

## **Appendix 12: Response to Natural England's Regulation 19 Representation**

### **WDC response Introduction:**

This Appendix responds to the representation on the Wealden District Local Plan made by Natural England on 5<sup>th</sup> October 2018 in response to the consultation held between 13<sup>th</sup> August and 8<sup>th</sup> October 2018 pursuant to Regulation 19 of the Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended).

Natural England's representation considered the Wealden Local Plan, its evidence base and the HRA. This included representations in relation to landscape, the High Weald Area of Outstanding Natural Beauty (AONB) and green infrastructure, as well as matters relating to designated European sites and the Council's Habitats Regulations Assessment.

This Appendix sets out the representation made by Natural England so far as relevant to the Habitats Regulations Assessment only. Wealden District Council's responses to Natural England are provided on a point by point / paragraph by paragraph basis in grey boxes headed 'WDC Response'. The Council consider that this is the easiest way to structure its responses to the matters raised by Natural England. The non-HRA elements of the Natural England representations, such as those relating to landscape or biodiversity, are not addressed here, but are dealt with elsewhere in the Council's evidence base in support of the Local Plan.

It should be noted that Wealden District Council has considered the representation made by Natural England very carefully and has gained external expert advice to assist in its considerations. In carefully considering the advice provided by Natural England, Wealden District Council has concluded that there are cogent reasons for disagreeing with Natural England in certain respects, as set out in the HRA as well as this.

Please note that any footnotes provided within Natural England's original text are as set out on the following page below. Footnotes provided at the bottom of the subsequent pages relate to WDC response text only.

Natural England footnotes (as relevant to Natural England's text only)

1. Specifically Lewes District Council, the South Downs National Park Authority, Tunbridge Wells Borough Council, Hastings Borough Council, and Rother District Council
2. <http://publications.naturalengland.org.uk/publication/4720542048845824>
3. Specifically Lewes District Council, the South Downs National Park Authority, Tunbridge Wells Borough Council, Hastings Borough Council, and Rother District Council
4. ([http://naei.beis.gov.uk/overview/pollutants?pollutant\\_id=6](http://naei.beis.gov.uk/overview/pollutants?pollutant_id=6)).
5. [http://www.wealden.gov.uk/Wealden/Residents/Planning\\_and\\_Building\\_Control/Planning\\_Development\\_Management/Agents\\_and\\_Parish\\_Council\\_Information/Planning\\_Agents\\_Ashdown\\_Forest.aspx](http://www.wealden.gov.uk/Wealden/Residents/Planning_and_Building_Control/Planning_Development_Management/Agents_and_Parish_Council_Information/Planning_Agents_Ashdown_Forest.aspx)
6. [https://publications.europa.eu/en/publication-detail/-/publication/21676661-a79f-4153-b984-aeb28f07c80a/language-en Page 2](https://publications.europa.eu/en/publication-detail/-/publication/21676661-a79f-4153-b984-aeb28f07c80a/language-en_Page_2)
7. [http://www.euro.who.int/\\_data/assets/pdf\\_file/0005/123098/AQG2ndEd\\_11no2\\_level.pdf](http://www.euro.who.int/_data/assets/pdf_file/0005/123098/AQG2ndEd_11no2_level.pdf)
8. Advocate General Opinion in Case C-258/11 Sweetman (refer paras 58-61)
9. Case C258-11 Sweetman (refer para 56)
10. <http://www.apis.ac.uk/src/submit=Source+Attribution&sitetype=SAC&sitecode=UK0030080&sitename=Ashdown+Forest>
11. <http://publications.naturalengland.org.uk/publication/5354697970941952>
12. <http://jncc.defra.gov.uk/page-4060>

Date: 05 October 2018  
Our ref: 255168  
Your ref: Wealden Local Plan Reg 19

LDF Planning Policy  
Wealden District Council



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Dear Sir or Madam

### **Wealden Local Plan – Proposed Submission Document (Regulation 19)**

Thank you for your consultation email received on 10<sup>th</sup> August regarding the Wealden Local Plan proposed submission document. We have reviewed the Local Plan together with its Habitats Regulations Assessment (HRA) and Sustainability Appraisal (SA). As well as providing our comments on the local plan policies and site allocations below, we have provided an overarching summary of our statutory advice on the HRA and SA. More detailed comments on the HRA are included within Annex 1, and our detailed advice on site allocations and their site-specific policies are provided in Annex 2.

The importance of the environment to the district is demonstrated through the plan's recognition of Wealden's beautiful and tranquil countryside, special landscapes and nationally and internationally important wildlife sites. Natural England welcomes therefore the statement in the vision for the local plan that '*The environment of the District will have been protected and biodiversity enhanced.*'

Wealden was the first district in the country to undertake a full revision of the Ancient Woodland Inventory to include smaller woodland sites, and we recognise and welcome the council's ongoing commitment to its rich and varied habitats and wildlife. This commitment is further underlined by the council's recognition of the importance of net gain and the local plan's aim to '*actively seek opportunities to increase biodiversity within the District.*'

We also note the council's commitment in the vision to protecting the sensitive habitats of Ashdown Forest and Pevensy Levels, and we have worked closely with Wealden to advise how these and other wildlife sites can be fully considered in the plan process. In particular, we recognise and welcome the council's commitment to ensuring there is a robust package of measures in place to protect the Forest from visitor pressure.

However, Natural England does have strong concerns regarding the allocation of major development within the High Weald Area of Outstanding Natural Beauty, and we have provided specific comments regarding the proposed allocation of land at Ghyll Road, Heathfield. We consider such a proposal runs contrary to the council's aim to only permit development that conserves and seeks to enhance this nationally important landscape.

We remain, however, committed to working closely with the council to help ensure that a sound plan is secured that enables growth in accordance with the principles of sustainable development.

## Habitats Regulations Assessment (HRA) – Overarching summary

### Air Quality – All sites

Natural England is satisfied that it **can** be ascertained that the plan or project **will not** adversely affect the integrity of Ashdown Forest Special Area of Conservation (SAC), Lewes Downs SAC and Pevensey Levels SAC and Ramsar from air quality impacts. Natural England's advice regarding air quality is that this conclusion can be reached without mitigation measures being needed under the specific requirements of the Habitats Regulations. Our advice is based on the evidence provided, our expert knowledge of the particular characteristics, interest features and management of the designated sites in question and our professional judgement.

Natural England is satisfied that it **can** be ascertained that the plan or project **will not** adversely affect the integrity of Ashdown Forest Special Area of Conservation (SAC), Lewes Downs SAC and Pevensey Levels SAC and Ramsar from air quality impacts. Natural England's advice regarding air quality is that this conclusion can be reached without mitigation measures being needed under the specific requirements of the Habitats Regulations. This is based on the evidence provided, our expert knowledge of the particular characteristics, interest features and management of the designated sites in question, and our professional judgement.

#### **WDC response:**

The Council is pleased to note that Natural England consider that the Local Plan will not adversely affect the integrity of Ashdown Forest SAC, Lewes Downs SAC and Pevensey Levels SAC and Ramsar.

The Council notes that Natural England consider that the conclusion of 'no adverse effect' can be reached without mitigation measures and that Natural England's conclusion is based on the evidence provided, their expert knowledge and their professional judgement.

In accordance with the Conservation of Habitats and Species Regulations 2017 (Reg 105(2)), the Council has had regard to Natural England's representation. However, as the competent authority, Wealden District Council (WDC) considers that mitigation measures are required in order to conclude 'no adverse effect on integrity' for Ashdown Forest SAC and Lewes Downs SAC. WDC are therefore in disagreement with Natural England in relation to this matter. It is perhaps unusual for a Council to consider that mitigation measures are required to protect the Natura 2000 network when the government's environmental advisors advise that no such measures are required. However, the Council considers that there are cogent reasons for disagreeing with Natural England on this issue.

WDC's conclusions, as competent authority, are based on the evidence provided as part of the HRA, (including supplementary consideration subsequent to the Regulation 19 consultation), and expert knowledge including that provided by Professor Mark Sutton from the Centre of Ecology and Hydrology (CEH), leading Air Quality Consultants (AQC) and Ecologists (Mott MacDonald / ECUS). The conclusion of WDC, as competent authority, is also based on relevant legislation and policy, guidance, case law and professional judgement.

The overall disagreement between WDC and Natural England as to whether a conclusion of no adverse effect can be reached in the absence of mitigation, stems from differences in view on a range of issues, including:

- Which air quality modelling scenario to use (A, B or C);
- Legal interpretation of Habitats legislation; and
- Interpretation and application of recent case law.

WDC has, during the Habitats Regulations Assessment process, sought expert advice, which has also been used within this WDC response to Natural England's Regulation 19 Representation. A number of supporting documents are therefore available to support this response including:

- Ashdown Forest SAC: Air Quality Monitoring and Modelling Air Quality Consultants, August 2018);
- Ecological Monitoring at Ashdown Forest: Considering the current and Future Impacts on the SAC caused by Air Quality and Nitrogen Deposition (ECUS Environmental Consultants, July 2018);
- Wealden District Council letter to Natural England (2<sup>nd</sup> March 2018);
- Air Quality Input for Habitats Regulations Assessment: Pevensey Levels (Air Quality Consultants, August 2018);
- Air Quality Input for Habitats Regulations Assessment: Lewes Downs SAC (Air Quality Consultants, August 2018);
- Wealden District Council Local Plan – Comments on Regulation 19 Response of: Natural England (AQC, November 2018)
- Wealden District Council Local Plan – Comments on Regulation 19 Response of: Lewes District Council, Tunbridge Wells Borough Council, South Downs National Park Authority, and AECOM (AQC, November 2018)
- Risks from air pollution to the integrity of Ashdown Forest Special Area of Conservation: Overview of Issues and Conclusions (Professor Mark A. Sutton, January 2019);
- Risks from air pollution to the integrity of Ashdown Forest Special Area of Conservation: Analysis of the (Regulation 19) consultation responses from Natural England, South Downs National Park Authority, Tunbridge Wells Borough Council and Lewes District Council concerning the proposed Wealden Local Plan (Professor Mark A. Sutton, January 2019);

We note WDC's conclusion that there will not be an adverse effect on the integrity of these sites, provided that mitigation measures are secured. Whilst we have reviewed the evidence specifically relating to WDC's local plan, our advice, that mitigation measures are not necessary to avoid an adverse effect, is consistent with our advice to WDC's neighbouring authorities<sup>1</sup> in their plan making.

**WDC response:**

Any advice received by neighbouring authorities from Natural England is a matter for them as competent authorities for their plans. As competent authority in relation to its Local Plan, WDC have undertaken a detailed programme of both air quality monitoring and modelling and ecology monitoring to inform its HRA and Local Plan. The information and subsequent HRA shows that in 2028, if the Local Plan were to proceed without mitigation, it would result in additional nitrogen deposition and atmospheric pollutants

from additional vehicle movements across the road network adjacent to Ashdown Forest and Lewes Downs SAC. All air quality model scenarios (A, B and C) demonstrate this increase. It is scenario B that Natural England consider the 'right' scenario to use for HRA purposes, while the Council considers scenario A to be the right scenario, as explained below and in the HRA.

We recognise that it is a matter for WDC as competent authority to reach its conclusion on the Appropriate Assessments, having considered the advice provided by Natural England. If WDC decides to depart from our advice and considers that mitigation is required, it will be necessary for the council to demonstrate that the mitigation will be effective and there is sufficient certainty as to its delivery.

**WDC response:**

The advice provided here is noted. It is also noted that this advice applies to all European / International sites. The Council agrees that any mitigation proposed to avoid or mitigate an adverse effect will be required to demonstrate its effectiveness, as well as certainty that the measures can be delivered.

Whilst unrelated to air quality, WDC would like to highlight that whilst mitigation elsewhere in the Country in relation to access management may be considered to be 'effective' by Natural England, such as that in Thames Basin Heath or the Dorset Heaths, at the time that Natural England requested SANGS and SAMMs at Ashdown Forest in 2010 no evidence existed in relation to SPA mitigation anywhere in the Country.

In addition to the above, WDC considers that Natural England are content with relying on Government-predicted improvements but without the certainty that they will be effective, or indeed delivered, in the time frames provided. Advice is therefore contradictory in relation to 'proving with sufficient certainty' that mitigation proposed by the WLP HRA will be effective.

We have provided advice on these measures in the context that we do not consider they are required to reach a conclusion of no adverse effect on the European sites. It is our considered opinion that the mitigation measures, as proposed by WDC, do not provide the level of certainty that would be required under the Habitats Regulations. If the measures were needed, the impacts that WDC have identified would need to be negated or reduced to an acceptable level.

**WDC response:**

The Council considers that the mitigation proposed will provide the requisite certainty.

Since publication of the August 2018 HRA, the European Commission has published a Notice on Managing Natura 2000 Sites (C (2018) 7621 final). This provides additional guidance. The guidance states:

*‘For the competent authority to be able to decide if the mitigation measures are sufficient to remove any potential adverse effects of the plan or project on the site (and do not inadvertently cause other adverse effects on the species and habitat types in question), each mitigation measure must be described in detail, with an explanation based on scientific evidence of how it will eliminate or reduce the adverse impacts which have been identified. Information should also be provided of how, when and by whom they will be implemented, and what arrangements will be put in place to monitor their effectiveness and take corrective measures if necessary. The need for definitive data at the time of authorization is also raised in case C-142/16, paragraphs 37-45.*

*If the competent authority considers the mitigation measures are sufficient to avoid the adverse effects on site integrity identified in the appropriate assessment, they will become an integral part of the specification of the final plan or project or may be listed as a condition for project approval. If, however, there is still a residual adverse effect on the integrity of the site, even after the introduction of mitigation measures, then the plan or project cannot be approved (unless the conditions set out in Article 6(4) are fulfilled)’.*

A draft mitigation Tariff was published on 7<sup>th</sup> September 2018. The Draft Tariff was provided to Natural England also. This was subsequent to the publication of the HRA.

Notwithstanding the case that the August 2018 HRA confirmed that the effects resulting from the WLP on the SAC’s can be mitigated with sufficient certainty, the HRA has been updated to provide additional information. This information is provided to demonstrate that the level of certainty required by the Habitats Regulations and the European Commission Guidance will be achieved. Should it be considered (contrary to WDC’s view) that the level of certainty cannot be achieved, the Council may seek to apply Article 6(4) of the Habitats Directive, including appropriate compensatory measures.

Natural England welcomes any measures that will contribute to reducing background nitrogen loads to designated sites. However, as stated above, our advice is that these measures are not necessary to meet the requirements of the Habitats Regulations. Such actions would, however, be welcome as an element of a future Shared Nitrogen Action Plan (SNAP). We welcome WDC’s commitment to working with Natural England and other stakeholders in developing locally targeted measures through the SNAP that can address all sources of atmospheric nitrogen pollution at a site level.

**WDC response:**

Wealden District Council is committed to ensuring that its function, through the delivery of the Local Plan and associated growth, does not result in an adverse effect on any Natura 2000 sites. For this reason, and as relevant to air pollution in particular, it is committed to deliver the necessary mitigation as required by the Habitats Regulations to ensure that its plan will not result in an adverse effect on the SACs through the worsening of conditions relating to air pollutants and deposition. This mitigation relates to future pollutants specifically from housing / employment growth. It does not seek to deal with historic pollution or seek to reduce background levels from other sources, although the mitigation could, where necessary, seek to improve the condition of the site through enhanced management measures. As per the requirements of the Habitats Regulations, the mitigation strategy seeks to 'avoid or reduce impacts or prevent them from happening in the first place' (see page 51 of the Commission Guidance) and to a level where they will no longer adversely affect the integrity of the site.

The Council is also committed to working in partnership with Natural England and other partners to assist in the delivery of a Site Nitrogen Action Plan (SNAP) of which Natural England are the leading delivery body. The purpose and role of a SNAP is set out in the HRA and this point is covered in more detail below.

Recreational Pressure – Ashdown Forest

Natural England is satisfied that it **can** be ascertained that the plan or project **will not** adversely affect the integrity of Ashdown Forest SAC and Special Protection Area (SPA), from recreational pressure subject to appropriate mitigation measures as identified in Policy EA 2.

**WDC response:**

Noted, and WDC concur with this conclusion.

Water Quality – Pevensey Levels

Natural England is satisfied that it **can** be ascertained that the plan or project **will not** adversely affect the integrity of Pevensey Levels SAC and Ramsar from water quality subject to appropriate SuDS as identified in Policy SWGA 7. Further detailed comments relating to the specific impact pathways on the relevant designated sites are included in Annex 1.

**WDC response:**

Noted, and WDC concur with this conclusion.

## Wealden Local Plan

### WDC response:

The sections of the Natural England Representations on pages 3 to 9 entitled Wealden Local Plan, Targets, Site Allocations and Sustainability Appraisal (SA) have been omitted from this Appendix, since they are not relevant to Habitats Regulations issues.

### Soundness of the local plan

Natural England has considered the local plan against the tests of soundness in the NPPF. Our advice is that there are some issues which need to be addressed to ensure the plan is not unsound. In particular, Natural England is concerned that the local plan proposes an allocation for major development within the High Weald AONB, at Ghyll Road, Heathfield. Natural England **objects** to this allocation and recommends that it is deleted to avoid the plan being considered unsound.

We have provided advice that we do not consider mitigation measures are necessary to avoid an adverse effect on Ashdown Forest Special Area of Conservation (SAC), Lewes Downs SAC and Pevensey Levels SAC and Ramsar site from air quality impacts. If WDC decides to depart from our advice and considers that mitigation measures are required, it will be necessary for the council to conclude that the mitigation will be effective and there is sufficient certainty as to its delivery. In other words, if mitigation measures are being relied upon, it will be necessary for the council to ensure these measures are effective, reliable, timely and sufficiently certain to ensure the local plan is not unsound.

### WDC response:

WDC note this advice. As explained elsewhere in this Appendix, it considers that mitigation measures are required for Ashdown Forest SAC and Lewes Downs SAC, but that the measures are certain and allow an overall conclusion of no adverse effect on integrity.

As the issues regarding air quality in particular are technically complex, we would be happy to attend the Examination in Public if that would aid the Council or the Inspector.

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

Yours  
faithfully  
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## Annex 1 - HRA detailed comments

1. Comments on sections of the HRA that are relevant to the assessment methodology and therefore relevant to all designated sites are below. This is followed by comments on air quality that are relevant to all sites and then the specific impact pathways by designated site.

### Chapter 4

2. Para 4.41 implies that all features within a site boundary should be considered but this is “as a general rule” and areas are often also included in site boundaries as site fabric. Sometimes this is because the boundary is drawn to a recognisable feature on the ground such as the edge of a field or a road. It is relevant of course to consider the whole site at screening stage where further detailed information is not available. We are fortunate in that we have specific information about the location of qualifying features within the sites from the significant amount of detailed modelling that has been provided. Further stages of assessment should relate to the specific interest features of the site and their location on the site in relation to potential impacts.

#### **WDC response:**

There are a number of points that WDC wishes to consider here:

- (a) Paragraph 4.41 was drafted directly from information contained in a JNCC publication. McLeod, CR, Yeo, M, Brown, AE, Burn, AJ, Hopkins, JJ, & Way, SF (eds.) (2005) The Habitats Directive: selection of Special Areas of Conservation in the UK. 2nd edn. Joint Nature Conservation Committee, Peterborough<sup>1</sup>.

This states the following at section 1.5.3 ‘Identifying SAC boundaries’ on page 15. Relevant text is highlighted.

*“Sites on land (including freshwater sites and coastal sites down to low water mark) are normally notified as SSSI or ASSI, and, where appropriate, the same boundary has been used to simplify administrative arrangements and to assist in identification of the boundary on the ground. However, SSSI/ASSI are often notified for features which are of national importance but which are not Annex I habitats or Annex II species. **Consequently, SSSI/ASSI may be larger than the SACs that are contained within their boundaries. As a general principle, SAC boundaries have been drawn closely around the qualifying habitat types or the habitats of species for which the sites have been selected, taking into account the need to ensure that the site operates as a functional whole for the conservation of the habitat type(s) or species and to maintain sensible management units.***

***Buffer zones have generally not been included as part of SACs.** Measures are provided in the UK Habitats Regulations to control, through the planning system, adverse impacts on a qualifying feature arising outside the site. Some sites straddle the land/sea divide or are entirely marine. In these situations the seaward boundaries of the site have been drawn as straight lines, to ensure ease of identification on charts and at sea.*

<sup>1</sup> <http://jncc.defra.gov.uk/pdf/SAC-selection-background-T37.pdf>

**Some SACs are in fact clusters of geographically discrete sites. This has been appropriate when qualifying interests are ecologically interdependent or were geographically contiguous before being divided by human activity, as, for example, has happened in a number of cases with heathland and woodland.** In some cases, such as the North Pennine Dales Meadows, a number of relatively small SSSIs in the same geographical area have been clustered into one site. Such clusters may contain a range of habitat types. **However, the argument for clustering of sites is strongest where the fragments support the same habitat types or species.** Since the area of the cluster is larger than an individual fragment, it will often support more species characteristic of the habitat type, simply because of the species-area relationship. This is well-established for a variety of habitats (see, for example, Dawson 1994). In addition, a cluster is likely to span a wider range of conditions for a single habitat type than a single fragment. This will increase the total species-richness and to some degree buffer the habitat resource against the uncertain effects of climate and other changes. Where the sites in the cluster are close together and species have relatively mobile patterns of distribution over time, there will be a higher probability of maintaining species diversity, as opportunities for successful dispersal and establishment will be more frequent”.

The Council considers that its paragraph 4.41 within the HRA is consistent with this passage, and a correct statement of principle.

- (b) The Habitats legislation itself does not distinguish between stages in HRA, i.e. between screening and an appropriate assessment. Therefore, WDC does not agree with Natural England’s representation regarding considering the whole site at the screening stage and then specific interest features only during further stages of assessment. In an appropriate assessment, the implications for the site as a whole must be considered in the light of its conservation objectives. It is also unclear from Natural England’s representation what they consider a ‘specific interest feature’ to be and whether they are referring to Annex I or Annex II features in their statement.
- (c) The term “site fabric” is not found in the Directive or Regulations and is unclear. WDC consider that all parts of the designated SAC are subject to protection under the Directive.
- (d) Whilst specific information about the current location of qualifying interest features has been gained, the location of qualifying interests may change in the future subject to management, lack of management, fire or for other reasons such as factors affecting site condition. The whole SAC boundary is therefore relevant. This is particularly relevant when considering heathland sites where there is a clear ecological relationship between woodland, heathland and other habitats present. This mosaic of habitats are important for site integrity for both SPAs and SACs. In fact woodland is often essential to restore heathland.
- (e) Professor Mark Sutton of CEH in his analysis of the Natural England Regulation 19 response<sup>2</sup> concurs with the above and at paragraph 73 further adds that:
  - i. The identification of ‘specific interest features’ ... “should not be simply based on current land cover maps (e.g., as described in the ECUS Report), but also consider areas of heathland at the time of designation of Ashdown Forest SAC, as well as any areas for which it is recognized as being relevant to restore to the priority

<sup>2</sup> Risks from air pollution to the integrity of Ashdown Forest Special Area of Conservation: Analysis of the (Regulation 19) consultation responses from Natural England, South Downs National Park Authority, Tunbridge Wells Borough Council and Lewes District Council concerning the proposed Wealden Local Plan (CEH, January 2019).

habitats. This might include areas of heathland that have been lost due to scrub and woodland encroachment over past decades, as well as areas of bracken (e.g., where current or future clearing programmes could aim to restore to good condition heathland”).

ii. “...one should not simply ignore exceedance of air pollution at certain locations within the SAC simply because a location is currently mapped as not being heathland”.

3. Para 4.45 states “*It is clear that the focus of site integrity relates to the European site as a whole and not just the parts of the site where the qualifying habitats or species exist*”. This may be the case on some sites where additional features are considered to contribute to the functionality of the site. However we consider this is not the case on all sites and this approach ignores the fact that boundaries to designated sites often run to a recognisable feature on the ground for practical mapping purposes. Additionally site fabric may also be included within site boundaries, these are areas of land, water and/or permanent structure that are not and never have been part of the special features of a site and do not contribute towards supporting a special feature of the site.

**WDC response:**

It is noted that Natural England point (3) is general in nature and not specifically directed at individual SACs covered in the WLP HRA. If it were, then further clarification would be helpful. Notwithstanding this, there are a number of points that WDC wish to make here due to the relevance of this statement to the WDC HRA:

- (a) Paragraph 4.45 simply seeks to provide interpretation of the definition of ‘site integrity’ as provided in the EU Commission guidance (2018).
- (b) The designation process for SACs provides the ability to identify features that do not contribute to the site, or where presence of a habitat or species is non-significant in relation to maintaining or restoring the site. There is a tool to provide this information on each specific site’s Natura 2000 Standard Data Form. It is noted that for Ashdown Forest SAC, Pevensey Levels SAC and Lewes Downs SAC no mention is made of ‘insignificant features or habitats’. Therefore, for the sites considered within the appropriate assessment, ‘the whole area’ as per that stated in the definition of site integrity, is considered relevant in this case.
- (c) The protection under the Directive relates to the site’s conservation objectives, which are not only maintenance but also restoration of the site’s integrity, the extent and distribution of qualifying features, the structure and function of habitats, the supporting processes on which such habitats rely, the populations of qualifying species and their distribution within the site. Therefore, areas of the site that do not currently contain relevant features are not irrelevant for the purposes of an appropriate assessment. They may have the potential to contain such features in the future, and they may have a supporting role in relation to parts of the site which currently do contain such features. In addition, if impacts on the non-qualifying habitats could lead to an adverse effect on the qualifying habitat, then this would be relevant and would need to be considered as part of any assessment.
- (d) In principle if it could be evidenced definitively and with certainty that an area of the site could never be restored to contain such features, and could never have any relevant supporting role to play within the integrity of the site, Natural England’s comment could be correct, but this would need to be evidenced and is likely to be difficult to show.
- (e) The judgment of the European Court of Justice, on case C-461/17, handed down on 7th

November 2018, addresses the proper approach. It states in its ruling at paragraph 70(1) that: “an ‘appropriate assessment’ must, on the one hand, catalogue the entirety of habitat types and species for which a site is protected and, on the other, identify and examine both the implications of the proposed project for the species present on that site, and for which that site has not been listed, and the implications for habitat types and species to be found outside the boundaries of that site, provided that those implications are liable to affect the conservation objectives of the site.”

4. Para 4.47 - Article 17 of the Habitats Directive is the reporting mechanism used to assess the condition of SACs, although the monitoring can draw on CSM data where applicable.

**WDC response:**

The Article 17 reporting mechanism is noted in the HRA, for example in Appendix 1 at paragraphs 18.24 and 20.17. However, paragraph 4.47 of the HRA discusses the ‘Use of SSSI condition assessments and site integrity’. This is due to limited site specific data being available as part of the Article 17 reporting mechanism, which can be useful in undertaking a Habitats Regulations Assessment.

5. Para 4.48 - It should be noted that CSM is related to the specific SSSI interest features rather than the N2K features although some of these may overlap in some cases.

**WDC response:**

This is noted and considered as part of the WLP HRA.

**All sites - Air Quality**

6. Natural England’s comments regarding air quality are consistent with our nationally agreed Internal approach to air emissions on road traffic<sup>2</sup>

**WDC response:**

AQC provide the following in their Natural England response. This response is agreed by WDC: Natural England’s position is considered to be ill informed and also does not appear to take account of UK High Court Case No: CO/3943/2016 nor the Advocate General Kokott Opinion or subsequent Judgement on ECJ Joined Cases C-293/17 and C-294/17. As a result of these failings, adherence to Natural England’s published guidance would mean providing an air quality assessment which is not the most appropriate or robust scientific assessment as required by the Habitats Regulations and therefore not fit for purpose for the protection of the environment.

In addition to the above, WDC has taken note and agrees with the specific advice provided by Professor Mark Sutton of CEH<sup>3</sup>. The advice provides, in part, an analysis of Natural England’s approach as set out in their Guidance document NEA001 to assessing

<sup>3</sup> Risks from air pollution to the integrity of Ashdown Forest Special Area of Conservation: Analysis of the (Regulation 19) consultation responses from Natural England, South Downs National Park Authority, Tunbridge Wells Borough Council and Lewes District Council concerning the proposed Wealden Local Plan (CEH, January 2019 date).

road traffic emissions under the Habitats Regulations. Detail is provided in paragraphs 22-62 of the CEH 'Regulation 19 analysis report. It is advised to read the advice document in full to gain a full appreciation of the advice provided. However, the following main issues are considered:

- Emission trading and reliance on future predicted background nitrogen pollution levels for this purpose;
- The level of certainty that is required to rely on future predicted background nitrogen pollution trends;
- Future development and whether the implementation of this will delay the attainment of critical loads / levels to be achieved and therefore a delay to achieving favourable conservation status.
- The 200m distance criterion for screening and the issue that this provides a focus on near road increases only and does not provide a mechanism to understand background increases.
- An understanding of background increases is important in relation to an 'in combination' assessment, if full account of the possible impacts of development are to be assessed.
- The suggestion that only 'live' plans and projects should be considered in any assessment.
- The 1% screening threshold of the critical level / loads and its relevance to road and other emission sources; and
- Natural England's approach to the SAC area to be considered with regards to adverse impacts and the duration of potential adverse impacts.

7. We note WDC's conclusion that there will not be an adverse effect on the integrity of these sites, provided that mitigation measures are secured. Whilst we have reviewed the evidence specifically relating to WDC's local plan, our advice, that mitigation measures are not necessary to avoid an adverse effect, is consistent with our advice to WDC's neighbouring authorities<sup>3</sup> in their plan making.

**WDC response:**

This is a repeat paragraph from the Natural England letter. The points are addressed above.

8. We recognise that it is a matter for WDC as competent authority to reach its conclusion on the Appropriate Assessments, having considered the advice provided by Natural England. If WDC decides to depart from our advice and considers that mitigation is required, it will be necessary for the council to demonstrate that the mitigation will be effective and there is sufficient certainty as to its delivery.

**WDC response:**

This is a repeat paragraph from the Natural England letter. The points are addressed above.

9. We have provided advice on these measures in the context that we do not consider they are required to reach a conclusion of no adverse effect on the European sites. It is our considered opinion that the mitigation measures, as proposed by WDC, do not provide the level of certainty that would be required under the Habitats Regulations. If the measures were needed, the impacts that WDC have identified would need to be negated or reduced to an acceptable level.

**WDC response:**

This is a repeat paragraph from the Natural England letter. The points are addressed above.

10. In our opinion, many of the measures proposed in Policies AF1 and AF2 are not specifically mitigation but the investigation, through monitoring, of what mitigation measures might be required. Other mitigation proposals are soft measures such as the introduction of electric vehicle charging points in new developments, the use of promotional material, and the provision and promotion of walking or cycling schemes, and electric transport. Whilst these are measures that may make some contribution to reducing background nitrogen loads, there is no evidence provided as to their efficacy or certainty as to their delivery.

**WDC response:**

The Proposed Submission HRA on page 181 – 183 set out a number of measures under five headings; 'strategy/policy', 'monitoring', 'communication plan', 'investigation and delivery of mitigation measures', and 'strategic long-term'. For ease of reference, these are provided below:

Strategy / Policy

- Low emission Strategy
- Air quality planning guidance
- Travel plan guidance

Monitoring

- Monitoring at Ashdown Forest

- Monitoring at Lewes Downs
- Monitoring at Pevensey Levels

#### Communication plan

- Active travel campaign
- Travel communication plan
- Car and lift sharing schemes
- Information and education
- School travel plans
- Promotion of walking and cycling

#### Investigation and delivery of mitigation measures

Initial investigations to determine deliverability and individual project scope for:

- Access restrictions
- Visitor parking at 'gateway' locations only
- Reduction of speed limits
- Published Air Quality data through Sussex Air
- Priority parking for Low Emission Vehicles (LEVs)
- Provision of electric vehicle charging points in local centres, railways and car parks etc.
- Support community transport operators to use low emission vehicles
- Improvement to freight vehicles/ traffic
- Congestion management

#### Strategic long-term<sup>4</sup>

- Polegate Parkway Station
- A27 offline Improvements
- Upgrade of Uckfield – Eridge Line
- Reinstatement of Lewes-Uckfield Line
- A27 online improvements

A description of the mitigation measures, as well as an appreciation that monitoring is not mitigation but is nonetheless an integral part of the mitigation strategy, was provided on pages 183-184 of the Proposed Submission HRA. As detailed above, the measures are varied, including 'soft measures', 'harder measures' and some measures which require further investigation.

The Air Quality Mitigation – Interim Mitigation Strategy Tariff Guidance for residential dwellings was published by Wealden District Council on 7th September 2018<sup>5</sup>. This was during the Proposed Submission Consultation period. Natural England were contacted on 13<sup>th</sup> September 2018 as follows:

<sup>4</sup> It is not anticipated that it will be possible to deliver these strategic measures during the plan period. These measures are long-term measures and they cannot therefore be relied upon to mitigate development identified within the Wealden local Plan.

<sup>5</sup> Please note that this has since been updated (January 2019)

‘.....It would be helpful as Statutory Consultees, if you are able to consider the Draft Interim Mitigation Strategy alongside / as part of the Wealden Local Plan Habitats Regulations Assessment’.

To date the only feedback received is that contained within this representation response.

The Interim Tariff Guidance states at paragraph 5.6 the following:

“Whilst there are many different ways to mitigate air pollutant effects with varying levels of effectiveness, the conclusion of the work undertaken is that a combination of the above air pollution mitigation measures will be required”.

Additionally, the Proposed Submission HRA, at paragraph 12.29, confirms that it is WDC’s conclusion that a reduction in concentrations predicted as a result of the Local Plan can be achieved.

Notwithstanding this, and in considering Natural England’s comments, WDC has sought further clarification on this point and has updated the HRA accordingly.

This further work has confirmed the following:

- That the measures proposed in the mitigation strategy are appropriate;
- That, as with any mitigation strategy, it is important for the mitigation strategy to remain ‘live’; and
- The measures proposed have the ability to ‘offset’ / mitigate the effect of the Local Plan;

The report produced by AQC ‘Evaluation of impact of Wealden Mitigation Strategy Air Quality Technical Note is provided as a Wealden Local Plan HRA submission document.

11. As paragraph 4.59 of the HRA notes: “Overall *mitigation measures should only be used if the competent authority is confident that the approach is legally robust; based on evidence, effective, reliable, timely and sufficiently certain with regards to its delivery*”.

**WDC response:**

The certainty of the delivery of a mitigation strategy is provided by the WDC Draft mitigation SAC Tariff document, which was published on 7th September 2018. This provides a detailed tariff to collect funds to deliver a mitigation strategy.

WDC agree that it is important that the mitigation measures within the HRA give confidence that they will be effective at reducing impacts predicted within the HRA to an acceptable level that will ensure the integrity of the site is not adversely affected. The HRA has accordingly been updated to ensure that this is reflected. Should it be considered (contrary to WDC’s view) that the mitigation strategy is not effective then

WDC will need to consider the tests under Article 6(4) of the Habitats Directive. However, at the time of submission WDC consider that its mitigation strategy will be effective to conclude 'no adverse effect on site integrity as a result of the Local Plan' and so it has not needed to apply the Article 6(4) tests.

12. Natural England welcomes any measures that will contribute to reducing background nitrogen loads to designated sites. However, as stated above, our advice is that these measures are not necessary to meet the requirements of the Habitats Regulations. Such actions would however be welcome as an element of a future Shared Nitrogen Action Plan (SNAP). We welcome WDC's commitment to working with Natural England and other stakeholders in developing locally targeted measures through the SNAP that can address all sources of atmospheric nitrogen pollution at a site level.

#### **WDC response:**

In considering Natural England's representation here, it is important to identify a few key points about a SNAP. The following is taken direct from the Executive Summary of the Atmospheric nitrogen theme plan IPENS report. It is identified that (emphasis provided by WDC):

- *There is a wealth of evidence that atmospheric nitrogen deposition is changing ecosystems;*
- *80% of Special Areas of Conservation in England are estimated to receive amounts of atmospheric nitrogen above their critical loads.*
- *The pressure of nutrient loading can lead to loss of species and irreversible change.*
- ***For sites that are affected by atmospheric nitrogen, there is the significant challenge for Natural England and its partners to ensure that adequate measures are put in place to maintain the integrity of the sites and that a Favourable Conservation Status for the habitat can be achieved.***
- *The issue of atmospheric nitrogen impacts on protected sites is linked to wider air pollution and the use of nitrogen in the economy.*
- *Measures for protected sites are likely to have wider benefits beyond biodiversity and improved ecosystem services.*
- ***Although nitrogen emissions have been significantly reduced over the past decades, atmospheric nitrogen deposition is likely to remain above critical loads for many sites in the foreseeable future.***
- *Nitrogen deposition on protected sites comes both from long distance sources and from local diffuse and point sources.*
- *Three interrelated approaches are needed to achieve the long term targets along an achievable trajectory:*
  - *National and international measures which reduce the background deposition,*
  - ***Locally targeted measures that reduce nitrogen emissions close to protected sites, or that intercept deposition to the site,***
  - *Habitat restoration measures that mitigate the impact of historic and on-going deposition.*

The Executive summary goes on to say that 'This theme plan proposes to trial the development of 'Site Nitrogen Action Plans' (SNAPs) to integrate these approaches at a site level, as a remedy for affected sites. **SNAPs would document:**

- ***The current status of the site in terms of nitrogen deposition and attribution***

of this nitrogen to identify the most significant sources,

- **The expected future decline in background deposition at the site** as a result of existing national and international measures,
- **Coordinated locally targeted measures** to reduce the contribution of local sources where feasible and appropriate,
- **Habitat restoration and management measures** that mitigate the impact of atmospheric nitrogen.

The Executive Summary goes on to say “...*The intention is that SNAPs would demonstrate what appropriate measures are in place to secure the integrity of the Natura 2000 sites and would coordinate possible future local measures. **By providing a timetabled trajectory towards favourable condition status, future SNAPs can have the potential to clarify what ‘headroom’ might be available for future developments, thereby providing a firmer basis for habitats regulations assessments.** They can also help to inform a balanced and proportionate approach to reduction measures across different emission source sectors. Establishing SNAPs is likely to require partnership working with the relevant authorities and intensive stakeholder engagement to raise awareness of the issue, to identify appropriate measures and to support implementation along feasible timescales. It is recommended to trial this approach for a limited number of sites initially. A national task group should oversee the development of SNAPs.*”

From the Executive summary provided above it is considered that Natural England's statement at paragraph 12 is rather conflicting. In the first instance Natural England welcome measures that will assist to reduce background levels. This confirms Natural England's position that there is an already existing issue with nitrogen deposition. In the second instance Natural England are stating that mitigation measures are not necessary to meet the Habitats Regulations. This would also appear contrary to the Executive summary above, which clearly states that **‘By providing a timetabled trajectory towards favourable condition status, future SNAPs can have the potential to clarify what ‘headroom’ might be available for future developments, thereby providing a firmer basis for habitats regulations assessments’**”.

Both Lewes Downs SAC and Ashdown Forest SAC exceed their critical load. It therefore seems only logical to acknowledge that the Wealden Local Plan will result in additional car movements on roads adjacent to the SACs and therefore additional atmospheric pollution / deposition and to seek to ensure that any additional deposition / pollutants that it will add as a result of its Local Plan is avoided and reduced through targeted mitigation. It is through the provision of mitigation, which would otherwise not be funded or delivered, that WDC will reduce its impact to conclude no adverse effect on site integrity.

The mitigation proposed in the strategy is considered suitable across the country as a way to reduce atmospheric pollution and deposition. It has also been proven to reduce roadside emissions.

In identifying a mitigation strategy WDC provide ‘certainty’ that measures and reductions will be achieved where currently there is no certainty under the guise of a SNAP that any such measures will be delivered or achieved. This is on the basis that, at this current time, there has been no / very limited work undertaken in relation to identifying a SNAP for Ashdown Forest SAC or Lewes Downs SAC, only discussions amongst Local Authority partners.

For improvements to take place a delivery body is required to instigate and deliver measures. WDC through its proposed mitigation strategy is seeking to deliver what it considers to be required and effective measures to mitigate the impact of its Local Plan on the SACs. Such mitigation measures will, through their very nature, result in a benefit

that otherwise would not be achieved, certainly in the short and most likely in the long term, and will by their nature contribute to the overall aim of a SNAP i.e. reduce the amount of nitrogen deposition on a Natura 2000 site from the implementation of the Local Plan. WDC is therefore seeking to reduce its contribution of atmospheric pollution, which it considers is necessary to meet the Habitats Regulations. The Local Plan both alone and in combination with other Plans and projects will result in additional emissions in 2028. WDC is taking responsibility for this, including that required legislatively by the Habitats Regulations / Directive to ensure that environmental impacts are reduced to a level that will not result in an adverse effect on integrity.

Natural England in paragraphs 10 and 11, discuss their view in relation to the effectiveness of mitigation measures proposed. Yet the effectiveness of the proposed mitigation measures is implicitly accepted by Natural England in their statement in paragraph 12, where they note that measures identified by WDC as part of the mitigation strategy 'would however be welcome as an element of a future Shared Nitrogen Action Plan (SNAP)'. From this statement it is clear that Natural England consider that locally targeted measures will indeed result in a reduction / improvement in nitrogen deposition and indeed will work towards an improvement in site condition. This view is of course mirrored by the IPENS report.

It is worth acknowledging that the role of a SNAP is one of coordination rather than delivery. This is provided by the Executive Summary which sets out that the role of a SNAP is to document what measures are in place to secure site integrity and to coordinate possible future measures. The coordinating role of a SNAP is also documented by Professor Mark Sutton of CEH within his Regulation 19 analysis of the Natural England Response report at paragraph 67. This states:

"I note that NE would welcome measures "that will contribute to reducing background nitrogen loads... as an element of a future Shared Nitrogen Action Plan (SNAP)" (NE Submission, p 2). Given the complex multi-actor nature of the discussions in relation to the WLP, I see this as a very positive proposal, which in my view would need to address both the near-road increase and background increase of concentrations and deposition. Such a SNAP could have a key coordinating role, thereby helping to ensure effective delivery of either mitigation measures (under Article 6(3)) or compensatory measures (under Article 6(4)).

To conclude on this point, it is considered by WDC that a way forward is for any future SNAP to remain focused in its aim (that is to document and coordinate measures to bring sites below their critical load) and as part of this account for measures that are taken forward in the WDC mitigation strategy. WDC confirms its commitment to work with Natural England in the development of a SNAP, once any SNAP project commences. However, it is understood from Natural England and the Atmospheric nitrogen theme plan that Ashdown Forest and Lewes Downs SAC's are not identified as a priority for a SNAP. A timeframe for the project to commence has also not been identified to date. It is acknowledged that once Natural England are able to deliver a SNAP then this will allow the identification of whether or not more headroom for development can be allowed. WDC note that public bodies have a shared responsibility for addressing atmospheric nitrogen. It also notes that a SNAP is much wider in scope than that proposed by WDC as mitigation.

Update the SNAP section in the HRA.

13. The recent opinion of General Advocate Kokott has been quoted within the HRA but at the time of writing this has not been handed down as a judgement so is subject to change and has limited weight. Whether a future judgement would have any relevance has not been fully assessed, as yet.

**WDC response:**

At the time of the publication of the Proposed Submission WLP HRA (and also at the time of Natural England's Regulation 19 representation) the CJEU had not yet given judgment on Joined cases C-293/17 and C-294/17. Notwithstanding this, WDC disagrees with Natural England's position that AG Kokott's Opinion of 25<sup>th</sup> July 2018 carried limited weight at that time, given that she is an experienced and respected Advocate General in the environmental field, and given that it is in practice unusual for a Court to reach a different conclusion to an Advocate General.

On 7 November 2018, the Court gave judgment in the Joined Cases. The judgment is broadly aligned with the Opinion of AG Kokott, and so her Opinion remains of relevance and should be given weight (indeed more weight, now that the Court has given a judgment which does not disagree with it). It is noted that Natural England itself offers guidance based on another AG Opinion (see Natural England Submission at para 31. C-258/11, Sweetman). WDC, as well as Professor Mark Sutton of CEH in his Regulation 19 analysis report (paragraph 76) consider that both Advocate General opinions should have the same weight.

WDC consider the judgment in the Joined Cases to also be of clear relevance for the Habitats Regulation Assessment of the Wealden Local Plan, as set out in the submission version of the HRA.

14. Natural England previously provided advice on earlier versions of the modelling and monitoring reports under our Discretionary Advice Service (DAS). It is not necessary to repeat that advice verbatim, however where pertinent, some aspects have been reproduced in the sections below.

**WDC response:**

Natural England's discretionary advice was provided on 16<sup>th</sup> February 2018. This advice was provided on early drafts of air quality reports and the ecology report relating to Ashdown Forest SAC. Subsequent to receiving Natural England's advice in February 2018, further air quality modelling and ecology work took place, as well as further detailed analysis in relation to both air quality and ecology. Natural England were specifically advised, as part of the Regulation 19 consultation, that significant updates to the reports as published in July / August 2018 had taken place and that these reports should be reviewed in detail due to the significant updates in relation to additional modelling and analysis now presented in these reports.

For the above reasons, WDC considers that it is incorrect for Natural England to rely on its previous discretionary advice because the discretionary advice provided in February 2018 does not account for the subsequent modelling, results or indeed the subsequent conclusions as published in the July / August 2018 air quality and ecology reports. Natural England note the updated reports and subsequent work in paragraph 35 of this representation.

Notwithstanding updates made to earlier reports, WDC considered Natural England's discretionary advice and published a response to the points made. The WDC response to Natural England's DAS is provided as a Wealden Local Plan HRA submission document.

15. Comments that relate to all of the designated sites are noted here with specific comments on the individual designated sites in the following sections.
16. The general requirement of the HRA is to assess
- Is the designated site sensitive to air quality?
  - Are the interest features that are sensitive to air quality within an area likely to be impacted?
  - Will the additional input exceed 1% of the relevant critical level or load?
  - Is the background close to or over the critical load?
  - If all of these are yes then what is the ecological relevance of this (i.e. would the impact have an adverse effect on the integrity of the designated site).

**WDC response:**

WDC consider that this is a simplistic take on HRA. The second point is a relevant question, but is not determinative. So, for example, an impact on an area not currently containing an interest feature may harm a conservation objective to restore.

So far as the third point is concerned, the 1% process contribution approach advocated by Natural England is not particularly relevant to the WDC HRA, since the 1% threshold is exceeded at both Ashdown Forest and Lewes Downs SACs. But in any event, it should be noted that WDC does not agree with the 1% contribution / de minimis approach. The Council's concern that a 1% approach is too rough, and not sufficiently precautionary, is supported by Professor Mark Sutton of CEH in his analysis of the Regulation 19 Natural England response at paragraph 77. In addition, a consideration of the 1% de minimis approach is also considered at paragraphs 42 – 46 of Professor Mark Sutton's analysis of the Regulation 19 Natural England response.

For clarity, WDC confirm that the answer is 'yes' to the first four questions posed at paragraph 16 for both Ashdown Forest SAC and Lewes Downs SAC. The ecological relevance is that mitigation is required to avoid a conclusion of an adverse effect on integrity.

17. In practice, where a site is already exceeding a relevant benchmark, the extent to which additional increments from plans and projects would undermine a conservation objective to 'restore' will involve further consideration of whether there is credible evidence that the emissions represent a real risk that the ability of other national or local measures and initiatives to otherwise reduce background levels will be compromised in a meaningful manner. This is a judgement to be taken by the competent authority, which should be informed by, amongst others,
- the extent to which any declining national trends in air pollution or strategic work to tackle emissions affecting the site more locally might otherwise lead to improvements,
  - the rate at which such improvement are anticipated to be delivered,
  - any credible evidence on the extent of the impacts of a plan or project and
  - whether those impacts can properly be considered temporary and reversible.

**WDC response:**

WDC notes that this is a direct citation from Natural England's Guidance NEA001 at paragraph 5.28. WDC consider that the statement blurs a number of relevant key areas. Notwithstanding this, WDC has broken down Natural England's first paragraph to provide the following questions and answers:

- Exceedance of benchmark: WDC has established that Ashdown Forest SAC and Lewes Downs SAC is already exceeding its relevant benchmark;
- Would additional increments add to the exceedance of the benchmark? WDC has established that additional increments would result from its Local Plan;
- Will a continued exceedance of the benchmark undermine the conservation objective to 'restore'? Yes, this is the whole concept of the critical load / level approach. A critical load / level has been identified based on scientific understanding and provides the environmental threshold for specific habitats to withstand adverse impacts from atmospheric pollution / deposition.
- Is there credible evidence that emissions represent a real risk? On the matter of credible evidence, WDC has presented best available scientific evidence within its HRA and its associated evidence base documents. WDC has reviewed literature and has undertaken a specific study at Ashdown Forest SAC. Both air quality modelling and ecological assessments have been reviewed and WDC has concluded based on the expert advice provided that vehicle emissions associated with the Local Plan in combination with other development presents a real risk. In applying this evidence, the conclusion is that, if allowed to go unchecked, then the Wealden Local Plan will result in an adverse effect on Ashdown Forest SAC and Lewes Downs SAC as a result of atmospheric pollution from additional vehicles as a result of the Plan. The evidence and expert advice used by WDC to conclude this is credible.
- Will additional emissions compromise the ability of national or local measures / initiatives to otherwise reduce background levels in a meaningful manner? WDC consider that the resultant emissions that are predicted to result from the Local Plan (both alone and in combination) will compromise the reduction of background levels in a meaningful manner. i.e. any measures to contribute to a reduction in background levels will be required to address the exceedance of critical loads / levels as well as any increase caused by the Local Plan. This is relevant to both background levels as well as increases in concentrations and deposition close to roads. Advice provided by AQC and Professor Mark Sutton (please see Overview and Conclusions Report para 61-71) has identified the following to support this informed conclusion:
  - In general the maps of predicted NO<sub>x</sub>, NH<sub>3</sub> and nitrogen deposition show significant exceedance of critical levels and critical loads. The extent of threshold exceedance is highest for N deposition, which exceeds the 10 kg N ha<sup>-1</sup> year<sup>-1</sup> critical load across the whole domain of Ashdown Forest SAC for both the current baseline (scenario A) as well as all future scenarios (B and C);
  - the calculated differences in the average N deposition rate as a result of the WD plan alone are of the order of 0.1 kg N ha<sup>-1</sup> year<sup>-1</sup>, which should be considered as a conservative estimate, both because of the effect on emissions outside of WD is not fully treated and because the effects of stationary combustion sources within WD (e.g. gas boilers and wood stoves) associated with development have not been considered.
  - According to the AQC model the Wealden Local Plan alone contributes a maximum additional 3 kg N ha<sup>-1</sup> year<sup>-1</sup> (when assuming technology A, and comparing 2028 With WD Plan to the 2028 No-WDC Growth). The Wealden Local Plan in combination with additional traffic within WD from development outside of WD is estimated to lead to a maximum additional

7 kg N ha<sup>-1</sup> year<sup>-1</sup> (when assuming Technology A, and comparing 2028 With WD Plan to the 2028 No Growth Model). If it were assumed that Technology B applies (i.e. reduced NO<sub>x</sub> emissions per km driven in 2028 according to the CURED model), then the estimated maximum contribution of Wealden Local Plan alone is 2 kg N ha<sup>-1</sup> year<sup>-1</sup>, or in combination with traffic within WD arising from development outside WD is 4 kg N ha<sup>-1</sup> year<sup>-1</sup>. It is noted in Professor Mark Sutton's report at paragraph 80 that the increase in background exposure is an underestimation due to the air quality model inputs.

- Professor Mark Sutton, in paragraphs 72-90 of the CEH 'Regulation 19 analysis' report, considers the above further. WDC agrees with the conclusion made at paragraph 82 of the CEH 'Overview of Issues and Conclusions' report that:

**“The *near-road increases in NO<sub>x</sub> and NH<sub>3</sub> concentrations and N deposition associated with the Wealden Local Plan are expected to cause a significant worsening of the condition of the SAC, as a result of further exceeding critical levels and loads.* Conversely, the minor modelled *background increase (<0.1 kg N ha<sup>-1</sup> year<sup>-1</sup>) as a result of the Wealden Local Plan alone is likely to be too small to cause a substantial worsening of condition on the areas of Ashdown Forest that are furthest from roads (e.g. >400 m) It is for this reason that such assessments should consider developments both alone and in combination with other possible developments”.***

Drawing on the analysis undertaken by Professor Mark Sutton on the NEA001 Guidance at paragraphs 13-30 and also 56-59 of the CEH Regulation 19 analysis report, WDC consider that the following is also relevant in its considerations of the Natural England representation above:

- (a) whether it is possible to be certain about a national declining trend in nitrogen pollution into the future based on technical and economic projections and also whether there can be exchangeability between national emission reductions vs a local emission increase; and
- (b) whether impacts of nitrogen can be considered temporary and reversible in this context.

WDC agree with advice provided by Professor Mark Sutton and its air quality advisors (AQC) in that the certainty required by the Habitats Regulations / Directive cannot currently be established to determine that future projections will deliver the anticipated emission reductions. Due to the uncertainties, it is not therefore possible to rely on these future projections.

In particular, WDC agree with Professor Mark Sutton and its air quality advisors (AQC) in that there is substantial uncertainty in future NO<sub>x</sub> and NH<sub>3</sub> emissions, and even greater uncertainty in future spatial patterns of NO<sub>x</sub> and NH<sub>3</sub> concentrations and of N deposition. There are also many confounding factors that add to scientific uncertainty (See CEH Regulation 19 analysis report, paragraph 20).

WDC consider that because future scenarios of NO<sub>x</sub> and NH<sub>3</sub> concentrations, and of N deposition, cannot be scientifically certain, this requires that its appropriate assessment should be based on the most recent available data to represent present conditions, which is in full accord with para 98 of the Advocate General's Opinion on C-293/17 & C-294/17 as well as the related Judgment (see in particular paragraph 6 of the ruling).

WDC also consider advice provided by Professor Mark Sutton of CEH to be relevant in relation to whether impacts are considered temporary and reversible. Professor Mark Sutton in his Regulation 19 analysis report identifies the following:

- Recovery from the effects of NO<sub>x</sub> and NH<sub>3</sub> concentrations and nitrogen

- deposition is both uncertain and can be expected to take many years (decades).
- Natural England in their NEA001 Guidance at para 5.54 notes: “The longer or more uncertain the feature’s likely recovery time from an impact, the more difficult it may be to demonstrate no adverse effect on integrity.” It can be concluded that even where substantial recovery in the 5-10 year period after cessation of N deposition has been reported, a complete recovery has not been achieved.
  - Even if a decrease in pollution levels are demonstrated with certainty to be within critical loads / levels within a reasonable timeframe (10-20 years), it would not be justifiable to conclude ‘no adverse effect on integrity’ on the basis that the impact were of ‘short duration’. This is because the time-scale of adverse impact occurs over multiple years, during which time the habitat can be expected to degrade substantially, making it challenging to demonstrate with certainty that complete recovery would be achievable within a reasonable timeframe.

In addition to the above, the conservation objective for SACs is to also ensure that the integrity of a site is maintained as well as having the ability to be ‘restored’.

18. Whilst most sensitive European Sites will be in this exceedance state, it does *not* automatically mean that further plans or projects affecting them would have an adverse effect on site integrity. Rather, it provides another piece of information to consider when determining whether a proposal might have a benign impact on site integrity and be acceptable or whether a conclusion of no adverse effect on site integrity cannot be reached by the assessment.

**WDC response:**

Please see above response at paragraph 17. A consideration of this particular matter is provided by Professor Mark Sutton of CEH at paragraphs 27 – 30 of the Regulation 19 analysis report.

In addition, the definition of benign is ‘not harmful in effect’. Air pollution and nitrogen deposition is identified as per scientific knowledge to be harmful to certain ecosystems as identified by specific critical loads / levels as relevant to habitats. The ‘restore’ element of the Habitats Regulations must also be considered and adding ‘more’ air pollution / deposition will contribute to moving the site further away from its ability to ‘restore’ favourable condition.

19. Table 1 in Chapter 5 of the HRA refers to Nitrogen oxides but is misleading in that it states that the levels have not decreased as expected. This may be the case but the same source identifies that since 1990, emissions from road transport have fallen by 76% due to the introduction of catalytic converters and stricter regulations (i.e. Euro Standards)<sup>4</sup>

**WDC response:**

The text in the HRA to which Natural England refers in paragraph 19 above states:

“Further reductions in NO<sub>x</sub> emissions were anticipated. However, to date the NO<sub>2</sub> concentrations have not decreased as expected due to the failure of Euro vehicle emission standards for diesel vehicles to deliver the anticipated reductions in NO<sub>x</sub> emissions in real world driving conditions.”

Natural England appears to be confused on two separate, but equally important, issues. The first is a mistaken belief that changes in ‘estimated’ emissions are the same as

changes in 'actual' concentrations. This is not the case. Natural England's second point of confusion appears to be that, because NO<sub>x</sub> emissions (and concentrations) are mostly lower than they were in 1990, that this implies a linear and continuous trend. This is also incorrect.

Concentrations of NO<sub>x</sub> and NO<sub>2</sub> fell appreciably at most UK monitoring sites from about 1996 to 2002. This fitted well with improvements that had been predicted based on Defra's published emissions estimates. These emissions estimates then predicted continued improvements for the period 2004 to 2009. However, during this period there was growing concern amongst air quality professionals in the UK that measured concentrations were not falling in line with these projections.

Defra commented on this in 2010 in a Frequently Asked Question (FAQ) on its Local Air Quality Management helpdesk website:

*"Measured nitrogen oxides (NO<sub>x</sub>) and/or nitrogen dioxide (NO<sub>2</sub>) concentrations in my local authority area do not appear to be declining in line with national forecasts. Should I take this into account in my Review and Assessment work?"<sup>6</sup>*

The answer to this FAQ is repeated in full in Appendix A2 of the Wealden District Council Local Plan – Comments on Regulation 19 Response of: Natural England (AQC, November 2018).

In particular it explains that:

"Analyses of historical monitoring data have identified a disparity between the measured concentrations and the projected decline in concentrations associated with the emissions forecasts. Trends in ambient concentrations of NO<sub>x</sub> and NO<sub>2</sub> in the UK have generally shown two characteristics; a decrease in concentration from about 1996 to 2002-2004, followed by a period of more stable concentrations from 2002-2004 up until 2009.

As a whole, urban roadside sites show evidence that NO<sub>x</sub> concentrations have declined very weakly over the past 6 – 8 years [as at 2010]. NO<sub>x</sub> concentrations at urban background sites broadly reflect the same trend, and have been close to stable over this same period. For NO<sub>2</sub>, levels have largely remained stable at urban roadside and background sites, but show a slight upward trend in inner London. At monitoring sites close to motorways and dual-carriageways, there is evidence that NO<sub>x</sub> concentrations have fallen at some, but not all locations, while NO<sub>2</sub> concentrations have levelled off.

In all cases there are differences between individual sites (with some showing upward or downward trends) but overall, there is little evidence of a consistent downward trend in either NO<sub>x</sub> or NO<sub>2</sub> concentrations, that would be suggested by emission inventory estimates." ...

"On this basis, it might also be expected that the forecast reductions in background NO<sub>x</sub> and NO<sub>2</sub> concentrations associated with the road traffic component are optimistic. There is no evidence to suggest that background concentrations associated with the other (non-traffic) source contributions should not behave as forecast."

This summarises the position in 2010 and is still provided by Defra as current guidance.

<sup>6</sup> <https://laqm.defra.gov.uk/laqm-faqs/faq5.html>

Defra's 2009 guidance to local authorities (LAQM.TG(09))<sup>7</sup> contained factors for "projecting measured annual mean roadside nitrogen dioxide concentrations to future years" which covered the period 2006 to 2020. These were derived using what, at that time, were Defra's official projections<sup>8</sup>. For roadside sites outside of London, these predicted reductions of 3 to 4% per year in total NO<sub>2</sub> concentrations (thus falling, for example, by 16% between 2012 and 2016).

AQC's comments on the AECOM review show that the published measured NO<sub>2</sub> concentrations at the roadside monitoring site closest to Ashdown Forest, rather than falling by a double-digit percentage, actually increased between 2012 and 2017. Further information is contained within section 2 of the AQC Joint Authority review<sup>9</sup>.

Appendix 2 to AQC's comments on the AECOM review shows that this pattern was not unusual in this region. AQC<sup>10</sup> has shown that nationally, over the period 2005-2017, NO<sub>2</sub> concentrations have increased at some sites and reduced at others. On average, there has been a downward trend but this has been much smaller than the concurrent reductions predicted by emissions models.

The emissions model that is cited by Natural England provides no basis for stating that WDC's comment in Chapter 5 of the HRA, which refers to NO<sub>2</sub> concentrations, is misleading. The likelihood of air quality improvements in the future is a separate discussion point (Sections 3 and 4 of the AQC Natural England Response to Regulation 19 note) but it is unhelpful to overlook the air quality industry's well-documented failures to predict the scale, rate, and existence of past air quality improvements.

20. The scenarios included in the air quality modelling by WDC's air quality consultants include
- Scenario A – no emissions improvements in technology since the 2015 baseline;
  - Scenario B – improvements will come forward but without consideration of not yet tested technology and using AQC's CURED model and
  - Scenario C – that all the forecasted improvements will come forward (including future but as yet untested technology).

**WDC response:**

No response required here. However, for a correct description of the scenarios, reference to the AQC Report (August 2018) should be made.

<sup>7</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69334/pb13081-tech-guidance-laqm-tg-09-090218.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69334/pb13081-tech-guidance-laqm-tg-09-090218.pdf)

<sup>8</sup> The factors published in 2009 have been re-issued several times subsequently, using different national emissions models and base years, but a consistent feature of all of these datasets has been the prediction of substantial reductions in the (each time) near future.

<sup>9</sup> Wealden District Council Local Plan – Comments on Regulation 19 Response of: Lewes District Council, Tunbridge Wells Borough Council, South Downs National Park Authority, and AECOM (AQC, November 2018).

<sup>10</sup> <http://www.aqcconsultants.co.uk/AQC/media/Reports/NO2-NOx-Trend-Report.pdf>.

21. It is Natural England's considered opinion that Scenario B with its precautionary element is the most appropriate as it takes account of the Euro 6/VI standards which have been mandatory since 2015. Scenario C is not considered further in this response for any of the designated sites as we consider it is reasonable to remove forecasted improvements from untested technology.

**WDC response:**

Whilst it is acknowledged that Natural England, along with the Council's Consultants (AQC), consider the CURED model to be the most likely future scenario, it would appear that Natural England may have misunderstood the basis of the CURED V3A model which underpins Scenario B of the Ashdown Forest, Pevensey Levels, and Lewes Downs air quality modelling.

AQC reviewed available evidence of NO<sub>x</sub> emissions from Euro 6 diesel cars and Euro VI heavy-duty vehicles in 2016. This evidence was used to create a calibrated emissions model and this calibration was the basis of CURED V1A and CURED V2A. Subsequent to this, the European Environment Agency published Version 5 of its COPERT emissions model, and Defra used this to create Version 8 of its Emissions Factors Toolkit (EFT V8.0). COPERT V5 included very similar calibrated emissions factors to CURED V1A and V2A and so there was no longer a need to provide a separate calibration for these vehicles.

While the emissions functions for the first tranche of Euro 6 diesel cars in COPERT V5 are based on emissions tests, this is not true for the second or third tranches of these vehicles. The second and third tranches for Euro 6 diesel cars and vans were based on EXPECTED improvements and not on any real-world emissions tests.

CURED V3A assumes that BOTH the first and second tranches of Euro 6 diesel cars are implemented in line with EFT V8.0. CURED V3A does not, however, include the third tranche.

Without intending to cast doubt on its Consultants (AQC) own model, WDC does question the reasoning provided by Natural England's response in Paragraph 21 (as above). This states that CURED V3A (i.e. Scenario B) is its preferred model and that EFT V8.0 (i.e. Scenario C) should not be considered since it includes "untested technology". WDC, as advised by AQC, accepts that Scenario B may provide a likely prediction in 2028; however, it also wholly recognises that Scenario B still includes an element of "untested technology". It is thus not just Scenario C that includes untested technology. There is thus still 'uncertainty' in Scenario B.

WDC in this response would also like to draw out the considerations made by Professor Mark Sutton of CEH on this point. Please see paragraphs 13-30 of the CEH 'Regulation 19 analysis' report. In paragraph 79 of the same report, Professor Mark Sutton in his considerations concludes that Scenario A should be used, which is consistent with the CJEU Ruling on C-293/17 and C-294/17, in which the Court ruled that autonomous measures cannot be taken into account in an appropriate assessment if the expected benefits of those measures are not "certain" at the time of the assessment. Professor Mark Sutton confirms that "This is even more so the case for future NH<sub>3</sub> emissions and concentrations, which are even more uncertain".

22. Natural England had previously advised in its DAS advice to WDC<sup>5</sup> that Scenario A is considered to be wholly unreasonable and is not realistic of even current conditions considering that Euro 6/VI standards have been mandatory three years. Considering the

Government's Clean Air Strategy, 25 year plan and increasing public awareness and desire for cleaner technology, it would seem unreasonable to assume no uptake at all of Euro 6/VI vehicles.

**WDC response:**

It is standard in environmental assessment to start a process that takes several years to complete, so that it is necessarily based on recent years' data as a proxy for the present. It would be unreasonable for an HRA to be re-done annually if the process takes some time to complete. As such, WDC and as identified by Professor Mark Sutton of CEH in his analysis of Natural England's response, consider that 2015 is an obvious pragmatic proxy for "present conditions".

Although it is considered that Scenario B provides a "reasonable" representation of the future in 2028, for the purpose of assessing air quality impacts on the Natura 2000 network / European sites, Scenario B also needs to be considered against the advice of Advocate General Kokott (delivered to the European Court of Justice on 25 July 2018), and the subsequent Judgment of the European Court of Justice (handed down on 7th November 2018) on Joined Cases C-293/17 and C294/17. Basing a Habitats Regulations Assessment on either Scenario B or Scenario C would run directly counter to the clear guidance provided by Advocate General Kokott, and would also be incompatible with Ruling 6 of the 7th November Judgment.

These points are expanded on in AQC's response to the AECOM review as well as by Professor Mark Sutton.

It is considered that both the Advocate General's Opinion and the subsequent Judgment have significant implications for much of Natural England's response, which frequently seeks to interpret the increases that will be caused by the Wealden Local Plan as a retardation of expected autonomous improvements, rather than as adverse impacts. WDC and its expert advisors do not believe that this is consistent with either the Opinion or the Judgment.

In addition, other variables also add to uncertainty including other economic factors, other emissions (including new permissions and from other sectors) and atmospheric non-linearities. This means that it is not possible to be certain about pollution levels in 2028.

23. AQC's own investigations as noted in their reports has identified that Euro 6 cars manufactured prior to 2017 emit lower NO<sub>x</sub> than previous Euro 5 and earlier models and consider that "*it is reasonable to expect that diesel cars and vans registered for type approval since 2017 will, on average, generate even lower NO<sub>x</sub> emissions*". Additionally Euro VI (for heavy duty vehicles) also include an ammonia standard to avoid increase of ammonia from SCR technology. This is likely to reduce background ammonia levels over time.

**WDC response:**

Natural England, in the above paragraph, suggest that the inclusion of an ammonia standard for Euro VI heavy-duty vehicles is "likely to reduce background ammonia levels over time". WDC's consultants AQC questions the evidence base for this statement, which would only be the case if: a) background ammonia concentrations were currently driven by emissions from heavy duty vehicles *and* b) the ammonia

emission standard for heavy duty vehicles (there is no equivalent standard for cars and vans) is lower than the emissions from the current heavy duty vehicle fleet.

In addition, it has been highlighted by Professor Mark Sutton of CEH that Natural England's conclusion that 'this is likely to reduce background ammonia levels over time' is concerning. It also illustrates Professor Mark Sutton's concern with Natural England's overall approach in their submission. At paragraph 82 of the Regulation 19 analysis report, Professor Mark Sutton states, in his analysis of the Natural England response that:

"It may be 'likely' that vehicle ammonia emissions reduce in future, but it is far from certain that they will do so. Concerning 'background', there are multiple other factors influencing ammonia background (see paras. 13-30 above), meaning that it is extremely uncertain to project future ammonia background levels. My overall expectation is that NH<sub>3</sub> concentrations may indeed increase, as SO<sub>2</sub> levels tend to decrease and climate change promotes increased NH<sub>3</sub> volatilisation. Either way, 'likely' is not sufficient, as it does not provide the degree of certainty needed."

24. Whilst there had previously been well documented errors in laboratory testing of these standards, they are now tested under real road testing and Defra forecasts have been updated to allow for this. This is explained more fully in the relevant sections for each site's air quality modelling undertaken by AQC. Indeed, previous iterations of the air quality modelling for all sites stated that "*The results from the sensitivity test and worst-case scenarios are likely to over predict emissions from vehicles in the future*".

**WDC response:**

While the type-approval test for Euro 6/VI vehicles now includes on-road testing, there can still be substantial differences between the emissions standard and emissions measured at any point on the test cycle; or even when taken as a simple average over the test journey. Defra's forecasts do not assume that average real-world emissions will meet the emissions standards, but do rely on the relative change in emissions from one vehicle type to another. Thus, even if Defra's predictions of emissions from future vehicles are correct, but its predictions of emissions from older vehicles are incorrect, then the forecast rate of change over time will also be incorrect. AQC believes that scenario A is likely to over-predict NO<sub>x</sub> emissions in the future, and that scenario B is also, on balance, likely to be worst-case for NO<sub>x</sub>. AQC also believes that its future-year forecasts will under-predict traffic-related NH<sub>3</sub> emissions. None of these changes are, however, certain.

25. There is a long established trend of declining background concentrations close to roads in particular as a result of technological improvements in vehicles even allowing for additional growth in Local Plans. In other words, we can still expect - even with the plan/project timeframe - the overall environmental loading will return to below critical level and loads within an appropriate timeframe.

**WDC response:**

In responding to this point, WDC wish to draw directly from the CEH Regulation 19 analysis of the Natural England response provided at paragraph 83.

“NE Submission, para 25, notes that there is “a **long established trend** of declining background concentrations close to roads.... Even allowing for additional growth in Local Plans. In other words, we can still expect – even within the plan/project timeframe – the overall environmental loading will **return to below the critical level and loads** within an **appropriate time frame**”. This statement illustrates several of my concerns outlined above (e.g., paras 13-30, 56-59), which can be summarised as follows:

- a. “long established trend”: past trends are no guarantee of future trends. It should also be noted that several anticipated trends for NH<sub>3</sub>, NO<sub>x</sub> and wet deposition in the past did not transpire as was expected based on emissions controls (e.g., Dutch ammonia policy, non-linearity of sulphur in wet deposition in UK).
- b. “will return to below the critical level and loads”: even the most ambitious future scenario for 2028 (with technology scenario variant C) does *not* achieve overall environmental loading at less than the critical load. Rather, the critical load remains exceeded over the whole domain of heathlands for Ashdown Forest SAC.
- c. “appropriate time frame”: No indication is provided in the NE Submission of what would be an appropriate time frame. In my judgement continuing N pollution levels at above critical levels/loads for a decade would not be consistent with a conclusion of ‘no adverse effect’ on site integrity”.

WDC also refers to comments made by AQC in its response to the AECOM review in which the “*long-established trend of declining ... concentrations close to roads*” is refuted. It is well-documented that the substantial rates of improvement [in NO<sub>2</sub> concentrations] achieved during the 1990’s have not been repeated since then. While there is more recent evidence that concentrations of NO<sub>x</sub> and NO<sub>2</sub> have been falling, ‘on average’, when viewed nationally, there is also good evidence that recent concentrations have not been falling everywhere and that they have been increasing in many locations; including those monitoring sites closest to Ashdown Forest. Thus, any assumption of substantive local improvements in the future is NOT a continuation of the status quo.

26. The Communication from the Commission is relevant here on the precautionary principle<sup>6</sup> which clarified “*The precautionary principle which is essentially used by decision makers in the management of risk should not be confused with the element of caution that scientists apply in their assessment of scientific data*”.

**WDC response:**

No comment required here. However, as CEH identify in the Regulation 19 analysis of Natural England’s response (paragraph 84) it is unclear what point Natural England are trying to make here. The guide should be the wording of the Habitats Regulations / Directive, as supported by case law.

27. The recommendation for using the lower end of the critical load is for screening for further assessment. Using Ashdown Forest heathland as an example, critical loads have other considerations for where in the range is appropriate including precipitation, hydrology and historical management as described on APIS site relevant critical loads page for Ashdown

Forest SAC which are all designed to cover a broad range of situations (eg critical loads have a range and are not one measure that is site specific).

**WDC response:**

WDC consider that this statement does not provide the stringent approach required by the Habitats Regulations / Directive. In the absence of the identification of an exact Critical load, WDC consider that the lower end of the critical load is relevant. The reasons why the lower bound critical level is relevant are confirmed by CEH in their Regulation 19 analysis of Natural England's response report at paragraph 85.

28. For all sites, the 24 hour NO<sub>x</sub> critical level (CLE) of 75 µg/m<sup>3</sup> has been used. This CLE presumes an exceedance of SO<sub>2</sub> and O<sub>3</sub>. As previously explained, WHO<sup>7</sup> also consider a 200 level µg m<sup>-3</sup>.

*"Experimental evidence exists that the CLE decreases from around 200 µg/m<sup>3</sup> to 75 µg/m<sup>3</sup> when in combination with O<sub>3</sub> or SO<sub>2</sub> at or above their critical levels. In the knowledge that short-term episodes of elevated NO<sub>x</sub> concentrations are generally combined with elevated concentrations of O<sub>3</sub> or SO<sub>2</sub>, 75 µg/m<sup>3</sup> is proposed for the 24 h mean."*

29. Of relevance to the appropriate CLE of 24hr NO<sub>x</sub> is Section A1.5 of Appendix 1 of the Ashdown Forest air quality report which states *"The deposition of sulphur has not been quantified as part of this study. Since the introduction of sulphur-free fuels, sulphur emissions from road traffic have fallen appreciably and, as such, impacts on ambient concentrations caused by traffic-related sulphur dioxide (SO<sub>2</sub>) emissions are no longer considered to be a significant concern in the UK."* As elevated concentrations of SO<sub>2</sub> and O<sub>3</sub> are not present on the designated sites considered within the Local Plan then the relevant CLE is 200 µg/m<sup>3</sup>.

**WDC response:**

Both paragraph 28 and 29 above are considered by CEH in their Regulation 19 analysis of Natural England's response. This is provided at paragraphs 86-88.

30. Para 10.49 indicates that any increase where the site currently exceeds the CL/CLE has the potential to adversely impact on the designated site. This is misleading as this is not the case for inputs below 1% of the relevant CL/CLE. 1% of CL/CLE is considered by Natural England's air quality specialists (and by industry, regulators and other statutory nature conservation bodies) to be suitably precautionary, as any emissions below this level are widely considered to be imperceptible.

**WDC response:**

WDC's position in relation to Natural England's 1% process contribution approach is provided in WDC response at paragraph 16.

Professor Mark Sutton of CEH considers this point in more detail in the CEH Regulation 19 analysis report, at paragraphs 89 and 31-46. This considers the following:

- That the 1% process contribution approach does not meet the requirements for an 'in combination' assessment;

- That it could be argued that any increase above currently exceeded critical load / level could result in a worsening of site condition either alone or in combination with multiple plans / projects;
- That the de minimus approach used in the Dutch nitrogen programme of 0.01% and 0.02% is much less than that proposed by NE<sup>11</sup>; and
- That the 1% process contribution debate is not relevant to WDC on the basis that the Local Plan alone exceeds the 1% threshold.

31. In terms of whether there is an ‘adverse’ effect on the integrity of a designated site, the Advocate General’s Opinion in *Sweetman*<sup>8</sup> indicated that, in her view, a plan or project involving ‘*some strictly temporary loss of amenity which is capable of being fully undone*’ would not be an adverse effect on integrity. By comparison, the ‘*lasting and irreparable loss*’ of part of the SAC feature in *Sweetman*<sup>9</sup> was ruled to be an adverse effect on integrity.

**WDC response:**

WDC and its expert advisors are unclear as to the purpose of this paragraph; however, it may be to share a view that a temporary effect of N air pollution may be discounted. WDC consider that there is no sound basis to conclude that ongoing air pollutant emissions will be temporary in nature for reasons provided in the CEH Regulation 19 analysis report at paragraphs 56-59. At paragraph 59 it is concluded that:

“...my recommendation would be that temporary duration of impact is highly unlikely to apply as a basis to conclude ‘no adverse effect’ in the case of plans or projects tending to increase NO<sub>x</sub> and NH<sub>3</sub> concentrations and N deposition in the context of a decreasing national background”.

32. In practice therefore, where a site is already exceeding a relevant benchmark, the extent to which additional increments from plans and projects would undermine a conservation objective to ‘restore’ will involve further consideration. This may include consideration of whether there is credible evidence that the emissions represent a real risk and whether the ability of other national or local initiatives to otherwise reduce background levels will be compromised in a meaningful manner. This is a judgement which should be informed by, amongst other things, the extent to which any declining national trends in air pollution or strategic work to tackle emissions affecting the site more locally might otherwise lead to improvements, the rate at which such improvement are anticipated to be delivered, any credible evidence on the extent of the impacts of a plan or project and whether those impacts can properly be considered temporary and reversible.

**WDC response:**

No comment required. This paragraph is a repeat of Natural England’s response paragraph 32. Please see associated WDC response.

**Ashdown Forest Air Quality**

<sup>11</sup> See Advocate General Opinion on C-293/17 & C-294/17 paragraph 106).

33. Natural England welcomes the commitment that has been shown by Wealden District Council to undertake air quality monitoring and ecological monitoring over the last few years. A substantial amount of information has been submitted for this which is considered useful.

**WDC response:**

It is noted that Natural England welcomes WDC's commitment and that Natural England consider the work that WDC has undertaken to be 'useful'.

34. Natural England previously provided advice on earlier versions of the modelling and monitoring under our Discretionary Advice Service (DAS) dated 16 February and which is published on the WDC website so it is unnecessary to fully repeat that advice.

**WDC response:**

As per WDC's earlier comment at Natural England's paragraph 14.

In addition, WDC considered Natural England's discretionary advice and published a response to the points made. The WDC response to Natural England's DAS is provided as a Wealden Local Plan HRA submission document.

35. The air quality modelling is extensive and largely uses a bespoke model that has been developed by WDC's air quality consultants. However there are some changes to previous reports and newer additions to the modelling by adding an EA methodology to the deposition velocities. This is not the standard approach that Natural England recommended including for comparison but is a more detailed experimental approach that, to our knowledge, is not used routinely by the Environment Agency. Additionally the interpretation provided by WDC in their assessment of the Local Plan under the Habitats Regulations Assessment (HRA) and in undertaking their Appropriate Assessment is new information that has been provided as part of this consultation process.

**WDC response:**

It should be noted that on several occasions WDC has asked Natural England to clarify what it considers a 'standard method' to be. To date this has not been provided and so the following comments relate to WDC's consultant's (AQC) assumptions regarding what Natural England might consider to be an appropriate method.

Predicting Concentrations

AQC understands that Natural England's modelling supports use of the DMRB spreadsheet for calculating concentrations. AQC was involved with producing the current published (2007)<sup>12</sup> and unpublished (2013) versions of this tool but does not believe that, when used on their own, either these tools provide robust predictions (or that the 2007 tool is currently fit for purpose). Without understanding how they have been used, it is considered that any predictions made using either model should not

<sup>12</sup> This version of the spreadsheet was actually released in 2002. An error was corrected in 2003. The 2007 update was restricted to carbon emissions only.

be relied on. The modelling carried out by AQC uses ADMS-Roads and is considered superior to using the DMRB screening tool.

### Predicting Deposition Fluxes

It is also assumed that Natural England's description of a "standard" approach is to use annual average deposition velocities, but it is unclear which deposition velocities it prefers. Given Natural England's reliance on DMRB guidance, it is assumed that the single fixed velocity included in DMRB guidance is considered by Natural England to be most appropriate; although it is also noted that other commonly-used fixed velocities are up to 3 times higher than this<sup>13</sup>. It is well established that a single annual average deposition velocity cannot accurately predict concentrations at both roadside and non-roadside settings. This is because the diurnal and seasonal profiles in concentrations in these locations will be different. As such, it can be demonstrated from first principles that any study, which uses an annual average deposition velocity for both roadside and non-roadside vegetation, must give an incorrect answer. Typically, the level of error is accepted and so this basic approach is generally considered suitable. This does not, however, make it correct.

The "AQC" deposition model used for the Ashdown Forest, Pevensey Levels, and Lewes Downs assessments is based on the national modelling that underpins the APIS deposition maps that Natural England frequently relies on for its own work. It is considered superior to any method using annual average deposition velocities. It is also assumed that it is AQC's derivation of the APIS method, rather than the APIS method itself, which Natural England considers to be experimental and non-standard. The "EA" model follows an approach that the EA has previously suggested AQC follow<sup>14</sup> at complex and sensitive sites.

The Wealden Local Plan HRA, including the evidence base that is used to inform decisions, has been an iterative process. The information provided as part of the Regulation 19 consultation was the best and most up-to-date information held. Since February 2018, WDC sought to address the advice provided by Natural England and also that received from the Centre of Ecology and Hydrology (CEH). This resulted in additional modelling taking place as well as both additional air quality and ecology analysis. Whilst additional analysis and modelling was presented as part of the Regulation 19 consultation the conclusions provided by the HRA evidence base remained constant.

<sup>13</sup> AQTAG06. Technical guidance on detailed modelling approach for an appropriate assessment for emissions to air.

<sup>14</sup> Jim Storey, AQ Senior Advisor at Environment Agency, pers comm.

36. The reports are very large and complex and the presentation of the data does not aid understanding of the outputs. We welcome the significantly clearer assessment that is presented within the HRA however, this information is still presented in such a way as to indicate that there will be a net deterioration in 2028. The reasons why this is not the case is explained in more detail below.

**WDC response:**

The scientific nature of air quality and ecology does not lend itself easily to meeting simple presentational needs. WDC required detailed information in order to consider matters fully within its HRA. Whilst WDC agree that it does take time to understand and get used to the presentation of data the reports and the data contained within them are sufficient to inform a Habitats Regulations Assessment. As part of this work, WDC has taken the lead to provide further detailed work and has published, as part of its submission HRA, a further report<sup>15</sup> which has been produced by CEH. It is hoped, by both WDC and its author, that this report assists in making the results more accessible.

37. Our advice is that where an existing national, regional or local initiative can be relied upon to lead to the reduction in background levels of pollution at a site, the competent authority should assess the implications of a plan or project against an improving background trend.

**WDC response:**

WDC notes that Natural England's paragraph is another repeat of its guidance NEA001 at paragraph 5.58. It is again considered by WDC and its expert advisors that this statement fails the tests of Article 6(3) since it "cannot be relied upon" with the requisite level of certainty on the approach of the CJEU in Joined Cases C-293/17 and C-294/17.

It is worth highlighting here that Chapter 15 of the AQC Ashdown Forest SAC Report (August 2018) sets out the predicted changes in concentrations and fluxes that would be caused by the Local Plan in combination with other predicted traffic growth and changes in national and international emissions projections, which includes changes in emissions per vehicle associated with technological improvements, as well as reductions in emissions from many other sectors. WDC as the competent authority has indeed therefore assessed the implications against an 'improving background trend'.

Whilst the above modelling has taken place, WDC and its expert advisors (AQC and CEH) do not consider that it is correct to use the predicted benefits associated with technology and international policy, which are unrelated to the Wealden Local Plan, to offset the adverse impacts of the Local Plan for Habitats Regulations Assessment in light of the CJEU in Joined Cases C-293/17 and C-294/17. WDC accepts this advice and has not therefore relied on a future scenario with an improving background trend due to the inherent uncertainties associated with predicting future conditions associated with NO<sub>x</sub>, NH<sub>3</sub> and nitrogen deposition as well as other confounding factors which are also uncertain.

Whilst future scenarios that contain forecast emissions reductions show improvements when compared to the current situation, the AQC Ashdown Forest SAC Report states that:

<sup>15</sup> Risks from air pollution to the integrity of Ashdown Forest Special Area of Conservation: Overview of Issues and Conclusions (Professor Mark Sutton, UK Centre for Ecology & Hydrology, (January, 2019).

“These predicted benefits should, however, be understood in the context of an Opinion from the European Court of Justice (see Paragraph 15.4), which is that predicted benefits, such as those associated with technology and national policy, which are unrelated to the Wealden Local Plan (and will happen autonomously with or without the Plan), cannot be used to offset the adverse impacts of the Plan where the critical levels or loads are still exceeded.”

Whilst Natural England’s statement at paragraph 37 suggests that the forecast benefits of autonomous<sup>16</sup> measures may be used to offset the impact of the Plan, even when continued exceedances are predicted, this does not appear to be consistent with the advice given by Advocate General Kokott in Joined Cases C-293/17 and C-294/17 or with the 7th November judgment in those cases.

38. Natural England’s advice is that Scenario B provides a suitably precautionary approach and is the most realistic for the reasons previously given. WDC have chosen to take Scenario A forward within their Appropriate Assessment. Natural England considers this Scenario to be wholly unreasonable for reasons previously given.

**WDC response:**

Please note WDC’s previous response in relation to the suitability of Scenario B at Natural England paragraphs 21, 22 and 37 in relation to the reasoning for considering Scenario A within the HRA.

In addition, in assessing which air quality modelling scenario to take forward within the HRA, WDC has considered the model inputs and has taken leading expert advice in order to consider the ‘certainty’ test that is put forward and required by the Advocate General’s Opinion and subsequent judgment in Joined cases C-293/17 and C-294/17.

The advice provided by Natural England to use Scenario B is contrary to the Opinion provided by Advocate General Kokott in the preliminary ruling delivered to the European Court of Justice on 25th July 2018 where it was explained that:

“the autonomous decrease in nitrogen emissions can establish the compatibility of additional nitrogen deposition ... only if it is already definitively established ... that the total load on the site from nitrogen deposition falls below the threshold for the integrity of the site being adversely affected. On the other hand, it is not sufficient, for the purposes of approval of additional nitrogen deposition, if deposition declines overall, but the land in question is still overloaded with nitrogen. Mere forecasts regarding the future effects of those measures and the expected decrease in nitrogen emissions may not be taken into account in the decision on the approval of additional nitrogen deposition.”

Thus, in the context of assessing impacts of nitrogen deposition on designated sites, Advocate General Kokott’s position is clear. Applying that position, since the total load from nitrogen deposition does not fall below the threshold for the sites being adversely affected, the forecasts of reductions under Scenarios B and C may not be taken into account. Basing the assessment on emissions scenarios B or C would run directly counter to the clear guidance provided by Advocate General Kokott.

Advocate General Kokott’s Opinion informed a European Court judgment on Joined

<sup>16</sup> i.e. which are unrelated to the Wealden Local Plan.

Cases C-293/17 and C294/17 handed down on 7th November 2018. This notes (in Ruling 6) that benefits associated with measures which are not a part of the proposal being determined may not be taken into account if they are not “certain” at the time of the assessment.

Scenarios B and C both include predicted benefits associated with national and international measures and trends which are not a part of the Wealden Local Plan i.e. they are autonomous. Although it is considered that some such benefits are likely, it is not possible to say that the full extent of benefits in either Scenario B or Scenario C are certain. The practical interpretation of the 7th November judgment is thus the same as that of the Advocate General’s Opinion that informed it: that the ‘uncertain’ benefits contained within scenario B or C may not be taken into account. Scenario A, which does not include these benefits, is thus the scenario which WDC and its expert advisors (AQC and CEH) consider must form the basis of decisions in relation to the assessment of atmospheric pollutant effects on Natura 2000 ecological sites.

For reasons set out above Natural England’s paragraphs 39 and 43 are also not valid.

39. Additional Nitrogen (N) deposition will occur as a result of new development over the course of the plan period however this happens concurrently with the declining trend (both background and as part of the plan) of concentrations close to roads as a result of existing cleaner vehicle technology (as also noted in Section 7.7 of the air quality report). The improvements coming forward close to roads is declining faster than the additional inputs as part of the 10 year Local Plan.

**WDC response:**

WDC note here that Natural England accept that additional nitrogen deposition will occur as a result of new development over the course of the plan period. However, for reasons presented by both CEH and also AQC in their supporting reports on the Natural England response the test is not that associated with ‘likely expectation’ that air pollutant levels will reduce but a robust level of ‘certainty’ as per that associated with the CJEU Ruling on C-293/17 & C-294 is required. As identified by CEH in their Regulation 19 analysis report of Natural England’s response at paragraph 94, this:

“...makes clear that an appropriate assessment may not take into account ‘autonomous measures’ “if the expected benefits of those measures are not certain at the time of that assessment” (ruling 6, after para 138)”.

40. Ashdown Forest as a whole exceeds the critical load and there may or may not be existing implications for the site condition which is the purpose of noting air quality as a threat on the site condition report for Ashdown Forest. A SNAP is the recommended approach to tackling background pollution however this is on a whole site approach recognising that the source attribution on the Air Pollution Information System (APIS)<sup>10</sup> notes other inputs including agriculture that have a much higher influence on the site than local transport. The SNAP will hopefully address the existing high concentrations that may not benefit as much due to improvements opposed to those areas close to roads which are expected to experience significant declines due to the long term reduction in concentrations due to cleaner vehicular technology.

**WDC response:**

WDC has considered the proposition of a SNAP in its response to Natural England's paragraph 12. In addition, WDC wish to highlight that the purpose of a SNAP is indeed as Natural England point out to reduce 'existing' background pollution. The aim of the Wealden mitigation strategy is to address pollution that is predicted to be experienced as a result of the Wealden Local Plan.

41. Natural England advises that Chapter 15 of the air quality report, in particular 'with plan' emissions scenario B is the most realistic and sufficiently precautionary approach to assessing the impacts of the plan (in combination) on Ashdown Forest. However much of the information within the HRA looks specifically at the increase that will come forward as a result of increased traffic from growth within the plan and assesses that against the background situation in 2028 without the plan. Clearly there will be an increase but the relevance of the declining background has been given little consideration and how this changes the assessment of the ecological relevance in terms of any adverse effect on integrity of the site.

**WDC response:**

WDC has commented previously in relation to the use of Scenario B. Therefore, no further response is provided here on this matter. Natural England are correct to note that the HRA considers the increase that will come forward as a result of growth proposed in the Local Plan. This is because, and as per WDC's response to paragraph 37 / 38, WDC do not consider that it is correct to use the predicted benefits associated with technology and international policy, (including the inherent uncertainties), which are unrelated to the Wealden Local Plan, to offset the adverse impacts of the Local Plan.

In addition, WDC would like to draw readers' attention to the CEH Regulation 19 analysis report of Natural England response, which considers this in detail.

42. Ashdown Forest contains a mosaic of habitats including woodland which is not a notified feature of the SAC but is a feature of the SSSI designation. Where exceedances are affecting woodland, this should be disregarded in the AA and only exceedances affecting the notified features of dry heath and wet heath should be assessed. We welcome that this has been made clearer in the HRA than has been the case within the air quality and ecological monitoring reports.

**WDC response:**

WDC do not wholly agree with Natural England's statement that exceedances affecting woodland, which is a SSSI feature rather than one associated with SAC, should be disregarded. This consideration is supported by CEH at paragraphs 101 / 102 of the CEH 'Overview and Conclusion' report. It is also considered in CEH's Regulation 19 analysis report at paragraph 96 and paragraphs 72 and 73. WDC have also commented previously on this point at Natural England paragraph 2 and 3.

WDC also wishes to respond to the last sentence made by Natural England in paragraph 42 above. WDC would like to make it clear that whilst the HRA has provided an element of focus on dry and wet heath, the HRA specifically identifies that information on other habitat types (Bracken, woodland, grassland, water and bare ground) are presented in the Ashdown Forest Air Quality Report.

43. Table 39 in the HRA demonstrates the decline expected in 2028, when compared to Table 41 this shows how little the local plan will retard that improvement. This identifies that the plan will not result in a worsening of the existing situation and will not outweigh the improvements and should only be seen as a small retardation of the improvements that are expected to come forward by the end of the plan period.

**WDC response:**

WDC note that Natural England in paragraph 43 correctly accept that the Local Plan will retard any improvement that may be expected as a result of any technological or policy related emission improvements. The extent of the impact because of the Local Plan is provided in both the HRA, Air quality Report as well as further explained in the CEH 'Overview and Conclusions' report at questions 4 and 5.

WDC consider that again central to this statement is its response at Natural England paragraphs 38 and 39.

44. There are a number of comments in the HRA and the Local Plan that relate to the fact that at the end of the plan period, the site will still exceed the CL/CLE. These comments are not relevant to the HRA.

**WDC response:**

WDC consider it to be highly relevant that critical levels / loads will still be exceeded in 2028 at the end of the Local Plan period.

WDC also considers that this statement appears to take no account of the Advocate General's Opinion in Joined Cases C-293/17 and C-294/17 regarding when autonomous improvements may, and may not, be taken into consideration.

This particular point has also been considered by CEH at paragraph 97 of their Regulation 19 analysis report and as relevant to Natural England's guidance.

45. It is not the function of the plan to reduce all background levels that are a result of a number of other factors such as long range transport and farming impacts. These background levels will be addressed by national and international measures and the development of a SNAP to influence the local situation. We very much welcome WDCs strong commitment to working with the Ashdown Forest SAC working group on helping to develop a suitable SNAP.

**WDC response:**

WDC agree with this statement.

46. The Appropriate Assessment must consider whether the impacts arising from the plan in combination would have an adverse effect on the site. It is our considered opinion that this is not the case.

**WDC response:**

WDC has presented the findings of its appropriate assessment in the Wealden Local Plan HRA. It is WDC's considered opinion as supported by evidence that it is not possible to conclude that the Local Plan will not adversely affect the integrity of Ashdown Forest SAC without the provision of appropriate and effective mitigation.

Subsequent to the publication of the Proposed Submission Local Plan HRA, WDC has gained further expert advice including that from Professor Mark Sutton at CEH. In his report, Professor Mark Sutton considers in detail both the air quality modelling and ecological evidence. The conclusion made by WDC that the Local Plan will result in an adverse effect on integrity, should it be allowed to proceed without mitigation, is thus supported by CEH's, (in particular Professor Mark Sutton, whose credentials are set out within his Report), independent review of the Ashdown Forest SAC air quality and ecology evidence base. Information relevant to this review is provided in the two separate CEH reports. It should be noted that Professor Mark Sutton (rightly) agrees with Natural England that if it is not possible to demonstrate that mitigation will be effective then in accordance with Article 6(4) of the Habitats Directive then IROPI should be applied and compensatory measures should be delivered.

It is further noted by WDC, that CEH consider that Natural England's submission at paragraph 46 above is hung

“...almost entirely on the dependence of off-setting a tendency toward future local emissions increases against anticipated national emissions reductions over the same period”.

Such an approach by Natural England is misconceived for reasons given above.

47. Notwithstanding any of the above comments, the greatest relative declines in species abundance are for sites below critical load because nitrogen sensitive species may not have already been lost. When considering Ashdown Forest, which is at/above the critical load for nitrogen deposition, the dose-response of heathland already loaded with nitrogen means a larger contribution of nitrogen would be required to result in further loss of species richness when compared to a site with much less nutrient loading (and thus more sensitive species). NECR210<sup>11</sup> (as shown in Table 21) attempts to quantify this dose-response. For example, a lowland heath site with background pollution of 5kg N ha<sup>-1</sup> y<sup>-1</sup> would require an annual contribution 0.4kg per ha of extra nitrogen to lose a further point of species richness whereas a site at 15kg N ha<sup>-1</sup> y<sup>-1</sup> would require 1.3kg to generate the same loss in species richness. Where the background is 20kg N ha<sup>-1</sup> y<sup>-1</sup> this increases further to 1.7kg.

**WDC response:**

WDC has sought expert advice to consider the point made by Natural England at paragraph 47. Advice received is presented in the two CEH reports. A summary of CEH's conclusion on the points made above is provided below for ease of reference (taken from paragraph 99 of the CEH 'Regulation 19 analysis report'. However, both CEH reports should be referred to for a full explanation.

“Natural England Submission, para 47, concerns interpretation of NECR210. I am not convinced that the data presented (e.g., in the Appendices) of NECR210 show reliably that “the greatest relative declines in species abundance are for sites below critical load” noted in the Natural England Submission. While there is indeed some evidence of overall non-linear response in the species numbers in relation to nitrogen deposition, the study focused on establishing best-fit curves across the full deposition range, and did not test for statistical significance whether the reductions were already significant below the existing critical load minimum. Indeed, if that were the case it would be evidence in favour of lowering the UNECE critical load ranges. Similarly, I conclude that the subsequent arguments of substantial species loss at low N deposition rates and less species loss at high N deposition rates, are not actually useful for the discussion about whether there would be an adverse effect of the proposed WLP on Ashdown Forest SAC. Even if total rate of species change decreases, the data Annexes in NECR210 (e.g., Appendix 3 of that report, p 89) show that there is substantial change going on for key species through the full range of 10-20 kg N ha<sup>-1</sup> yr<sup>-1</sup>. In addition, while N-sensitive plants disappear rapidly at low N levels (e.g., in the region 10-15 kg ha<sup>-1</sup> yr<sup>-1</sup>), the data of NECR210 data suggests that N-loving plants increase most rapidly at high N levels (e.g., >20 kg N ha<sup>-1</sup> yr<sup>-1</sup>). It is nevertheless good that NE draw attention to this report, which provides important supporting evidence for the existing value of the critical load as adopted by WDC”.

48. The HRA states that NECR210 does not distinguish between species richness from undesirable or uncharacteristic species however, for heathland in particular this aspect was taken into account in the NECR210 report and the conclusion were considered to be robust once confounding factors had been removed.

**WDC response:**

WDC has no comment in addition to its comment above at paragraph 47.

49. There are a number of assumption that have been made within the ecological monitoring that relate to the condition of Ashdown Forest however various sections of the Ashdown Forest Ecological Monitoring Report (July 2018) and previous iterations showed no significant correlation between grass:forb ratio and distance from a road. The expected correlation between foliar nitrogen concentrations and distance from road for Heath Plait Moss and Heather was also not observed and bryophytes and lichens (which are highly sensitive to Nitrogen) showed no statistically significant relationship between nitrogen index values and road. In summary, generally through the ecological monitoring report, it is noted that background air quality is a pressure on Ashdown Forest but much of the specific ecological monitoring and analysis is generally unable to attribute road contributions to be a statistically significant contributor to this.

**WDC response:**

WDC throughout the HRA has sought expert ecological advice in order to assist in the determination of the ecological monitoring results. CEH have contributed to the HRA through the provision of expert knowledge. This work is now published alongside the Submission HRA. Within the Overview and Conclusions Report prepared by Professor Mark Sutton, information is provided in a clear way identifying the relationships between ecological monitoring and air quality data.

In considering Natural England's comments here, Professor Mark Sutton concludes at paragraph 100 of the CEH 'Regulation 19 submission' analysis report that he is:

"...convinced that there is a substantial body of evidence that points to the effects of atmospheric N deposition on this site considering both near-road increase and background increase... In particular, I note that the most N-sensitive species and habitats do not occur in close vicinity to roads, which may be a result of combined pressures, e.g., increased atmospheric N pollution, increased visitor pressure, different management etc."

50. Para 11.51 - 11.54 provides further information following scoring of vegetation against the Ellenberg N values. This does not fully accord with the information contained within the ecological monitoring report (July 2018) where Nitrophobe species did not have relationship to distance from road nitrophile species did show a correlation although as the text states this was particularly at 2 quadrats that were 1m and 5m from the roads. Areas immediately at the kerbside or within the first 5m of the road will be subject to other confounding factors such as air disturbance by moving vehicles, salt from road gritting and dirt and run off from the road itself (Truscott 2005).

**WDC response:**

WDC agree that quadrats very close to roads will be subject to other factors in addition to atmospheric nitrogen pollution. However, it is reasonable that such pressures will often increase where the intensity of road use increases.

Professor Mark Sutton in the CEH 'Regulation 19 analysis report' identifies that:

“...in this regard, atmospheric N pollution is not only useful in its own right, but also provides an indicator on the level of environmental disturbance associated with road use. (It would require separate study to quantify the relative response of the other traffic related indicators, but I do not consider this a priority, since there is already ample evidence demonstrating adverse effects of roads and N pollution on Ashdown Forest SAC)”. (paragraph 101)

51. There is no doubt that large areas of the site are currently in unfavourable recovering condition however the reason for these to be classed as “recovering” is that there are measures in place to ameliorate the decline in the habitat which is considered to be wholly down to management constraints. Management of the site is not a function of the Local Plan.

**WDC response:**

Natural England Submission, para 51, considers that there “is **no doubt** that **large areas** of the site are currently ‘unfavourable **recovering**’”. Natural England justifies the inclusion of the word ‘recovering’ because “there are measures in place to ameliorate the decline in the habitat which is considered to be **wholly** down to management constraints” (emphasis added). It is considered by Professor Mark Sutton in the CEH ‘Regulation 19 analysis’ report that this is an unreliable statement in the Natural England Submission, based on the evidence presented in the ECUS and AQC Reports, since:

- a. just because certain measures to improve management are in place, it does not mean that they have so far demonstrated success;
- b. no evidence has been presented to demonstrate the success of improved site management (hence a label of ‘unfavourable presumed recovering’ would appear to be more appropriate);
- c. no evidence has been presented of what ‘large areas’ means quantitatively (e.g., as a % of Ashdown Forest SAC);
- d. the areas sampled in the ECUS ecological transects only showed small areas in more favourable condition, while the overall picture recorded by ECUS was of very degraded habitat (i.e., unfavourable); and
- e. the wording ‘wholly’ excludes a role of atmospheric deposition, when there is clear evidence of both critical loads and levels exceedance and species effects that are consistent with critical loads and levels exceedance.

Comments on particular sections of the HRA are noted below.

52. Para 8.42 - The HRA refers to 'Condition Standards Monitoring', this is incorrect. It is 'Common Standards Monitoring (CSM)<sup>12</sup> and is used to assess and monitor the condition of SSSIs. Article 17 (of the Habitats Directive) reporting is the mechanism used to assess the condition of SACs, although the monitoring can draw on CSM data where applicable.

**WDC response:**

WDC note this minor point and have updated para 8.42.

53. Para 8.52 - Availability and analysis of Ashdown Forest condition assessment data. The raw data for the majority of the heathland units have been summarised, detailing the CSM attributes which failed and those which passed. This gives sufficient detail to provide a good understanding on a unit by unit basis of historical monitoring data. For this reason it is not necessary to retain the raw data.

**WDC response:**

WDC wholly disagrees with this statement. As part of its ecological investigations, it would have been useful for WDC and its consultants to have access to this data to understand the SAC in a historical context. It is disappointing that Natural England have destroyed this data.

54. Para 11.8 - SSSI monitoring: the report states that Natural England undertake SSSI condition assessments every 6 years. There is no set time length for periodic monitoring of SSSIs. The length of time between each condition assessment is dependent upon a number of factors. These factors include, but are not limited to, the nature of the habitat, whether there are management mechanisms in place (for example, Countryside Stewardship), and changes in circumstances (ownership, management).

**WDC response:**

The HRA report has been updated to reflect the above.

55. Para 11.18 - CSM target attributes: The statement that each SSSI unit should comprise of at least 50% of heather vegetation is erroneous. CSM guidance for lowland heathland advises that the range of dwarf shrub cover should reflect local conditions, which greatly vary from site to site, and are influenced by many factors. Hence the CSM target, as detailed in the guidance is for 'dwarf scrub cover to be between 25%-90%, rather than between 50-75%, which is referred to in the CSM guidance as an example. The target used in the approved and published Favourable Condition Table (FCT) for Ashdown Forest is dwarf scrub cover of between 25% and 90%, not 50-75%.

**WDC response:**

WDC note the advice provided by Natural England. The CSM guidance for lowland heathland advises that the range of dwarf shrub cover should reflect local conditions, which greatly vary from site to site, and are influenced by many factors. WDC note that the 50-75% range in the CSM Guidance is given as an example rather than a definitive range for all sites. However, it is noted that there must be a minimum of 25% cover of heathland species to qualify as heathland habitat. It is therefore noted that the site-specific target set for Ashdown Forest SSSI is at its minimal range.

Text has been updated in the HRA to reflect the above.

Overall, WDC does not consider that Natural England's comments above have any bearing on whether the Local Plan would be determined as having 'no adverse effect' on the integrity of the SAC.

56. Para 11.20 - Poor species richness: the HRA states that only two forb species were found with any regularity across the units', and many only had one species. If two forb species are occasional across a unit, then the unit is considered to be meeting the target for that attribute, following JNCC CSM guidance. Plant diversity varies from site to site, and is dependent on a variety of factors, including management history, with some heathland sites being more species rich, whilst other sites are historically more species poor. No evidence has been provided that suggests that the site has historically supported a diverse range of forb species. Given that grazing was all but abandoned on Ashdown Forest in 1983, and from 1998 only the newly fenced area supported grazing animals in any great number, it is to be expected that many areas will be relatively species poor (Marrable, 2003).

**WDC response:**

WDC note Natural England's comments above but consider that the comments made do not have any bearing on whether the Local Plan would be determined as having 'no adverse effect' on the integrity of the SAC.

57. Para 11.22 states that 44% of units failed on the bare ground target. However this appears to have no relevance to air quality impacts. Lack of bare ground is associated with lack of appropriate grazing.

**WDC response:**

WDC note Natural England's comments above. WDC in its paragraph within the HRA did not suggest that bare ground is related to air quality impacts.

WDC does not consider that Natural England's comments above have any bearing on whether the Local Plan would be determined as having 'no adverse effect' on the integrity of the SAC.

58. Paras 11.79 to 11.81 - We welcome recognition of the particular issues with regards to the management of the site; in particular the current fencing constraints on common land. An additional note about the invisible fencing trial is that there were unfortunate technological problems and it is considered that this new technology may be more appropriate to flat pasture. It was found to be less suitable for the topography of Ashdown Forest.

**WDC response:**

WDC note Natural England's comments above, however, this does not change the text presented in the HRA. No updates have been made to these paragraphs.

59. Para 11.120 States that many of the SSSI target failings reflect known adverse effects from nitrogen deposition, despite 20 years of management. Restoration of degraded heathland is a long-term process, and may take many decades to achieve – as stated in para 11.79 of the HRA. Although there has been funding to support management of Ashdown Forest for 20 years, it is only since the introduction of Higher Level Stewardship in 2005 that the levels of funding have been at a level to support targeted and appropriate heathland management.

**WDC response:**

WDC notes that Natural England's comments above recognise that heathland restoration "may take many decades to achieve", and that it is only "since the introduction of the Higher Level Stewardship in 2005 that the levels of funding have been at a level to support targeted and appropriate heathland management."

WDC wishes to highlight that despite a Higher Level Stewardship Scheme being in place woodland cover apparently still increased over the period 2005 to 2014-2017, albeit at a slower rate than between 1947 to 2005 (para 101, Sutton O&C).

WDC would also like to highlight that Natural England agree here with a previous response made by WDC relating to the timeframes for heathland restoration and recovery presented in response to Natural England paragraph 17.

60. This statement also fails to take sufficient account of the current and past management history of the site. There is no evidence provided to suggest that nitrogen deposition impacts can be attributed to failing CSM targets across the heathland complex. The main reason why the majority of the heathland is not meeting the SSSI monitoring targets for one or more attributes is because of lack of regular grazing over a significant part of the heathland (as referenced in para 11.80 and 11.93 of the HRA).

**WDC response:**

WDC note that Natural England consider that the 'main' reason for Ashdown Forest SSSI not meeting its monitoring targets is due to a lack of regular grazing. As provided within the HRA at paragraph 11.80 this is identified where the HRA states:

'In relation to management practices, a notable finding from a review of CSM data was that for 33 SSSI units that failed to meet key CSM targets one of the reasons identified for the failures was no grazing'.

WDC in its HRA at paragraphs 8.44 – 8.49 explains that CSM was not designed to detect or attribute nitrogen deposition impacts and provides the reasons why. In addition, WDC consider and apply the decision framework provided by JNCC<sup>17</sup> in its report titled 'A decision framework to attribute nitrogen deposition as a threat to or a cause of unfavourable habitat condition on protected sites' within the HRA.

WDC consider, based on the advice from Professor Mark Sutton in the CEH 'Regulation 19 analysis' report, that it is likely that effects from nitrogen deposition are underreported on the basis that there is currently not a widely used tool to assess whether air pollution impacts contribute to unfavourable status.

WDC does not consider that Natural England's comments above have any bearing on whether the Local Plan would be determined as having 'no adverse effect' on the integrity of the SAC.

61. This is illustrated by the fact that the two heathland units that are meeting all objectives, and considered to be in favourable condition are within the fenced area, where regular grazing is being maintained. Analysis of the condition assessment data shows that four of the units failing within the fenced area are failing because of the bracken cover and/ or age structure of dwarf shrubs only, not for poor species diversity, or a high grass:forb ratio, effects which the HRA appears to be attributing to nitrogen deposition. Where the fenced areas are failing on these attributes, it is likely to be because the fenced area, which covers more than 500 ha cannot be divided into smaller grazing units, thus control of grazing is limited.
62. Para 11.121 - The report states that an increase in atmospheric pollution and nitrogen deposition can affect species diversity and grass:forb ratios, graminoid abundance and a decrease in species richness. The HRA references that other variables/factors can influence site condition, including visitor pressure and management practices (para 11.72) then fails to acknowledge that lack of, or inappropriate grazing can also affect all of these attributes. There have been many studies that have provided evidence for this: (Lake *et al*, 2001), (Bullock and Pakeman 1997). Of particular relevance is the research report commissioned by English Nature that undertook a comparison study of the ungrazed and grazed areas

<sup>17</sup> Jones, L., Hall, J., Strachan, I., Field, C., Rowe, E., Stevens, C.J., Caporn, S.J.M., Mitchell, R., Britton, A., Smith, R., Bealey, B., Masante, D., Hewison, R., Hicks, K., Whitfield, C., Mountford, E., (2016) A decision framework to attribute atmospheric nitrogen deposition as a threat or cause of unfavourable habitat condition on protected sites. JNCC Report, No. 579.

within Ashdown Forest which found that the grazed areas supported a more diverse plant community (Marrable, 2003).

**WDC response:**

As advised by CEH, WDC agree with the implication of the Natural England submission here that grass: forb ratio and overall total diversity are not the best measures of N deposition impacts. Natural England emphasize their experience of how grazing and fences are having an impact on the site. This, of course, is not evidence against the argument that site management and atmospheric pollution levels are both relevant.

63. The HRA asserts that Ashdown Forest is in unfavourable, declining condition, rather than unfavourable recovering. The Natural England definition of declining condition is that: 'site condition is getting progressively worse' (NE Standards, SSSIs) No evidence has been provided to support this assertion. Para 11.93 summaries the 2012 SSSI condition assessment conclusions which reported that 'things have got a little worse, but due to small sample size there was not enough difference to be sure that things are getting worse'.

**WDC response:**

WDC agrees with the definition of 'declining condition' provided in this paragraph.

WDC at paragraph 11.15 states the following:

"In summary, Ashdown Forest is considered by Natural England overall to be in unfavourable recovering condition".

Furthermore, WDC in paragraphs 11.93 – 11.96 states the following:

"Natural England is responsible for the assessment of condition and regularly survey the whole SSSI. The assessment in 2012 included the following summary:

'In terms of bare ground, dwarf shrub age structure & composition and grass & forb diversity the results are broadly similar [to the 2007 unit assessment]; if anything things have got a little worse, although given the much smaller sample size in 2012 there was not enough difference to be sure that things are getting worse. However, in terms of Bracken and scrub levels there have been significant improvements from the 2007 survey. My conclusions from this are that the Conservators have utilised the HLS money well to get the Bracken and scrub under control and have made great progress with this. However due to a lack of grazing, and in the fenced area lack of control over grazing, there has been no improvement (and possibly a decline) of the smaller scale aspects of heathland such as vegetation structure, bare ground, and grass & flower diversity.'

The surveys undertaken by Ecus Ltd. in 2017 support this summary. Bracken and gorse were not recorded as widespread. 42 quadrats (26.4%) had bracken coverage of over 10% and only 21 quadrats (13.2%) had gorse (*Ulex europaeus*)

cover of over 25%. The extensive efforts of the Board of Conservators to control bracken and gorse spread have therefore clearly been effective.

Likewise, the Ecus Ltd. CSM assessments for 2017 support Natural England's conclusions that a significant proportion of units fail to meet targets for fundamental attributes of lowland heathland including 25% cover of dwarf shrubs and at least 50% ericaceous vegetation and between 1-10% bare ground.

To address the failings the SIP for Ashdown Forest and the Management Plan for Ashdown Forest will need to effectively deliver remedial measures in order to bring the SSSI units into favourable condition and thereby help the SAC to achieve and maintain favourable conservation status.

The SIP provides the headline strategic priorities for making significant progress in addressing the current unfavourable condition of the lowland heathland at Ashdown Forest".

WDC considers that it is Natural England that identifies in its SSSI condition summary that 'if anything, things have got a little worse'.

The ECUS Report<sup>18</sup> identifies at paragraph 7.1.5 the following:

"In our study we have determined that all quadrats along all transects represent degraded heathland habitat. This is not surprising because Natural England currently considers Ashdown Forest SSSI to be in an 'unfavourable recovering' condition, and an experienced ecologist would reach a similar conclusion with just a cursory visit to the site. It is interesting to note here, too, that applying the decision framework proposed by Jones *et al.* (2016) to attribute atmospheric nitrogen deposition as a threat to, or cause of, unfavourable habitat condition on protected sites (a report commissioned by the JNCC) would most likely classify Ashdown Forest into at least the 'orange outcome category'. This suggests that the site is 'not recovering' and 'requires action to reduce N deposition impacts at national or site-level'".

Natural England in its DAS advice suggested that WDC use the JNCC decision-making framework. In applying the Framework the conclusion as identified at paragraph 11.110

"...suggests that the condition of Ashdown Forest is 'not recovering' and 'requires action to reduce N deposition impacts at national or site-level'".

### **Pevensey Levels Air Quality**

64. Natural England provided advice to the Council in December 2017 under our Discretionary Advice Service (DAS) on a previous iteration of the air quality report. Some of this information has been included within the HRA document and it is not necessary to reproduce our previous advice in full. However since that advice was provided the report has been updated. The July 2018 air quality report does not change the advice previously given that Pevensey Levels SAC and Ramsar is water quality dependant and in particular Phosphorous (P) limited.
65. Our advice remains that the Local Plan poses no credible air quality risk to Pevensey Levels

<sup>18</sup> Ecological Monitoring at Ashdown Forest: Considering the Current and Future Impacts on the SAC caused by Air Quality and Nitrogen Deposition (ECUS, July 2018).

SAC and Ramsar and there would be no likely significant effect as the site is not sensitive to air quality.

66. The freshwater ditches which the Habitats Regulations Assessment correctly identifies as significant provides habitat for both the SAC feature *Anisus vorticulus* and the Ramsar features- the invertebrate and plant assemblages. Pevensey features 450km of freshwater ditches on which the SAC and Ramsar features depend. Ditches do not fit easily within the APIS habitat definitions however, rivers and streams would be the most relevant as there is effectively 'flow' within the overall water management system with water moving into and out of the levels through a complex system of water level management (as touched in from paras 21.34 -21.35).
67. Pevensey Levels is known to be a P limited site. The HRA includes detailed comments with regard to the possibility of Nitrogen (N) having an impact on emergent vegetation however this appears to be a misunderstanding of limited systems. Nitrogen could potentially have an impact on nitrogen sensitive features of a P/N co-limited site but Pevensey Levels is not a co-limited site so N would have no appreciable effect. The greatest contributor of P on the site is the waste water treatment works that discharge to the levels however P is controlled under the discharge permissions.
68. Notwithstanding the P limitation of the site, there is an extensive discussion of NOx critical load in relationship to Pevensey Levels based on the assumption outlined in paragraph 5.26, that the site features low and medium altitude hay meadow. Unfortunately although coastal floodplain grassland can feature this habitat, on Pevensey this is not the case. As outlined in the SSSI favourable condition table the site is largely semi-improved grassland which is seasonally inundated. This wet grassland is feeding habitat for the SSSI notified feature of wintering waders, specifically lapwing. According to APIS, semi improved grassland has no identifiable critical load therefore the discussion of the modelling in relationship to critical load should be discounted and additionally has no relevance to the qualifying features of the site.
69. The conclusions of the air quality modelling in paras 15.39 – 15.42 suggest that likely significant effect on the site cannot be determined. Para 15.54 goes further in that it states that the precautionary principle applies based on information in table 70. Information in this table refers to various scenarios eg "chronic conditions of elevated nitrogen", "leaching of nitrogen into the ditches from surrounding grazing land" however as explained above, this is not a relevant consideration for a P limited site. Additionally there are other areas of the HRA that do not accurately reflect the interest features of the site or the P limitation, particularly Tables 4, 5 and 8.
70. The Redfield ratio is 16:1 for N:P. In very simplistic terms this means that there would have to be sixteen times the amount of Nitrogen to Phosphorous for the balance to be in equilibrium and for Nitrogen to start to impact on the ditch system. A P limited site in practice means limited uptake of Nitrogen because the balance between Nitrogen and Phosphate is not correct. This is explained further by Liebig's law (also known as the law of the minimum) whereby a plants growth is limited by the nutrient in shortest supply. Therefore for a P limited site, N is not considered as a threat to site condition.

### **Lewes Downs Air Quality**

71. Natural England provided advice to the Council in December 2017 under our Discretionary Advice Service (DAS) on a previous iteration of the air quality report. Some of this information has been included within the HRA document and it is not necessary to reproduce our previous advice in full. However the updated July 2018 air quality report does not change much of the advice previously given or the conclusion that we do not consider that air quality will have an adverse effect on the designated site.

**WDC response:**

Natural England's discretionary advice was provided on 19<sup>th</sup> December 2017. This advice was provided on an earlier draft of the Lewes Downs SAC air quality report. Subsequent to receiving Natural England's advice in December 2017, further air quality modelling took place and the final report was published in August 2018<sup>19</sup>. Natural England were specifically advised as part of the Regulation 19 consultation that significant updates to the air quality reports which inform the WDC Local Plan HRA had taken place and that these reports should be reviewed, in detail, due to the significant updates in relation to additional modelling and analysis now presented in these reports.

For the above reasons, WDC considers that it is incorrect for Natural England to rely on its previous discretionary advice because the discretionary advice provided in December 2017 does not account for the subsequent modelling, results or indeed the subsequent conclusions as published in the August 2018 Lewes Downs air quality report. Natural England note the updated reports and subsequent work in paragraph 35 of this representation.

Notwithstanding updates made to earlier reports, WDC considered Natural England's discretionary advice and published a response to the points made. The WDC response to Natural England's DAS is provided as a Wealden Local Plan HRA submission document.

72. For the reasons provided elsewhere in this response, Scenario A is considered to be an unreasonable worst case scenario whilst Scenario B has a sensible level of precaution and is considered to be the appropriate scenario to consider within the HRA.

**WDC response:**

Whilst applied to Lewes Downs SAC specifically, this is a repeat / similar paragraph provided earlier in Natural England's response. The response provided by WDC to paragraph 22 is therefore relevant here also.

73. This advice is based on the topography of Lewes Downs SAC and the interest features for which it is designated. Not all features of a designated site are present within a given location within the site. In some cases, the boundary of the site may include other features that may not form part of a qualifying feature. Therefore, a site's conservation objectives are unlikely to apply equally to all parts of a site. To clarify, the woodland is not a qualifying feature of the SAC however it is a feature of the SSSI.

<sup>19</sup> Air Quality Input for Habitats Regulations Assessment: Lewes Downs SAC, (AQC, August 2018)  
[http://www.wealden.gov.uk/Wealden/Residents/Planning\\_and\\_Building\\_Control/Planning\\_Policy/Evidence\\_Base/Planning\\_Evidence\\_Base\\_Habitat\\_Regulations\\_Assessment.aspx](http://www.wealden.gov.uk/Wealden/Residents/Planning_and_Building_Control/Planning_Policy/Evidence_Base/Planning_Evidence_Base_Habitat_Regulations_Assessment.aspx)

**WDC response:**

WDC in its HRA identifies at paragraph 14.43 the following:

The presence of Annex I habitat H6210 (semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia)) with the priority habitat type 'orchid rich sites' is the primary reason for designation of the Lewes Downs as an SAC. Other habitat present includes semi-natural woodland. Details in relation to the SAC can be found in Appendix 3 of the HRA.

WDC does not therefore disagree with Natural England's first three sentences, or indeed the last sentence of which the HRA already clarifies as above.

On a general basis, WDC does however disagree with Natural England's fourth sentence which states that:

"...a site's conservation objectives are unlikely to apply equally to all parts of a site".

WDC has responded previously in relation to the relevance of non-designated interest features in WDC response paragraph 2 and 3. The relevant responses in relation to Lewes Downs SAC are provided at points 2a, c, d and e (ii) and 3.

74. Table 64 states that the woodland is integral to the site to support "*organisms presumably involved in supporting and maintaining the H6210 grassland such (e.g. rabbits, birds, invertebrates)*". This is an erroneous assumption; the woodland, whilst a feature of the SSSI designation is not integral to the SAC.

**WDC response**

WDC has sought further advice in relation to Natural England's point above. WDC agree with Natural England on this point and have updated the HRA accordingly.

75. The western edge of Lewes Downs SAC closest to the A26 and the area that could be impacted by air quality impacts has a thick belt of woodland cover. The topography of this area of Lewes Downs rises very steeply from the road; one area is actually a disused pit. The woodland belt currently functions as a buffer against air quality impacts onto the calcareous grassland and is also an important component of soil stability of the steep gradient. It is therefore not within the conservation objectives to remove this feature with any intention to restore to calcareous grassland.

**WDC response:**

WDC note the advice provided by Natural England in paragraph 75. This advice mirrors that provided by Natural England in their DAS response of December 2017 which was provided verbatim in the Proposed Submission HRA (August 2018 version). WDC does not disagree with Natural England's advice and has ensured that this is incorporated in the Submission version of the HRA.

76. Based on Scenario B, in the main the only habitat likely to be impacted by air quality deterioration even without background improvements is woodland which is not a qualifying feature of the SAC. The two units within 200m of the road are both in favourable condition with the air quality levels at their present level. There is an overall declining trend in Nitrogen concentrations, and there is no reason to expect this trend to reverse.

**WDC response:**

WDC does not disagree with the above statement should scenario B be the correct scenario to apply. However, for reasons provided in WDC's response to paragraphs above including paragraph 21, 22, 37, 38 and 41, WDC disagrees with Natural England that scenario B is the correct scenario to use within the Local Plan HRA.

Notwithstanding Natural England's advice, WDC concludes within its Submission version of the HRA that relying on Scenario B would also result in an adverse effect on site integrity should mitigation not be in place. Whilst under scenario B nitrogen deposition is predicted to reduce, the reductions would be greater without growth proposed in the Local Plan and in combination with amended TEMPRO 7.2 growth. Even with the reductions predicted in 2028 using scenario B, Lewes Downs SAC is predicted to remain above the critical load threshold. Therefore, additional growth proposed within the Wealden Local Plan and/or growth elsewhere (as provided by amended TEMPRO 7.2 data), will contribute to a further exceedance of the nitrogen deposition critical load.

Natural England are incorrect to conclude that under scenario B the main habitat to be impacted by air quality is woodland. The Lewes Downs SAC air quality Report (August 2018), in its figures, provides contours to show where there is an exceedance of critical levels / loads as well as a predicted increase of 1% or for 24-hr-mean NO<sub>x</sub> a 10% increase in the critical level / load value. The figures are used for illustration purposes. Beyond the contour an increase in NO<sub>x</sub> concentrations or deposition fluxes are predicted but this will be less than the 1% or 10% of the critical level / load.

However, it has been highlighted by the Centre of Ecology and Hydrology<sup>20</sup> that "there is broad consensus in the scientific community that "any additional deposition above [existing levels of deposition, which already exceed the critical load] would inhibit restoration and favourable condition" (Paragraph, 138).

The HRA has been updated for submission to make this point clearer.

77. It is clear from this that there is no credible risk that the Local Plan would have an adverse effect on Lewes Downs SAC from air quality impacts.

**WDC response:**

Please see WDC response at paragraph 76 above.

<sup>20</sup> Risks from air pollution to the integrity of Ashdown Forest Special Area of Conservation: Analysis of the (Regulation 19) consultation responses from Natural England, South Downs National Park Authority, Tunbridge Wells Borough Council and Lewes District Council concerning the proposed Wealden Local Plan (CEH, January 2019).

## **Ashdown Forest SAC and SPA – Recreational Pressure**

78. Natural England has worked collaboratively with Wealden District Council together with other surrounding Councils over the course of many years to ensure that there is a collective and robust mitigation strategy to avoid adverse impacts on Ashdown Forest as a result of increased recreational pressure affecting the interest features of Ashdown Forest. As part of this collaborative working relationship we have also been involved in discussions of potential alternative mitigation measures. We are fully supportive of WDCs approach and are satisfied that the most appropriate mitigation measures have been taken forward by WDC and the other relevant Local Authorities and are satisfied with the proposed and currently operating SANGs and the measures that are being included within the SAMM.

## **Pevensy Levels Water Quality**

79. While the following is implicit in the information put forward in the HRA, for clarity, Natural England summarise the issue of development and water availability as follows:
80. Increased surface water flow from the hard surface created by development has the potential to materially alter water levels within Pevensy Levels. As described in paras 16.26 – 16.25 the Levels are a complex managed system. Relatively stable water levels, all year around, are required for the Natura 2000 features. Large-scale development within the catchment has the potential to increase the flow of water into the site and alter the nature of that flow, i.e. large increases during heavy rainfall, all of which could have a potential impact. Additionally, water quality from surface run off which could be contaminated by a range of pollutants, including oil and sediment, would also have an adverse impact.
81. Para 16.15 water level management is achieved on a site basis and is principally delivered by the Pevensy and Cuckmere Water Level Management Board and the Environment Agency. Individual landowners have field level control.
82. Paras 16.19-16.24 The Environment Agency has reviewed all licensable discharges into Pevensy Levels through the Review of Consents process with Natural England's advice. This process found that the principle licensable inputs which impacted on Pevensy Levels were the sewerage treatment works.
83. Para 16.22. Natural England has aligned water quality targets for the site with the Environment Agency's Water Framework Directive targets for Good Ecological Status. These targets are site specific and were developed using the Agency's detailed models and available data. The mean range of soluble reactive phosphorous are 0.085 mg/l near Hailsham to the 0.063mg/l near Windmill Hill. Further water chemistry targets are based on Common Standards Monitoring and are as follows: DO 70% saturation 10th centile; BOD 4 Mgl-1 90th Centile; 0.6 Ammonia mgNI-1
84. Para 16.54 - Natural England welcomes Policy SWGA7 (Protection of Pevensy Levels) and agrees that this policy is essential to ensure no likely significant effect on the site. However, we would further advise that a SUDS policy needs to specifically address the quality and availability targets laid out in our advice note of November 2017.
85. We support the development of the policy described in paras 16.60 and 16.61 and the inclusion of SUDS measures within the master plan described in para 16.73. It should be noted that the scale and nature of SUDS required may not be able to be achieved on a site-by-site basis so applications will also need to be assessed at a project level. Lastly, long term management of SUDS is essential and avenues to ensure this could be explored through the policy as it develops.
86. In relation to waste water discharge it should be noted that package treatment works are unlikely to meet the 'in water' quality requirements of Pevensy Levels and therefore will not

be licensable by the Environment Agency. It is essential therefore that the para 16.89, in relation to headroom at the existing waste water treatment works and para 16.64 that all development sites will be required to provide a connection to the sewerage system, should be adhered to.

87. Natural England's concurs with the Council that a strategic approach is the most desirable. Strategic-scale SuDS could also address additional concerns such as open space access and green infrastructure provision. We therefore welcome the hook within the policy and the opportunity it presents for Natural England to work with Wealden and other relevant authorities to develop this approach.
88. Further comments on the wider interconnected issues that include water quality may be found in Annex 2

**WDC response:**

Subsequent to the Proposed Submission HRA and in light of Natural England's response above the Council has sought further clarification on whether additional atmospheric concentrations and deposition will adversely affect the integrity of Pevensey Levels SAC Ramsar. In considering the advice received as well as Natural England's representation above WDC has revisited its appropriate assessment. The conclusion of the Submission version of the HRA has been modified to confirm WDC's reassessment. The Submission version of the HRA now concludes that the Wealden Local Plan will not result in an adverse effect on the integrity of the site in relation as relevant to air quality.

**WDC: Please note that Appendix 2 site allocations has been removed from this document.**