



Habitats Regulations Assessment of the East Devon Local Plan 2020 to 2040 (Preferred Options)

Authors: Durwyn Liley, Bernie Fleming & Emily Rush

FOOTPRINT ECOLOGY, FOREST OFFICE, BERE ROAD, WAREHAM, DORSET BH20 7PA WWW.FOOTPRINT-ECOLOGY.CO.UK 01929 552444





Footprint Contract Reference: 700698 Date: 11th July 2022 Version: HRA to accompany Preferred Options: draft for comment Recommended Citation: Liley, D., Fleming, B. & Rush, E. (2022). Habitats Regulations Assessment of the East Devon Local Plan 2020 to 2040 (Preferred Options).

Summary

The Conservation of Habitats and Species Regulations 2017 (as amended) require local authorities to assess the impact of their local plan on the internationally important sites for biodiversity in and around their administrative areas. Together, these Special Protection Areas, Special Areas of Conservation and Ramsar sites are known as European sites. The task is achieved by means of a Habitats Regulations Assessment (HRA).

An HRA asks very specific questions of a plan. Firstly, it 'screens' the plan to identify if there is a risk that certain policies or allocations may have a 'likely significant effect' on a European site, alone or (if necessary) in-combination with other plans and projects. If the risk of likely significant effects can be ruled out, then the plan may be adopted but if they cannot, the plan must be subjected to the greater scrutiny of an 'appropriate assessment' to find out if the plan will have an 'adverse effect on the integrity' of the European sites.

Following an appropriate assessment, a Plan may only be adopted if an adverse effect on the integrity of the site can be ruled out. If necessary, a plan should be amended to avoid or mitigate any likely conflicts. This usually means that some policies or allocations will need to be modified or, more unusually, may have to be removed altogether.

This document is an interim HRA report for the East Devon Local Plan and has been undertaken at the Preferred Options Regulation 18 consultation version of the Plan (autumn 2022). This is an early stage in the formulation of the Plan and likewise the HRA is at an early stage and will continue to progress as the Plan develops. At this stage we have undertaken an initial screening of the whole Plan. This has enabled us to make some recommendations whereby policy wording could be modified to ensure compliance with the Habitats Regulations (policies 16, 23, 82 and 84).

The initial screening of the Plan identified the potential for likely significant effects with respect to a number of different impact pathways:

- General urban effects, with the potential for likely significant effects identified for the East Devon Heaths SPA/SAC, Exe Estuary SPA/Ramsar and Sidmouth to West Bay SAC.
- Loss of supporting habitat/functionally linked land, with the potential for likely significant effects identified for Beer Quarry & Caves SAC, the East Devon Heaths SPA/SAC and the Exe Estuary SPA/Ramsar.
- Recreation, with the potential for likely significant effects were identified for the Exe Estuary SPA/Ramsar, East Devon Heaths SAC/SPA¹, Dawlish Warren SAC, the River Axe SAC and Sidmouth to West Bay SAC.
- Hydrological issues with the potential for likely significant effects identified for the Exe Estuary SPA/Ramsar, Lyme Bay and Torbay SAC, River Axe SAC, Sidmouth to West SAC.

¹ We use this term to refer to both the East Devon Pebblebed Heaths SAC and the East Devon Heaths SPA, which have identical boundaries.

• Air quality, with the potential for likely significant effects to the East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, River Axe SAC and Sidmouth to West Bay SAC.

For each impact pathway we review the information available to inform the appropriate assessment and identify areas where further evidence or information are required and also highlight where changes or additional policy wording may be necessary as the Plan progresses.

For general urban effects we identify the need for specific policy wording for any allocations very close to the European site boundary. This wording should ensure the design and layout addresses any risks from urban effects and that these are checked at project-level HRA.

For loss of supporting habitat/functionally-linked land, appropriate assessment will need to check all allocation sites carefully and where such sites that may relate to supporting habitat are included in the Plan, wording may need to indicate that the site would only be developed following targeted survey work for the relevant species and as necessary any mitigation measures incorporated at project level (for example with respect to lighting). Project level HRA will be necessary before such sites can come forward. The number of allocations effected is relatively small and risks are low. Policy 23 (Seaton and its future development) highlights issues for possible allocations and the need for mitigation (with respect to Beer Quarry & Caves SAC). Should these be included in later versions of the Plan, ensuring adequate mitigation is achievable and can be secured will be necessary or suitable wording will need adding to the Plan to ensure that the site can only come forward if and when adverse effects on integrity are ruled out. For the new settlement options, and the scale of growth proposed around the East Devon Heaths SPA, it will be necessary to gain a better understanding of how Nightjar forage in the wider landscape.

For recreation we highlight the importance of the existing strategic mitigation approach for the Exe Estuary SPA/Ramsar/East Devon Heaths SAC/SPA and Dawlish Warren SAC; the strategy has been running since 2014 and a review and update has been commissioned. This will be available prior to the Plan being finalised and the next version of the HRA will need to ensure the strategy includes adequate mitigation for the levels of growth set out in the Plan. This is critical given the scale of growth proposed, including the new settlement options that will mean a large uplift in population in a specific area, in close proximity to both the Exe Estuary SPA/Ramsar and the East Devon Heaths SAC/SPA.

The River Axe SAC and Sidmouth to West Bay SAC are not covered by any strategic approach. The risks are potentially much less but there is scope for the conservation objectives to be undermined. On the River Axe swimming, canoeing and dog walking have the potential to cause damage and contamination while on the Sidmouth to West Bay SAC, vegetated shingle is particularly vulnerable to trampling. Further checks are necessary with Natural England and local ecologists to ascertain the level of risk and any evidence that may enable adverse effects on integrity to be ruled out. Walkovers/impact assessment may be necessary to check scale of any current issues.

The studies required or evidence needed to inform the assessment of hydrological issues and for air quality have not yet been carried out or are not yet available.

Clarification is needed regarding water availability and water quality that there is sufficient headroom and infrastructure in place to ensure no adverse effects on integrity. With respect to the River Axe SAC, Policy 86 in the Plan sets out a requirement for all development in the Axe catchment to demonstrate nutrient neutrality. It will be a key consideration for future iterations of the HRA– at a strategic level – that this is possible and there are no allocations that are being promoted that cannot be delivered.

With respect to air quality traffic studies will be required for those roads within 200m of the four European sites. Where modelling of traffic flows identifies increases in traffic of greater than 1,000 AADT for all traffic or 200AADT for HDVs amongst a range of other criteria, air quality analysis will be needed to be commissioned to predict the impact on NO_x , ammonia and nitrogen deposition. The traffic modelling and any air quality modelling will need to be commissioned and evidence this will need to test the effects of growth in East Devon incombination with that in other neighbouring authorities.

Contents

Summary	
Contents	vi
Acknowledgements	vii
Overview The East Devon Plan Habitats Regulations Assessment process European sites Role of the competent authority Process	1 1 1 2 3 3 <i>guidance</i>
Overview of potentially relevant European sit Overlapping site boundaries	evon
What constitutes a likely significant effect? The screening	17
Relevant policies from initial LSE screening Introduction	n effects
Introduction	of supporting habitat/functionally linked land53 53 54
Relevant policies from initial LSE screening Introduction Potential sites and risks Considerations for appropriate assessment	sation
Relevant policies from initial LSE screening Introduction Water supply Considerations for appropriate assess	ological issues 60 60 61 61 61 ment 63

8. Appropriate assessment topic: Air Quality Introduction	
References	
Appendix 1: Conservation Objectives	
Appendix 2: Summary of European Sites	81
Appendix 3: Site pressures and threats for relevant European sites	

Acknowledgements

This report has been commissioned by East Devon Council. We are grateful to Matt Dickins for overseeing the work.

1. Introduction

Overview

- 1.1 This report is an interim Habitats Regulations Assessment (HRA) report to accompany the East Devon Local Plan 2020 to 2040 ('the Plan') at the Preferred Options stage. This report has been prepared by Footprint Ecology on behalf of East Devon Council. An HRA assesses the implications of a plan for legally protected European sites.
- 1.2 This report will be updated each stage of the Plan and the HRA will be finalised at the point at which the Plan is ready for adoption.

The East Devon Plan

- 1.3 East Devon District spans the area from the Dorset border west as far as Exeter. The East Devon Plan will be the main planning policy document for the District and will set out where development should take place and provide the policies which will be used in making decisions on planning application.
- 1.4 The Preferred Options version of the Plan is the initial version of the Plan (falling under Regulation 18 of the plan making regulations). It will be revised to form the 'Publication Plan' (which will fall under Regulation 18 of the plan making regulations).

Habitats Regulations Assessment process

1.5 The designation, protection and restoration of European wildlife sites is embedded in the Conservation of Habitats and Species Regulations 2017, as amended, which are commonly referred to as the 'Habitats Regulations'. Importantly, the most recent amendments (the Conservation of Habitats and Species (amendment) (EU Exit) Regulations 2019²) take account of the UKs departure from the EU.

² The amending regulations generally seek to retain the requirements of the 2017 Regulations but with adjustments for the UK's exit from the European Union. See Regulation 4, which also confirms that the interpretation of these Regulations as they had effect, or any guidance as it applied, before exit day, shall continue to do so.

1.6 Regulation 105 *et seq* addresses the assessment of local plans and determines the scope of this HRA alongside recent Government Guidance on the interpretation and application of the Regulations³.

European sites

- 1.7 'European sites' are the cornerstone of UK nature conservation policy. Each forms part of a 'national network' of sites that are afforded the highest degree of protection in domestic policy and law. They comprise Special Protection Areas (SPA) classified under the 1979 Birds Directive and Special Areas of Conservation (SAC) designated under the 1992 Habitats Directive. As a matter of policy, potential SPAs (pSPAs), possible SACs (pSACs) and those providing formal compensation for losses to European sites, are also given the same protection⁴.
- 1.8 The network safeguards the most valuable and threatened habitats and species across the country and Europe. Prior to Brexit, this formed part of the EU-wide Natura 2000 network of SPAs and SACs to form the largest, coordinated network of protected areas in the world.
- 1.9 The designations made under the European Directives still apply and the term, 'European site' remains in use. According to long-established Government policy⁵, European sites also comprise 'Wetlands of International Importance' (or Ramsar sites) although these do not form part of the national network.
- 1.10 The overarching objectives of the national network are to maintain, or where appropriate, restore habitats and species listed in Annexes I and II of the

³ Habitats regulations assessments: protecting a European site. Defra and Natural England. 24 February 2021. <u>https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-</u> <u>european-site</u> (accessed 17th August 2022).

⁴ For the avoidance of doubt, the list of statutory European sites also comprises: A site submitted by the UK to the European Commission (EC) before Exit Day (a candidate SAC or cSAC) as eligible for selection as a Site of Community Importance (SCI) but not yet entered on the ECs list of SCI, until such time as the Appropriate Authority has designated the site or it has notified the statutory nature conservation body that it does not intend to designate the site. After Exit Day, no further cSACs will be submitted to the EU. Statutory European sites also include SCI included on a list of such sites by the European Commission from cSACs submitted by the UK before the UK left the EU, until such time as the UK designates the site when it will become a fully designated SAC.

⁵ ODPM Circular 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System (16 August 2005), to be read in conjunction with the current NPPF, other Government guidance and the current version of the Habitats Regulations.

Habitats Directive to a Favourable Conservation Status, and contribute to ensuring, in their area of distribution, the survival and reproduction of wild birds and securing compliance with the overarching aims of the Wild Birds Directive.

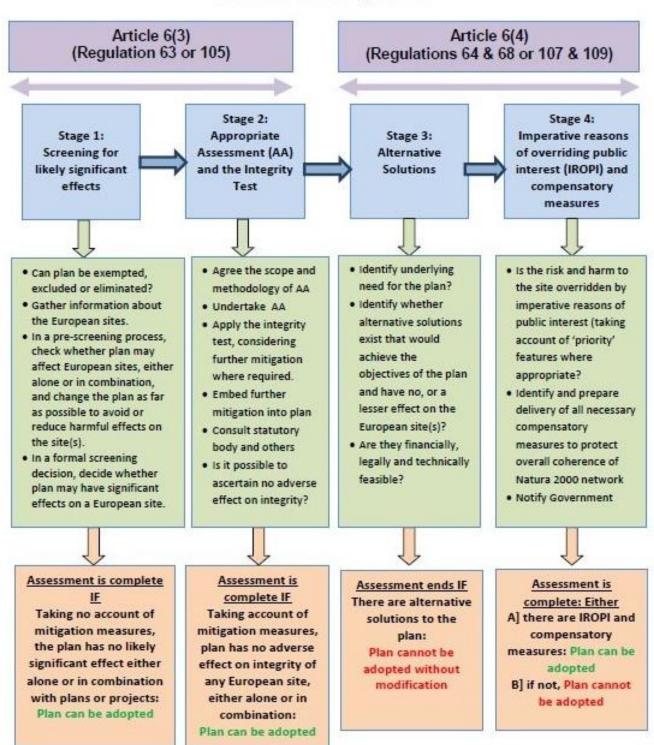
1.11 The appropriate authorities must have regard to the importance of protected sites, coherence of the national site network and threats of degradation or destruction (including deterioration and disturbance of protected features) on SPAs and SACs.

Role of the competent authority

1.12 Although this HRA has been prepared to help the Council discharge its duties under the Habitats Regulations, the Council is the competent authority, and it must decide whether to accept this report or otherwise. Further, it should be noted that this HRA has been prepared for the purposes of preparing and examining the Plan. Individual allocations will need to be reviewed when they become the subject of an individual planning application, to ensure that, if further assessment under the Habitats Regulations is necessary, it is undertaken in accordance with the requirements of appropriate assessment.

Process

1.13 The step-by-step process of HRA is summarised in Figure 1. Though dated prior to the latest amendments to the Regulations, the same tests still apply and it remains valid.



Outline of the four-stage approach to the assessment of plans under the Habitats Regulations

> Extract from The Habitats Regulations Assessment Handbook, www.dtapublications.co.uk © DTA Publications Limited (October 2018) all rights reserved This work is registered with the UK Copyright Service

Figure 1: Outline of the assessment of plans under the Habitat Regulations

- 1.14 Throughout all stages, there is a continual consideration of the options available to avoid and mitigate any identified potential impacts. A competent authority may consider that there is a need to undertake further levels of evidence gathering and evaluation at the appropriate assessment stage in order to provide the necessary certainty. At this point the competent authority may identify the need to add to or modify the plan in order to adequately protect the European site, and these mitigation measures may be added through the imposition of particular restrictions and conditions.
- 1.15 For plans, the stages of HRA are often quite fluid, with the plan normally being prepared by the competent authority itself. This gives the competent authority the opportunity to repeatedly explore options to prevent impacts, refine the plan and rescreen it to demonstrate that all potential risks to European sites have been successfully dealt with.
- 1.16 When preparing a plan, a competent authority may therefore go through a continued assessment as the plan develops, enabling the assessment to inform the development of the plan. For example, a competent authority may choose to pursue an amended or different option where impacts can be avoided, rather than continue to assess an option that has the potential to significantly affect European site interest features.
- 1.17 After completing an assessment, a competent authority should only adopt a plan where it can be ascertained that there will not be an adverse effect on the integrity of the European site(s) in question. In order to reach this conclusion, the competent authority may have made changes to the plan, or modified the project with restrictions or conditions, in light of their Appropriate Assessment findings.
- 1.18 Where adverse effects cannot be ruled out, further exceptional tests are set out in Regulation 107. In exceptional cases, this allows a plan to be taken forward where there are no 'alternative solutions', where 'imperative reasons of overriding public interest' apply and where compensation can be delivered. It should be noted that meeting these tests is a rare last resort and ordinarily, competent authorities seek to ensure that a plan or project is fully mitigated for, or it does not proceed.
- 1.19 In such circumstances where a competent authority considers that a plan should proceed under Regulations 107, they must notify the relevant Secretary of State. Normally, planning decisions and competent authority duties are then transferred, becoming the responsibility of the Secretary of State, unless on considering the information, the planning authority is

directed by the Secretary of State to make their own decision on the plan or project at the local level. The decision maker, whether the Secretary of State or the planning authority, should give full consideration to any proposed 'overriding reasons' for which a plan or project should proceed despite being unable to rule out adverse effects on European site interest features, and ensure that those reasons are in the public interest and are such that they override the potential harm. The decision maker will also need to secure any necessary compensatory measures, to ensure the continued overall coherence of the European site network if such a plan or project is allowed to proceed. However, it is understood that the Council would not wish to pursue these derogations.

Definitions, references to case law and guidance

- 1.20 This HRA follows principles of case law, both UK and EU. It also refers as appropriate to the Habitats Regulations Assessment Handbook (Tyldesley & Chapman, 2021), to which Footprint Ecology subscribes. We also follow relevant government guidance.
- 1.21 Drawing on the Handbook, other relevant guidance and case law, we clarify the following terms used in the flow chart (Figure 1):
- 1.22 In Stage 1, A '**likely significant effect**' following Waddenzee⁶, is a '*possible significant effect; one whose occurrence cannot be excluded on the basis of objective information*'. It is a low threshold and simply means that there is a risk or doubt regarding such an effect. The screening stage is a preliminary examination, sometimes described as a coarse filter, or following Sweetman⁷, as '*a trigger for the obligation to carry out an appropriate assessment*'. There should however be credible evidence to show that there is a real rather than a hypothetical risk of effects that could undermine a site's conservation objectives. This was amplified in the Bagmoor Wind⁸ case where '*if the absence of risk... can only be demonstrated after a detailed investigation, or expert opinion,* [then] *the authority must move from preliminary examination to appropriate assessment*'.

⁶ Waddenzee: European Courts C-127/02 Waddenzee 7th September 2004, reference for a preliminary ruling from the Raad van State.

⁷ Sweetman: European Court C – 258/11 Sweetman 11th April 2013, reference for a preliminary ruling from the Supreme Court of Ireland.

⁸ Bagmoor Wind: UK courts Bagmoor Wind v The Scottish Ministers, Court of Session [2012] CSIH 93.

- 1.23 Following the People Over Wind judgement⁹, when making screening decisions for the purposes of deciding whether an appropriate assessment is required, competent authorities cannot take into account any mitigation measures.
- 1.24 Stage 2 involves the **appropriate assessment and integrity test**. Here a plan can only be adopted if the competent authority can demonstrate that it will not adversely affect the integrity of the European site. This is precautionary approach and means it is necessary to show the absence of harm.
- 1.25 Following Champion¹⁰ '**appropriate'** is not a technical term but simply indicates that the assessment needs to be appropriate to the task in hand.
- 1.26 The **integrity** of a European site has been described as the 'coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified¹¹. An alternative definition, after Sweetman¹², is 'the lasting preservation of the constitutive characteristics of the site'.
- 1.27 In terms of the burden of proof, the HRA of development plans was first made a requirement in the UK following a ruling by the European Court of Justice in EC v UK¹³. However, the judgement¹⁴ recognised that any assessment had to reflect the actual stage in the strategic planning process and the level of evidence that might or might not be available. This was given expression in the High Court (Feeney)¹⁵ which stated: *"Each ... assessment ... cannot do more than the level of detail of the strategy at that stage permits"*.
- 1.28 The need to consider possible **in-combination** effects arises at stage 1 the screening and also at stage 2 the appropriate assessment and integrity test. The effects of the plan in-combination with other plans or projects are the cumulative effects which will or might arise from the addition of the effects of other relevant plans or projects alongside the plan under

⁹ People Over Wind and Sweetman v Coillte Teoranta (323-17) [2018] PTSR 1668

¹⁰ R (on the application of Champion v North Norfolk District Council [2015] 1 WLR 3170 at para 41

¹¹ Para 20 of the ODPM Circ. 06/2005

¹² Sweetman v An Bord Pleanála (C-258-11) [2014] PTSR 1092 at paragraph 39

¹³ Commission v UK (C-6/04) [2005] ECR 1-9017

¹⁴ Commission of the European Communities v UK Opinion of Advocate General Kokott

¹⁵ Feeney v Oxford City Council [2011] EWHC 2699 Admin at paragraph 92

consideration. If during the stage 1 screening it is found the subject plan would have no likely effect alone, but might have such an effect incombination then the appropriate assessment at stage 2 will proceed to consider cumulative effects. Where a plan is screened as having a likely significant effect alone, the appropriate assessment should initially concentrate on its effects alone. Exceptionally, the Wealden decision¹⁶ requires the impacts of air pollution to be considered alone and incombination.

¹⁶ Wealden District Council v Secretary of State for Communities and Local Government, Lewes District Council and the South Downs National Park Authority (Defendants) and Natural England (Interested Party) [2017] EWHC 351 (Admin).

2. European sites in and around East Devon

Overview of potentially relevant European sites

- 2.1 We have used 20km from the District boundary as an initial area of search (20km providing a reasonable area of search within which policies could reasonably be considered to generate measurable effects). Air quality impacts at plan level are typically considered to relate to a 10km distance (Chapman & Kite, 2021) while generic analysis of Footprint Ecology visitor data to countryside sites in the UK (Weitowitz et al., 2019) indicates that the majority of visitors originate within a 12.6km radius. The choice of 20km is therefore precautionary.
- 2.2 Sites that fall within this initial area of search are listed in Table 1. SAC sites are shown in Map 1, Map 2 shows SPA and Ramsar sites. All sites are described in Appendix 2.

Table 1: European Sites within a 20km radius.

SACs	SPA	Ramsar
Beer Quarry & Caves	East Devon Heaths	Exe Estuary
Bracket's Coppice	Exe Estuary	Somerset Levels & Moors
Chesil & The Fleet	Somerset Levels & Moors	
Culm Grasslands		
Dawlish Warren		
East Devon Pebblebed Heaths		
Hestercombe House		
Holme Moor & Clean Moor		
Lyme Bay and Torbay		
Quants		
River Axe		
Sidmouth to West Bay		
South Dartmoor Woods		
South Hams		
West Dorset Alder Woods		

Overlapping site boundaries

2.3 It should be noted that the East Devon Pebblebed Heaths SAC and the East Devon Heaths SPA have identical boundaries and in the rest of this report we will refer to the East Devon Heaths SAC/SPA where we mean both sites together. Where we use the specific site name then the text is specific to the relevant site (i.e. the SAC or SPA). Similarly, we use the Exe Estuary SPA/Ramsar when referring to both the Exe Estuary SPA and Ramsar site together (again the boundaries overlap) and Somerset Levels and Moors SPA/Ramsar to refer to the SPA and Ramsar together there.

Initial review of sites and potential impact pathways

2.4 Potential impact pathways - ways in which elements of the Plan might impact the relevant European sites - are summarised in Table 2. Potential impact pathways are then summarised by European site in Table 3. Many of the European sites listed are well outside the East Devon boundary and as such many can be excluded easily at this stage.

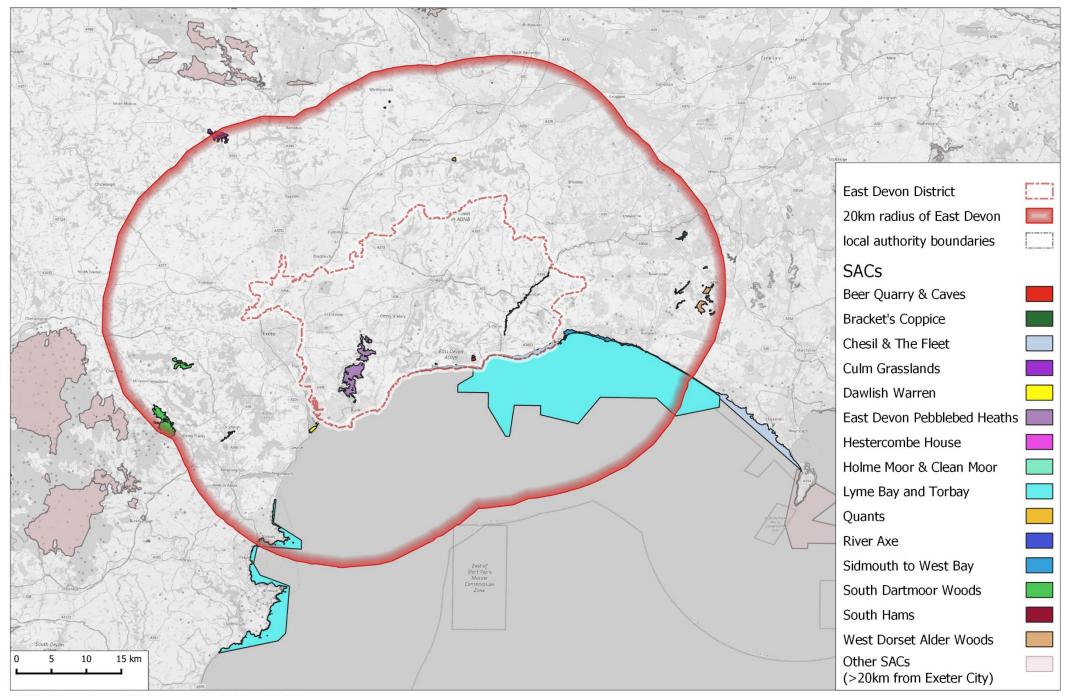
Table 2: Impact Pathways

Pathway	Explanation
General urban effects	Effects on a European site from nearby development, including light, noise, domestic cats, spread of invasive species, etc. Relates to development in close proximity.
Loss of supporting habitat/functionally linked land	Effects on European sites relating to loss or deterioration of land outside the site boundary which supports the relevant qualifying features and directly relates to the individuals or populations on the European site. For example, bats foraging in the wider landscape away from a roost.
Recreation impacts	Effects on a European site caused by human use of site for recreational activities and their consequences, including walking, riding, sports, organised activities etc. Effects may include direct disturbance of species by people, dogs or vehicles, trampling, erosion, fire, vandalism, fly tipping.
Hydrological impacts (water quality & availability)	Effects on a European site from altered local water quality or from interruption, reduction or other interference of local hydrology, including groundwater, surface standing water or watercourses.
Air Quality	Effects on a European site from changes in local air quality, primarily likely from increased vehicle traffic associated with growth in the Plan. Impacts from traffic where roads are within 200m of the European site

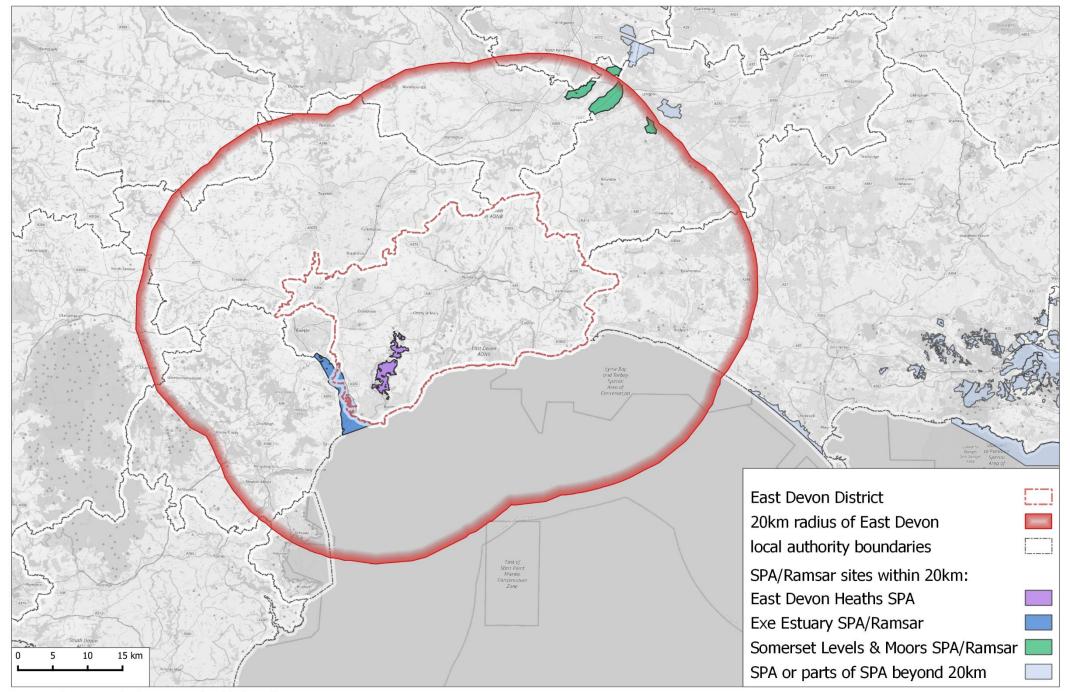
Table 3: Potential impact pathways with a tick indicating where the pathway is relevant to the site Distances are the approximate distances from the nearest part of the European site to the nearest part of the city boundary. No distances are given those sites that are within the District boundary.

Site	Distance (km)	General urban effects	Loss of supporting habitat	Recreation impacts	Hydrological impacts (water quality & availability)	Air Quality	Notes
Beer Quarry & Caves SAC		\checkmark	\checkmark			\checkmark	Consultation zone and guidance established for bats and the risk of loss of supporting habitat (Jennings & Youngman, 2022). Only road within 200m is an unclassified lane.
Bracket's Coppice SAC	14.2						Site qualifies for Bechstein's Bat and Purple Moor Grass/Rush Pasture. Site is distant and in a very rural area, access is limited and the site is relatively hard to find.
Chesil & The Fleet SAC	12.6						Recreation impacts can be ruled out based on distance. Visitor survey data (Liley et al., 2022) indicates a potential zone of influence of around 7.3km and there were just 3 visitors from E. Devon.
Culm Grasslands SAC	17.8						Air quality and recreation impacts can be ruled out on the distance.
Dawlish Warren	0.4			\checkmark			Potential for recreation impacts due to ease of access by boat from Exmouth and ferry.
East Devon Heaths SAC/SPA		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	Hydrological impacts unlikely as sites as while the SAC qualifies for Southern Damselfly, these occur on rain-fed valley mires.
Exe Estuary SPA/Ramsar		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Hestercombe House SAC	16.1						Site qualifies for Lesser Horseshoe Bats, which roost in the roof of the house. Given distance no impact pathways.
Holme Moor & Clean Moor SAC	14.5						Small fen and Purple Moor Grass/Rush Pasture site well to the north of the district.
Lyme Bay and Torbay SAC					\checkmark		The sea caves are potentially vulnerable to recreation impacts but these only occur around Torbay.
Quants SAC	5.9						Neutral grassland site that qualifies for Marsh Fritillary. Site is well to the north of the District, towards Wellington and Taunton. Impacts can be ruled out on distance.

Site	Distance (km)	General urban effects	Loss of supporting habitat	Recreation impacts	Hydrological impacts (water quality & availability)	Air Quality	Notes	
River Axe SAC				\checkmark	\checkmark	~	Recreation possibly a risk as there is canoeing on the river and there is access to the river from a range of Public Rights of Way and roads. Fish spawning areas may be impacts by trampling and disturbance. Paddling and entering the water could increase turbidity.	
Sidmouth to West Bay SAC		\checkmark		\checkmark	\checkmark		Water quality could be relevant for any development in close proximity.	
South Dartmoor Woods SAC	9.3						Site is the other side of Exeter from East Devon and recreation impact pathway not relevant given the challenge of getting round Exeter and the distance.	
South Hams SAC	11.4						Exe Estuary creates a physical barrier and given distance involved, no impact pathways relevant.	
West Dorset Alder Woods SAC	12.6						Well to the east and within the relatively isolated and rural valleys towards Dorchester. No impact pathways can be relevant.	
Somerset Levels and Moors SPA/Ramsar	13.8						Distance and hydrology means all impact pathways can be ruled out.	



Contains Ordnance Survey data © Crown copyright and database right 2022. © OpenStreetMap contributors. Terms: www.openstreetmap.org/copyright. © Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right 2022.



Contains Ordnance Survey data © Crown copyright and database right 2022. © OpenStreetMap contributors. Terms: www.openstreetmap.org/copyright. © Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right 2022. 2.6 In assessing the implications of any plan or project on European sites, it is essential to fully understand the ecology and sensitivity of the sites, in order to identify how they may be affected. Appendix 1 summarises the generic conservation objectives and Appendix 2 provides detail of the relevant sites, listing their qualifying features, describing the sites and providing links to the relevant detailed conservation advice from Natural England.

3. Screening for Likely Significant Effects

- 3.1 This section is an initial screening of the policies of the Plan at this stage in the plan making.
- 3.2 The screening is the first step in the 4 stage process of HRA. The screening for likely significant effects of a plan involves checking all aspects of the plan and identifying any areas of potential concern, which are then examined in more detail in the appropriate assessment (stage 2) of the HRA. The check for likely significant effects provides an initial test of the plan. It is undertaken to enable the plan maker as competent authority to do two things. Firstly, it narrows down and highlights those elements of the plan that may pose a risk to European sites. Secondly, where an option poses a risk but is a desired element of the plan, the screening exercise identifies where further assessment is necessary in order to determine the nature and magnitude of potential impacts on European sites and what could be done to avoid, cancel, reduce or eliminate those risks. Further assessment and evidence gathering after early screening may include, for example, the commissioning of additional survey work, modelling, researching scientific literature or setting out justifications in accordance with expert opinion.

What constitutes a likely significant effect?

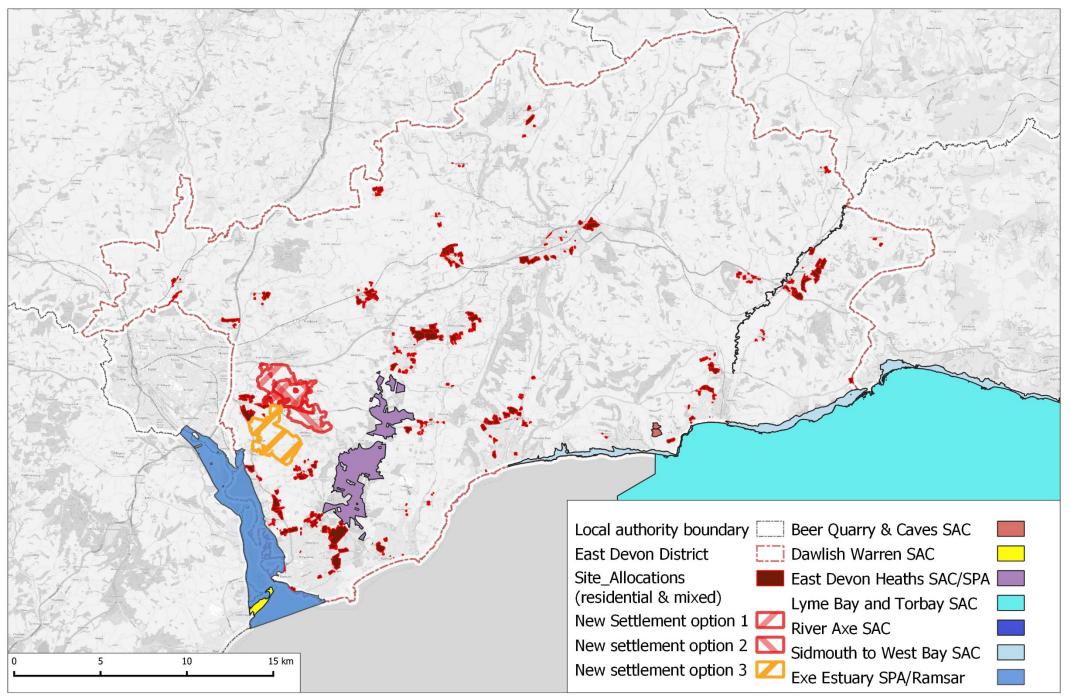
- 3.3 Where the screening identifies risks that cannot be avoided with simple clarifications, corrections or instructions for project level HRA, a more detailed assessment is undertaken to gather more information about the likely significant effects and give the necessary scrutiny to potential mitigation measures. This is the appropriate assessment stage of HRA.
- 3.4 A likely significant effect could be concluded on the basis of clear evidence of risk to European site interest, or there could be a scientific and plausible justification for concluding that a risk is present, even in the absence of direct evidence. The latter is an example of the precautionary approach, which is embedded through the HRA process. The precautionary principle should be applied at all stages in the HRA process and follows the principles established in domestic and EU case law.

3.5 The screening in this report looks at policies prior to any avoidance/reduction/mitigation measures in line with People Over Wind¹⁷; mitigation can only be considered at Appropriate Assessment stage. People Over Wind clarified the need to carefully explain actions taken at each HRA stage, particularly at the screening for likely significant effects stage. The Judgment highlights the need for clear distinction between the stages of HRA, and good practice in recognising the function of each. The screening for likely significant effects stage should function as a screening or checking stage (regardless of avoidance/reduction/mitigation measures), to determine whether further assessment is required. Assessing the nature and extent of potential impacts on European site interest features, and the robustness of mitigation options, should be done at the appropriate assessment stage.

The screening

- 3.6 Allocations (residential and mixed use) and new settlement options are shown in Map 3.
- 3.7 The screening for likely significant effects within
- 3.8 Table 4 below provides the screening at this stage in the plan-making. The screening covers the whole plan. Where risks are highlighted and there is a possibility of significant effects on European sites, further and more detailed appropriate assessment will required. Inevitably there will be precaution in screening elements of the plan, as the purpose of screening for likely significant effects is to identify where there is either no possibility of an effect, or where there are uncertainties.

¹⁷ People Over Wind: European Count Case C-323/17 People Over Wind & Peter Sweetman v Coillte Teoranta 12 April 2018.



Contains Ordnance Survey data © Crown copyright and database right 2022. © OpenStreetMap contributors. Terms: www.openstreetmap.org/copyright. © Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right 2022.

Table 4: Initial screening of the Outline Draft Plan for likely significant effects. Orange shaded rows with bold text indicates policies that are screened in, alone or in-combination. Grey shading indicates chapter headings for ease of reference. Yellow highlights indicate text referring to minor changes to the plan wording that could be improved for later iterations of the plan.

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
Chapter 1. Introduction, evidence and policies	Introductory text on role and schedule of local plan.	Administrative text. No LSE.		
Chapter 2. Vision and objectives	Overarching vision for the local plan.	A general aspiration. No LSE.		
Chapter 3. The spatial strategy	Introductory text on spatial strategy.	Introductory text. No LSE.		
1. Strategic Policy – Spatial Strategy	Identifies the most suitable areas for development.	General policy. No LSE.		Policy very strategic and while setting broad locations for development, sets no specific quantum of growth or detail. Policy is implemented through later policies in the Plan which are more specific and more appropriate to assess for their effects.
2. Strategic Policy – Housing distribution	Detailed description of where proposed developments has been allocated.	LSE. Screened in.	Urban effects alone (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, Sidmouth to West Bay SAC); Loss of supporting habitat/functionally linked land alone (Beer Quarry & Caves SAC, East Devon Heaths SPA, Exe Estuary SPA/Ramsar); Recreation effects alone (Dawlish Warren SAC, East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, River Axe SAC, Sidmouth to West Bay SAC); Hydrological effects alone (Exe Estuary SPA/Ramsar, Lyme Bay and Torbay SAC, River Axe SAC, Sidmouth to West Bay SAC); Air Quality alone (East Devon	Table proposing the exact number of dwellings per area. A total of 1,953 developments had been completed and 4,403 have been committed by 2022. A further 11,811 have been allocated within the local plan to be delivered by 2040.

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
3. Strategic Policy - Levels of future housing development	ldentifies the level of affordable and market housing required by area, and level of growth expected over time.	LSE. Screened in.	Heaths SAC/SPA, Exe Estuary SPA/Ramsar, River Axe SAC, Sidmouth to West Bay SAC). Urban effects alone (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, Sidmouth to West Bay SAC); Loss of supporting habitat/functionally linked land alone (Beer Quarry & Caves SAC, East Devon Heaths SPA, Exe Estuary SPA/Ramsar); Recreation effects alone (Dawlish Warren SAC, East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, River Axe SAC, Sidmouth to West Bay SAC); Hydrological effects alone (Exe Estuary SPA/Ramsar, Lyme Bay and Torbay SAC, River Axe SAC, Sidmouth to West Bay SAC); Air Quality alone (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, River Axe SAC, Sidmouth to West Bay SAC).	Exact figures of housing growth per area to be completed post consultation, but the current housing growth trajectory will be 946 new dwellings (net) per year.
4. Strategic Policy - Employment Provision and Distribution Strategy	Outlines the level of industrial development needed to provide employment new developments by area.	Policy listing general criteria. No LSE.		Policy categorizes potential industrial development by industry, such as office space, industrial units and storage space. No quantum or specific locations identified and awaiting results of Economic Development Needs Assessment.
5. Strategic Policy – Mixed use developments incorporating housing, employment and community facilities	Identifies the ratio of employment land needed per residential development.	Policy listing general criteria. No LSE.		Includes conditions for planning permission in relation to level of employment development and suitability.

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
6. Strategic Policy – Development inside Settlement Boundaries	Broadly states that development within settlement boundaries will be endorsed in principle but not guaranteed.	Policy listing general criteria No LSE.		Refers also to any changes to the settlement boundaries, whether or not they might be compatible.
7. Strategic policy - Development beyond Settlement Boundaries	Strategic text on development outside of settlement boundary.	Policy listing general criteria. No LSE.		
Chapter 4. Addressing housing needs and identifying sites for development	Describes the process for allocating sites for development.	Administrative text. No LSE.		
Chapter 5. Future growth and development on the western side of East Devon	Identifies the significant development and further demand in the western side of East Devon (near Exeter).	Introductory text. No LSE.		
8. Strategic Policy – Development of a second new town east of Exeter	Details of the homes, pitches and employment to be developed in the new town by 2040.	LSE. Screened in.	Recreation effects alone (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar); Hydrological effects alone (Exe Estuary SPA/Ramsar); Air Quality alone (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, Sidmouth to West Bay SAC).	Allocation for new town, and while location and specific details uncertain, broad location means clear risk for East Devon Heaths and the Exe Estuary in particular.
9. Strategic policy – Development within the Enterprise Zone	Outlines the need for high quality new developments and public transport provision within the Enterprise Zone.	Policy listing general criteria. No LSE.		

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
10. Strategic policy – Exeter Science Park	General policy for any development at Exeter Science Park	Policy listing general criteria. No LSE.		Policy is site specific but strategic in that it does not set any particular levels of development and simply information on which uses are acceptable.
11. Strategic policy – Land north of the Science Park	General policy for business development.	LSE. Screened in.	Hydrological effects in-combination (Exe Estuary SPA/Ramsar); Air Quality effects in- combination (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar).	4.3 hectares of land allocated for business usage. Approximately 5km from Exe Estuary SPA/Ramsar and 8.5km from East Devon Heaths SAC/SPA.
12. Strategic policy – High quality employment north of Sowton village	General policy for business development.	LSE. Screened in.	Hydrological effects in-combination (Exe Estuary SPA/Ramsar); Air Quality effects in- combination (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar).	17 hectares of land allocated for business usage. This land is less than 5km from Exe Estuary SPA/Ramsar and 7.5 km from East Devon Heaths SAC/SPA.
13. Strategic policy – Exeter Airport and its future operation and development	Expansion of Exeter Airport is permitted within boundary, as well as employment provision and training.	Policy listing general criteria. No LSE.		Any increase in traffic or flights could have implications for nearby sites, particularly the East Devon Heaths SAC/SPA. However, policy simply outlines support for growth and expansion of the airport and airport related businesses and is too strategic for any impacts to be identified or assessed.
14. Strategic Policy – Employment land to the east of airport buildings	General policy for business development.	LSE. Screened in.	Hydrological effects in-combination (Exe Estuary SPA/Ramsar); Air Quality effects in- combination (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar).	7.7 hectares of land allocated for business near Exeter Airport. Close proximity to both East Devon Heaths SAC/SPA & Exe Estuary SPA/Ramsar.
15. Strategic Policy – Employment land east of the	General policy for business development.	LSE. Screened in.	Hydrological effects in-combination (Exe Estuary SPA/Ramsar); Air Quality effects in- combination (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar).	12 hectares of land allocated for employment usage near Exeter Airport. Close proximity to both East

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
Airport and north of the A30				Devon Heaths SAC/SPA & Exe Estuary SPA/Ramsar.
16. Strategic Policy – Green infrastructure and the Clyst Valley Regional Park	The objectives of the Clyst Valley Regional Park, to provide a green space for wellbeing and recreation, as well as mitigate for adverse impacts to environmentally sensitive locations.	Policy that could not have any conceivable effect on a site. No LSE.		Environmentally positive and aims to reduce recreation pressure from other areas. Policy therefore not taken into account within the screening in accordance with <i>People Over Wind</i> . Supporting text could be improved in future iterations of the Plan by removing the now dated reference to Natura 2000 sites and replacing with 'Habitats Sites' or 'European Sites'.
17. Strategic Policy – Development next to the M5 and north of Topsham	Allocation of land near Topsham, detailing housing, employment and infrastructure requirements.	LSE. Screened in.	Recreation effects in-combination (Dawlish Warren SAC, East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar); Hydrological effects in- combination (Exe Estuary SPA/Ramsar); Air Quality in-combination (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar).	Outlines the provision of 580 new homes and 2.4 hectares of employment land. Transport and pedestrian access to the land, linking to Clyst Valley Regional Park (see Strategic Policy 16). Very close proximity (1.5km) to Exe Estuary SPA/Ramsar and to East Devon Heaths SAC/SPA (7.5km).
18. Strategic Policy – Gypsy and traveller site east of the M5 and south of the Exeter-Waterloo line	Allocation of land for pitches/gypsy and traveller development.	LSE. Screened in.	Recreation effects in-combination (Dawlish Warren SAC, East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar); Hydrological effects in- combination (Exe Estuary SPA/Ramsar); Air Quality in-combination (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar).	Specifically good access to roads for the proposed traveller pitches. Part of the allocated area is floodplain, and any other development here will be resisted. This site is 5.5km from Exe Estuary SPA/Ramsar and 8.5km from East Devon Heaths SAC/SPA.
Chapter 6. Strategy for development at Principal Centres, Main Centres, Local	Summarises the allocation of development per town.	Introductory text. No LSE.		

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
Centres and Service Villages				
19. Strategic Policy – Axminster and its future development	Allocation of potential sites for development in Axminster.	LSE. Screened in.	Recreation effects in-combination (River Axe SAC, Sidmouth to West Bay SAC); Hydrological effects in-combination (Lyme Bay and Torbay SAC, River Axe SAC, Sidmouth to West Bay SAC); Air Quality effects in-combination (River Axe SAC).	1,050 new homes proposed for Axminster and 7.2 hectares proposed for employment. Very close proximity to River Axe SAC (<2km, but railway creates clear divide in terms of urban effects, recreation etc), within 10km of Lyme Bay and Torbay SAC, Sidmouth to West Bay SAC. Axminster is approximately 12km from Beer Quarry & Caves SAC and outside the landscape connectivity zone for the SAC set out in the guidance (Jennings & Youngman, 2022).
20. Strategic Policy – Exmouth and its future development	Allocation of potential sites for development in Exmouth.	LSE. Screened in.	Recreation effects in-combination (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar); Recreation effects alone (Dawlish Warren SAC, East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar); Hydrological effects in- combination (Exe Estuary SPA/Ramsar); Air Quality in-combination (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar).	1,033 new homes allocated for Exmouth and 6.6 hectares proposed for employment. Settlement is very close to Exe Estuary SPA/Ramsar and East Devon Heaths SAC/SPA (<1km) and Dawlish Warren SAC (2km). Land on the north-eastern side of Exmouth is within 500m of the East Devon Heaths SAC/SPA. No LSE with respect to loss of supporting habitat and Exe Estuary SPA/Ramsar as no relevant locations identified for development on the proposals map.

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
21. Strategic Policy – Honiton and its future development	Allocation of potential sites for development in Honiton.	LSE. Screened in.	Recreation effects in-combination (East Devon Heaths SAC/SPA, Sidmouth to West Bay SAC); Air Quality in-combination (East Devon Heaths SAC/SPA, River Axe SAC).	471 new homes allocated for the Honiton area and 14.6 hectares for employment. Within 10km of East Devon Heaths SAC/SPA. Honiton is outside the landscape connectivity zone for the Beer Quarry and Caves SAC set out in the guidance (Jennings & Youngman, 2022).
22. Strategic Policy – Ottery St Mary and its future development	Allocation of potential sites for development in Ottery St Mary.	LSE. Screened in.	Recreation effects in-combination (East Devon Heaths SAC/SPA, Sidmouth to West Bay SAC); Air Quality in-combination (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar).	288 new homes allocated for Ottery St Mary and 1.25 hectares for employment. Approximately 5km from East Devon Heaths SAC/SPA. Ottery St. Mary is outside the landscape connectivity zone for the Beer Quarry and Caves SAC set out in the guidance (Jennings & Youngman, 2022).
23. Strategic Policy – Seaton and its future development	Allocation of potential sites for development in Seaton.	LSE. Mitigation measures to be considered. Screened in.	Loss of supporting habitat/functionally linked land alone (Beer Quarry & Caves SAC); Recreation effects in-combination (East Devon Heaths SAC/SPA, Sidmouth to West Bay SAC) Hydrological effects in-combination (Lyme Bay and Torbay SAC, Sidmouth to West Bay SAC); Air Quality effects in-combination (Sidmouth to West Bay SAC).	217 new homes allocated in the Seaton area and 2.2 hectares required for employment development. Policy identifies the need for avoidance/mitigation/compensation measures to be identified to ensure no adverse effects to Beer Quarry & Caves SAC (3km away). Future iterations of policy wording should remove reference to compensation to ensure compliance with Habitats Regulations.

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
24. Strategic Policy – Sidmouth and its future development	Allocation of potential development in Sidmouth.	LSE. Screened in.	Loss of supporting habitat/functionally linked land alone (Beer Quarry & Caves SAC); Recreation effects in-combination (East Devon Heaths SAC/SPA, Sidmouth to West Bay SAC); Hydrological effects in-combination (Lyme Bay and Torbay SAC, Sidmouth to West Bay SAC); Air Quality effects in-combination (East Devon Heaths SAC/SPA)	168 new homes proposed in Sidmouth and 0.51 hectares of required employment land. Less than 5km to both East Devon Heaths SAC/SPA and Sidmouth to West Bay SAC.
25. Strategic Policy – Development at Local Centres	Allocation of development by each local centre.	LSE. Screened in.	Urban effects alone (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar); Loss of supporting habitat/functionally linked land alone (Beer Quarry & Caves SAC, East Devon Heaths SPA); Recreation effects in-combination (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, River Axe SAC, Sidmouth and West Bay SAC); Hydrological effects in-combination (Exe Estuary SAC/SPA, Lyme Bay and Torbay SAC, River Axe SAC, Sidmouth to West Bay SAC); Air Quality effects in-combination (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, River Axe SAC).	More details of total dwellings per local centre in table in Strategic Policy 2.
26. Strategic Policy – Development at service villages	Allocation of housing development in service villages (by village).	LSE. Screened in.	Urban effects alone (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, Sidmouth to West Bay SAC); Loss of supporting habitat/functionally linked land alone (Beer Quarry & Caves SAC, East Devon Heaths SPA, Exe Estuary SPA/Ramsar); Recreation effects in- combination (Dawlish Warren SAC, East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, Lyme Bay and Torbay SAC, River Axe SAC, Sidmouth to West Bay SAC); Hydrological effects in-combination (Exe Estuary	

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
			SPA/Ramsar, Lyme Bay and Torbay SAC, River Axe SAC, Sidmouth to West Bay SAC); air quality in-combination (East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, River Axe SAC).	
Chapter 7. Tackling the climate emergency and responding to climate change	Introductory text about the threat of climate change.	Strategic text. No LSE.		
27. Strategic Policy – Climate Emergency	East Devon aims to be carbon-neutral by 2040.	Policy listing general criteria. No LSE.		
28. Strategic Policy – Net-Zero Carbon Development	The commitment for developments to be net- zero and 'future proofed' for the effects of climate change.	Policy listing general criteria. No LSE.		
29. Strategic Policy – Promoting renewables and zero carbon energy	Strategic text to state the role of renewables in reducing unacceptable impacts on the local environment.	General policy that will not lead to development. No LSE.		
30. Strategic Policy – Suitable areas for solar energy developments	Identifies the potential of solar energy development, with no unacceptable impacts on the local environment.	General policy that will not lead to development. No LSE.		
31. Strategic Policy – Suitable areas for	Wind energy development will be supported, assuming there will be no	General policy that will not lead to		There are risks associated with turbines (e.g. bats or birds striking them) however policy is general and does not

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
wind energy developments	adverse negative impacts on the local environment.	development. No LSE.		promote development at specific locations so no risks.
32. Strategic Policy – Energy Storage	Strategic text, planning permission for energy storage facilities.	General policy that will not lead to development. No LSE.		
33. Strategic Policy – Heat Networks	Strategic text, heat networks will be installed for larger developments, or expanded where one exists already.	General policy that will not lead to development. No LSE.		
34. Strategic Policy – Embodied carbon	Strategic text, to consider existing infrastructure	General policy that will not lead to development. No LSE.		
35. Strategic Policy – Flooding	Strategic text to reduce the likelihood flooding.	General policy that will not lead to development. No LSE.		
36. Policy – Coastal change management areas (CCMAs)	Outlining that all coastal development, particularly residential will be checked against the likelihood longevity of the coastal area in question.	Policy listing general criteria. No LSE.		Residential properties are less likely to be successful in gaining planning permission, however commercial and temporary developments may be successful particularly if it benefits employment.
37. Policy – Relocation of uses	Properties affected by coastal change may be relocated within the	Policy listing general		

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
affected by coastal change	community, without any adverse effects to biodiversity and the landscape.	criteria. No LSE.		
38. Strategic Policy – Development affecting coastal erosion	The council will promote coastal management proposals provided they do not have unacceptable adverse economic, social or environmental impact	General policy that will not lead to development. No LSE.		Policy seeks to balance the need for protective measures to reduce rates of coastal change with the integrity of the World Heritage Site. Wording could be strengthened to also reference Sidmouth to West Bay SAC which also depends on coastal processes.
Chapter 8. Meeting housing needs for all	Addressing the housing needs for the East Devon district, by health and wellbeing, shelter and affordability.	Introductory text. No LSE.		
39. Strategic Policy - Housing to address needs	This detailed outline identifies the range of housing needs, such as by age (retirement homes and first homes for younger generations), affordable housing, private accommodation, using up an to date Local Housing Needs Assessment of the district.	General policy that will not lead to development. No LSE.		
40. Policy - Affordable Housing	States the minimum requirements of affordable housing, rented housing, first homes and any other	Policy listing general criteria. No LSE.		

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
41. Policy - Housing to meet the needs	conditions to consider per development site. Identifies the needs of older persons dwellings to be close to local facilities, and the requirement by	Policy listing general		A minimum of 1,630 net dwellings are expected to be delivered meet older persons needs under the local plan. An extension of Policy 42, specifically
of older people	development size to provide older persons dwellings or specialist accommodation.	criteria. No LSE.		Adaptable Housing, having recognised the need to provide more homes for older people.
42. Policy - Accessible and Adaptable Housing	All new affordable housing, market housing and specialist accommodation will meet building regulations.	Policy listing general criteria. No LSE.		
43. Policy - Market housing mix	States the evidenced housing needs by size of the East Devon district.	Policy listing general criteria. No LSE.		
44. Policy – Self- Build and Custom Build Housing	Self-build plots must be made available where there is a demand, proportionate to the size of the development and demand in the local area.	Policy listing general criteria. No LSE.		
45. Policy – Residential Sub- division of Existing Dwellings and Buildings and	Identifies the criteria for replacement dwellings or a change (e.g., sub-division of dwelling) to ensure that there are no adverse	Policy listing general criteria. No LSE.		

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
Replacement of Existing Dwellings	effects to the surrounding area.			
46. Policy – Householder Annexes, Extensions, Alterations and Outbuildings	Conditions for the scale, size and justification of building an annex or extension to a main dwelling.	Policy listing general criteria. No LSE.		
47. Policy - Hostels and Houses in Multiple Occupation (HMOs)	Outlines the criteria for converting a residential dwelling to multi- occupancy.	Policy listing general criteria. No LSE.		
48. Strategic Policy – Provision for Gypsy and Travellers, and Travelling Showpeople Sites	Criteria for choosing sites for Gypsy and Traveller pitches, to be considered alongside predicted needs assessment.	Strategic text and policy still to be confirmed. No LSE.		Awaiting findings of Gypsy and Traveller Needs Assessment. Future iterations of policy will need checking for sites.
49. Policy – Rural Exception Sites and First Homes Exception Sites	Outlines the criteria for building in rural communities, to ensure that sites remain small, provide some first homes, and avoid becoming too expensive for the level of disposable income in the area.	Policy listing general criteria. No LSE.		
50. Policy – Housing for rural workers	Outlines criteria for obtaining permission to develop rural dwelling.	Policy listing general criteria. No LSE.		Accommodation for rural workers may be approved when alternative housing is not available in the nearby settlement.

Plan section/policy	Description	Initial LSE	Potential risks	Comments
Fian section/policy	Description	screening	FOLENLIAL FISKS	Comments
Chapter 9. Supporting jobs and the economy and vibrant town centres	Aims to provide future employment, including town centre hierarchy and retail policies.	Introductory text. No LSE.		
51. Policy – Employment development within settlement boundaries	Employment land will be allocated if compatible with neighbouring developments.	Policy that could not have any conceivable effect on a site No LSE.		
52. Policy – Employment development in the countryside	Criteria for expanding or developing business in the countryside.	Policy listing general criteria. No LSE.		
53. Policy – Farm Diversification	Outlines the criteria for farm diversification and expansion.	Policy listing general criteria. No LSE.		
54. Policy – Resisting the loss of Employment sites	Criteria to change the type of employment viable at a site or permit the site for use other than for employment.	Policy listing general criteria. No LSE.		
55. Policy – Employment and Skills Statements	The proposed policy will address the employment skills and opportunities required, to be met by developers.	Policy listing general criteria. No LSE.		Awaiting evidence of skills base, financial contribution of employment and employment opportunity in the area.
56. Strategic Policy – Town centre	Demonstrates the town centre hierarchy and which	Policy listing general		

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments	
hierarchy, sequential approach and impact assessment	development plan will be followed in each tier.	criteria. No LSE.			
57. Policy - Town Centre development	Town development and or change of shop use will be permitted providing there is evidence stating the benefit to the town as a whole.	Policy that could not have any conceivable effect on a site No LSE.			
58. Policy – Local shops and services	In tier 3 & 4 town centres, new shops and services will be supported if they predominantly sell convenience goods. Proposals which lead to the loss of shops and services will not be supported.	Policy that could not have any conceivable effect on a site No LSE.			
59. Policy – Rural shops	Rural businesses will sell goods that are sourced either on the premises or in the local area (30 miles radius) only, where deemed beneficial to the local community.	Policy that could not have any conceivable effect on a site No LSE.			
60. Policy – Sustainable Tourism	The vision for East Devon to become a year-round tourism destination. Contains criteria for new tourist attractions,	Policy listing general criteria. No LSE.		There could be risks associated with tourism growth e.g. with respect to water quality or recreation. Policy however sets no quantum of growth or specific locations.	

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
	accommodation and facilities.			
61. Policy – Holiday Accommodation Parks in designated landscapes	Criteria for the extension of current holiday parks, including the mitigation of sensitive surrounding areas. New holiday parks will not be permitted.	Policy listing general criteria. No LSE.		There could be risks associated with tourism development e.g. with respect to water quality or recreation. Policy however sets no quantum of growth or specific locations.
Chapter 10. Designing beautiful and healthy spaces and buildings	Introductory text.	Policy listing general criteria. No LSE.		
62. Policy – Design and Local Distinctiveness	Outlines criteria for using appropriate materials and methods which will reduce carbon emissions over time and mitigate for any adverse impacts of the proposed development.	Policy listing general criteria. No LSE.		Criteria for resource use, urban landscape and design with no adverse effects to the character of the town and surrounding environment.
63. Policy – Housing Density and Efficient Use of Land	Developments will be in keeping with character of the neighbourhood, whilst making most efficient use of space and density.	Policy that could not have any conceivable effect on a site No LSE.		Minimum density standards yet to be determined.
64. Policy – Display of Advertisements	Criteria for advertisements of the development.	Policy that could not have any conceivable effect on a site No LSE.		

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
Chapter 11. Prioritising Sustainable travel and providing the transport and communications facilities we need	Identifies that the needs to communities in East Devon vary, dependant on how rural these communities are. As a result, transport and communication needs vary in reflection of this.	Introductory text. No LSE.		
65. Strategic Policy – Walking, cycling, and public transport	New developments should prioritise walking and cycling routes and be able to facilitate access to public transport.	Policy that could not have any conceivable effect on a site No LSE.		
66. Policy – Protecting transport sites and routes	Specific sites & routes that will be protected from development.	Policy that could not have any conceivable effect on a site No LSE.		
67. Policy – Travel Plans, Transport Statements, Transport Assessments	Developments must complete Travel Plans under these outlined criteria to gain permission.	Policy that could not have any conceivable effect on a site No LSE.		
68. Policy – Parking standards	Sets level of provision for bike parking and car parking In addition, EV charging points must also be provided on new developments.	Policy that could not have any conceivable effect on a site No LSE.		

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
69. Policy - Rear Servicing of Shopping/Commerc ial Development	Provide rear access to commercial development areas to reduce congestion.	Policy that could not have any conceivable effect on a site No LSE.		
70. Policy – Safe vehicular access to sites	Where development provides additional parking, safe vehicular access must be demonstrated.	Policy that could not have any conceivable effect on a site No LSE.		
71. Policy - Aerodrome Safeguarded Areas and Public Safety Zones	Planning permission will be denied where in immediate vicinity of an airport, which could raise public safety concerns or impact the operations of the airfield.	Policy that could not have any conceivable effect on a site No LSE.		
72. Strategic policy – Digital Connectivity	New developments must have superfast broadband connectivity. Early discussions between developers and providers are encouraged.	Policy that could not have any conceivable effect on a site No LSE.		
73. Policy – Wireless connectivity and telecoms infrastructure	Encourages good practice for wireless network building and outlines the criteria for permission.	Policy that could not have any conceivable effect on a site No LSE.		'Proposals within AONB or sensitive locations must provide [the appropriate assessment]'

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
Chapter 12. Caring for our outstanding landscape	Introductory text.	Introductory text. No LSE.		
74. Policy – Landscape Features	Identifies the features within East Devon landscape which will be protected against harmful development.	General environmental policy. No LSE.		Environmentally positive policy that will protect rural areas from development.
75. Policy - Areas of Outstanding Natural Beauty	Identifies the developments that will be permitted within AONBs.	General environmental policy. No LSE.		AONB management plans will be integral to decision making.
76. Policy - Coastal Preservation Areas	Development will not be permitted if it will likely damage the Coastal Protection Area.	General environmental policy. No LSE.		
77. Policy – Areas of Strategic Visual Importance	Outlines the types of views to be considered, conserved or enhanced by development.	General environmental policy. No LSE.		
78. Policy – Green wedges	Guidance to ensure that development does not conflict with Green Wedges and outlines the criteria in which development would be permitted within a Green Wedge.	General environmental policy. No LSE.		
79. Policy – Land of Local Amenity Importance or Local Green Space	Development will be restricted in land that is designated as a Local Green Space and outlines	General environmental policy. No LSE.		

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
	the criteria for what types of development would be deemed appropriate within them.			
80. Policy - Contaminated Land	If there is contaminated land near a development site, the appropriate assessments must be taken as outlined in this policy before permission is considered.	General environmental policy. No LSE.		
81. Policy - Potentially Hazardous Developments and Notifiable Installations	Health and safety risk of any hazardous installation must be ruled out for planning permission to be granted.	General environmental policy. No LSE.		
82. Policy - Control of Pollution	Planning permission will not be granted if there are unacceptable levels of pollution.	General environmental policy. No LSE.		Policy does make specific mention of wildlife sites, noting European designated sites and species. However, this is too general to be taken into account as mitigation and screened in (following <i>People Over Wind</i>). Policy could potentially be improved by removing reference to European wildlife sites, given text is so vague and issues covered in more detail in later policies.
83. Policy - Development on High Quality Agricultural Land	Identifies the only conditions from which the best agricultural land will be developed upon, which	Strategic text. No LSE.		

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
	is otherwise protected from development.			
Chapter 13. Protecting and enhancing our outstanding biodiversity and geodiversity	East Devon has an abundance of biodiversity and geodiversity interest. This chapter recognises the importance of these and aims to protect them.	Introductory text. No LSE.		
84. Policy – Protection of Internationally and Nationally important wildlife sites	Proposals that may adversely affect the integrity of designated nationally and internationally important sites will not be permitted, unless proposals meet the criteria given in this policy.	General environmental policy. No LSE.		Policy related to European sites, however, it is too general to be taken into account as mitigation and screened out (following <i>People Over Wind</i>). Policy wording should be changed to ensure compliance with Habitats Regulations. Biodiversity net gain is not appropriate to address permanent or long-term habitat loss or direct reduction of habitat condition on internationally designated sites and the policy would benefit from making a clear distinction between the different tiers of designation.
85. Policy – Protection of irreplaceable habitats and important features	Proposals that will adversely affect important habitats will be refused, unless in exceptional circumstances. Important habitats include hedgerows and ancient woodland, for example.	General environmental policy. No LSE.		Environmentally positive policy.
86. Policy – Habitats	Mitigation measures and the role of HRA.	Policy intended to	Mitigation and site-specific wording relates to urban effects (East Devon Heaths SPA), loss of	Safeguarding or protective policy that is intended to avoid or reduce

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
Regulations Assessment		avoid or reduce harmful effect to European sites. LSE. Screened in.	supporting habitat (Beer Quarry and Caves SAC), recreation impacts (Exe Estuary SPA/Ramsar, East Devon Heaths SAC/SPA and Dawlish Warren SAC) and hydrological effects (River Axe SAC).	harmful effects to a European site. Wording should be improved for clarity and to ensure legal compliance. Reference to compensation will be required should be removed or additional clarifications added. Wording on nutrient neutrality should cover nitrates as well as phosphates. Reference to the East Devon Heaths should ensure correct names used (the SPA is called the East Devon Heaths SPA).
87. Policy – Biodiversity Net Gain	Proposals in the area should aim for a BNG of at least 20% within the East Devon district.	General environmental policy. No LSE.		Environmentally positive policy.
88. Strategic Policy – Local Nature Recovery Strategy and Nature Recovery Network	Planning permission that is mapped into Nature Recovery Networks will be denied. In contrast, BNG credits gained within the NRN areas is encouraged.	General environmental policy. No LSE.		Generally, environmentally positive and likely to be beneficial to European sites.
89. Policy – Ecological Impact Assessment	The criteria for which an EcIA might deviate from best practice.	General environmental policy. No LSE.		
90. Policy – Due consideration of protected and notable species	Protection of any protected species, and the conditions under which planning permission would be granted.	General environmental policy. No LSE.		Generally, environmentally positive, for European protected species.

		Initial LSE		
Plan section/policy	Description	screening	Potential risks	Comments
91. Policy – Ecological enhancement and incorporation of design features to maximize the biodiversity value of proposals	Providing wildlife friendly features to development, such as bat boxes and gaps between garden fences for hedgehog movement.	General environmental policy. No LSE.		Positive for local wildlife networks.
92. Policy – Tree policy	Contribution to the Devon Tree Strategy.	General environmental policy. No LSE.		
93. Policy – Protection and enhancement of the Jurassic Coast World Heritage site	Assessments required for proposals within the Jurassic World Heritage Site.	General environmental policy. No LSE.		
94. Policy – Protection of designated geological sites	Development on geological sites will not be permitted, unless the criteria outlined are met.	General environmental policy. No LSE.		
95. Policy – Regionally Important Geological and Geomorphological Sites	Protection of RIGS, limiting development and requiring mitigation where development is necessary.	General environmental policy. No LSE.		
Chapter 14. Open space and sports and recreation facilities	States the importance of accessible open spaces and recreational facilities.	Introductory text. No LSE.		

DI	D	Initial LSE		
Plan section/policy	Description	screening	Potential risks	Comments
96. Strategic Policy – Access to open space and recreation facilities	States that any new development must consider the access that new residents have to recreational features.	Policy that could not have any conceivable effect on a site No LSE.		
97. Policy – Land and buildings for sport, recreation and open space areas in association with development	Details the recreational space required per development size, by recreation type, such as allotments, playing space, parks etc.	Strategic text. No LSE.		Awaiting update for additional supply needs.
98. Policy – Location of facilities for sport and recreation, open spaces and allotments	Outlines that new, accessible, open spaces will be given planning permission given that there are no adverse effects to the environment.	Policy listing general criteria. No LSE.		
99. Policy – Retention of land and buildings for sport and recreation use	The policy states that proposals leading to the loss of open space currently used for recreation will not be permitted.	Policy listing general criteria. No LSE.		
100. Policy – New allotments and avoiding the loss of existing ones	Proposals that include land of existing allotments will not be developed upon. New allotments will be granted planning permission when related to new settlements and	Policy listing general criteria. No LSE.		

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
	avoid adverse environmental effects.			
101. Policy – Leisure and recreation developments in the countryside	Plans for outdoor recreation facilities will be granted, if it is in keeping with the character of the area and the local environment.	Policy listing general criteria. No LSE.		
Chapter 15. Our outstanding historic environment	Outlines the rich heritage that East Devon has and defines heritage assets.	Introductory text. No LSE.		
102. Policy – Historic Environment	Proposals must consider the impact to the historic environment and/or heritage assets and will only be supported under the criteria outlined in this policy.	General policy that will not lead to development. No LSE.		
103. Policy – Listed buildings	Identifies the criteria for changing of use, extension, demolition or partial demolition of listed buildings.	Policy listing general criteria. No LSE.		
104. Policy - Conservation Areas	Expectations of developers building within Conservation Area's.	General policy that will not lead to development. No LSE.		
105. Policy – Archaeology and	Developments must consider whether the site is likely to have	Policy that could not have any		

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
Scheduled Monuments	archaeological remains and take the necessary steps to assess this.	conceivable effect on a site No LSE.		
106. Policy – Historic Landscapes, parks and gardens	Sites of special historic interest should be conserved or enhanced. Proposals should consider sites of special historic interest and must justify any harm or loss clearly and convincingly.	Policy that could not have any conceivable effect on a site No LSE.		
Chapter 16. Ensuring we have community buildings and facilities	Outlines the need for community spaces and buildings to have a thriving community.	Introductory text. No LSE.		
107. Policy – New or extended community facilities	Development of new community facilities will be proportionate to the needs of the local community, including being physically close to current and provisional settlements.	Policy listing general criteria. No LSE.		
108. Policy – Loss of Community facilities	Planning permission will not be granted for developments which result in the loss of community facilities.	Policy listing general criteria. No LSE.		
Chapter 17. Implementation	Infrastructure will be developed alongside housing and economic	No LSE.		

Plan section/policy	Description	Initial LSE screening	Potential risks	Comments
and monitoring of the local plan	development. Monitoring of the local plan will ensure that policies are carried out successfully and not just a 'wish list', via the Annual Monitoring Report.			

Screening conclusions

- 3.9 The initial screening of the outline draft plan has identified a number of risks in terms of general urban effects, loss of supporting habitats, recreation, hydrological impacts and air quality. Policies that have been screened in are summarised in Table 5.
- 3.10 It is too early to undertake a full appropriate assessment as the site options are still to be finalised and key pieces of evidence are still to be collated. Following the initial screening, topics for appropriate assessment are highlighted to advise on the scope of the appropriate assessment and inform the evidence that will need to be gathered as the Plan progresses. These topics will be assessed in detail within the appropriate assessment at the next iteration of the Plan, when more detail and evidence are available.

Table 5: Summary of policies screened in for Likely Significant Effects and relevant European sites and impact pathways. Grey shaded cells indicate effects alone (as opposed to in-combination).

Plan section/policy	Urban effects	Loss of supporting habitat/functionally linked land	Recreation	Hydrological effects	Air quality
2. Strategic Policy – Housing distribution	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, Sidmouth to West Bay SAC	Beer Quarry & Caves SAC, East Devon Heaths SPA, Exe Estuary SPA/Ramsar	Dawlish Warren SAC, East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, River Axe SAC, Sidmouth to West Bay SAC	Exe Estuary SPA/Ramsar, Lyme Bay and Torbay SAC, River Axe SAC, Sidmouth to West Bay SAC	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, River Axe SAC, Sidmouth to West Bay SAC
3. Strategic Policy - Levels of future housing development	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, Sidmouth to West Bay SAC	Beer Quarry & Caves SAC, East Devon Heaths SPA, Exe Estuary SPA/Ramsar	Dawlish Warren SAC, East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, River Axe SAC, Sidmouth to West Bay SAC	Exe Estuary SPA/Ramsar, Lyme Bay and Torbay SAC, River Axe SAC, Sidmouth to West Bay SAC	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, River Axe SAC, Sidmouth to West Bay SAC
8. Strategic Policy – Development of a second new town east of Exeter			East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar	Exe Estuary SPA/Ramsar	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, Sidmouth to West Bay SAC
11. Strategic policy – Land north of the Science Park				Exe Estuary SPA/Ramsar	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar
12. Strategic policy – High quality employment north of Sowton village				Exe Estuary SPA/Ramsar	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar
14. Strategic Policy – Employment land to the east of airport buildings				Exe Estuary SPA/Ramsar	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar
15. Strategic Policy - Employment land east of the Airport and north of the A30				Exe Estuary SPA/Ramsar	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar
17. Strategic Policy – Development			Dawlish Warren SAC, East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar	Exe Estuary SPA/Ramsar	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar

Plan section/policy	Urban effects	Loss of supporting habitat/functionally linked land	Recreation	Hydrological effects	Air quality
next to the M5 and north of Topsham					
18. Strategic Policy – Gypsy and traveller site east of the M5 and south of the Exeter- Waterloo line			Dawlish Warren SAC, East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar	Exe Estuary SPA/Ramsar	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar
19. Strategic Policy – Axminster and its future development			River Axe SAC, Sidmouth to West Bay SAC	Lyme Bay and Torbay SAC, River Axe SAC, Sidmouth to West Bay SAC	River Axe SAC
20. Strategic Policy – Exmouth and its future development	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar		Dawlish Warren SAC, East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar	Exe Estuary SPA/Ramsar	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar
21. Strategic Policy – Honiton and its future development			East Devon Heaths SAC/SPA, Sidmouth to West Bay SAC		East Devon Heaths SAC/SPA, River Axe SAC
22. Strategic Policy – Ottery St Mary and its future development			East Devon Heaths SAC/SPA, Sidmouth to West Bay SAC		East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar
23. Strategic Policy – Seaton and its future development		Beer Quarry & Caves SAC	East Devon Heaths SAC/SPA, Sidmouth to West Bay SAC	Lyme Bay and Torbay SAC, Sidmouth to West Bay SAC	Sidmouth to West Bay SAC
24. Strategic Policy – Sidmouth and its future development		Beer Quarry & Caves SAC	East Devon Heaths SAC/SPA, Sidmouth to West Bay SAC	Lyme Bay and Torbay SAC, Sidmouth to West Bay SAC	East Devon Heaths SAC/SPA
25. Strategic Policy – Development at Local Centres	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar	Beer Quarry & Caves SAC, East Devon Heaths SPA	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, River Axe SAC, Sidmouth and West Bay SAC	Exe Estuary SAC/SPA, Lyme Bay and Torbay SAC, River Axe SAC, Sidmouth to West Bay SAC	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, River Axe SAC

Plan section/policy	Urban effects	Loss of supporting habitat/functionally linked land	Recreation	Hydrological effects	Air quality
26. Strategic Policy – Development at service villages	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, Sidmouth to West Bay SAC	Beer Quarry & Caves SAC, East Devon Heaths SPA, Exe Estuary SPA/Ramsar	Dawlish Warren SAC, East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, Lyme Bay and Torbay SAC, River Axe SAC, Sidmouth to West Bay SAC	Exe Estuary SPA/Ramsar, Lyme Bay and Torbay SAC, River Axe SAC, Sidmouth to West Bay SAC	East Devon Heaths SAC/SPA, Exe Estuary SPA/Ramsar, River Axe SAC
86. Policy – Habitats Regulations Assessment		Beer Quarry and Caves SAC	Exe Estuary SPA/Ramsar, East Devon Heaths SAC/SPA and Dawlish Warren SAC	River Axe SAC	

4. Appropriate assessment topic: Urban effects

Relevant policies from initial LSE screening

4.1 Likely significant effects were identified in the initial screening for three European sites and a range of policies, all of which support development in close proximity to European site boundaries: For all policies the likely significant effects were identified alone.

East Devon Heaths SAC/SPA

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 20. Strategic Policy Exmouth and its future development
- 25. Strategic Policy Development at Local Centres
- 26. Strategic Policy Development at service villages

Exe Estuary SPA/Ramsar,

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 20. Strategic Policy Exmouth and its future development
- 25. Strategic Policy Development at Local Centres
- 26. Strategic Policy Development at service villages

Sidmouth to West Bay SAC

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 26. Strategic Policy Development at service villages
- In addition, Policy 86 includes specific mitigation text around the East Devon Heaths SPA and urban effects, establishing a zone within 400m of the SPA boundary where new dwellings will not be allowed. In accordance with People Over Wind this policy has not been taken account in the screening and will need to be considered as part of the appropriate assessment.

Introduction

4.3 Urban effects relate to issues where development is close to the European site boundary and is an umbrella term relating to impacts such as light, noise, cat predation, fly tipping, increased fire risk, spread of invasive species (e.g. from gardens and garden waste) and vandalism. Where development is directly adjacent to sites, access can occur directly from gardens and informal access points. Use will spill over from adjacent gardens and any area of green space next to urban areas is often subject to a range of activities and issues that are not necessarily compatible with nature conservation. We treat urban effects separately from recreation as urban effects are specific to where housing is in close proximity and urban effects are not addressed through the existing mitigation strategy.

Considerations for appropriate assessment

- 4.4 The 400m protection zone around the East Devon Heaths SPA will mean urban effects for East Devon Heaths SAC/SPA should be straightforward to rule out.
- 4.5 For the Exe Estuary SPA/Ramsar and Sidmouth to West Bay SAC risks are relatively low and would relate to increased fire incidence, cat predation (the Exe SPA/Ramsar only), light pollution (the Exe SPA/Ramsar only) and spread of invasive species from garden waste etc.
- 4.6 Fire is potentially a concern only during dry periods and some vegetation types only (for example patches of reed or reedbeds). Fires can start in a range of ways, including deliberate arson, children playing, campfires, barbeques, sparks from vehicles, discarded cigarettes etc. Studies of fire incidence have shown higher incidence of fires in locations with higher levels of housing within 500m of the site boundary (Kirby & Tantram, 1999). Light pollution would be a risk on the Exe where it potentially affects foraging behaviour and distribution of birds (Dwyer et al., 2013; Longcore & Rich, 2004; Santos et al., 2010).
- 4.7 Cat predation (e.g. Cecchetti et al., 2021; Hall et al., 2016; Kays et al., 2019; Loss & Marra, 2017) is potentially a risk only where aggregations of small waders or other waterbirds on the Estuary are accessible to cats. Fly-tipping and dumping of garden waste resulting in contamination and spread of non-native species are only likely to be of concern where areas are accessible and adjacent to roads or paths or backed onto by gardens.
- 4.8 As such risks are all very site specific and relate to issues with the design, layout etc. At plan-level it should be possible to rule out adverse effects on integrity through the inclusion of suitable wording for any allocations very close to the European site boundary. This wording should ensure the design and layout addresses any risks from urban effects and that these are checked at project-level HRA.

5. Appropriate assessment topic: Loss of supporting habitat/functionally linked land

5.1 Likely significant effects were identified in the initial screening for three European sites and a range of policies. All of the European sites are ones where the qualifying features can roam widely beyond the site boundary. For all policies the likely significant effects were identified alone.

Beer Quarry & Caves SAC

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 23. Strategic Policy Seaton and its future development
- 24. Strategic Policy Sidmouth and its future development
- 25. Strategic Policy Development at Local Centres
- 26. Strategic Policy Development at service villages

East Devon Heaths SPA

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 25. Strategic Policy Development at Local Centres
- 26. Strategic Policy Development at service villages

Exe Estuary SPA/Ramsar

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 25. Strategic Policy Development at Local Centres
- 26. Strategic Policy Development at service villages
- 5.2 In addition, Policy 86 includes specific mitigation text around the Beer Quarry & Caves SAC and the need to protect the pinch points. In accordance with People over Wind this policy has not been taken account in the screening and will need to be considered as part of the appropriate assessment.

Introduction

5.3 Development outside European sites may impact qualifying features where individuals of the relevant species roam outside the European site boundary (see Chapman & Tyldesley, 2016 for review and discussion). Impacts can involve the direct loss of habitat or impacts such as disturbance that might mean the supporting habitat does not function as well.

- 5.4 For the Beer Quarry & Caves SAC the bats can roam widely in the landscape, following particular flight-lines to reach other roost sites and foraging areas outside the SAC boundary. Further background and details are set out by Jennings and Youngman (2022).
- 5.5 Nightjar are a qualifying feature of the East Devon Heaths SPA and are likely to move off the heath to nearby woodland, wet grassland, orchards and even grassland to feed (Alexander & Cresswell, 1990; Conway et al., 2015; Cresswell, 1996). Given the scale of growth around the East Devon Heaths, with allocations on all sides of the SPA, there is a risk of loss of foraging habitat and disruption to flight lines.
- 5.6 Waterbirds associated with the Exe Estuary SPA/Ramsar will use low-lying land around the estuary as roost sites and for feeding.

Considerations for appropriate assessment

- 5.7 Appropriate assessment will need to check all allocation sites carefully and where such sites are included in the Plan, wording may need to indicate that the site would only be developed following targeted survey work for the relevant species and as necessary any mitigation measures incorporated at project level (for example with respect to lighting). Project level HRA will be necessary before such sites can come forward.
- 5.8 The number of sites effected is relatively small and risks are low, as allocations are mostly within settlement boundaries and in areas that are not sensitive. The guidance for Beer Quarry and Caves SAC clearly sets out areas of risk and types of development that are relevant for bats. Policy 23 (Seaton and its future development) highlights issues for possible allocations and the need for mitigation. Should these be included in later versions of the Plan, ensuring adequate mitigation is achievable and can be secured will be necessary or suitable wording ensuring that the site can only come forward if and when adverse effects on integrity are ruled out. For the settlement options and growth around the East Devon Heaths SPA it will be necessary to have an understanding of Nightjar foraging behaviour in the area how these birds use supporting habitat.

6. Appropriate assessment topic: Recreation

Relevant policies from initial LSE screening

6.1 Likely significant effects were identified in the initial screening for five European sites and a range of policies. These effects were identified alone for the policies that set the overall quantum of growth and the new town (policies 2,3 and 8). Relevant sites and policies were:

Dawlish Warren SAC

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 8. Strategic Policy Development of a second new town east of Exeter
- 17. Strategic Policy Development next to the M5 and north of Topsham
- 18. Strategic Policy Gypsy and traveller site east of the M5 and south of the Exeter-Waterloo line
- 20. Strategic Policy Exmouth and its future development
- 25. Strategic Policy Development at Local Centres
- 26. Strategic Policy Development at service villages

East Devon Heaths SAC/SPA

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 8. Strategic Policy Development of a second new town east of Exeter
- 17. Strategic Policy Development next to the M5 and north of Topsham
- 18. Strategic Policy Gypsy and traveller site east of the M5 and south of the Exeter-Waterloo line
- 20. Strategic Policy Exmouth and its future development
- 21. Strategic Policy Honiton and its future development
- 22. Strategic Policy Ottery St Mary and its future development
- 25. Strategic Policy Development at Local Centres
- 26. Strategic Policy Development at service villages

Exe Estuary SPA/Ramsar

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 8. Strategic Policy Development of a second new town east of Exeter
- 17. Strategic Policy Development next to the M5 and north of Topsham
- 18. Strategic Policy Gypsy and traveller site east of the M5 and south of the Exeter-Waterloo line
- 20. Strategic Policy Exmouth and its future development
- 21. Strategic Policy Honiton and its future development

- 25. Strategic Policy Development at Local Centres
- 26. Strategic Policy Development at service villages

River Axe SAC

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 19. Strategic Policy Axminster and its future development
- 21. Strategic Policy Honiton and its future development
- 25. Strategic Policy Development at Local Centres
- 26. Strategic Policy Development at service villages

Sidmouth to West Bay SAC

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 19. Strategic Policy Axminster and its future development
- 21. Strategic Policy Honiton and its future development
- 25. Strategic Policy Development at Local Centres
- 26. Strategic Policy Development at service villages
- 6.2 In addition, Policy 86 includes specific mitigation text around strategic mitigation for recreation (relating to Dawlish Warren SAC, the East Devon Heaths SAC/SPA and the Exe Estuary SPA). In accordance with People over Wind this policy has not been taken account in the screening and will need to be considered as part of the appropriate assessment.

Introduction

6.3 In the UK there is considerable overlap between nature conservation and recreation. Many of our most important nature conservation sites have legal rights of access, for example through Public Rights of Way or Open Access through the Countryside and Rights of Way Act (CRoW) 2000. People are often drawn to sites that are important for nature conservation as they are large, scenic and often few other alternatives exist. Recreation use can include a variety of activities, ranging from the daily dog walks to competitive adventure and endurance sports. Visits to the natural environment have shown a significant increase in England as a result of the increase in population and a trend to visit more (O'Neill, 2019). The issues are particularly acute in southern England, where population density is highest. The covid pandemic resulted in a further marked increase in use of local countryside sites (Burnett et al., 2021; Natural England & Kantar Public, 2021) and a marked uplift in dog ownership (Morgan et al., 2020).

- 6.4 There can be a difficult balancing act between providing for an increasing demand for access without compromising the integrity of protected wildlife sites. There is now a strong body of evidence showing how increasing levels of access can have negative impacts on wildlife. Issues are varied and include disturbance, increased fire risk, contamination and damage (for general reviews see: Liley et al., 2010, 2019; Lowen et al., 2008; Ross et al., 2014; Underhill-Day, 2005).
- 6.5 The issues are not however straightforward. It is now increasingly recognised that access to the countryside is crucial to the long term success of nature conservation projects, for example through enforcing pro-environmental behaviours and a greater respect for the world around us (Richardson et al., 2016). Access also brings wider benefits to society that include benefits to mental/physical health (Bell et al., 2018; Keniger et al., 2013; Lee & Maheswaran, 2011; Pretty et al., 2005) and economic benefits (ICF GHK, 2013; ICRT, 2011; Keniger et al., 2013; The Land Trust, 2018). Nature conservation bodies are trying to encourage people to spend more time outside and government policy is also promoting countryside access in general (e.g. through enhancing coastal access).

Potential sites and risks

6.6 Recreation issues have the potential to undermine the conservation objectives of the European sites where likely significant effects have been identified in a range of ways (see Table 6) and are identified in the respective site improvement plans (produced by Natural England) as summarised in Table 6. For the Exe Estuary SPA/Ramsar, Dawlish Warren SAC and the East Devon Heaths SAC/SPA the issues are long standing and a strategy was established in 2014 to mitigate the impacts from residential development for these sites. Table 6: European sites and potential recreation impacts relevant at the appropriate assessment stage. Relevant pressures/threats from Site Improvement Plans (SIPs). Direct impact from third party can include unauthorised access and fire.

		Relevant pressures/threats from SIPs			
Site	Recreation impacts/risks	Direct impact from third party	Wildfire/arson	Public access/disturbance	
Dawlish Warren SAC	Trampling damage to dune habitats, dog fouling, fire incidence.			\checkmark	
East Devon Pebblebed Heaths SAC	Trampling damage, dog fouling, increased fire risk.		\checkmark	\checkmark	
East Devon Heaths SPA	Disturbance to Nightjar and Dartford Warbler; also fire risk.		\checkmark	\checkmark	
Exe Estuary Ramsar	Disturbance to waterbirds.			\checkmark	
Exe Estuary SPA	Disturbance to waterbirds.			\checkmark	
River Axe SAC	Trampling damage, increased turbidity, contamination from dogs (e.g. swimming in river)				
Sidmouth to West Bay SAC	Dog fouling, trampling damage (vegetated shingle), fire.	\checkmark			

- 6.7 Recreation impacts has long been identified as a concern for Dawlish Warren SAC, the East Devon Heaths SAC/SPA and the Exe Estuary SPA/Ramsar. A strategic approach to mitigation has been in place for these sites since 2014. This strategic approach applies to residential and some tourist development within a zone of influence drawn around each European site and is applied consistently across Exeter City, East Devon and Teignbridge. Full details of the issues and mitigation measures are set out in the strategy (see Liley et al., 2014).
- 6.8 Mitigation has involved on-site measures such as rangers, management of parking and engagement with visitors on the respective sites (these measures are referred to as SAMM – Strategic Access Management and Monitoring) and the provision of alternative places for recreation use by local residents (SANG – Suitable Alternative Natural Greenspace).
- 6.9 The mitigation strategy is long running, well established and ensures mitigation can be delivered. It provides transparency for developers as the costs and

mitigation requirements are known in advance. The strategy is clearly referenced and mitigation requirements for the Plan established in Policy NE3 while SANGs are also referenced in Policy NE2. The strategy is being updated and revised.

Considerations for appropriate assessment

- 6.10 The mitigation strategy provides a robust and established means to deliver the mitigation and is in line with strategies in other parts of the country, such as the Thames Basin Heaths, the Dorset Heaths, the Solent Coast, the Suffolk Coast and the North Kent Coast. As such there can be confidence in the broad approach as a means to address impacts arising from the cumulative effects of development across a wide area. It should be straight forward for the strategy to be updated prior to the next iteration of the Plan.
- 6.11 In order to be able to rule out adverse effects on integrity from recreation on the Exe Estuary SPA/Ramsar, East Devon Heaths SAC/SPA and Dawlish Warren SAC it will be necessary for the next iteration of this HRA to be able to draw on the updated mitigation strategy. The HRA will need to be able to have the confidence that the strategy is achievable, that the necessary SAMM and SANG are adequately resourced and deliverable and that the level of mitigation will address the scale of growth coming forward.
- 6.12 The River Axe SAC and Sidmouth to West Bay SAC are not covered by any strategic approach. The risks are potentially much less but there is scope for the conservation objectives to be undermined. On the River Axe swimming, canoeing and dog walking have the potential to cause damage and contamination while on the coastal SAC site, vegetated shingle is particularly vulnerable to trampling. Further checks are necessary with Natural England and local ecologists to ascertain the level of risk and any evidence that may enable adverse effects on integrity to be ruled out. Walkovers/impact assessment may be necessary to check scale of any current issues.

7. Appropriate assessment topic: Hydrological issues

Relevant policies from initial LSE screening

7.1 Likely significant effects were identified in the initial screening for a range of sites that have relevant qualifying features that are water dependent and where development has the potential to impact the hydrology through changes to flow or water quality. The impacts of development will relate to the overall quantum of growth in the relevant catchments. These effects were identified alone for the policies that set the overall quantum of growth and the new town (policies 2,3 and 8). Relevant sites and policies were:

Exe Estuary SPA/Ramsar

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 8. Strategic Policy Development of a second new town east of Exeter
- 11. Strategic policy Land north of the Science Park
- 12. Strategic policy High quality employment north of Sowton village
- 14. Strategic Policy Employment land to the east of airport buildings
- 15. Strategic Policy Employment land east of the Airport and north of the A30
- 17. Strategic Policy Development next to the M5 and north of Topsham
- 18. Strategic Policy Gypsy and traveller site east of the M5 and south of the Exeter-Waterloo line
- 20. Strategic Policy Exmouth and its future development
- 25. Strategic Policy Development at Local Centres
- 26. Strategic Policy Development at service villages

Lyme Bay and Torbay SAC

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 8. Strategic Policy Development of a second new town east of Exeter
- 19. Strategic Policy Axminster and its future development
- 23. Strategic Policy Seaton and its future development
- 24. Strategic Policy Sidmouth and its future development
- 25. Strategic Policy Development at Local Centres
- 26. Strategic Policy Development at service villages

River Axe SAC

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 8. Strategic Policy Development of a second new town east of Exeter

- 19. Strategic Policy Axminster and its future development
- 25. Strategic Policy Development at Local Centres
- 26. Strategic Policy Development at service villages

Sidmouth to West Bay SAC

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 8. Strategic Policy Development of a second new town east of Exeter
- 19. Strategic Policy Axminster and its future development
- 23. Strategic Policy Seaton and its future development
- 24. Strategic Policy Sidmouth and its future development
- 25. Strategic Policy Development at Local Centres
- 26. Strategic Policy Development at service villages

Introduction

- 7.2 Run-off outflow from sewage treatments and overflows from septic tanks and poorly installed washing machines can result in increased nutrient loads and contamination of water courses. This can have consequences for European sites which contain wetland or aquatic features, as the pollution will affect the ability of the site to support the given interest.
- 7.3 Furthermore, abstraction and land management can influence water flow and quantity, resulting in reduced water availability at certain periods or changes in the flow. This can exacerbate issues relating to water quality.
- 7.4 These impact pathways can be specific to particular parts of European sites or particular development locations and are also relevant to the overall quantum of development.

Water supply

- 7.5 It is the role of the Environment Agency to make sure that abstraction is sustainable and does not damage the environment. Water abstraction is managed through a licensing system originally introduced by the Water Resources Act 1963.
- 7.6 The Environment Agency is the competent authority for the Water Framework Directive, and it oversees the publication of River Basin Management Plans which are a requirement of the Directive. These plans set out how the management of water bodies will be undertaken, the roles of relevant bodies and the steps undertaken to ensure environmental targets are met.

- 7.7 The first River Basin Management Plans were produced in 2009 and then updated in 2015. In the more recent, second cycle river basin management plans the Environment Agency has committed to ensure abstraction licensing strategies and actions fully incorporate all environmental objectives and align with river basin management plans. The Agency will assess all licence applications and only issue licences that adequately protect and improve the environment; where necessary each should be subject to an individual HRA. The Agency will only grant replacement licences where the abstraction is environmentally sustainable, and abstractors can demonstrate they have a continued need for the water, and it will be used efficiently. In addition, for existing licences, the Agency will prioritise actions to protect and improve European sites and address the most seriously damaging abstractions during this plan period. All abstractors in surface water and groundwater bodies where serious damage is occurring or could occur without action should expect that their licences will be constrained over the next 6 years.
- 7.8 The Water Act 2003 introduced a legal requirement into the Water Industry Act 1991 for water companies to prepare, publish and maintain WRMPs. South West Water's draft Water Resources Management Plan 2024 (WRMP)¹⁸ predicts demand for water and identifies issues around supply. The East Devon area is supplied with domestic water from the Wimbleball Water Resource Zone (WRZ) which extends across a wide area. Forecasts are made based on population forecasts from the Office of National Statistics and property forecasts from local plans. The WRMP uses water supply and demand forecasts, together with climate change and target headroom values to forecast baseline supply demand for a 25 year period to 2049/50. The modelling of the baseline supply demand balance for Wimbleball WRZ shows it in deficit from around 2033, however with the plan incorporated into the models the WRZ is in surplus until around 2048 at least.
- 7.9 These predictions take into account abstraction licence changes and renewals, including information provided by the Environment Agency on actions that companies need to undertake to contribute towards meeting environmental obligations, including any required changes to abstraction licences.
- 7.10 Despite this positive outcome, the WRMP sets out a series of interventions are set out that would apply across the entire water company area and include, in the short-term, reducing South West Water's consumption of water at large sewage treatment works, reducing leakage and helping customers reduce water use.

¹⁸ https://www.southwestwater.co.uk/environment/water-resources/water-resources-management-plan/

7.11 With these interventions in place, the Water Resources Management Plan indicates there is sufficient surplus of water with no need to increase abstraction beyond that provided for by existing licences.

Considerations for appropriate assessment

- 7.12 The WRMP will be ready for publication and implementation in 2024. It is anticipated that WRMP24 will be accompanied by its own HRA. The appropriate assessment for the East Devon Plan will need to check on that HRA. As the water company and Environment Agency will represent the most suitable competent authorities to assess the WRMP24, once produced its findings can and should be adopted by the East Devon Local Plan HRA.
- 7.13 Given the reliance of the WRMP on interventions to reduce water consumption, it would be reasonable and appropriate for the Local Plan to emphasise the need for future development to incorporate water-saving measures, in accordance with South West Water advice.

Water quality

- 7.14 Wastewater or sewage can be very damaging to water bodies as it can contain large amounts of nutrients (such as phosphorus and nitrates), ammonia, bacteria, harmful chemicals and other damaging substances. Issues arise where sewage treatment technology to adequately reduce levels of phosphorus and harmful chemicals is not in place, where leakages occur from privately owned septic tanks and, in wet weather, storm overflows can discharge untreated sewage. Poorly installed domestic washing machines and even washing cars at home can, in places, also add to the pollution load. Outcomes can include increased turbidity, algal blooms, reduced dissolved oxygen and an overall increase in the nutrient status of receiving waterbodies. Simply, increases in housing increase pressure on the sewage network and the volume of wastewater.
- 7.15 The pollution of inland and coastal waters has received greater recognition in recent years and the significance of such potential impacts and the need to mitigate has been given emphasis by Natural England's demands. These state that new development affecting vulnerable water bodies must achieve 'nutrient neutrality', i.e. avoid any net increase in nitrate and phosphate pollution. Whilst this relates primarily to the disposal of foul water, run-off from hard surfaces can also be a factor. This reflects contemporary case law (the Dutch case) which makes clear that where water quality targets of European sites are not being met, further inputs of pollutants should not be allowed.

- 7.16 With respect to the East Devon Local Plan, one key concern is the River Axe SAC. There is a significant issue with phosphate levels which are having a detrimental impact on the SAC and Natural England have advised East Devon Council accordingly¹⁹. For all the European sites where likely significant effects have been identified (the River Axe SAC, Exe Estuary SPA/Ramsar, Lyme Bay and Torbay SAC and Sidmouth to West Bay SAC) water quality is key to the supporting processes and loss of water quality would result in the deterioration of the qualifying natural habitats/the habitats of qualifying species.
- 7.17 River Basin Management Plans provide the framework for protecting and enhancing the water environment. The relevant plan for the South West²⁰ sets out statutory objectives for protected areas and a programme of measures to achieve those objectives. South West Water provides wastewater treatment for new development which it typically delivers by ensuring there is adequate capacity or headroom within the wastewater treatment system.
- 7.18 Whilst it should be expected that all existing wastewater treatment works that lie within the catchment of the respective sites operate within their licensed conditions and that all have capacity to accommodate predicted levels of growth, this is not known to the Council for certain. On the other hand, licenses for all wastewater treatment works and any changes to these would have been subjected to project-level HRAs and would not be permitted to operate if adverse effects could not be ruled out.
- 7.19 South West Water also produced its first Drainage and Wastewater Management Plan (DWMP)²¹. DWMPs provide the basis for integrated long-term planning relating to drainage, flooding and protection of the environment and covers the period from 2025 to 2050. The DWMP is accompanied by an HRA²².

Considerations for appropriate assessment

7.20 Given their particular knowledge of the water environment, South West Water/Environment Agency are the competent authorities best placed to assess the impact of the disposal and the subsequent management of foul water, not the Council.

 ¹⁹ See <u>https://eastdevon.gov.uk/planning/phosphates-on-the-river-axe/</u> and <u>https://publications.naturalengland.org.uk/file/5533796329062400</u> for background
 ²⁰ See <u>Environment Agency website</u>

²¹ South West Water (undated). Our Draft Drainage and Wastewater Management Plan.

²² https://www.southwestwater.co.uk/siteassets/document-repository/business-plan-2020-2025/sww-dwmp-hra.pdf

7.21 It will be necessary for future iterations of the HRA to be able to show that there is sufficient headroom to accommodate the quantum of growth or that development (in the case of the catchment for River Axe SAC) is nutrient neutral. Policy wording will need to ensure any uncertainties are addressed through phasing and break clauses as required. Policy 86 in the Plan sets out a requirement for all development in the Axe catchment to demonstrate nutrient neutrality. It will be a key consideration for future iterations of the HRA- at a strategic level – that this is possible and there are no allocations that are being promoted that cannot be delivered.

8. Appropriate assessment topic: Air Quality

- 8.1 Likely significant effects were identified in the initial screening for a range of sites that have relevant qualifying features that are sensitive with respect to air quality and have roads within 200m.
- 8.2 These effects were identified alone for the policies that set the overall quantum of growth and the new town (policies 2,3 and 8). Relevant European sites and policies were:

East Devon Heaths SAC/SPA

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 8. Strategic Policy Development of a second new town east of Exeter
- 11. Strategic policy Land north of the Science Park
- 14. Strategic Policy Employment land to the east of airport buildings
- 12. Strategic policy High quality employment north of Sowton village
- 15. Strategic Policy Employment land east of the Airport and north of the A30
- 17. Strategic Policy Development next to the M5 and north of Topsham
- 18. Strategic Policy Gypsy and traveller site east of the M5 and south of the Exeter-Waterloo line
- 20. Strategic Policy Exmouth and its future development
- 21. Strategic Policy Honiton and its future development
- 22. Strategic Policy Ottery St Mary and its future development
- 24. Strategic Policy Sidmouth and its future development
- 25. Strategic Policy Development at Local Centres
- 26. Strategic Policy Development at service villages

Exe Estuary SPA/Ramsar

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 8. Strategic Policy Development of a second new town east of Exeter
- 11. Strategic policy Land north of the Science Park
- 12. Strategic policy High quality employment north of Sowton village
- 14. Strategic Policy Employment land to the east of airport buildings
- 15. Strategic Policy Employment land east of the Airport and north of the A30
- 17. Strategic Policy Development next to the M5 and north of Topsham
- 18. Strategic Policy Gypsy and traveller site east of the M5 and south of the Exeter-Waterloo line
- 20. Strategic Policy Exmouth and its future development

- 21. Strategic Policy Honiton and its future development
- 22. Strategic Policy Ottery St Mary and its future development
- 25. Strategic Policy Development at Local Centres
- 26. Strategic Policy Development at service villages

River Axe SAC

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 19. Strategic Policy Axminster and its future development
- 25. Strategic Policy Development at Local Centres
- 26. Strategic Policy Development at service villages

Sidmouth to West Bay SAC

- 2. Strategic Policy Housing distribution
- 3. Strategic Policy Levels of future housing development
- 8. Strategic Policy Development of a second new town east of Exeter
- 23. Strategic Policy Seaton and its future development

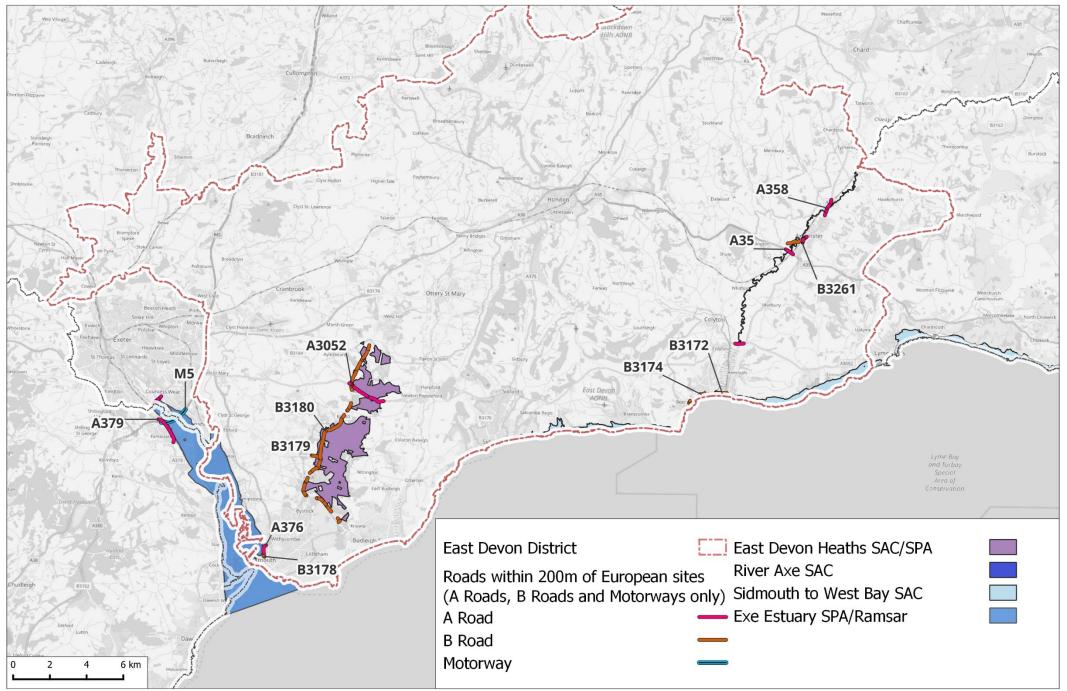
Introduction

- 8.3 Development is typically associated with increased traffic and emissions which can increase the airborne concentration of nitrogen oxides (NO_x) and ammonia (NH₃), and the subsequent rate of nitrogen deposition from the atmosphere. This can lead to the nutrient enrichment and acidification of soils, encouraging more tolerant ruderal species at the expense of sensitive plant, lower plant and invertebrate communities. In high concentrations, ammonia can result in direct toxic effects on vegetation, a factor which may also be true of NO_x. Larger animals, such as small mammals and birds are considered immune to direct effects but can be vulnerable to change in their supporting habitats. Furthermore, it can exacerbate the effects of other factors such as climate change or pathogens, for example.
- 8.4 However, levels of nitrogen deposition typically fall quickly over the first few metres from the roadside before gradually levelling out; beyond 200m, they become difficult to distinguish from background levels. In other words, impacts at 10m, 50m or 200m can be very different from those at the roadside.
- 8.5 Map 4 shows roads within 200m of European sites. Only motorways, A roads and B roads are shown (i.e. unclassified roads are not included). Certain key stretches are labelled. European sites with no A roads, B roads or motorways within 200m are

not included on the map. Drawing on these data we can identify the following road sections:

- Exe Estuary SPA/Ramsar: M5, A376 and A379, B 3178;
- East Devon Heaths SAC/SPA: A3052, B3180;
- Sidmouth to West Bay SAC: B3172 and B3174 in the vicinity of Seaton and Beer;
- River Axe: A35, A358, B3261, A3052.

Map 4: Roads within 200m of European sites



Contains Ordnance Survey data © Crown copyright and database right 2022.

© OpenStreetMap contributors. Terms: www.openstreetmap.org/copyright.

© Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right 2022.

- 8.6 Reflecting this, Natural England provides screening criteria to assess the impact of air pollution on European sites²³. Essentially, this provides a stepwise process that first explores whether any European sites lie within 200 m of a busy road that is anticipated to carry increased traffic, prior to determining whether vulnerable qualifying features live within the affected area. If they do, detailed traffic analysis is required to determine if the level of traffic is anticipated to exceed a standard threshold of 1,000 Annual Average Daily Traffic (flows) for all vehicles or 200 Heavy Duty Vehicles (HDVs). If these thresholds are exceeded, air quality analysis is required.
- 8.7 Specific impacts are assessed by calculating the relative contribution of the local plan (and, bearing in mind the Wealden decision, in-combination with other plans or projects) in relation to the relevant critical levels for NO_x and ammonia, and the critical loads for nitrogen deposition.
- 8.8 The critical level for NO_x is 30 *u*gm⁻³. It is a precautionary threshold below which there is confidence that adverse effects on vegetation communities will not arise. The critical level for ammonia is set at 3 *u*gm⁻³ unless bryophytes or lichens form part of the qualifying features in which case it falls to 1 *u*gm⁻³ (as in the case of the East Devon Heaths). The critical loads for nitrogen deposition are specific to each individual feature or habitat and are expressed in kilograms of nitrogen per hectare per year (or kgNha⁻¹yr⁻¹). These are presented as a range of values (e.g. 10-20 kgNha⁻¹yr⁻¹) and, as a precautionary approach, only the lowest values in the range are typically used. Critical levels and loads are drawn from the Air Pollution Information Service (or APIS)²⁴.
- 8.9 Drawing on best practice²⁵ where existing background levels of these pollutants fall below the relevant critical levels or loads, emissions are considered to avoid harm where the contribution of the local plan (alone and in-combination) would not exceed the same thresholds. However, this is rare in lowland England. Indeed, where background levels already exceed these thresholds, it is considered that adverse effects will be avoided only if the increase is less than 1% of the critical levels or loads. The 1% threshold has been widely adopted in established guidance as in practice it is barely discernible from natural background fluctuations. Set at two orders of magnitude below the critical level or load, this threshold is

²³ Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations. Version 1.4. June 2018

²⁴ Air Pollution Information Service available at https://www.apis.ac.uk/

²⁵ Holman et al. (2019). A guide to the assessment of air quality impacts on designated nature conservation sites – version 1.0. Institute of air quality management, London. Available at: https://iaqm.co.uk/text/guidance/air-quality-impacts-on-nature-sites-2019.pdf

considered suitably precautionary. Furthermore, whilst exceedance of the 1% threshold means that adverse effects cannot be ruled out, it does not necessarily mean that harm would arise.

- 8.10 It can be seen, therefore, that the additional contributions that might arise from increased traffic are only likely to be significant where a European site lies within 200m of a road which is expected to experience a marked increase in traffic, and where a feature is known to be sensitive to such effects.
- 8.11 All four European sites include the high-level conservation objective to:

'... maintaining or restoring ... the supporting processes on which qualifying natural habitats [and in the case of the East Devon Heaths and Exe Estuary] and the habitats of qualifying species rely ...' (though the wording of the Exe Estuary objective refers to 'qualifying features' rather than habitats or species.

8.12 The supplementary advice for East Devon Heaths²⁶ states for all the qualifying features (emphasis added):

'<u>Restore</u> as necessary the concentrations and deposition of air pollutants to at or below the site-relevant Critical Load or Level values given for this feature of the site ... [on APIS].'

- 8.13 For the Exe Estuary²⁷ the same text is employed though the target is to '<u>maintain'</u>, as is the case for the relevant qualifying features of the Sidmouth to West Bay SAC²⁸ and for the River Axe SAC²⁹.
- 8.14 Importantly, a target to 'restore' reflects that existing background concentrations and/or rates of deposition already exceed critical levels or loads, respectively. In turn, this highlights the greater challenge of achieving the conservation objectives.
- 8.15 Should the HRA be unable to rule out adverse effects on the integrity of the site, mitigation will be required. This could take the form of the reduction of other sources of airborne pollutants, speed restrictions, improves to junctions, improvements in public transport, reductions in the size of certain allocations to reduce traffic or, more unusually, the removal of an allocation altogether.

https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=UK9010081&SiteNam e=exe+estuary&SiteNameDisplay=Exe+Estuary+SPA&countyCode=&responsiblePerson=&SeaArea=&IF CAArea=&NumMarineSeasonality=7 (accessed 10th July 2023)

 ²⁶ <u>https://publications.naturalengland.org.uk/publication/6222265876217856</u> (accessed 10th July 2023)
 ²⁷

²⁸ <u>https://publications.naturalengland.org.uk/publication/5076579893903360</u> (accessed 10th July 2023)

²⁹ <u>https://publications.naturalengland.org.uk/publication/5156988124135424</u> (accessed 10th July 2023)

8.16 Given the context provided above, in order to obtain the evidence to assess air pollution, traffic studies will be required for those roads within 200m of the four European sites. Where this identifies increases in traffic of greater than 1,000 AADT for all traffic or 200AADT for HDVs amongst a range of other criteria, air quality analysis will be needed to be commissioned to predict the impact on NO_x, ammonia and nitrogen deposition. Where this exceeds 1% of the critical level or lowest critical load, adverse effects on the integrity of the site cannot be ruled out.

References

- Alexander, I., & Cresswell, B. (1990). Foraging by Nightjars Caprimulgus europaeus away from their nesting areas. *Ibis*, *132*, 568–574.
- Anderson, P., & Radford, E. (1992). *A review of the effects of recreation on woodland soils, vegetation and fauna*. English Nature.
- Bell, S. L., Westley, M., Lovell, R., & Wheeler, B. W. (2018). Everyday green space and experienced well-being: The significance of wildlife encounters. *Landscape Research*, *43*(1), 8–19. https://doi.org/10.1080/01426397.2016.1267721
- Burnett, H., Olsen, J. R., Nicholls, N., & Mitchell, R. (2021). Change in time spent visiting and experiences of green space following restrictions on movement during the COVID-19 pandemic: A nationally representative cross-sectional study of UK adults. *BMJ Open*, *11*(3), e044067. https://doi.org/10.1136/bmjopen-2020-044067
- Cecchetti, M., Crowley, S. L., & McDonald, R. A. (2021). Drivers and facilitators of hunting behaviour in domestic cats and options for management. *Mammal Review*, *51*(3), 307– 322. https://doi.org/10.1111/mam.12230
- Chapman, C., & Tyldesley, D. (2016). *Functional linkage: How areas that are functionally linked to European sites have been considered when they may be affected by plans and projects – a review of authoritative decisions* (Natural England Commissioned Report No. NECR207). Natural England.
- Conway, G., Henderson, I., & Bolderstone, T. (2015). *Variations in home range and habitat use in breeding European Nightjars in two contrasting landscapes.* British Ornithologist Union -BIRDS IN TIME AND SPACE: AVIAN TRACKING AND REMOTE SENSING.

- Corney, P. M., Smithers, R. J., Kirby, J. S., Peterken, G. F., Le Duc, M. G., & Marrs, R. H. (2008). *The impact of development on nearby ancient woodland*. Woodland Trust.
- Cresswell, B. (1996). Nightjars—Some aspects of their behaviour and conservation. *British Wildlife*, 7, 297–304.
- Cruickshanks, K., & Liley, D. (2012). *East Devon, Exeter and Teignbridge household survey and predictions of visitor use of greenspaces*. Footprint Ecology.
- Day, B., Harwood, A., Tyler, C., & Zonneveld, S. (2018). *Population futures and Dartmoor National Park: Implications of developments around the outskirts of Dartmoor for recreational use and management of access*. Report by SWEEP for the Dartmoor National Park.
- Dwyer, R. G., Bearhop, S., Campbell, H. A., & Bryant, D. M. (2013). Shedding light on light: Benefits of anthropogenic illumination to a nocturnally foraging shorebird. *Journal of Animal Ecology*, *82*(2), 478–485. https://doi.org/10.1111/1365-2656.12012
- Hall, C. M., Bryant, K. A., Haskard, K., Major, T., Bruce, S., & Calver, M. C. (2016). Factors
 determining the home ranges of pet cats: A meta-analysis. *Biological Conservation*, 203, 313–320. https://doi.org/10.1016/j.biocon.2016.09.029
- ICF GHK. (2013). *The economic impact of Natural England's National Nature Reserves* (Natural England Commissioned Report No. NECR131).

ICRT. (2011). *The Economic Potential of Nature Tourism in Eastern Yorkshire* (p. 61). http://mediafiles.thedms.co.uk/Publication/YS-EY/cms/pdf/YNT%20ICRT%20Report,%20Nature%20Tourism%20in%20Eastern%20York shire.pdf

- Jennings, S., & Youngman, P. (2022). *Beer Quarry & Caves Special Area of Conservation (SAC) Habitats Regulations Assessment Guidance*. Devon County Council / East Devon District Council / East Devon AONB.
- Kays, R., Dunn, R. R., Parsons, A. W., Mcdonald, B., Perkins, T., Powers, S. A., Shell, L.,
 McDonald, J. L., Cole, H., Kikillus, H., Woods, L., Tindle, H., & Roetman, P. (2019). The
 small home ranges and large local ecological impacts of pet cats. *Animal Conservation*,
 n/a(n/a). https://doi.org/10.1111/acv.12563
- Keniger, L. E., Gaston, K. J., Irvine, K. N., & Fuller, R. A. (2013). What are the Benefits of Interacting with Nature? *International Journal of Environmental Research and Public Health*, *10*(3), 913–935. https://doi.org/10.3390/ijerph10030913

Kirby, J. S., & Tantram, D. A. S. (1999). *Monitoring heathland fires in Dorset: Phase 1*.

- Lee, A. C. K., & Maheswaran, R. (2011). The health benefits of urban green spaces: A review of the evidence. *Journal of Public Health*, *33*(2), 212–222. https://doi.org/10.1093/pubmed/fdq068
- Liley, D., & Clarke, R. T. (2003). The impact of urban development and human disturbance on the numbers of nightjar Caprimulgus europaeus on heathlands in Dorset, England. *Biological Conservation*, *114*, 219–230.
- Liley, D., Hoskin, R., Lake, S., Underhill-Day, J., & Cruickshanks, K. (2014). *South-east Devon European Site Mitigation Strategy*. Footprint Ecology.
- Liley, D., Lake, S., Panter, C., & Saunders, P. (2019). *Potential impacts of recreation on Woodland Trust reserves: A general review* (Unpub. No. 521). Footprint Ecology / Woodland Trust.
- Liley, D., Lake, S., Shellswell, C., & Bishop, E. (2022). *Visitor surveys and recreation impact* assessment work to inform the Dorset Council Local Plan: Coastal Sites. Footprint Ecology.

- Liley, D., Lake, S., Underhill-Day, J., Sharp, J., White, J., Hoskin, R., Cruickshanks, K., & Fearnley, H. (2010). *Welsh Seasonal Habitat Vulnerability Review*. Footprint Ecology / CCW.
- Longcore, T., & Rich, C. (2004). Ecological light pollution. *Frontiers in Ecology and the Environment*, *2*(4), 191–198. https://doi.org/10.1890/1540-9295(2004)002[0191:ELP]2.0.CO;2
- Loss, S. R., & Marra, P. P. (2017). Population impacts of free-ranging domestic cats on mainland vertebrates. *Frontiers in Ecology and the Environment*, *15*(9), 502–509. https://doi.org/10.1002/fee.1633
- Lowen, J., Liley, D., Underhill-Day, J., & Whitehouse, A. T. (2008). *Access and Nature Conservation Reconciliation: Supplementary guidance for England.* internal-pdf://NECR013 Access and N C Reconciliation - Supp Guidance-2802587904/NECR013 Access and N C Reconciliation - Supp Guidance.pdf
- Marzano, M., & Dandy, N. (2012). *Recreational use of forests and disturbance of wildlife. A literature review.* Forestry Commission.

https://www.forestry.gov.uk/pdf/FCRP020.pdf/\$FILE/FCRP020.pdf

- Morgan, L., Protopopova, A., Birkler, R. I. D., Itin-Shwartz, B., Sutton, G. A., Gamliel, A., Yakobson, B., & Raz, T. (2020). Human–dog relationships during the COVID-19 pandemic: Booming dog adoption during social isolation. *Humanities and Social Sciences Communications*, 7(1), 1–11. https://doi.org/10.1057/s41599-020-00649-x
- Murison, G. (2002). *The impact of human disturbance on the breeding success of nightjar Caprimulgus europaeus on heathlands in south Dorset, England*. English Nature.
- Murison, G., Bullock, J. M., Underhill-Day, J., Langston, R., Brown, A. F., & Sutherland, W. J. (2007). Habitat type determines the effects of disturbance on the breeding productivity

of the Dartford Warbler Sylvia undata. *Ibis*, 149(s1), 16–26.

https://doi.org/doi:10.1111/j.1474-919X.2007.00660.x

- Natural England, & Kantar Public. (2021). *Impact of Covid-19 on engagement with green and natural spaces* (Natural England Report No. PANS003). The People and Nature Survey for England. http://publications.naturalengland.org.uk/publication/4513040482697216
- O'Neill, R. (2019). *Monitor of Engagement with the Natural Environment The national survey on people and the natural environment. Headline report 2019* (NECR No. 275). Natural England and the Office for National Statistics.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachm ent_data/file/828552/Monitor_Engagement_Natural_Environment_2018_2019_v2.pdf

- Pretty, J., Griffin, M., Peacock, J., Hine, R., Selens, M., & South, N. (2005). A countryside for health and well-being: The physical and mental health benefits of green exercise. *Countryside Recreation*, *13*(1), 2–7.
- Richardson, M., Cormack, A., McRobert, L., & Underhill, R. (2016). 30 Days Wild: Development and Evaluation of a Large-Scale Nature Engagement Campaign to Improve Well-Being. *PLOS ONE*, *11*(2), e0149777. https://doi.org/10.1371/journal.pone.0149777
- Ross, K., Liley, D., Austin, G., Clarke, R. T., Burton, N. H., Stillman, R. A., Cruickshanks, K., & Underhill-Day, J. (2014). *Housing development and estuaries in England: Developing methodologies for assessing the impacts of disturbance to non-breeding waterfowl*. Footprint Ecology, unpublished report for Natural England.
- Ryan, L. (2012). *Impacts of nearby development on ancient woodland addendum*. The Woodland Trust. https://www.woodlandtrust.org.uk/mediafile/100168353/Impacts-of-nearbydevelopment-on-the-ecology-of-ancient-woodland-addendum.pdf

Santos, C. D., Miranda, A. C., Granadeiro, J. P., Lourenço, P. M., Saraiva, S., & Palmeirim, J. M. (2010). Effects of artificial illumination on the nocturnal foraging of waders. *Acta Oecologica*, *36*(2), 166–172. https://doi.org/10.1016/j.actao.2009.11.008

The Land Trust. (2018). *The Economic Value of Greenspaces*. The Land Trust.

- Tyldesley, D., & Chapman, C. (2021). *The Habitats Regulations Handbook*. DTA Publications. https://www.dtapublications.co.uk/handbook/
- Underhill-Day, J. C. (2005). *A literature review of urban effects on lowland heaths and their wildlife*. English Nature. internal-pdf://EN RR 623, John Day literature review of urban effects-3794804480/EN RR 623, John Day literature review of urban effects.pdf

Appendix 1: Conservation Objectives

- 8.17 As required by the Directives, 'Conservation Objectives' have been established by Natural England, which should define the required ecologically robust state for each European site interest feature. All sites should be meeting their conservation objectives. When being fully met, each site will be adequately contributing to the overall favourable conservation status of the species or habitat interest feature across its natural range. Where conservation objectives are not being met at a site level, and the interest feature is therefore not contributing to overall favourable conservation status of the species or habitat, plans should be in place for adequate restoration.
- 8.18 In 2012, Natural England issued a set of generic European site Conservation Objectives, which should be applied to each interest feature of each European site. The list of generic Conservation Objectives for each European site includes an overarching objective, followed by a list of attributes that are essential for the achievement of the overarching objective. Whilst the generic objectives are standardised, they are to be applied to each interest feature of each European site, and the application and achievement of those objectives will therefore be site specific and dependant on the nature and characteristics of the site.
- 8.19 For SPAs, the overarching objective is to:

'Avoid the deterioration of the habitats of qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.'

- 8.20 This is achieved by, subject to natural change, maintaining and restoring:
 - The extent and distribution of the habitats of the qualifying features.
 - The structure and function of the habitats of the qualifying features.
 - The supporting processes on which the habitats of the qualifying features rely.
 - The populations of the qualifying features.
 - The distribution of the qualifying features within the site.

8.21 For SACs, the overarching objective is to:

'Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the

integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features.'

- 8.22 This is achieved by, subject to natural change, maintaining and restoring:
 - The extent and distribution of the qualifying natural habitats and habitats of qualifying species.
 - The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species.
 - The supporting processes on which qualifying natural habitats and habitats of qualifying species rely.
 - The populations of qualifying species.
 - The distribution of qualifying species within the site.
- 8.23 Conservation objectives inform any HRA of a plan or project, by identifying what the interest features for the site should be achieving, and what impacts may be significant for the site in terms of undermining the site's ability to meet its conservation objectives. Site specific supplementary advice highlights the importance of typical species, processes or ecological characteristics that are critical to the interest features of the site. Within the supplementary advice these are normally referred to as 'attributes' and can refer to a range of ecological characteristics such as population number, extent of habitat or a supporting process such as hydrology. Each attribute has a 'target' for the required condition of the attribute.
- 8.24 In Appendix 2 the hyper-links cross reference to the relevant conservation objectives page (on the Natural England website) for all the relevant European sites.

Appendix 2: Summary of European Sites

Summary of European sites and their interest features. Links in the site column relate to the conservation objectives for each site or (in the case of the Ramsar sites) the relevant page with the information sheet on the Natural England website. # in the interest features column denotes an interest feature for which the UK has a special responsibility. Descriptions are drawn from the description in the relevant site improvement plans.

Site	Interest features	Description
<u>Beer Quarry & Caves SAC</u>	S1303 <i>Rhinolophus hipposideros</i> : Lesser horseshoe bat S1304 <i>Rhinolophus ferrumequinum</i> : Greater horseshoe bat S1323 <i>Myotis bechsteinii</i> : Bechstein`s bat	This complex of abandoned mines in south-west England is divided in two by a road, with a working quarry to the north and a disused quarry and cave system to the south. This site supports important populations of hibernating bats. Its use as a hibernation site by the Bechstein's Bat is the primary reason for its designation as a SAC. The area also supports a significant presence of both the Lesser Horseshoe Bat and the Greater Horseshoe Bat which are both qualifying features but are not primary reasons for the site's selection.
Bracket's Coppice SAC	S1323 <i>Myotis bechsteinii</i> : Bechstein's bat H6410 Molinia meadows on calcareous, peaty or clayey-silt- laden soils (<i>Molinion caeruleae</i>); Purple moor-grass meadows	Bracket's Coppice lies close to Corscombe in the vales of West Dorset. The site comprises oak and ash woodland, wooded stream valleys, and a mosaic of herb rich grassland and fen-meadow contained within small fields bounded by tall native hedges. The site is designated for Bechstein's bat and Purple moor-grass <i>Molinia</i> meadow. One of the first maternity colonies of Bechstein's bat was discovered using bat-boxes in this small woodland.
<u>Chesil & The Fleet SAC</u>	 H1150 Coastal lagoons H1210 Annual vegetation of drift lines H1220 Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves H1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) H1420 Mediterranean and thermos-Atlantic halophilous scrubs (<i>Sacrocornetea fruticose</i>); Mediterranean saltmarsh scrub 	The Fleet is the largest example of lagoonal habitat in England, bordered by the shingle barrier of Chesil Beach, through which sea water penetrates and mixes with freshwater inlets. Extensive populations of two species of eelgrass, three species of tasselweed and a rare spiral tasselweed can be found within the lagoon, along with a number of nationally rare and scarce fauna. Chesil Beach is sparsely vegetated where it is subject to storm conditions, however supports sea kale <i>Crambe maritima</i> and sea pea <i>Lathyrus japonicus</i> , alongside other grassland and lichen-rich communities towards the eastern end of the beach. A dynamic equilibrium exists between

Site	Interest features	Description
<u>Culm Grasslands SAC</u>	H4010 Northern Atlantic wet heaths with <i>Erica tetralix</i> ; Wet heathland with cross-leaved heath H6410 Molinia meadows on calcareous, peaty or clayey-silt- laden soils (<i>Molinion caeruleae</i>); Purple moor-grass meadows S1065 <i>Euphydryas (Eurodryas, Hypodryas) aurinia</i> : Marsh fritillary butterfly	 the drift line vegetation and Mediterranean saltmarsh scrub, which is replaced by the former when subject to disturbance, across the inner shore of Chesil Beach. Culm Grasslands represents Molinia meadows in south-west England. This site contains extremely diverse examples of the heathy type of M24 <i>Molinia caerulea – Cirsium dissectum</i>; fenmeadow, ranging from short, grazed swards through to stands that are transitional to scrub. M26 <i>Molina caerulea – Crepis paludosa</i>; mire occurs more locally in wet upland grasslands also. Structural diversity accounts for the conservation of a wide range of flora and fauna, particularly of species characteristic of south-western Europe, such as meadow thistle <i>Cirsium dissectum</i> and whorled caraway <i>Carum verticillatum</i>. The site contains extensive areas of wet heath also, dominated by M16 <i>Sphagnum compactum</i>. Culm Grasslands contains the largest cluster of sites for Marsh fritillary <i>Euphydryas aurinia</i> in the south-west peninsula. It is judged to be the most important location for the species in its major south-west stronghold.
East Devon Pebblebed Heaths SAC	H4030 European dry heaths S1044 <i>Coenagrion mercuriale</i> : Southern damselfly H4010 Northern Atlantic wet heaths with <i>Erica tetralix;</i> Wet heathland with cross-leaved heath	The East Devon Pebblebed Heaths is the largest block of lowland heath in Devon, and it is internationally important for its Northern Atlantic wet heaths and extensive areas of lowland European dry heaths. The diversity of heathland reflects the varied topography, geology, hydrology and water chemistry of the area, and supports associated plant and animal communities. Among the 21 breeding dragonfly species recorded at the site is the southern damselfly, an Annex II species.
East Devon Heaths SPA	A302 (B) <i>Sylvia undata</i> : Dartford warbler A224 (B) <i>Caprimulgus europaeus</i> : European nightjar	The East Devon Pebblebed Heaths is the largest block of lowland heath in Devon. There is an important assemblage of birds, and breeding European nightjar and Dartford warbler afford the site SPA status.
Dawlish Warren SAC	H2190 Humid dune slacks S1395 <i>Petalophyllum ralfsii</i> : Petalwort	Dawlish Warren is a geomorphologically important sand spit which protects the mouth of the Exe estuary. Herb-rich neutral grassland hosts the only mainland population of the Warren Crocus <i>Romulea</i>

Site	Interest features	Description
	H2120 Shifting dunes along the shoreline with <i>Ammophila</i> <i>arenaria</i> ("white dunes"); Shifting dunes with marram H2130# Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland	<i>Colomnae</i> . A mosaic of reed bed, marsh, scrub and open water support several nationally rare plants, including Petalwort <i>Petalophyllum ralfsii</i> , an Annex II species for which the site is designated.
<u>Exe Estuary SPA</u>	A141 (NB) <i>Pluvialis squatarola</i> : Grey plover A046a (NB) <i>Branta bernicla bernicla</i> : Dark-bellied brent goose A132 (NB) <i>Recurvirostra avosetta</i> : Pied avocet A156 (NB) <i>Limosa limosa islandica</i> : Black-tailed godwit A149 (NB) <i>Calidris alpina alpina</i> : Dunlin A007 (NB) <i>Podiceps auritus</i> Slavonian grebe A130 (NB) <i>Haematopus ostralegus</i> : Eurasian oystercatcher Waterbird assemblage	The Exe estuary is of international importance for wintering and migratory wetland birds. It is also of national importance for its marine life, especially that associated with intertidal sand and mud flats. Dawlish Warren is a geomorphologically important sand spit which protects the mouth of the Exe estuary. Salt marsh in the lee of the spit is an important habitat and provides a winter roost for wildfowl and waders, particularly dark-bellied Brent geese and oystercatcher.
<u>Exe Estuary Ramsar</u>	Waterfowl assemblage of international importance (under criterion 5) Species/populations occurring at levels of international importance (under criterion 6): <i>Branta bernicla bernicla</i> : Dark-bellied brent goose	As above.
<u>Hestercombe House SAC</u>	S1303 <i>Rhinolophus hipposideros</i> : Lesser horseshoe bat	Hestercombe House SAC is a Lesser horseshoe bat summer maternity roost and winter hibernacula of national importance in the vale of Taunton Deane. It consists of two roof voids within the former stable block and main house of Hestercombe House - a former country house and estate consisting of mixed woodland, pasture, lakes and landscaped garden. This site holds only a small proportion of the UK population, it has been selected as a representative of the species in south-west England. The UK holds one of the largest populations of this species in western Europe.
Holme Moor & Clean Moor SAC	H6410 <i>Molinia</i> meadows on calcareous, peaty or clayey-silt- laden soils (<i>Molinion caeruleae</i>); Purple moor-grass meadows H7210# Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> ; Calcium-rich fen by great fen sedge (Saw sedge)	Holme Moor and Clean Moor SAC is important as alkaline/calcareous fen, with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> , and is highly species rich, with transitions from <i>Cladium</i> fen to mire with Black Bog-Rush and Blunt-Flowered Rush. It consists of fen, marsh and swamp habitats associated with high water tables fed by base rich, nutrient poor ground water, and has

Site	Interest features	Description
	H7230 Alkaline fens; Calcium-rich springwater-fed fens	Molinia meadows on calcareous, peaty or clayey-silt-laden soils. These wetland areas are of international importance, with communities of local, nationally rare and uncommon plant species. Clean Moor supports the only Black bog-rush - Blunt-flowered rush calcareous flush community in Somerset, and Holme Moor supports a rare swamp community dominated by Great Fen-Sedge. Both sites are the only Somerset sites for Broad-leaved Cotton Grass.
Lyme Bay & Torbay SAC	H1170 Reefs H8330 Submerged or partially submerged sea caves	The two sections of the Lyme Bay and Torbay SAC off the Devon coast of England contain a greater diversity of habitats than found in other existing SACs in the Western English Channel and Celtic Sea. Within the Lyme Bay Reefs portion, bedrock and stony reef, boulders and cobble and sediments comprise a type of reef uncommon in the region. This complex and diverse reef habitat supports particularly high species richness. Hydroids, anemones, sea squirts, sponges and corals populate the area to the extent the area has been identified as a marine biodiversity 'hotspot.' The pink sea fan and the nationally rare southern cup coral is found throughout the site. The diverse geology of the 'Mackerel Cove to Dartmouth Reefs' in Torbay, limestone reefs and outcrops, sandstone, slate reef, granite outcrops, and stony reef, supports a similarly rich assemblage of animal communities, including an extensive coverage of kelp and blue mussel communities on shallower reefs, and species of sponge, anemone, soft corals and crustaceans on the deeper reefs. The area also contains a diversity of wave-eroded sea caves at Babbacombe to Hopes Nose and Broad Sands to Berry Head. The freshwater and saltwater mix in these caves makes them some of the best examples of coastal solution caves in the UK. The caves also support a richness of animal life including many nationally significant species such as sponges, pink sea fingers, burrowing anemones and southern cup coral.

Site	Interest features	Description
<u>Quants SAC</u>	S1065 <i>Euphydryas (Eurodryas, Hypodryas) aurinia</i> ; Marsh fritillary butterfly	This damp and sheltered site on the slopes of the Blackdown Hills supports a medium-sized but strong marsh fritillary population in an unimproved neutral grassland/fen mosaic. It is strategically placed close to other smaller sub-populations, with which it forms a metapopulation, and may exchange individuals with the large population at Southey Moor (outside the SAC series).
<u>River Axe SAC</u>	H3260 Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation; Rivers with floating vegetation often dominated by water- crowfoot S1095 <i>Petromyzon marinus</i> : Sea Lamprey S1096 <i>Lampetra planeri</i> : Brook Lamprey S1163 <i>Cottus gobio</i> : Bullhead	The lower reaches of the River Axe feature a mixed catchment geology of sandstones and limestones giving rise to calcareous waters and associated Water-Crowfoots <i>Ranunculion fluitantis</i> and Water-Starworts <i>Callitricho batrachion</i> . The river also supports the significant presence of Sea Lamprey, Brook Lamprey, Bullhead and Atlantic Salmon.
<u>Sidmouth to West Bay SAC</u>	H1210 Annual vegetation of drift lines H1230 Vegetated sea cliffs of the Atlantic and Baltic coasts H9180# <i>Tilio-Acerion</i> forests of slopes, screes and ravines; Mixed woodland on base rich coils associated with rocky slopes	Sidmouth to West Bay is an example of a highly unstable soft cliff coastline subject to mudslides and landslips. The principal rock types are soft mudstones, clays and silty limestones, with a small chalk outlier in the west. Vegetation is very varied, and includes pioneer communities on recent slips in addition to short-lived ephemeral and perennial species, calcareous grassland and scrub on detached chalk blocks, and extensive self-sown woodland dominated by ash Fraxinus excelsior or sycamore <i>Acer</i> <i>pseudoplatanus</i> . This mosaic of habitats makes this site rich in invertebrates, especially bees and wasps. The Red Data Book lichen <i>Parmelia quercina</i> occurs on ash Fraxinus excelsior trees.
South Dartmoor Woods SAC	H4030 European dry heaths H91A0 Old sessile oak woods with <i>llex</i> and <i>Blechnum</i> in the British Isles; Western acidic oak woodland	The SAC consists of fine examples of old sessile oak woods, some of the best remaining in South Devon. The SAC forms a complex mosaic of woodland, grassland and heathland, which supports an assemblage of animal species, nationally rare invertebrate species of Pearl Border Fritillary and High Brown Fritillary and rare lichen species.
South Hams SAC	H8310 Caves not open to the public H6210# Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>)	The South Hams SAC is comprised of several but separate component SSSIs. The SAC is thought to hold the largest population of Greater horseshoe bat in the UK and is the only one containing

Site	Interest features	Description
	H4030 European dry heaths H1230 Vegetated sea cliffs of the Atlantic and Baltic coasts H9180# <i>Tilio-Acerion</i> forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with rocky slopes S1304 <i>Rhinolophus ferrumequinum</i> : Greater Horseshoe Bat	more than 1,000 adult bats. It contains the largest known maternity roost in the UK and possibly Europe. The site contains both maternity and hibernation sites. Many of the roosts are within caves not open to the public. The SAC is important for its extensive limestone grassland, some areas on the plateau support European dry heath characteristic of acid soil. The limestone headland cliffs of Torbay support calcareous grassland and scrubland facies. The site is exceptional in that it supports a number of rare and scarce vascular plants typical of the oceanic southern temperate and Mediterranean-Atlantic elements of the British flora. The SAC also supports areas of <i>Tilio-Acerion</i> ravine forest which is woodland containing ash, wych elm and small leaved lime and field maple.
<u>Somerset Levels & Moors SPA</u>	A142(NB) <i>Vanellus vanellus</i> : Northern Lapwing A037(NB) <i>Cygnus columbianus</i> bewickii: Bewick Swan A140(NB) <i>Pluvialis apricaria</i> : European Golden Plover A052(NB) <i>Anas crecca</i> : Eurasian Teal Waterbird assemblage	The Somerset Levels and Moors are located in south-west England and are one of the largest and richest areas of traditionally managed wet grassland and fen habitats in lowland UK. The SPA is within this area and covers about 35,000 ha in the floodplains of the Rivers Brue, Parrett, Tone and their tributaries. The majority of the site is only a few metres above mean sea level and drains through a large network of ditches, rhynes, drains and rivers. Flooding may affect large areas in winter depending on rainfall and tidal conditions. Parts of the site in the Brue Valley include areas of former raised peatbog that have now been substantially modified by agricultural intensification and peat extraction. This has created areas of open water, fen and reedbed. The site attracts important numbers of waterbirds (swans, ducks and waders) in winter.
<u>Somerset Levels & Moors Ramsar</u>	 17 species of red-listed invertebrate (under criterion 2) Waterfowl assemblage of international importance (under criterion 5) Species/populations occurring at levels of international importance (under criterion 6): Anas crecca: Eurasian Teal Vanellus vanellus: Northern Lapwing 	As above.

Site	Interest features	Description
<u>West Dorset Alder Woods SAC</u>	H6410 <i>Molinia</i> meadows on calcareous, peaty or clayey-silt- laden soils (<i>Molinion caeruleae</i>); Purple moor-grass meadows H9190 Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains; Dry oak-dominated woodland H91E0# Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus</i> <i>excelsior</i> (<i>Alno-Padion, Alnion incanae, Salicion albae</i>); Alder woodland on floodplains S1065 <i>Euphydryas</i> (<i>Eurodryas, Hypodryas</i>) <i>aurinia</i> : Marsh Fritillary butterfly S1166 <i>Triturus cristatus</i> : Great Crested Newt	The SAC comprises mixed ash-alder woods found along the sinuous valleys in West Dorset. They have developed along the headwaters of alkaline streams and seepages having their origin in the chalk downland and issuing from the underlying Upper Greensand at its junction with the Gault Clay. The wetter woods or carr form transitions to drier oak-ash woodland as well as associated further transitions to base-rich fens, reedswamp, fen meadow and acid grassland. This mosaic of grassland and scrub habitat supports a population of Marsh fritillary species and combined with aquatic habitat in parts of the SAC provides ideal breeding and foraging conditions for the great crested newt.

Appendix 3: Site pressures and threats for relevant European sites

The table lists the threats and pressures identified for each European site in the relevant site improvement plan. The links are for the relevant plan and the threats/pressures are listed in prioritised order.

Site	Site pressures and threats
East Devon Pebblebed Heaths SAC/SPA	 1 Inappropriate scrub control 2 Undergrazing 3 Change in land management 4 Public access/disturbance 5 Air pollution: impact of atmospheric nitrogen deposition 6 Water pollution 7 Hydrological changes
Exe Estuary SPA and Dawlish Warren SAC	 Public access/disturbance (affecting birds) Changes in species distributions Coastal squeeze Change in land management Public access/disturbance (visitor pressure at Dawlish Warren) Fisheries: Commercial marine and estuarine
Lyme Bay & Torbay SAC	1 & 2 Fisheries: commercial marine and estuarine 3 Public access/disturbance
Sidmouth to West Bay SAC	 Invasive species Disease Direct impact from third party Planning permission: general Water pollution Vehicles Habitat fragmentation Inappropriate coastal management Air pollution: risk of atmospheric nitrogen deposition
South Dartmoor Woods SAC	1 Air pollution: impact of atmospheric nitrogen deposition
South Hams SAC	1 Change in land management

Site	Site pressures and threats
	2 Planning permission: general
	3 Physical modification
	4 Inappropriate vegetation management
	5 & 7 Public access/disturbance
	6 Forestry and woodland management
	8 Inappropriate scrub control
	9 Air pollution: impact of atmospheric nitrogen deposition