MSDC 18

Note to the Mid Sussex District Plan Examination on the Implications of the Wealden Case Related to Ashdown Forest

Summary

- The purpose of this note is to update the Inspector on the position of the Mid Sussex District Plan (MSDP) in the light of the Wealden decision¹ (Wealden v SSCLG [2017]). This follows a request to the Council of 20 March 2017 by letter from the Inspector (ID18) for comments.
- 2. The Council seeks to agree a sound adopted plan at the earliest opportunity which is in line with Government objectives to boost the supply of housing and for sustainable development, and to avoid further delays to the achievement of an adopted plan at the earliest opportunity.
- 3. The potential implications of the Wealden judgment are for the soundness of the District Plan in relation to the Habitats Regulations in the context of the Ashdown Forest Special Protection Area (SPA) and Special Area of Conservation (SAC). This refers, in particular, to past advice given to the Council by Natural England and the resulting validity of Mid Sussex's approach to the Habitats Regulations Assessment.
- 4. This note also considers the <u>implications of the Inspector's Interim Conclusions of 20 February 2017 in relation to the Habitats Regulations</u> which initially suggested that higher growth may be sustainable.
- 5. Through its findings the *Wealden* judgment has created an extremely challenging context for agreeing a habitats-sound plan position. This note adopts an assessment approach which reflects a proportionate response in the spirit of paragraph 158 of the NPPF and the reasonable resources available to the authority. In addition, it is the Council's intention to update the Habitats Regulations Assessment (HRA) for the Mid Sussex District Plan to reflect updated information. This would occur alongside other updates such as the Sustainability Appraisal and would not be anticipated to extend the timescales for Plan adoption.

Implications for the Submitted District Plan (the "Plan")

- 6. Having reconsidered the submitted plan in the light of the *Wealden* decision, the following main points emerge:
 - The effects of the MSDP, in terms of certain pollutants arising from net additional traffic on habitat sensitive areas of Ashdown Forest must be assessed in combination with other plans and projects likely to affect the Forest in a similar way.
 - The judgement has directed Natural England to reconsider its advice and that the Design Manual for Roads and Bridges be re-examined and clarified. As a result of the case, the current and correct precautionary position that should be adopted by Mid Sussex as the competent authority in lieu of such guidance is a position whereby only plans or proposals which do not result, overall, in additional net traffic through the Forest should be assessed as having no likely significant effect.

(3) SOUTH DOWNS NATIONAL PARK AUTHORITY Defendants - and – NATURAL ENGLAND Neutral Citation Number: [2017] EWHC 351 (Admin)

¹ WEALDEN DISTRICT COUNCIL Claimant - and - (1) SECRETARY OF STATE FOR COMMUNITIES AND LOCAL GOVERNMENT (2) LEWES DISTRICT COUNCIL

- Mid Sussex's assessment has always adopted an in combination methodology
 through the use of the West Sussex County Strategic Transport Model, which
 incorporates growth assumptions for surrounding local authority areas but there
 are implications of the decision for the definition of the way in which background
 expected growth is treated and the thresholds of deemed significant impact.
- The pre-Wealden transport and HRA assessment by the Council contained within the Mid Sussex Transport Study (EP41) concluded that based on the submitted Plan (with 800 dpa and the allocations proposed), significant effects were unlikely on Ashdown Forest. In part this was because the major allocations proposed in the Plan are away from Ashdown Forest, such as at Burgess Hill. Indeed other districts, such as Crawley, are closer to the Ashdown Forest than some parts of Mid Sussex.
- Updated transport assessments, which reflect Wealden continue to suggest that there is no net additional traffic through Ashdown Forest from the submitted MSDP. However, while the improved relationship between homes and jobs and services suggests that there will actually be net overall reductions on the Forest roads as result of the Plan although the Plan results in a small increase in traffic on the A275. This is partly because the effect of the Plan is to divert traffic from other Forest roads onto the A275.
- 7. Overall, it is assumed that the submitted District Plan may be regarded as sound. The Plan generates no overall, additional net traffic movements and the legal protection of the SPA/SAC relates to the overall area. The existing Habitats Regulations Assessment will need updating to reflect the latest modelling. Additional work may need to be undertaken if the additional traffic on the A275 (alone) is judged to have a significant effect, particularly if the benefits to the other roads in the form of reduced traffic do not offset this effect or represent a form of 'mitigation'. This additional work would be to identify any possible effects of this traffic on the ecology of Ashdown Forest and the scope for mitigation. However, to trigger the requirement for appropriate assessment, the District Plan itself must contribute to a possible impact in some material regard.

Implications for the Inspector's Interim Conclusions of 20 February 2017

- 8. The Council has also considered the implications of the Inspector's interim conclusions of 20 February 2017 (ID11) which are of a higher potential housing provision than in the submitted MSDP, with an Mid Sussex OAN of 876 and a housing provision of 1,026 dwellings per annum, aimed at meeting the wider needs of the Housing Market Area (HMA). The following conclusions can be drawn:
 - The effects on Ashdown Forest through increased road traffic are sensitive to the scale and location of the resulting required additional housing allocations within the district. In practice, it is not possible to model with any certainty additional growth without making assumptions about where it would be located. Attempting to identify areas of the district where development might or might not affect the Ashdown Forest is speculative and risks 'fossilising' areas of the district as not being suitable for development.

- At 876 dpa, the Council believes that it has an identified five year housing land supply (as set out in MSDC15) and it is possible to make some reasonable assumptions about the location of additional growth in subsequent years. If the 5 year supply position is accepted and the assumptions for later years are also accepted, it is possible that the effects on traffic through Ashdown Forest may still result in an overall net reduction in traffic through the Forest, but with additional traffic on the A275 relative to the modelling results for 800 dpa.
- To meet 1,026 dpa, a significant amount of additional development sites are required in comparison with 800 dpa, or even 876 dpa. Due to the relatively limited supply of such known sites, uncertainties of their present deliverability and the sensitivities of traffic effects to location and scale and other strategic development, it is not possible to provide a reliable transport assessment at the current time for 1,026 dpa. It follows that it is not possible to provide a sound HRA. This issue arises because site assumptions would need to be made for several thousand dwellings, many of which would not be required until the later stages of the plan period. While the Council is aware of some broad options for further future growth, these options all have issues in demonstrating either deliverability or an absence of effect on the Forest at the current time. It would seem inappropriate to rule out now some longer term possible sites or areas because of their currently assessed future impact on the Ashdown Forest, especially as this would be without knowledge of the longer term approach to mitigation and traffic management. This is compounded by the current position whereby only plans (or proposals) which do not result in overall additional traffic through the Ashdown Forest should be assessed as not having a likely significant effect on the Forest.
- Whilst the transport assessment work makes a small allowance for windfalls in development scenarios, unless there is some overall resolution of the Ashdown Forest position, e.g. by Government, windfall developments may need to be separately assessed by developers in combination with the District Plan and other plans and projects likely to affect the Ashdown Forest.
- Overall the Council suggests it cannot demonstrate a 'Habitats-sound' position at 1,026 9. dpa at the current time. This because any adoption of 1,026 dpa, depends on the agreement of key assumptions about the location of additional sites and development within the transport modelling work. To a lesser extent this is partly true of the 876 dpa, although the Council has suggested a 5 year land supply position and believes that it is on stronger ground for years 6-10 based on the use of assumptions based on 'three tick' SHLAA sites. The Council proposes therefore that a sound position is to proceed with the adoption of the housing allocations of the submitted MSDP at 876 dpa, if the assumptions on sites are accepted. This would need to be confirmed through an updated HRA. To maintain a rolling 5 year land supply, the Council will undertake a full or partial review to assess and achieve additional site allocations at a time when it is hoped that the overall Habitats situation and approach to mitigation (and any possible public interest justifications and compensation) will be clearer. Mid Sussex will also work with surrounding districts to establish a Habitats sound growth allocation within the HMA as a whole.
- 10. Potential early adoption of the plan at 876 dpa would also support the early delivery of housing, especially giving confidence to the early realisation of the strategic allocation at Burgess Hill.

11. It is anticipated that in the medium term, additional guidance on the assessment approach will be available from Government or statutory bodies and that a scheme of mitigation and/ or compensation will be agreed together with the other affected local authorities. However, it is unlikely that substantive guidance or a workable programme of mitigation or compensation is imminent from any stakeholder.

Annexes

- 12. Annexed to this note are a series of technical appendices, including:
 - Annex A Overview of the Habitats Regulations
 - Annex B Background and the Wealden Case
 - Annex C Implications of the Wealden decision for the HRA of the Mid Sussex District Plan, including Updated Transport Analysis.
 - Annex D Evidence on Levels of Nitrogen Deposition in the Forest
 - Appendix 1. Growth Assumptions for Surrounding Authorities used in the Transport Model

Annex A: Overview of the Habitats Regulations

- 13. This section provides a brief summary of the Habitats Regulations. Definitive legal reliance should be placed on the detail of the actual Directive, Regulations, court decisions and other material.
- 14. European Directives for the protection of habitats and birds have been transposed into UK law by 'The Conservation of Habitats and Species Regulations 2010'. These regulations are commonly referred to as the 'Habitats Regulations'. The Habitats Regulations require that when making plans, such as the District Plan, or when determining planning applications, the effects of the plan or planning application on protected European sites is considered, and that any significant harm occurring to such sites is prevented.
- 15. There are 3 types of site protected by the Habitat Regulations:
 - **Special Areas of Conservation** These are sites designated for flora, fauna and habitats of international interest. They are commonly referred to as SACs;
 - Special Protection Areas These are sites classified to conserve the habitats of protected wild birds. They are commonly referred to as SPAs; and
 - Ramsar Sites These are sites designated as wetlands of global importance.
- 16. There are no Special Protection Areas (SPAs) or Special Areas of Conservation (SACs) or Ramsar sites in Mid Sussex district, but large parts of Ashdown Forest within the neighbouring district of Wealden are SPA and/ or SAC. The SAC status was awarded because Ashdown Forest contains one of the largest single continuous blocks of lowland heath in south-east England. The SAC designation (2,279 hectares) recognises the special nature of the vegetation found within Ashdown Forest, namely European dry heaths (14.8% cover) and North Atlantic wet heath (44.5% cover). The description of the heathland habitats, as detailed on the JNCC website, are provided below:

4010 Northern Atlantic Wet Heaths with Erica Tetralix

1.2.3 The M16 Erica tetralix – Sphagnum compactum wet heath element provides suitable conditions for several species of bog-mosses Sphagnum spp., bog asphodel Narthecium ossifragum, deergrass Trichophorum cespitosum, common cotton-grass Eriophorum angustifolium, marsh gentian Gentiana pneumonanthe and marsh clubmoss Lycopodiella inundata. The site supports important assemblages of beetles, dragonflies, damselflies and butterflies, including the nationally rare silver-studded blue Plebejus argus, and birds of European importance, such as European nightjar Caprimulgus europaeus, Dartford warbler Sylvia undata and Eurasian hobby Falco Subbuteo.

4030 European Dry Heaths

- 1.2.4 The dry heath in Ashdown Forest is an extensive example of the southeastern H2 Calluna vulgaris Ulex minor community. This vegetation type is dominated by heather Calluna vulgaris, bell heather Erica cinerea and dwarf gorse Ulex minor, with transitions to other habitats. It supports important lichen assemblages, including species such as Pycnothelia papillaria. This site supports the most inland remaining population of hairy greenweed Genista pilosa in Britain.
- 1.2.5 Annex II species present as a qualifying feature, but not a primary reason for site selection, include great crested newt (Triturus vulgaris).

- 17. Article 6 of the Habitats Directive 92/43/CEE provides the overarching framework for the management of Natura sites including SAC and SPA areas and the whole of these provisions are relevant. Especially relevant to this case Article 6 (3) sets out that:
 - Any plan or project nor directly connected with or necessary to the management of the site but likely to have significant effects thereon, either individually or in combination with other specific plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned, after having obtained the opinion of the general public.
- 18. Importantly the need for appropriate assessment is triggered by a likelihood (not a certainty) of significant effects, although the use of the word 'likely' seems to suggest there must be some realistic possibility. In line with the precautionary principle, it is unacceptable to fail to undertake such an assessment on the basis that significant effects are not certain. A likelihood of significant effects may clearly arise from projects that arise beyond a protected site.
- 19. A series of individually modest impacts may in combination produce a significant impact and hence Article 6(3) tries to address this, by suggesting a need to take account of the combination of effects from other plans or projects. Article 6(3) does not explicitly define which other plans and projects are within the scope of the in combination provision. In theory, at least, it is possible to consider plans or projects which are completed; approved but uncompleted; or not yet proposed.
- 20. Advice in the European Commission's own interpretation guide² is that already completed plans and projects are excluded, although it is important that some account is taken of such plans and projects in the assessment, if they have continuing effects on the site and point to a pattern of progressive loss of site integrity. The advice also suggests that on grounds of legal certainty, it would seem appropriate to restrict the in combination assessment to plans or projects which have actually been proposed. At the same time, it must be evident that in considering a proposed plan or project a presumption in favour of other, as yet un-proposed, plans or projects is not established.
- 21. When preparing plans such as the District Plan, the Council is required to undertake a Habitats Regulations Assessment which assesses the potential effects of the plan on European protected sites.
- 22. The sensitivities of different kinds of effect are specific to SPA and SACs, although there are overlaps. In very broad summary the SPA is particularly sensitive to visitor effects and numbers, while the SAC is particularly sensitive to the deposition of elements and compounds which act as 'pollutants', such as Nitrogen, and which affect growing conditions for the protected species.

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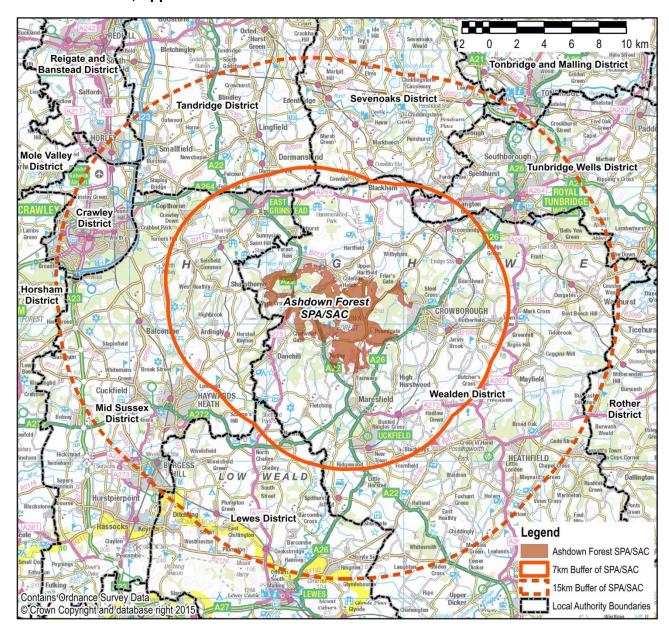
² Managing Natura 2000 Sites, The Provision of Article 6 of the Habitats Directive 92/43/EEC, 2000

- 23. In relation to the SPA, recreational disturbance can be mitigated through the provision of Suitable Alternative Natural Greenspace (SANG) which are designed to attract visitors away from the Ashdown Forest SPA, and a Strategic Access Management and Monitoring Strategy (SAMM) which aims to manage visitors at the Ashdown Forest. Mitigation is required for new residential development within a 7km zone of influence around the Ashdown Forest SPA (see map below). There is ongoing consideration with the other affected local authorities of whether the 7km zone of influence should be extended based on the results of an updated visitor survey, but to date this has not been established or agreed. See the Ashdown Forest Topic Paper (TP2) for further information. The map below is also useful for establishing the parts of Mid Sussex in proximity to the Forest and the relative position of areas in neighbouring districts and the Housing Market Area.
- 24. Until the recent *Wealden* decision, the statutory agency, Natural England, had sought to provide practical guidance to local authorities on the methodology used to determine if the proposals in the District Plan would be likely to contribute significant additional pollution deposition. Interpretation of this guidance was that plans and proposals did not require an in combination assessment where <u>individually</u> they contributed less than an additional 1% 'process contribution' of pollutants to the SAC. This is taken as equivalent to an additional 1,000 annual average daily traffic (AADT) movements based on the guidance in the Department of Transport's Design Manual for Roads and Bridges (DMRB). The effect of the Wealden decision means that such an assessment should not be considered individually but in combination with other known developments, as explained below. It should also be noted that atmospheric pollution on the SAC is an issue mostly related to the likelihood of additional transport generation through the Ashdown as a consequence of development proposals and does not relate to development in the 7km zone of influence.
- 25. The *Wealden* decision does not necessarily hold that the thresholds set out in the DMRB are inherently unlawful, although it does raise questions as to whether in the spirit of the decision they remain defensible, even in combination, particularly at a 1,000 AADT threshold. Nevertheless, in the *Wealden* judgement, it was the failure to consider in-combination effects when reviewing the application of the threshold which led to the result in the case, not the existence or quantity of the threshold itself. The Judge also supported the use of thresholds as a way of screening for likely in combination effects.

Consideration of alternative solutions and IROPI

- 26. Article 6(4) of the Habitats Directive sets out that plans or projects which may have a negative effect on a site protected by the directive can go ahead if there are "no alternative solutions" and "imperative reasons of overriding public interest" (IROPI), and compensatory measures have been secured.
- 27. The Council does not currently consider that the need for IROPI exists in relation to the Mid Sussex Plan as the recent transport modelling suggests that there is no overall effect on traffic through the Forest at the levels of growth proposed by the Council.

Ashdown Forest, Approximate 7km Zone of Influence for the SPA



Annex B: Background and the Wealden case

- 28. The principal point raised by the recent legal challenge was whether Lewes District Council and the South Downs National Park Authority had acted unlawfully in concluding, on advice, that their Joint Core Strategy would not likely have a significant effect on the SAC in combination with the Wealden Core Strategy. The emphasis was on the adjectival phrase "in combination with" because it lay at the heart of the application. Wealden DC did not suggest that deleterious environmental effects are likely to have a significant effect on the SAC were they to be considered in isolation. Wealden's point was that they must properly be considered in tandem with the Wealden Core Strategy (WCS), which was another (and earlier) Joint Core Strategy prepared with SDNPA and adopted in late 2012 and early 2013 (and by implication with other neighbouring plans). The essential contention was that if relevant data and findings are properly amalgamated, the effects of increased traffic flows near the SAC would not have been ignored at the first screening or scoping stage of the process.
- 29. Natural England has previously advised that following its interpretation of the DMRB, air quality effects on the SAC would not be significant if (i) the expected increase in traffic (average annual daily traffic [AADT]) is less than 1,000 cars per day (or 200 HGVs per day); and (ii) if there is a less than a 1% increase in traffic compared with that predicted at the end of the strategy period. In accordance with this assumption Natural England agreed with Mid Sussex District Council in a Statement of Common Ground dated 20 May 2016 (ref. BP17 Section 4) that the Council had undertaken an HRA, which fulfilled the requirements of the Habitats Directive. See the Ashdown Forest Topic Paper (TP2).
- 30. Natural England's position was not accepted by the Judge in the *Wealden* Case in relation to the Lewes and South Downs National Park Plan and this has clearly raised questions as to the compliance of the pre *Wealden* Mid Sussex HRA.
- 31. Specifically, the judgment included the following critical findings in relation to Lewes and SDNP use of the 1,000 AADT threshold in this case:

"I do not know the empirical basis for this professional judgment, but it is not scientific. To the extent that it is a planning judgment, it is anecdotal and little more than an assertion. On the facts of the instant case, it is not a question of a couple of minor developments or projects being sought to be taken in combination, but a Core Strategy covering a twenty-year period which has already assessed the impact of additional traffic flows on an SAC within its borders. There is no sensible or logical basis for excluding the WCS from account." (para. 92)

"A toxicologist would no doubt agree that a rat subjected to one million of the lowest homeopathic doses of a toxin (i.e. zero) would suffer no adverse effects. But the same toxicologist would also point out that one dose at 95% of the relevant safety threshold for the toxin might have an effect if added to another small dose. This is very basic science. There can be no difference for these purposes between adverse animal and environmental effects." (para. 94)

"In my judgment, the issue hinges in the first instance on whether it was obvious from the face of Natural England's advice, having regard to any reasons given for it, that it was plainly wrong." (para. 106)

"In my view, it was not apparent why Natural England was advising that a cumulative assessment did not require an aggregation of two figures. (para. 107)"

"I have pondered whether there could be technical or methodological reasons pertaining to the science of environmental modelling militating against the need to undertake what looks to me like simple addition. Yet no such reasons have been suggested; it would be speculative to imagine that these might exist; and, I believe that Natural England's advice, brief as it was, cried out for further explanation. I return to the point that the cars are the same and the nitrogen dioxide is the same, regardless of their provenance. This case falls within the exceptional category of case where, at the very least, further specific inquiry of Natural England was necessary. Had the straightforward question been asked (namely, why does a cumulative assessment not entail the addition of two figures?), we know what the answer would have been: the relevant documents would have been produced, and/or an explanation identical to that contained in Ms Ashdown's witness statement would have been given. On that premise, I would hold that the only rational conclusion would have been for the decision-makers to have rejected Natural England's advice. For these purposes, it makes no difference if the decision-makers are the local planning or the examining Inspector. The latter should have found that the development plan documents were unsound." (para. 108)

"Accordingly, applying traditional public law principles to this case, I am driven to conclude that the HRA is vitiated by Natural England's plainly erroneous advice. I have reached this conclusion on two bases: the first, because the decision-makers should have undertaken further inquiry of Natural England in circumstances where no explanation had been given for not aggregating two amounts; the second, because Natural England's error directly infects the decision-making process." (para. 111)

"Natural England's advice removed the premise of the HRA – that a cumulative assessment is required - and brought about a clear breach of Article 6(3) of the Habitats Directive." (para.112)

- 32. The Judge gave no ruling or judgment as to the practical effect of his decision. The Judge even stated that the parties "did not assist me with submissions as to the practical effect on any judgment." One of the implications of the judgment is that the parameters for any assessment of traffic impact are now unclear beyond a general presumption that any development that is likely to lead to impacts on the SAC in the form of additional traffic through the Forest may need to be considered through all stages of the HRA and that this may apply to both plans and planning applications.
- 33. The Judge was also not prescriptive about the traffic transport assessment methodology beyond that it should be based on an 'in combination' assessment methodology. The clear weakness of current approaches and the 'simple addition' of individual authority specific impacts is that many trips begin in one authority and end in another so the 'simple addition' of movements in each district risks double counting of the same trip. Given the different methods used by several authorities, it is far from clear that any addition, based on different assessment methodologies would not be simply adding 'apples with pears with oranges or any other fruit'. It is likely that the most reliable methods are derived from consistent modelling, such as has been undertaken by Mid Sussex.

- 34. If traffic impacts and nitrogen deposition levels are deemed to be significant on the Special Areas of Conservation (SAC), then the mitigation is also not straightforward. Additional housing development may generate additional transport movements and, as noted above, there is no readily defined zone of influence (e.g. the 7km zone) as there is for Special Protection Areas (SPAs) in the form of Suitable Alternative Natural Greenspace (SANG) and Strategic Access Management and Monitoring (SAMM). Any mitigation would need to avoid or reduce the impact of traffic and in all likelihood existing background movements, such as through reducing emissions through controls on vehicle types, e.g. through a low emissions zone. Unlike the SANG mitigation for the Special Protection Areas (SPAs), there is not so far an obvious mechanism that can reduce the effect to, say, a financial contribution from developers. It is also not obvious how mitigation can be delivered, particularly by authorities beyond the Forest and without responsibility for relevant actions, such as measures to reduce traffic.
- 35. A large technical working group of potentially affected authorities has been constituted (including Wealden DC and Natural England) to think through the implications of the *Wealden* decision and share differences in understanding, assumptions and data on the issues, and potentially consider mitigation and compensation options.. This group met for a preliminary meeting on 9th May, although further meetings have yet to be fixed. No early findings on mitigation are anticipated, given the complexity of issues and the need to be able to examine and understand the Wealden monitoring information, which has not been published.

Annex C: Implications of the *Wealden* decision for the HRA of the Mid Sussex District Plan and Updated Transport Analysis

- 36. In the light of the **Wealden** case, the key considerations are (i) the extent to which Mid Sussex has undertaken a valid in combination transport assessment, and (ii) the extent to which it demonstrates an impact on Ashdown Forest.
- 37. Mid Sussex's general understanding has been that significant work has been undertaken since 2013 by Wealden to monitor nitrogen deposition on the Forest. Based on published information on the APIS and Wealden District Council websites, initial results suggest that high levels may have been estimated to exist within the Ashdown Forest Special Area of Conservation (SAC) in the areas closest to the roads across the Forest, see Annex D for further details.
- 38. In the light of the Judge's ruling in the Wealden case, and on the assumption that nitrogen levels across the Forest may already be high and that there is not necessarily an agreed threshold for significance, the only sound current position appears to be the extent to which the Mid Sussex District Plan would not have any overall in combination effect is where it does not have any discernible effect, i.e. in terms of creating net additional traffic through Ashdown Forest over the Plan period, based on results for 2031. This is because it follows that if no overall net additional traffic is generated, then it is unlikely that there would be additional significant nitrogen deposition as a result of development proposed by the development strategy in the Mid Sussex District Plan.

Mid Sussex's Approach Prior to the Wealden Judgement of 20 March 2017

- 39. Mid Sussex's method for assessing transport impacts on the Forest has been undertaken through the use of the West Sussex County Highways Model, as part of wider analysis. The model is able to assess the impacts of future growth on the key road links through the Forest, specifically the A275, the A22, the A26 and B2110. Although there are other roads and road vehicle tracks within the Forest, they are dependent upon these four road links.
- 40. The model takes account of background growth and growth in surrounding areas, using National Trip End Model (NTEM) assumptions. NTEM details are at: https://data.gov.uk/dataset/national-trip-end-model-ntem
- 41. Data from NTEM has been adjusted to take account of cross-boundary local plan housing requirements and known significant site specific strategic developments in adjacent local authority areas. A summary of the assumptions used, where these vary from NTEM sources, is set out in Appendix 1.
- 42. This assessment has been through successive iterations, over the development of the MSDP with the most recent assessment published in the Examination Library as Document EP41, the Mid Sussex Transport Study (MSTS) Stage 3 of December 2016, although earlier versions of the analysis also exist. The December publication reflects the time taken to achieve assessment findings sign off with Highways England, and Highways England's concerns that the level of growth proposed in the Mid Sussex Plan should not add delays to the strategic road transport network, although these are unrelated to Ashdown Forest matters.

- 43. The approach adopted in the MSTS to assess transport impact upon the Ashdown Forest reflected that used in other authorities, including the use of 1,000 AADT as the threshold for significance in line with the previous Natural England advice. The approach was agreed with Highways England, Natural England, and West Sussex County Council as the local highway authority, all of which signed statements of common ground late 2016/ early 2017 (Ref. BP17). The details of the modelling are set out in EP41.
- 44. Table 1 below summarises the 24 Hour AADT (Two-way) on the four road links in the Ashdown Forest from the modelled development cases (derived from EP41). This shows overall 24 hour traffic flows for the four key road links related to the Ashdown Forest. The different scenarios shown compare a plan and a non-plan case, as set out below.
 - The Reference Case represents existing background growth over the period to 2031, including committed growth in Mid Sussex (allocations in the extant 2004 Mid Sussex Local Plan, the 2008 Small Scale Housing Allocations DPD, made neighbourhood plans, planning permissions and completions as at present, and assumed committed growth in the wider area)
 - The development case is as the Reference Case, based on proposed allocations in the district plan to meet the submitted Plan's housing target of 800 dpa, over the Plan period to 2031.
 - The Alternative Development Case represents the development case with the additional development of a science/ business park at Burgess Hill. It should be noted that the science/ business park is not an allocation in the District Plan.
 - The first half of the table shows the numbers of movements while the second half shows the change in numbers from the Reference Case.

Table 1: 24 Hour AADT, Effect on Links Through the Ashdown Forest (December 2016 modelling output)

Link	SATURN No	de List		Direction	Stage 3 2031													
From	A-Node	B-Node	C-Node		Reference Case	Development Case	Alternative Development Case	Developm ent Sensitivity Case	Alternative Development Sensitivity Case									
A275	3920	4096		2-way	7535	7208	7166	7207	7143									
A22	8131	4096		2-way	6337	6055	5928	6015	5881									
A26	3422	4010		2-way	4300	4141	4314	4170	4328									
B2110	8127	8126		2-way	2467	2191	2216	2227	2237									
Link	SATURN No	de List		Direction	Stage 3 2031													
From	A-Node	B-Node	B-Node C-Node		Reference Case	Development Case	Alternative Development Case	Developm ent Sensitivity Case	Alternative Development Sensitivity Case									
A275	3920	4096		2-way	-	-328	-369	-328	-392									
A22	8131	4096		2-way	-	-281	-409	-322	-455									
A26	3422	4010		2-way	-	-159	14	-131	28									
B2110	8127	8126		2-way	-	-275	-251	-240	-230									

Source: Derived from ED41

- 45. Overall Table 1 shows that the Development Case, representing the development proposed in the submitted Mid Sussex District Plan (at the tested maximum housing provision of 800 dpa) had no additional traffic impact on the Forest roads and indeed resulted in an overall reduction in traffic flows relative to the Reference Case. These reductions reflect the overall realignment of journeys across the highways network as a whole. This mostly reflects an improvement in the location of homes relative to jobs and services, with the main effect coming from the location of homes in the district, rather than changes in employment which based on the plan strategy does not change substantially; and the impact of remedial transport measures.
- 46. Overall this earlier analysis suggested that the effects of the Mid Sussex District Plan, as submitted, were not considered to be significant, based on a reasonable and proportionate assessment method that was supported by Natural England.

Implications of the Wealden Judgment For Mid Sussex

- 47. In the light of the Wealden Judgment, the most 'sound' current Plan position appears to be one in which the MSDP would not have any significant in combination effect and where it does not have any discernible effect in terms of creating additional traffic through Ashdown Forest. This is because it follows that if no net additional traffic is generated, then it is unlikely that there would be additional nitrogen deposition as a result of development proposed by the development strategy of the Mid Sussex District Plan. As noted above the effect of the Plan is to reduce overall traffic on the Forest roads.
- 48. However, it should be noted that even if additional traffic is generated through Ashdown Forest it does not necessarily follow that there will actually be an adverse effect on ecological integrity on the Forest. Rather, it is an indication that more work is required as part of the HRA process to ascertain this.
- 49. Mid Sussex has further reviewed the methodology in the light of the *Wealden* Judgment. This has confirmed the validity of the broad modelling approach as a valid and reasonable approach to assessing in combination effects. The main implication has been in redefining the Reference Case to take account of the Judgment in terms of the ongoing validity of the 1,000 AADT threshold. Further modelling was also required in the light of the Inspector's interim conclusions that Mid Sussex may need to meet a higher housing requirement of 1,026 dpa or 876 dpa relative to the submitted plan that had assumed 800 dpa.
- 50. The review concluded that the Reference Case should be redefined in terms of the treatment of committed development. This was in part because, with the removal of the 1,000 AADT threshold, even smaller scale development, such as allocations in made Neighbourhood Plans could still be refused at an application decision stage in line with the Habitats Regulations, if they had an impact on the Ashdown Forest SAC. This change increases the level of discretionary development tested though the Plan development scenarios and reduces the level of development in the Reference Case.
- 51. The use of a Reference Case for Mid Sussex which now includes only consented development is considered to be the most realistic simulation of the non-Plan case. Over the plan period 2014 2031, the Reference Case comprises commitments in Mid Sussex, as existing planning consents totalling 5,086 dwellings and completions of 2,426, equivalent to a Reference Case for Mid Sussex of 7,512 dwellings, or an average provision of 441 dpa over the plan period.

- 52. The Reference Case in terms of neighbouring authorities has been maintained as previously in line with the adjusted NTEM forecasts. Although, in the light of the *Wealden* decision, it is possible that the level of growth delivered may actually be reduced relative to that previously planned in these authorities, the Reference Case growth is generally already substantial.
- 53. Having established a more robust Reference Case, MSDC have sought to use the model to explore reasonable Plan scenarios in terms of the sensitivity of their effects on traffic movements across Ashdown Forest. Overall this work reveals a number of findings set out below.
 - First, that the scale of impact on the Forest roads is sensitive to both the scale and location of development in Mid Sussex. As might be expected, generally, development close to one of the main routes through Ashdown Forest has an impact on traffic in the Forest. However, the submitted MSDP is generally based on the provision of additional development in locations away from the Forest, such as at Burgess Hill.
 - Second, the impact of planned development in much of Mid Sussex is focused on the A275, rather than other Forest roads. Some larger development in the district, regardless of location, may also be likely to have traffic effects on the Forest.
- 54. The implication is that reliable modelling can only proceed on the basis of reasonably specific distributions of growth across the district in terms of firm potential allocations. This means that while it is possible to model (with reasonable reliability) the known allocations, there is a considerable challenge in modelling levels of growth for which there are no clear options as to how this growth can be delivered. Therefore, while it is possible to model the allocations to meet, say, plan provisions of 800 and 876 with reasonable reliance, in the early part of the plan period, any modelling beyond this level requires multiple assumptions to be made as to the location of this additional growth (see paragraph 8).
- 55. The effects of the new Reference Case and the resulting increase in housing numbers which must be tested through a Plan development scenario are presented in the Table below. In particular, the further modelling analysis suggests that at 800 and 876 dpa, the uncommitted, additional, (discretionary) housing growth allocated within the Plan results in an overall net reduction of traffic on Forest roads of between 206 -280 average annual daily traffic movements (AADT), equivalent to about 230 250 AADT relative to a non-plan reference case.
- 56. This overall reduction encompasses reductions on the A22, A26 and B2110 and increases on the A275 between the A272 at North Chailey and Wych Cross. (see Maps in Annex D). In effect the additional traffic on the A275 is offset by reductions in traffic in other Forest Roads, as a consequence of the Plan. In simple terms the effect of the Mid Sussex Plan is to divert traffic onto the A275 in a Mid Sussex direction from other forest roads.
- 57. Mid Sussex has also explored the implications of lower housing growth provision to identify whether there is a growth scenario that has no impact on any individual forest roads. This has focused on a range of possible provisions between the Reference Case of 441 dpa and the submitted plan level of 800 dpa. The results suggest that all growth options between 565 dpa and 800 dpa result in increases in traffic on the A275, and reductions on most other Forest roads.

58. As noted in Annex D, in the case of the A275, the main hotspot for nitrogen deposition based on Wealden estimates is in the narrow apex of the junction with the A22. It is not clear whether this existing issue arises from the A22 or A275 traffic, or both, or the effects of the Wych Cross crossroad junction and access to the nearby Garden Centre.

Table 2: 24 Hour AADT, Effect on Links Through the Ashdown Forest Updated (May 2017 modelling output).

24 Hour A	ADT																
Link	SAT	URN Node	List		2014 2031												
From	From A-Node B-Node C		C-Node	Direction	Present Year	Reference case	876dpa	800dpa	565dpa	600dpa	700dpa						
A275	3920	4096		2-way	5839	7107	7354	7354 7336		7230	7272						
A22	8131	4096		2-way	4920	6272	6214	6223	6136	6143	6143						
A26	3422	4010		2-way	3882	4483	4286	4294	4502	4437	4373						
B2110	8127	8126		2-way	1968	2247	1976	2050	2079	2117	2104						
Total	23600	20328			16609	20109	19830	19903	19917	19927	19891						
24 Hour A	ADT (Chang	ge from Ref	erence Cas	se two way)													
Link	SAT	URN Node	List		2014 2031												
				Direction													
From	A-Node	B-Node	C-Node		Present Year	Reference case	876dpa	800dpa	565dpa	600dpa	700dpa						
A275	3920	4096		2-way	-	-	247	229	93	123	165						
A22	8131	4096		2-way	-	-	-58	-50	-137	-129	-129						
A26	3422	4010		2-way	-	-	-197	-188	20	-46	-110						
B2110	8127	8126		2-way	-	-	-271	-197	-168	-130	-144						
Total	23600	20328			-	-	-280	-206	-192	-182	-218						

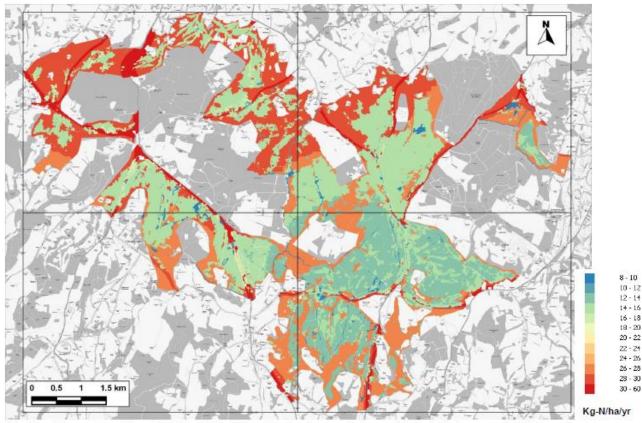
59. Beyond 876 dpa the position is particularly uncertain and requires multiple and uncertain assumptions to be made, about which sites should be involved. Although the Council has considered a range of additional sites, there are no obvious deliverable sites beyond those required for provision above 876, that could be allocated at the current time to meet a higher provision (see paragraph 8). There is also no information on the transport strategies that these sites might wish to offer. Undertaking modelling at this stage on numerous possible sites that might be considered would also risk excluding sites before they had been properly considered and sterilising or 'fossilising' land for development.

Annex D: Evidence on levels of Nitrogen Deposition in the Forest

- 60. The UK Air Pollution Information System (APIS: www.apis.ac.uk) has specific information available for Ashdown Forest. The critical load is a common measure of environmental sensitivity and relates to the quantity of a pollutant deposited from the air to the ground. The critical load of nitrogen is defined as 10-20 kg N/ha/yr and average estimated loads for Ashdown Forest already fall within the critical range. The critical load is not a quantitative estimate or damage to the environment, rather it represents the potential for damage or harm. It is used to represent a level of potential risk. The effects of additional deposition beyond critical levels or thresholds are not necessarily linear.
- 61. Wealden have also undertaken their own monitoring exercise; some of the un-redacted results of which are published at:
 - www.wealden.gov.uk/Wealden/Residents/Planning and Building Control/Planning Policy/CoreStrategy/CoreStrategyLibrary/Planning_Evidence_Base_Habitat_Regulations_Assessment.aspx.
- 62. The Wealden approach has been based on a methodology originally suggested by Mott MacDonald but subsequently amended to meet study objectives more practically. A summary is available at:

 http://www.wealden.gov.uk/nmsruntime/saveasdialog.aspx?IID=18989&sID=5680
 - The methodology notes the reliability of different methods. Generally all methods are subject to some potential error and monitoring nitrogen is challenging using the equipment available. Given the number of observation sites and the timing of survey the results must be 'grossed up' across the whole of the SAC.
- 63. The results of the Wealden Interim Report Year 1 Assessment are also shown on the map below, relating specifically to the SAC areas, and some further more zoomed in maps of this area are available in the source reports. Unfortunately the boundaries used are not particularly helpful in assessing the wider extent of the nitrogen deposition, which makes full interpretation challenging. It is hoped that Wealden will publish future maps showing a slightly wider area, e.g. to include buffer areas and the whole of the Forest, so that these results may be assessed in context.





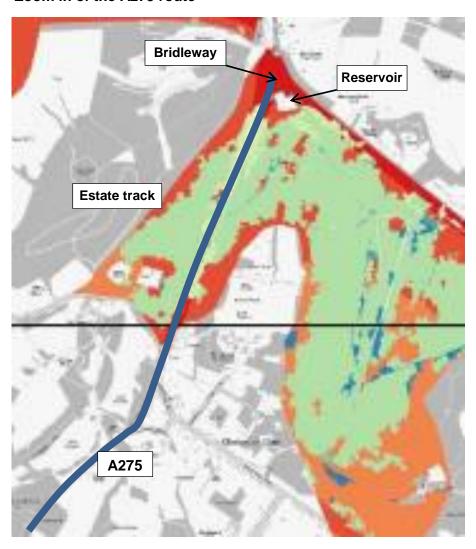
Map 19: Nitrogen Deposition to SAC (kg-N/ha/yr) (Also showing four quadrants used for the following more detailed maps)

Source: Page 20, Interim Report Year 1: Ashdown Forest Air Quality Monitoring and Modelling – Figures, February 2016

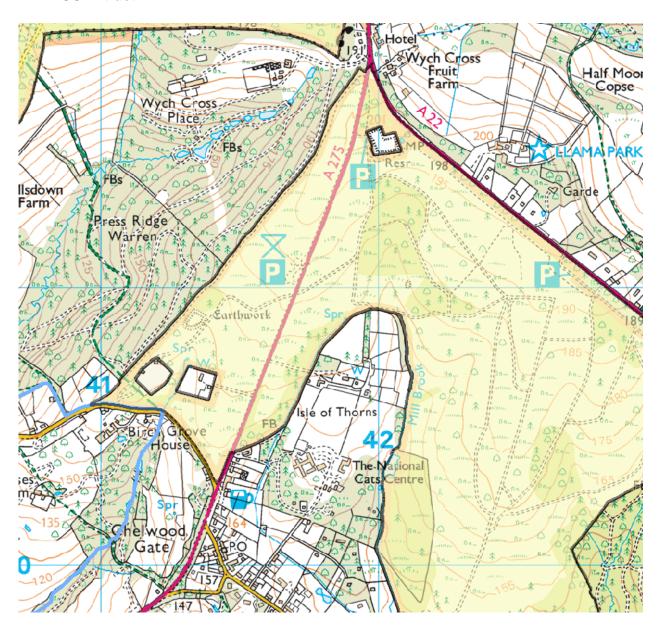
64. As the above map suggests Wealden's own monitoring also suggests that critical loads have been reached or exceeded, with some of the recorded values being considerably higher (surprisingly so) than the APIS estimates, particularly along the major roads through the Forest. Much of Wealden's evidence is currently redacted, so it is difficult to scrutinise these results or understand how they have been calculated from sample recordings, although Wealden are in the process of conducting a 'peer review' of the year 2 report results. Mid Sussex, (and as far as we are aware) other authorities and Natural England have not been given access to detailed or recent results beyond that already published. It is understood that in redacting data, Wealden's concern is for the security of the monitoring equipment and the need to organise data in a suitable and robust form for wider use.

- 65. A zoom in of the NW quadrant of the map is shown, with the route of the A275 shown in blue together with an extract from the OS base. As noted elsewhere it is the A275, that development in Mid Sussex seems most likely to effect in terms of traffic. As may be observed, based on the Wealden data, the major 'hotspot' for nitrogen deposition is at the junction of the A275 with the A22. According to the Wealden map there is also significant deposition along the route of a farm/estate track accessed from a private access road (with security gate) to the west of the A275, while in contrast much of the A275 route seems to involve deposition close to forest averages. The levels of traffic on the estate track is unknown, but these results are rather unexpected and may reflect an error in the analysis, confusion as to the route of the A275, unexpected levels of traffic on the estate road, or the unreliability of the methodology.
- 66. The overall levels of nitrogen in the A275/A22 junction area may be strongly affected by the traffic- lighted junction immediate to the north at the Wych Cross crossroads and the Wyevale garden centre to the north east of the junction.
- 67. The 'hotspot' area close to the A275/A22 junction would be worthy of further analysis which would be addressed in any HRA in terms of actual ecology, if any effect on the A275 was thought significant. The area immediately close to the junction is landscaped and includes an entrance to a private estate with a private garden frontage with rhododendron bushes. The flora and fauna of the area further south of the junction may already have been compromised by the vulnerabilities of its situation in the narrow apex of two 'A' roads, although the present tree vegetation appears mature and longstanding.
- 68. An initial vegetation survey (in May 2017) suggests that the qualifying species for SAC are not present in the apex extending to about 250m south of the A275/A22 junction and encompassing most of the identified hotspot (north of the reservoir car park). The actual vegetation of this area comprising trees and typical woodland groundcover of bracken and the common bramble (Rubus fruticosus). About 100 metres south of the car park (300m south of the junction), the landscape opens up and includes some heathland species including common gorse (Ulex europaeus), and a limited amount heather (Calluna vulgaris) on bridgeway and footpath edges, as well as substantial areas of common and invasive plants including grass (including marsh grass), and emergent silver birch (Betula pendula), wild honeysuckle (probably Lonicera periclymenum), Ragwort (Jacobaea vulgaris/ Senecio jacobaea) and silver-leaved cinquefoil (Potentilla argentea).

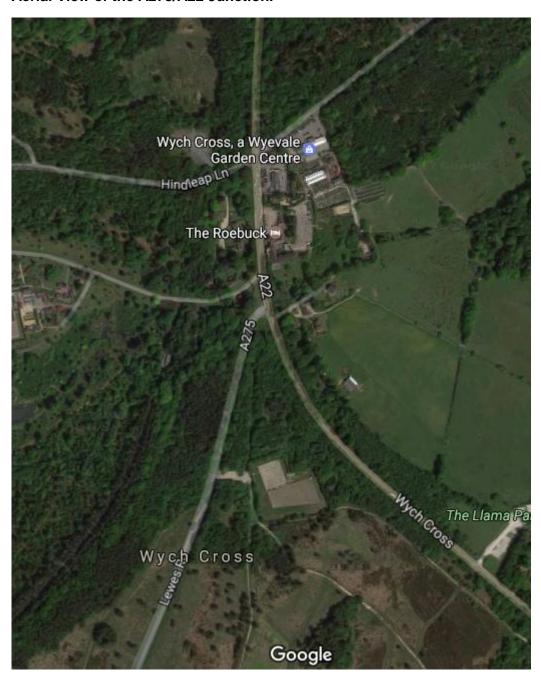
Zoom in of the A275 route



OS Extract



Aerial View of the A275/A22 Junction.



(Below) Junction of A22 and A275 looking south



(Below) Looking North from Junction A275 with the A22 with Wych Cross crossroads to the north and the garden centre on the far left.



(Below) Bridleway looking southwards with the apex of the A22 and A275 immediately to the south of the junction.



(Below) Entrance to estate road (forming western boundary of the forest and showing high recorded levels of nitrogen deposition within the SAC)



(Below)Open area south of the reservoir with the A22/A275 apex to the south



(Below) View back from open area north to the A22/A275 Junction apex woods, including Brideway



(Below) Heather along the edges of the Bridgeway, about 300m south of the A275/A22 junction



Appendix 1: Growth Assumptions for Surrounding Authorities used in the Transport Model

MSTS - Neighbouring Authorities Housing Growth Assessment																														
		Evidence Base Completions/Anticipated Delivery																												
Neighbouring Authority	Completions	Completions	Anticipated Delivery	2008	2009	2010	2011	2012	2013	2014	2015	2016							2023	2024	2025	2026	2027	2028	2029	2030	2031	Total 2008-2031	NTEM 2008-2031	NTEM Shortfall
Crawley	Housing Implementatio n Strategy (Nov 14)	Crawley 2030	Crawley 2030	368	409	384	202	78	159	148	390	724	870	455	395	387	325	310	342	337	252	208	55	55	55	-	-	6908	3351	3557
Wealden	Annual Monitoring Report (14-15)	-	Adopted Core Strategy (Feb 13)	349	337	709	619	674	560	576	434	430	430	430	430	430	430	430	430	430	430	430	-	-	-	-	-	8988	10367	-1379
Lewes	Housing Implementatio n Strategy (Sep 14)	-	Lewes District Local Plan, Part 1, Joint Core Strategy (Focus Amendments)	257	175	161	247	218	113	316	303	303	303	303	303	303	303	303	303	303	303	303	303	303	303	-	-	6032	5345	687
Brighton & Hove	Annual Monitoring Report (12-13)	Annual Monitoring Report (14-15)	Brighton & Hove City Plan Part 1	721	380	283	309	374	436	581	748	748	748	748	748	748	748	748	748	748	748	748	748	748	745	-	-	14301	14466	-165
Horsham	Annual Monitoring Report (13-14)	Annual Monitoring Report (14-15)	Annual Monitoring Report (14-15)	306	235	160	261	484	826	854	1050	1257	1339	1119	1057	1049	1059	852	922	957	688	582	442	392	424	386	-	16701	11820	4881
Tandridge	Annual Monitoring Report (13-14)	Statement of Five Year Housing Land Supply (Apr 15)	Statement of Five Year Housing Land Supply (Apr 15)	297	172	132	261	221	257	142	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289	6395	3435	2960