building stone is generally for sandstone, with a low likelihood of significant effects on European sites.
- 4.26 The highest quality concreting sands and gravels in Northumberland are derived from igneous rocks, and so occur in the north of the county, in valleys of rivers which are within the River Tweed SAC. Potential significant effects include releases of silt or pollutants to the watercourses and hydrological changes arising from water abstraction for processing.

Climate Change

- 4.27 Changes in climate arising from increasing levels of atmospheric CO₂ are very complex and difficult to predict. However, increasingly warm dry summers and mild, stormy winters along with rising sea levels seem to be the most likely trends. Possible impacts on European sites include the following:
- coastal squeeze, as habitats such as saltmarshes and sand dunes are caught in a decreasing amount of space between rising sea levels on their seaward side and human land uses on their landward side. This is likely to affect all coastal European sites, but effects will be felt first and most severely on European sites with intertidal habitats and dunes, which are Berwickshire and North Northumberland Coast SAC, Tweed Estuary SAC, North Northumberland Dunes SAC, Lindisfarne SPA and Ramsar Site, Northumbria Coast SPA and Ramsar

Site. Increased depths of water due to sea level rise may also affect coastal reefs and caves in the Berwickshire and North Northumberland Coast SAC.

- distribution patterns of many species affected by shifts in their 'climate space' (the geographic area which has the appropriate climate for that species) which may have impacts on coastal sites.
- increasing rates of colonisation by new species, including pests and diseases
- higher summer water temperatures, with consequent decrease in levels of dissolved oxygen and increases in levels of primary productivity and decay processes.

4.28 Measures likely to assist in reducing the impacts of or in adapting to climate change include habitat restoration to improve 'ecosystem services', and land use change to facilitate the movement of communities and species. Examples of ecosystem services include the hydrological functioning of blanket bogs in absorbing large quantities of water from rainfall and gradually releasing it to watercourses, and the flood storage function of river floodplains. The hydrological function of blanket bogs in the uplands of Northumberland and surrounding areas has been adversely affected by the excavation of drainage ditches, especially during the 1950s – 1970s, and through afforestation. Projects to block ditches and restore afforested bogs are underway in the North Pennines and the Border Uplands, but are of a small scale compared to the areas affected. The area of functional floodplain in Northumberland has been greatly reduced over a long time period as flood defences have been put in place for settlements and farmland; however, increasingly severe winter storms will increase the need for it. Coastal realignment (the setting back of coastal defences) has the potential to allow coastal habitats such as saltmarsh to migrate landwards rather than being lost to coastal squeeze; projects are currently underway at Alnmouth and Goswick through the Northumberland Foreshores Project which will demonstrate the potential of this approach, although again these are of very limited scale compared to the problem.

4.29 The issue of facilitating the movement of communities and species in response to movements in their climate space is complex, as they vary greatly in their ability to make such movements and their requirements that they have in order to do so; accordingly such changes are likely to be chaotic rather than simple, with more adaptable species and less specialist communities faring much better than more demanding and specialist ones. It is unclear whether beneficial land management practices can be initiated on a significant enough scale to assist in this process; however, those activities that are most likely to have a beneficial effect in this respect include restoring existing habitats to good condition to maximise their resilience, and increasing ecological connectivity by increasing the overall extent of semi-natural vegetation in the wider countryside; reinforcing and expanding features that act as links and corridors such as watercourses and their associated riparian habitats; increasing the density of networks of habitats such as wetlands, semi-natural grasslands and native woodlands; and managing farmland in a way that integrates food production and wildlife conservation. This requires that nature conservation is planned and implemented at a landscape scale, rather than on the traditional site-by-site basis.

Invasive Species

- 4.30 Thousands of non-native species have become established in the UK, having been brought here either intentionally or accidentally by people. A small proportion of non-native plants have become highly invasive, displacing native vegetation and forming dense single-species stands of little value to wildlife. Similarly, a few such animals are displacing native species, either directly or via pests or diseases that they have brought with them. Significant problems within European sites are as follows:
- Pirri-pirri bur is adversely affecting dune grassland within the North Northumberland Dunes SAC.
 - *Spartina* (a saltmarsh grass) is adversely affecting mudflats within the Berwickshire and North Northumberland Coast SAC and Lindisfarne SPA.
 - Japanese knotweed and giant hogweed is displacing native riparian vegetation in the River Tweed SAC and many other rivers.
 - Crayfish plague, associated with the introduced signal crayfish, is spreading in northern England, and so the integrity of the River Eden SAC is at risk.
 - Pacific oyster *Crassostrea gigas*, a non-native invasive species is currently being farmed within Lindisfarne SPA and Ramsar Site, Northumberland Marine SPA and the Berwickshire and North Northumberland Coast SAC.

Coastal Mitigation Service

- 4.31 The Northumberland Coast is of national and international importance for its wildlife. This includes a wide range of wading birds and wildfowl (ducks, geese and swans) that pass through on migration each spring or autumn or spend the winter there before returning to arctic breeding grounds; little terns and arctic terns that nest on beaches in the north of the county; and the diverse plant communities found on its sand dunes. Areas of the coast of national importance for their bird populations or plant communities are protected through designation as Sites of Special Scientific Interest (SSSIs), and areas of international importance are also designated as Special Protection Areas (SPAs) and Wetlands of International Importance under the Ramsar Convention (Ramsar Sites). Dune grasslands of international importance are designated as Special Areas of Conservation (SACs).

When considering planning applications for new development, Northumberland County Council is obliged to consider impacts on these specially protected areas.

For internationally important sites the Council is obliged to fulfil the strict requirements set out in the Conservation of Habitats and Species Regulations 2017, ensuring that adequate mitigation is provided for any impacts that a development is likely to have on them, alone or in-combination with other plans or projects.

This legislation is precautionary in nature, and so an impact must be assumed unless it is beyond reasonable scientific doubt that there will not be an impact.

New development can have a range of impacts on these protected areas, but one that is likely to arise from all new housing or tourist accommodation is increased disturbance to the bird species that are their special features, arising from increased recreational activity on the coast. Increased foot passage through the dunes also causes the spread of a non-native invasive species called pirri-pirri bur.

It is the responsibility of the developer to provide the required mitigation for their development. However, this can be especially difficult for developers to achieve for impacts arising from recreational activity on sites outside the developer's control and which people have a right to access and an understandably strong desire to access, such as the coast.

Northumberland County Council has been working with Natural England to review its approach to the assessment and management of impacts arising from new development on specially protected sites on the coast, and has determined that the only realistic way to address the impacts of recreational activity on designated sites on the coast is through a strategic scheme funded by developers and implemented by the Council.

This will enable mitigation to be provided within the designated sites themselves, in a consistent manner along the whole of the Northumberland coast. This approach also provides clarity and certainty for developers, as they will make a known financial contribution to the Mitigation Service rather than trying to provide their own bespoke mitigation for each development, and will save them time and money because they will not have to undertake the ecological surveys and assessments required to devise such mitigation.

The contributions from developers will fund a ranger team who will be out on the coast working with visitors and residents, raising awareness and providing wardening.

More detail on the mitigation service can be found at this link [Northumberland Coastal Mitigation Service](#)

5. Stage 1C: Analysis of proposals and policies in the Thirston Neighbourhood Development Plan - Identification of Likely Significant Effects

- 5.1 The objectives, policies and community actions contained within the Thirston Neighbourhood Development Plan have been evaluated to identify where there could be a likely significant effect on the interest features of European sites.

Paragraph 177 of the NPPF states that the presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

- 5.2 The following European sites are within a 10km of the boundary of the Plan. Each European Site is underpinned by a number of component Sites of Special Scientific Interest.

Special Areas of Conservation

- North Northumberland Dunes

Special Protection Areas

- Northumbria Coast

- Northumberland Marine
- Coquet Island SPA (not considered further as offshore with no access permitted).

Ramsar Sites

- Northumbria Coast
- Coquet Island (not considered further as offshore with no access permitted).

5.3 Current Condition of Designated Sites and Threats to Site Integrity

Site	Qualifying Features	Current Condition of Component SSSIs within 10km of the Plan boundary	Threats to Site Integrity
North Northumberland Dunes SAC	Fixed dunes with herbaceous vegetation * Dunes with creeping willow Embryonic shifting dunes Humid dune slacks Shifting dunes with marram Petalwort	<p><u>Bamburgh Dunes SSSI</u> 100% favourable condition; no mention of any access-related problems in the 'Condition of SSSI Units' report.</p> <p><u>Newton Links SSSI</u> 49.07% favourable, 50.93 unfavourable recovering. Species diversity declining.</p> <p><u>Alnmouth Saltmarsh and Dunes</u> 100% favourable condition; no mention of any access-related problems in the 'Condition of SSSI Units' report.</p>	<p>Fixed dunes – loss of species and structural diversity, no increase in area occupied by invasive species e.g.</p> <p>Dunes with creeping willow – loss of active successional processes.</p> <p>Embryonic shifting dunes – loss of area between high water mark and stable dunes to allow development of embryonic dunes, loss of beach plain at low tide to supply blown sand</p> <p>Humid dune slacks –hydrological regime changes</p> <p>Shifting dunes with marram – lack of sufficient area between high water mark and stable dunes to allow development of embryonic dunes, presence of beach plain at low tide to supply blown sand, increase in linear extent or area constrained by introduced structures or landforms, increase in area where vegetation establishment is prevented by human activity.</p> <p>Petalwort –loss from dune slacks</p>

Site	Qualifying Features	Current Condition of Component SSSIs within 10km of the Plan boundary	Threats to Site Integrity
Northumbria Coast SPA/Ramsar Site	Internationally important breeding populations of little tern and arctic tern Internationally important wintering populations of purple sandpiper and turnstone	100% of the underlying SSSI units are assessed as being in favourable condition.	All features –significant increase in human disturbance or that caused by off-lead dogs. Loss of sparsely vegetated dunes for nesting (little tern). Changes to the extent and quality of rocky shore feeding and roosting habitat (purple sandpiper and turnstone)
Northumberland Marine SPA	Internationally important breeding populations of Annex 1 species: Sandwich tern Roseate tern Common tern Arctic tern Little tern Common guillemot Atlantic puffin An internationally important seabird assemblage of over 20,000 birds	Not available yet	Not available yet

Assessment of the Plan's Objectives:

5.4 OBJECTIVE 1: The built and natural environment

This objective is a general statement of policy, which seeks to define the acceptability of proposals and match future housing to community needs. It is therefore not likely to have a significant effect on a European Site.

5.5 OBJECTIVE 2: The economy, employment and the community

This objective is a general statement of policy/general aspiration and is therefore not likely to have a significant effect on a European Site.

Assessment of the Plan Policies:

5.6 POLICY 1: DESIGN AND DEVELOPMENT PRINCIPLES

This policy sets general design principles and is screened out as there can be no conceivable effect on the European Sites.

5.7 POLICY 2: NEW HOUSING DEVELOPMENT

This policy sets out the circumstances in which a limited range of small-scale development would be supported should it come forward, unless material considerations indicate otherwise.

Any net increase in housing (either residential or tourist accommodation) within the 10km buffer of the coast will bring additional recreational disturbance to coastal sites, and impact upon the interest features for which those sites are designated.

Should such development come forward, mitigation will be required to ensure that it does not have an adverse effect on the integrity of the Northumbria Coast SPA/Ramsar Site and the North Northumberland Dunes SAC. Accordingly, it is necessary to conclude that this policy is likely to have a significant effect on European sites.

5.8 POLICY 3: WILDLIFE CORRIDOR AND SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)

This policy is an environmental protection policy. There is no likely negative significant effect on European Sites.

5.9 POLICY 4: COASTAL MITIGATION SERVICE

This policy sets out the mitigation requirements for any new units of accommodation in the plan area and is screened out (although it is considered as mitigation at Appropriate Assessment).

5.10 POLICY 5: LOCAL GREEN SPACES

This policy is an environmental protection policy. There is no likely negative significant effect on European Sites.

5.11 POLICY 6: BUSINESSES AND COMMUNITY FACILITIES

The objective concerns the design and suitability of proposals and is not considered to have a likely significant effect on European Sites (tourism which includes increased units of accommodation is considered at Policy 7).

5.12 POLICY 7: TOURISM ACCOMMODATION

This policy explicitly supports new development within the settlement boundary and sets out the type of developments that would be supported.

Any net increase in housing (either residential or tourist accommodation) within the 10km buffer of the coast will bring additional recreational disturbance to coastal sites, and impact upon the interest features for which those sites are designated.

Should such development come forward, mitigation will be required to ensure that it does not have an adverse effect on the integrity of the Northumbria Coast SPA/Ramsar Site and North Northumberland Dunes SAC. Accordingly, it is necessary to conclude that this policy is likely to have a significant effect on European sites.

5.13 POLICY 8: WOODLAND BURIAL SITE AND CREMATORIUM

The objective concerns the design and suitability of proposals and is not considered to have a likely significant effect on European Sites.

5.14 **Community Projects.**

CP1: Work with Northumberland County Council to secure the production of a Conservation Area Character Appraisal for West Thirston

CP2: Continue to work with residents to reduce litter in the Parish

CP3: Consider measures for promoting nature conservation in the Parish

As statements of intent for community action they are by their nature not likely to have a significant effect on European sites.

5.15 Screening of Policies to Assess Likely Significant Effect.

Policies likely to lead to a net increase in residential units
POLICY 2: SETTLEMENT BOUNDARIES
POLICY 7: TOURISM ACCOMMODATION

Interest Feature:	Potential hazard:	Mechanism of effect/impact (including the probability that the interest feature will be affected, and the magnitude, duration and reversibility of the effect)
Purple Sandpiper and turnstone (Northumbria Coast SPA and Ramsar Site)	Disturbance of feeding or roosting birds during winter.	<p>The nearest part of the SPA/Ramsar is approx. 8km east of the plan boundary, with good road linkages and parking from the inland parts of the plan area. This is well within the distance used for activities such as daily dog walks and so the increased population resulting from the development could result in increased recreational disturbance.</p> <p>This would lead to increased footfall on beaches and rocky shore by walkers/dog walkers which shall potentially increase disturbance of wintering birds, particularly associated with rocky shore. Other disturbance impacts may arise from angling, water sports and bait digging. Evidence indicates that disturbance from off-lead dogs can be the biggest single source of disturbance, probably because off-lead dogs can range widely from owner, at speed and can be perceived by coastal birds as a direct predator.</p> <p>The magnitude of the disturbance effect over the long term on a population level is unknown, not least because bird the population is influenced by many factors. However increased levels of disturbance can reduce time spent foraging, lead to wasted energy avoiding perceived threats and ultimately has potential to reduce an individual's fitness to survive and breed.</p> <p>Given the main risk of increased recreational activities resulting from the development without mitigation there would be a likely significant effect arising from disturbance to turnstone and purple sandpiper.</p>

Interest Feature:	Potential hazard:	Mechanism of effect/impact (including the probability that the interest feature will be affected, and the magnitude, duration and reversibility of the effect)
Little tern and arctic tern (Northumbria Coast SPA and Ramsar Site)	Increased disturbance of Long Nanny breeding site	The tern colony is over 20km from the plan boundary, therefore the potential risk of disturbance from activities such as daily dog walks is low; however, it is well within the distance for less frequent activities such as weekend recreational activities. Accordingly the implications for the tern colony from this development alone is relatively low, but it need to be considered in-combination with other plans and projects.
Sandwich tern Roseate tern Common tern Arctic tern Little tern (Northumberland Marine SPA)	Disturbance of feeding terns during the summer by terrestrial recreation.	Theoretical risk of increase disturbance by recreation on sandy beach areas upon shallow water feeding areas close to the shore. However as the area of the SPA is very large alternative feeding areas are readily available, therefore the effect of disturbance shall be very limited. In addition terns are relatively tolerant, maintaining feeding behaviour offshore. Accordingly the effect of disturbance is unlikely to be significant and so this can be screened out.
Sandwich tern Roseate tern Common tern Arctic tern Little tern (Northumberland Marine SPA)	Disturbance of feeding terns during the summer by marine recreation, particularly powered craft such as jet skis.	<p>There is a risk of increase disturbance by recreation particularly with powered craft in areas of shallow water that terns may use to forage. Little tern preferentially use shallower waters for foraging so theoretically may be more susceptible to this impact. However the southern alongshore extent for foraging for little tern is about 6km.</p> <p>The number of launch points for powered craft are restricted, though include Amble and Beadnell for small leisure craft. These launching points are regulated through licences and boats operated under a code of conduct. Furthermore, the area of the SPA is very large, therefore other feeding areas are readily available, therefore the effect of disturbance is unlikely to be significant and so this can be screened out. .</p>

Interest Feature:	Potential hazard:	Mechanism of effect/impact (including the probability that the interest feature will be affected, and the magnitude, duration and reversibility of the effect)
<p>Fixed dunes with herbaceous vegetation * (priority habitat) Dunes with creeping willow Embryonic shifting dunes Humid dune slacks Shifting dunes with marram Petalwort (North Northumberland Dunes SAC)</p>	<p>Increased risk of introduction and spread of invasive species impacting dune habitat.</p>	<p>The SAC is approx. 8km from the plan boundary. This is well within the distance used for activities such as daily dog walks and so the increased population resulting from the development could result in increased recreational activity within the SAC.</p> <p>Potential increases in visitor numbers may lead to further introduction and spread of invasive species, particularly pirri-pirri bur which is a severe problem on dunes at Lindisfarne and a growing problem on other dunes within the SAC.</p>

Is the effect likely to be significant?	
a) Alone? (explain conclusion, e.g. in relation to <i>de minimus</i> criteria)	<p>Northumberland Marine SPA – No – <i>de minimus</i></p> <p>Northumbria Coast SPA and Ramsar Site – there is a credible risk of an effect and so in the absence of objective evidence demonstrating that there will not be it has to be concluded that there is a likely significant effect.</p> <p>North Northumberland Dunes SAC – there is a credible risk of an effect and so in the absence of objective evidence demonstrating that there will not be it has to be concluded that there is a likely significant effect.</p>
b) In combination with other plans or projects?	<p>Yes, for Northumbria Coast SPA and Ramsar and North Northumberland Dunes SAC</p> <p>All proposed housing development within the coastal buffer zone for the full length of the European sites (Berwick to Crimdon) contribute to in-combination effects.</p>
Conclusion:	<p>Northumbria Coast SPA and Ramsar Site: Yes - appropriate assessment required</p> <p>North Northumberland Dunes SAC: Yes - appropriate assessment required</p> <p>Northumberland Marine SPA: No - screened out</p>

- 6. Stage 1 D Identification of other plans and projects relevant to the assessment, to identify any likely in-combination effects.**
- 6.1 Policies 1, 2 and 4 are screened in because of the potential impact of housing growth on the Northumbria Coast SPA/Ramsar and the North Northumberland Dunes SAC and so will be taken forward to Appropriate Assessment.
- 6.2 Where significant impacts on a European site can only be avoided with mitigation, as a competent authority Northumberland County Council must consider the Implications of Case C 323/17 in the Court of Justice of the European Union (People over Wind). The ECJ provided a ruling to the Irish Courts in the above case on 12th April 2018 in response to a request for a ruling to answer the following question: *‘Whether, or in what circumstances, mitigation measures can be considered when carrying out screening for appropriate assessment under Article 6(3) of the Habitats Directive?’*
- 6.3 The ruling was: *‘Article 6(3)... Must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of measures intended to avoid or reduce the harmful effects of the plan or project on that site.’*
- 6.4 As such, it is not possible to conclude at the screening stage that additional housing sites will not have significant effects on Coastal European Sites and the policies and objectives related to those sites require Appropriate Assessment, at which stage the mitigation measures can be considered. Accordingly, an appropriate assessment is required to determine if the above policies will have an adverse effect on the integrity of the interest features of the Northumbria Coast SPA and Ramsar Site and the North Northumberland Dunes SAC.
- 6.5 None of the other policies will have any effect on any European sites and therefore cannot contribute to in-combination effects.

**APPROPRIATE ASSESSMENT OF
THIRSTON NEIGHBOURHOOD DEVELOPMENT
PLAN 2020 - 2036
REGULATION 15 SUBMISSION PLAN**

7. Stage 2: Appropriate Assessment

- 7.1 The screening assessment of the Thirston Neighbourhood Development Plan identified that the following objectives and policies are likely to have a significant effect on the Northumbria Coast SPA and Ramsar Site and the North Northumberland Dunes SAC

POLICY 2: NEW HOUSING DEVELOPMENTS

POLICY 7: TOURISM ACCOMMODATION

- 7.2 Accordingly, an appropriate assessment is required to determine if the above policies will have an adverse effect on the integrity of the interest features of the Northumbria Coast SPA and Ramsar Site and the North Northumberland Dunes SAC.
- 7.3 The same potential impact arises from each of these objectives/policies, which is the cumulative increase in recreational disturbance arising from increased housing numbers within the coastal zone of influence. Disturbance primarily arises from recreational activities such as walking and sea angling, with off-lead dogs being a particular concern because they range more widely than their owners and because the birds, as species that feed and roost on the ground, have to have a strong predator avoidance response to mammals such as fox and wolf, and therefore domestic dogs. Repeated disturbance causes birds to waste foraging time monitoring what they perceive to be potential predators, and to waste energy repeatedly taking flight to avoid them, and this can affect them in a range of ways that ultimately can affect their survival rates.
- 7.4 Impacts also occur on dune grasslands, with a particular problem in Northumberland being the spread of pirri-pirri bur, a non-native invasive species spread mainly on the clothes of people and the coats of dogs. This invasive species can adversely impact on the delicate balance of species which comprise dune grassland habitats.
- 7.5 Because the same impact is being considered for the policies being assessed, they are considered as a whole rather than individually. The assessment is summarised in the table below:

PART A: The Proposal	
1. Type of Plan: Neighbourhood Plan	2. Author/Lead: Thirston Parish Council
3. Brief description of proposal: Thirston Neighbourhood Development Plan 2020 – 2036 Regulation 15 Submission Plan covering the Parish Council and local community's priorities for the period 2020 to 2036 POLICY 2: SETTLEMENT BOUNDARIES POLICY 7: TOURISM ACCOMMODATION All policies support a net increase in residential units within the 10km zone of influence for coastal sites.	
4. European site name(s):	Northumbria Coast SPA and Ramsar Site North Northumberland Dunes SAC
5. List of interest features: <u>Northumbria Coast SPA and Ramsar Site</u> Internationally important breeding population of little tern and arctic tern Internationally important migratory and wintering populations of purple sandpiper and turnstone <u>North Northumberland Dunes SAC</u> Fixed dunes with herbaceous vegetation * (priority habitat) Dunes with creeping willow Embryonic shifting dunes Humid dune slacks Shifting dunes with marram Petalwort	

PART B: Identification of effects being considered and relevant features affected			
Significant effect being considered (attribute affected)	Affected qualifying feature(s)	Favourable condition target(s) for relevant feature(s) based on conservation objectives set for SPA/ Ramsar	Contribution of attribute(s) to site integrity (ecological structure and functioning of site)
Increasing levels of recreational disturbance in Northumbria Coast SPA and Ramsar Site	Non-breeding populations of: Turnstone Purple sandpiper	Restrict the frequency, duration and/or disturbance affecting roosting, foraging, feeding, moulting and/or loafing birds so that they are not significantly disturbed.	Direct effect on qualifying feature therefore inherent to site integrity
Increasing levels of recreational disturbance in Northumbria Coast SPA and Ramsar Site	Breeding populations of: Little tern Arctic tern	Restrict the frequency, duration and/or disturbance affecting roosting, nesting, foraging, feeding, moulting and/or loafing birds so that they are not significantly disturbed.	Direct effect on qualifying feature therefore inherent to site integrity
Spread of pirri-pirri bur within North Northumberland Dunes SAC and Lindisfarne Ramsar - degradation of qualifying features including one that is a priority habitat type	Fixed dunes with herbaceous vegetation (priority habitat type) Shifting dunes with marram	Subject to natural change, to maintain in (or restore to) favourable condition the listed habitats: Fixed dunes – appropriate grazing levels to maintain species and structural diversity, no increase in area occupied by invasive species	Attributes are qualifying features including one that is a Priority Habitat Type in Annex 1 to the Habitats Directive - therefore inherent to site integrity

1.1.1.1 PART C: Assessment				
Significant effect being considered (attribute affected)	Adverse Effect of proposal alone on attribute and/or feature and in relation to conservation objective for the feature	Adverse Effect of proposal in combination with other plans or projects, on attribute and /or feature	Can adverse effects be avoided?	Adverse effect on integrity; long term, short term. Yes, no or uncertain?
Northumbria Coast SPA and Ramsar Site - Increasing levels of recreational disturbance - direct effect on purple sandpiper and turnstone (qualifying features)	<p>Disturbance arises from a range of recreational activities, such as walking, dog-walking, rockpooling and sea angling.</p> <p>Disturbance reduces foraging time and increases energy expenditure because birds have to spend more time engaging in vigilance and escape activities. Reduced food intake combined with increased energy expenditure decreases fitness, which in turn increases mortality at the wintering grounds or on migration, or results in birds arriving at their breeding grounds in poorer condition, reducing their productivity.</p>	<p>Disturbance arises from a range of recreational activities, such as walking, dog-walking, rockpooling and sea angling.</p> <p>Disturbance reduces foraging time and increases energy expenditure because birds have to spend more time engaging in vigilance and escape activities. Reduced food intake combined with increased energy expenditure decreases fitness, which in turn increases mortality at the wintering grounds or on migration, or results in birds arriving at their breeding grounds in poorer condition, reducing their productivity.</p>	Policy 4 of the plan requires all new development within the buffer zone for likely impacts to contribute to the Coastal Mitigation Service	NO

<p>Northumbria Coast SPA and Ramsar Site - Increasing levels of recreational disturbance - direct effect on little tern and arctic tern (qualifying features)</p>	<p>Recreational disturbance arising from a single housing development is unlikely to have a significant effect on the SPA/Ramsar Site</p>	<p>Disturbance arises from a range of recreational activities, especially walking, dog-walking and general beach recreation.</p> <p>Disturbance at or near the nest can cause adults to temporarily leave eggs or young, exposing them to increased predation risk; disruption to provisioning visits by adults, reducing food intake by the young; loss of eggs to trampling damage and nest abandonment. All of these impacts reduce productivity.</p>	<p>Policy 4 of the plan requires all new development within the buffer zone for likely impacts to contribute to the Coastal Mitigation Service</p>	<p>NO</p>
<p>North Northumberland Dunes SAC - Degradation of qualifying features</p>	<p>Increased spread of pirri-pirri bur arising from increased foot fall from a single housing development is unlikely to have a significant effect</p>	<p>Increased spread of pirri-pirri bur via people's clothing and boots and on dog fur will degrade the dune grassland plant community through displacement of important species</p>	<p>Policy 4 of the plan requires all new development within the buffer zone for likely impacts to contribute to the Coastal Mitigation Service</p>	<p>NO</p>

PART D: County Council's Conclusion

CAN IT BE ASCERTAINED THAT THE PLAN OR PROJECT WILL NOT ADVERSELY AFFECT THE INTEGRITY OF THE EUROPEAN SITE(S)?

YES.

This is a plan supporting residential development within the 10km coastal buffer zone where recreational disturbance is likely. Mitigation is proposed within the plan (requirement to contribute to the Coastal Mitigation Service) which is robust and clear.

Policy 4: Coastal Mitigation Service

"To ensure that the impacts arising from increasing levels of recreational disturbance on coastal Sites of Special Scientific Interest and European Sites can be addressed, all development within 7km of the coast that will result in a net increase in the number of residential units or tourist accommodation will be required to contribute to the Coastal Mitigation Service, or provide alternative mitigation of demonstrable effectiveness. Within a zone, as shown on the policies map, extending between 7km and 10km from the coast, only major development will be required to make a contribution to the Coastal Mitigation Service, or provide alternative mitigation of demonstrable effectiveness. All financial contributions required in accordance with this policy will be secured by way of a planning obligation under section 106 of the Town and Country Planning Act 1990, or any subsequent amending legislation."

As such, an adverse impact on the site integrity of European Sites is not likely.

8. Conclusion.

- 8.1 This is a record of the determination as to whether the Thirston Neighbourhood Development Plan 2020 – 2036 Regulation 15 Submission Plan January 2021 is likely to have a significant effect on any European sites, as required under Regulation 106 of the Conservation of Habitats and Species Regulations 2017 as amended.
- 8.2 Policies 2 and 7 are likely to have a significant effect on the Northumbria Coast SPA and North Northumberland Dunes SAC for the reasons identified in Section 5 of this Report. Accordingly an appropriate assessment has been undertaken of this objective and these policies.
- 8.3 Policy 4 of the plan embeds a requirement for mitigation for coastal impacts via a contribution to the Coastal Mitigation Service.
- 8.4 In accordance with Regulation 106 of the Conservation of Habitats and Species Regulations 2017 as amended, Northumberland County Council concludes that the Thirston Neighbourhood Development Plan 2020 – 2036 Regulation 15 Submission Plan January 2021 will not have an adverse effect on the integrity of European sites with mitigation.
- 8.5 However, it should be noted that this is an iterative process, and any significant subsequent changes to the Plan will need to be subject to further Habitats Regulations Assessment which will include further consultation with Natural England.

ADF
26/01/2021

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Appendix 1. Comments from Natural England

Date: 17 February 2021
Our ref: 341302
Your ref: Thirston Neighbourhood Plan - HRA



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BY EMAIL ONLY

Dear Ms. Deary Francis

Thirston Neighbourhood Plan – Habitats Regulations Assessment Report, January 2021

Thank you for your consultation on the above dated 26 January 2021

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

Natural England is a statutory consultee in neighbourhood planning and must be consulted on draft neighbourhood development plans by the Parish/Town Councils or Neighbourhood Forums where they consider our interests would be affected by the proposals made.

Natural England agrees with the conclusions of the Thirston Neighbourhood Development Plan Habitat Regulations Assessment Report, January 2021, and does not have any further comments on this draft neighbourhood plan.

It is our advice, on the basis of the material supplied with the consultation, that, in so far as our strategic environmental interests (including but not limited to statutory designated sites, landscapes and protected species, geology and soils) are concerned, that there are unlikely to be significant environmental effects from the proposed plan, and note that the plan does not allocate land for development.

Natural England agree with the conclusions made within the Appropriate Assessment of the Thirston Neighbourhood Plan, that the plan will not adversely affect the integrity of European Sites, including Northumbria Coast SPA and Ramsar Site, and North Northumberland Dunes SAC. We fully support the inclusion of Policy 4, which mitigates adverse impacts to the integrity of European Sites through the required contribution to the Coastal Mitigation Service.

However, we refer you to the attached annex which covers the issues and opportunities that should be considered when preparing a Neighbourhood Plan.

For any further consultations on your plan, please contact: consultations@naturalengland.org.uk

Yours sincerely
Cameron Chandler
Northumbria Area Team