

Habitat Regulations Assessment: Chichester Local Plan Review

Chichester District Council

Project number: 60549754

November 2018

Quality information

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Revision History

Revision	Revision date	Details	Authorized	Name	Position
0	24 October 2018	Draft for client comment	JR	Dr James Riley	Technical Director (Ecology and Habitats Regulations Assessment)
1	5 November 2018	Amended following client comment	JR	Dr James Riley	Technical Director
2	9 November 2018	Amended following client comment	JR	Dr James Riley	Technical Director

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Executive Summary

A Habitat Regulations Assessment was undertaken of the Chichester Local Plan Review, including both an assessment of Likely Significant Effects and an Appropriate Assessment. The HRA investigated potential impact pathways that could link the Local Plan Review to European sites (including Medmerry Nature Reserve), alone and in combination with other plans and projects. Impact pathways explored include recreational pressure, loss of functionally linked land, urbanisation, air quality, water quality and coastal squeeze

The HRA identified that in general the Chichester Local Plan review contains a protective policy framework to ensure that the Chichester Local Plan Review will not result in adverse effects on integrity of any European sites, either in isolation, or in combination. Key positive policy provisions that ensure this include (this is not an exhaustive list):

- Provisions within Policy DM16: Sustainable Design and Construction have the potential to reduce recreational pressure on European sites to reduce reduced water consumption and has the potential to reduce atmospheric pollution contributions.
- With specific regard to Medmerry Nature Reserve Policy DM20: Development around the Coast states that a requirement of all development is that *'There are no harmful effects on or net loss of nature conservation or areas of geological importance within the Chichester and Pagham Harbours and Medmerry Realignment'*
- Policy DM24: Air Quality aims to improve air quality within the district of Chichester.
- Policy DM29: Biodiversity provides explicit protection of European designated sites.
- Policy DM30: Development and Disturbance of Birds in Chichester and Langstone Harbours Special Protection Areas details explicit requirements regarding addressing the strategic issue of increased recreational pressure on the Solent European sites via the Bird Aware Solent Strategy; or a developer provided package. It also identifies that all mitigation measures must be *'agreed to be appropriate by Natural England through the Habitats Regulations Assessment process...'*
- Policy S12: Infrastructure Provision and Policy S32: Design Strategies for Strategic and Major Development Sites provide for the timely delivery of infrastructure. This would include recreational provision and water treatment infrastructure to ensure no adverse effects result.
- Policy S31: Wastewater in the Chichester Harbour and Pagham Harbour Wastewater Treatment Catchments ensures that any development within catchments of the above harbours will be required to *'demonstrate that no adverse impact on the water quality of Chichester Harbour and Pagham Harbour'* will occur.
- Policy S14: Chichester City Transport Strategy, Policy S23: Transport and Accessibility and Policy S32: Design Strategies for Strategic and Major Development Sites identify provisions and initiates that have the potential to reduce atmospheric pollution contributions.

Recommendations have been made for amendments to policy text in relation to recreational pressure, loss of functionally linked supporting habitat for birds and water quality at the Chichester and Langstone Harbour European sites and Pagham Harbour European sites have been made to ensure that that the Chichester local Plan review provides robust protection European designated sites, and ensuring that no adverse effects on integrity result, alone or in combination. This includes policy wording relating to strategic locations for development. These are summarised in Chapter 11 of the HRA: Recommendations and Conclusions.

One impact pathway – air quality – requires further investigation through air quality modelling before a conclusion can be drawn with regard to Butser Hill SAC, Ebernoe Common SAC and The Mens SAC. As such, it is recommended that air quality modelling is undertaken on the A3 at Butser Hill, the A283 at Ebernoe Common SAC and the A272 at The Mens SAC to inform an update to the HRA report.

1. Introduction

Background to the Project

- 1.1 AECOM has been appointed by Chichester District Council to assist in undertaking a Habitats Regulations Assessment (HRA) of the Local Plan Review, which is being undertaken to reflect new data and changing circumstances since preparation of the existing Local Plan 2014-2029 (adopted in July 2015). As part of the Review, the Council intends to extend the Plan period to 2035. The objectives of this HRA assessment are to:
- Identify any aspects of the Local Plan Review that would cause an adverse effect on the integrity of Natura 2000 sites, otherwise known as European sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs), protected SPAs (pSPAs) and, as a matter of Government policy, Ramsar sites), either in isolation or in combination with other plans and projects; and
 - To advise on appropriate policy mechanisms for delivering mitigation where such effects were identified.

Legislation

- 1.2 The need for Habitats Regulations Assessment is set out within Article 6 of the EC Habitats Directive 1992, and interpreted into British law by the Conservation of Habitats and Species Regulations 2017. The ultimate aim of the Directive is to “*maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest*” (Habitats Directive, Article 2(2)). This aim relates to habitats and species, not the European sites themselves, although the sites have a significant role in delivering favourable conservation status.
- 1.3 The Habitats Directive applies the precautionary principle to European sites. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the site(s) in question. Plans and projects with predicted adverse impacts on European sites may still be permitted if there are no alternatives to them and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation would be necessary to ensure the overall integrity of the site network.
- 1.4 In order to ascertain whether or not site integrity will be affected, a Habitats Regulations Assessment should be undertaken of the plan or project in question:

Box 1: The legislative basis for Habitats Regulations Assessment

Habitats Directive 1992

Article 6 (3) states that:

“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives.”

Conservation of Habitats and Species Regulations 2017

The Regulations state that:

“A competent authority, before deciding to ... give any consent for a plan or project which is likely to have a significant effect on a European site ... shall make an appropriate assessment of the implications for the site in view of that sites conservation objectives... The authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site”.

- 1.5 Over the years the phrase ‘Habitats Regulations Assessment’ has come into wide currency to describe the overall process set out in the Conservation of Habitats and Species Regulations from screening through to IROPI. This has arisen in order to distinguish the process from the individual stage described in the law as an ‘Appropriate Assessment’ (AA). Throughout this report we use the term Habitats Regulations Assessment for the overall process.

Scope of the Project

- 1.6 There is no pre-defined guidance that dictates the physical scope of an HRA of a Local Plan document. Therefore, in considering the physical scope of the assessment, we were guided primarily by the identified impact pathways rather than by arbitrary ‘zones’. Current guidance suggests that the following European sites be included in the scope of assessment:
- All sites within the Local Plan area boundary; and
 - Other sites shown to be linked to development within the boundary through a known ‘pathway’.
- 1.7 As the Adopted Local Plan has already been subject to HRA (in May 2014), the scope of the HRA of the Local Plan Review has utilised this as a starting point.
- 1.8 Briefly defined, pathways are routes by which a change in activity within the Local Plan area can lead to an effect upon a European site. In terms of the second category of European site listed above, guidance from the former Department of Communities and Local Government states that the HRA should be ‘*proportionate to the geographical scope of the [plan policy]*’ and that ‘*an AA need not be done in any more detail, or using more resources, than is useful for its purpose*’ (CLG, 2006, p.6). More recently, the Court of Appeal¹ ruled that providing the Council (competent authority) was duly satisfied that proposed mitigation could be ‘achieved in practice’ to satisfy that the proposed development would have no adverse effect, then this would suffice. This ruling has since been applied to a planning permission (rather than a Local Plan document). In this case the High Court ruled that for ‘*a multistage process, so long as there is sufficient information at any particular stage to enable the authority to be satisfied that the proposed mitigation can be achieved in practice it is not necessary for all matters concerning mitigation to be fully resolved before a decision maker is able to conclude that a development will satisfy the requirements of the Habitats Regulations*’.
- 1.9 The following European sites lie (at least partly) within Chichester District:
- Chichester and Langstone Harbours SPA and Ramsar sites;
 - Pagham Harbour SPA and Ramsar sites;
 - Solent Maritime SAC; and
 - Solent and Dorset Coast potential SPA (pSPA)
- 1.10 Chichester and Langstone Harbours SPA and Ramsar site and Solent Maritime SAC overlap with the Solent and Dorset Coast SPA; unlike the other SPA designations the Solent and Dorset Coast SPA extends much further out into coastal waters. This SPA is proposed to protect the open water feeding grounds for internationally important populations of common, sandwich and little terns. Since nothing in the Local Plan Review would affect the ability of the open waters in the Solent and Dorset Coast to continue to provide adequate fish resources for foraging terns, the site allocations are extremely unlikely to affect the potential Solent and Dorset Coast SPA. This particular SPA is therefore not discussed further.
- 1.11 Due to the location of the Solent and Dorset Coast pSPA beyond the harbours and within the ‘open sea’ environment it is considered that it is not sensitive to changes in water quality of draining rivers as its open tidal location ensures continuous mixing. In addition, the plan does not provide any linking impact pathways that could result in increased disturbance at sea from shipping activities or recreational activities that could interact with the pSPA. It is for these reasons that this European site is not considered further.
- 1.12 The following European sites lie within Chichester District, but outside the area covered by the Local Plan Review as they are within the South Downs National Park. Although the South Downs National Park has its own planning policies (with a Local Plan about to commence Examination), these European sites are considered as there are pathways of impact that may link development within Chichester to these sites:

¹ <https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/06/Advice-note-10v4.pdf>

- Ebernoe Common SAC;
 - The Mens SAC; and
 - Duncton to Bignor Escarpment SAC.
- 1.13 The following European sites lie outside Chichester District but are briefly considered as there is potential for pathways of impact that may link development within Chichester to these sites:
- Butser Hill SAC;
 - Woolmer Forest SAC/Wealden Heaths Phase 2 SPA was screened out at the time of the development of the adopted Local Plan in consultation with Natural England. Woolmer Forest SAC is above its Critical Load for nitrogen deposition and is potentially susceptible to increased deposition from additional traffic (particularly undertaking journeys to work) passing within 200m of the site. However, due to the large distances separating this site from site allocations within the Local Plan Review (i.e. more than 22km in a straight line from the southern portion of Chichester District and more than 40km from Chichester city by road along the A27 and A3), it is considered that atmospheric pollution is not a realistic linking impact pathway to these allocated sites and as such is not discussed further.
- 1.14 The following European sites lie outside of Chichester District and while subject to HRA screening at the time of the adopted Local Plan, were screened out at that stage, and are not considered likely to require screening as part of the Local Plan Review (as no new or heightened Pathways of Impact are considered relevant):
- Arun Valley SAC, SPA & Ramsar sites.
- 1.15 Arun Valley SPA and Ramsar site is vulnerable to loss of functionally linked supporting habitat located outside of the European site. However, research to the location of the area of functionally linked supporting habitat² identifies no areas within Chichester District Council authority boundary and outside the South Downs National Park Authority that serve as functionally linked supporting habitat for the SPA. As such, there is no realistic impact pathway linking this site to the Local Plan Review. This European site is not discussed further within this HRA.
- 1.16 In addition to those discussed above, the following sites were scoped out of the assessment of the developing Local Plan Review since there was no identifiable pathway linking development in the Local Plan Review area to these sites:
- Rook Clift SAC;
 - Singleton and Cocking Tunnels SAC;
 - East Hampshire Hangers SAC;
 - Shortheath Common SAC;
 - South Wight Maritime SAC;
 - Solent and Isle of Wight Lagoons SAC; and
 - Thursley and Ockley Bogs Ramsar site.
- 1.17 It is considered that there remains no realistic impact pathway linking these sites to the proposed strategic site allocations in the Chichester plan area. Therefore they are not discussed further in this report.

HRA of Adopted Local Plan – summary of conclusions

- 1.18 The HRA of the adopted Local Plan³ provides the starting point for the HRA of the Local Plan Review. The HRA of the adopted Local Plan assessed the following pathways of impact on European sites:
- Urbanisation, recreational pressure, reduced air quality, reduced water quality as a result of constraints to waste water treatment capacity, coastal squeeze and loss of supporting habitats on the Chichester and Langstone Harbours SPA and Ramsar sites and Solent Maritime SAC;

² <https://www.arun.gov.uk/download.cfm?doc=docm93ijim4n10217.pdf&ver=10138>
[accessed 15/10/2018]

³ Available online: <http://www.chichester.gov.uk/CHttpHandler.ashx?id=28359&p=0>

- Urbanisation, recreational pressure, coastal squeeze and loss of supporting habitats on the Pagham Harbour SPA and Ramsar sites;
 - Reduced air quality and potential disruption to bat flight lines on Ebernoe Common SAC and The Mens SAC; and
 - Reduced air quality on Duncton to Bignor Escarpment SAC.
- 1.19 In all cases, the policy framework was found to be robust in leading to a conclusion of no adverse effects on integrity on European sites as a result of the adopted Local Plan.
- 1.20 The HRA of the subsequent Site Allocation DPD⁴ (at the time of writing (October 2018) this had not yet been adopted) determined that mitigation was required for the following pathways of impact relating to specific site allocations and related policies on European sites:
- Recreational pressure, and loss of supporting habitats on the Chichester and Langstone Harbours SPA and Ramsar sites and the Medmerry alignment;
 - Recreational pressure on the Pagham Harbour SPA and Ramsar sites; and
 - Disruption of bat flight lines on Ebernoe Common SAC and The Mens SAC.
- 1.21 Since this time, it has been identified that Butser Hill SAC could be sensitive to changes in atmospheric pollution as a result of increased traffic stemming from surrounding authorities, including Chichester District Council, and as such this European site will be included in this HRA assessment.
- 1.22 The locations of the above mentioned European sites are illustrated in Appendix A, Figure A1.

⁴ Available online: <http://www.chichester.gov.uk/CHttpHandler.ashx?id=30416&p=0>

2. Methodology

Introduction

- 2.1 The HRA has been carried out in the continuing absence of formal central Government guidance, although general EC guidance on HRA does exist⁵. The former Department for Communities and Local Government released a consultation paper on the Appropriate Assessment of Plans in 2006⁶. As yet, no further formal guidance has emerged. However, Natural England has produced its own internal guidance⁷ as has the RSPB⁸. Both of these have been referred to alongside the guidance outlined in Section 1.2 in undertaking this HRA.
- 2.2 Figure 1 below outlines the stages of HRA according to current draft MHCLG guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations and any relevant changes to the plan until no significant adverse effects remain.

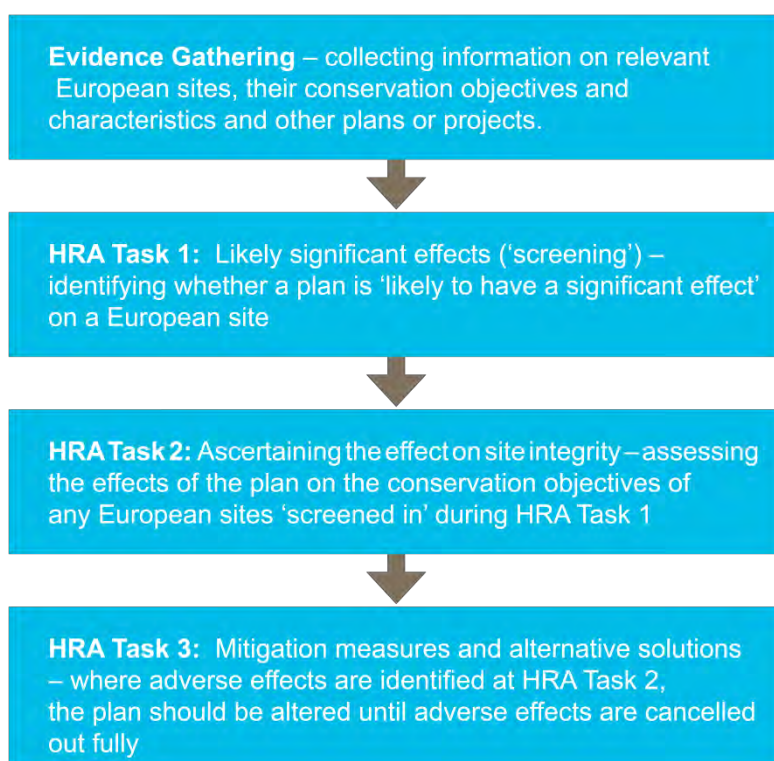


Figure 1: Four stage approach to Habitat Regulations Assessment (Source: CLG, 2006).

⁵ European Commission. (2001) Assessment of plans and projects significantly affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and 6(4) of the Habitats Directive.

⁶ CLG. (2006) Planning for the Protection of European Sites, Consultation Paper.

⁷ http://www.ukmpas.org/pdf/practical_guidance/HRGN1.pdf

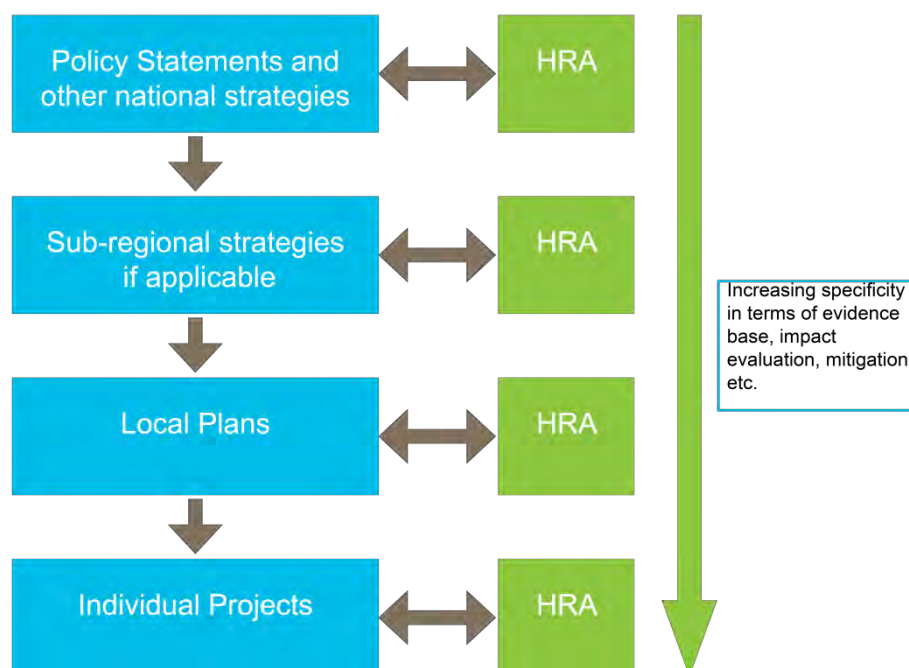
⁸ Dodd, A.M., Cleary, B.E., Dawkins, J.S., Byron, H.J., Palframan, L.J. & Williams, G.M. (2007)

The Appropriate Assessment of Spatial Plans in England: a guide to why, when and how to do it. The RSPB, Sandy.

HRA Task 1 – Likely Significant Effects (LSE) Test

- 2.3 Following evidence gathering, the first stage of any Habitats Regulations Assessment is a Likely Significant Effect (LSE) test - essentially a risk assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. The essential question is:
- 2.4 *“Is the Plan, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?”*
- 2.5 The objective is to ‘screen out’ those plans and projects that can, without any detailed appraisal, be said to be unlikely to result in significant adverse effects upon European sites, usually because there is no mechanism for an adverse interaction with European sites. This stage is undertaken in Appendix B and summarised in Chapter 4 of this report.
- 2.6 In evaluating significance, AECOM have relied on our professional judgement as well as the results of previous stakeholder consultation regarding development impacts on the European sites considered within this assessment.
- 2.7 The level of detail in land use plans concerning developments that will be permitted under the plans is rarely sufficient to make a detailed quantification of adverse effects. It is therefore necessary to be cognisant of the fact that HRAs for plans can be tiered, with assessments being undertaken with increasing specificity at lower tiers. This is in line with the Department of Communities and Local Government guidance and Court rulings that the level of detail of the assessment, whilst meeting the relevant requirements of the Conservation Regulations, should be ‘appropriate’ to the level of plan or project that it addresses. This ‘tiering’ of assessment is summarised in Box 2.

Box 2: Tiering in HRA of Land Use Plans



- 2.8 On these occasions the advice of Advocate-General Kokott⁹ is worth considering. She commented that: *‘It would ...hardly be proper to require a greater level of detail in preceding plans [rather than planning applications] or the abolition of multi-stage planning and approval procedures so that the assessment of implications can be concentrated on one point in the procedure. Rather, adverse effects on areas of conservation must be assessed at every relevant stage of the procedure to the extent possible on the basis of the precision of the plan. This assessment is to be updated with increasing specificity in subsequent stages of the procedure’* [emphasis added].

⁹ Opinion of Advocate General Kokott, 9th June 2005, Case C-6/04. Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland, paragraph 49. <http://curia.europa.eu/juris/document/document.jsf?docid=58359&doclang=EN>

HRA Task 2 – Appropriate Assessment (AA)

- 2.9 Where it is determined that a conclusion of 'No Likely Significant Effect' cannot be drawn, the analysis has proceeded to the next stage of HRA known as Appropriate Assessment. Case law has clarified that 'Appropriate Assessment' is not a technical term. In other words, there are no particular technical analyses, or level of technical analysis, that are classified by law as belonging to appropriate assessment.
- 2.10 There has been a very recent decision by the European Court of Justice¹⁰, which concludes that measures intended to avoid or reduce the harmful effects of a proposed project on a European site, but which are not an integral part of the project or plan, may no longer be taken into account by competent authorities at the Likely Significant Effects or 'screening' stage of HRA and as such is subject to assessment at the Appropriate Assessment stage.

HRA Task 3 – Avoidance and Mitigation

- 2.11 Where necessary, measures will be recommended for incorporation into the Plan in order to avoid or mitigate adverse effects on European sites. There is considerable precedent concerning the level of detail that a Local Plan document needs to contain regarding mitigation for recreational impacts on European sites. The implication of this precedent is that it is not necessary for all measures that will be deployed to be fully developed prior to adoption of the Plan, but the Plan must provide an adequate policy framework within which these measures can be delivered.
- 2.12 In evaluating significance, AECOM has relied on professional judgement as well as the results of previous stakeholder consultation regarding development impacts on the European sites considered within this assessment.
- 2.13 When discussing 'mitigation' for a Local Plan document, one is concerned primarily with the policy framework to enable the delivery of such mitigation rather than the details of the mitigation measures themselves since the Local Plan document is a high-level policy document.

Confirming Other Plans and Projects That May Act 'In Combination'

- 2.14 It is a requirement of the Regulations that the impacts of any land use plan being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the European site(s) in question.
- 2.15 In considering the potential for regional housing development on European sites the primary consideration is the impact of visitor numbers – i.e. recreational pressure – to which the European designated site within the Chichester plan area is vulnerable. Other pathways of impact described in more detail in Chapter 3 include urbanisation, atmospheric pollution, and pressure on water resources and water quality. Whilst these are also strongly related to housing and employment provision, the actual geographic impact must also be considered within the context of relevant infrastructure (e.g. road transport corridors and water supply catchments).

¹⁰ People Over Wind and Sweetman v Coillte Teoranta (C-323/17)

Table 1: Housing levels to be delivered in authorities neighbouring to Chichester District Council

Local Authority	Housing Levels To Be Delivered In Authorities Neighbouring Chichester District Council
South Downs National Park Authority	4,750 (2014 to 2033) ¹¹
Arun District Council	at least 20,000 (2011 to 20131) ¹²
Horsham District Council	16,000 (2011 to 2031) ¹³
Waverley Borough Council	11,210 (2013 to 2032) ¹⁴
East Hampshire District Council (Whitehill-Bordon EcoTown)	10,060 (2011 to 2028) ¹⁵
Havant Borough Council	9,549 (2016 to 2036) ¹⁶
Portsmouth City Council	up to 8,387 (2010-2027) ¹⁷

2.16 There are other plans and projects that are relevant to the 'in combination' assessment, and the following have all been taken into account in this assessment:

Plans

- Core Strategies/Local Plans and DPDs produced by local authorities surrounding the Local Plan area;
- Draft Portsmouth Water's Final Water Resource Management Plan (May 2018);
- South East Water's Final Water Resources Management Plan (2019);
- North Solent Shoreline Management Plan – Selsey Bill to Hurst Spit;
- South Downs Shoreline Management Plan – Beachy Head to Selsey Bill;
- Pagham to East Head Coastal Defence Strategy;
- Portchester Castle to Emsworth draft Coastal Flood and Erosion Risk Management Strategy;
- Pre-submission Chichester Harbour AONB Management Plan 2019-2024;
- Chichester Harbour AONB State of the AONB Report 2018;
- South Downs Partnership Management Plan 2014-2019;
- Pagham Harbour Local Nature Reserve Management Plan (2014);
- Pagham Harbour Local Nature Reserve Annual Report 2015-2016;
- Environment Agency Abstraction Management Strategies;
- Environment Agency River Basin Management Plans;
- Environment Agency Water Level Management Plans;
- Environment Agency, Southern Water and Chichester District Council position statements on waste-water treatment works;
- Stage 3 and (as appropriate) 4 of the Environment Agency's Review of Consents process for the European sites covered in this assessment (where available);
- European Site Management and Access Management Plans where available;

¹¹ https://www.southdowns.gov.uk/wp-content/uploads/2018/04/SDLP-01-Pre-Submission_South_Downs_Local_Plan.pdf [accessed 02/11/2018]

¹² <https://www.arun.gov.uk/download.cfm?doc=docm93jjm4n12844.pdf&ver=12984> [accessed 02/11/2018]

¹³ https://www.horsham.gov.uk/_data/assets/pdf_file/0006/28563/Horsham-District-Planning-Framework-2015.pdf [accessed 02/11/2018]

¹⁴ http://www.waverley.gov.uk/download/downloads/id/5974/waverley_local_plan_part_1_chapters_only.pdf [accessed 02/10/2018]

¹⁵ <https://www.easthants.gov.uk/sites/default/files/documents/DP01EastHampshireDistrictLocalPlanJointCoreStrategy.pdf> [accessed 02/11/2018]

¹⁶ http://www.havant.gov.uk/sites/default/files/documents/The%20Draft%20Local%20Plan%202036_for%20web%20with%20policy%20numbers%20%281%29.pdf [accessed 02/11/2018]

¹⁷ <https://www.portsmouth.gov.uk/ext/documents-external/pln-portsmouth-plan-post-adoption.pdf> [accessed 02/11/2018]

- Chichester District Council Air Quality Management Plan;
 - West Sussex Local Transport Plan (2011-2026);
 - West Sussex Minerals Local Plan (2003);
 - West Sussex Waste Local Plan (2014-2031); and
 - Chichester District Council's Local Biodiversity Action Plan (2015-2019).
- 2.17 When undertaking this part of the assessment it is essential to bear in mind the principal intention behind the legislation i.e. to ensure that those projects or plans which in themselves have minor impacts are not simply dismissed on that basis, but are evaluated for any cumulative contribution they may make to an overall significant effect. In practice, in combination assessment is therefore of greatest relevance when the plan would otherwise be screened out because its individual contribution is inconsequential.

3. Pathways of Impact

Introduction

- 3.1 In carrying out an HRA it is important to determine the various ways in which land use plans can impact on European sites by following the impact pathways through which development can be connected with European sites, in some cases many kilometres distant. Briefly defined, pathways are routes by which a change in activity associated with a development can lead to an effect upon a European site.

Relevant Supporting Studies

- 3.2 In determining pathway-receptor potential for impacts of the Chichester Local Plan Review on European sites, the following data sources have been examined:
- Amec Foster Wheeler. Chichester District Council Water Quality Assessment. Final Report (August 2018);
 - PBA Peter Brett. Chichester District Council – Local Plan. Transport Study of Strategic Development Options and Sustainability Transport Measures (2018);
 - Solent Waders and Brent Goose Strategy: Interim Guidance on Off-setting and Mitigation Requirements (2018);
 - Bird Aware Solent - Solent Recreation Mitigation Strategy (2017);
 - Solent Disturbance and Mitigation Project (Final Report, 2013);
 - Greenaway, F. (2005) Advice for the management of flightlines and foraging habitats of the barbastelle bat *Barbastellus barbastellus*. English Nature Research Report, Number 657;
 - Greenaway, F. (2008) Barbastelle bats in the Sussex West Weald 1997–2008;
 - Surveys undertaken by Footprint Ecology on behalf of the Solent Forum relating to the Solent Disturbance and Mitigation Project;
 - Arun District Council and Chichester District Council – visitor surveys for Pagham Harbour SPA;
 - Cruickshanks, K. & Liley, D. (2012) Pagham Harbour Visitor Surveys. Unpublished report by Footprint Ecology. Commissioned by Chichester District Council.
 - The UK Air Pollution Information System (www.apis.ac.uk) and Sussex Air Pollution dataset; and
 - www.magic.gov.uk and its links to SSSI citations and the JNCC website (www.natureonthemap.org.uk).

Disturbance and Recreational Pressure

- 3.3 Recreational use of a European site has the potential to:
- Prevent appropriate management or exacerbate existing management difficulties;
 - Cause damage through erosion and fragmentation;
 - Cause eutrophication as a result of dog fouling; and
 - Cause disturbance to sensitive species, particularly ground-nesting birds and wintering wildfowl.
- 3.4 Different types of European sites are subject to different types of recreational pressures and have different vulnerabilities. Studies across a range of species have shown that the effects from recreation can be complex.

Mechanical/abrasive Damage and Nutrient Enrichment

- 3.5 Most types of terrestrial European site can be affected by trampling, which in turn causes soil compaction and erosion. Walkers with dogs contribute to pressure on sites through nutrient enrichment via dog fouling and also have potential to cause greater disturbance to fauna as dogs are less likely to keep to marked footpaths and move more erratically. Motorcycle scrambling and off-road vehicle use can cause serious erosion, as well as disturbance to sensitive species.
- 3.6 There have been several papers published that empirically demonstrate that damage to vegetation in woodlands and other habitats can be caused by vehicles, walkers, horses and cyclists:
- Wilson & Seney (1994)¹⁸ examined the degree of track erosion caused by hikers, motorcycles, horses and cyclists from 108 plots along tracks in the Gallatin National Forest, Montana. Although the results proved difficult to interpret, it was concluded that horses and hikers disturbed more sediment on wet tracks, and therefore caused more erosion, than motorcycles and bicycles.
 - Cole *et al.* (1995a, b)¹⁹ conducted experimental off-track trampling in 18 closed forest, dwarf scrub and meadow and grassland communities (each trampled between 0–500 times) over five mountain regions in the US. Vegetation cover was assessed two weeks and one year after trampling, and an inverse relationship with trampling intensity was discovered, although this relationship was weaker after one year than two weeks indicating some recovery of the vegetation. Differences in plant morphological characteristics were found to explain more variation in response between different vegetation types than soil and topographic factors. Low-growing, mat-forming grasses regained their cover best after two weeks and were considered most resistant to trampling, while tall forbs (non-woody vascular plants other than grasses, sedges, rushes and ferns) were considered least resistant. Cover of hemicryptophytes and geophytes (plants with buds below the soil surface) was heavily reduced after two weeks, but had recovered well after one year and as such these were considered most resistant to trampling. Chamaephytes (plants with buds above the soil surface) were least resistant to trampling. It was concluded that these would be the least tolerant of a regular cycle of disturbance.
 - Cole (1995c)²⁰ conducted a follow-up study (in four vegetation types) in which shoe type (trainers or walking boots) and trampler weight were varied. Although immediate damage was greater with walking boots, there was no significant difference after one year. Heavier trampers caused a greater reduction in vegetation height than lighter trampers, but there was no difference in effect on cover.
 - Cole & Spildie (1998)²¹ experimentally compared the effects of off-track trampling by hikers and horses (at two intensities – 25 and 150 passes) in two woodland vegetation types (one with an erect forb understorey and one with a low shrub understorey). Horse traffic was found to cause the largest reduction in vegetation cover. The forb-dominated vegetation suffered greatest disturbance but recovered rapidly. Higher trampling intensities caused more disturbance.
- 3.7 The total volume of dog faeces deposited on sites can be surprisingly large. For example, at Burnham Beeches National Nature Reserve over one year, Barnard (2003)²² estimated the total amounts of urine and faeces from dogs as 30,000 litres and 60 tonnes respectively. Nutrient-poor habitats such as heathland are particularly sensitive to the fertilising effect of inputs of phosphates, nitrogen and potassium from dog faeces²³.
- 3.8 Areas of dune habitat that may be sensitive to trampling and erosion are present within Solent Maritime SAC, and Chichester and Langstone Harbours SPA and Ramsar sites at the entrance to Chichester Harbour. Additionally, visitors from the district may choose to visit European sites outside of the area

¹⁸ Wilson, J.P. & Seney, J.P. (1994) Erosional impact of hikers, horses, motorcycles and off-road bicycles on mountain trails in Montana. *Mountain Research and Development* 14: 77-88.

¹⁹ Cole, D.N. (1995a) Experimental trampling of vegetation. I. Relationship between trampling intensity and vegetation response. *Journal of Applied Ecology* 32: 203-214.

Cole, D.N. (1995b) Experimental trampling of vegetation. II. Predictors of resistance and resilience. *Journal of Applied Ecology* 32: 215-224.

²⁰ Cole, D.N. (1995c) Recreational trampling experiments: effects of trampler weight and shoe type. Research Note INT-RN-425. U.S. Forest Service, Intermountain Research Station, Utah.

²¹ Cole, D.N. & Spildie, D.R. (1998) Hiker, horse and llama trampling effects on native vegetation in Montana, USA. *Journal of Environmental Management* 53: 61-71.

²² Barnard, A. (2003) Getting the Facts - Dog Walking and Visitor Number Surveys at Burnham Beeches and their Implications for the Management Process. *Countryside Recreation* 11: 16-19.

²³ Shaw, P.J.A., Lankey, K. & Hollingham, S.A. (1995) Impacts of trampling and dog fouling on vegetation and soil conditions on Headley Heath. *The London Naturalist* 74: 77-82.

covered by Chichester's Local Plan that may be sensitive to such impacts. Direct mechanical trampling and nutrient enrichment are both more subtle and reversible effects than disturbance of bird populations.

Disturbance

- 3.9 Concern regarding the effects of disturbance on birds stems from the fact that they are expending energy unnecessarily and the time they spend responding to disturbance is time that is not spent feeding. Disturbance therefore risks increasing energetic output while reducing energetic input, which can adversely affect the 'condition' and ultimately survival of the birds. In addition, displacement of birds from one feeding site to others can increase the pressure on the resources available within the remaining sites as they must sustain a greater number of birds.
- 3.10 A number of studies have shown that birds are affected more by dogs and people with dogs than by people alone, with birds flushed more readily, more frequently, at greater distances and for longer. In addition, dogs, rather than people, tend to be the cause of many management difficulties, notably by worrying grazing animals, and can cause eutrophication near paths.
- 3.11 However, the outcomes of many of these studies should be treated with care. For instance, the effect of disturbance is not necessarily correlated with the impact of disturbance, i.e. the most easily disturbed species are not necessarily those that will suffer the greatest impacts. It has been shown that, in some cases, the most easily disturbed birds simply move to other feeding sites, whilst others may remain (possibly due to an absence of alternative sites) and thus suffer greater impacts on their population. A literature review undertaken for the RSPB also urges caution when extrapolating the results of one disturbance study because responses differ between species and the response of one species may differ according to local environmental conditions. These factors have to be taken into account when attempting to predict the impacts of future recreational pressure on European sites.
- 3.12 Disturbing activities are on a continuum. The most disturbing activities are likely to be those that involve irregular, infrequent, unpredictable loud noise events, movement or vibration of long duration. Birds are least likely to be disturbed by activities that involve regular, frequent, predictable, quiet patterns of sound or movement or minimal vibration. The further any activity is from the birds the less likely it is to result in disturbance.
- 3.13 The factors that influence a species' response to a disturbance are numerous, but the three key factors are species sensitivity, proximity of disturbance sources and timing/duration of the potentially disturbing activity.
- 3.14 It should be emphasised that recreational use is not inevitably a problem. Many European sites are also nature reserves managed for conservation and public appreciation of nature. At such sites, access is encouraged and resources are available to ensure that recreational use is managed appropriately.
- 3.15 Where increased recreational use is predicted to cause adverse impacts on a site, avoidance and mitigation should be considered. Avoidance of recreational impacts at European sites involves location of new development away from such sites; Local Development Frameworks (and other strategic plans) provide the mechanism for this. Where avoidance is not possible, mitigation will usually involve a mix of access management, habitat management and provision of alternative recreational space.
- 3.16 Access management – restricting access to some or all of a European site - is not usually within the remit of the District Council and restriction of access may contravene a range of Government policies on access to open space, and Government objectives for increasing exercise, improving health etc. However, active management of access may be possible, such as that practised on nature reserves.
- 3.17 Habitat management is not within the direct remit of the Council. However the Council can help to set a framework for improved habitat management by promoting cross-authority collaboration and S106 funding of habitat management. In the case of Chichester, opportunities for this are limited since, according to Natural England, the areas of European designated habitat in the District are already in favourable condition or recovering.
- 3.18 Provision of alternative recreational space can help to attract recreational users away from sensitive European sites and reduce pressure on the sites. For example, some species for which European sites have been designated are particularly sensitive to dogs, and many dog walkers may be happy to be

diverted to less sensitive sites. However, the location and type of alternative space must be attractive to users for this to be effective.

Atmospheric Pollution

3.19 The main pollutants of concern for European sites are oxides of nitrogen (NO_x), ammonia (NH₃) and sulphur dioxide (SO₂). NO_x can have a directly toxic effect upon vegetation. In addition, greater NO_x or ammonia concentrations within the atmosphere will lead to greater rates of nitrogen deposition to soils. An increase in the deposition of nitrogen from the atmosphere to soils is generally regarded to lead to an increase in soil fertility, which can have a serious deleterious effect on the quality of semi-natural, nitrogen-limited terrestrial habitats.

Table 2: Main sources and effects of air pollutants on habitats and species

Pollutant	Source	Effects on habitats and species
Acid deposition	SO ₂ , NO _x and ammonia all contribute to acid deposition. Although future trends in S emissions and subsequent deposition to terrestrial and aquatic ecosystems will continue to decline, it is likely that increased N emissions may cancel out any gains produced by reduced S levels.	Can affect habitats and species through both wet (acid rain) and dry deposition. Some sites will be more at risk than others depending on soil type, bed rock geology, weathering rate and buffering capacity.
Ammonia (NH ₃)	Ammonia is released following decomposition and volatilisation of animal wastes. It is a naturally occurring trace gas, but levels have increased considerably with expansion in numbers of agricultural livestock. Ammonia reacts with acid pollutants such as the products of SO ₂ and NO _x emissions to produce fine ammonium (NH ₄ ⁺) - containing aerosol which may be transferred much longer distances (can therefore be a significant trans-boundary issue.)	Adverse effects are as a result of nitrogen deposition leading to eutrophication. As emissions mostly occur at ground level in the rural environment and NH ₃ is rapidly deposited, some of the most acute problems of NH ₃ deposition are for small relict nature reserves located in intensive agricultural landscapes.
Nitrogen oxides NO _x	Nitrogen oxides are mostly produced in combustion processes. About one quarter of the UK's emissions are from power stations, one-half from motor vehicles, and the rest from other industrial and domestic combustion processes.	Deposition of nitrogen compounds (nitrates (NO ₃), nitrogen dioxide (NO ₂) and nitric acid (HNO ₃)) can lead to both soil and freshwater acidification. In addition, NO _x can cause eutrophication of soils and water. This alters the species composition of plant communities and can eliminate sensitive species.
Nitrogen (N) deposition	The pollutants that contribute to nitrogen deposition derive mainly from NO _x and NH ₃ emissions. These pollutants cause acidification (see also acid deposition) as well as eutrophication.	Species-rich plant communities with relatively high proportions of slow-growing perennial species and bryophytes are most at risk from N eutrophication, due to its promotion of competitive and invasive species which can respond readily to elevated levels of N. N deposition can also increase the risk of damage from abiotic factors, e.g. drought and frost.
Ozone (O ₃)	A secondary pollutant generated by photochemical reactions from NO _x and volatile organic compounds (VOCs). These are mainly released by the combustion of fossil fuels. The increase in combustion of fossil fuels in the UK has led to a large increase in background ozone concentration, leading to an increased number of days when levels across the region are above 40ppb. Reducing ozone pollution is believed to require action at international level to reduce levels of the precursors that form ozone.	Concentrations of O ₃ above 40 ppb can be toxic to humans and wildlife, and can affect buildings. Increased ozone concentrations may lead to a reduction in growth of agricultural crops, decreased forest production and altered species composition in semi-natural plant communities.
Sulphur Dioxide SO ₂	Main sources of SO ₂ emissions are electricity generation, industry and domestic fuel combustion. May also arise from shipping and increased atmospheric concentrations in busy ports. Total SO ₂ emissions have decreased substantially in the UK	Wet and dry deposition of SO ₂ acidifies soils and freshwater, and alters the species composition of plant and associated animal communities. The significance of impacts depends on levels of deposition and the buffering capacity of soils.

since the 1980s.

3.20 Sulphur dioxide emissions are overwhelmingly influenced by the output of power stations and industrial processes that require the combustion of coal and oil. Ammonia emissions are dominated by agriculture, with some chemical processes also making notable contributions. NOx emissions, however, are dominated by the output of vehicle exhausts (more than half of all emissions). Within a 'typical' housing development, by far the largest contribution to NOx (92%) will be made by the associated road traffic. Other sources, although relevant, are of minor importance (8%) in comparison²⁴. Emissions of NOx could therefore be reasonably expected to increase as a result of greater vehicle use as an indirect effect of the plan.

3.21 According to the World Health Organisation, the critical NOx concentration (critical threshold) for the protection of vegetation is 30 µgm⁻³; the threshold for sulphur dioxide is 20 µgm⁻³. In addition, ecological studies have determined 'critical loads'²⁵ of atmospheric nitrogen deposition (that is, NOx combined with ammonia NH₃) for key habitats within the European sites considered within this assessment. According to the Department of Transport's Transport Analysis Guidance, "Beyond 200m, the contribution of vehicle emissions from the roadside to local pollution levels is not significant".

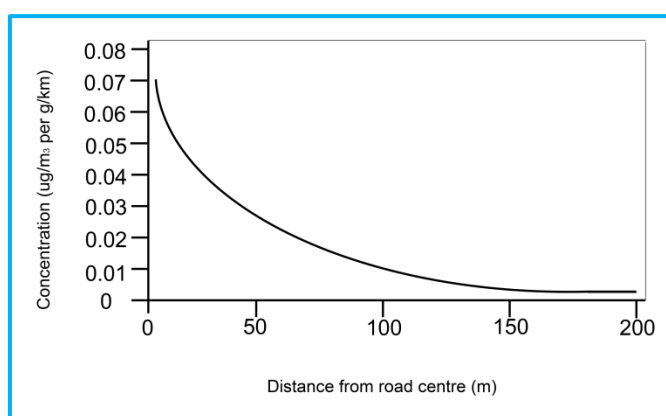


Figure 2: Traffic contribution to concentrations of pollutants at different distances from a road (Source: DfT)

3.22 This is therefore the distance that has been used throughout this HRA in order to determine whether European sites are likely to be significantly affected by development under the Plan.

3.23 The following European sites are located within 200m of a potentially affected road.

Table 3: European Sites Located within 200m of a Potentially Affected Road

European Site	Potentially Affected Road	Ordnance Survey Grid Reference
Duncton to Bignore Escarpment SAC	A285	SU95651612
Kingley Vale SAC	B2142	SU83361332
Solent European Sites near Bosham	A259	SU79790523
Solent European sites near Fishbourne	A259	SU83520470
Pagham Harbour	B2145	SZ85649648

²⁴ Proportions calculated based upon data presented in Dore CJ et al. 2005. UK Emissions of Air Pollutants 1970 – 2003. UK National Atmospheric Emissions Inventory. <http://www.airquality.co.uk/archive/index.php>

²⁵ The critical load is the rate of deposition beyond which research indicates that adverse effects can reasonably be expected to occur

SPA/Ramsar site

Ebernoe Common SAC	A283	SU96512597
The Mens SAC	A272	TQ02332379
Butser Hill SAC	A3	SU72181977
Solent European sites	A27/ Southampton Road	SU62880566
Solent European sites	M27 J12	SU65020461
Solent European sites	M27 East of A2030 junction	SU6790444

3.24 It is the above European sites identified in Table 3 that will be subject to an air quality assessment.

Water Abstraction

3.25 The South-East has been identified as generally being an area of high water stress (see Figure 3).

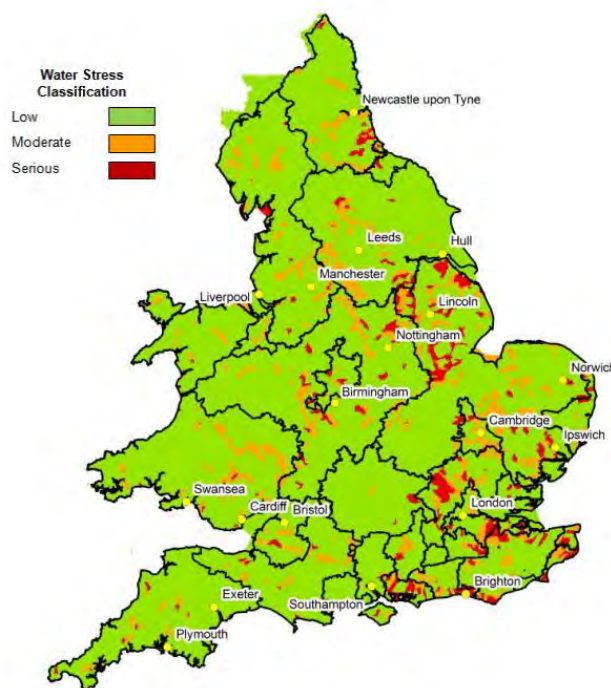


Figure 3. Areas of water stress within England. ²⁶

3.26 However, it should be noted that Portsmouth Water’s area of supply is no longer ‘Seriously Water Stressed’ as defined by the EA. The change reflects the sustainability changes that the Company has made to their licences and the lower demand forecast now being used. Development and population growth are allowed for in the Company’s Water Resource Management Plan but falling per capita consumption and falling commercial demand means that overall demand is not increasing. Abstraction has fallen by 20% since the 1980’s and Portsmouth Water has no intention of applying for additional licences.

3.27 The Local Plan area is supplied with water from the Environment Agency Arun and Western Streams catchment, which currently assesses groundwater availability as being ‘restricted’ in terms of supplies from the Chichester chalk. Freshwater flows into Chichester Harbour arise from the Chichester Rifes - the River Lavant, River Ems, Fishbourne Springs, Bosham Stream, Cutmill Creek, Ham Brook, and the

²⁶ Figure adapted from Environment Agency. 2013. Water stressed areas – final classification https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/244333/water-stressed-classification-2013.pdf

springs at Warblington. The Habitats Directive (HD) review of consents investigated the impact of abstraction on freshwater flows to the SPA and the abstraction management strategy noted that any new licence would need to consider impacts on this conservation site. The review of consents process identified that no changes to licences were required in order to maintain integrity of the Arun Valley SAC/ SPA/ Ramsar sites. Within the Local Plan area two water companies are operational in terms of supply:

- Portsmouth Water supplies Chichester, East Wittering, Southbourne, Tangmere and Selsey via their Chichester and Bognor Regis resources zone. Portsmouth Water's licences in the Chichester area are now fully compliant with the Habitats Regulations. The only outcome from the WFD investigations in this area is to consider increased augmentation of the River Ems. This scheme is in the EA's National Environment Programme and has been included in the Company's Business Plan.
- South East Water supplies the north of the district from their WRZ5 resources zone. WRZ5 has sufficient water supply through the Plan period beyond 2035²⁷ ..

3.28 Portsmouth Water has confirmed that overall water demand is not increasing despite increased populations and they do not intend to apply for additional licences. Given that South East Water's relevant supply zone will be essentially in surplus for the whole planning period the potential for a water resource/supply effect on European sites can be scoped out of this assessment.

3.29 Ensuring an adequate future water supply is a matter for the water company in consultation with the Environment Agency and the Regulator. However, local authorities can play an important role through incorporating Local Plan policies that indicate how new development will need to maximise water efficiency measures and minimise demands on water resources.

Water Quality

3.30 The quality of the water that feeds European sites is an important determinant of the nature of their habitats and the species they support. Poor water quality can have a range of environmental impacts. Sewage and industrial effluent discharges can contribute to increased nutrient levels within European sites, leading to unfavourable conditions. In addition, diffuse pollution, partly from urban run-off, has been identified during an Environment Agency Review of Consents process as being a major factor in causing unfavourable condition of European sites.

3.31 This impact pathway will be discussed further in relation to the relevant European sites in subsequent chapters.

Coastal Squeeze

3.32 Rising sea levels can be expected to cause intertidal habitats (principally saltmarsh and mudflat) to migrate landwards. However, in built-up areas, such landward retreat is often rendered impossible due to the presence of sea walls and other flood defences.

3.33 In addition, as development frequently takes place immediately behind the sea wall, flood defences often cannot be moved landwards to accommodate managed retreat of threatened habitats. The net result of this is that the quantity of saltmarsh and mudflat adjacent to built-up areas will progressively decrease as sea levels rise. This process is known as 'coastal squeeze'. In areas where sediment availability is reduced, the 'squeeze' also includes an increasingly steep beach profile and foreshortening of the seaward zones.

3.34 The North Solent Shoreline Management Plan units for Chichester and Langstone Harbours indicate that there will be a combination of 'Hold the Line', 'Managed Realignment' and 'Adaptive Management' strategies²⁸. An HRA of the draft plan²⁹ indicated that Hold the Line will have no effect on habitats behind the defences, whilst Managed Realignment is likely to *"have a significant detrimental effect resulting in loss of designated terrestrial habitats including coastal grazing marsh, saline lagoons and grasslands."* Managed Realignment is proposed in the short term for part of Chichester Harbour. Although Hold the Line is the preferred approach for the majority of the shoreline, the SMP notes that further studies on

²⁷ <https://corporate.southeastwater.co.uk/media/2419/13350-sew-revised-dwrmp-2020-2080-aw.pdf> [accessed 02/11/2018]

²⁸ <http://www.northsolentsmp.co.uk/> [Accessed: 12/10/2018]

²⁹ [http://www.northsolentsmp.co.uk/media/adobe/o/2/Appendix_J_-_Appropriate_Assessment_\(draft\).pdf](http://www.northsolentsmp.co.uk/media/adobe/o/2/Appendix_J_-_Appropriate_Assessment_(draft).pdf).

Chichester and Langstone Harbours may lead to revision of this for significant lengths of shoreline in the inner harbours.

- 3.35 The South Downs SMP for areas fronting Pagham Harbour identifies a mix of Hold the Line and Managed Realignment strategies. The SMP states that a Managed Realignment strategy is being adopted to maintain the integrity of the harbour with its nature conservation value as a primary consideration.
- 3.36 In order to conclude that development in the Local Plan area would not lead to a significant adverse effect as a result of coastal squeeze, it will be necessary to conclude that the Local Plan would not require the SMP (or resulting Coastal Strategy) policies for the frontage to be altered and would not be situated in such a position as to require new defences in currently undefended parts of the coastline or locate development in areas planned for managed realignment in the SMP or the Environment Agency Regional Habitat Creation Programme.

Loss of Habitats Outside of European Sites

- 3.37 European sites are designated on the basis of key habitats and species. Species are often mobile beyond the designated site boundary and it is possible that development in the wider area may have an impact on the species populations for which the European sites are designated.

Bat Sites

- 3.38 Ebernoe Common SAC and The Mens SAC are both designated for populations of barbastelle (*Barbastella barbastellus*). The barbastelles forage widely outside of these SACs, and studies carried out over the past fifteen years give detailed information on flightlines³⁰:
- 3.39 These reports have identified that:
- The barbastelles of The Mens SAC forage to the east of the SAC, principally on the floodplain of the River Arun from near Horsham in the north to Parham in the south. They also cross to the Adur floodplain. In some cases the bats travelled up to 7km to visit foraging areas;
 - The barbastelles at Ebernoe Common SAC had flightlines that followed watercourses, particularly the River Kird, and woodland cover for distances of typically 5km. Flightlines outside the SAC are particularly to the south (the Petworth and Tillington area) but also to the west, north and east; and
 - Ebernoe Common SAC is also designated for a population of Bechstein's bat (*Myotis bechsteinii*). Radio-tracking projects that have been implemented for this species have established that tracked individuals generally remained within approximately 1.5km of their roosts³¹. These distances are concordant with those identified from radio-tracking of Bechstein's bats at Ebernoe Common SAC from 2001, which identified that the maximum distance travelled by a tagged Bechstein's bat to its foraging area was 1,407m, with an average of 735.7m³².
- 3.40 These SACs require inclusion in the screening stage of this HRA since severance of bat flightlines could theoretically occur through new development, which could have an adverse effect on the SAC designation. Recent Natural England advice to South Downs National Park Authority related to the HRA of their Local Plan proposed the following zone-based approach when assessing potential impact pathways for these SACs³³:
- A 'key conservation area' – for any development proposed within 6.5km of the SAC, all impacts will be considered; and
 - A 'wider conservation area' – for any development proposed 6.5 - 12km from the SAC, significant impacts or severance of flightlines will be considered. This area encompasses the full extent from the SAC in which bats may forage.

³⁰ Greenaway, F. (2008) Barbastelle bats in the Sussex West Weald 1997 – 2008.

Greenaway, F. (2004) Advice for the management of flightlines and foraging habitats of the barbastelle bat *Barbastellus barbastellus*. *English Nature Research Report*, Number 657.

³¹ Cited in: Schofield H & Morris C. (2000) Ranging Behaviour and Habitat Preferences of Female Bechstein's Bats in Summer. Vincent Wildlife Trust.

³² Fitzsimmons, P., Hill, D. & Greenaway, F. (2002) Patterns of habitat use by female Bechstein's bats (*Myotis bechsteinii*) from a maternity colony in a British woodland.

³³ Sussex Bat Special Area of Conservation Planning and Landscape Scale Enhancement Protocol' (2017)

Bird Sites

3.41 Chichester and Langstone Harbours SPA and Ramsar site and Pagham Harbour SPA and Ramsar site are notified partly for their over-wintering populations of brent goose (*Branta bernicla bernicla*). However, studies have identified that many feeding sites for this species around the Solent fall outside of the statutory nature conservation site boundaries. The majority of brent goose feeding sites are amenity/recreation grasslands with little intrinsic nature conservation interest, and therefore are vulnerable to loss or damage from development. This also applies to some high tide wader roosts in the Solent. This issue is addressed by the Solent Recreation Mitigation Strategy³⁴, and specific mitigation guidance is provided in the Solent Waders and Brent Goose Strategy: Interim Guidance on Mitigation and Off-setting Requirements³⁵. As part of this Strategy, a network of terrestrial non-designated sites used by brent goose and waders has been identified, in which sites are categorised according to their importance to brent goose and wader populations using the following system:

- **Core Areas** – sites identified as having a network value and/or have a maximum Brent goose and/or wader count of at least 1000 and/or have the maximum score of 7 in at least three metrics;
- **Primary Areas** – sites with a score of 3-6;
- **Secondary Support Areas** – sites with a score of 1-2 and/or have a maximum bird count of at least 100 for brent goose or any wader species;
- **Low Use** – sites in which low numbers of brent goose and/or waders have been recorded (score 0); and
- **Candidate Sites** – sites in which high numbers of brent goose and/or waders have been recorded (at least 100 birds) and/or a score of at least 3 but have fewer than three records in total.

³⁴ Bird Aware Solent. (2017) Solent Recreation Mitigation Strategy. December 2017.

³⁵ Solent Waders and Brent Goose Strategy Steering Group. (2018) Solent Waders and Brent Goose Strategy: Interim Guidance on Mitigation and Off-setting Requirements. March 2018.

4. Likely Significant Effects Test Summary

Policies

4.1 In the Likely Significant Effects Test undertaken in Appendix A, Table 10, the following policies could not be screened out in isolation:

- Policy S2: Settlement Hierarchy
- Policy S3: Development Strategy
- Policy S4: Meeting Housing Needs
- Policy S5: Parish Housing Requirements 2016-2035
- Policy S7: Meeting the Gypsies, Travellers and Travelling Showpeoples' Needs
- Policy S8: Meeting Employment Land Needs
- Policy S9: Retail Hierarchy and Sequential Approach
- Policy S11: Addressing Horticultural Needs
- Policy DM20: Development around the Coast

4.2 The Likely Significant Effects Test identified that the following potential linking impact pathways could result in adverse effects on integrity of European sites, and as such will be subject to Appropriate Assessment in the following subsequent Chapters (Chapters 5 to 10):

- Water quality;
- Air quality;
- Recreational pressure;
- Loss of functionally linked supporting habitat;
- Urbanization; and
- Coastal squeeze.

Strategic Site Allocations

4.3 In the Likely Significant Effects Test undertaken in Appendix A, Table 11, the following strategic site allocations could not be screened out in isolation:

- Policy AL1: Land West of Chichester
- Policy AL2: Land at Shopwyke (Oving Parish)
- Policy AL3: East of Chichester (Oving Parish)
- Policy AL5: Southern Gateway
- Policy AL6: Land south-west of Chichester (Apuldram and Donnington Parishes)
- Policy AL7: Highgrove Farm, Bosham
- Policy AL8: East Wittering Parish
- Policy AL9: Fishbourne Parish
- Policy AL10: Chidham and Hambrook Parish
- Policy AL11: Hunston Parish
- Policy AL12: Land North of Park Farm, Selsey
- Policy AL13: Southbourne Parish

4.4 This Likely Significant Effects Test identified that the following potential linking impact pathways could result in adverse effects on integrity of European sites, and as such will be subject to Appropriate Assessment in the following Chapters.

- Water quality;
- Air quality;
- Recreational pressure;
- Loss of functionally linked supporting habitat;
- Urbanization; and
- Coastal squeeze.

Summary

4.5 In summary, the focus of the Appropriate Assessment is therefore on the following pathways of impact:

- **Recreational pressure**
 - whether proposed housing sites are located within 5.6km of the Chichester and Langstone Harbours SPA/Ramsar site or the Medmerry realignment
 - whether proposed housing sites are located within 3.5km of Pagham Harbour SPA/Ramsar site.
- **Other forms of disturbance such as noise or lighting**
- **Water quality**
 - in terms of whether individual sites present impact pathways (such as surface water runoff) to European sites, or are located within the catchment of WwTW that with limited headroom that drain into Chichester Harbour
- **Loss of, or prevention of access to, functionally linked supporting habitat:**
 - Chichester and Langstone Harbours SPA/Ramsar site (including the Medmerry realignment);
 - Pagham Harbour SPA/Ramsar site;
 - Ebernoe Common SAC; and
 - The Mens SAC.
- **Atmospheric pollution:**
 - Duncton to Bignore Escarpment SAC
 - Kingley Vale SAC
 - Chichester and Langstone Harbours SPA/Ramsar site
 - Solent Maritime SAC
 - Pagham Harbour SPA/Ramsar site
 - Ebernoe Common SAC
 - The Mens SAC
 - Butser Hill SAC

5. Chichester and Langstone Harbours SPA and Ramsar Site/Solent Maritime SAC/Solent and Dorset Coast SPA³⁶

Introduction

- 5.1 Chichester and Langstone Harbours SPA and Ramsar site encompasses two large sheltered estuarine basins: Langstone and Chichester Harbours on the Hampshire/Sussex border. The two harbours are separated by Hayling Island and meet at Langstone Bridge. The SPA is comprised of two Sites of Special Scientific Interest (SSSI): Chichester Harbour SSSI and Langstone Harbour SSSI.
- 5.2 Chichester Harbour and Langstone Harbour, along with the coastal waters between the two harbours, form part of the Solent Maritime SAC, along with Portsmouth Harbour SPA/Ramsar site and Solent & Southampton Water SPA/Ramsar site.
- 5.3 Chichester Harbour SSSI is a large estuarine basin within which extensive mud and sandflats are exposed at low tide. The site is of particular significance for wintering wildfowl and waders and also for breeding birds both within the Harbour and in the surrounding pastures and woodlands. There is also a wide range of habitats which have important plant communities.
- 5.4 Chichester Harbour and the adjoining Portsmouth and Langstone Harbours together form a single system which is among the ten most important intertidal areas for waders in Britain.

Chichester and Langstone Harbours SPA and Ramsar site

- 5.5 Features of European Interest³⁷ Chichester and Langstone Harbours SPA qualifies under Article 4.1 of the Birds Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive
- 5.6 During the breeding season:
 - Common Tern *Sterna hirundo*: 0.3% of the breeding population in Great Britain (5-year mean, 1992-1996);
 - Sandwich Tern *Sterna sandvicensis*: 0.2% of the breeding population in Great Britain (5-year mean, 1993-1997); and
 - Little Tern *Sternula albifrons*: 4.2% of the breeding population in Great Britain (5-year mean, 1992-1996).
- 5.7 Over winter:
 - Bar-tailed Godwit *Limosa lapponica*: 3.2% of the wintering population in Great Britain (5-year peak mean 1991/92-1995/96).
- 5.8 This site also qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:
- 5.9 Over winter:

³⁶ Note that this includes the Medmerry realignment, which although close to Pagham Harbour SPA/Ramsar site was created to compensate for coastal squeeze losses on the Solent & Southampton Water and Chichester & Langstone Harbours. In practice there is considerable overlap between the 5.6km zone from Medmerry, the 5.6km zone from Chichester Harbour and the 3.5km zone from Pagham Harbour.

³⁷ <http://publications.naturalengland.org.uk/publication/5789102905491456> [Accessed: 15/10/2018]

- Pintail *Anas acuta*: 1.2% of the population in Great Britain (5-year peak mean 1991/92-1995/96);
- Shoveler *Anas clypeata*: 1% of the population in Great Britain (5-year peak mean 1991/92-1995/96);
- Teal *Anas crecca*: 0.5% of the population (5-year peak mean 1991/92-1995/96);
- Wigeon *Anas penelope*: 0.7% of the population in Great Britain (5-year peak mean 1991/92-1995/96);
- Turnstone *Arenaria interpres*: 0.7% of the population in Great Britain (5-year peak mean 1991/92-1995/96);
- Dark-bellied Brent Goose *Branta bernicla bernicla*: 5.7% of the population (5-year peak mean 1991/92-1995/96);
- Sanderling *Calidris alba*: 0.2% of the population (5-year peak mean 1991/92-1995/96);
- Dunlin *Calidris alpina alpina*: 3.2% of the population (5-year peak mean 1991/92-1995/96);
- Ringed Plover *Charadrius hiaticula*: 3% of the population in Great Britain (5-year peak mean 1991/92-1995/96);
- Red-breasted Merganser *Mergus serrator*: 3% of the population in Great Britain (5-year peak mean 1991/92-1995/96);
- Curlew *Numenius arquata*: 1.6% of the population in Great Britain (5-year peak mean 1991/92-1995/96);
- Grey Plover *Pluvialis squatarola*: 2.3% of the population (5-year peak mean 1991/92-1995/96);
- Shelduck *Tadorna tadorna*: 3.3% of the population in Great Britain (5-year peak mean 1991/92-1995/96); and
- Redshank *Tringa totanus*: 1% of the population (5-year peak mean 1991/92-1995/96).

5.10 The area also qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting an internationally important assemblage of birds. Over winter, the area regularly supports 93,230 individual waterfowl (5-year peak mean 01/04/1998) including: Wigeon, Bar-tailed Godwit, Dark-bellied Brent Goose, Ringed Plover, Grey Plover, Dunlin, Redshank, Shelduck, Curlew, Teal, Pintail, Shoveler, Red-breasted Merganser, Sanderling and Turnstone.

Conservation Objectives³⁸

5.11 'With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

5.12 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.'

5.13 Chichester and Langstone Harbours **Ramsar** site qualifies under the following Ramsar criteria.³⁹

³⁸ Natural England. European Site Conservation Objectives for Chichester and Langstone Harbours Special Protection Area (2014) Available: <http://publications.naturalengland.org.uk/publication/5789102905491456> [Accessed: 15/10/2018].

³⁹ <http://jncc.defra.gov.uk/pdf/RIS/UK11013.pdf> [accessed 01/10/2018]

Note: Defra and Natural England have not produced a Conservation Advice package, instead focussing on the production of High Level Conservation Objectives. Natural England considers the Conservation Advice packages for the overlapping European Marine Site designations to be, in most cases, sufficient to support the management of the Ramsar interests.

Table 4. Chichester and Langstone Harbours Ramsar site criteria.

Ramsar criterion	Description of criterion	Chichester and Langstone Harbours
1	A wetland should be considered internationally important if it contains a representative, rare, or unique example of a natural or near-natural wetland type found within the appropriate biogeographic region.	Two large estuarine basins linked by the channel which divides Hayling Islands from the main Hampshire coastline. The site includes intertidal mudflats, saltmarsh, sand and shingle spits and sand dunes.
5	A wetland should be considered internationally important if it regularly supports assemblages of waterbirds of international importance.	76,480 waterfowl (5-year peak mean 1998/99–2002/03).
6	A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	<p>Species with peak counts in spring/autumn:</p> <p>Ringed plover <i>Charadrius hiaticula</i>: 853 individuals, representing an average of 1.1% of the population (5-year peak mean 1998/99–2002/03).</p> <p>Black-tailed godwit <i>Limosa limosa islandica</i>: 906 individuals, representing an average of 2.5% of the population (5-year peak mean 1998/99–2002/03).</p> <p>Common redshank <i>Tringa totanus totanus</i>: 2577 individuals, representing an average of 1% of the population (5-year peak mean 1998/99–2002/03).</p> <p>Species with peak counts in winter:</p> <p>Dark-bellied brent goose <i>Branta bernicla bernicla</i>: 12,987 individuals, representing an average of 6% of the populations (5-year peak mean 1998/99–2002/03).</p> <p>Common shelduck <i>Tadorna tadorna</i>: 1,468 individuals, representing an average of 1.8% of the GB population (5-year peak mean 1998/99–2002/03).</p> <p>Grey plover <i>Pluvialis squatarola</i>: 3,043 individuals, representing an average of 1.2% of the population (5-year peak mean 1998/99–2002/03).</p> <p>Dunlin <i>Calidris alpina alpina</i>: 33,436 individuals, representing an average of 2.5% of the population (5-year peak mean 1998/99–2002/03).</p> <p>Species regularly supported during the breeding season:</p> <p>Little tern <i>Sternula albifrons albifrons</i>: 130 apparently occupied nests, representing an average of 1.1% of the breeding populations (Seabird 2000 census)⁴⁰</p>

⁴⁰ Species identified subsequent to designation for future possible consideration.

Medmerry Nature Reserve

5.14 At present Medmerry has the status of 'Identified Compensatory Habitat' which gives it protection through the planning system (specifically, paragraph 118 of the National Planning Policy Framework identifies that such compensatory habitat must be treated as if it is a European site). If/when it becomes identified by Natural England as a potential SPA (pSPA) this would give it legal protection under the Habitats Regulations 2017. Since it is not actually a pSPA it does not have specific official conservation objectives or designated interest features. However, for the purposes of future-proofing the HRA of the Local Plan Review it is reasonable to assume that during the plan period it will acquire a collection of interest features similar to that of Chichester & Langstone Harbour SPA and the Solent Maritime SAC. The site is already known to support Brent geese, golden plover, lapwing and avocet and also has extensive areas of intertidal mudflat and early successional saltmarsh.

Solent Maritime SAC

Features of European Interest⁴¹

5.15 Solent Maritime SAC qualifies as a SAC for both habitats and species. Firstly, the site contains the following Habitats Directive Annex I habitats:

- Estuaries;
- Cord-grass (*Spartina*) swards (*Spartinion maritimae*);
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*);
- Subtidal sandbanks (sandbanks which are slightly covered by seawater all the time);
- Intertidal mudflats and sandflats (mudflats and sandflats not covered by seawater at low tide);
- Lagoons (coastal lagoons);
- Annual vegetation of drift lines;
- Coastal shingle vegetation (perennial vegetation of stony banks);
- Glasswort (*Salicornia*) and other annuals colonising mud and sand; and
- Shifting dunes with marram (shifting dunes along the shoreline with *Ammophila arenaria* 'white dunes').

5.16 Secondly, the site also qualifies for the following Habitats Directive Annex II species:

- Desmoulin's whorl snail (*Vertigo moulinsiana*).

Conservation Objectives⁴²

5.17 'Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,

⁴¹ Available online: <http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0030059> [Accessed: 15/10/2018].

⁴² Natural England. European Site Conservation Objectives for Solent Maritime Special Area of Conservation (2014). Available online: <http://publications.naturalengland.org.uk/publication/5762436174970880> [Accessed: 15/10/2018].

- *The distribution of qualifying species within the site.'*

Historic Trends and Current Conditions

- 5.18 Langstone Harbour is fringed by urban and industrial development, whereas Chichester Harbour is surrounded mainly by high grade farmland. The site is subjected to significant recreational pressures, especially during summer months.
- 5.19 Both harbours are managed by statutory bodies whose remits include conservation of the natural environment. Conservation bodies have an advisory input to the management of the harbours, and play an active role in the management of numerous Local Authority and RSPB nature reserves around the site. In 2000, a collaborative Solent European Marine Sites project was set up with the aim of developing a strategy for managing the marine and coastal resources of the Solent in a more integrated and sustainable way.
- 5.20 The Environment Agency Review of Consents and the HRA of the South East RSS both identified that development within the Chichester area may be constrained by restrictions that will be/have been placed on some Wastewater Treatment Works (WwTW) in order to ensure suitable water quality in the receiving marine/coastal waters of the two harbours. Memoranda of understanding currently exist between both the Environment Agency (EA) and Southern Water Services and Chichester Council which clearly set out which WwTWs are constrained, the quantum of new housing that can be accommodated and the available strategies for delivering housing while avoiding adverse effects on the European sites.
- 5.21 Natural England condition assessment of Chichester Harbour SSSI indicated that 22% of the site was in favourable condition, with the remaining 78% recovering from an unfavourable status. In the case of Langstone Harbour SSSI these figures were 9% and 91% respectively.

Key Environmental Conditions

- 5.22 The key environmental conditions that support the features of European interest have been defined as:
- Sufficient space between the site and development to allow for managed retreat of intertidal habitats (to avoid coastal squeeze);
 - Avoidance of dredging or land-claim of coastal habitats;
 - Maintenance of freshwater inputs;
 - Balance of saline and non-saline conditions;
 - Unpolluted water;
 - Absence of nutrient enrichment;
 - Absence of non-native species;
 - Maintenance of adjacent grassland (key foraging resource); and
 - Absence of disturbance.

Potential Effects Linking to the Local Plan Review

- 5.23 The screening assessment undertaken in the tables in Appendix A identify the following policies and strategic site allocations have the potential to link to these European designated sites and result in likely significant effects. These are as follows:

Policies

- Policy S2: Settlement Hierarchy
- Policy S3: Development Strategy
- Policy S4: Meeting Housing Needs
- Policy S5: Parish Housing Requirements 2016-2035

- Policy S7: Meeting the Gypsies, Travellers and Travelling Showpeoples' Needs
- Policy S8: Meeting Employment Land Needs
- Policy S9: Retail Hierarchy and Sequential Approach
- Policy S11: Addressing Horticultural Needs
- Policy DM20: Development around the Coast

Strategic Site Allocations

- Policy AL1: Land West of Chichester
- Policy AL2: Land at Shopwyke (Oving Parish)
- Policy AL3: East of Chichester (Oving Parish)
- Policy AL5: Southern Gateway
- Policy AL6: Land south-west of Chichester (Apuldram and Donnington Parishes)
- Policy AL7: Highgrove Farm, Bosham
- Policy AL8: East Wittering Parish
- Policy AL9: Fishbourne Parish
- Policy AL10: Chidham and Hambrook Parish
- Policy AL11: Hunston Parish
- Policy AL12: Land North of Park Farm, Selsey
- Policy AL13: Southbourne Parish

Potential linking impact pathways are as follows:

- Urbanisation
- Recreational pressure
- Reduced water quality
- Coastal squeeze
- Loss of functionally linked supporting habitat for birds
- Atmospheric pollution

Appropriate Assessment

Urbanisation

5.24 Development described in the Chichester Local Plan Review provides for development within the following allocations or Parishes that are wholly or partially located within 400m of the SPA/ Ramsar site and as such could affect the European sites in urbanisation effects:

- Policy AL6: Land south-west of Chichester (Apuldram and Donnington Parishes)
- Policy AL9: Fishbourne Parish
- Policy AL10: Chidham and Hambrook Parish
- Policy AL13: Southbourne Parish
- The Parish of Southbourne
- The Parish of West Thorney
- The Parish of Chidham and Hambrook
- The Parish of Bosham

- The Parish of Fishbourne
 - The Parish of Appuldram
 - The Parish of Birdham
 - The Parish of West Itchenor
 - The Parish of West Wittering
- 5.25 In addition, the parishes of Selsey, Earnley and Sidlesham all lie within 400m of Medmerry Nature Reserve. The only specific allocated site identified in these parishes is on the opposite side of Selsey (Policy AL12: Land North of Park Farm, Selsey) and thus no development is expected within 400m of Medmerry.
- 5.26 Whilst none of the policies stated above provide for specific protection from potential urbanisation effects, Plan Policy DM29: Biodiversity states: *'Planning permission will be granted for development where it can be demonstrated that all the following criteria have been addressed... 4. The proposal protects, manages and enhances the plan area network of ecology, biodiversity and geological sites, including the international, national and local designated sites (statutory and non-statutory), priority habitats, wildlife corridors and stepping stones that connect them;'* thus providing protection to European sites to ensure no adverse effect on integrity results.
- 5.27 Other protective measures included within policy text include:
- Policy S12: Infrastructure Provision: this policy provides for the timely delivery of infrastructure. This may include recreational provision to ensure no adverse effects result.
 - Policy DM16: Sustainable Design and Construction: provisions within this policy have the potential to reduce recreational pressure on European sites.
 - Policy S17: Thorney Island: *'All development proposals should seek to enhance the overall character of the Island, mitigate any adverse impacts on local infrastructure, not erode the character of the surrounding area and take opportunities to increase public access. Particular regard will be given to the environmental sensitivity of the location within the Chichester Harbour AONB and the proximity of the Chichester Harbour SAC/SPA/Ramsar'*.
 - Policy AL9: Fishbourne Parish and Policy AL10: Chidham and Hambrook Parish: *'Demonstration that development would not, with mitigation if required, have an adverse impact on the Chichester Harbour SAC/SPA/Ramsar by reason of recreational disturbance'*.
 - Policy AL13: Southbourne Parish: development proposals are required to... *'be located and designed to minimise impact on the surrounding landscape, paying adverse impact on the Chichester Harbour SAC/SPA/Ramsar by reason of recreational disturbance'*.
- 5.28 Moreover, Policy DM20 states that a requirement of all development is that *'There are no harmful effects on or net loss of nature conservation or areas of geological importance within the Chichester and Pagham Harbours and Medmerry Realignment'*, Policy AL11: Hunston Parish states that development must be: *'Be planned with special regard to the need to mitigate potential impacts of recreational disturbance on the Chichester Harbour SAC/SPA/Ramsar and Pagham Harbour SPA and Ramsar site and the Medmerry realignment including contributing to any strategic access management issues, loss of functionally linked supporting habitat, and water quality issues relating to runoff from a designated site'* and Policy AL8: East Wittering Parish: states that a requirement will be *'Demonstration that development would not, with mitigation if required, have an adverse impact on the Pagham Harbour SPA/Ramsar and the Medmerry realignment by reason of recreational disturbance or loss of functionally linked supporting habitat'*.

Recreational Pressure

- 5.29 Chichester and Langstone Harbours SPA/Ramsar sites and the Medmerry Nature Reserve lie within the Chichester Local Plan area. The Solent Forum undertook a project to examine bird disturbance and possible mitigation in the Solent area. A Phase 1 report has outlined the existing visitor data for the Solent, canvassed expert opinion on recreational impacts on birds and assessed current available data on relevant species. Phase II of the Solent Disturbance and Mitigation Project identified that survival rates for curlew and a variety of other bird species were predicted to decrease under an increase in visitor rates.

- 5.30 The 2017 Solent Recreation Mitigation Strategy⁴³ aims to address the strategic issue of increased recreational pressure to SPA sites along the Solent Coast by implementing measures including a coastal ranger team, increased education, responsible dog walking initiatives, codes of conduct for coastal activities, site-specific visitor management and habitat protection projects and the provision of alternative greenspaces. These measures are to be coordinated by a partnership manager, and their delivery will be funded by financial contributions from developments within 5.6km of the Solent European sites. At the time of writing (October 2018), this contribution is currently equivalent to an average of £564 per dwelling, but is subject to annual change⁴⁴.
- 5.31 Data on visitor activity in the Solent complex was obtained through the Solent Disturbance and Mitigation Project.^{45,46} Chichester Harbour is expected to see an increase of 15-20% in visitors (Fig. 5.4 of Stillman et al), although the numbers of visitors per hectare of intertidal habitat (i.e. visitor density) is predicted to be a lot lower than most other parts of the Solent frontage (Figure 5.6 of the same report). In most cases, visitor density is predicted to be below 30/ha, the density above which the report identifies birds may have reduced survival due to disturbance (Figure 5.7 of the same report). The exceptions are sectors 67 (Northney to Langstone Bridge) and 78 (Bosham Shipyard to Southwood Farm); in the case of sector 78 visitor densities are predicted to be more than twice this threshold. Although disturbance rates were relatively low within Chichester Harbour as a whole, the low measured abundance of food, implies that birds would also be vulnerable to disturbance in this site. Visitor numbers per day were typically highest on weekends compared to weekdays. Holiday makers accounted for 6% of the total number of visitors recorded. Visitors undertook a wide range of activities, with walking (without a dog) and dog walking the two most frequently recorded activities (44% and 42% of interviews). Across all sites and activities, visits were typically short, with 89% lasting less than two hours. Across all sites (and taking the data for non-holiday makers only) visitors were roughly evenly divided between those who arrived by car and those who arrived on foot. Ninety percent of all visitors arriving on foot lived within 2km, compared to only 20% of visitors arriving by car. Almost eighty percent of all visitors arriving by car (excluding holiday makers) lived within 10km, with 50% living within 4km. The overall median distance from site (across the study area) for non-tourist visitors was 1.7km.
- 5.32 From examination of Map 4 in Fearnley et al⁴⁷ the vast majority of South-Hampshire based visitors (irrespective of mode of transport) to Chichester Harbour lived south of the A27 in a band from Emsworth (in Havant district) to south-west Chichester city. Emsworth and South Hayling in Havant district, and Chichester city itself were the most significant sources of local visitors to Chichester Harbour, while East Wittering makes a contribution that is not insignificant. However, visitors did arise from as far afield as Horndean in East Hampshire (approximately 8km to the north-west). The projected increase in visitors cannot therefore be entirely attributed to the Local Plan area any more than it can be stated that the Local Plan area will not be contributing visitor pressure along other sections of frontage. However, it is reasonable to assume that significant new development within the Chichester Local Plan Review area will make a significant contribution to increased visitor pressure in Chichester Harbour. Medmerry Nature Reserve was completed in autumn 2013 and has the status of '*Identified Compensatory Habitat*'. One of the specific objectives of the scheme is to create a new extensive network of public and permissive rights of way, which will be managed in the long term. Given its sheer size, the creation of an extensive network of footpaths and the fact that it is promoted as a visitor attraction it is likely to form a recreational draw and the same principles regarding an adverse effect at Chichester Harbour should therefore apply to Medmerry. The main settlements around Medmerry at which the Local Plan proposes new housing are Selsey and East Wittering/Bracklesham.
- 5.33 Phase 3 of the Solent Disturbance and Mitigation Project identified that a 5.6 km zone of influence should be applied around the European sites and that mitigation for recreational pressure impacts would need to be associated with all new housing within this zone. Chichester Council have considered mitigation measures produced from the Solent Disturbance and Mitigation Project (Phase 3) to establish measures

⁴³ Stillman, R. A., West, A. D., Clarke, R. T. & Liley, D. (2012) Solent Disturbance and Mitigation Project Phase II: Predicting the impact of human disturbance on overwintering birds in the Solent. Report to the Solent Forum.

⁴⁴ Bird Aware. Solent Recreational Mitigation Strategy (December 2017).

<http://www.birdaware.org/CHttpHandler.ashx?id=29372&p=0> [accessed 11/10/2018]

⁴⁵ Fearnley, H., Clarke, R. T. & Liley, D. (2010). The Solent Disturbance & Mitigation Project. Phase II - On-site visitor survey results from the Solent region. ©Solent Forum /Footprint Ecology

⁴⁶ Stillman, R. A., West, A. D., Clarke, R. T. & Liley, D. (2012) Solent Disturbance and Mitigation Project Phase II: Predicting the impact of human disturbance on overwintering birds in the Solent. Report to the Solent Forum.

⁴⁷ Fearnley, H., Clarke, R. T. & Liley, D. (2010). The Solent Disturbance & Mitigation Project. Phase II - On-site visitor survey results from the Solent region. ©Solent Forum /Footprint Ecology

that prevent and where possible reduce the cumulative impacts of recreational pressures placed upon European Sites.

- 5.34 This is recognised in the reviewed Policy DM30: Development and Disturbance of Birds in Chichester and Langstone Harbours Special Protection Areas: *'It is Natural England's advice that all net increases in residential development within the 5.6km 'Zone of Influence' are likely to have a significant effect on the Chichester and Langstone Harbours SPA either alone or in-combination with other developments and will need to be subject to the provisions of Regulation 63 of the Conservation of Habitats and Species Regulations 2017. In the absence of appropriate avoidance and/or mitigation measures that will enable the planning authority to ascertain that the development would not adversely affect the integrity of the SPA, planning permission will not be granted because the tests for derogations in Regulation 64 are unlikely to be met. Furthermore, such development would not have the benefit of the presumption in favour of sustainable development in the National Planning Policy Framework.*
- 5.35 *Appropriate avoidance/mitigation measures that are likely to allow the planning authority to ascertain that there will be no adverse effect on the integrity of the SPA will comprise:*
- a) *A contribution in accordance with the joint mitigation strategy outlined in the Bird Aware Solent Strategy; or*
 - b) *A developer provided package of measures associated with the proposed development designed to avoid any significant effect on the SPA, provided and funded in-perpetuity; or*
 - c) *A combination of measures in (a) and (b) above.*
- 5.36 *Avoidance/mitigation measures will need to be phased with development and shall be maintained in perpetuity. All mitigation measures in (b) and (c) above must be agreed to be appropriate by Natural England through the Habitats Regulations Assessment process...'*
- 5.37 Other protective measures included within policy text include:
- Policy DM29: Biodiversity states: *'Planning permission will be granted for development where it can be demonstrated that all the following criteria have been addressed... 4. The proposal protects, manages and enhances the Plan Area network of ecology, biodiversity and geological sites, including the international, national and local designated sites (statutory and non-statutory), priority habitats, wildlife corridors and stepping stones that connect them;'*
 - Policy S12: Infrastructure Provision: this policy provides for the timely delivery of infrastructure. This may include recreational provision to ensure no adverse effects result.
 - Policy DM16: Sustainable Design and Construction: provisions within this policy have the potential to reduce recreational pressure on European sites.
 - Policy S17: Thorney Island: *'All development proposals should seek to enhance the overall character of the Island, mitigate any adverse impacts on local infrastructure, not erode the character of the surrounding area and take opportunities to increase public access. Particular regard will be given to the environmental sensitivity of the location within the Chichester Harbour AONB and the proximity of the Chichester Harbour SAC/SPA/Ramsar'.*
 - Policy AL6: Land south-west of Chichester (Apuldram and Donnington Parishes): development proposals are required to... *'provide mitigation to ensure the protection of the adjacent SPA, SAC and SSSI at Chichester Harbour'.*
 - Policy AL9: Fishbourne Parish and Policy AL10: Chidham and Hambrook Parish: *'Demonstration that development would not, with mitigation if required, have an adverse impact on the Chichester Harbour SAC/SPA/Ramsar by reason of recreational disturbance'.*
 - Policy AL13: Southbourne Parish: development proposals are required to... *'be located and designed to minimise impact on the surrounding landscape, paying adverse impact on the Chichester Harbour SAC/SPA/Ramsar by reason of recreational disturbance'.*
 - With specific regard to Medmerry Nature Reserve, Policy DM20 states that a requirement of all development is that *'There are no harmful effects on or net loss of nature conservation or areas of geological importance within the Chichester and Pagham Harbours and Medmerry Realignment'*, Policy AL11: Hunston Parish states that development must be: *'Be planned with special regard to the need to mitigate potential impacts of recreational disturbance on the Chichester Harbour*

SAC/SPA/Ramsar and Pagham Harbour SPA and Ramsar site and the Medmerry realignment including contributing to any strategic access management issues, loss of functionally linked supporting habitat, and water quality issues relating to runoff from a designated site' and Policy AL8: East Wittering Parish: states that a requirement will be that 'Demonstration that development would not, with mitigation if required, have an adverse impact on the Pagham Harbour SPA/Ramsar and the Medmerry realignment by reason of recreational disturbance or loss of functionally linked supporting habitat'.

- 5.38 With this wide ranging policy framework to ensure the protection of European sites in it is considered that this impact pathway will not result in adverse effect on the integrity of these European sites.

Recommendation:

5.39 The following recommended policy text changes are made to ensure full robustness of the Local Plan Review Policy Framework :

- **Policy DM14: Caravan and Camping Sites:** To ensure this policy provides a robust framework to ensure the protection of European sites, it is recommended that policy text is amended as follows:

'The degree of protection considered desirable in order to avoid disturbance to sensitive sites of ecological value (including ensure no adverse effects on integrity of sensitive European designated wildlife sites occurs) or to protect the tranquillity and character of the countryside, Chichester Harbour Area of Outstanding Natural Beauty and the setting of the National Park, Pagham Harbour and the undeveloped coast; and'

- **Policy DM20: Development around the Coast:** It is recommended that point 1 is amended as follows:

'1. There are no harmful effects on or net loss of nature conservation or areas of geological importance within the Chichester and Pagham Harbours and Medmerry Realignment (including no adverse effects on the associated European designated sites);

2. The development provides recreational opportunities that do not adversely affect the character, environment and appearance of the coast and Chichester Harbour Area of Outstanding Natural Beauty or result in adverse effects of integrity to European designated wildlife sites'

Reduced Water Quality

- 5.40 Much of the development in the southern part of the Local Plan Review area is served by WwTW which discharge into the WFD water body of Chichester Harbour which includes the Solent Maritime SAC, and Chichester and Langstone Harbours SPA and Ramsar site. The main relevant WwTW are Apuldram (Chichester) WwTW, Bosham WwTW and Thornham WwTW.

- 5.41 Chichester District Council has commissioned a Water Quality Assessment⁴⁸ which has identified that the SSSI units associated with the European sites are in 'unfavourable- recovering' or 'unfavourable with no change or unfavourable' condition, which is in part due to high levels of nitrogen in the water. It identified the threat to recovery of the Harbour due to potential future changes in water quality as a result of future development and the 'uncertainty around efficacy of existing measures to tackle diffuse pollution'.

- 5.42 In 2007 the RoC process identified the need for the reduction in nitrate levels into waterbodies that discharge to the harbours, and as such the discharge permits Apuldram WwTW, Bosham WwTW and Thornham WwTW were reduced to limit nitrate emissions. However, the Water Quality Assessment identified that the potential increased nitrate inputs from the Plan could result in a small but measurable increase in nitrogen loading in the harbours and as such contribute to in combination adverse effects on the European sites.

- 5.43 The Assessment goes further to identify potential measures that could be put in place to limit nitrate emissions such as demand management and reduce water usage, or the provision of a long outfall pipe that discharges beyond the harbour. In addition the report identifies that catchment management could provide additional headroom capacity; however catchment scale management would be unlikely to show sufficient improvements for 20-30 years and thus would not be functional in time to accommodate

⁴⁸ AMEC Foster Wheeler (August 2018). Chichester District Council Water Quality Assessment. Final Report.

development identified in the Local Plan. It is, however, noted in the report that Chichester Harbour Conservancy indicated that it may not be possible to reduce nitrate concentrations at an economic cost.

5.44 However, the in-combination assessment within the Water Quality Assessment identifies that the combined contribution of nitrogen loading from the three WwTWs that discharge into Chichester Harbour, indicates... *'an increased risk to Chichester Harbour and measures may be required to reduce the future potential loading of nitrate'*.

5.45 In light of this, the Local Plan Review provides policy to provide protection to European sites as a result of adverse water quality as follows:

- Policy S31: Wastewater in the Chichester Harbour and Pagham Harbour Wastewater Treatment Catchment areas states: *'Proposals for development in the catchment should be able to demonstrate no adverse impact on the water quality of Chichester Harbour and Pagham Harbour.... Proposals for development in the catchment should be able to demonstrate no adverse impact on the water quality of Chichester Harbour and Pagham Harbour.'*
- Policy DM29: Biodiversity states: *'Planning permission will be granted for development where it can be demonstrated that all the following criteria have been addressed... 4. The proposal protects, manages and enhances the Plan Area network of ecology, biodiversity and geological sites, including the international, national and local designated sites (statutory and non-statutory), priority habitats, wildlife corridors and stepping stones that connect them'*.
- Policy S12: Infrastructure Provision and Policy S32: Design Strategies for Strategic and Major Development Sites provide for the timely delivery of infrastructure. This would include water treatment infrastructure to ensure no adverse effects result.
- Policy DM16: Sustainable Design and Construction: This policy provides provision for reduced water consumption as follows: *'For all new dwellings or for new non-domestic buildings, evidence will be required by the developer to demonstrate that the following criteria have been achieved: ...1. The proposal achieves a maximum of 110 litres per person per day including external water use.'*

5.46 With this wide ranging provision of policy framework to ensure the protection of European sites in it is considered that this impact pathway will not result in adverse effect on the integrity of these European sites.

Recommendation

5.47 To ensure Policy S31: Wastewater in the Chichester Harbour and Pagham Harbour Wastewater Treatment Catchment areas provides robust protection of sensitive European sites, it is recommended that the wording of the first paragraph of the policy is amended as follows: *'Proposals for development in the catchment should be able to demonstrate no adverse effect on the integrity of Chichester Harbour and Pagham Harbour as a result of water quality.'*

5.48 Additionally the following recommended policy text changes/ additions should be made in relation to strategic site allocations/ policies that are relevant to specific settlements:

- Policy SA5: Southern Gateway: *'Be planned with special regard to the need to mitigate potential impacts of recreational disturbance on the Chichester Harbour SAC/SPA/Ramsar including contributing to any strategic access management issues; Ensure sufficient capacity within the relevant Wastewater Treatment Works before the delivery of development as required'*
- Policy SA13: Southbourne Parish: *'Provide mitigation to ensure the protection of the SPA, SAC and Ramsar site at Chichester Harbour including contributing to any strategic access management issues, loss of functionally linked supporting habitat and water quality issues relating to runoff into a European designated site. Ensure sufficient capacity within the relevant Wastewater Treatment Works before the delivery of development as required'*
- Policy SA9: Fishbourne Parish: *'Provide mitigation to ensure the protection of the SPA, SAC and Ramsar site at Chichester Harbour as a result of water quality issues relating to runoff into a designated site, and loss of functionally linked supporting habitat. Ensure sufficient capacity within the relevant Wastewater Treatment Works before the delivery of development as required'*

Coastal Squeeze

- 5.49 Loss of estuarine habitats could be an issue where greenfield sites are developed but could also be an issue where intensification of existing residential areas through brownfield development might be an argument for maintaining or strengthening existing defences ('hold the line' or 'advance the line'). No new development areas identified in the Local Plan Review are sufficiently close to the SPA/Ramsar site to constrain any managed retreat that may be required in the future to allow the SPA/Ramsar site to respond to sea level rise and none would require the coastal defence policies identified in the Shoreline Management Plan to be altered (indeed, Policy S18 Integrated Coastal Zone Management for the Manhood Peninsula specifically states that the approach will be compatible with the SMP and Coastal Strategies).
- 5.50 Although the development of Thorney Island set out in Policy S17 Thorney Island could theoretically lead to development that constrained the natural processes of the SPA/Ramsar site if care was not taken, policy text specifically states that '*Development would need to be compatible with the Chichester Harbour AONB and avoid or mitigate any impact on the adjoining SPA/SAC/Ramsar designations*'. This is further reflected in the policy text itself which states that '*All development proposals should seek to enhance the overall character of the Island, mitigate any adverse impacts on local infrastructure, not erode the character of the surrounding area and take opportunities to increase public access. Particular regard will be given to the environmental sensitivity of the location within the Chichester Harbour AONB and the proximity of the Chichester Harbour SAC/SPA/Ramsar*'. It also states that aviation or noisy sports are unlikely to be considered acceptable. Given the explicit statement in policy that any redevelopment must be compatible with the SPA/Ramsar site it is considered that there would be no adverse effects on the integrity of the European sites will occur as a result of Plan policy. There are no other plans or projects which would operate 'in combination' with the Local Plan Review.

Loss of Functionally Linked Supporting Habitat for Birds

- 5.51 Chichester & Langstone Harbours SPA and Ramsar sites are notified partly for their over-wintering populations of Brent geese and wading bird species. However, studies⁴⁹ have identified that many feeding and roosting sites around the Solent fall outside of the statutory nature conservation site boundaries. The majority of Brent Goose feeding sites are amenity/recreation grasslands with little intrinsic nature conservation interest, and therefore are vulnerable to loss or damage from development. This also applies to some high tide wader roosts in the Solent.
- 5.52 As highlighted within the strategic site allocation screening table there are several parishes that support functionally linked habitat for over-wintering populations of Brent geese and wading bird species. These are summarised as follows:
- **East Wittering** – holds large pockets of functionally linked habitat ranking from *candidate* to *low use*. It is therefore considered that the allocation of c. 350 residential dwellings within the Parish could lead to the loss of this essential habitat, which could affect both Chichester Harbour and Medmerry Nature Reserve.
 - **Fishbourne** – holds large pockets of functionally linked habitat ranking from *low use* to *primary support areas*. It is also considered that the allocation of c. 250 residential dwellings within the Parish could lead to the loss of this essential habitat.
 - **Chidham and Hambrook** – Chidham holds large pockets of functionally linked habitat ranking from *candidate* to *low use*. It is therefore considered that the allocation of c. 500 residential dwellings within the Parish could lead to the loss of this essential habitat. However, the area of Hambrook does not hold functionally linked habitat. It is therefore advised that housing development if focused towards the north of Chidham and Hambrook Parish as to avoid loss of functionally linked habitat.
 - **Southbourne** - holds pockets of functionally linked habitat ranking from *primary support areas* to *low use*. It is therefore considered that the allocation of c. 1,250 residential dwellings within the Parish could lead to the loss of this essential habitat.
- 5.53 As such it was considered at the screening stage that development within these Parishes would lead to likely significant effects to over-wintering populations of Brent geese and wading bird species.

⁴⁹ King, D. (2010) Solent Waders and Brent Goose Strategy 2010. Hampshire and Isle of Wight Wildlife Trust.

- 5.54 In the HRA undertaken for Chichester District Council in 2014 it was reported that the Council had *'indicated in discussions over this HRA that policy recommendations to protect locations outside of the SPA/ Ramsar site of value to Brent geese and waders would be addressed within the Site Allocations DPD and Neighbourhood Plans'*.
- 5.55 None the less, policy within the Local Plan Review includes policy that provides protection to European designated sites as follows:
- 5.56 Policy DM29: Biodiversity states: *'Planning permission will be granted for development where it can be demonstrated that all the following criteria have been addressed... 4. The proposal protects, manages and enhances the Plan Area network of ecology, biodiversity and geological sites, including the international, national and local designated sites (statutory and non-statutory), priority habitats, wildlife corridors and stepping stones that connect them;'*
- 5.57 However, recommendations have been made to specific strategic site allocation policies that are located within areas that could provide functionally linked supporting habitat as follows:

Recommendation:

5.58 The following recommendations are made for policy text changes to ensure full robustness of the Local Plan Review Policy Framework:

- **Policy AL3: East of Chichester (Oving Parish):** *'Be planned with special regard to the need to mitigate potential impacts on the Chichester Harbour SAC/SPA/Ramsar including contributing to any strategic access management issues, and potential for loss of functionally linked supporting habitat;'*
- **Policy AL11: Hunston Parish:** *'Be planned with special regard to the need to mitigate potential impacts of recreational disturbance on the Chichester Harbour SAC/SPA/Ramsar and Pagham Harbour SPA and Ramsar site and the Medmerry realignment including contributing to any strategic access management issues, loss of functionally linked supporting habitat, and water quality issues relating to runoff from a designated site.'*
- **Policy AL13: Southbourne Parish:** *'Provide mitigation to ensure the protection of the SPA, SAC and Ramsar site at Chichester Harbour including contributing to any strategic access management issues, loss of functionally linked supporting habitat and water quality issues relating to runoff into a European designated site. Ensure sufficient capacity within the relevant Wastewater Treatment Works before the delivery of development as required'*
- **Policy AL8: East Wittering Parish:** *'9.Demonstration that development would not, with mitigation if required, have an adverse impact on the Pagham Harbour SPA/Ramsar and the Medmerry realignment by reason of recreational disturbance or loss of functionally linked supporting habitat'*
- **Policy AL9: Fishbourne Parish:** *'Provide mitigation to ensure the protection of the SPA, SAC and Ramsar site at Chichester Harbour as a result of water quality issues relating to runoff into a designated site, and loss of functionally linked supporting habitat. Ensure sufficient capacity within the relevant Wastewater Treatment Works before the delivery of development as required'*
- **Policy AL10: Chidham and Hambrook Parish:** *'Provide mitigation to ensure the protection of the SPA, SAC and Ramsar site at Chichester Harbour as a result of water quality issues relating to runoff into a designated site, and loss of functionally linked supporting habitat'*

Atmospheric Pollution

- 5.1 The relevant part of the Solent Maritime SAC within Chichester (Chichester Harbour) is located within 200m of the A259 in the vicinity of Fishbourne. It has a baseline nitrogen deposition rate of 12.9kgN/ha/yr⁵⁰. Nitrogen deposition is therefore well below the most stringent critical load (20 kgN/ha/yr) for saltmarsh and intertidal mudflat, the relevant SAC and SPA habitats in these locations according to www.magic.gov.uk.

⁵⁰ PBA Peter Brett. Chichester District Council – Local Plan. Transport Study of Strategic Development Options and Sustainability Transport Measures (2018). Appendix G Ecological Receptors Results

- 5.2 Moreover, this background deposition rate is likely to decrease rather than increase as improvements in background air quality are achieved in line with central government initiatives and improvements in emission technology (such as the further roll out of the Euro6/VI emissions standard which only became mandatory in 2014/2015). This is supported by oxidised nitrogen deposition and NO_x concentration trend data available on APIS for the 1km (for NO_x) and 5km (for nitrogen deposition) grid squares within which the relevant parts of the SPA/SAC are situated. This indicates that background NO_x concentrations reduced between 2010 and 2014 (the most recent year for which data are available) from 15.2 µg_m⁻³ to 12 µg_m⁻³. Similarly, background oxidised nitrogen deposition rates (those attributable to combustion such as vehicle exhausts) reduced by 0.5 kgN/ha/yr between 2005 and 2014.
- 5.3 Given this trend, it is unlikely that increased traffic flows as a result of development in the Local Plan Review area, even in combination with other projects and plans would result in a sufficiently large increase to push it over the critical load. Furthermore, it is important to note that the experimental studies that underlie conclusions regarding the sensitivity of saltmarsh to nitrogen deposition, and the selection of 20 kgN/ha/yr as the minimum critical load have '*... neither used very realistic N [nitrogen] doses nor input methods i.e. they have relied on a single large application more representative of agricultural discharge*⁵¹', which is far in excess of anything that would be deposited from atmosphere. For coastal saltmarshes such as those for which Solent Maritime SAC is partly designated nitrogen inputs from air are not as important as nitrogen effects from other sources because the effect of any deposition of nitrogen from atmosphere is likely to be dominated by much greater flushes of more readily utilized nitrogen from marine, fluvial or agricultural sources. This is reflected on APIS itself, which states regarding saltmarsh that '*Overall, N deposition [from atmosphere] is likely to be of low importance for these systems as the inputs are probably significantly below the large nutrient loadings from river and tidal inputs*⁵²'. Moreover, the nature of intertidal saltmarsh in this area means that there is flushing by tidal incursion twice per day. This is likely to further reduce the role of nitrogen from atmosphere in controlling botanical composition.
- 5.4 The modelling undertaken by PBA⁵³ identifies that the Do Nothing 2033 scenario would result in nitrogen deposition rates of 12.6kgN/ha/yr, whilst the 2033 Do Something scenario (Scenario 1 Mitigated) (i.e. the development within the Plan plus that of surrounding authorities) is modelled to result in nitrogen deposition rates of 12.8kgN/ha/yr which is still well below the critical load of 20 kgN/ha/year for saltmarsh habitats.
- 5.5 Notwithstanding this conclusion, the Local Plan Review does include several measures that can be expected to result in further improvement in roadside air quality, beyond that achieved by improvements in EU-mandated emissions technology. Air quality mitigation measures can be broadly classified as four types:
- Behavioural measures and modal shift - reducing the amount of traffic overall;
 - Traffic management - modifying traffic behaviour to control where emissions are generated;
 - Emissions reduction at source - reducing the emissions level per vehicle; and
 - Roadside barriers - reducing the impact on the public of emissions.
- 5.6 The measures identified in Chichester Local Plan Review document cover all of these categories, except for the fourth (roadside barriers) which is not within the remit of local planning policy. The Chichester Local Plan Review document contains positive measures that should aim to mitigate or avoid the likelihood of significant adverse effects from reduced air quality:
- Policy DM24: Air Quality: This policy aims to improve air quality within the district of Chichester. This includes through traffic calming measure, Air Quality Management Areas and air quality assessments.
 - Policy S14: Chichester City Transport Strategy: This policy provides for initiatives that go to reduce the use of private car use, such as the provision of additional bus lanes, improving bus and rail links and improving both cycle and pedestrian links and reduce traffic congestion;

⁵¹ UK Air Pollution Information System website [accessed 21/04/15]: <http://www.apis.ac.uk/node/968>

⁵² APIS website [accessed 06/06/16]: <http://www.apis.ac.uk/node/968>

⁵³ PBA Peter Brett. Chichester District Council – Local Plan. Transport Study of Strategic Development Options and Sustainability Transport Measures (2018). Appendix G Ecological Receptors Results

- Policy S23: Transport and Accessibility: this policy identifies that development should be well located to reduce the need to travel and improve bus and train connectivity and improve the pedestrian and cycle networks, thus reducing atmospheric pollution contributions;
 - Policy S32: Design Strategies for Strategic and Major Development Sites: this policy states: '*Proposals for housing allocations and major development sites must be accompanied by a site-wide design strategy that includes the following:... d. integrate with the surrounding built, historic and natural environments, in particular maximising existing and potential movement connections and accessibility to encourage walking, cycling and use of public transport*';
 - Policy DM16: Sustainable Design and Construction: Provisions within this policy have potential to reduce atmospheric pollution contributions; and,
 - Policy DM17: Stand-alone Renewable Energy: The provision of renewable energy has the ability to reduce atmospheric pollution contributions.
- 5.7 These policies form a protective framework to help to reduce atmosphere pollution contributions and thus it is considered that the Plan will not result in an adverse effect in integrity on this European site.

6. Pagham Harbour SPA and Ramsar Site

Introduction

6.1 Pagham Harbour comprises an extensive central area of saltmarsh and tidal mudflats, with surrounding habitats including lagoons, shingle, open water, reed swamp and wet permanent grassland. The intertidal mudflats are rich in invertebrates and algae and provide important feeding areas for birds.

6.2 Most of the site is a Local Nature Reserve managed by West Sussex County Council.

Features of European Interest

6.3 Pagham Harbour SPA qualifies under Article 4.1 of the Birds Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive⁵⁴.

6.4 During the breeding season:

- Common Tern *Sterna hirundo*: 0.5% of the breeding population in Great Britain (1996); and
- Little Tern *Sternula albifrons*: 0.3% of the breeding population in Great Britain (5-year mean, 1992-1996).

6.5 Over winter:

- Ruff *Philomachus pugnax*: 1.4% of the population in Great Britain (5-year peak mean 1995-1999); and

6.6 This site also qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species.

6.7 Over winter:

- Dark-bellied Brent Goose *Branta bernicla bernicla*: 0.6% of the population (5-year peak mean 1991/2-1995/6).

6.8 Pagham Harbour Ramsar site qualifies under one of the nine **Ramsar** criteria⁵⁵.

Table 5. Pagham Harbour Ramsar site criteria

Ramsar criterion	Description of criterion	Pagham Harbour
6	A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	Dark-bellied brent goose <i>Branta bernicla bernicla</i> : 2512 individuals, representing an average of 1.1% of the populations (5-year peak mean 1998/99-2002-03) Black-tailed godwit <i>Limosa limosa islandica</i> : 377 individuals, representing an average of 1% of the population (5-year peak mean 1998/99-2002/03). ⁵⁶

6.9 It is important to note that this area also includes the Medmerry Realignment Scheme which was created in order to provide compensatory habitat for future effects on the Solent European sites as a result of coastal defence work. However, Medmerry has already been discussed extensively in the preceding chapter covering Chichester Harbour SPA and Solent Maritime SAC (since the realignment was intended to compensate for coastal squeeze losses at the Solent Maritime SAC).

⁵⁴ <http://jncc.defra.gov.uk/pdf/SPA/UK9012041.pdf> [accessed 10/10/2018]

⁵⁵ <http://jncc.defra.gov.uk/pdf/SPA/UK9012041.pdf> [accessed 10/10/2018]

⁵⁶ This population was identified subsequent to designation, for possible future consideration.

Conservation Objectives⁵⁷

6.10 *'Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;*

- *The extent and distribution of the habitats of the qualifying features*
- *The structure and function of the habitats of the qualifying features*
- *The supporting processes on which the habitats of the qualifying features rely*
- *The population of each of the qualifying features, and,*
- *The distribution of the qualifying features within the site.'*

Historic Trends and Current Pressures

6.11 The majority of the site is managed as a nature reserve by West Sussex County Council. Historical land drainage for agricultural purposes is being addressed through the Local Nature Reserve Management Plan and Management Agreements, while pollution from inadequate treatment of sewage discharges is reviewed by the Environmental Agency.

6.12 Studies by the Environment Agency indicate that existing sewage discharges are not having a significant adverse effect on the integrity of the Pagham Harbour SPA/Ramsar site.

6.13 The latest Natural England condition assessment of Pagham Harbour SSSI indicated that 93% of the site was in favourable condition.

Key Environmental Conditions

6.14 The following key environmental conditions have been identified for the site:

- Sufficient space between the European site and development to allow for managed retreat of intertidal habitats (to avoid coastal squeeze);
- Maintenance of appropriate hydrological regime;
- Unpolluted water;
- Absence of nutrient enrichment of water;
- Absence of non-native species; and
- Absence of disturbance.

Potential Effects Linking to the Local Plan Review

6.15 The screening assessment undertaken in the tables in Appendix A identify that following policies and site allocation have the potential to link to these European designated sites and result in likely significant effects. These are as follows:

Policies

- Policy S2: Settlement Hierarchy
- Policy S3: Development Strategy
- Policy S4: Meeting Housing Needs
- Policy S5: Parish Housing Requirements 2016-2035
- Policy S7: Planning for Gypsies, Travellers and Travelling Showpeoples' Needs
- Policy S8: Meeting Employment Land Needs

⁵⁷ [accessed 10/10/2018]

- Policy S9: Retail hierarchy and Sequential Approach
- Policy S11: Addressing Horticultural Needs
- Policy DM20: Development around the Coast

Strategic Site Allocations

- Policy AL5: Southern Gateway
- Policy AL6: Land south-west of Chichester (Apuldrum and Donnington Parishes)
- Policy AL8: East Wittering Parish
- Policy AL11: Hunston Parish
- Policy AL12: Land North of Park Farm, Selsey

6.16 Potential linking impact pathways are as follows:

- Urbanisation
- Recreational pressure
- Coastal squeeze
- Water quality
- Loss of functionally linked supporting habitat for birds

Appropriate Assessment

Urbanisation

6.17 Policy AL11: Hunston Parish: this Parish includes land that is located within the European sites. Development at Selsey (Policy AL12: Land North of Park Farm, Selsey) could also involve placing new housing development within 300m-600m of Pagham Harbour SPA/Ramsar site. However, there are already residential dwellings closer to Pagham Harbour than this and the small scale of development at Selsey identified in Policy AL12: Selsey (250 dwellings or an approximately 6.7% increase in the existing stock) cannot be described as 'urbanisation'. Whilst Hunston parish is also identified to provide 200 additional new dwellings, only a small part of the parish lies within 400m of the European designated sites and this constitutes Chichester Golf Club, which is unlikely to receive housing due to its nature and its remoteness from Hunston village. There are no other plans or projects which would operate 'in combination' with the Local Plan Review and as such this impact pathway is not considered to result in an adverse effect in integrity of the European sites.

Recreational Pressure

6.18 Chichester District Council commissioned Footprint Ecology to undertake a visitor survey of those parts of the Pagham Harbour SPA/Ramsar site that fell within the Local Plan area⁵⁸. According to Table 14 on page 26 of that report, approximately 53% of winter visitors and 76% of summer visitors to the western (Chichester District) parts of Pagham Harbour come from within the District (Selsey, Chichester City, Sidlesham, Lodsworth, Bosham, Mundham, Hunston, Emsworth/Southbourne and Midhurst). Three settlements (Selsey, Chichester and Sidlesham) make by far the greatest contribution to visitors to Pagham Harbour, accounting for 48% of all winter visitors and 66% of all summer visitors. Of these three settlements, Selsey is responsible for the majority of visitors. Moreover, approximately 96% of visitors with dogs (who are likely to have the greatest potential disturbance effect on SPA birds) live south of Chichester, emphasising the local catchment of the site. Policy DM30 (Development and Disturbance of Birds in Pagham Harbour Special Protection Area) of the Chichester Local Plan Review identifies the core recreational catchment on the Chichester side of the harbour as 3.5km and states that net increases in residential development within that zone will be required to provide mitigation for the SPA/Ramsar site.

⁵⁸ Cruickshanks, K. & Liley, D. (2012) Pagham Harbour Visitor Surveys. Unpublished report by Footprint Ecology. Commissioned by Chichester District Council.

- 6.19 Work was completed in 2010 by Arun District Council regarding visitor surveys for Pagham Harbour SPA. In summary, this work identified that 8.7% of the visitors to the Arun sections of the SPA/Ramsar site come from within 500m, 49.7% come from within 5km, 52.9% come from within 6km and 57.4 % come from within 10km. Beyond 10km the visitors origins are very dispersed. This indicates that the largest single contribution to visits to the SPA comes from the 5-6km zone. The study focused on visitors from Arun District.
- 6.20 Other settlements (including the other settlements mentioned above and relatively large nearby settlements in adjacent districts such as Bognor Regis) make a very small contribution in comparison e.g. 1-3% of visitors each to the parts of Pagham Harbour within Chichester District.
- 6.21 Clearly therefore, large amounts of new development at Selsey (in particular), Chichester city or Sidlesham would potentially have the greatest effect on visitor pressure within Pagham Harbour. The Chichester Local Plan Review currently plans the following development in settlements located within 3.5km of the Harbour:
- Selsey = 250 new dwellings
 - Hunston = 200 new dwellings
- 6.22 If one applies a residents per dwelling multiplier of 2.4 to each of these allocations and then divides that by the existing population of each settlement one would get a worst-case scenario population increase for each settlement⁵⁹:
- Selsey = 250 new dwellings x 2.4 = 600/10,737 x 100 = 6% increase
 - Hunston = 200 new dwellings x 2.4 = 480/1,257 x 100 = 38% increase
- 6.23 If 100% of visitors to Pagham Harbour came from Selsey, for example, then we could crudely conclude that a 6% worst-case increase in the population of that settlement might lead to a similar increase in visitors to Pagham Harbour. However, we know that in actuality 38% of winter visitors and 50% of summer visitors come from Selsey. As such, it is possible to weight the population increase attributable to each settlement by the percentage of visitors to Pagham Harbour that arise from that settlement as follows:
- Selsey – there would be a 6% worst case population increase as a result of development set out in the Local Plan Review. Approximately 38% of winter visitors and 50% of summer visitors to Pagham Harbour derive from Selsey. Therefore a 6% population increase could lead to a 2.2% (in winter) or 3.0% (in summer) increase in visitors to Pagham Harbour ($6\% \times 0.38 = 2.2\%$; $6\% \times 0.5 = 3.0\%$).
 - Hunston – there would be a 38% worst case population increase as a result of development set out in the Local Plan Review. Approximately 1% of winter visitors to Pagham Harbour derive from Hunston. Therefore a 38% population increase could lead to a 0.4% (in winter) increase in visitors to Pagham Harbour ($38\% \times 0.01 = 0.3\%$)
- 6.24 Summing these percentages gives us the following:
- Percentage increase in visitors to Pagham Harbour in winter, due to planned development in the Local Plan area = c. 2.6%
 - Percentage increase in visitors to Pagham Harbour in summer, due to planned development in the Local Plan area = c. 3.6%
- 6.25 There will of course be additional visitors due to development in surrounding authorities ‘in combination’ with that in the Local Plan area. However, the Footprint Ecology survey indicates that beyond the Local Plan area points of visitor origin to the Chichester parts of Pagham Harbour become highly dispersed and even larger settlements contribute a relatively small percentage of current visitors to the SPA/Ramsar site. The settlements outside the Local Plan area that were identified as making the highest contribution to current visitor activity within the Chichester parts of the SPA/Ramsar site were:
- Bognor Regis – 3% of winter visitors and 4% of summer visitors;

⁵⁹ This is highly precautionary since it assumes that a) these are all net new dwellings rather than replacements for existing stock, b) all net new dwellings will be occupied by new residents rather than existing residents of these settlements and c) household sizes will remain similar to current sizes

- Southampton, Hayling Island, Richmond-upon-Thames, Epsom & Ewell and Westergate/Barnham/Yapton – each of these settlements contributed 2% of winter visitors according to the survey and were dispersed across the south-east including London; no summer visitors covered by the survey came from these settlements. It can reasonably be concluded that most if not all of the visitors from these settlements were birders rather than conventional recreational visitors;
 - Reigate/Redhill and Merton - each of these settlements contributed 2% of summer visitors according to the survey and were dispersed across the south-east including London; no winter visitors covered by the survey came from these settlements. It can reasonably be concluded that the visitors from these settlements were holidaymakers, birdwatchers or similar.
- 6.26 All other settlements contributed 1% or less to visitor activity within the SPA/Ramsar site. At first glance it seems unusual that Bognor Regis in Arun district contributed so few visitors to the SPA/Ramsar site according to this survey, since it is by far the largest settlement near the site. However, the survey was specifically designed to target people coming from the Chichester district side and there were no survey locations on the Arun district side which explains the apparently low visitor contribution of Bognor Regis. The aforementioned visitor surveys commissioned by Arun Council have already demonstrated that Bognor Regis is the main contributory settlement to recreational activity on the eastern (Arun district) side of the SPA/Ramsar site.
- 6.27 According to the Arun Local Plan there will be considerable new housing development at Bognor Regis from the combination of a 2,500 dwelling sustainable urban extension which has already been consented and 300 currently dwellings that were unallocated at the time the Local Plan was submitted for Examination. The Local Plan also allocated 100 dwellings to Pagham. This will clearly operate 'in combination' with development at Selsey in particular.
- 6.28 The Local Nature Reserve Management Plan states that 150,000 visits are made to Pagham Harbour each year. Provided that visitors adhere to designated access routes, there was not perceived to be an issue with disturbance (as of 2007). However, the Management Plan notes that any further increased numbers of visitors could create damaging levels of disturbance. Car parking arrangements (numbers and locations) help to limit the potential for excessive visitor presence. Nonetheless, the Management Plan does note that there are issues such as four-wheel drive and motorbike usage, and factors such as dog-fouling that do present threats to reserve integrity.
- 6.29 The implications of the survey results in terms of whether an adverse effect on integrity would result in the absence of mitigation need to be considered alongside the survey undertaken for Arun district. Given the current uncertainties over this issue therefore, the Council has taken a precautionary approach for the Local Plan Review and assumed that the same type of strategy devised for Chichester Harbour would also have to be extended to Pagham Harbour, principally with regard to development at Selsey (which has been identified in the survey as being the source of almost half of all winter visitors to the Chichester part of the SPA/Ramsar site and over half of all summer visitors).
- 6.30 This is reflected in several policies of the Chichester Local Plan Review:
- Policy DM30: Development and Disturbance of Birds in Pagham Harbour Special Protection Areas:
'Net increases in residential development within the 3.5km 'Zone of Influence' are likely to have a significant effect on the Pagham Harbour SPA either alone or in-combination with other developments and will need to be subject to the provisions of Regulation 63 of the Conservation of Habitats and Species Regulations 2017. In the absence of appropriate avoidance and/or mitigation measures that will enable the planning authority to ascertain that the development would not adversely affect the integrity of the SPA, planning permission will not be granted because the tests for derogations in Regulation 64 are unlikely to be met. Furthermore, such development would not have the benefit of the presumption in favour of sustainable development in the National Planning Policy Framework.
Net increases in residential development, which incorporates appropriate avoidance/mitigation measures, which would avoid any likelihood of a significant effect on the SPA, will not require 'appropriate assessment'. Appropriate avoidance/mitigation measures that are likely to allow the planning authority to ascertain that there will be no adverse effect on the integrity of the SPA will comprise:
 - a) A contribution towards the appropriate management of the Pagham Harbour Local Nature Reserve through the joint Chichester and Arun Scheme of Mitigation in accordance with the LNR Management Plan; or

- b) A developer provided package of measures associated with the proposed development designed to avoid any significant effect on the SPA; or
- c) A combination of measures in (a) and (b) above.

Avoidance/mitigation measures will need to be phased with development and shall be maintained in perpetuity. All mitigation measures in (a), (b) and (c) above must be agreed to be appropriate by Natural England in consultation with owners and managers of the land within the SPA.

The provisions of this policy do not exclude the possibility that some residential schemes either within or outside the Zone of Influence might require further assessment under the Habitats Regulations. For example, large schemes, schemes proposing bespoke or alternative avoidance/mitigation measures, or schemes proposing an alternative approach to the protection of the SPAs where there is survey or other evidence that the site is used as supporting habitats by SPA species, including Brent Geese. Such schemes will be assessed on their own merits, under Regulation 63 (appropriate assessment), and subject to advice from Natural England.'

6.31 Other protective measures included within policy text include:

- Policy DM29: Biodiversity states: *'Planning permission will be granted for development where it can be demonstrated that all the following criteria have been addressed... 4. The proposal protects, manages and enhances the Plan Area network of ecology, biodiversity and geological sites, including the international, national and local designated sites (statutory and non-statutory), priority habitats, wildlife corridors and stepping stones that connect them;'*
- Policy S12: Infrastructure Provision: this policy provides for the timely delivery of infrastructure. This may include recreational provision to ensure no adverse effects result.
- Policy DM16: Sustainable Design and Construction: provisions within this policy have the potential to reduce recreational pressure on European sites.
- Policy AL12: Land North of Park Farm, Selsey states: *'Development in this location will be expected to address the following site-specific requirements:... 9. Demonstration that development would not, with mitigation if required, have an adverse impact on the Pagham Harbour SPA/Ramsar site and the Medmerry realignment by reason of recreational disturbance;'*
- Policy AL11: Hunston Parish states: *'Development will be expected to address the following requirements:... 8. Demonstration that development would not have an adverse impact on the Pagham Harbour SAC/SPA/Ramsar site by reason of recreational disturbance;'*

6.32 The neighbouring District of Arun has also developed the following series of mitigation and avoidance proposals relating to housing within Arun district, as expressed in their Local Plan:

- Wardening - increasing the number of wardens at the site to ensure that people do not stray into sensitive areas.
- Access management and site protection - improving or closing paths, erecting fencing or establishing other barriers, in order to prevent or reduce access to sensitive areas
- Habitat improvements - mitigating against any disturbance to birds, including their nesting, roosting or feeding habitats which could instead be enhanced or created.
- Interpretation, education and signage - improving visitor facilities and informing visitors of the requirement to protect the wildlife of the site and outlining how best to achieve this;
- Monitoring of wildlife and visitor numbers and the effect that disturbance has on wildlife, so that access management can be modified as appropriate.

6.33 Policy DM35 of the Arun Local Plan goes on to describe a series of distance bands, and the mitigation or other measures which development within those zones may trigger and which broadly fit with the core catchment of the SPA/Ramsar site as identified in the Footprint Ecology visitor survey:

- Within Zone A (<400m) as identified on the Proposals Map, development will only be permitted in exceptional circumstances which shall be demonstrated by the developer. These circumstances shall relate to the impact, type and the effects of any proposed development on Pagham Harbour, including on non-native species.
- Within Zone B (400m – 5km) all new residential development will be required to:

- (a) contribute financially towards improved access management at Pagham Harbour. Access management measures shall be undertaken and shall include wardening, access management and site protection, habitat improvements, provision for interpretation, education and signage and monitoring of wildlife and visitor numbers; and
 - (b) create easily accessible new green spaces for recreation within or adjacent to the development site, or to make developer contributions towards the provision of such green spaces to serve the area. New spaces shall be capable of accommodating the predicted increases in demand for local walking and dog walking. Good pedestrian links shall be provided between housing areas and new and existing green space in order to discourage car use.
 - Large scale developments taking place outside Zone B and close to its boundary will be considered on a case by case basis for potential effects on Pagham Harbour, and the need for avoidance or mitigation measures.
 - A tariff will be set to ensure sufficient funds are available to secure the required access management measures and the provision of alternative green space of a suitable size, design and location, where necessary, in advance of the occupation of new development and to ensure it is appropriately managed in perpetuity.
- 6.34 The Chichester Local Plan Review broadly reflects the Arun Local Plan approach by including protective policy (analogous to that produced for Chichester and Langstone Harbours SPA/Ramsar sites). Policy DM30: Development and Disturbance of Birds in Chichester, Langstone and Pagham Harbours Special Protection Areas specifically addresses that residential development within the established 3.5km zone of influence is likely to have adverse impacts to the integrity of Pagham Harbour SPA be subject to the provisions of Regulation 63 of the Conservation of Habitats and Species Regulations 2017. In the absence of appropriate avoidance and/or mitigation measures that will enable the planning authority to ascertain that the development would not adversely affect the integrity of the SPA, planning permission will not be granted because the tests for derogations in regulation 64 are unlikely to be met. Furthermore, such development would not have the benefit of the presumption in favour of sustainable development in the National Planning Policy Framework. Appropriate avoidance/mitigation measures will comprise:
- a) a contribution towards the appropriate management of the Pagham Harbour Local Nature Reserve in accordance with the LNR Management Plan;
 - b) a developer provided package of measures associated with the proposed development designed to avoid any significant effect on the SPA; or
 - c) a combination of measures in (a) and (b) above.
- 6.35 Furthermore, the policy states that appropriate mitigation must be agreed with Natural England and also be in place prior to the proposed development taking place.
- 6.36 The different distances used in the Chichester Local Plan Review (3.5km compared to 5km for Arun District) reflect the visitor survey results for the Chichester District part of Pagham Harbour.
- 6.37 Given the application of a dedicated policy to protect Pagham Harbour and Medmerry and ensure the delivery of improved access management of the Harbour in line with any increase in population within the core catchment it is considered that there will be no adverse effect on the integrity of the Harbour as a result of the Chichester Local Plan Review. The assessment already factors in development within Arun District and therefore no separate assessment 'in combination' is necessary.

Recommendation:

6.38 The following recommended policy text changes are made to ensure full robustness of the Local Plan Review Policy Framework :

- **Policy DM14: Caravan and Camping Sites: To ensure this policy provides a robust framework to ensure the protection of European sites, it is recommended that policy text is amended as follows:**

'The degree of protection considered desirable in order to avoid disturbance to sensitive sites of ecological value (including ensure no adverse effects on integrity of sensitive European designated wildlife sites occurs) or to protect the tranquillity and character of the countryside, Chichester Harbour Area of Outstanding Natural Beauty and the setting of the National Park, Pagham Harbour and the undeveloped coast; and'

- **Policy DM20: Development around the Coast: It is recommended that point 1 is amended as follows:**
 - '1. There are no harmful effects on or net loss of nature conservation or areas of geological importance within the Chichester and Pagham Harbours and Medmerry Realignment (including no adverse effects on the associated European designated sites);**
 - 2. The development provides recreational opportunities that do not adversely affect the character, environment and appearance of the coast and Chichester Harbour Area of Outstanding Natural Beauty or result in adverse effects of integrity to European designated wildlife sites'**

Coastal Squeeze

6.39 No new development areas identified in the Local Plan Review in relation to Selsey would constrain any managed retreat that may be required in the future to allow the SPA/Ramsar site to respond to sea level rise, as they are either over 400m from the SPA/Ramsar site or lie landwards of existing housing. Moreover, none would require the coastal defence policies identified in the Shoreline Management Plan to be altered. There are no other plans or projects which would operate 'in combination' with the Chichester Local Plan Review.

Water Quality

6.40 The growth area of Hunston is served by Pagham WwTW that discharges into Pagham Rife which flows into Pagham Harbour European site. The growth areas of East Wittering/ Bracklesham, Selsey and Birdham are served by Sidlesham WwTW which flows into Broad Rife, upstream of Pagham Harbour European site.

6.41 Chichester District Council has commissioned a Water Quality Assessment⁶⁰, which identifies that due to the distance from the discharge points at Pagham and Sidlesham WwTW to the European sites, and the processes of mixing and dilution, the contribution of nitrate loading in the Pagham Harbour is 'potentially low'. The Assessment concludes that no mitigation measures are required and as such development within those settlements that are served by both Pagham and Sidlesham WwTW would not adversely affect the water quality of Pagham Harbour European site. Nonetheless, the Assessment identifies potential measures that could be put in place to limit nitrate emissions such as demand management and reduce water usage.

6.42 Furthermore, the Local Plan Review provides policy to provide protection to European sites as a result of adverse water quality as follows:

- Policy S31: Wastewater in the Chichester Harbour and Pagham Harbour Wastewater Treatment Catchment areas states: *'Proposals for development in the catchment should be able to demonstrate no adverse impact on the water quality of Chichester Harbour and Pagham Harbour.... Proposals for development in the catchment should be able to demonstrate no adverse impact on the water quality of Chichester Harbour and Pagham Harbour.'*
- Policy DM29: Biodiversity states: *'Planning permission will be granted for development where it can be demonstrated that all the following criteria have been addressed... 4. The proposal protects, manages and enhances the Plan Area network of ecology, biodiversity and geological sites, including the international, national and local designated sites (statutory and non-statutory), priority habitats, wildlife corridors and stepping stones that connect them;'*
- Policy S12: Infrastructure Provision and Policy S32: Design Strategies for Strategic and Major Development Sites provide for the timely delivery of infrastructure. This would include water treatment infrastructure to ensure no adverse effects result.
- Policy DM16: Sustainable Design and Construction: This policy provides provision for reduced water consumption as follows: *'For all new dwellings or for new non-domestic buildings, evidence will be required by the developer to demonstrate that the following criteria have been achieved: ...1. The proposal achieves a maximum of 110 litres per person per day including external water use.'*

⁶⁰ AMEC Foster Wheeler (August 2018). Chichester District Council Water Quality Assessment. Final Report.

6.43 With this wide ranging provision of policy framework to ensure the protection of European sites in it is considered that this impact pathway will not result in adverse effect on the integrity of these European sites.

Loss of Functionally Linked Supporting Habitat for Birds

6.44 Pagham Harbour SPA/Ramsar is partially notified for its breeding population of Common and Little tern species and over-wintering populations of Brent geese and wading bird species including ruff. However, studies⁶¹ have identified that many feeding and roosting sites around the European Site fall outside of the statutory nature conservation site boundaries.

6.45 As highlighted within the screening table that assesses both site allocations and the location of Parishes to receive a quantum of development (see Appendix A, Table 11), one Parish and one site allocation are identified to provide development within the Plan and which due to their locations could contain functionally linked supporting habitat for over-wintering populations of Brent geese and wading bird species. These are:

- Policy AL8: East Wittering Parish
- Policy AL12: Land North of Park Farm, Selsey

6.46 In the HRA undertaken for Chichester District Council in 2014 it was reported that the Council had *'indicated in discussions over this HRA that policy recommendations to protect locations outside of the SPA/ Ramsar site of value to Brent geese and waders would be addressed within the Site Allocations DPD and Neighbourhood Plans'*.

6.47 None the less, policy within the Local Plan Review includes policy that provides protection to European designated sites as follows:

6.48 Policy DM29: Biodiversity states: *'Planning permission will be granted for development where it can be demonstrated that all the following criteria have been addressed... 4. The proposal protects, manages and enhances the Plan Area network of ecology, biodiversity and geological sites, including the international, national and local designated sites (statutory and non-statutory), priority habitats, wildlife corridors and stepping stones that connect them;'*

6.49 However, recommendations have been made to specific site allocation policies that are located within areas that could provide functionally linked supporting habitat below.

6.50 Provided the below recommendations are included within the Plan, it can be concluded that the Local Plan Review will not result in adverse effect in integrity of the European site.

Recommendation:

6.51 The following recommended policy text changes/ additions will be made in relation to site allocations/ policies that are relevant to specific settlements:

- **Policy AL8: East Wittering Parish: *'9.Demonstration that development would not, with mitigation if required, have an adverse impact on the Pagham Harbour SPA/Ramsar and the Medmerry realignment by reason of recreational disturbance or loss of functionally linked supporting habitat'***
- **Policy AL12: Land North of Park Farm Selsey: *'Provide mitigation to ensure the protection of the SPA, SAC and Ramsar site at Pagham Harbour and the Medmerry realignment as a result of loss of supporting habitat'***

⁶¹ King, D. (2010) Solent Waders and Brent Goose Strategy 2010. Hampshire and Isle of Wight Wildlife Trust.

Atmospheric Pollution

- 6.52 The relevant part of the Pagham Harbour SPA and Ramsar site that is located within 200m of the B2145 has a nitrogen deposition rate of 16.0kgN/ha/yr⁶². Current nitrogen deposition is therefore well below the most stringent critical load (20 kgN/ha/yr) for saltmarsh and intertidal mudflat, the relevant SPA and Ramsar site habitats in this location according to www.magic.gov.uk.
- 6.53 Moreover, this background deposition rate is likely to decrease rather than increase as improvements in background air quality are achieved in line with central government initiatives and improvements in emission technology (such as the further roll out of the Euro6/VI emissions standard which only became mandatory in 2014/2015). This is supported by oxidised nitrogen deposition and NO_x concentration trend data available on APIS for the 1km (for NO_x) and 5km (for nitrogen deposition) grid squares within which the relevant parts of the SPA/SAC are situated. This indicates that background NO_x concentrations reduced between 2010 and 2014 (the most recent year for which data are available) from 12.9 µg_m⁻³ to 10.4 µg_m⁻³. Similarly, background oxidised nitrogen deposition rates (those attributable to combustion such as vehicle exhausts) reduced by 0.8 kgN/ha/yr between 2005 and 2014.
- 6.54 Given this trend, it is unlikely that increased traffic flows as a result of development in the Local Plan Review area, even in combination with other projects and plans would result in a sufficiently large increase to push it over the critical load. Furthermore, it is important to note that the experimental studies that underlie conclusions regarding the sensitivity of saltmarsh to nitrogen deposition, and the selection of 20 kgN/ha/yr as the minimum critical load have '*... neither used very realistic N [nitrogen] doses nor input methods i.e. they have relied on a single large application more representative of agricultural discharge*⁶³, which is far in excess of anything that would be deposited from atmosphere. For coastal saltmarshes such as those for which Solent Maritime SAC is partly designated nitrogen inputs from air are not as important as nitrogen effects from other sources because the effect of any deposition of nitrogen from atmosphere is likely to be dominated by much greater flushes of more readily utilized nitrogen from marine, fluvial or agricultural sources. This is reflected on APIS itself, which states regarding saltmarsh that '*Overall, N deposition [from atmosphere] is likely to be of low importance for these systems as the inputs are probably significantly below the large nutrient loadings from river and tidal inputs*⁶⁴. Moreover, the nature of intertidal saltmarsh in this area means that there is flushing by tidal incursion twice per day. This is likely to further reduce the role of nitrogen from atmosphere in controlling botanical composition.
- 6.55 The modelling undertaken by PBA⁶⁵ identifies that the Do Nothing 2033 scenario would result in nitrogen deposition rates of 14.6kgN/ha/yr, whilst the 2033 Do Something scenario (Scenario 1 Mitigated) (i.e. the development within the Plan plus that of surrounding authorities) is modelled to result in nitrogen deposition rates of 14.9kgN/ha/yr which is still well below the critical load of 20 kgN/ha/year for saltmarsh habitats.
- 6.56 Notwithstanding this conclusion, the Local Plan Review does include several measures that can be expected to result in further improvement in roadside air quality, beyond that achieved by improvements in EU-mandated emissions technology. Air quality mitigation measures can be broadly classified as four types:
- Behavioural measures and modal shift - reducing the amount of traffic overall;
 - Traffic management - modifying traffic behaviour to control where emissions are generated;
 - Emissions reduction at source - reducing the emissions level per vehicle; and
 - Roadside barriers - reducing the impact on the public of emissions.
- 6.57 The measures identified in Chichester Local Plan Review document cover all of these categories, except for the fourth (roadside barriers) which is not within the remit of local planning policy. The Chichester Local Plan Review document contains positive measures that should aim to mitigate or avoid the likelihood of significant adverse effects from reduced air quality:

⁶² PBA Peter Brett. Chichester District Council – Local Plan. Transport Study of Strategic Development Options and Sustainability Transport Measures (2018). Appendix G Ecological Receptors Results

⁶³ UK Air Pollution Information System website [accessed 21/04/15]: <http://www.apis.ac.uk/node/968>

⁶⁴ APIS website [accessed 06/06/16]: <http://www.apis.ac.uk/node/968>

⁶⁵ PBA Peter Brett. Chichester District Council – Local Plan. Transport Study of Strategic Development Options and Sustainability Transport Measures (2018). Appendix G Ecological Receptors Results

- Policy DM24: Air Quality: This policy aims to improve air quality within the district of Chichester. This includes through traffic calming measure, Air Quality Management Areas and air quality assessments.
- Policy S14: Chichester City Transport Strategy: This policy provides for initiatives that go to reduce the use of private car use, such as the provision of additional bus lanes, improving bus and rail links and improving both cycle and pedestrian links and reduce traffic congestion;
- Policy S23: Transport and Accessibility: this policy identifies that development should be well located to reduce the need to travel and improve bus and train connectivity and improve the pedestrian and cycle networks, thus reducing atmospheric pollution contributions;
- Policy S32: Design Strategies for Strategic and Major Development Sites: this policy states: *'Proposals for housing allocations and major development sites must be accompanied by a site-wide design strategy that includes the following:... d. integrate with the surrounding built, historic and natural environments, in particular maximising existing and potential movement connections and accessibility to encourage walking, cycling and use of public transport'*;
- Policy DM16: Sustainable Design and Construction: Provisions within this policy have potential to reduce atmospheric pollution contributions; and,
- Policy DM17: Stand-alone Renewable Energy: The provision of renewable energy has the ability to reduce atmospheric pollution contributions.
- These policies form a protective framework to help to reduce atmosphere pollution contributions and thus it is considered that the Plan will not result in an adverse effect in integrity on this European site.

7. Ebernoe Common SAC

Introduction

- 7.1 Ebernoe Common is an internationally important example of ancient woodland. It contains a wide range of structural and vegetation community types which have been influenced in their development by differences in the underlying soils and past management. The native trees, particularly those with old growth characteristics, support rich lichen and fungal communities and a diverse woodland breeding bird assemblage. Nationally important maternity roosts for barbastelle and Bechstein's bat occur within the woodland.
- 7.2 At its closest point the SAC lies adjacent to the Local Plan Review area in the vicinity of Kirdford, Plaistow and Ifold.

Features of European Interest⁶⁶

- 7.3 Ebernoe Common SAC qualifies as an SAC for both habitats and species. Firstly, the site contains the following Habitats Directive Annex I habitat:
- Beech forests on acid soils.
- 7.4 Secondly, the site contains the following Habitats Directive Annex II species:
- Barbastelle *Barbastella barbastellus*; and
 - Bechstein's bat *Myotis bechsteinii*.

Historic Trends and Current Conditions

- 7.5 Ebernoe Common SAC is owned and managed by Sussex Wildlife Trust (SWT). There is evidence that the Common has contained a mixture of open pasture and high forest for centuries. Ebernoe Nature Reserve is an Open Access site and is fairly well used (SWT estimate up to 3,000 visitors per annum)⁶⁷.
- 7.6 In the most recent Natural England condition assessment process, 93% of Ebernoe Common SSSI was considered to be in favourable condition, with the remainder recovering from unfavourable status.

Conservation Objectives⁶⁸

- 7.7 *'With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;*
- *Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; The extent and distribution of qualifying natural habitats and habitats of qualifying species*
 - *The structure and function (including typical species) of qualifying natural habitats*
 - *The structure and function of the habitats of qualifying species*
 - *The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely*
 - *The populations of qualifying species, and,*
 - *The distribution of qualifying species within the site'.*

Key Environmental Conditions

⁶⁶ <http://publications.naturalengland.org.uk/file/6245694033625088> [accessed 15/10/2018]

⁶⁷ Monk-Terry, M. & Lyons, G. Sussex Wildlife Trust Ebernoe Nature Reserve Management Plan 2010-2015.

⁶⁸ Natural England. European Site Conservation Objectives for Ebernoe Common Special Area of Conservation (2014). Available online: <http://publications.naturalengland.org.uk/publication/6255629165395968> [Accessed: 15/10/2018].

7.8 The key environmental conditions that support the features of European interest have been defined as:

- Appropriate management;
- Minimal atmospheric pollution – may increase the susceptibility of beech trees to disease and alter epiphytic communities;
- Absence of disturbance;
- In a wider context, bats require good connectivity of landscape features to allow foraging and commuting;
- Both bat species have close association with woodland. Areas of undesignated woodland adjacent to SAC may be of most importance to population; and
- Barbastelles require a constant humidity around their roosts; any manipulation of the shrub layer must be carefully considered.

Potential Effects Linking to the Local Plan Review

7.9 The screening assessment undertaken in the tables in Appendix A identify that following policies and site allocation have the potential to link to this European designated site and result in likely significant effects. These are as follows:

Policies

- Policy S2: Settlement Hierarchy
- Policy S3: Development Strategy
- Policy S4: Meeting Housing Needs
- Policy S5: Parish Housing Requirements 2016-2035
- Policy S7: Meeting Gypsies, Travellers and Travelling Showpeoples' Needs
- Policy S8: Meeting Employment land needs
- Policy S9: Retail Hierarchy and Sequential Approach
- Policy S11: Addressing Horticultural Needs

Site Allocations

7.10 There are no site allocations within proximity of this SAC site.

7.11 Potential linking impact pathways are as follows:

- Disturbance of bat flight lines through development within the north of the Local Plan Review area; and
- Potential air quality impacts associated with traffic.

Appropriate Assessment

Disturbance of Bat Flight Lines

7.12 Ebernoe Common is an exceptional site for both Bechstein's and Barbastelle bats. As discussed in Chapter 3 (paragraph 3.38 onwards), key conservation areas have been determined as follows:

- A 'key conservation area' – for any development proposed within 6.5km of the SAC, all impacts will be considered; and
- A 'wider conservation area' – for any development proposed 6.5-12km from the SAC, significant impacts or severance of flightlines will be considered. This area encompasses the full extent from the SAC in which bats may forage.

7.13 The Local Plan Review does not allocate any new residential development north of the South Downs National Park Authority boundary within either the key conservation area or wider conservation area.

However, it does allocate a quantum of growth to both Loxwood and Wisborough Green parishes (125 dwellings to Loxford and 25 to Wisborough Green). Actual sites will be identified in the respective Neighbourhood Plan Reviews. As such it is not known on which (or how many) development sites these housing requirements will be met. Clearly, however, the entirety of both parishes lies within the 12km zone and much lies within the 6.5km zone. Therefore they could impact upon the supporting habitat of bats associated with Ebernoe Common SAC. The same applies to any windfall development that could feasibly occur within the north of the District.

7.14 Policy DM31: Trees, Hedgerows and Woodlands of the Chichester Local Plan Review outlines that hedgerows are identified as a priority habitat requiring conservation action under the UK Biodiversity Action Plan. Therefore all development must be undertaken in accordance with the British Standard 5837 and all tree works must be carried out in accordance with British Standard 3998. This is set out in the following policy:

- *'Development proposals will be granted where it can be demonstrated that all of the following criteria have been addressed;*
 1. *Proposals conserve and, where appropriate, enhance existing valued trees, hedgerows and woodlands;*
 2. *The felling of protected trees, groups of trees or woodland will only be permitted in exceptional circumstances and in accordance with the relevant legislation, policy and good practice recommendations. Where protected trees are subject to felling, a replacement of an appropriate number, species and size in an appropriate location will be required;*
 3. *A proposed loss or damage of non-protected but valued trees, woodland or hedgerows should be avoided, and if demonstrated as being unavoidable, appropriate mitigation measures are provided;*
 4. *A minimum buffer of 15 metres will be required between the development and ancient woodland or veteran trees; and*
 5. *Development proposals must demonstrate that appropriate protection measures are in place prior to any work on site throughout the development process as part of a comprehensive landscaping plan, and that suitable opportunities for the restoration, enhancement or planting of trees, woodland, and hedgerows are identified and incorporated.'*

7.15 Since hedgerows and woodlands are key supporting habitats used by bat species to facilitate movement between foraging habitats, this policy provides for adequate mitigation for the protection of bat flightlines within Chichester. However, barbastelle bats will also forage in and around other habitats (particularly wetlands and flood meadows) if their prey abundance is sufficiently great.

7.16 Protection of these habitats would be facilitated by Policy DM29: Biodiversity, which states that: *'Planning permission will be granted for development where it can be demonstrated that all the following criteria have been addressed:... The proposal protects, manages and enhances the Plan Area network of ecology, biodiversity and geological sites, including the international, national and local designated sites (statutory and non-statutory), priority habitats, wildlife corridors and stepping stones that connect them.'* Given the rarity of the barbastelle bats, effects of development on their habitat (whether commuting or foraging habitat) is a material consideration in the planning process whether or not the bats in question are associated with a European site. This policy therefore enables protection of barbastelle bat habitat and (if it cannot be preserved) would also enable the Council to require that provision was made for replacing any loss of foraging habitat that may be anticipated, prior to its loss.

7.17 Along with implementation of the Sussex Bat Special Area of Conservation Planning and Landscape Scale Enhancement Protocol' (2017), the above policies provide a protective framework for the SAC and the Local Plan Review will not result in an adverse effect in integrity on this SAC.

Atmospheric Pollution

7.18 As identified in Table 3 the SAC lies within 200m of the A283 for a short distance. According to APIS the background nitrogen deposition rate for this site (not specifically within 200m of the roadside) is 23.1kgN/ha/yr for SU965259 which is above the upper critical load of 20 kgN/ha/yr and well above the lower critical load of 10 kgN/ha/yr.

7.19 The Local Plan Review does not allocate any dwellings within the north of the Plan area but does make provision for 150 dwellings across Loxwood and Wisborough Green parishes; moreover, development around Chichester City could use the A283 as a journey to work route. Within the north of the District all settlements outside of the South Downs National Park Authority are small villages that have many roads connecting them to the wider landscape other than the A283.

7.20 The traffic modelling A283 at Ebernoe Common SAC to support the Local Plan Review is illustrated in Table 6.

Table 6: Traffic Modelling Data: A283 at Ebernoe Common SAC

Link Name – 2 way Links	2014 (Base Case)	2035 Core (Do Minimum)	2035 Scenario 1 (Do Something)	2035 Scenario 1 – Mitigated (Do Something Mitigated)
Link 6: A283 - Ebernoe Common SAC	5,600	7,586	8,122	8,024

7.21 The traffic modelling illustrated in Table 6 forecasts that the contribution of Scenario 1 Mitigated provides an additional AADT of 438 beyond the Do Minimum contribution. This is the contribution of development provided by the Chichester Local Plan Review and while small it cannot be considered an insignificant change in flows. That said, as with other sites discussed in this document, the trend for NOx concentrations and nitrogen deposition is an improving one and that is likely to continue given that more stringent emissions standards (notable Euro 6/VI) only became mandatory in 2014/15. According to APIS, background oxidised nitrogen deposition in the 5km grid square within which the SAC is situated reduced by 3kgN/ha/yr between 2005 and 2014 despite an increase in vehicles on the network.

7.22 To fully inform the HRA process, and since woodland is potentially highly susceptible to nitrogen deposition and the site currently exceeds its critical load, air quality modelling will be undertaken of the road link on the A283 at Ebernoe Common SAC to determine the NOx and nitrogen deposition contributions at the SAC from the Local Plan Review, both alone and in combination. This will be undertaken for a later iteration of this HRA report.

7.23 Notwithstanding the fact that modelling is ongoing, the Local Plan Review provides the following policies that would reduce atmospheric pollution contributions stemming from development:

- Policy DM24: Air Quality: This policy aims to improve air quality within the district of Chichester. This includes through traffic calming measure, Air Quality Management Areas and air quality assessments.
- Policy S41: Chichester City Transport Strategy: This policy provides for initiatives that go to reduce the use of private car use, such as the provision of additional bus lanes, improving bus and rail links and improving both cycle and pedestrian links and reduce traffic congestion;
- Policy 23: Transport and Accessibility: this policy identifies that development should be well located to reduce the need to travel and improve bus and train connectivity and improve the pedestrian and cycle networks, thus reducing atmospheric pollution contributions;
- Policy S32: Design Strategies for Strategic and Major Development Sites: this policy states: '*Proposals for housing allocations and major development sites must be accompanied by a site-wide design strategy that includes the following:... d. integrate with the surrounding built, historic and natural environments, in particular maximising existing and potential movement connections and accessibility to encourage walking, cycling and use of public transport*';
- Policy DM16: Sustainable Design and Construction: Provisions within this policy have potential to reduce atmospheric pollution contributions; and,
- Policy DM17: Stand-alone Renewable Energy: The provision of renewable energy has the ability to reduce atmospheric pollution contributions.

7.24 Given that these policies form a protective framework to help to reduce atmosphere pollution contributions and that according to APIS background nitrogen deposition rates at the SAC are improving it is likely that a conclusion of no adverse effect in integrity on this European site will be possible, however detailed traffic and air quality modelling will be required to support conclusions. .

Further steps

- 7.25** To fully inform the HRA process it is recommended that air quality modelling is undertaken of the road link on the A283 at Ebernoe Common SAC to determine the NO_x contributions at the SAC from the Local Plan Review, both alone and in combination.

8. The Mens SAC

Introduction

- 8.1 The Mens remains one of the most extensive examples of Wealden Woodland in West Sussex. It is important for its size, structural diversity and the extremely rich fungal and lichen floras which occur here. The wood supports a diverse community of breeding birds and is the locality of a nationally endangered species of fly.
- 8.2 At its closest point the SAC lies adjacent to part of the Local Plan area to which the Chichester Local Plan: Key Policies Submission Document applies.

Features of European Interest⁶⁹

- 8.3 The Mens SAC qualifies as a SAC for both habitats and species. Firstly, the site contains the following Habitats Directive Annex I habitat:
- Beech forests on acid soils.
- 8.4 Secondly, the site contains the following Habitats Directive Annex II species:
- Barbastelle *Barbastella barbastellus*.

Conservation Objectives⁷⁰

- 8.5 *With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;*
- 8.6 *Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;*
- *The extent and distribution of qualifying natural habitats and habitats of qualifying species*
 - *The structure and function (including typical species) of qualifying natural habitats*
 - *The structure and function of the habitats of qualifying species*
 - *The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely*
 - *The populations of qualifying species, and,*
 - *The distribution of qualifying species within the site.'*

Historic Trends and Current Pressures

- 8.7 The Mens SAC is owned and managed by Sussex Wildlife Trust. In the most recent Natural England condition assessment process, 97% of The Mens SSSI was considered to be in favourable condition.

Key Environmental Conditions

- 8.8 The key environmental conditions that support the features of European interest have been defined as:
- Appropriate woodland management;
 - Low recreational pressure (because management is minimum intervention and Bridleway degradation by horse riding is a recurring threat);

⁶⁹ <http://publications.naturalengland.org.uk/file/5157859599843328> [accessed 15/10/2018]

⁷⁰ Natural England. European Site Conservation Objectives for The Mens Special Area of Conservation (2014) Available online: <http://publications.naturalengland.org.uk/publication/5642356338458624> [Accessed: 15/10/2016].

- Minimal air pollution – may increase the susceptibility of beech trees to disease and alter epiphytic communities; and
- Barbastelles require a constant humidity around their roosts; any manipulation of the shrub layer must be carefully considered.

Potential Effects Linking to the Local Plan Review

8.9 The screening assessment undertaken in the tables in Appendix A identify that following policies and site allocation have the potential to link to this European designated site and result in likely significant effects. These are as follows:

Policies

- Policy S2: Settlement Hierarchy
- Policy S3: Development Strategy
- Policy S4: Meeting Housing Needs
- Policy S5: Parish Housing Requirements 2016-2035
- Policy S7: Meeting Gypsies, Travellers and Travelling Showpeoples' Needs
- Policy S8: Meeting Employment Land Needs
- Policy S9: Retail Hierarchy and Sequential Approach
- Policy S11: Addressing Horticultural Needs

Site Allocations

8.10 There are no site allocations within proximity of this SAC site.

8.11 Potential linking impact pathways are as follows:

- Disturbance of bat flight lines through development within the Local Plan area; and
- Potential air quality impact on the woodland.

Appropriate Assessment

Disturbance of Bat Flight Lines

8.12 The Mens SAC is important for its barbastelle populations and radio-tracking studies have been undertaken to identify core foraging areas. As discussed in Chapter 3 (paragraph 3.38 onwards), key conservation areas have been determined as follows:

- A 'key conservation area' – for any development proposed within 6.5km of the SAC, all impacts will be considered; and
- A 'wider conservation area' – for any development proposed 6.5-12km from the SAC, significant impacts or severance of flightlines will be considered. This area encompasses the full extent from the SAC in which bats may forage.

8.13 The Local Plan Review does not allocate any new residential development north of the South Downs National Park Authority boundary within either the key conservation area or wider conservation area. However, it does allocate a quantum of growth to both Loxwood and Wisborough Green parishes (125 dwellings to Loxford and 25 to Wisborough Green). Actual sites will be identified in the respective Neighbourhood Plan Reviews. As such it is not known on which (or how many) development sites these housing requirements will be met. Clearly, however, the entirety of both parishes lies within the 12km zone and much lies within the 6.5km zone. Therefore they could impact upon the supporting habitat of bats associated with The Mens SAC. The same applies to any windfall development that could feasibly occur within the north of the District.

8.14 Policy DM31: Trees, Hedgerows and Woodlands of the Chichester Local Plan Review outlines that

hedgerows are identified as a priority habitat requiring conservation action under the UK Biodiversity Action Plan. Therefore all development must be undertaken in accordance with the British Standard 5837 and all tree works must be carried out in accordance with British Standard 3998. This is set out in the following policy:

- *'Development proposals will be granted where it can be demonstrated that all of the following criteria have been addressed;*
 6. *Proposals conserve and, where appropriate, enhance existing valued trees, hedgerows and woodlands;*
 7. *The felling of protected trees, groups of trees or woodland will only be permitted in exceptional circumstances and in accordance with the relevant legislation, policy and good practice recommendations. Where protected trees are subject to felling, a replacement of an appropriate number, species and size in an appropriate location will be required;*
 8. *A proposed loss or damage of non-protected but valued trees, woodland or hedgerows should be avoided, and if demonstrated as being unavoidable, appropriate mitigation measures are provided;*
 9. *A minimum buffer of 15 metres will be required between the development and ancient woodland or veteran trees; and*
 10. *Development proposals must demonstrate that appropriate protection measures are in place prior to any work on site throughout the development process as part of a comprehensive landscaping plan, and that suitable opportunities for the restoration, enhancement or planting of trees, woodland, and hedgerows are identified and incorporated.'*

8.15 Since hedgerows and woodlands are key supporting habitats used by bat species to facilitate movement between foraging habitats, this policy provides for adequate mitigation for the protection of bat flightlines within Chichester. However, barbastelle bats will also forage in and around other habitats (particularly wetlands and flood meadows) if their prey abundance is sufficiently great.

8.16 Protection of these habitats would be facilitated by Policy DM29: Biodiversity, which states that: *'Planning permission will be granted for development where it can be demonstrated that all the following criteria have been addressed: ...The proposal protects, manages and enhances the Plan Area network of ecology, biodiversity and geological sites, including the international, national and local designated sites (statutory and non-statutory), priority habitats, wildlife corridors and stepping stones that connect them.'* Given the rarity of the barbastelle bats, effects of development on their habitat (whether commuting or foraging habitat) is a material consideration in the planning process whether or not the bats in question are associated with a European site. This policy therefore enables protection of barbastelle bat habitat and (if it cannot be preserved) would also enable the Council to require that provision was made for replacing any loss of foraging habitat that may be anticipated, prior to its loss.

8.17 Along with implementation of the Sussex Bat Special Area of Conservation Planning and Landscape Scale Enhancement Protocol' (2017), the above policies provide a protective framework for the SAC and the Local Plan Review will not result in an adverse effect in integrity on this SAC.

Atmospheric Pollution

8.18 As identified in Table 3 the SAC lies within 200m of the A272 for a short distance. The deposition rate is 31kgN/ha/yr for TQ022237 which is above the upper critical load of 25.48 kgN/ha/yr and well above the lower critical load of 10 kgN/ha/yr.

8.19 The Local Plan Review does not allocate any dwellings within the north of the Plan area but does make provision for 150 dwellings across Loxwood and Wisborough Green parishes; moreover, development around Chichester City could use the A283 as a journey to work route. Within the north of the District all settlements outside of the South Downs National Park Authority are small villages that have many roads connecting them to the wider landscape other than the A272.

8.20 Nonetheless the traffic modelling A272 at The Mens SAC to support the Local Plan Review is illustrated in Table 7.

Table 7: Traffic Modelling Data : A272 at the Mens SAC

Link Name – 2 way Links	2014 (Base Case)	2035 Core (Do Minimum)	2035 Scenario 1 (Do Something)	2035 Scenario 1 – Mitigated (Do Something Mitigated)
Link 7: A272 - The Mens SAC	2,358	4,735	5,853	5,041

8.21 The traffic modelling illustrated in Table 7 forecasts that the contribution of Scenario 1 Mitigated is an additional AADT of 306 beyond the Do Minimum contribution and as such the contribution of development provided by the Local Plan Review cannot be considered insignificant. That said, as with other sites discussed in this document, the trend for NOx concentrations and nitrogen deposition is an improving one and that is likely to continue given that more stringent emissions standards (notable Euro 6/VI) only became mandatory in 2014/15. According to APIS, background oxidised nitrogen deposition in the 5km grid square within which the SAC is situated reduced by 3kgN/ha/yr between 2005 and 2014 despite an increase in vehicles on the network.

8.22 To fully inform the HRA process, and since woodland is potentially highly susceptible to nitrogen deposition and the site currently exceeds its critical load, air quality modelling will be undertaken of the road link on the A272 at The Mens SAC to determine the NOx and nitrogen deposition contributions at the SAC from the Local Plan Review, both alone and in combination. This will be undertaken for a later iteration of this HRA report.

8.23 Notwithstanding the fact that modelling is ongoing, the Local Plan Review provides the following policies that would reduce atmospheric pollution contributions stemming from development:

- Policy DM24: Air Quality: This policy aims to improve air quality within the district of Chichester. This includes through traffic calming measure, Air Quality Management Areas and air quality assessments.
- Policy S41: Chichester City Transport Strategy: This policy provides for initiatives that go to reduce the use of private car use, such as the provision of additional bus lanes, improving bus and rail links and improving both cycle and pedestrian links and reduce traffic congestion;
- Policy 23: Transport and Accessibility: this policy identifies that development should be well located to reduce the need to travel and improve bus and train connectivity and improve the pedestrian and cycle networks, thus reducing atmospheric pollution contributions;
- Policy S32: Design Strategies for Strategic and Major Development Sites: this policy states: 'Proposals for housing allocations and major development sites must be accompanied by a site-wide design strategy that includes the following:... d. integrate with the surrounding built, historic and natural environments, in particular maximising existing and potential movement connections and accessibility to encourage walking, cycling and use of public transport';
- Policy DM16: Sustainable Design and Construction: Provisions within this policy have potential to reduce atmospheric pollution contributions; and,
- Policy DM17: Stand-alone Renewable Energy: The provision of renewable energy has the ability to reduce atmospheric pollution contributions.

8.24 Given that these policies form a protective framework to help to reduce atmosphere pollution contributions and that according to APIS background nitrogen deposition rates at the SAC are improving it is likely that a conclusion of no adverse effect in integrity on this European site will be possible, however detailed traffic and air quality modelling will be required to support conclusions.

Further Steps

8.25 To fully inform the HRA process it is recommended that air quality modelling is undertaken of the road link on the A272 at The Mens SAC to determine the NOx contributions at the SAC from the Local Plan Review, both alone and in combination.

9. Butser Hill SAC

Introduction

9.1 Butser Hill is a chalk massif with a discontinuous cap of clay-with-flints. The massif has been eroded to leave a series of deep combes in which the modern spring-line is about 1 km from the combe-head. The combes on the south-east flank support dense yew *Taxus baccata* woods and the remaining slopes of the Hill are sheep-grazed chalk grassland. The calcareous yew woods are outstanding examples of a habitat with a very small representation in Britain. The series of vegetation types represented in the SSSI – chalk grassland, mixed scrub and yew wood – were the subject of a series of pioneer ecological studies.

Reasons for Designation

- 9.2 Butser Hill qualifies as a SAC for its habitats. The site contains the Habitats Directive Annex I habitats of:
- Dry grasslands and scrublands on chalk or limestone: the richest terricolous lichen flora of any chalk grassland site in England. Also supports the distinctive *Scapanietum asperae* or southern hepatic mat association of leafy liverworts and mosses on north-facing chalk slopes. This association is very rare in the UK and Butser Hill supports the largest known example.
 - Yew-dominated woodland

Conservation Objectives⁷¹

- 9.3 *With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;*
- 9.4 *Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;*
- The extent and distribution of qualifying natural habitats
 - *The structure and function (including typical species) of qualifying natural habitats, and*
 - *The supporting processes on which qualifying natural habitats rely'*

Historic Trends and Current Pressures

- 9.5 The site has traditionally been vulnerable to the effects of surrounding agriculture – i.e. spray –drift causing eutrophication. The SAC is now within the boundary of the South Downs National Park. Most of the SAC is in favourable condition, and landowners, in conjunction with English Woodland Grant Schemes have been removing inappropriate conifers and clearing excessive scrub.
- 9.6 The environmental requirements of Butser Hill SAC are mainly:
- Maintenance of grazing
 - Minimal air pollution – nitrogen deposition may cause reduction in diversity, sulphur deposition can cause acidification
 - Absence of direct fertilisation
 - Well-drained soils
 - Controlled recreational pressure
 - No spray-drift (i.e. eutrophication) from surrounding intensive arable land.

⁷¹ <http://publications.naturalengland.org.uk/file/5684004183343104> [accessed 15/10/2018]

Potential Effects Linking to the Local Plan Review

9.7 The screening assessment undertaken in the tables in Appendix A identify that following policies and site allocation have the potential to link to this European designated site and result in likely significant effects. These are as follows:

Policies

- Policy S2: Settlement Hierarchy
- Policy S3: Development Strategy
- Policy S4: Meeting Housing Needs
- Policy S5: Parish Housing Requirements 2016-2035
- Policy S7: Meeting Gypsies, Travellers and Travelling Showpeople' Needs
- Policy S8: Meeting Employment Land Needs
- Policy S9: Retail Hierarchy and Sequential Approach
- Policy S11: Addressing Horticultural Needs

Site Allocations

9.8 There are no site allocations within proximity of this SAC that could result in an adverse effect in integrity.

9.9 Potential linking impact pathways are as follows:

- Atmospheric pollution

Appropriate Assessment

Atmospheric Pollution

9.10 Habitats for which Butser Hill SAC is designated are sensitive to changes in atmospheric pollution. At its closest, Butser Hill SAC is 5m from the A3. Traffic modelling was undertaken to support the South Downs National Park Pre Submission Local Plan⁷². This modelling included an element of development to be delivered within the portion of Chichester District that is located and incorporated within the South Downs National Park Authority, and will have also included an element of development within the wider areas of Chichester District. This modelling will not however allow for the exact quantum and location of development within the Chichester District as covered by the Local Plan Review. This modelling undertaken for the South Downs National Park Authority identified that the baseline NOx concentrations are above the 30 µgm⁻³ general Critical Level for vegetation for a distance of approximately 30m into the SAC. At the time of writing a full air quality modelling assessment for the Chichester Local Plan Review was not available for the A3 road link close to the Butser Hill SAC. The traffic modelling for the A3 at Butser Hill SAC to support the Local Plan Review is illustrated in Table 8.

Table 8: Traffic Modelling Data : A3 at Butser Hill

Link Name – 2 way Links	2014 (Base Case)	2035 Core (Do Minimum)	2035 Scenario 1 (Do Something)	2035 Scenario 1 – Mitigated (Do Something Mitigated)
Link 8: A3 at Butser Hill	95,095	111,431	111,931	112,253

9.11 The traffic modelling illustrated in Table 8 forecasts that the contribution of Scenario 1 Mitigated is an additional AADT of 822 beyond the Do Minimum contribution and as such the contribution of development provided by the Local Plan Review cannot be considered insignificant. In addition, the designated habitats for Butser Hill SAC are coniferous (yew) woodland and calcareous grassland. The lowest nitrogen Critical

⁷² <https://www.southdowns.gov.uk/wp-content/uploads/2018/04/SDLP-05-Habitats-Regulations-Assement-2018.pdf> [accessed 15/10/2018]

Load for these (woodland) is 10kgN/ha/yr, and as such the baseline for nitrogen deposition is currently considerably above the Critical Load. That said, as with other sites discussed in this document, the trend for NOx concentrations and nitrogen deposition is an improving one and that is likely to continue given that more stringent emissions standards (notable Euro 6/VI) only became mandatory in 2014/15. According to APIS, background oxidised nitrogen deposition in the 5km grid square within which the SAC is situated reduced by 3.4kgN/ha/yr between 2005 and 2014 despite an increase in vehicles on the network.

9.12 To fully inform the HRA process, and since woodland is potentially highly susceptible to nitrogen deposition and the site currently exceeds its critical load, air quality modelling will be undertaken of the road link on the A3 at Butser Hill SAC to determine the NOx and nitrogen deposition contributions at the SAC from the Local Plan Review, both alone and in combination. This will be undertaken for a later iteration of this HRA report.

9.13 Notwithstanding the fact that modelling is ongoing, the Local Plan Review provides the following policies that would reduce atmospheric pollution contributions stemming from development:

- Policy DM24: Air Quality: This policy aims to improve air quality within the district of Chichester. This includes through traffic calming measure, Air Quality Management Areas and air quality assessments.
- Policy S41: Chichester City Transport Strategy: This policy provides for initiatives that go to reduce the use of private car use, such as the provision of additional bus lanes, improving bus and rail links and improving both cycle and pedestrian links and reduce traffic congestion;
- Policy 23: Transport and Accessibility: this policy identifies that development should be well located to reduce the need to travel and improve bus and train connectivity and improve the pedestrian and cycle networks, thus reducing atmospheric pollution contributions;
- Policy S32: Design Strategies for Strategic and Major Development Sites: this policy states: 'Proposals for housing allocations and major development sites must be accompanied by a site-wide design strategy that includes the following:... d. integrate with the surrounding built, historic and natural environments, in particular maximising existing and potential movement connections and accessibility to encourage walking, cycling and use of public transport';
- Policy DM16: Sustainable Design and Construction: Provisions within this policy have potential to reduce atmospheric pollution contributions; and,
- Policy DM17: Stand-alone Renewable Energy: The provision of renewable energy has the ability to reduce atmospheric pollution contributions.

9.14 Given that these policies form a protective framework to help to reduce atmosphere pollution contributions and that according to APIS background nitrogen deposition rates at the SAC are improving it is likely that a conclusion of no adverse effect in integrity on this European site will be possible, however detailed traffic and air quality modelling will be required to support conclusions. .

Further Steps

9.15 To fully inform the HRA process it is recommended that air quality modelling is undertaken of the road link on the A3 at Butser Hill to determine the NOx contributions at the SAC from the Local Plan Review, both alone and in combination.

10. Kingley Vale SAC

Introduction

10.1 The Kingley Vale SAC comprises 208ha of chalk grassland, scrub, mixed oak *Quercus* sp. and ash woodland and ancient yew forest. The reserve is a steep sided dry valley, the bottom of which is covered in ancient yew forest. The slopes of the valley support up to 50 species of flowering plant and grasses per square metre.

Reasons for Designation⁷³

10.2 The Kingley Vale valley qualifies as a SAC due to the following Annex I habitats:

- Semi-natural dry grasslands and scrubland facies: on calcareous substrates *Festuco-Brometalia* for which the area is considered to support a significant presence;
- Yew-dominated woodland for which this is considered to be one of the best areas in the UK.

Conservation Objectives⁷⁴

10.3 *'With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;*

10.4 *Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;*

- *The extent and distribution of qualifying natural habitats and habitats*
- *The structure and function (including typical species) of qualifying natural habitats, and*
- *The supporting processes on which qualifying natural habitats rely'*

Historic Trends and Current Pressures

10.5 The long-term conservation of the yew forest requires the maintenance of nurse scrub habitat and the regulation of numbers of resident deer. Current management practices address these problems. The threat to characteristic chalk grassland of scrub invasion is considered to be adequately countered by the cutting and grazing regimes currently employed.

10.6 The key vulnerabilities to the SAC are:

- Over grazing by deer
- Scrub invasion
- Management of cutting and grazing regimes
- Atmospheric pollution

Potential Effects Linking to the Local Plan Review

10.7 The screening assessment undertaken in the tables in Appendix A identify that following policies and site allocation have the potential to link to this European designated site and result in likely significant effects. These are as follows:

⁷³ <http://incc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUcode=UK0012767> [accessed 15/10/2018]

⁷⁴ ⁷⁴ Natural England. European Site Conservation Objectives for Chichester and Langstone Harbours Special Protection Area (2014) Available: <http://publications.naturalengland.org.uk/publication/5789102905491456> [Accessed: 15/10/2018]
<http://publications.naturalengland.org.uk/file/6012259255975936> [accessed 12/15/10/2018]

Policies

- Policy S2: Settlement Hierarchy
- Policy S3: Development Strategy
- Policy S4: Meeting Housing Needs
- Policy S5: Parish Housing Requirements 2016-2035
- Policy S7: Meeting Gypsies, Travellers and Travelling Showpeoples' Needs
- Policy S8: Meeting Employment Land Needs
- Policy S9: Retail Hierarchy and Sequential Approach
- Policy S11: Addressing Horticultural Needs

Site Allocations

10.8 There are no site allocations within proximity of this SAC that could result in an adverse effect in integrity.

10.9 Potential linking impact pathways are as follows:

10.10 Atmospheric Pollution

Appropriate Assessment

Atmospheric Pollution

10.11 At its closest Kingley Vale SAC is 125m from the B2141. Given the distance from the road and its minor nature, NOx concentrations within the SAC are unsurprisingly currently below the critical level. At the time of writing (October 2018) no air quality modelling has been undertaken for this link road location. None the less the traffic modelling B2141 at Kingley Vale SAC to support the Local Plan Review is illustrated in Table 9.

Table 9: Traffic Modelling Data : B2141 at Kingley Vale SAC

Link Name – 2 way Links	2014 (Base Case)	2035 Core (Do Minimum)	2035 Scenario 1 (Do Something)	2035 Scenario 1 – Mitigated (Do Something Mitigated)
Link 2: B2142 - Kingley Vale SAC	4,868	7,391	7,626	7,480

10.12 The traffic modelling illustrated in Table 9 forecasts that the contribution of Scenario 1 Mitigated is an additional AADT of 89 beyond the Do Minimum contribution. In contrast to other modelled links this is a very small change in daily traffic movements (equivalent to less than 2% of baseline flows), probably due to the small role the B2141 plays in journey to work routes. very small changes to 24hr AADT flows (e.g. tens of AADT) are very unlikely to materially alter any air quality modelling results (and thus ecological effects), and would thus be essentially imperceptible, for two reasons:

- Firstly, daily traffic flows are not fixed numerals but fluctuate from day to day. The AADT for a given road is an annual average (specifically, the total volume of traffic for a year, divided by 365 days). It is this average number that is used in air quality modelling, but the 'true' flows on a given day will vary around this average figure. Small changes in average flow will lie well within the normal variation (known as the standard deviation or variance) and would not make a statistically significant difference in the total AADT; and
- Secondly, when converted into NOx concentrations, ammonia concentrations or nitrogen deposition rates, our experience is that very small changes in AADT (tens of AADT) would only affect the third decimal place. The third decimal place is never reported in air quality modelling to avoid false precision. For this reason, pollution is generally not reported to more than 2 decimal places (0.01). Anything smaller is simply reported as less than 0.01 (< 0.01) i.e. probably more than zero but too small to model with precision.

10.13 Nonetheless, the Local Plan Review provides the following policies that have the potential to reduce atmospheric pollution contributions stemming from development identified in the Local Plan Review:

- Policy DM24: Air Quality: This policy aims to improve air quality within the district of Chichester. This includes through traffic calming measure, Air Quality Management Areas and air quality assessments.
- Policy S41: Chichester City Transport Strategy: This policy provides for initiatives that go to reduce the use of private car use, such as the provision of additional bus lanes, improving bus and rail links and improving both cycle and pedestrian links and reduce traffic congestion;
- Policy 23: Transport and Accessibility: this policy identifies that development should be well located to reduce the need to travel and improve bus and train connectivity and improve the pedestrian and cycle networks, thus reducing atmospheric pollution contributions;
- Policy S32: Design Strategies for Strategic and Major Development Sites: this policy states: 'Proposals for housing allocations and major development sites must be accompanied by a site-wide design strategy that includes the following:... d. integrate with the surrounding built, historic and natural environments, in particular maximising existing and potential movement connections and accessibility to encourage walking, cycling and use of public transport';
- Policy DM16: Sustainable Design and Construction: Provisions within this policy have potential to reduce atmospheric pollution contributions; and,
- Policy DM17: Stand-alone Renewable Energy: The provision of renewable energy has the ability to reduce atmospheric pollution contributions.

10.14 Given the imperceptible nature of the forecast change in AADT that these policies form a protective framework to help to reduce atmosphere pollution contributions and that according to APIS background nitrogen deposition rates at the SAC are improving it is likely that a conclusion of no adverse effect in integrity on this European site will be possible.

11. Recommendations and Conclusions

Summary of Recommendations

Recreational Pressure

Chichester and Langstone Harbour European sites and Pagham Harbour European sites

11.1 The following recommended policy text changes are made to ensure full robustness of the Local Plan Review Policy Framework :

- Policy DM14: Caravan and Camping Sites: To ensure this policy provides a robust framework to ensure the protection of European sites, it is recommended that policy text is amended as follows:

'The degree of protection considered desirable in order to avoid disturbance to sensitive sites of ecological value (including ensure no adverse effects on integrity of sensitive European designated wildlife sites occurs) or to protect the tranquillity and character of the countryside, Chichester Harbour Area of Outstanding Natural Beauty and the setting of the National Park, Pagham Harbour and the undeveloped coast; and'

- Policy DM20: Development around the Coast: It is recommended that point 1 is amended as follows:
'1. There are no harmful effects on or net loss of nature conservation or areas of geological importance within the Chichester and Pagham Harbours and Medmerry Realignment (including no adverse effects on the associated European designated sites);
2. The development provides recreational opportunities that do not adversely affect the character, environment and appearance of the coast and Chichester Harbour Area of Outstanding Natural Beauty or result in adverse effects of integrity to European designated wildlife sites'

Loss of Functionally Linked Supporting Habitat for Birds

Chichester and Langstone Harbour European sites

11.2 The following recommended policy text changes are made to ensure full robustness of the Local Plan Review Policy Framework :

- Policy AL3: East of Chichester (Oving Parish): *'Be planned with special regard to the need to mitigate potential impacts on the Chichester Harbour SAC/SPA/Ramsar including contributing to any strategic access management issues, and potential for loss of functionally linked supporting habitat;'*
- Policy AL11: Hunston Parish: *' Be planned with special regard to the need to mitigate potential impacts of recreational disturbance on the Chichester Harbour SAC/SPA/Ramsar and Pagham Harbour SPA and Ramsar site and the Medmerry realignment including contributing to any strategic access management issues, loss of functionally linked supporting habitat, and water quality issues relating to runoff from a designated site. '*
- Policy AL13: Southbourne Parish: *'Provide mitigation to ensure the protection of the SPA, SAC and Ramsar site at Chichester Harbour including contributing to any strategic access management issues, loss of functionally linked supporting habitat and water quality issues relating to runoff into a European designated site. Ensure sufficient capacity within the relevant Wastewater Treatment Works before the delivery of development as required'*
- Policy AL8: East Wittering Parish: *'9.Demonstration that development would not, with mitigation if required, have an adverse impact on the Pagham Harbour SPA/Ramsar and the Medmerry realignment by reason of recreational disturbance or loss of functionally linked supporting habitat'*
- Policy AL9: Fishbourne Parish: *'Provide mitigation to ensure the protection of the SPA, SAC and Ramsar site at Chichester Harbour as a result of water quality issues relating to runoff into a designated site, and loss of functionally linked supporting habitat. Ensure sufficient capacity within the relevant Wastewater Treatment Works before the delivery of development as required'*

- Policy AL10: Chidham and Hambrook Parish: *'Provide mitigation to ensure the protection of the SPA, SAC and Ramsar site at Chichester Harbour as a result of water quality issues relating to runoff into a designated site, and loss of functionally linked supporting habitat'*

Pagham Harbour European sites

11.3 The following recommended policy text changes/ additions will be made in relation to site allocations/ policies that are relevant to specific settlements:

- Policy AL8: East Wittering Parish: *'9.Demonstration that development would not, with mitigation if required, have an adverse impact on the Pagham Harbour SPA/Ramsar and the Medmerry realignment by reason of recreational disturbance or loss of functionally linked supporting habitat'*
- Policy AL12: Land North of Park Farm, Selsey: *'Provide mitigation to ensure the protection of the SPA, SAC and Ramsar site at Pagham Harbour and the Medmerry realignment as a result of loss of supporting habitat'*

Water Quality

11.4 To ensure Policy S31: Wastewater in the Chichester Harbour and Pagham Harbour Wastewater Treatment Catchment areas provides robust protection of sensitive European sites, it is recommended that the wording of the first paragraph of the policy is amended as follows: *'Proposals for development in the catchment should be able to demonstrate no adverse effect on the integrity of Chichester Harbour and Pagham Harbour as a result of water quality.'*

Other Plans and Projects

11.5 As discussed earlier in this Document, a full analysis of the impacts of the Chichester Local Plan in combination with other plans and projects was made as part of that HRA report. Some of the impact pathways already discussed in this document (particularly the recreational pressure analyses) are inherently 'in combination' since they only arise when development across the core catchments of Chichester and Langstone Harbour and Pagham Harbour are considered cumulatively.

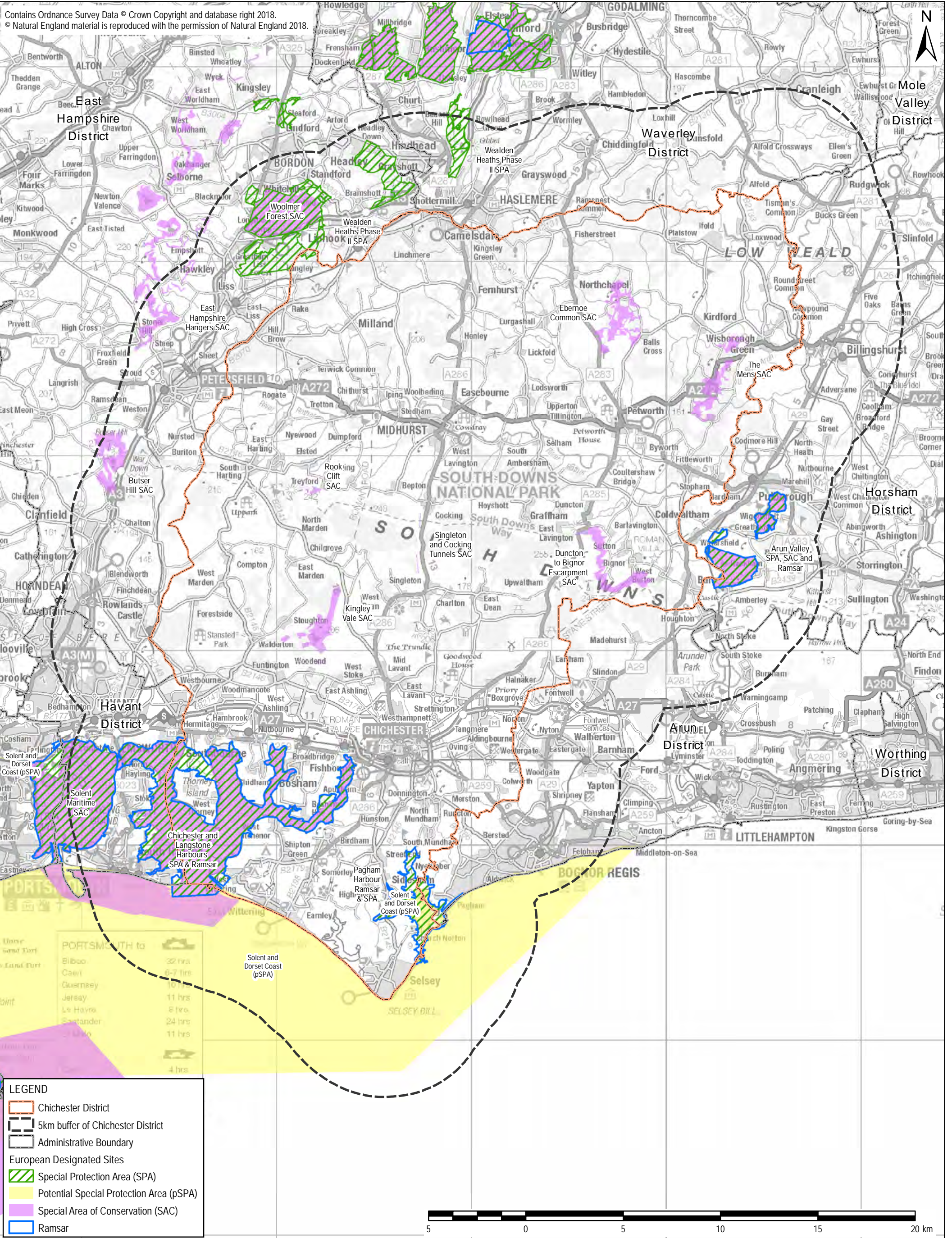
Next Steps

11.6 To fully inform the HRA process it is recommended that air quality modelling is undertaken of the road link on the A3 at Butser Hill, A283 at Ebernoe Common SAC and A272 at The Mens SAC are undertaken to determine the NOx contributions at the SAC from the Local Plan Review, both alone and in combination.

Overall Conclusion

11.7 With the inclusion of the above recommendations and undertaking the recommended 'Next Steps', it can be concluded that the Chichester Local Plan review will not have an adverse effect on integrity of European designated sites, in isolation or in combination.

Appendix A Figures



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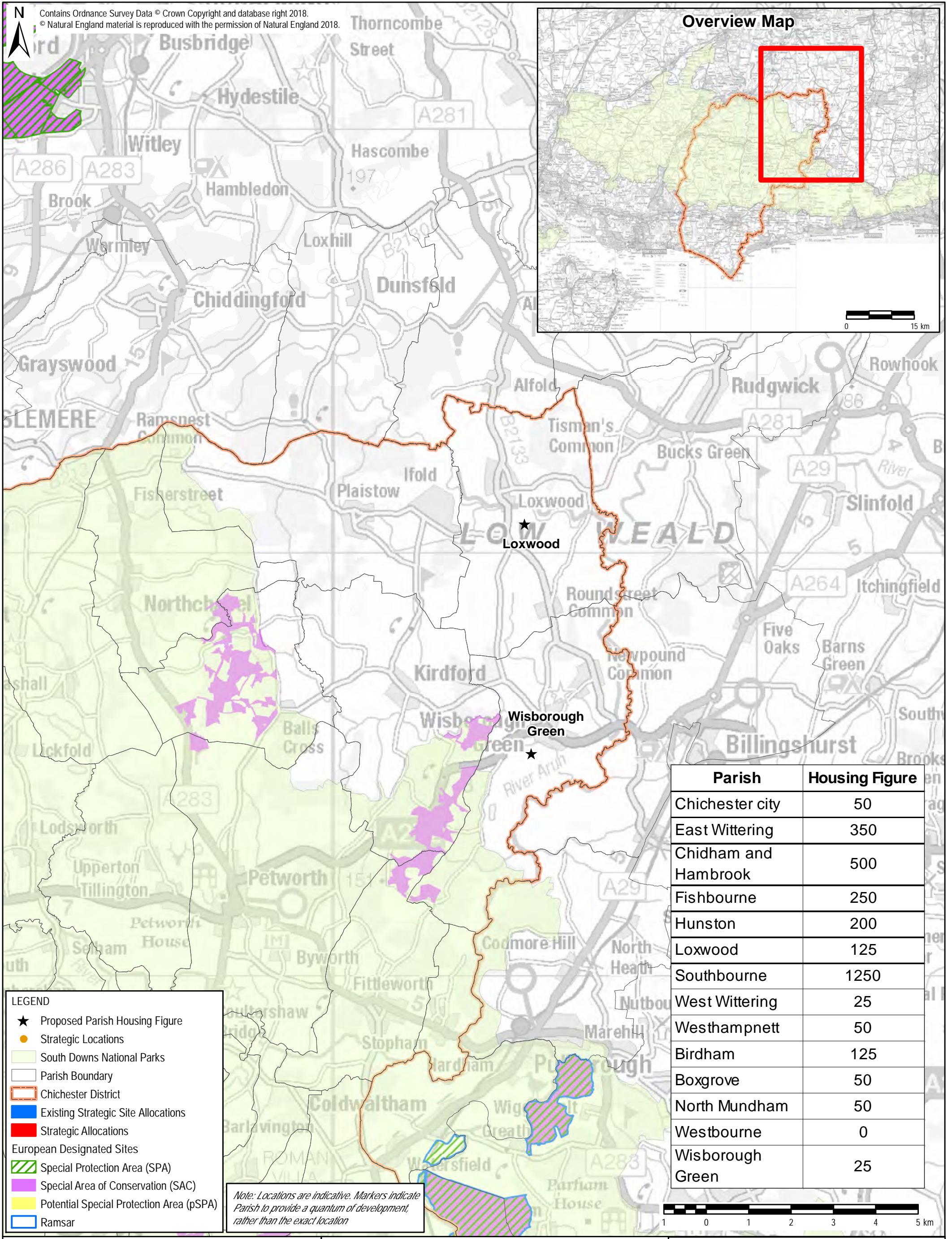
PORTSMOUTH to	
Elbow	32 hrs
Caer	6-7 hrs
Guernsey	16 hrs
Jersey	11 hrs
Le Havre	8 hrs
Santander	24 hrs
St. Udo	11 hrs
4 hrs	

LEGEND

- Chichester District
- 5km buffer of Chichester District
- Administrative Boundary
- European Designated Sites**
- Special Protection Area (SPA)
- Potential Special Protection Area (pSPA)
- Special Area of Conservation (SAC)
- Ramsar

Project Title/Drawing Title		Client		AECOM	
CHICHESTER LOCAL PLAN REVIEW HRA		CHICHESTER DISTRICT COUNCIL		Midpoint	
EUROPEAN DESIGNATED SITES		Drawn	Checked	Approved	Alençon Link, Basingstoke Hampshire, RG21 7PP Telephone (01256) 310200 Fax (01256) 310201 www.aecom.com
		JW	AK	JR	
		Date	Scale @ A3	Purpose of Issue	
		16/10/2018	1:175,000	DRAFT	
		Drawing Number	Rev		
		FIGURE 1			THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

File Name: K:\15004 - Information Systems\Local Plan Review\02_Maps\Figure 1 European Designated Sites.mxd



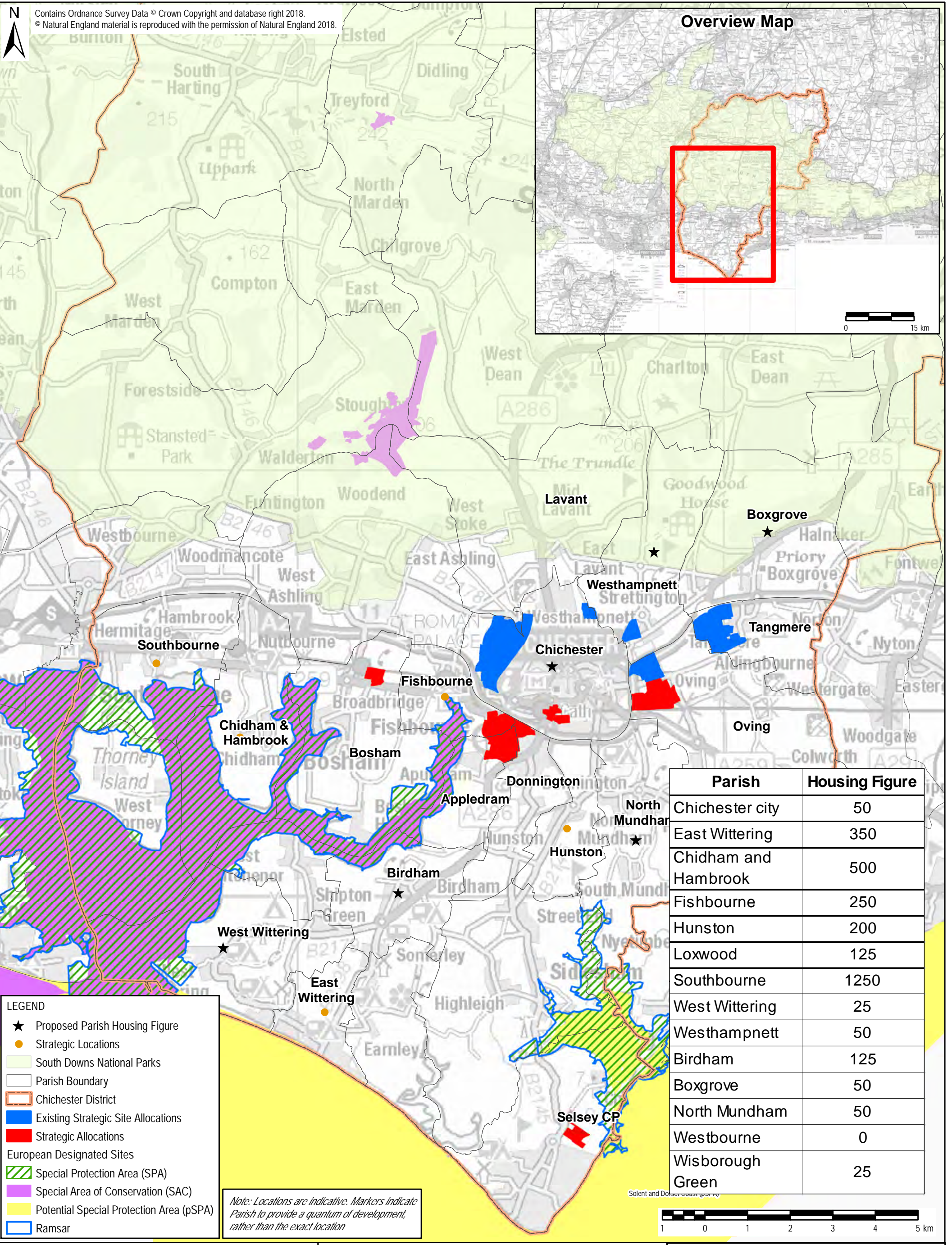
Parish	Housing Figure
Chichester city	50
East Wittering	350
Chidham and Hambrook	500
Fishbourne	250
Hunston	200
Loxwood	125
Southbourne	1250
West Wittering	25
Westhampnett	50
Birdham	125
Boxgrove	50
North Mundham	50
Westbourne	0
Wisborough Green	25

- LEGEND**
- ★ Proposed Parish Housing Figure
 - Strategic Locations
 - South Downs National Parks
 - Parish Boundary
 - Chichester District
 - Existing Strategic Site Allocations
 - Strategic Allocations
 - European Designated Sites
 - Special Protection Area (SPA)
 - Special Area of Conservation (SAC)
 - Potential Special Protection Area (pSPA)
 - Ramsar

Note: Locations are indicative. Markers indicate Parish to provide a quantum of development, rather than the exact location

File Name: C:\Users\munshia\Desktop\Figure 2 Location of Site Allocations_v4.mxd

Project Title/Drawing Title		Client		AECOM	
CHICHESTER LOCAL PLAN REVIEW HRA		CHICHESTER DISTRICT COUNCIL		Midpoint	
LOCATION OF STRATEGIC ALLOCATIONS		Drawn JW	Checked AK	Approved JR	Alençon Link, Basingstoke Hampshire, RG21 7PP
		Date 09/11/2018	Scale @ A3 1:80,000	Purpose of Issue DRAFT	Telephone (01256) 310200 Fax (01256) 310201 www.aecom.com
		Drawing Number FIGURE 2		Rev	



Parish	Housing Figure
Chichester city	50
East Wittering	350
Chidham and Hambrook	500
Fishbourne	250
Hunston	200
Loxwood	125
Southbourne	1250
West Wittering	25
Westhampnett	50
Birdham	125
Boxgrove	50
North Mundham	50
Westbourne	0
Wisborough Green	25

- LEGEND**
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Drawn JW		Checked AK	Approved JR			
Date 09/11/2018		Scale @ A3 1:80,000	Purpose of Issue DRAFT			
Drawing Number FIGURE 2			Rev		THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.	

Appendix B Likely Significant Effects Test of Policies and Strategic Site Allocations of the Chichester Local Plan Review

Table 10: Likely Significant Effects Test of Policies of the Chichester Local Plan Review

Where an impact pathway is coloured green in the HRA Implications column, there is considered to be no linking impact pathway present and this policy can be screened out from further consideration alone. Where an impact pathway is coloured orange in the HRA Implications column, there is considered to be potential for this linking impact pathway to be present and this policy can be screened out from further consideration alone and is discussed further within the report.

Policy	Brief summary (refer to the Chichester Local Plan Review for actual policy text)	HRA Implications						
Policy S1: Presumption in Favour of Sustainable Development	<p>When considering development proposals the Council will take a positive approach that reflect the presumption in favour of sustainable development contained in the National Planning Policy Framework.</p> <p>Where there are no policies relevant to the application or relevant policies are out of date at the time of making the decision then the Council will grant permission unless material considerations indicate otherwise – taking into account whether:</p> <ol style="list-style-type: none"> Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole; or Specific policies in that Framework indicate that development should be restricted. 	<p>No Likely Significant Effect</p> <p>This policy encourages sustainable development outlined by the NPPF. In doing this policy ensures that the impact of development upon Local Conservation Areas and Special Protected Area. Only in exception circumstances will permission be granted, although, proposals will be subject to considerable policy constraint and is therefore managed to reduced environmental impact.</p>						
Policy S2: Settlement Hierarchy	<p>The Settlement Hierarchy sets out a framework for the Council to achieve its vision for the Plan area meet the scale of development required and enhance the quality of the built, natural, historic, social and cultural environments, while sustaining the vitality of communities.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Settlement Type</th> <th>Communities</th> </tr> </thead> <tbody> <tr> <td>Sub-Regional Centre</td> <td>Chichester city</td> </tr> <tr> <td>Settlement Hubs</td> <td>East Wittering / Bracklesham Selsey Southbourne Tangmere</td> </tr> </tbody> </table>	Settlement Type	Communities	Sub-Regional Centre	Chichester city	Settlement Hubs	East Wittering / Bracklesham Selsey Southbourne Tangmere	<p>Likely significant Effect</p> <p>This policy sets out the framework for the delivery of new development in the plan area</p> <p>It is noted that this policy does not identify any quantum, type or exact location of development.</p> <p>Since a number of these settlements are located within the influence catchment of European Sites, which includes Chichester & Langstone Harbours SPA/Ramsar, Pagham Harbour SPA/Ramsar and Solent Maritime SAC, Ebernoe Common SAC and The Mens SAC there are potential linking impact pathways present, notably relating to recreational</p>
Settlement Type	Communities							
Sub-Regional Centre	Chichester city							
Settlement Hubs	East Wittering / Bracklesham Selsey Southbourne Tangmere							

	Service Villages	Birdham, Bosham, Boxgrove, Camelsdale / Hammer, Fishbourne, Hambrook / Nutbourne, Hermitage, Hunston, Kirdford, Loxwood, North Mundham / Runcton, Plaistow / Ifold, Stockbridge, West Wittering, Westbourne, Westhampnett, Wisborough Green.	pressure, loss of functionally linked supporting habitat, hydrology and air quality. As such this policy cannot be screened out and will be subject to Appropriate Assessment.								
	Rest of the Plan area	Small villages, hamlets, scattered development and countryside									
Policy S3: Development Strategy	<p>The development strategy identifies the broad approach to providing sustainable development in the plan area. It seeks to spread development across the Plan area:</p> <ul style="list-style-type: none"> • Focus the majority of planned sustainable growth at Chichester and within the east-west corridor, • Reinforce the role of Manhood Peninsula as a home to existing communities, tourism and agricultural enterprise, • Where opportunities arise support the thriving villages and rural communities in the north of the Plan Area <p>To help achieve sustainable growth the Council will:</p> <p>a. Ensure that new residential development is distributed in line with the settlement hierarchy, with a greater proportion of development in the larger and more sustainable settlements:</p> <table border="1" data-bbox="389 738 1476 1283"> <thead> <tr> <th data-bbox="389 738 810 802"></th> <th data-bbox="810 738 1476 802">Strategic Development Location</th> </tr> </thead> <tbody> <tr> <td data-bbox="389 802 810 1007">Within or adjacent to the sub regional centre of Chichester City</td> <td data-bbox="810 802 1476 1007">Shopwyke (Policy AL2); West of Chichester (Policy AL1) Westhampnett (Policy AL4) East of Chichester (Policy AL3) Southern Gateway (Policy AL5) South-west of Chichester (Policy AL6)</td> </tr> <tr> <td data-bbox="389 1007 810 1145">At the following settlement hubs</td> <td data-bbox="810 1007 1476 1145">Southbourne (Policies AL13); Tangmere (Policy AL 14); Selsey (Policy AL12); East Wittering (Policy AL8);</td> </tr> <tr> <td data-bbox="389 1145 810 1283">At the following Service Villages</td> <td data-bbox="810 1145 1476 1283">Bosham (PolicyAL7) Fishbourne (Policy AL9) Chidham and Hambrook Parish (AL10) Hunston (Policy AL11)</td> </tr> </tbody> </table> <p>b. In addition to the above allocations, non-strategic provision is made for the following forms of development in service villages:</p>			Strategic Development Location	Within or adjacent to the sub regional centre of Chichester City	Shopwyke (Policy AL2); West of Chichester (Policy AL1) Westhampnett (Policy AL4) East of Chichester (Policy AL3) Southern Gateway (Policy AL5) South-west of Chichester (Policy AL6)	At the following settlement hubs	Southbourne (Policies AL13); Tangmere (Policy AL 14); Selsey (Policy AL12); East Wittering (Policy AL8);	At the following Service Villages	Bosham (PolicyAL7) Fishbourne (Policy AL9) Chidham and Hambrook Parish (AL10) Hunston (Policy AL11)	<p>Likely Significant Effect</p> <p>This policy is similar to the Settlement Hierarchy Policy described above as the overall aim to concentrate development within Chichester city and the east-west corridor thereby reducing residential, retail and employment development pressure upon the surrounding towns and villages. This policy also identifies policies that allocate both residential and employment development</p> <p>Potential linking impact pathways present include:</p> <ul style="list-style-type: none"> • Recreational pressure • Atmospheric pollution • Changes to hydrological conditions • Loss of functionally linked supporting habitat
	Strategic Development Location										
Within or adjacent to the sub regional centre of Chichester City	Shopwyke (Policy AL2); West of Chichester (Policy AL1) Westhampnett (Policy AL4) East of Chichester (Policy AL3) Southern Gateway (Policy AL5) South-west of Chichester (Policy AL6)										
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At the following Service Villages	Bosham (PolicyAL7) Fishbourne (Policy AL9) Chidham and Hambrook Parish (AL10) Hunston (Policy AL11)										

	<p>a. Small scale housing developments consistent with the indicative housing numbers set out in Policy xx;</p> <p>b. Local community facilities, including village shops, that meet identified needs within the village, neighbouring villages and surrounding smaller communities, and will help make the settlement more self-sufficient; and</p> <p>c. Small scale employment, tourism or leisure proposals.</p> <p>To ensure that the Council delivers its housing target, the distribution of development may need to be flexibly applied, within the overall context of seeking to ensure that the majority of new housing is developed at sub regional centre and settlement hubs where appropriate and consistent with other policies in this plan. Any changes to the distribution will be clearly evidenced and monitored through the Annual Monitoring Report.</p>																																							
<p>Policy S4: Meeting Housing Needs</p>	<p>The housing target for the Plan Area is to provide for at least 12,350 dwellings to be delivered in the period 2016-2035. The broad sources of supply anticipated in this Plan are as follows:</p> <table border="1" data-bbox="322 512 1473 932"> <thead> <tr> <th colspan="2">Category</th> <th>Number of dwellings (minimum)</th> </tr> </thead> <tbody> <tr> <td colspan="2">Housing requirement for the full Plan period (1 April 2016 to 31 March 2035)</td> <td>12,350</td> </tr> <tr> <td colspan="2">Housing completions (1 April 2016 to 31 March 2017)</td> <td>439</td> </tr> <tr> <td rowspan="6">Housing supply (1 April 2017 to 31 March 2035)</td> <td>Known commitments (<i>comprising</i>)</td> <td>6,444</td> </tr> <tr> <td><i>Outstanding adopted LP allocations without pp</i></td> <td>1,950</td> </tr> <tr> <td><i>Outstanding 'made' NP allocations without pp</i></td> <td>189</td> </tr> <tr> <td><i>Planning permissions as of 1 April 2017</i></td> <td>4305</td> </tr> <tr> <td>Proposed Strategic Locations/Allocations</td> <td>4,400</td> </tr> <tr> <td>Parish Housing Requirements</td> <td>500</td> </tr> <tr> <td></td> <td>Windfall (small site allowance)</td> <td>695</td> </tr> <tr> <td colspan="2">Total supply for the full Plan period (1 April 2016 to 31 March 2035)</td> <td>12,478</td> </tr> </tbody> </table> <p>The broad spatial distribution of this supply of housing across the different plan areas is indicated in the table below:</p> <table border="1" data-bbox="322 995 904 1203"> <thead> <tr> <th>Sub-Area</th> <th>Housing provision 2016-2035</th> </tr> </thead> <tbody> <tr> <td>East-West Corridor</td> <td>10,056</td> </tr> <tr> <td>Manhood Peninsula</td> <td>1,933</td> </tr> <tr> <td>North of Plan Area</td> <td>489</td> </tr> <tr> <td>Plan Area Total</td> <td>12,478</td> </tr> </tbody> </table>	Category		Number of dwellings (minimum)	Housing requirement for the full Plan period (1 April 2016 to 31 March 2035)		12,350	Housing completions (1 April 2016 to 31 March 2017)		439	Housing supply (1 April 2017 to 31 March 2035)	Known commitments (<i>comprising</i>)	6,444	<i>Outstanding adopted LP allocations without pp</i>	1,950	<i>Outstanding 'made' NP allocations without pp</i>	189	<i>Planning permissions as of 1 April 2017</i>	4305	Proposed Strategic Locations/Allocations	4,400	Parish Housing Requirements	500		Windfall (small site allowance)	695	Total supply for the full Plan period (1 April 2016 to 31 March 2035)		12,478	Sub-Area	Housing provision 2016-2035	East-West Corridor	10,056	Manhood Peninsula	1,933	North of Plan Area	489	Plan Area Total	12,478	<p>Likely Significant Effect</p> <p>This policy identifies the quantum of residential development to be provided within the District. Potential linking impact pathways present include:</p> <ul style="list-style-type: none"> • Recreational pressure • Atmospheric pollution • Changes to hydrological conditions <p>Loss of functionally linked supporting habitat</p>
Category		Number of dwellings (minimum)																																						
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<p>Policy S5: Parish Housing Requirements 2016-2035</p>	<p>Small scale housing sites will be identified to help provide for the needs of local communities in accordance with the parish housing numbers set out below. Suitable sites will be identified either through neighbourhood plans or subsequent development plan document.</p> <table border="1" data-bbox="539 1342 1256 1375"> <tr> <td>Parish</td> <td>Housing</td> <td>Parish</td> <td>Housing</td> </tr> </table>	Parish	Housing	Parish	Housing	<p>Likely Significant Effect</p> <p>This policy identifies the quantum of housing within the villages, towns and cities of Chichester District Council.</p>																																		
Parish	Housing	Parish	Housing																																					

		Figure		Figure	
	Apuldram*	0	Birdham	125	<p>Potential linking impact pathways present include:</p> <ul style="list-style-type: none"> • Recreational pressure • Atmospheric pollution • Changes to hydrological conditions • Loss of functionally linked supporting habitat
	Bosham*	0	Boxgrove	50	
	Chichester city	50	Chidham and Hambrook*	0	
	Donnington*	0	Earnley	0	
	East Wittering*	0	Fishbourne*	0	
	Funtington	0	Hunston*	0	
	Itchenor	0	Kirdford	0	
	Lavant	0	Loxwood	125	
	Lynchmere	0	North Mundham*	50	
	Oving*	0	Plaiستow and Ifold	0	
	Selsey*	0	Sidlesham	0	
	Southbourne*	0	Tangmere*	0	
	West Wittering	25	Westbourne	0	
	Westhampnett	50	Wisborough Green	25	
			Total	500	
Policy S6: Affordable Housing	<p>A 30% affordable housing contribution will to be sought as part of residential development where there is a net increase of dwellings.</p> <ol style="list-style-type: none"> 1. On all sites of 11 dwellings or more, affordable dwellings should be provided on site.. If it can be demonstrated that affordable housing may not be appropriate, development of affordable dwellings on another site may be considered. If this is not achievable, as a last resort and in exceptional circumstances only, the Council will seek a financial contribution to enable provision of affordable homes elsewhere within the plan area; 2. On sites of 6 to 10 dwellings in areas designated as rural areas as shown on Map *** above, the Council will seek a financial contribution for the provision of affordable dwellings as a commuted sum,. 3. Where the affordable housing calculation results in fractions of homes, the fraction will be sought as a commuted sum, 4. Where developers are unable to meet the requirements of the delivery of affordable housing, the Council will expect the requirements of criterion 4 to be demonstrated through an 'open book' process. An independent valuer appointed by the Council, at the developer's cost, will provide an independent viability assessment. 5. The affordable housing element will be provided on the following basis: <ol style="list-style-type: none"> a. It is proportionate. Like for like basis in terms of housing size and type, with a minimum of two bedrooms, unless the latest housing needs survey evidence indicates otherwise; b. It is built to a minimum of the Nationally Described Space Standards or subsequent guidance if this has been superseded 6. A vacant building credit may be applied where it can be demonstrated that qualifying buildings are vacant. Whether a building is genuinely vacant will be determined on a site by site basis. The NPPG states that the vacant building credit will not apply when: 				<p>No Likely Signiant Effect</p> <p>A development management policy relating to provision of affordable housing . There are no linking impact pathways present.</p>

	<p>a. The building has been made vacant for the sole purpose of redevelopment.</p> <p>Where the building is covered by an extant or recently expired planning permission for the same or substantially the same development.</p>																													
<p>Policy S7: Meeting Gypsies, Travellers and Travelling Showpeoples' Needs</p>	<p>The Gypsy, Traveller and Travelling Showpeople Assessment identifies the potential need for permanent pitches and plots for the period 2018 to 2035 as:</p> <ul style="list-style-type: none"> • 91 additional permanent residential Gypsy and Traveller pitches of which 66 pitches are required before 2023; and • 28 additional plots for Travelling Showpeople, of which 18 are required before 2023. <p>Where there is a shortfall in provision, sites will be allocated within a Site Allocation DPD. The Council's annual monitoring will ensure provision is provided at the appropriate time.</p> <p>The following sequential approach will be applied when considering proposals for new Gypsy, Traveller and Travelling Showpeople provision, in the following order:</p> <ol style="list-style-type: none"> 1. Existing identified permitted sites, which could provide additional provision through intensification and/or improved orientation; then 2. Existing identified permitted sites which could provide additional provision through appropriate extension; then 3. Sites within existing settlement boundaries or strategic development locations. <p>Existing traveller sites will be safeguarded for traveller use. These sites will continue to be safeguarded for as long as the need exists for traveller accommodation in the Plan Area.</p>	<p>Likely Significant Effect</p> <p>This policy identifies a quantum of permanent residential Gypsy and Traveller pitches. It is noted that no location is identified.</p> <p>Dependant on the location of the sites potential linking impact pathways present include:</p> <ul style="list-style-type: none"> • Recreational pressure • Atmospheric pollution • Changes to hydrological conditions • Loss of functionally linked supporting habitat 																												
<p>Policy S8: Meeting Employment Land Needs</p>	<p>Provisions will be made for a net additional 145,835 sqm of new floorspace for uses in the B Use Classes (B1,B2 and B8), in addition to other employment-generating uses, through the following sources of supply:</p> <table border="1" data-bbox="322 890 1469 1375"> <thead> <tr> <th colspan="2">Category</th> <th>Floorspace (m2)</th> </tr> </thead> <tbody> <tr> <td colspan="3">Employment floorspace requirement for the full Plan period (1 April 2016 to 31 March 2035)</td> </tr> <tr> <td colspan="2"><i>Identified need from HEDNA</i></td> <td>145,835</td> </tr> <tr> <td colspan="2"><i>Allowance for potential future losses</i></td> <td>86,000</td> </tr> <tr> <td colspan="2">Floorspace to make provision for (1 April 2016 to 31 March 2035)</td> <td>231,835</td> </tr> <tr> <td colspan="3">Identified sources of supply</td> </tr> <tr> <td colspan="2">Employment floorspace completions (1 April 2016 to 31 March 2017)</td> <td>-1,819</td> </tr> <tr> <td rowspan="3">Floorspace supply (1 April 2017 to 31 March 2035)</td> <td>Permissions</td> <td>15,313</td> </tr> <tr> <td>Allocations in Site Allocations DPD</td> <td>1989</td> </tr> <tr> <td>Proposed allocations in this Plan (see Chapter xx)</td> <td>219,700)</td> </tr> </tbody> </table>	Category		Floorspace (m2)	Employment floorspace requirement for the full Plan period (1 April 2016 to 31 March 2035)			<i>Identified need from HEDNA</i>		145,835	<i>Allowance for potential future losses</i>		86,000	Floorspace to make provision for (1 April 2016 to 31 March 2035)		231,835	Identified sources of supply			Employment floorspace completions (1 April 2016 to 31 March 2017)		-1,819	Floorspace supply (1 April 2017 to 31 March 2035)	Permissions	15,313	Allocations in Site Allocations DPD	1989	Proposed allocations in this Plan (see Chapter xx)	219,700)	<p>Likely Significant Effect</p> <p>This policy outlines the net sum of employment space to be delivered within the Chichester District. It does not provide the sites allocations for these employment units, rather the total sum of floorspace to be allocated within the District.</p> <p>Dependant on the location of the new employment space potential linking impact pathways present include:</p> <ul style="list-style-type: none"> • Atmospheric pollution • Changes to hydrological conditions • Loss of functionally linked supporting habitat
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	<p>Total supply for the full Plan period (1 April 2016 to 31 March 2035)</p>	<p>235,182</p>	
<p>Policy S9: Retail Hierarchy and Sequential Approach</p>	<p>Proposals for significant new office development will be encouraged in Chichester city centre with smaller-scale office developments supported in other settlements.</p> <p>For the period up to 2026 provision will be made for 9,500 sq.m (gross) of comparison retail floorspace at Chichester city, through provision at Southern Gateway and other opportunity sites, taking account of the sequential test.</p> <p>The vitality and viability of the city and local centres, local and village parades will be maintained and enhanced. The existing network will form the focal point for uses, services, and facilities serving the surrounding population. The scale, character and role of the centres define their position within the hierarchy. The network of centres within the district is as follows:</p> <ul style="list-style-type: none"> • Chichester City centre (defined as Town Centre on the policies map); • Selsey and East Wittering (defined as 'Local Centres' as shown on the policies map); and • Bracklesham, Southbourne, Tangmere, Bosham and Westbourne ('Village Centre to be defined in the neighbourhood plans or subsequent DPD). <p>Proposals for main town centre uses outside a defined city or local centre must be subject to an impact assessment where the floorspace of the proposed development exceeds the following thresholds:</p> <ul style="list-style-type: none"> • Chichester City centre: over 2,500 sqm gross floorspace. • Local centres: over 500 sqm gross floorspace. • Village centres: over 250 sqm gross floorspace. 	<p>Likely Significant Effect</p> <p>This policy identifies broad locations for new retail development</p> <p>Dependant on the exact location of the new employment space, potential linking impact pathways present include:</p> <ul style="list-style-type: none"> • Atmospheric pollution • Changes to hydrological conditions • Loss of functionally linked supporting habitat 	
<p>Policy S10: Local Centres, Local and Village Parades</p>	<p>Proposals for development will be encouraged where they would contribute to the vitality and viability of Local Centre, Local and Village Parades. Planning permission will be granted for development proposals that:</p> <ol style="list-style-type: none"> Provide small-scale retail uses (Use Classes A1 to A5), contributing to the vitality and viability of the area; Support small and independent businesses; and Proposals provide an active retail frontage use at ground floor and maximise opportunities for residential, leisure and office development above ground floor units where appropriate. <p>Where sites cannot be found within the local centres and Local / Village Parades, consideration will be given to proposals on edge of centre sites.</p> <p>For town centre uses outside of the designated Town, Local Centres and Local / Village Parades, planning permission will be granted where either:</p> <ol style="list-style-type: none"> The net sales area is 250 sqm or less; or It has been demonstrated that there are no other sequentially preferable sites within or on the edge of Local Centres and Local / Village Parades <p>In the Local Centres, Local and Village Parades and other existing local centres, parades and isolated shops, retail uses will be protected. Planning permission for other uses will be granted where it has been demonstrated that all the following</p>	<p>No Likely Significant Effect</p> <p>This policy does not designate areas within Chichester for development. Rather this policy provides development management policy.</p> <p>There are no linking impact pathways present.</p>	

	<p>criteria have been met:</p> <ol style="list-style-type: none"> 1. The proposal does not result in the reduction of shopping facilities; or 2. There is no demand for continued retail use and the site has been marketed effectively for such use or no local need has been identified. 							
<p>Policy S11: Addressing Horticultural Needs</p>	<p>To support the growth of the horticultural industry within the plan area, specific provision will be made for a maximum of 228,000 sq.m of additional floorspace for glasshouse, packhouse and polytunnel development, through the following sources of supply:</p> <table border="1" data-bbox="322 499 1357 667"> <thead> <tr> <th>Category</th> <th>Floorspace (m2)</th> </tr> </thead> <tbody> <tr> <td>Maximum horticultural floorspace requirement for the full Plan period (April 2016 to March 2035)</td> <td>228,000</td> </tr> <tr> <td>Committed supply of horticultural floorspace within Tangmere & Runcton HDA (permissions granted April 2016 to March 2018)</td> <td>68,000</td> </tr> </tbody> </table> <p>Large scale horticultural glasshouses will continue to be focused within the existing Horticultural Development Areas at Tangmere and Runcton. The Sidlesham and Almodington Horticultural Development Areas will continue to be the focus for smaller scale horticultural glasshouses.</p> <p>The anticipated residual requirement of 68,000 of the maximum floorspace requirement will be kept under review during the plan period with.</p>	Category	Floorspace (m2)	Maximum horticultural floorspace requirement for the full Plan period (April 2016 to March 2035)	228,000	Committed supply of horticultural floorspace within Tangmere & Runcton HDA (permissions granted April 2016 to March 2018)	68,000	<p>Likely Significant Effects</p> <p>This policy provides for 228,000sq.m of additional horticultural development. This will be focused around Tangmere, Runcton, Sidlesham and Almodington.</p> <p>Potential linking impact pathways include:</p> <ul style="list-style-type: none"> • Atmospheric pollution • Changes to hydrological conditions • Loss of functionally linked supporting habitat
Category	Floorspace (m2)							
Maximum horticultural floorspace requirement for the full Plan period (April 2016 to March 2035)	228,000							
Committed supply of horticultural floorspace within Tangmere & Runcton HDA (permissions granted April 2016 to March 2018)	68,000							
<p>Policy S12: Infrastructure Provision</p>	<p>Development and infrastructure provision will be coordinated to ensure that growth is supported by the timely provision of adequate infrastructure, facilities and services. The Infrastructure Delivery Plan will be used to identify the timing, type and number of infrastructure requirements to support the objectives and policies of the Plan as well as the main funding mechanisms and lead agencies responsible for their delivery.</p> <p>All development will be required to meet all the following criteria:</p> <ol style="list-style-type: none"> 1. Make effective use of existing infrastructure, facilities and services, including opportunities for co-location and multi-functional use of facilities; 2. Provide or fund new infrastructure, facilities or services required, both on and off-site, (including full fibre communications infrastructure) as a consequence of the proposal; 3. Safeguard the requirements of infrastructure providers, including but not limited to: <ul style="list-style-type: none"> • electronic communications networks (particularly high speed broadband), • electricity power lines, • high pressure gas mains, • educational facilities, • health facilities, and • aquifer protection areas. 4. Facilitate accessibility to facilities and services by a range of transport modes; and 	<p>No Likely Significant Effects</p> <p>This is a positive delivery management policy relating to the provision of infrastructure. No type, location or quantum of development are identified.</p> <p>This is a positive policy in that it provides for the 'timely provision of adequate infrastructure, facilities and services'. This will include the requirement of sufficient capacity within waste water treatment works.</p> <p>There are no linking impact pathways present.</p>						

	<p>5. Where appropriate:</p> <ul style="list-style-type: none"> Phase development to coordinate with the delivery of necessary infrastructure, facilities and services; Provide for the future maintenance of infrastructure, facilities or services provided as a result of the development. 	
<p>Policy S13: Chichester City Development Principles</p>	<p>New development, infrastructure and facilities will be planned for Chichester city that enhance the city's role as a sub-regional centre and visitor destination, contribute to meeting local needs, and conserve and enhance the city's historic character and heritage. This will include provision for development and proposals that:</p> <ul style="list-style-type: none"> Support and strengthen the vitality and viability of the city centre and its role as a shopping/visitor destination and a place to live; Support and enhance the city's existing heritage, arts and cultural facilities; Enhance the city's existing heritage, arts and cultural facilities; Enhance the city's existing entertainment and leisure offer, including the 'evening economy'; Protect views of the cathedral; Provide or contribute towards improved facilities for education, health and other social and community uses; Enhance the character and distinctiveness of the city's local neighbourhoods; Provide or contribute towards an enhanced network of green infrastructure, including additional parks and amenity open space, outdoor sport pitches, recreational routes and access to natural green space; Support and promote improved access to the city and sustainable modes of travel in accordance with the transport strategy for the city; and Enhance the public realm, especially within the city centre and key routes in and out of the city. 	<p>No Likely Significant Effect</p> <p>This is a development management policy relating to Chichester City. It sets out the aesthetic character of development such as reflecting heritage, community and natural green spaces. No development is provided for and as such this policy can be screened out.</p>
<p>Policy S14: Chichester City Transport Strategy</p>	<p>The Council will work with West Sussex County Council and other relevant organisations to deliver an integrated transport strategy for Chichester city, taking account of existing and emerging studies of potential interventions to the highway and wider transport system.</p> <p>Currently identified measures include:</p> <ul style="list-style-type: none"> Initiatives to promote behavioural change in travel choices, including but not limited to travel plans, easy-to-use journey planning tools, skills training and promotional activities; Reviewing car parking provision, including encouraging use of peripheral car parks to reduce traffic in city centre and giving consideration to the introduction of parking restrictions along some arterial routes to improve traffic circulation (particularly for buses); Introducing bus lanes and bus priority measures along key routes (including the A259 Bognor Road approaching its junction with the A27); Reviewing and expanding the use of Variable Message Systems (VMS); Providing Real Time Passenger Information (RTPI) screens at key locations; Exploring potential options to provide an improved bus / rail interchange; Delivering strategic cycle routes linking the city centre, residential areas and key facilities, including proposed areas of new housing, employment and greenspace within and close to the city; Improvements to the pedestrian network within and around the city, including proposed areas of new development and greenspace; and 	<p>No Likely Significant Effect</p> <p>This is a development management policy relating to the provision of the Transport Strategy for Chichester City.</p> <p>This is a positive policy as it aims to improve the number of residents using public transport, cycling routes and pedestrian walkways, thus reducing atmospheric pollution.</p> <p>It is noted that the policy does identify schemes such as new bus lanes on the A259 and A27 and the exploration of options to reduce traffic congestion at exact locations, however the level of detail provided in this policy is insufficient to undertake HRA and this will be done at the scheme specific planning application stage.</p>

	<ul style="list-style-type: none"> Exploring potential options for reducing traffic congestion and improving safety at key junctions in the city, including the Northgate Gyratory, Southgate Gyratory and the junctions on Westhampnett Road. 	
<p>Policy S15: Goodwood Motor Circuit and Airfield</p>	<p>The Council is supportive of the role that Goodwood Motor Circuit and Airfield plays in the district's economy and in attracting visitors to the district. The Council will permit proposals for outdoor sport, recreation and leisure activities in connection or ancillary to the existing motor sport use at Goodwood Motor Circuit and Airfield, provided the proposal does not conflict with other policies of the Plan.</p> <p>The following criteria will also apply to such proposals:</p> <ol style="list-style-type: none"> The proposed development must not result in increased noise levels experienced by nearby residential properties over and above that already permitted; The character of the area should be retained and reinforced; The proposed development should be appropriate in scale and character to the existing uses or buildings; Any anticipated additional demand for traffic movements should be appropriately mitigated with opportunities for non-car based travel options secured and additional private vehicular traffic confined to utilising the existing access <p>The Council will continue to support the use of the site as an airfield. Proposals for airfield related development will be supported where it can be demonstrated that:</p> <ul style="list-style-type: none"> it represents the replacement of existing facilities on the site on a like-for-like basis in terms of size and scale; it ensures the ongoing safe and operational efficiency of the airfield; and it would not lead to an increased number of flights in excess of the existing legal agreement 	<p>No Likely Significant Effects</p> <p>This is a development management policy.</p> <p>It does not provide for any quantum or type of development at the Goodwood Motor Circuit and Airfield, but merely supports development that will support the district's economy and visitor attractions.</p> <p>There are no linking impact pathways present.</p>
<p>Policy S16: Development within vicinity of Goodwood Motor Circuit and Airfield</p>	<p>There is a general presumption against development proposals for noise-sensitive development within 400m of Goodwood Motor Circuit and Airfield, as defined on the proposals map. Where development for noise-sensitive development is proposed within this area, planning permission will only be granted where it can be clearly and robustly demonstrated that:</p> <ol style="list-style-type: none"> An acceptable level of amenity, by reason of expected experienced noise and disturbance, will be provided for the future occupiers of the noise-sensitive development within both internal and external areas of the development; and that the above levels of amenity are achieved without an adverse impact on the design and layout of the proposed development by reason of noise mitigation measures. <p>In considering the above, the Council will be mindful of the particular noise characteristics typically emanating from the site.</p>	<p>No Likely Significant Effect</p> <p>Documented within Chichester District Council's Adopted Local Plan is the provision of development within 400m of Goodwood Motor Circuit and Airfield. Only in exceptional circumstances would development within this area be granted. As such it is conserved that this policy would not have likely significant effects to the integrity of European Sites within Chichester. This policy is therefore screened out of further discussion.</p>
<p>Policy S17: Thorney Island</p>	<p>Proposals for new development and changes of use at the military base and airfield at Thorney Island which help enhance or sustain its operational military capability will be supported. Development proposals within the vicinity of Thorney Island will be expected to demonstrate that they will not adversely affect the operation of the military base and airfield.</p> <p>Should Thorney Island cease to be required for military purposes, assessment of potential alternative uses will be considered through a masterplanning process which takes into account the location, characteristics and designations</p>	<p>No Likely Significant Effect</p> <p>Thorney Island is an active military base and airfield and it is the Council's view to support the Ministry of Defence for its continued operation.</p>

	<p>affecting the Island.</p> <p>All development proposals should seek to enhance the overall character of the Island, mitigate any adverse impacts on local infrastructure, not erode the character of the surrounding area and take opportunities to increase public access. Particular regard will be given to the environmental sensitivity of the location within the Chichester Harbour AONB and the proximity of the Chichester Harbour SAC/SPA/Ramsar.</p> <p>Development proposals for aviation and noisy sports uses are unlikely to be considered acceptable.</p> <p>All proposals must ensure that the cultural and historical significance of the military facilities (and any other significant archaeological assets) located on the site, are understood and inform the scope of future development of that site.</p>	<p>The policy describes that should development be required for site expansion this will be considered in conjunction with the constraints of the site i.e. Thorney Island is bounded by Chichester & Langstone Harbours SPA/Ramsar and Solent Maritime SAC. These European Sites are also addressed within this policy to prevent adverse effects to the integrity of these sites.</p> <p>Furthermore, to date there are no development proposals for the site to deviate away from current site use. As such this policy is no considered to pose as a likely significant effect to the integrity of European Sites.</p>
<p>Policy S18: Integrated Coastal Zone Management for the Manhood Peninsula</p>	<p>The Council will prepare plans, strategies, projects and other measures, in partnership with other organisations and local communities, to ensure that the Manhood Peninsula is planned for in a coordinated and integrated manner, whilst recognising the individual needs of the communities within the area.</p> <p>Proposals and initiatives will be supported that promote the following general objectives:</p> <ol style="list-style-type: none"> 1. Facilitate the economic, environmental and social well-being of the area; 2. Address proposals for the coastline and coastal communities set out in Coastal Defence Strategies and Shoreline Management Plans; 3. Contribute to greater safeguarding of property from flooding or erosion and/or enable the area and pattern of development to adapt to change, including the relocation of current settlement areas, and vulnerable facilities and infrastructure that might be directly affected by the consequences of climate change; 4. Provide resources to improve the process of harbour and coastal management, incorporating and integrating social, recreational, economic, physical and environmental issues and actions; 5. Improve infrastructure to support sustainable modes of transport, especially cycle ways, bridleways and footpaths, including the National Coastal Footpath; and 6. Provide the means of supporting regeneration on the Manhood Peninsula. 	<p>No Likely Significant Effect</p> <p>Chichester Council wishes to produce Integrated Coastal Zone Management (ICZM) at the Manhood Peninsula. Much of this scheme involves suitable management and safeguarding of property from flooding and preventing erosion. Also included within this policy are flood management and surface water management into the environment. Whilst there are potential for linking impact pathways stemming from development within the Manhood Peninsula, this policy is a development management policy and does not identify any location, type or quantum of development. This policy is therefore not considered to have likely significant effects to the integrity of European Sites within Chichester and is thereby screened out of further discussion.</p>
<p>Policy S19: North of the Plan Area</p>	<p>Provision will be made for development in the North of the Plan area through Neighbourhood Plans and/or Development Plan Documents.</p> <p>The Council will encourage and support development proposals and other initiatives that:</p> <ul style="list-style-type: none"> • Conserve and enhance the rural character of the area, the quality of its landscape and the natural and historic environment; 	<p>No Likely Significant Effect</p> <p>This is a development management policy that supports development in the north of the plan</p>

	<ul style="list-style-type: none"> • Safeguard existing local facilities and expand the range of local facilities; and • Improve accessibility to facilities in nearby centres outside the North of the Plan area and the recreational opportunities available in the South Downs National Park. 	<p>area. Whilst development in the north of the Plan Area (such as Loxwood and Wisborough Green) has the potential to result in linking impact pathways, as no explicit location, type or quantum of development is identified, this actual policy can be screened out from resulting in a likely significant effect to the European Sites within Chichester. However, the implications of delivering housing in Loxwood and Wisborough Green in line with the allocations in Policy S5 are discussed in the HRA.</p>
<p>Policy S20: Design</p>	<p>Proposals for new development will be required to be of high quality design that:</p> <ol style="list-style-type: none"> 1. responds positively to the site and its surroundings, cultural diversity and history, conserves and enhances historic character and reinforces local identity or establishes a distinct identity whilst not preventing innovative responses to context; 2. creates a distinctive sense of place through high quality townscape and landscaping that physically and visually integrates with its surroundings; 3. provides a clear and permeable structure of streets, routes and spaces that are legible and easy to navigate through because of the use of street typology, views, landmarks, public art and focal points; 4. is well connected to provide safe and convenient ease of movement by all users, prioritising pedestrian and cycle movements both within the scheme and neighbouring areas and ensuring that the needs of vehicular traffic does not dominate at the expense of other modes of transport, or undermine the resulting quality of places; 5. incorporates and/or links to high quality Green Infrastructure and landscaping to enhance biodiversity and meet recreational needs, including public rights of way; 6. is built to last, functions well and is flexible to changing requirements of occupants and other circumstances; 7. addresses the needs of all in society by incorporating mixed uses and facilities as appropriate with good access to public transport and a wide range of house types and tenures; 8. is visually attractive and the scale, height, density, grain, massing, type, details and materials are appropriate for the site and surrounding area; 9. creates safe communities and reduces the likelihood and fear of crime; 10. secures a high quality public realm with well managed and maintained public areas that are overlooked to promote greater community safety, with clearly defined private spaces; 11. ensures a sufficient level of well-integrated car and bicycle parking and external storage; 12. is sustainable and resilient to climate change by taking into account landform, layout, building orientation, massing and landscaping to minimise energy consumption and mitigate water run-off and flood risks. 	<p>No Likely Significant Effect</p> <p>A development management policy relating to design. This policy encourages development of high quality design.</p> <p>This is a positive policy as it aims to prioritise pedestrian and cycle movements within a scheme and into the surrounding areas, thus potentially reducing atmospheric pollution contributions. It also encourages the provision of green infrastructure which has the potential to divert recreational pressure from sensitive European sites.</p> <p>There are no linking impact pathways present.</p>
<p>Policy S21: Health</p>	<p>The Council will improve and promote strong, vibrant and healthy communities through ensuring a high</p>	<p>No Likely Significant Effect</p>

and Wellbeing	quality environment which supports health, social and cultural wellbeing. Measures that will help contribute to healthier communities must be incorporated in a development where appropriate.	This policy supports the protection of good quality environments for the local people of Chichester. The Council require development proposals to ensure that the wellbeing of locals is provided for. This policy is therefore not expected to pose as a likely significant effect to the integrity of European Sites within Chichester.
Policy S22: Historic Environment	<p>The Council will ensure the significance of heritage assets within the plan area are conserved or enhanced to ensure the long term protection and enjoyment of the historic environment by:</p> <ol style="list-style-type: none"> 1. Safeguarding and managing all heritage assets, archaeological sites and historic landscapes, designated and non-designated assets, and their setting in accordance with legislation and national policy; 2. Understanding, identifying and respecting the significance of the assets; 3. Undertaking further Conservation Area Appraisals and any related management plans; 4. Taking account of heritage assets identified at risk or vulnerable to risk and taking a proactive approach to their improvement. 	<p>No Likely Significant Effect</p> <p>This is a development management policy relating to the historic environment, There are no linking impact pathways present. This policy is therefore screened out of further discussion.</p>
Policy S23: Transport and Accessibility	<p>The Council will work with Highways England, West Sussex County Council, other transport and service providers and developers to improve accessibility to key services and facilities and to provide an improved and better integrated transport network.</p> <p>This will include:</p> <ul style="list-style-type: none"> • Ensuring that new development is well located and designed to minimise the need for travel, encourages the use of sustainable modes of travel as an alternative to the private car, and provides or contributes towards necessary transport infrastructure, including through travel plans; • Working with relevant providers to improve accessibility to key services and facilities and to ensure that new facilities are readily accessible by sustainable modes of travel; and • Planning to achieve timely delivery of transport infrastructure needed to support new housing, employment and other development identified in this Plan. <p>Integrated transport measures will be developed to mitigate the impact of planned development on the highways network, improve highway safety and air quality, promote more sustainable travel patterns and encourage increased use of sustainable modes of travel, such as public transport, cycling and walking. This will include:</p> <ul style="list-style-type: none"> • New road connecting Birdham Road to A27 Fishbourne roundabout • Provision for car sharing clubs • Provision for electric charging points • A coordinated package of improvements to junctions on the A27 Chichester Bypass, along with a new road between Birdham Road and the Fishbourne Roundabout south-west of Chichester and other small-scale junction improvements within the city and elsewhere. These will increase road capacity, reduce 	<p>No Likely Significant Effect</p> <p>A development management policy relating to transport and accessibility.</p> <p>This policy provides for positive transport measures that will improve air quality and promote more sustainable travel methods and patterns including the use of public transport cycling and walking.</p> <p>It is noted that this policy identifies new road schemes such as Birdham Road to A27 Fishbourne roundabout, and a package of improvements along the A27. However this policy does not provide any detailed location or scheme details and as such cannot be assessed under the Habitats Regulations; this will need to be undertaken by the applicant at the planning application stage.</p> <p>This policy is therefore screened out and is not</p>

	<p>traffic congestion, improve safety and air quality, and improve access to Chichester City from surrounding areas;</p> <ul style="list-style-type: none"> • Targeted investment to improve local transport infrastructure, focusing on delivery of improved and better integrated bus and train services, and improved pedestrian and cycling networks, including the public rights of way network; and • Measures to promote behavioural change in travel choices, such as easy-to-use journey planning tools, skills training and promotional activities. Travel plans will be developed as a means of coordinating these measures. 	discussed further.
<p>Policy S24: Countryside</p>	<p>Outside settlement boundaries as defined on the policies map, development will be permitted in the countryside provided that:</p> <ol style="list-style-type: none"> 1. It conserves and, where possible, enhances the key features and qualities of the rural and landscape character of the countryside setting; 2. It is of an appropriate scale, siting and design that is unlikely to cause unacceptable harm to the appearance of the countryside; and 3. It requires a countryside setting or meets an essential local need. 	<p>No Likely Significant Effect</p> <p>This is a development management policy in relation to the countryside. This policy does not identify any location, quantum or type of development and as such there are no linking impact pathways present.</p>
<p>Policy S25: The Coast</p>	<p>The Council will continue to work with partner organisations and authorities to protect and enhance the Plan's coastal areas in order to ensure they continue to provide an important recreational, economic and environmental resource. In particular the Council will support:</p> <ul style="list-style-type: none"> • ongoing habitat protection/restoration/enhancement; • leisure/recreational uses, including water based activities; • marine employment uses, including those which require direct access to water; and • flood defence and adaptation to climate change <p>In supporting the above, the Council will be mindful of the consistency of proposals with other relevant statutory and non-statutory policies and documents of relevance, including the Chichester Harbour Conservancy Harbour Management Plan</p>	<p>Likely Significant Effect</p> <p>This is a development management policy relating to the coast. This is generally a positive policy, however it encourages recreational and water uses of the coast which has potential to impact on European sites via increased recreational pressure.</p> <p>As such this policy will be subject to Appropriate Assessment.</p>
<p>Policy S26 Natural Environment</p>	<p>The Council will continue to work with partner authorities and organisations to protect and enhance the natural environment of the Plan Area. In relation to development proposals this will include:</p> <ul style="list-style-type: none"> • Ensuring that distinctive local landscape character and sensitivity is protected • Ensuring there is no adverse impact on the openness of views in and around the coast, designated environmental areas and the setting of the South Downs National Park. • Protecting the biodiversity value of the site and its environment; and • Considering the quality of the agricultural land, with the development of poorer quality agricultural land being preferred to the best and most versatile land. 	<p>No Likely Significant Effect</p> <p>A development management policy relating to the Natural Environment. There are no linking impact pathways present.</p>
<p>Policy S27: Flood</p>	<p>Flood Zones in the Chichester plan area are defined in accordance with National Planning Practice Guidance and the</p>	<p>No Likely Significant Effect</p>

<p>Risk Management</p>	<p>Council's Strategic Flood Risk Assessment Level 1. In order to reduce the overall and local risk of flooding in the area:</p> <ol style="list-style-type: none"> 1. Development must be located, designed and laid out to ensure that it is safe; that the risk from flooding is minimised whilst not increasing the risk of flooding elsewhere; and that residual risks are safely managed. In locations identified as being at risk of flooding, planning permission will only be granted, or land allocated for development, where it can be demonstrated that: <ol style="list-style-type: none"> a. sequential and exceptions tests have been undertaken and passed, any development that takes place where there is a risk of flooding will need to ensure that flood mitigation measures, including a site specific flood evacuation plan, are integrated into the design both on-site and off-site, to minimise the risk of property and life should flooding occur; b. through a sequential approach, it is located in the lowest appropriate flood risk location in accordance with the NPPF and the Chichester Strategic Flood Risk Assessment (SFRA); and c. it would not constrain the natural function of the flood plain, either by impeding flood flow or reducing storage capacity. 2. Sustainable drainage systems (SuDS) will be required on major developments (10 or more dwellings or equivalent) and encouraged for smaller schemes. A site-specific Flood Risk Assessment will be required for sites within or adjacent to areas at risk of surface water flooding as identified in the SFRA. There should be no increase in either the volume or rate of surface water runoff leaving the site. 	<p>A positive development management policy relating to flood risk management. It identifies the requirement for the provision of SuDS on major developments and encourages them on smaller developments. These have the potential to limit run off into sensitive European sites. There are no linking impact pathways present.</p>
<p>Policy S28: Pollution</p>	<p>The Council will seek to ensure that development protects, and where possible, improves upon the amenities of existing and future residents, occupiers of buildings and the environment in general. Where development is likely to generate significant adverse impacts by reason of pollution, the Council will require that the impacts are minimised and/or mitigated to an acceptable level. What is acceptable? How is it measured ?</p>	<p>No Likely Significant Effect A development management policy relating to pollution. There are no linking impact pathways present.</p>
<p>Policy S29: Green Infrastructure</p>	<p>The Council will continue to work with partner authorities and organisations to work together to reinforce and enhance the role of green infrastructure in securing the long term sustainable growth of the plan area and beyond in accordance with Policy DMxx.</p>	<p>No Likely Significant Effect This is a positive development management policy relating to green infrastructure. The provision of green infrastructure has the potential to divert recreational pressure away from sensitive European sites. There are no linking impact pathways present .</p>
<p>Policy S30: Strategic Wildlife Corridors</p>	<p>Development proposals within, or in close proximity to, strategic wildlife corridors will be granted where it can be demonstrated that:</p> <ol style="list-style-type: none"> 1. There are no sequentially preferable sites available outside the wildlife corridor; 2. The development will not have an adverse impact on the integrity and function of the wildlife corridor; and 3. Development located in close proximity to strategic wildlife corridors protects and enhances its features and habitats. <p>Minor built development within the strategic wildlife corridor will be acceptable where it can be demonstrated that there are no suitable alternative sites, and appropriate enhancement and mitigation is provided.</p>	<p>No Likely Significant Effect This development management policy ensures the protection of wildlife corridors from development. There are no linking impact pathways present.</p>

<p>Policy S31 Wastewater in the Chichester Harbour and Pagham Harbour Wastewater Treatment Catchment areas</p>	<p>Proposals for development in the catchment should be able to demonstrate no adverse impact on the water quality of Chichester Harbour and Pagham Harbour.</p> <p>All proposals for new development in the catchment should conform to the following water management measures:</p> <ol style="list-style-type: none"> 1. All new dwellings should achieve the higher building regulations water consumption standard of a maximum of 110 litres per person per day including external water use; 2. No surface water from new development shall be discharged to the public foul or combined sewer system; and 3. Where appropriate, development should contribute to the delivery of identified actions to deliver infiltration reduction across the catchment. <p>Planning permission will be granted for development where the provision of water infrastructure is not considered detrimental to the water environment, including existing abstractions, river flows, water quality, fisheries, amenity and nature conservation.</p>	<p>No Likely Significant Effect</p> <p>This positive policy safeguards Chichester & Langstone Harbours SPA/Ramsar and Pagham Harbour SPA/Ramsar from poor water quality. This policy is therefore of benefit to the SPA/Ramsar sites and unlikely to have significant impacts as such this policy can be screened out from further discussion.</p> <p>Recommendation:</p> <p>To ensure this policy provides robust protection of sensitive European sites, it is recommended that the wording of the first paragraph of the policy is amended as follows: <i>'Proposals for development in the catchment should be able to demonstrate no adverse effect on the integrity of Chichester Harbour and Pagham Harbour as a result of water quality.'</i></p>
<p>Policy S32: Design Strategies for Strategic and Major Development Sites</p>	<p>Proposals for housing allocations and major development sites must be accompanied by a site-wide design strategy that includes the following:</p> <ol style="list-style-type: none"> 1. A Masterplan which should: <ol style="list-style-type: none"> a. identify the vision for the development, setting out a clear description of the type of place that could be created whilst building on the overall aims for the district b. demonstrate a coherent and robust framework for development that clearly sets out: land uses proposed including amount, scale and density, movement and access arrangements and Green Infrastructure provision c. show how the design requirements of the scheme work within the vision and demonstrate how the vision will be achieved d. integrate with the surrounding built, historic and natural environments, in particular maximising existing and potential movement connections and accessibility to encourage walking, cycling and use of public transport e. provide community facilities and other amenities to meet the needs of all the community, including access to education and training facilities, health care, community leisure and recreation facilities as appropriate f. define a hierarchy of routes and the integration of suitable infrastructure, including, for example, SuDS within the public realm g. contain a Green Infrastructure framework to ensure that public and private open space standards are met, relate well to each other and to existing areas and that the new spaces are safe, convenient, accessible and functional, and h. contain an indicative layout which illustrates a legible urban structure based on strategic urban design principles and 	<p>No Likely Significant Effect</p> <p>This policy does not allocated sites for development rather this policy describes the development management strategies to be prepared for development sites. Chichester Council requires a design strategy for development to improve the quality of development with regards to aesthetics but also to improve the outcome of green infrastructure, layout, sustainability and functionality. This is a positive policy as it provides for the provision of green infrastructure (which has the potential to divert recreational pressure away from sensitive European sites), encourages walking, cycling and use of public transport (which has the potential to reduce atmospheric pollution contributions) and the timely delivery of</p>

	<p>Identifies key elements of townscape such as main frontages, edges, landmark buildings and key building groups and character areas.</p> <p>2. an accompanying Design and Access Statement, which should explain:</p> <ol style="list-style-type: none"> a. the steps taken to appraise the context of the proposed development, and how the design of the development takes that context into account to create or reinforce local distinctiveness to achieve a positive sense of place and identity b. the design principles and concepts that have been applied to the proposed development and how these principles will be used to inform subsequent phases or development parcels and the mechanism for delivering the Vision at more detailed stages, for example through design coding c. how sustainability and environmental matters will be addressed including the efficient use of resources both during construction and when the development is complete d. the delivery phasing and implementation strategies to be in place to ensure the timely delivery of infrastructure and services to the development when they are needed by new residents, and that new developments are built out in a logical manner e. how the mix of housing types and tenures is integrated and supports a range of household sizes, ages and incomes to meet identified housing need, and f. how consultation with the existing community has been incorporated. 	<p>infrastructure (such as increased capacity of waste water treatment works). There are no linking impact pathways present.</p>					
<p>Policy DM1: Specialist Housing</p>	<p>The provision of housing to meet specialist needs in the Plan area will be supported where this is consistent with the Council's strategic requirements.</p> <p>Proposals for specialist needs housing such as homes for older people, people with disabilities, student accommodation or homes for other specific groups who may require properties that are specifically designed and / or allocated will be supported where:</p> <ol style="list-style-type: none"> 1. There is a clear identified need; 2. The development is located in an area that is sustainable to meet the social as well as the housing needs of the intended residents; 3. It will not lead to a concentration of similar uses in an area of similar uses that would be detrimental to the character or function of an area and / or residential amenity; 4. It is in close proximity to everyday services, preferably connecting by safe and suitable walking / cycling routes or public transport for the intended occupier; 5. It can be demonstrated that the development is designed and managed to provide the most appropriate types of support for the target resident; 6. It can be demonstrated that revenue funding can be secured to maintain the long term viability of the scheme; and 7. The scheme is supported by the relevant statutory agencies. 	<p>No Likely Signiant Effect</p> <p>A development management policy relating to the provision of specialist housing. It does not provide any quantum or location of development. There are no linking impact pathways present.</p>					
<p>Policy DM2: Housing Mix</p>	<p>1.All new residential developments must provide homes of an appropriate type, size, price and tenure to address the identified needs and market demand and to support mixed communities. Proposals should provide numbers of dwellings of sizes to accord with the relevant broad mix:</p> <table border="1" data-bbox="315 1337 1384 1377"> <tr> <td></td> <td>1 Bedroom</td> <td>2 Bedroom</td> <td>3 Bedroom</td> <td>4 Bedroom</td> </tr> </table>		1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	<p>No Likely Signiant Effect</p> <p>A development management policy relating to housing mix provision. There are no linking impact</p>
	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom			

	Affordable rented housing delivered as part of a market housing scheme	25-30%	40-45%	20-25%	5-10%	pathways present.
	Low cost homeownership as part of a market housing scheme	20%	40%	30%	10%	
	Market housing	At least 5%	At least 30%	Up to 45%	Up to 20%	
	<p>2. Planning permission will be granted for an alternative mix provided that:</p> <p>a. that robust evidence of local housing need demonstrates that a different mix of dwellings is required to meet local needs and demand for specific types, tenures and sizes of housing to contribute to the diversity of housing in the local area and help to redress any housing imbalance that exists; or</p> <p>b. it addresses need and demand for affordable, market housing and including self-build and custom-build housing.</p> <p>3. Development proposals will be permitted for residential development where it is clearly demonstrated that the proposal responds to the requirements of a changing population and of particular groups in the community, by increasing the supply of accessible and specialist housing (including ground floor flats, flats with lifts and bungalow accommodation) which is able to meet people's needs throughout their lifetimes based on locally derived evidence of need and demand.</p> <p>4. On strategic development locations (or sites of 200 dwellings or more), additional specialised housing (including extra care housing) should be considered where demand exists, to meet defined specialist needs.</p> <p>5. All Housing should be designed to meet the Nationally Described Space Standards</p> <p>6. Up to 3% of dwellings should be designed to the Standards of Part M (4) Category 3: Wheel chair accessible dwellings (or any replacement standards). This will be considered on a site by site basis</p>					
Policy DM3 – Housing Density	<p>All new housing will be developed at a density that is consistent with making the best use of land whilst achieving high quality, sustainable design that does not compromise the distinctive character of the area in which it is located. Development proposals at a minimum average net density of 35 dwellings per hectare will be supported, except at:</p> <p>a. accessible urban locations with transport links and good access to services, where higher densities will be encouraged;</p> <p>b. locations adjacent to sensitive locations (i.e. national park and AONB) where a lower density may be appropriate. Proposals should take into account the existing density of the site and its surroundings. The density of large sites should be varied within the site to provide a high quality, mixed use development with a unique sense of place</p>					<p>No Likely Signiant Effect</p> <p>A development management policy relating to housing density. There are no linking impact pathways present.</p>
Policy DM4: Affordable Housing Exception Sites	<p>Where there are no available and deliverable sites within a settlement affordable housing may be permitted on exception sites outside of Settlement Boundaries to meet a specific local need where one of the two following criteria is met:</p> <p>1. In settlements that have a defined Boundary, proposals should be located adjacent to the Boundary and in all</p>					<p>No Likely Signiant Effect</p> <p>A development management policy relating to</p>

	<p>circumstances be modest in scale and well related to the settlement, local services and facilities; or</p> <p>2. In the rest of the plan area, schemes will only be permitted where it is considered that the proposal is modest in scale and can be integrated to an existing settlement without damage to its character or setting and is well related to local services and facilities.</p> <p>And all the following criteria are met:</p> <ol style="list-style-type: none"> 1. The scheme provides 100% affordable housing (unless a robust justification is provided in line with paragraph **); 2. The proposed development would help meet an identified local need of households with a 'local connection' to the parish, and the mix of dwelling sizes, types and tenures is supported by a local housing need assessment; 3. There are insufficient sites available and deliverable within the Settlement Boundary (where applicable) to meet the local need for affordable housing; 4. The proposed scheme is economically viable and deliverable, and is able to be properly managed by a partner Registered Provider or other Approved Body in perpetuity; 5. The proposal does not result in the net loss of existing affordable housing; and 6. The site is subject to an appropriate planning obligation to ensure that the affordable housing will be retained as affordable housing for households with a local connection in perpetuity. 	<p>provision of affordable housing exception sites.</p> <p>There are no linking impact pathways present.</p>
<p>Policy DM5: Planning for Gypsies, Travellers and Travelling Showpeople</p>	<ol style="list-style-type: none"> 1. The following criteria will be applied in assessing development proposals for new Gypsy, Traveller and Travelling Showpeople sites and in assessing the suitability of sites for allocation in a development plan document: <ol style="list-style-type: none"> a. It is well related to existing settlements and appropriate in scale to not dominate the nearest settlement, having regard to factors such as the scale and form of existing Travellers' pitches and Travelling Showpeople's plots in the area, and the availability of safe and convenient vehicular access, local infrastructure, services and facilities. b. Be suitable in terms of topography and able to achieve a reasonable level of visual and acoustic privacy for both people living on the site and for those living nearby. The site will provide an acceptable level of amenity for the proposed residents and will not have an unacceptable level of impact on the residential amenity of the neighbouring dwellings; c. Be located, designed and landscaped to avoid unacceptable harm to the character of the local area and not compromise the essential features of nationally designated areas of landscape, historic environment or nature conservation protection; d. Avoid locations where there is a risk of flooding, or which are adjacent to incompatible uses such as a refuse tip, sewage treatment works or significantly contaminated land; and e. For Travelling Showpeople, a site suitability assessment should be submitted with proposals which takes account of the nature and scale of the Showpeople's business in terms of the land required for storage and/or the exercising of animals. <p>Existing traveller sites will be safeguarded for traveller use. These sites will continue to be safeguarded for as long as the need exists for traveller accommodation in the Plan Area.</p> 2. The following criteria will be applied in assessing proposals for the sub-division of pitches or plots at existing authorised Gypsy, Traveller and Travelling Showpeople sites: <ol style="list-style-type: none"> a. Sites are of a suitable size to enable the creation of additional pitches or plots; b. There is no loss of amenity provision for residents within the existing site; 	<p>No Likely Signifiant Effect</p> <p>A development management policy relating to planning for Gypsies, travellers and Travelling Showpeople. This policy does not identify any quantum or location of development. There are no linking impact pathways present.</p>

	<p>c. There is no adverse impact in terms of highways access and vehicle movement on site;</p> <p>d. There is no significant loss of soft and hard landscaping within the existing site; and</p> <p>e. The sub-division of a site does not result in unacceptable harm to the character of the local area and does not compromise the essential features of nationally designated areas of landscape, historic environment or nature conservation protection.</p>	
<p>Policy DM6: Accommodation for Agricultural and other Rural Workers</p>	<p>Development proposals which are necessary to meet the accommodation needs of full-time workers in agriculture, forestry or other businesses requiring a countryside location will be granted where all the following criteria have been addressed:</p> <ol style="list-style-type: none"> 1. Provision on-site or in the immediate vicinity of the agricultural operation, is essential for the operation of the business; 2. No suitable accommodation exists or could be made available in established buildings on the site or in the immediate vicinity; 3. Clear evidence is provided of the economic viability of the business enterprise that the accommodation is intended to support; 4. The dwelling is of a size commensurate with the operational requirements of the business; 5. The siting and landscaping of any new dwelling is well-related to the existing business building/s or other on-site dwellings and minimises the impact to the character and appearance of the countryside, ensuring no adverse impact on designated sites; and 6. The supporting information. 	<p>No Likely Significant Effect</p> <p>A development management policy relating to accommodation for agricultural and forestry workers. This policy does not identify any quantum or location of development. There are no linking impact pathways present.</p>
<p>Policy DM7: Local and Community Facilities</p>	<p>Development proposals leading to the loss of premises and existing community facility or land currently or last used for community facilities, public services, leisure and cultural uses will be granted, where it can be demonstrated that all the following criteria have been addressed:</p> <ol style="list-style-type: none"> 1. There is no longer a demand for the facility within the area and that the premises or land have been marketed for a reasonable period of time; or 2. There is provision for new or replacement facilities to meet an identified need in locations which are well related and easily accessible to the settlement or local community. <p>Proposals for new and improved community facilities, public services, leisure and cultural uses that result in improvements to meeting the needs of communities will be supported. Such facilities will be required to be easily accessible to all sectors of the community and, in rural areas where public transport may be poor, support will be given to innovative schemes that seek to improve local delivery of services.</p>	<p>No Likely Significant Effect</p> <p>A development management policy relating to local and community facilities. There are no linking impact pathways present.</p>
<p>Policy DM8: Transport, Accessibility and Parking</p>	<p>Development proposals will be granted where it can be demonstrated that the following criteria have been addressed:</p> <ol style="list-style-type: none"> 1. All development provides for the access and transport demands they create, through provision of necessary improvements to transport networks, services and facilities, either directly by the developer or indirectly in the form of financial contributions; 2. Development is located and designed to minimise additional traffic generation and movement, and should not create or add to problems of highway safety, congestion, air pollution, or other damage to the environment. Development must not create residual severe cumulative impacts on surrounding areas; 3. The proposal has safe and adequate means of access and internal circulation/turning arrangements for all modes of 	<p>No Likely Significant Effect</p> <p>A positive development management policy relating to transport accessibility and parking. Not type of development is provided. This policy identifies the need to minimise traffic generation and for access to sustainable transport methods. There are no linking impact pathways present</p>

	<p>transport relevant to the proposal; and particularly, emergency, service and delivery vehicles;</p> <p>4. Development can be accessed by and prioritises sustainable modes of transport, in part, through the creation of links between new development and existing pedestrian, cycle and public transport networks. Development should incorporate the requisite infrastructure necessary for charging plug-in and other ultra-low emission vehicles;</p> <p>5. The proposal provides for safe, easy and direct movement by all users including for those with disabilities or mobility problems difficulties;</p> <p>6. The proposal provides for adequate parking provision as well as suitable facilities for safe and secure cycle parking; and</p> <p>7. Where development is likely to have a significant impact on an Air Quality Management Area, an air quality assessment will be required.</p>	
<p>Policy DM9 Existing Employment Sites</p>	<p>Primary shopping frontages Within the primary shopping frontages in Chichester Shopping Centre additional non-shopping (A1) uses will be granted at ground floor level where all the following criteria are met:</p> <ul style="list-style-type: none"> a. Additional uses (Class A2 - A5) results in no more than 25% of the sum total of the street frontages in non-shopping (A1) uses; b. Additional use results in no more than two non-shopping (A1) uses adjacent to each other or a total of 15 metre continuous non-retail frontage (whichever is the greater); c. Proposal does not prejudice the effective use of the upper floors; and d. Shop window and entrance is provided or retained which relates well to the design of the building and to the street-scene and its setting. <p>Secondary shopping frontages Proposals for town centres uses at ground level within use classes A, B1 (a), C1, D1 and D2 of the Use Class Order will be granted within the secondary shopping frontages where the proposal, either cumulatively or individually is considered to have no adverse impact on the vitality or viability of the area. The change of use of ground floor premises to other uses, including residential, will be granted where all the following criteria are met:</p> <ul style="list-style-type: none"> a. No more than 75% of the whole of the shopping frontage is in non-shopping (A1) use; b. The proposal does not result in the loss of existing residential accommodation; c. The proposal does not prejudice the effective use of the upper floors; d. A shop window and entrance is provided or retained which relates well to the design of the building and to the street-scene and its setting. <p>Additional retail development will be granted provided that all the following criteria are met:</p> <ul style="list-style-type: none"> a. The floorspace size reflects the character and scale of the development in the existing shopping centre; b. Development respects the character of the existing shopping centre in terms of design, scale and materials; and c. The proposal relates appropriately to the existing shopping frontage <p>Reuse of redundant floorspace Within Town Centres, Local Centres, Local and Village Parades, proposals for the re-use of vacant floorspace on the upper levels for residential, leisure, commercial and community purposes will be permitted provides that:</p>	<p>No Likely Significant Effect</p> <p>A development management policy relating to existing employment sites. This policy does not provide for any new development. There are no linking impact pathways present.</p>

	<ul style="list-style-type: none"> a. It is demonstrated that non retail use of the upper floor will not inhibit business workplace, storage or retail expansion; b. The development has no significant adverse effects for the occupiers of neighbouring properties; and c. The proposal reflects the need to minimise noise intrusion. Applications must be accompanied by details of noise insulation measures if required. 	
<p>Policy DM10: New Employment Sites</p>	<p>Development proposals for employment uses within Use Classes B1 (b) B1 (c), B2 and B8 will be permitted within the settlement boundaries. Proposals for new office development will be permitted where they are focussed in Chichester city centre and the settlement hubs in accordance with the sequential test set out in national policy. Small scale office uses will be permitted in other service villages to meet local needs and as part of the residential-led allocations provided for in policies xx-xx.</p> <p>The Council will require new employment development, where feasible, to provide for a mixture of unit types and sizes to accommodate the needs of start-up and move-on businesses within the plan area.</p> <p>Development proposals will also need to be compatible with other policies in the Plan to ensure that the development is otherwise acceptable.</p>	<p>No Likely Significant Effect</p> <p>A development management policy relating to new employment sites. This policy does not identify any quantum of new development. There are no linking impact pathways present.</p>
<p>Policy DM11: Town Centre Development</p>	<p>1. Primary shopping frontages Within the primary shopping frontages in the Chichester City Centre additional non-shopping (A1) uses will be granted at ground floor level where all the following criteria are met:</p> <ul style="list-style-type: none"> a. Additional uses (Class A2 - A5) results in no more than 25% of the sum total of the street frontages in non-shopping (A1) uses; b. Additional use results in no more than two non-shopping (A1) uses adjacent to each other or a total of 15 metre continuous non-retail frontage (whichever is the greater); c. The proposal does not prejudice the effective use of the upper floors; and d. Shop windows and entrances are provided or retained which relate well to the design of the building and to the street-scene and its setting. <p>2. Secondary shopping frontages Proposals for town centres uses at ground level within use classes A, B1 (a), C1, D1 and D2 of the Use Class Order will be granted within the secondary shopping frontages where the proposal, either cumulatively or individually is considered to have no adverse impact on the vitality or viability of the area. The change of use of ground floor premises to other uses, including residential, will be granted where all the following criteria are met:</p> <ul style="list-style-type: none"> a. No more than 75% of the whole of the shopping frontage is in non-shopping (A1) use; b. The proposal does not result in the loss of existing residential accommodation; c. The proposal does not prejudice the effective use of the upper floors; d. A shop window and entrance is provided or retained which relates well to the design of the building and to the street-scene and its setting. <p>3. Additional retail development will be granted provided that all the following criteria are met:</p> <ul style="list-style-type: none"> a. The floorspace size reflects the character and scale of the development in the existing shopping centre; b. Development respects the character of the existing shopping centre in terms of design, scale and materials; and 	<p>No Likely Significant Effect</p> <p>A development management policy relating to town centre development. This policy does not identify any quantum or specific location of new development. There are no linking impact pathways present.</p>

	<p>c. The proposal relates appropriately to the existing shopping frontage</p> <p>4. Reuse of redundant floorspace</p> <p>Within City Centres, Local Centres, Village Centres, proposals for the re-use of vacant floorspace on the upper levels for residential, leisure, commercial and community purposes will be permitted provides that:</p> <p>a. It is demonstrated that non retail use of the upper floor will not inhibit business workplace, storage or retail expansion;</p> <p>b. The development has no significant adverse effects for the occupiers of neighbouring properties; and</p> <p>c. The proposal reflects the need to minimise noise intrusion. Applications must be accompanied by details of noise insulation measures if required.</p>	
<p>Policy DM12: Edge and Out of Centre Retail Sites</p>	<p>Development proposals outside the central retail area for retail and leisure uses, including extensions, will be granted where it can be demonstrated that all the following criteria have been addressed:</p> <ol style="list-style-type: none"> 1. The proposal does not have a significant adverse impact on the vitality and viability of the central shopping area, either as an individual development or cumulatively with similar existing or proposed developments; 2. The proposed retail or leisure development on out of centre sites will need to demonstrate that no suitable site can be found, firstly within the existing town centre or, secondly, on the edge of the centre; 3. Proposals for retail floorspace over 2,500m² are accompanied by a full assessment of the potential impact on town centres and nearby centres; 4. The type of goods sold or leisure service provided and the form of shopping or leisure unit proposed could not be conveniently accommodated within the existing shopping centre or where suitable sites and premises are not available within the centre or edge of centre sites; 5. The retail units (including any created by the subdivision of existing units) are of a minimum size of 1,000m² gross floorspace; 6. The types of goods sold and the facilities provided complement those provided in the existing retail centre; 7. Servicing and customer traffic can be safely and conveniently accommodated by the surrounding road network and does not add to traffic generation in the town centre; 8. The proposal is easily accessible by the highway network and public transport and includes provision for access by cycle and on foot; and 9. The design of the buildings will not detract from the character or appearance of the site or the surrounding area. 	<p>No Likely Significant Effect</p> <p>A development management policy relating to edge and out of centre retail sites. This policy does not identify any quantum, type or specific location of new development. There are no linking impact pathways present.</p>
<p>Policy DM13: Built Tourist and Leisure Development</p>	<p>Development proposals for tourism and leisure development, including tourist accommodation, will be granted within or immediately adjoining the defined settlement boundaries of Chichester city or the settlement hubs where it can be demonstrated that all the following criteria have been addressed:</p> <ol style="list-style-type: none"> 1. It is sensitively designed to maintain the character of the area and amenities of existing occupiers; 2. Is located so as to minimise impact on the natural and historic environment, including that of visitors or users of the facility, particularly in relation to the potential for increased recreational pressures on Chichester Harbour and Pagham Harbour and other designated sites; 3. It provides a high quality attraction or accommodation; and 4. Encourages an extended tourist season. 	<p>No Likely Significant Effect</p> <p>A development management policy relating to tourism and leisure. Whilst increase tourism has potential to increase pressure on resources that could link to sensitive European sites (such as increased recreational pressure, atmospheric pollution and pressure of hydrological resources), this policy does not identify any quantum, type or</p>

	<p>Elsewhere in the Plan Area, small scale development for tourism and leisure development will be granted where the above and following criteria have been met:</p> <ol style="list-style-type: none"> 1. It can be demonstrated that the scale and use is appropriate to the location; and 2. Where proposals seek permission for new buildings, that the development cannot be accommodated elsewhere, including through the re-use, and expansion, of existing buildings in the locality and developing within the defined settlement boundaries. 	<p>specific location of new development. There are no linking impact pathways present.</p>
<p>Policy DM14: Caravan and Camping Sites</p>	<p>Development proposals for new caravan and camping sites with associated facilities and intensification/alterations to existing sites will be granted, where it can be demonstrated that all the following criteria have been addressed:</p> <ol style="list-style-type: none"> 1. They meet a demonstrable need and the location identified is justified in terms of sustainability objectives and contribution towards tourism; 2. They are of an appropriate scale in relation to their setting and would not diminish local amenity; 3. They are sensitively sited and designed to maintain the tranquillity and character of the area; 4. They are sited to be visually unobtrusive and can be assimilated so as to conserve and enhance the surrounding landscape; and 5. The road network and the site's access can safely accommodate any additional traffic generated. <p>Where planning permission for caravans sites is granted a condition restricting the type of occupation to holiday use will be used in order to retain the tourist accommodation and ensure it is not used for permanent residential use. The period of occupation will be dependent on:</p> <ol style="list-style-type: none"> 1. Whether the accommodation is within an area at risk of flooding, as defined by the Environment Agency; 2. The degree of protection considered desirable in order to avoid disturbance to sensitive sites of ecological value or to protect the tranquillity and character of the countryside, Chichester Harbour Area of Outstanding Natural Beauty and the setting of the National Park, Pagham Harbour and the undeveloped coast; and 3. The importance of securing the removal of touring units during the winter period where their permanent presence would be harmful to the landscape. 	<p>No Likely Significant Effect</p> <p>A development management policy relating to caravan and camping sites. This policy does not identify any quantum, type or specific location of new development.</p> <p>This is a positive policy as it identifies the need for development to '<i>avoid disturbance to sensitive sites of ecological value</i>'; There are no linking impact pathways present.</p> <p>Recommendation:</p> <p>To ensure this policy provides a robust framework to ensure the protection of European sites, it is recommended that policy text is amended as follows:</p> <p><i>'The degree of protection considered desirable in order to avoid disturbance to sensitive sites of ecological value (including ensure no adverse effects on integrity of sensitive European designated wildlife sites occurs) or to protect the tranquillity and character of the countryside, Chichester Harbour Area of Outstanding Natural Beauty and the setting of the National Park, Pagham Harbour and the undeveloped coast; and'</i></p>
<p>Policy DM15: Horticultural Development</p>	<p>Large scale horticultural glasshouses will continue to be focused within the existing Horticultural Development Areas at Tangmere and Runcton. The Sidlesham and Almodington Horticultural Development Areas will continue to be the focus for smaller scale horticultural glasshouses.</p> <p>Within designated Horticultural Development Areas, as shown on the Policies Map, planning permission will be granted for</p>	<p>No Likely Significant Effect</p> <p>A development management policy relating to horticultural development. Planning permission for</p>

	<p>new glasshouse, packhouse and polytunnel development where it can be demonstrated that the following criteria (1-7) have been addressed:</p> <ol style="list-style-type: none"> 1. There is no significant adverse increase in noise levels resulting from machinery usage, vehicle movement, or other activity on the site, which would be likely to unacceptably disturb occupants of nearby noise sensitive properties or be likely to cause unacceptable harm to the enjoyment of the countryside; 2. The proposal does not generate unacceptable levels of soil, water, odour or air pollution and there is no significant adverse impact resulting from artificial lighting on the occupants of nearby sensitive properties or on the appearance of the site in the landscape; 3. New planting is sufficient to benefit an improvement to the landscape and increases the potential for screening; 4. Adequate vehicular access arrangements exist or will be provided from the site to the road network to safely accommodate vehicle movements without detriment to highway safety or result in unacceptable harm to residential amenity; 5. The height and bulk of development and associated ancillary development, either individually or cumulatively, does not damage the character or appearance of the surrounding countryside, and mitigation measures are included to address any detrimental effects e.g. in order to mitigate the height and bulk of new horticultural structures; 6. It can be demonstrated that adequate water resources are available or can be provided and appropriate water efficiency measures are included; and 7. Acceptable surface water drainage capacity exists or can be provided as part of the development including sustainable drainage systems or water retention areas. <p>Outside HDAs Planning permission will be granted for new horticultural development proposals including the extension to existing Horticultural Development Areas where the above (1-7) and following criteria (8-11) have been addressed:</p> <ol style="list-style-type: none"> 8. There is a horticultural justification for the development and it can be demonstrated that the proposal cannot be accommodated within existing HDAs; 9. The land is sufficiently well drained, level and of a quality to be suitable for horticultural development; 10. Necessary infrastructure and services are available or will be provided; and 11. The proposal is not located within open countryside and ensures that long views across substantially open land are retained. 	<p>horticultural development will only be granted provided there are no significant increases in noise levels, water and air pollution and that sustainable drainage systems are incorporated into the design. It is a positive policy in that it requires new development to demonstrate that there is adequate water resources available/ can be provided and water efficiency measures are included. There are no linking impact pathways present.</p>
<p>Policy DM16: Sustainable Design and Construction</p>	<p>For all new dwellings or for new non-domestic buildings, evidence will be required by the developer to demonstrate that the following criteria have been achieved:</p> <ol style="list-style-type: none"> 1. The proposal achieves a maximum of 110 litres per person per day including external water use; 2. Energy consumption will be minimised to achieve at least a 19% improvement on the energy standard within the 2013 building regulations for new dwellings (unless superseded by national policy or legislation). <p>For all major development, evidence will be required by the developer to demonstrate that along with the above, all of the following criteria have been achieved:</p> <ol style="list-style-type: none"> 3. New commercial buildings will be expected to meet the energy requirements to achieve BREEAM Excellent standard; 	<p>No Likely Significant Effect</p> <p>A development management policy focusing on sustainability of development. This includes aspects of water usage and drainage, energy consumptions and protection/ enhancement of the natural environment. Provisions within this policy have the potential to reduce water use, reduce</p>

	<p>4. The energy supplied from renewable resources will be maximised to ensure that at least 10% of the predicted residual energy requirements of the development, after the standards in point 2 are achieved, is met through the incorporation of renewable energy. And to demonstrate how the following have been considered:</p> <p>5. How the proposal aims to protect and enhance the environment, both built and natural. Where this is not possible, how any harm will be mitigated;</p> <p>6. New development complies with Building for Life Standards or equivalent replacement national minimum standards, whichever are higher by ensuring it is accessible to all, flexible towards future adaptation in response to changing life needs, easily accessible to facilities and services; and takes into account the need for on-site waste reduction and recycling;</p> <p>7. The proposals apply sound sustainable design, good environmental practices, sustainable building techniques and technology, including the use of materials that reduce the embodied carbon of construction and the use of re-used or recycled materials;</p> <p>8. The proposals include measures to adapt to climate change, such as the provision of green infrastructure, sustainable urban drainage systems, suitable shading of pedestrian routes and open spaces, a mixture of drought and rain tolerant native planting and the incorporation of green roofs;</p> <p>9. The natural environment and biodiversity will be protected and/or where appropriate provision will be made for improvements to biodiversity areas and green infrastructure;</p> <p>10. The reduction of the impacts associated with traffic or pollution (including air, water, noise and light pollution) will be achieved, including but not limited to the promotion of car clubs and facilities for charging electric vehicles.</p>	<p>atmospheric pollution and reduce recreational pressure on European sites. There are no linking impact pathways present.</p>
<p>Policy DM17: Stand-alone Renewable Energy</p>	<p>Development proposals will be granted for stand-alone renewable energy (e.g. solar, biomass and energy crops, anaerobic digestion, wind and landfill gas) where it has been demonstrated that there is no significant adverse impact upon:</p> <ol style="list-style-type: none"> 1. Landscape or townscape character, ecology and wildlife, heritage assets whether designated or not, or upon areas or features of historical significance or amenity value; 2. There is no significant adverse impact on local amenity, outlook through unacceptable visual intrusion or upon general health and quality of life as a result of noise, emissions to atmosphere, electronic interference, or traffic generation; and 3. Highway safety. <p>All development proposals must be accompanied by a landscape assessment as well as mitigation measures, as appropriate to minimise any environmental impacts associated with the scheme.</p>	<p>No Likely Significant Effect</p> <p>A development management policy relating to renewable energy. The council will support development for renewable energy provided there are no adverse impacts on local amenity, ecology and heritage assets. Renewable energy has the potential to reduce atmospheric pollution contributions. This policy does not identify any type or location of development. There are no linking impact pathways present.</p>
<p>Policy DM18: Flood Risk and Water Management</p>	<p>Flood and erosion risk will be taken into account at all stages in the planning process to avoid inappropriate development in areas at current or future risk, and to direct development away from areas of highest risk.</p> <p>Development in areas at risk of flooding as identified by the Environment Agency flood risk maps will be granted where all the following criteria are met:</p> <ol style="list-style-type: none"> 1. The proposal incorporates specific requirements of the site, adaptation and mitigation procedures to include flood 	<p>No Likely Significant Effect</p> <p>This policy describes a set of criteria required to be undertaken for development proposed within flood risk zones. This policy does not identify any</p>

	<p>resilience and resistance measures appropriate to the character and biodiversity of the area and informed by the site-specific flood risk assessment;</p> <ol style="list-style-type: none"> 2. Development would not result/exacerbate coastal squeeze of any European sites or prevent managed realignment that may be required to ensure no adverse effect on European sites as a result of coastal squeeze; 3. Appropriate flood warning and evacuation plans are in place; 4. New site drainage systems are designed taking account of events which exceed the normal design standard i.e. consideration of flood flow routing and utilising temporary storage areas; 5. There is no net increase in surface water run-off. Priority should be given to incorporating Sustainable Drainage Systems (SuDS) to manage surface water drainage, unless it is proven that SuDS are not appropriate. Where SuDS are provided, arrangements must be put in place for their whole life management and maintenance. <p>All development proposals must take account of relevant Surface Water Management Plans, South East River Basin Management Plan, Catchment Flood Management Plans, Shoreline Management Plans, Coastal Defence Strategies and any other related flood defence plans and strategies as well as national guidance.</p>	<p>location or extent of development. This policy provides positive provision of explicit text that provides protection of European designated sites as a result of coastal squeeze.</p> <p>This policy also provides the requirement to ensure no water pollution occurs. There are no linking impact pathways present.</p>
<p>Policy DM19: Chichester Harbour Area of Outstanding Natural Beauty (AONB)</p>	<p>The impact of individual proposals and their cumulative effect on Chichester Harbour AONB and its setting will be carefully assessed. Planning permission will be granted where it can be demonstrated that all the following criteria have been addressed:</p> <ol style="list-style-type: none"> 1. The natural beauty and locally distinctive features of the AONB are conserved and enhanced; 2. Proposals reinforce and respond to, rather than detract from, the distinctive character and special qualities of the AONB as defined in the Chichester Harbour AONB Management Plan; 3. Either individually or cumulatively, development does not lead to actual or perceived coalescence of settlements or undermine the integrity or predominantly open and undeveloped, rural character of the AONB and its setting; and 4. The development is appropriate to the economic, social and environmental well-being of the area or is desirable for the understanding and enjoyment of the area (where this is consistent with the primary purpose of conserving and enhancing natural beauty); and 5. The development is consistent with/helps deliver the policy aims of the Chichester Harbour AONB Management Plan and Joint Chichester Harbour AONB SPD. 	<p>No Likely Significant Effect</p> <p>A development management policy relating to the AONB. There are no linking impact pathways present.</p>
<p>Policy DM20: Development around the Coast</p>	<p>Planning permission will be granted for development in the coastal area, outside of Settlement Boundaries, where it can be demonstrated that all the following criteria have been addressed:</p> <ol style="list-style-type: none"> 1. There are no harmful effects on or net loss of nature conservation or areas of geological importance within the Chichester and Pagham Harbours and Medmerry Realignment; 2. The development provides recreational opportunities that do not adversely affect the character, environment and appearance of the coast and Chichester Harbour Area of Outstanding Natural Beauty; 3. A high quality and inclusive design of new buildings in coastal locations has been achieved in accordance with other relevant design and historic environment policies; 3. There are measures for mitigation of any detrimental effects including where appropriate the improvement of 	<p>Potential Likely Significant Effect</p> <p>A development management policy relating to development around the coast. This policy provides for upgrading existing footpaths and cycleway. Whilst no location is identified, this has potential to encourage increased use of sensitive coastal sites for recreational activities that have the potential to affect bird features of the European</p>

	<p>existing landscapes relating to the proposal;</p> <p>4. Where appropriate, opportunities have been taken to upgrade existing footpaths and cyclepaths, enhance and protect the National Coastal Footpath and ensure that public access is retained and provided to connect existing paths along the waterfront;</p> <p>5. The development would result in improvements to or redistribution of moorings, marine berths or launch on demand facilities (dry berths) in the harbours; and</p> <p>7. The development would not be detrimental to infrastructure for, and quality of, water-based recreation, or be detrimental to the safety of navigation.</p> <p>The Council will seek to safeguard a minimum of a 15 metre strip of land immediately behind the landward edge of the existing or proposed sea defence or coast protection works to facilitate access for plant and materials used in connection with their maintenance or repair</p>	<p>sites.</p> <p>As such this policy will be subject to appropriate assessment.</p> <p>Recommendation:</p> <p>It is recommended that policy wording is amended as follows:</p> <p><i>'1. There are no harmful effects on or net loss of nature conservation or areas of geological importance within the Chichester and Pagham Harbours and Medmerry Realignment (including no adverse effects on the associated European designated sites);</i></p> <p><i>2. The development provides recreational opportunities that do not adversely affect the character, environment and appearance of the coast and Chichester Harbour Area of Outstanding Natural Beauty or result in adverse effects of integrity to European designated wildlife sites' ;</i></p>
<p>Policy DM21: Alterations, Change of Use and/or Re-use of Existing Buildings in the Countryside</p>	<p>Proposals for alterations, change of use and/or re-use of existing buildings in the countryside will be granted where it can be demonstrated that all the following criteria have been addressed:</p> <p>1.The building is structurally sound and is capable of conversion without the need for significant extension, alteration or rebuilding;</p> <p>2.It has been demonstrated that economic and community uses, have been considered before residential with residential uses only permitted if economic and community uses are shown to be inappropriate and unviable;</p> <p>3.The proposal is complementary to and does not prejudice any viable agricultural operations on a farm;</p> <p>4.Opportunities have been taken to enhance the accessibility of the site by means other than private motor vehicle; and</p> <p>5.The form, bulk and general design of the building is in keeping with its surroundings and the proposal and any associated development will not harm its landscape character and setting;</p> <p>Development/conversions that would create new isolated homes in the countryside will be avoided unless there are special circumstances as outlined in Government policy.</p>	<p>No Likely Significant Effect</p> <p>A development management policy relating to alterations, change of use and/or re-use of existing buildings in the countryside. This policy does not in itself provide for any quantum, location or type of development. There are no linking impact pathways present.</p>
<p>Policy DM22 Development in the Countryside</p>	<p>Within the countryside, outside Settlement Boundaries, development will be granted where it requires a countryside location and meets the essential, small scale, and local need which cannot be met within or immediately adjacent to existing settlements.</p> <p>Planning permission will be granted for sustainable development in the countryside where it can be demonstrated that all the following criteria have been addressed:</p>	<p>No Likely Significant Effect</p> <p>A development management policy relating to development in the countryside. This policy does not in itself provide for any quantum, location or</p>

	<p>1.The proposal is well related to an existing farmstead or group of buildings, or located close to an established settlement;</p> <p>2.The proposal is complementary to and does not prejudice any viable agricultural operations on a farm and other existing viable uses; and</p> <p>3.Proposals requiring a countryside setting, for example agricultural buildings, ensure that their scale, siting, design and materials would have minimal impact on the landscape and rural character of the area.</p> <p>Applications for retail development in the countryside will be considered where it has been demonstrated that the appropriate sequential and/or impact assessments have been undertaken. Local/small scale farm shops will be permitted provided they sell goods that have predominantly been produced on the farm.</p>	<p>type of development. There are no linking impact pathways present.</p>
<p>Policy DM23: Lighting</p>	<p>Where development involves an outdoor lighting scheme and where relevant an indoor lighting scheme (supermarkets, greenhouses etc), Planning permission will be granted where it can be demonstrated that the following criteria have been addressed:</p> <ol style="list-style-type: none"> 2. The detailed lighting scheme has been prepared in line with relevant British Standards and the latest national design guidance; 3. The design minimises unnecessary glare and spillage; 4. There is no significant adverse impact on neighbouring development or the wider landscape; and 5. Light levels are the minimum required for safety and security purposes, taking account of the existing location and character of the area. 	<p>No Likely Significant Effect</p> <p>This policy requires external lighting to meet British Standards. Furthermore, development proposals in order to gain permission are required to address issues relating to light within their design proposals. There are no linking impact pathways present.</p>
<p>Policy DM24: Air Quality</p>	<p>Development proposals will be permitted where it can be demonstrated that all the following criteria have been addressed:</p> <ol style="list-style-type: none"> 1.Development is located and designed to minimise traffic generation and congestion through access to sustainable transport modes, including maximising provision of pedestrian and cycle networks; 2.Development that creates or results in pollution including particulates, dust, smoke, pollutant gases or odour is designed to mitigate the impact on the amenities of users of the site and surrounding land to an appropriate level; and 3.Where development is close to an existing use that has potential to impact on the amenity of the proposed development through dust, particulates, pollutant gases and/or odour then an air quality assessment will be required to identify the potential impact on the area and detail the mitigation measures required; and <p>For major development proposals the following additional criteria must also be addressed:</p> <ol style="list-style-type: none"> 4.Where development is likely to have a significant negative impact on an Air Quality Management Area, or other areas of poor air quality then an air quality assessment will be required to identify the potential impact on the area and detail the mitigation measures required; 5.Air quality assessments for transport must include costed measures to off-set emissions associated with the development in its operational phase. 	<p>No Likely Significant Effect</p> <p>This policy aims to improve air quality within the district of Chichester. This includes through traffic calming measure, Air Quality Management Areas and air quality assessments. This policy does not provide any linking impact pathways.</p>
<p>Policy DM25: Noise</p>	<p>Planning permission will be granted where it can be demonstrated that the following criteria have been addressed:</p> <ol style="list-style-type: none"> 1.Where noise sensitive development is proposed, a high quality living environment is provided with acceptable levels of amenity for future occupiers by reason of absence of significant noise disturbance or annoyance and no significant adverse impact on the operation of nearby noise generating uses. 2.Where noise generating development is proposed, that any potential significant impact on amenity by reason of noise 	<p>No Likely Significant Effect</p> <p>A development management policy relating to noise. There are no linking impact pathways present.</p>

	disturbance and annoyance on the surrounding area will be adequately mitigated or minimised to an acceptable level.	
Policy DM26: Contaminated Land	<p>Development proposals requiring the remediation of contaminated land will be supported where it is demonstrated that the following criteria have been addressed:</p> <ol style="list-style-type: none"> 1. An appropriate site investigation has been completed to identify and quantify potential sources of contamination within the site; and 2. A risk assessment of the site investigation data has been undertaken and used to inform any necessary remediation measures so as to achieve an acceptable level of risk of contamination to future users of the site, the surrounding area and the environment. 	<p>No Likely Significant Effect</p> <p>A development management policy relating to contaminated land. There are no linking impact pathways present.</p>
Policy DM27: Historic Environment	<p>The Local Planning Authority will continue to conserve and enhance the historic environment through the preparation of conservation area character appraisals and management plans and other strategies, and new development which recognises, respects and enhances the local distinctiveness and character of the area, landscape and heritage assets will be supported.</p>	<p>No Likely Significant Effect</p> <p>This policy protects the historic environment such as monuments, listed buildings and conservation areas. There are no linking impact pathways present.</p>
Policy DM28: Natural Environment	<p>The impact of proposals will be carefully assessed to ensure the protection, conservation and enhancement of the landscape of the Plan area. Planning permission will be granted where it can be demonstrated that all the following criteria have been addressed:</p> <ol style="list-style-type: none"> 1. There is no adverse impact on: <ul style="list-style-type: none"> • The openness of the views in and around the coast, designated environmental areas and the setting of the South Downs National Park; and • The tranquil and rural character of the area. 2. Development recognises distinctive local landscape character and sensitively contributes to its setting and quality; 3. Proposals respect and enhance the landscape character of the surrounding area and site, and public amenity through detailed design; 4. Development of poorer quality agricultural land has been fully considered in preference to best and most versatile land (see policy xx); and 5. The individual identity of settlements, actual or perceived, is maintained and the integrity of predominantly 	<p>No Likely Significant Effect</p> <p>A development management policy relating to the natural environment. There are no linking impact pathways present.</p>
Policy DM29: Biodiversity	<p>Planning permission will be granted for development where it can be demonstrated that all the following criteria have been addressed:</p> <ol style="list-style-type: none"> 1. The biodiversity value of the site is safeguarded; 2. Demonstrable harm to habitats or species which are protected or which are of importance to biodiversity is avoided or mitigated; 3. The proposal has incorporated features that enhance biodiversity as part of good design and sustainable development, and identifies and pursues opportunities for achieving a net gain in biodiversity; 4. The proposal protects, manages and enhances the Plan Area network of ecology, biodiversity and geological sites, including the international, national and local designated sites (statutory and non-statutory), priority habitats, wildlife 	<p>No Likely Significant Effect</p> <p>This policy protects biodiversity at the local and regional level from impacts caused by development, this includes 'international... designated sites'. As such this policy is considered to benefit European Sites within Chichester and does not pose as a likely significant effect.</p>

	<p>corridors and stepping stones that connect them;</p> <p>5. Any individual or cumulative adverse impacts on sites are avoided;</p> <p>6. The benefits of development outweigh any adverse impact on the biodiversity on the site. Exceptions will only be made where no reasonable alternatives are available; and planning conditions and/or planning obligations may be imposed to mitigate or compensate for the harmful effects of the development.</p>	
<p>Policy DM30: Development and Disturbance of Birds in Chichester and Langstone Harbours Special Protection Areas</p>	<p>Development and Disturbance of Birds in Chichester and Langstone Harbours Special Protection Areas</p> <p>It is Natural England's advice that all net increases in residential development within the 5.6km 'Zone of Influence' are likely to have a significant effect on the Chichester and Langstone Harbours SPA either alone or in-combination with other developments and will need to be subject to the provisions of Regulation 63 of the Conservation of Habitats and Species Regulations 2017. In the absence of appropriate avoidance and/or mitigation measures that will enable the planning authority to ascertain that the development would not adversely affect the integrity of the SPA, planning permission will not be granted because the tests for derogations in Regulation 64 are unlikely to be met. Furthermore, such development would not have the benefit of the presumption in favour of sustainable development in the National Planning Policy Framework.</p> <p>Appropriate avoidance/mitigation measures that are likely to allow the planning authority to ascertain that there will be no adverse effect on the integrity of the SPA will comprise:</p> <ul style="list-style-type: none"> a. A contribution in accordance with the joint mitigation strategy outlined in the Bird Aware Solent Strategy; or b. A developer provided package of measures associated with the proposed development designed to avoid any significant effect on the SPA, provided and funded in-perpetuity; or c. A combination of measures in (a) and (b) above. <p>Avoidance/mitigation measures will need to be phased with development and shall be maintained in perpetuity. All mitigation measures in (b) and (c) above must be agreed to be appropriate by Natural England through the Habitats Regulations Assessment process. They should also have regard to the Chichester Harbour AONB Management Plan. The provisions of this policy do not exclude the possibility that some residential schemes either within or outside the Zone of Influence might require further assessment under the Habitats Regulations. For example, large schemes, schemes proposing bespoke or alternative avoidance/mitigation measures, or schemes that impinge on the supporting habitats identified by the Solent Waders and Brent Goose Strategy. Such schemes will be assessed on their own merits under Regulation 63 (appropriate assessment), and, subject to advice from Natural England. Where mitigation for any impact upon supporting habitat is required this should follow the guidance given in the Solent Waders and Brent Goose Strategy.</p> <p>Development and Disturbance of Birds in Pagham Harbour Special Protection Area</p> <p>Net increases in residential development within the 3.5km 'Zone of Influence' are likely to have a significant effect on the Pagham Harbour SPA either alone or in-combination with other developments and will need to be subject to the provisions of Regulation 63 of the Conservation of Habitats and Species Regulations 2017. In the absence of appropriate avoidance and/or mitigation measures that will enable the planning authority to ascertain that the development would not adversely affect the integrity of the SPA, planning permission will not be granted because the tests for derogations in Regulation 64 are unlikely to be met. Furthermore, such development would not have the benefit of the presumption in favour of</p>	<p>No Likely Significant Effect</p> <p>This is a positive development management policy in relation to disturbance of birds associated with both the Chichester and Langstone Harbours SPA and Pagham Harbour SPA. There are no negative linking impact pathways present.</p>

	<p>sustainable development in the National Planning Policy Framework.</p> <p>Net increases in residential development, which incorporates appropriate avoidance/mitigation measures, which would avoid any likelihood of a significant effect on the SPA, will not require 'appropriate assessment'. Appropriate avoidance/mitigation measures that are likely to allow the planning authority to ascertain that there will be no adverse effect on the integrity of the SPA will comprise:</p> <ul style="list-style-type: none"> d. A contribution towards the appropriate management of the Pagham Harbour Local Nature Reserve through the joint Chichester and Arun Scheme of Mitigation in accordance with the LNR Management Plan; or e. A developer provided package of measures associated with the proposed development designed to avoid any significant effect on the SPA; or f. A combination of measures in (a) and (b) above. <p>Avoidance/mitigation measures will need to be phased with development and shall be maintained in perpetuity. All mitigation measures in (a), (b) and (c) above must be agreed to be appropriate by Natural England in consultation with owners and managers of the land within the SPA.</p> <p>The provisions of this policy do not exclude the possibility that some residential schemes either within or outside the Zone of Influence might require further assessment under the Habitats Regulations. For example, large schemes, schemes proposing bespoke or alternative avoidance/mitigation measures, or schemes proposing an alternative approach to the protection of the SPAs where there is survey or other evidence that the site is used as supporting habitats by SPA species, including Brent Geese. Such schemes will be assessed on their own merits, under Regulation 63 (appropriate assessment), and subject to advice from Natural England.</p>	
<p>Policy DM31: Trees, Hedgerows and Woodlands</p>	<p>Development proposals will be granted where it can be demonstrated that all of the following criteria have been addressed;</p> <ol style="list-style-type: none"> 1. Proposals conserve and, where appropriate, enhance existing valued trees, hedgerows and woodlands; 2. The felling of protected trees, groups of trees or woodland will only be permitted in exceptional circumstances and in accordance with the relevant legislation, policy and good practice recommendations. Where protected trees are subject to felling, a replacement of an appropriate number, species and size in an appropriate location will be required; 3. A proposed loss or damage of non-protected but valued trees, woodland or hedgerows should be avoided, and if demonstrated as being unavoidable, appropriate mitigation measures are provided; 4. A minimum buffer of 15 metres will be required between the development and ancient woodland or veteran trees; and 5. Development proposal must demonstrate that appropriate protection measures are in place prior to any work on site throughout the development process as part of a comprehensive landscaping plan, and that suitable opportunities for the restoration, enhancement or planting of trees, woodland, and hedgerows are identified and incorporated. 	<p>No Likely Significant Effect</p> <p>A development management policy relating to trees, woodlands and hedgerows. There are no linking impact pathways present.</p>
<p>Policy DM32: Green Infrastructure</p>	<p>All development will be expected to contribute towards the provision of additional green infrastructure, and the protection and enhancement of existing green infrastructure.</p> <p>The existing green infrastructure network must be considered at an early stage of the design process for all major development proposals. Masterplans should illustrate how the development incorporates the existing green infrastructure network, and any new green infrastructure.</p> <p>Planning permission will be granted where it can be demonstrated that all the following criteria have been addressed:</p>	<p>No Likely Significant Effect</p> <p>A positive policy that provides for all development to contribute to the delivery of green infrastructure. Green infrastructure has the potential to divert recreational pressure away from sensitive</p>

	<p>1.The proposals maintain and, where appropriate, incorporate improvements to the existing network of green infrastructure, or the restoration, enhancement or creation of additional provision areas;</p> <p>2.Where appropriate, the proposals create new green infrastructure which is integrated into the development design and meets the needs of the communities within and beyond the site boundaries;</p> <p>3.The proposals contribute to improving the health and well-being of the local and wider community;</p> <p>4.The proposals do not lead to the dissection of the linear network of cycle ways, public rights of way, bridleways and ecological corridors; and</p> <p>5. Where appropriate, the Council will seek to secure via planning obligation provision for the future management and/or maintenance of green infrastructure.</p> <p>Development that will harm the green infrastructure network will only be granted if it can incorporate measures that avoid the harm arising or sufficiently mitigate its effects.</p> <p>The Council will expect that a legal agreement is entered in to where it is necessary to secure green infrastructure provision, or to ensure the long term sustainable management of green infrastructure. Unless stated elsewhere the Council will normally not be responsible for the long term maintenance and management of green infrastructure.</p>	<p>European sites.</p> <p>There are no linking impact pathways present.</p>
<p>Policy DM33: Canals</p>	<p>Development that makes provision of through navigation or enhancement of the Chichester Ship Canal and the Wey and Arun Canal will be supported where it meets environmental, ecological and transport considerations.</p> <p>Development will be permitted where it would not adversely affect the remaining line and configuration of the Portsmouth and Arundel Canal and features along it. Where no such line and configuration remains, proposals to reinterpret the alignment within new development proposals will be supported.</p>	<p>No Likely Significant Effect</p> <p>A development management policy relating to canals. There are no linking impact pathways present.</p>
<p>Policy DM34: Open Space, Sport and Recreation including Indoor Sports Facilities and Playing Pitches</p>	<p>The Council will seek to retain, enhance, improve access and increase the quantity and quality of public open space, playing fields, sport and recreation facilities (including indoor facilities) and rights of way including improvement of links to them.</p> <p>Development involving their loss will be granted permission where all the following criteria have been addressed:</p> <p>1.Alternative accessible replacement facilities of overall at least equivalent quantity and quality are provided: or</p> <p>2.Where the Chichester Open Space, Sport and Recreation Study (including Indoor Sports Facilities) and Playing Pitch Strategy identifies a surplus of provision, future needs and the potential of the open space to meet any shortfall in other types of provision in the local area have been taken into account; and</p> <p>3.There are no adverse impacts on biodiversity, heritage assets or the integrity of the Green Infrastructure network.</p> <p>Exceptions will only be made where the benefit of the development outweighs any harm, and it can be demonstrated there are no reasonable alternative sites available.</p> <p>New residential development (excluding replacement dwellings) will be required to contribute towards:</p> <p>1.The creation of new open space, sports and recreation facilities (including indoor facilities); new links to the existing rights of way network and/or</p> <p>2.Improving the quality and/or accessibility of existing open space or indoor facilities.</p>	<p>No Likely Significant Effect</p> <p>This policy aims to protected and enhance where possible open recreational spaces within Chichester. This type of development has the potential to divert recreational pressure away from sensitive European sites. There are no linking impact pathways present.</p>
<p>Policy DM35: Equestrian</p>	<p>Development proposals for horse related development will be granted where it can be demonstrated that all the following criteria have been addressed:</p>	<p>No Likely Significant Effect</p>

<p>Development</p>	<ol style="list-style-type: none"> 1. There is adequate land for the numbers of horses kept; 2. Existing buildings are reused where possible but where new buildings are necessary, these are well-related to existing buildings, appropriate to the number of horses to be kept and the amount of land available; 3. There is minimal visual impact on the landscape caused by the proposed development either individually or cumulatively; 4. The proposal, either on its own or cumulatively, with other horse related uses in the area, is compatible with its surroundings, and adequately protects water courses, groundwater and the safety of all road users; 5. The proposal does not lead to the need for additional housing on site; and 6. The proposal is well related to or has improved links to the existing bridleway network 	<p>A development management policy relating to equestrian development. There are no lining impact pathways present.</p>
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Table 11: Likely Significant Effects Test of Strategic Allocations of the Chichester Local Plan Review

Where an impact pathway is coloured green in the HRA Implications column, there is considered to be no linking impact pathway present and this impact pathway can be screened out from further consideration alone. Where an impact pathway is coloured orange in the HRA Implications column, there is considered to be potential for this linking impact pathway to be present and this impact pathway can be screened out from further consideration alone and is discussed further within the report.

Site Name	Policy Description	Impact Pathway	HRA Implications
Policy AL1: Land West of Chichester <i>Policy Carried Forward from Chichester Local Plan: Key Policies 2014-2029 (Adopted)</i>	Land at West of Chichester, as defined on the policies map, is allocated for mixed use development, comprising: <ul style="list-style-type: none"> • 1,600 homes; • 6 hectares of employment land (suitable for B1 Business uses); • A neighbourhood centre / community hub, incorporating local shops, a community centre, small offices and a primary school; and • Open space and green infrastructure, including a Country Park 	Recreational pressures	Chichester & Langstone Harbours SPA/Ramsar and Solent Maritime SAC: this site allocation is located within the 5.6km (700m north-east) of the SPA/ Ramsar sites.
			Pagham Harbour SPA/Ramsar: at its closest this site is located 5.4km north-east from the SPA/Ramsar.
		Disturbance of bat flightlines	Ebernoe Common SAC: this site lies 22km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.
			The Mens SAC: this site lies 22km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.
	Loss of functionally linked supporting habitat	Chichester & Langstone Harbours SPA/Ramsar From review of freely available online imagery it appears as though the current land use of this site is of agricultural land. Due to the close proximity to Chichester & Langstone Harbours SPA/Ramsar there is the possibility that the agricultural land could support off-site feeding and roosting habitats for over wintering bird species. However, data provided by the Solent Waders and Brent Goose Strategy does not provide evidence that birds are using this site. It is noted that the lack of records for a given area may not mean that it is not used but could simply mean that there has been no survey of that parcel. Therefore, notwithstanding the conclusion of this analysis it is considered that further investigation is undertaken for a planning application to confirm a) whether the site does provide suitable habitat for SPA birds and b) whether SPA birds use the site. If so, then mitigation would be required at that level	
Policy AL2: Land at Shopwyke (Oving Parish)	Land at Shopwyke, as defined on the policies map, is allocated for mixed use development, comprising: <ul style="list-style-type: none"> • approximately 585 homes; 	Recreational pressure	Chichester & Langstone Harbours SPA/Ramsar and Solent Maritime SAC: this site allocation is located 4.2km north-east from the SPA/ Ramsar sites.
			Pagham Harbour SPA/Ramsar: at its closest this site is located 5.3km north from the SPA/Ramsar.
		Disturbance of bat	Ebernoe Common SAC: this site lies more than 20km from the SAC and is therefore unlikely to

<p><i>Policy Carried Forward from Chichester Local Plan: Key Policies 2014-2029 (Adopted)</i></p>	<ul style="list-style-type: none"> At least 4 hectares of employment land (suitable for B1 and/or B2 Business uses); A neighbourhood centre / community hub, incorporating local shops to provide for small scale retail uses to meet primarily day to day convenience retail needs and a community centre; and Open space and green infrastructure, with the enhancement of the existing lakes for biodiversity improvements and safer access. 	flightlines	<p>present potential for a likely significant effect on the SAC.</p> <p>The Mens SAC: this site lies more than 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.</p>
		Loss of functionally linked supporting habitat	<p>Chichester & Langstone Harbours SPA/Ramsar</p> <p>From review of freely available online imagery it appears as though the current land use of this site is of industrial land, land currently being built out, rough grassland and grazed grassland. The Solent Waders and Brent Goose Strategy does not cover the area of this allocation, but due to the habitats present and the disturbance resulting from nearby construction work it is considered that this land parcel is not suitable to act as functionally linked supporting habitat.</p>
<p>Policy AL3: East of Chichester (Oving Parish)</p>	<p>Approximately 35 hectares of land at East of Chichester is allocated for a phased residential led development:</p> <ul style="list-style-type: none"> A minimum of 600 dwellings, A neighbourhood centre / community hub (incorporating a primary school, local shops, A community centre and Flexible space for employment/small-scale leisure use) along with open space and green infrastructure. 	Recreational pressure	<p>Chichester & Langstone Harbours SPA/ Ramsar and Solent Maritime SAC: this site allocation is located 3.8km east from the SPA/ Ramsar sites.</p> <p>Pagham Harbour SPA/Ramsar: at its closest this site is located over 4.8km north from the SPA/Ramsar.</p>
		Disturbance of bat flightlines	<p>Ebernoe Common SAC: this site lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.</p> <p>The Mens SAC: this site lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.</p>
		Loss of functionally linked supporting habitat	<p>Chichester & Langstone Harbours SPA/Ramsar</p> <p>From review of freely available online imagery it appears as though the current land use of this site is of arable fields, grazed grassland and scrub. Due to the close proximity to Chichester & Langstone Harbours SPA/Ramsar there is the possibility that the arable land could support off-site feeding and roosting habitats for over wintering bird species. However, this arable land is located adjacent to the B2144 and residential areas and as such will be subject to levels of disturbance. The Solent Waders and Brent Goose Strategy does not cover the area of this allocation, As such it is considered that the land parcel is not suitable to act as functionally linked supporting habitat.</p>
<p>Policy AL5: Southern Gateway</p>	<p>Approximately 12 hectares of land in the area known as Southern Gateway, as shown on</p>	<p>Recreational pressure</p>	<p>Chichester & Langstone Harbours SPA/ Ramsar and Solent Maritime SAC: this site allocation is located 1.8km east from the SPA/ Ramsar sites.</p> <p>Pagham Harbour SPA/Ramsar: at its closest this site is located 4.2km north from the SPA/Ramsar.</p>

	<p>the Policies Map, is allocated for a mixed-use development of:</p> <ul style="list-style-type: none"> • A minimum of 350 homes and • employment floorspace 	<p>Disturbance of bat flightlines</p>	<p>Ebernoe Common SAC: this site lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.</p> <p>The Mens SAC: this site lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.</p>
		<p>Loss of functionally linked supporting habitat</p>	<p>Chichester & Langstone Harbours SPA/ Ramsar Freely available online imagery indicates that this site is located in an urban environment and as such is not considered to provide functionally linked supporting habitat for wader species.</p>
		<p>Water quality</p>	<p>Pagham Harbour SPA/Ramsar The Water Quality Assessment has identified that the Southern Gateway is served by Apuldram WwTW. Apuldram WwTW discharges (indirectly) to Pagham Harbour. The Water Quality Assessment identified that the potential increased nitrate inputs from the Plan could result in a small but measurable increase in nitrogen loading in the harbours and as such contribute to in combination adverse effects on the European sites. Measures may be required to reduce future potential loading of nitrate to the Harbour.</p>
<p>Policy AL6: Land south-west of Chichester (Apuldram and Donnington Parishes)</p>	<p>Land is allocated at land south-west of Chichester for an employment-led development to include:</p> <ul style="list-style-type: none"> • approximately 20 hectares of employment land (suitable for B1c/B2 and B8 uses) and • A minimum of 100 homes along with a new link road connecting the A27/A259 Fishbourne roundabout and A286 Birdham Road. 	<p>Recreational pressure</p>	<p>Chichester & Langstone Harbours SPA/ Ramsar and Solent Maritime SAC: this site allocation is located 340m east from the SPA/ Ramsar sites.</p> <p>Pagham Harbour SPA/Ramsar: at its closest this site is located 3.9km north from the SPA/Ramsar.</p>
		<p>Disturbance of bat flightlines</p>	<p>Ebernoe Common SAC: this site lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.</p> <p>The Mens SAC: this site lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.</p>
		<p>Loss of functionally linked supporting habitat</p>	<p>Chichester & Langstone Harbours SPA/ Ramsar and Solent Maritime SAC: Freely available online imagery indicates that current land use of this area is of intensive arable land. The Solent Waders and Brent Goose Strategy does not suggest that this parcel of land acts as functionally linked supporting habitat and as such can be screened out.</p> <p>It is noted that the lack of records for a given area may not mean that it is not used but could simply mean that there has been no survey of that parcel. Therefore, notwithstanding the conclusion of this analysis it is considered that further investigation is undertaken for a planning application to confirm a) whether the site does provide suitable habitat for SPA birds and b) whether SPA birds use the site. If so, then mitigation would be required at that level.</p>
		<p>Hydrological impacts</p>	<p>Chichester & Langstone Harbours SPA/ Ramsar and Solent Maritime SAC: Due to the proximity of the allocation to the European site (340m), there is potential for runoff from the site to reach and potential affect the European designated site. The River Lavant flows through the site allocation to the European site as do ditches.</p>

		Water quality	Chichester & Langstone Harbours SPA/Ramsar The Water Quality Assessment has identified that this area is served by Apuldram WwTW. Apuldram WwTW discharges (indirectly) to Chichester Harbour. The Water Quality Assessment identified that the potential increased nitrate inputs from the Plan could result in a small but measurable increase in nitrogen loading in the harbours and as such contribute to in combination adverse effects on the European sites. Measures may be required to reduce future potential loading of nitrate to the Harbour.
		Urbanisation	Chichester & Langstone Harbours SPA/ Ramsar This allocation is located within 400m of the European sites and as such development in this location could result in linking impact pathways relating to urbanisation.
Policy AL7: Highgrove Farm, Bosham	Approximately 15 hectares of land at Highgrove Farm, Bosham is allocated for a residential-led development of: <ul style="list-style-type: none"> • A minimum of 250 dwellings and • A two-form entry primary school. 	Recreational pressure	Chichester & Langstone Harbours SPA/ Ramsar and Solent Maritime SAC: this site allocation is located 1.0km north east from the SPA/ Ramsar sites. Pagham Harbour SPA/Ramsar: at its closest this site is located 7.0km north from the SPA/Ramsar.
		Disturbance of bat flightlines	Ebernoe Common SAC: this site lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC. The Mens SAC: this site lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.
		Loss of functionally linked supporting habitat	Chichester & Langstone Harbours SPA/ Ramsar: Freely available online imagery indicates that current land use of this area is of intensive arable land. The Solent Waders and Brent Goose Strategy does not suggest that this parcel of land acts as functionally linked supporting habitat and as such can be screened out. It is noted that the lack of records for a given area may not mean that it is not used but could simply mean that there has been no survey of that parcel. Therefore, notwithstanding the conclusion of this analysis it is considered that further investigation is undertaken for a planning application to confirm a) whether the site does provide suitable habitat for SPA birds and b) whether SPA birds use the site. If so, then mitigation would be required at that level.
		Water quality	Chichester & Langstone Harbours SPA/Ramsar The Water Quality Assessment has identified that this area is served by Basham WwTW. Bosham WwTW discharges (indirectly) to Chichester Harbour. The Water Quality Assessment identified that the potential increased nitrate inputs from the Plan could result in a small but measurable increase in nitrogen loading in the harbours and as such contribute to in combination adverse effects on the European sites. Measures may be required to reduce future potential loading of nitrate to the Harbour.
Policy AL8 East Wittering Parish	Land will be allocated for development in the East Wittering Neighbourhood Plan	Recreational pressure	Chichester & Langstone Harbours SPA/ Ramsar and Solent Maritime SAC: this Parish is located within the 5.6km of the core recreational zone of the SPA/ Ramsar sites and within 700m from the Medmerry Realignment.

	for a minimum 350 dwellings including any amendments to the settlement boundary.		Pagham Harbour SPA/Ramsar: this Parish is partially located within the 3.5km core recreational zone of the SPA/ /Ramsar sites. Any development that is delivered within the 3.5km core recreational catchment zone has the potential to result in likely significant effects.
		Disturbance of bat flightlines	Ebernoe Common SAC: this parish lies over 12km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC. The Mens SAC: this parish lies over 12km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.
		Loss of functionally link habitat	Chichester & Langstone Harbours SPA//Ramsar and Pagham Harbour SPA/Ramsar: At the time of writing, the exact site allocations of c. 350 residential dwellings are not known as they are to be defined within the progressing East Wittering Neighbourhood Plan. The Parish supports functionally linked habitat classified as Low Use Areas identified in the Solent Waders and Brent Goose Strategy. As such development within this settlement has the potential to result in a likely significant effect.
Policy AL9: Fishbourne Parish	Land will be allocated for development in the revised Fishbourne Neighbourhood Plan for a minimum of 250 dwellings.	Recreational pressure	Chichester & Langstone Harbours SPA/ Ramsar and Solent Maritime SAC: this Parish includes parts of these European sites and as such is located well within the 5.6km of the core recreational zone of the SPA/ Ramsar sites. Pagham Harbour SPA/Ramsar: at its closest, this Parish is located 4.5km from the European site and as such beyond the 3.5km core recreational zone of the SPA/ Ramsar sites.
		Disturbance of bat flightlines	Ebernoe Common SAC: this parish lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC. The Mens SAC: this parish lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.
		Loss of functionally link habitat	Chichester & Langstone Harbours SPA/ Ramsar: At the time of writing, the exact site allocations of c. 250 residential dwellings are not known as they are to be defined within the Fishbourne Neighbourhood Plan. The Parish supports Primary Areas of functionally linked habitat identified in the Solent Waders and Brent Goose Strategy. As such development within this settlement has the potential to result in a likely significant effect.
		Hydrological impacts	Chichester & Langstone Harbours SPA/ Ramsar and Solent Maritime SAC: Due to the proximity of the settlement to the European site (up to immediately adjacent), there is potential for runoff from development to reach and potential affect the European designated site.
		Water quality	Chichester & Langstone Harbours SPA/Ramsar The Water Quality Assessment has identified that the this area is served by Apuldram WwTW. Apuldram WwTW discharges (indirectly) to Chichester Harbour. The Water Quality Assessment identified that the potential increased nitrate inputs from the Plan could result in a small but measurable increase in nitrogen loading in the harbours and as such contribute to in combination adverse effects

			on the European sites. Measures may be required to reduce future potential loading of nitrate to the Harbour.
		Urbanisation	Chichester & Langstone Harbours SPA/ Ramsar This allocation is located within 400m of the European sites and as such development in this location could result in linking impact pathways relating to urbanisation.
Policy AL10: Chidham and Hambrook Parish	Land will be allocated for development in the revised Chidham and Hambrook Neighbourhood Plan for a minimum of 500 dwellings, a two form entry primary school and supporting facilities and infrastructure.	Recreational pressure and loss of functionally link habitat	Chichester & Langstone Harbours SPA/ Ramsar and Solent Maritime SAC: this Parish is located well within the 5.6km of the core recreational zone of the SPA/ /Ramsar sites. this Parish includes parts of these European sites and as such is located well within the 5.6km of the core recreational zone of the SPA/ Ramsar sites Pagham Harbour SPA/Ramsar: this Parish lies over the 3.5km core recreational zone of the SPA/ Ramsar sites (7.5km).
		Disturbance of bat flightlines	Ebernoe Common SAC: this parish lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC. The Mens SAC: this parish lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.
		Loss of functionally link habitat	Chichester & Langstone Harbours SPA/ Ramsar At the time of writing, the exact site allocations of c. 500 residential dwellings and additional development are not known as they are to be defined within the Chidham and Hambrook Neighbourhood Plan. The parish supports Core Area and Primary support Areas identified in the Solent Waders and Brent Goose Strategy. As such development within this settlement has the potential to result in a likely significant effect.
		Hydrological impacts	Chichester & Langstone Harbours SPA/ Ramsar and Solent Maritime SAC: Due to the proximity of the settlement to the European site (up to immediately adjacent), there is potential for runoff from development to reach and potential affect the European designated site.
		Water quality	Chichester & Langstone Harbours SPA/Ramsar The Water Quality Assessment has identified that this area is served by Thornham WwTW. Thornham WwTW discharges (indirectly) to Chichester Harbour. The Water Quality Assessment identified that the potential increased nitrate inputs from the Plan could result in a small but measurable increase in nitrogen loading in the harbours and as such contribute to in combination adverse effects on the European sites. Measures may be required to reduce future potential loading of nitrate to the Harbour.
		Urbanisation	Chichester & Langstone Harbours SPA/ Ramsar This allocation is located within 400m of the European sites and as such development in this location could result in linking impact pathways relating to urbanisation.
		Policy AL11: Hunston Parish	Land will be allocated for development in the Hunston

	Neighbourhood Plan for a minimum of 200 dwellings, including any amendments to the settlement boundary.		Pagham Harbour SPA/Ramsar: These Parishes include land that is located within the European sites. As such it is located within the 3.5km core recreational zone of the SPA/ Ramsar sites.
		Disturbance of bat flightlines	Ebernoe Common SAC: this parish lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC. The Mens SAC: this parish lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.
		Loss of functionally link habitat	Chichester & Langstone Harbours SPA/ Ramsar and Pagham Harbour SPA/Ramsar. At the time of writing, the exact site allocations of c. 250 residential dwellings are not known as they are to be defined within the Neighbourhood Plan. The Solent Waders and Brent Goose Strategy does not identify the presence of support habitat for wader bird species, however the Parishes do contain suitable habitats such as arable farmland. As such development within this settlement has the potential to result in a likely significant effect. It is recommended that at the planning application stage it may be that following habitat surveys of the site it is identified to provide suitable habitat to support SPA and Ramsar site species and avoidance measures and mitigation will be required.
		Hydrological impacts	Pagham Harbour SPA/ Ramsar: Due to the proximity of the Parish to the European site (up to immediately adjacent), there is potential for runoff from development to reach and potential affect the European designated site.
		Urbanisation	Pagham Harbour SPA/ Ramsar This allocation is located within 400m of the European sites and as such development in this location could result in linking impact pathways relating to urbanisation.
Policy AL12: Land North of Park Farm, Selsey	Approximately 26 hectares of land North of Park Farm, Selsey is allocated for residential-led development of a minimum of 250 dwellings.	Recreational pressure	Chichester & Langstone Harbours SPA/ Ramsar and Solent Maritime SAC: this site allocation is located 8.6km east from the SPA/ Ramsar sites, however it is located within 5.6km of the Medmerry realignment (approximately 2.1km). Pagham Harbour SPA/Ramsar and Solent to Dorset Coast pSPA: at its closest this site is located 350m west from the SPA/Ramsar and pSPA.
		Disturbance of bat flightlines	Ebernoe Common SAC: Selsey lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC. The Mens SAC: Selsey lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.
		Loss of functionally linked supporting habitat	Pagham Harbour SPA/Ramsar: Freely available online imagery indicates that current land use of this area is of intensive arable land. The Solent Waders and Brent Goose Strategy does not survey this extent of the coast. Habitats present could provide functionally linked supporting habitat for SPA and Ramsar bird species.

			It is recommended that at the planning application stage it may be that following habitat surveys of the site it is identified to provide suitable habitat to support SPA and Ramsar site species and avoidance measures and mitigation will be required.
		Urbanisation	Pagham Harbour SPA/ Ramsar This allocation is located within 400m of the European sites and as such development in this location could result in linking impact pathways relating to urbanisation.
Policy AL13: Southbourne Parish	Land will be allocated for development in the revised Southbourne Neighbourhood Plan for a mixed use form of development to include a minimum of 1,250 dwellings, along with land to be allocated for employment and community uses subject to further examination of potential sites and including any amendments to the settlement boundary.	Recreational pressure	Chichester & Langstone Harbours SPA/ Ramsar and Solent Maritime SAC: The Parish of Southbourne includes land within the European site and as such is located well within the 5.6km of the core recreational zone of the SPA/ Ramsar sites. Pagham Harbour SPA/Ramsar: this Parish lies over the 3.5km core recreational zone of the SPA/Ramsar sites (10.2km).
		Disturbance of bat flightlines	Ebernoe Common SAC: this parish lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC. The Mens SAC: this parish lies over 20km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.
		Loss of functionally linked supporting habitat	Chichester & Langstone Harbours SPA/ Ramsar: Southbourne is located well within the 5.6km core recreational zone (the Parish includes land located within the European sites). At the time of writing, the exact site allocations of c. 1,250 residential dwellings and other development are to be defined within the Neighbourhood Plan. The parish supports Secondary Support Areas and Low Use Area and Secondary Support Area identified in the Solent Waders and Brent Goose Strategy. Dependant on the location of development within the Parish there is potential for loss of functionally linked supporting habitat
		Hydrological impacts	Chichester & Langstone Harbours SPA/ Ramsar: Due to the proximity of the Parish to the European site (up to immediately adjacent), there is potential for runoff from development to reach and potential affect the European designated site.
		Water quality	Chichester & Langstone Harbours SPA/Ramsar The Water Quality Assessment has identified that this area is served by Thornham WwTW. Thornham WwTW discharges (indirectly) to Chichester Harbour. The Water Quality Assessment identified that the potential increased nitrate inputs from the Plan could result in a small but measurable increase in nitrogen loading in the harbours and as such contribute to in combination adverse effects on the European sites. Measures may be required to reduce future potential loading of nitrate to the Harbour.
		Urbanisation	Chichester & Langstone Harbours SPA/ Ramsar This allocation is located within 400m of the European sites and as such development in this location could result in linking impact pathways relating to urbanisation.

Policy AL14: Tangmere Strategic Development Location	Approximately 73 hectares of land to the west of Tangmere is allocated for residential led development of a minimum of 1,300 dwellings.	Recreational pressure	Chichester & Langstone Harbours SPA/ Ramsar and Solent Maritime SAC: Tangmere lies over 5.6km of the core recreational zone of the SPA/ Ramsar sites (5.7km).
Policy AL15: Tangmere Strategic Employment Land	2.4 hectares of employment land is allocated for B1-B8 and similar employment generating uses in the form of an extension to the Chichester Business Park to the east of Tangmere village, with access to the A27 via City Fields Way/Meadow Way.	Disturbance of bat flightlines	<p>Pagham Harbour SPA/Ramsar: this Parish lies over the 3.5km core recreational zone of the SPA/ Ramsar sites (6.4km).</p> <p>Ebernoe Common SAC: this parish lies over 19km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.</p> <p>The Mens SAC: this parish lies over 17km from the SAC and is therefore unlikely to present potential for a likely significant effect on the SAC.</p>

