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# Folkestone & Hythe Proposed Submission Core Strategy Review

## Habitats Regulations Assessment

Prepared by LUC
December 2018

**Project Title**: HRA of Folkestone & Hythe Core Strategy Review

**Client**: Folkestone & Hythe District Council

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# 1 Introduction

1.1 Folkestone & Hythe District Council commissioned LUC in May 2017 to carry out a Habitats Regulations Assessment (HRA) of the Review of the Folkestone & Hythe District Core Strategy Local Plan. The purpose of this HRA is to ascertain whether the proposals and policies within the Plan would be likely to result in significant effects on the qualifying features of European Sites within and adjacent to the District, and where such effects are predicted, whether they would result in adverse effects on site integrity following mitigation.

## The Review of the Core Strategy

1.2 The District Council formally adopted the Core Strategy in September 2013. The adopted Core Strategy sets out the strategic planning policy framework and strategic site allocations[1] for the District to March 2031, providing the basis for decisions on land use planning affecting Folkestone & Hythe District. The adopted Core Strategy seeks to strike an overall balance between regeneration aspirations and protecting the District's sensitive landscapes and habitats.

1.3 The Core Strategy Review will soon be supplemented by the Places and Policies Local Plan (PPLP), which is programmed for adoption in 2019. Once adopted, the PPLP will sit alongside the adopted Core Strategy allocating small and medium-sized sites for development and containing detailed development management policies to guide planning applications in the District.

### Drivers for the Review

1.4 Since the adoption of Core Strategy in 2013, the Council has reviewed its Corporate Plan which now emphasises a commitment to Folkestone & Hythe residents enjoying a healthy, prosperous lifestyle and benefiting from high quality and affordable housing by making sure new homes are built in the district and by developing a sustainable and vibrant local economy.

1.5 The adopted Core Strategy plans to deliver a target of 8,000 new homes (with a minimum requirement of 7,000 new homes) during the plan period from 2006-2026. However, the latest demographic evidence indicates that the District's future housing need will be unmet unless new growth initiatives are brought forward.

1.6 While the Council prioritises development on brownfield land, recent Strategic Housing Land Availability Assessment (SHLAA) work undertaken to inform the preparation of the Places and Policies Local Plan has confirmed that the options for providing significant housing growth in the District appear to be limited due to the limited availability of brownfield land and the statutory designation of the Kent Downs Area of Outstanding Natural Beauty and the coverage of Romney Marsh by flood zone restrictions. The Council therefore envisages that future growth (beyond that allocated in the Core Strategy and Places and Policies Local Plan) cannot be provided by in-filling within existing settlement boundaries and therefore a new, visionary response to meeting future housing need will need to be identified.

1.7 Consequently, the Council commissioned two key updates to its Local Plan Evidence Base:

- An update to the District's Strategic Housing Market Assessment (SHMA)[2] to establish what the housing needs of the District are likely to be over the remaining period of the Core Strategy plan period and beyond.

[1] The two strategic site allocations and two strategic broad locations allocated within the adopted CS now have planning permission.

[2] Shepway Strategic Housing Market Assessment Available at: https://www.folkestone-hythe.gov.uk/core-strategy-review/core-strategy-review-examination-2021-main-modifications

- A Growth Options Study[3] to identify and test potential approaches to strategic planning for growth in Folkestone & Hythe, to determine whether the District can meet its housing needs, and if so the most appropriate approach to do so.

1.8 Informed by the updated SHMA, the Growth Options Study, reviewed Corporate Plan and other updates to the District's Local Plan evidence base[4], the Review of the Core Strategy plans for development and growth to at least 2036/37 and possibly beyond.

### Approach to the HRA

1.9 The HRA of the Proposed Submission Core Strategy Review policies focuses on the new policies not included in the adopted Core Strategy (2013) and the adopted Core Strategy policies that have been significantly revised. Folkestone & Hythe District's adopted Core Strategy (2013) was subject to HRA and, therefore, the findings of this HRA are considered to remain valid for those existing policies or those which have not significantly changed. The adopted Core Strategy policies that have not materially changed have only been appraised through consideration of the in-combination effects with the Core Strategy Review as a whole.

1.10 However, this HRA does include an updated air quality assessment[5] (see **Appendix 3**), undertaken in light of a High Court judgement in April 2017. The judgement (colloquially known as the Ashdown Forest judgement) partially quashed the Lewes District and South Downs National Park Joint Core Strategy. This was on the basis that the HRA supporting the Joint Core Strategy only considered its own contribution to changes in traffic flows (and specifically whether such flows would exceed 1,000 Annual Average Daily Traffic) in determining whether there would be a likely significant air quality effect on Ashdown Forest SPA. The judge ruled that the HRA had thus explicitly failed to undertake any form of assessment 'in combination' with growth in other authorities that would affect the same road links and that this was in contravention of the Conservation of Habitats and Species Regulations 2010. The air quality assessment provided herein is based on a specific modelling of the location and scale of population growth proposed in the Proposed Submission Folkestone & Hythe Core Strategy Review in-combination with forecast changes associated with other plans and projects in neighbouring authorities to avoid these problems.

1.11 This HRA also provides an update in light of recent case law as detailed below.

### HRA of the Places and Policies Local Plan

1.12 As background, LUC was previously appointed in 2016 to undertake a Habitats Regulations Assessment of the Regulation 18 stage of the Shepway (now Folkestone & Hythe) Places and Policies Local Plan (PPLP). The HRA of the PPLP concluded that, subject to implementation of appropriate avoidance and mitigation measures, there would be no adverse effect on the integrity of European Sites. The findings of the HRA were supported by Natural England.

## The requirement to undertake HRA of Development Plans

1.13 The requirement to undertake HRA of development plans was confirmed by the amendments to the Habitats Regulations published for England and Wales in July 2007 and updated in 2010[6] and again in 2012 and 2017[7]. Therefore, when preparing the Local Plan, Folkestone & Hythe District Council is required by law to carry out a Habitats Regulations Assessment.

1.14 The HRA refers to the assessment of the potential effects of a development plan on one or more European Sites, including Special Protection Areas and Special Areas of Conservation:

[3] Shepway Growth Options Study Available at: https://www.folkestone-hythe.gov.uk/core-strategy-review/core-strategy-review-examination-2021-main-modifications

[4] For example, alongside the Growth options Study, the council have commissioned a high-level Landscape Appraisal used to inform the strategic review of the relative impacts of strategic level development in various locations.

[5] AECOM, November 2017, *Air Quality Assessment of European Sites – Report to inform HRA of Shepway Local Plan*.

[6] The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007. HMSO Statutory Instrument 2007 No. 1843. From 1 April 2010, these were consolidated and replaced by the Conservation of Habitats and Species Regulations 2010 (SI No. 2010/490). Note that no substantive changes to existing policies or procedures have been made in the new version.

[7] The Conservation of Habitats and Species (Amendment) Regulations 2017.

- SPAs are classified under the European Council Directive "on the conservation of wild birds" (79/409/EEC; 'Birds Directive') for the protection of wild birds and their habitats (including particularly rare and vulnerable species listed in Annex 1 of the Birds Directive, and migratory species).
- SACs are designated under the Habitats Directive and target particular habitats (Annex 1) and/or species (Annex II) identified as being of European importance.

1.15 Currently, the Government also expects potential SPAs (pSPAs), candidate SACs (cSACs) and Ramsar sites to be included within the assessment[8].

- Ramsar sites support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention, 1971).

1.16 For ease of reference during HRA, these three designations are collectively referred to as European sites, despite Ramsar designations being at the wider international level.

1.17 The overall purpose of the HRA is to conclude whether or not a proposal or policy, or whole development plan would adversely affect the integrity of the site in question. This is judged in terms of the implications of the plan for a site's 'qualifying features' (i.e. those Annex 1 habitats, Annex IIspecies, and Annex 1 bird populations for which it has been designated). Significantly, HRA is based on the precautionary principle. Where uncertainty or doubt remains, an adverse impact should be assumed.

## Stages of the Habitat Regulations Assessment

1.18 **Table 1.1** below summarises the stages involved in carrying out HRA, based on various guidance documents[9],[10],[11]

**Table 1.1: Stages in HRA**

| Stage | Task | Outcome |
|---|---|---|
| Stage 1: Screening (the 'Significance Test') | Description of the plan.<br>Identification of potential effects on European Sites.<br>Assessing the effects on European Sites. | Where effects are unlikely, prepare a 'finding of no significant effect report'.<br>Where effects judged likely, or lack of information to prove otherwise, proceed to Stage 2. |
| Stage 2: Appropriate Assessment (the 'Integrity Test') | Gather information (plan and European Sites).<br>Impact prediction.<br>Evaluation of impacts in view of conservation objectives.<br>Where impacts considered to affect qualifying features, identify alternative options.<br>Assess alternative options.<br>If no alternatives exist, define and evaluate mitigation | Appropriate Assessment report describing the plan, European site baseline conditions, the adverse effects of the plan on the European site, how these effects will be avoided through, firstly, avoidance, and secondly, mitigation including the mechanisms and timescale for these mitigation measures.<br>If effects remain after all alternatives and mitigation measures have been |

[8] Department of Communities and Local Government (March 2012) National Planning Policy Framework (para 118).

[9] Assessment of plans and projects significantly affecting European Sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission Environment DG, November 2001.

[10] Planning for the Protection of European Sites. Guidance for Regional Spatial Strategies and Local Development Documents. Department for Communities and Local Government (DCLG), August 2006.

[11] The Appropriate Assessment of Spatial Plans in England. A guide to why, when and how to do it. RSPB. August 2007.

| Stage | Task | Outcome |
|---|---|---|
| | measures where necessary. | considered proceed to Stage 3. |
| Stage 3: Assessment where no alternatives exist and adverse impacts remain taking into account mitigation | Identify and demonstrate 'imperative reasons of overriding public interest' (IROPI).<br>Demonstrate no alternatives exist.<br>Identify potential compensatory measures. | This stage should be avoided if at all possible. The test of IROPI and the requirements for compensation are extremely onerous. |

1.19 In assessing the effects of the Core Strategy Review in accordance with Regulation 105 of the Conservation of Habitats and Species Regulations 2017[12], there are potentially two tests to be applied by the competent authority: a 'Significance Test', followed if necessary by an Appropriate Assessment which will inform the 'Integrity Test'. The relevant sequence of questions is as follows:

- Step 1: Under Reg. 105(1)(b), consider whether the plan is directly connected with or necessary to the management of the sites. If not –
- Step 2: Under Reg. 105(1)(a) consider whether the plan is likely to have a significant effect on the site, either alone or in combination with other plans or projects (the 'Significance Test'). [These two steps are undertaken as part of Stage 1: Screening shown in **Table 1.1** above.] If Yes –
- Step 3: Under Reg. 105(1), make an Appropriate Assessment of the implications for the site in view of its current conservation objectives (the 'Integrity Test'). In so doing, it is mandatory under Reg. 105(2) to consult Natural England, and optional under Reg. 105(3) to take the opinion of the general public. [This step is undertaken during Stage 2: Appropriate Assessment shown in **Table 1.1** above.]
- Step 4: In accordance with Reg.105(4), but subject to Reg.107, give effect to the land use plan only after having ascertained that the plan will not adversely affect the integrity of the European site.

1.20 It is normally anticipated that an emphasis on Stages 1 and 2 of this process will, through a series of iterations, help ensure that potential adverse effects are identified and eliminated through the avoidance of likely significant effects at Stage 1, and through Appropriate Assessment at Stage 2 by the inclusion of mitigation measures designed to avoid, reduce or abate effects. The need to consider alternatives could imply more onerous changes to a plan document. It is generally understood that so called 'imperative reasons of overriding public interest' (IROPI) are likely to be justified only very occasionally and would involve engagement with both the Government and European Commission.

1.21 The HRA should be undertaken by the 'competent authority' - in this case Folkestone & Hythe District Council, and LUC has been commissioned to do this on its behalf. The HRA also requires close working with Natural England as the statutory nature conservation body in order to obtain the necessary information and agree the process, outcomes and any mitigation proposals. The Environment Agency, while not a statutory consultee for the HRA, is also in a strong position to provide advice and information throughout the process as it is required to undertake HRA for its existing licences and future licensing of activities.

[12] SI No. 2017/2012

## Recent Case Law Changes

1.22 This HRA has been prepared in accordance with recent case law findings, including most notably the recent 'People over Wind' and 'Holohan' rulings from the Court or Justice for the European Union (CJEU).

1.23 The recent 'People over Wind, Peter Sweetman v Coillte Teoranta' judgement ruled that Article 6(3) of the Habitats Directive should be interpreted as meaning that mitigation measures should be assessed as part of an Appropriate Assessment, and should not be taken into account at the screening stage. The precise wording of the ruling is as follows:

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

1.24 In light of the above, the HRA screening stage has not relied upon avoidance or mitigation measures to draw conclusions as to whether the Local Plan would result in Likely Significant Effects on European sites, with any such measures being considered at the Appropriate Assessment stage as appropriate. As part of this HRA this has been taken to include any forms of mitigation upon which conclusions rely, either solely or partly. More detail regarding the ruling, and the method used in updating this HRA assessment is provided in **Section 2** Methodology below. As a result of the ruling, impacts which were previously ruled out at the screening stage as a result of mitigation and avoidance measures have been re-considered at the Appropriate Assessment stage.

1.25 This HRA also fully considers the recent Holohan v An Bord Pleanala (9 Nov 2018) CJEU judgement which stated that:

*"Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning 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.*

*Article 6(3) of Directive 92/43 must be interpreted as meaning that the competent authority is permitted to grant to a plan or project consent which leaves the developer free to determine subsequently certain parameters relating to the construction phase, such as the location of the construction compound and haul routes, only if that authority is certain that the development consent granted establishes conditions that are strict enough to guarantee that those parameters will not adversely affect the integrity of the site.*

*Article 6(3) of Directive 92/43 must be interpreted as meaning that, where the competent authority rejects the findings in a scientific expert opinion recommending that additional information be obtained, the 'appropriate assessment' must include an explicit and detailed statement of reasons capable of dispelling all reasonable scientific doubt concerning the effects of the work envisaged on the site concerned."*

1.26 In undertaking this HRA, LUC has fully considered the potential for effects on species and habitats, including those not listed as qualifying features, to result in secondary effects upon the qualifying features of European sites, including the potential for complex interactions and inter-dependencies which may affect the qualifying features. In addition, the potential for offsite impacts, such as through impacts to functionally linked land, and or species and habitats located beyond the boundaries of European site, but which may be important in supporting the ecological processes of the qualifying features or habitats and species upon which they depend, has also been fully considered in this assessment.

## Structure of HRA Report

1.27 This chapter has introduced the requirement to undertake HRA of the Folkestone & Hythe Core Strategy Review. The remainder of the report is structured as follows:

- **Chapter 2: HRA Screening Methodology** sets out the approach used and the specific tasks undertaken during the screening stage of the HRA.
- **Chapter 3: HRA Screening Assessment** assesses whether significant effects on European sites are likely to result from the implementation of the plan, either alone or in-combination.
- **Chapter 4: Appropriate Assessment** sets out the methodology and findings of the Appropriate Assessment stage of the HRA.
- **Chapter 5: Conclusion and Next Steps** summarises the overall HRA conclusions for the Core Strategy Review and outlines recommendations and, if required, the next stage in the process.

# 2 HRA Methodology

2.1 HRA Screening of the Proposed Submission Core Strategy Review has been undertaken in line with current available guidance and to meet the requirements of the Habitats Regulations. The tasks that have been undertaken during the screening stage of the HRA are described in detail below.

## Identification of European sites which may be affected by the Plan and the factors contributing to and defining the integrity of these sites

2.2 An initial investigation was undertaken to identify European sites within or adjacent to the Folkestone & Hythe District boundary which may be affected by the Plan. This involved the use of GIS data to map the locations and boundaries of European sites using publicly available data from Natural England. All European sites lying partially or wholly within 10km from the District boundary were included in order to address the fact that Local Plan policies may affect European sites which are located outside the administrative boundary of the plan. This distance was deemed sufficient to ensure that all designated sites that could potentially be affected by development are identified and included in the assessment.

2.3 European sites identified within 10km of Folkestone & Hythe District are shown in **Figure 2.1** and comprise:

- Dungeness, Romney Marsh and Rye Bay Ramsar.
- Dungeness, Romney Marsh and Rye Bay SPA.
- Dungeness SAC.
- Wye and Crundale Downs SAC.
- Lydden and Temple Ewell Downs SAC.
- Folkestone to Etchinghill Escarpment SAC.
- Blean Complex SAC.
- Dover to Kingsdown Cliffs SAC.
- Parkgate Down SAC.

2.4 The attributes of these sites which contribute to and define their integrity are described in **Appendix 1**. In doing so, reference was made to Standard Data Forms for SACs and SPAs[13] as well as Natural England's Site Improvement Plans[14]. This analysis enabled European site interest features to be identified, along with the features of each site which determine site integrity and the specific sensitivities and threats facing the site. This information was then used to inform an assessment of how the potential impacts of the Plan may affect the integrity of the site in question.

[13] These were obtained from the Joint Nature conservation Committee and Natural England websites (www.jncc.gov.uk and www.naturalengland.org.uk)

[14] Natural England is in the process of compiling Site Improvement Plans for all Natura 2000 sites in England as part of the Improvement programme for England's Natura 2000 sites (IPENS).

**Figure 2.1: Location of European Sites within 10km of Folkestone & Hythe**

## Potential Impacts of the Proposed Submission Core Strategy Review on European Sites

2.5 **Table 2.1** below sets out the range of potential impacts that development in general and related activities may have on European sites.

**Table 2.1: Potential Impacts and Activities Adversely Affecting European Sites**

| Broad categories and examples of potential impacts on European sites | Examples of activities responsible for impacts |
|---|---|
| **Physical loss**<br>• Removal (including offsite effects, e.g. foraging habitat)<br>• Smothering<br>• Habitat degradation | Development (e.g. housing, employment, infrastructure, tourism)<br>Infilling (e.g. of mines, water bodies)<br>Alterations or works to disused quarries<br>Structural alterations to buildings (bat roosts)<br>Afforestation<br>Tipping<br>Cessation of or inappropriate management for nature conservation<br>Mine collapse |
| **Physical damage**<br>• Sedimentation / silting<br>• Prevention of natural processes<br>• Habitat degradation<br>• Erosion<br>• Trampling<br>• Fragmentation<br>• Severance / barrier effect<br>• Edge effects<br>• Fire | Flood defences<br>Dredging<br>Mineral extraction<br>Recreation (e.g. motor cycling, cycling, walking, horse riding, water sports, caving)<br>Development (e.g. infrastructure, tourism, adjacent housing etc.)<br>Vandalism<br>Arson<br>Cessation of or inappropriate management for nature conservation |
| **Non-physical disturbance**<br>• Noise<br>• Vibration<br>• Light pollution | Development (e.g. housing, industrial)<br>Recreation (e.g. dog walking, water sports)<br>Industrial activity<br>Mineral extraction<br>Navigation<br>Vehicular traffic<br>Artificial lighting (e.g. street lighting) |
| **Water table/availability**<br>• Drying<br>• Flooding / storm water<br>• Water level and stability<br>• Water flow (e.g. reduction in velocity of surface water<br>• Barrier effect (on migratory species) | Water abstraction<br>Drainage interception (e.g. reservoir, dam, infrastructure and other development)<br>Increased discharge (e.g. drainage, runoff) |
| **Toxic contamination**<br>• Water pollution<br>• Soil contamination<br>• Air pollution | Agrochemical application and runoff<br>Navigation<br>Oil / chemical spills<br>Tipping<br>Landfill<br>Vehicular traffic<br>Industrial waste / emissions |
| **Non-toxic contamination**<br>• Nutrient enrichment (e.g. of soils and water) | Agricultural runoff<br>Sewage discharge<br>Water abstraction |

| Broad categories and examples of potential impacts on European sites | Examples of activities responsible for impacts |
|---|---|
| • Algal blooms<br>• Changes in salinity<br>• Changes in thermal regime<br>• Changes in turbidity<br>• Air pollution (dust) | Industrial activity<br>Flood defences<br>Navigation<br>Construction |
| **Biological disturbance**<br>• Direct mortality<br>• Out-competition by non-native species<br>• Selective extraction of species<br>• Introduction of disease<br>• Rapid population fluctuations<br>• Natural succession | Development (e.g. housing areas with domestic and public gardens)<br>Predation by domestic pets<br>Introduction of non-native species (e.g. from gardens)<br>Fishing<br>Hunting<br>Agriculture<br>Changes in management practices (e.g. grazing regimes, access controls, cutting/clearing) |
| **Recreational pressures**<br>• Visual presence<br>• Human presence<br>• Direct mortality<br>• Nest abandonment<br>• Nutrient enrichment<br>• Trampling<br>• Vandalism<br>• Edge effects | Dog walking/fouling<br>Disturbance from recreation e.g. walking/dog walking, cycling, running, horse riding, and water sports, etc.<br>Vehicular traffic<br>Anti-social activities (e.g. vandalism, fire etc.) |

## Assessment of 'likely significant effects' of the Proposed Submission Core Strategy Review

2.6 As required under Regulation 105 of the Conservation of Habitats and Species Regulations 2010[15] an assessment of the 'likely significant effects' of the Plan has been undertaken. A screening matrix has been prepared in order to assess which policies and site allocations would be likely to have a significant effect on European sites, either alone or in-combination with other plans and projects. The findings of the screening assessment are summarised in **Chapter 3** and the full matrix can be found in Appendix 2. Other plans or projects that could give rise to in-combination effects are considered in **Chapter 3**.

## Interpretation of 'likely significant effect'

2.7 Relevant case law helps to interpret when effects should be considered as being likely to result in a significant effect, when carrying out HRA of a plan.

2.8 In the Waddenzee case[16], the European Court of Justice ruled on the interpretation of Article 6(3) of the Habitats Directive (translated into the Habitats Regulations), including that:

- An effect should be considered 'likely', *"if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site"* (para 44).
- An effect should be considered 'significant', *"if it undermines the conservation objectives"* (para 48).

[15] SI No. 2010/490

[16] ECJ Case C-127/02 "Waddenzee" Jan 2004.

- Where a plan or project has an effect on a site *"but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned"* (para 47).

*2.9* An opinion delivered to the Court of Justice of the European Union[17] commented that: *"The requirement that an effect in question be 'significant' exists in order to lay down a 'de minimus' threshold. Plans or projects that have no appreciable effect on the site are thereby excluded. If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill."*

2.10 This opinion (the 'Sweetman' case) therefore allows for the authorisation of plans and projects whose possible effects, alone or in combination, can be considered 'trivial' or '*de minimus'*; referring to such cases as those *"which have no appreciable effect on the site"*. In practice such effects could be screened out as having no likely significant effect; they would be 'insignificant'.

## Mitigation provided by the Proposed Submission Core Strategy Review Local Plan

2.11 Some of the potential effects of the Folkestone & Hythe Proposed Submission Core Strategy Review could be mitigated through the implementation of other proposals in the Plan itself, such as those relating to the provision of improved sustainable transport links (which would help to mitigate potential increases in air pollution associated with increased vehicle traffic) and the provision of green infrastructure within new developments (which would help mitigate increased pressure from recreational activities at European sites).

2.12 However, a recent CJEU ruling (People over Wind, Peter Sweetman v Coillte Teoranta (Case C-323/17) judgement) ruled that Article 6(3) of the Habitats Directive should be interpreted as meaning that mitigation measures, specifically measures which avoid or reduce adverse effects, should be assessed as part of an Appropriate Assessment, and should not be taken into account at the screening stage. As part of this HRA this has been taken to include any forms of mitigation upon which conclusions rely, either solely or partly. The precise wording of the ruling is as follows:

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

2.13 Prior to this judgment, UK case law had established that avoidance or reduction measures that form part of a proposal could be taken into account at the screening stage, on the basis of objective information. This HRA has therefore been updated to take account of this recent ruling and as a result, conclusions have not relied on mitigation measures at the screening stage. Where such measures are proposed to avoid the harmful effects of the plan, they have been considered at the Appropriate Assessment stage to ensure compliance with recent case law.

## Screening assumptions and information used in reaching conclusions about likely significant effects

2.14 During the screening stage of the HRA, each policy was screened individually, which is consistent with current guidance and practice. For some types of impacts, screening for likely significant effects has been determined on a proximity basis, using GIS data to determine the proximity of potential development locations to the European sites that are the subject of the assessment. However, there are many uncertainties associated with using set distances as there are very few standards available as a guide to how far impacts will travel. Therefore, during the screening

[17] Advocate General's Opinion to CJEU in Case C-258/11 Sweetman and others v An Bord Pleanala 22nd Nov 2012.

stage a number of assumptions have been applied in relation to assessing the likely significant effects on European sites that may result from the Plan, as described below.

### Physical damage/loss

2.15 Any development resulting from the Proposed Submission Core Strategy Review would take place within Folkestone & Hythe District; therefore only European sites within the District boundary could be affected through physical damage or loss of habitat from within the site boundaries. As a result, Wye and Crundale Downs SAC; Lydden and Temple Downs SAC; Blean Complex SAC; and Dover to Kingdown Cliffs SAC, have been screened out of the assessment for physical damage and loss.

2.16 No development is proposed in the Proposed Submission Core Strategy Review within the site boundaries of European sites that lie within Folkestone & Hythe District. Loss of habitat from outside the boundaries of a European site could still have an effect on site integrity if that habitat supports qualifying species from within the European sites. Of the European sites identified, only Dungeness SPA and Ramsar site supports mobile species requiring consideration of offsite habitat use.

2.17 Folkestone to Etchinghill Escarpment SAC and Parkgate Down SAC are not designated for their transient species and no development is proposed within their site boundaries, therefore offsite habitat loss or damage resulting from development in Folkestone & Hythe District will not significantly affect these sites.

**2.18 Therefore, likely significant effects relating to physical loss of or damage to habitat need only be considered in relation to Dungeness SAC, SPA and Ramsar site and only in relation to offsite habitat.**

### Non-physical disturbance (noise, vibration and light)

2.19 Noise, vibration and lighting effects, e.g. during the construction of new housing or employment development, are most likely to disturb sensitive receptors such as birds and are thus a key consideration with respect to Dungeness SPA and Ramsar, where birds comprise all or part of the qualifying features.

2.20 It has been assumed that the effects of noise, vibration and light are most likely to be significant within a distance of 500 metres. There is also evidence of 300 metres being used as a distance up to which certain bird species can be disturbed by the effects of noise[18]; however, it has been assumed (on a precautionary basis) that the effects of noise, vibration and light pollution are most likely to cause an adverse effect if development takes place within 500 metres of a European site with qualifying features sensitive to these disturbances, or off-site habitat used for breeding, foraging or roosting.

**2.21** New policies in the Folkestone & Hythe Proposed Submission Core Strategy Review, and/or those retained policies which are significantly changed from the adopted Core Strategy, and which are therefore being assessed as part of this HRA, are all located beyond 500m from European Sites, and subsequently **the effects of non-physical disturbance have been screened out from this assessment.**

### Non-toxic contamination

2.22 Non-toxic contamination, including the introduction and spread of invasive species is considered likely to occur when housing and employment sites are located in close proximity to European Sites. New policies in the Folkestone & Hythe Proposed Submission Core Strategy Review, and/or those retained policies which are significantly changed from the adopted Core Strategy, and which are therefore being assessed as part of this HRA, are all located several kilometres from European Sites, and consequently **the effects of non-toxic contamination have been screened out from this assessment**.

[18] British Wildlife Magazine. October 2007.

### Air pollution

2.23 Air pollution is most likely to affect European sites where plant, soil and water habitats are the qualifying features, but some qualifying animal species such as birds at Dungeness may also be affected indirectly through changes in plant communities and/or habitat succession or degradation. Deposition of pollutants to the ground and vegetation can alter the characteristics of the soil, affecting the pH and nitrogen availability that can then affect plant health, productivity and species composition.

2.24 In terms of vehicle traffic, nitrogen oxides (NOx, i.e. NO and $NO_2$) are considered to be the key pollutants. Deposition of nitrogen compounds may lead to both soil and freshwater acidification, and NOx can cause eutrophication of soils and water.

2.25 Based on the Highways Agency Design Manual for Road and Bridges (DMRB) Manual Volume 11, Section 3, Part 114 (which was produced to provide advice regarding the design, assessment and operation of trunk roads (including motorways)), it is assumed that air pollution from roads is unlikely to be significant beyond 200m from the road itself. Where increases in traffic volumes are forecast, this 200m buffer needs to be applied to the relevant roads in order to make a judgement about the likely geographical extent of air pollution impacts.

2.26 The DMRB Guidance for the assessment of local air quality in relation to highways developments provides criteria that should be applied at the screening stage of an assessment of a plan or project, to ascertain whether there are likely to be significant impacts associated with routes or corridors. Based on the DMRB guidance, affected roads which should be assessed are those where:

- Daily traffic flows will change by 1,000 AADT (Annual Average Daily Traffic) or more; or
- Heavy duty vehicle (HDV) flows will change by 200 AADT or more; or
- Daily average speed will change by 10 km/hr or more; or
- Peak hour speed will change by 20 km/hr or more; or
- Road alignment will change by 5 metres or more.

2.27 Recent case law, known as the Wealden judgement[19], has revised the method by which Natural England expects to see in-combination air pollution effects assessed. The implication of the judgment is that, where the road traffic effects of other plans or projects are known or can be reasonably estimated (including those of adopted plans or consented projects), then these should be included in road traffic modelling by the local authority whose local plan or project is being assessed. The screening criteria of 1,000 AADT should then be applied to the traffic flows of the plans in combination.

2.28 It is assumed that only those roads forming part of the primary road network (motorways and 'A' roads) might be likely to experience any significant increases in vehicle traffic as a result of development (i.e. greater than 1,000 AADT). As such, where a site is not within 200 metres of a motorway or 'A' road, likely significant effects from traffic-related air pollution is ruled out.

2.29 European Sites within 10km of Folkestone & Hythe District that are within 200m of strategic roads, and which have therefore been considered susceptible to likely significant effects as a result of air pollution include:

- Folkestone to Etchinghill Escarpment SAC – part of the SAC is <200m from M20, A20, A259 and A260, which form part of the strategic road network around Folkestone.
- Dover to Kingsdown Cliffs SAC - a very small proportion of the SAC is located within 200m of the A2/Jubilee way, which provides a key strategic route between Folkestone and towns beyond Dover, including St Margaret's at Cliffe, Kingsdown, and Deal.
- Blean Complex SAC – a small proportion of the SAC is located c.30m from the A290 at its closest point.

[19] Wealden District Council v. (1) Secretary of State for Communities and Local Government; (2) Lewes District Council; (3) South Downs National Park Authority and Natural England

- Lydden and Temple Downs SAC - a small proportion of the SAC is located within 200m of the A2.
- Dungeness, Romney Marsh and Rye Bay SPA and Ramsar site is located adjacent to the A259 in several places and part of the Ramsar site is also located within 200m of the A2070.

2.30 Dungeness SAC is not located within 200m of a strategic road network but is located within 200m of the Jury's Gap road which, despite being a minor road, was considered could conceivably represent a journey to work route, and therefore for completeness and in accordance with a precautionary principle was included in the Air Quality Assessment (see **Appendix 3**).

**2.31 Wye and Crundale Downs SAC and Parkgate Down SAC are not located within 200m of a strategic road and have therefore been screened out of the assessment for air pollution. All of the remaining European sites considered in this assessment have been screened in for potential likely significant effects associated with air pollution potentially resulting from the new or significantly revised housing allocations within the Proposed Submission Core Strategy Review (Policies SS6-SS9 New Garden Settlement, and CSD9 Sellindge).**

### Impacts of recreation

2.32 Recreation activities and human presence can have a significant effect on a European site as a result of erosion, trampling or general disturbance, for example through human presence, dog walking and anti-social activities such as fire and vandalism. Where the Draft Core Strategy Review policies are likely to result in an increase in the local population, or where an increase in visitor numbers to the area is considered likely, the potential for an increase in visitor numbers and the associated potential impacts at sensitive European sites was considered.

2.33 The SACs in the north of the study area are designated for chalk grasslands with orchids. These habitat types are typically low in nutrient levels and therefore recreational activities can damage the soil chemistry as a result of dog walking and associated nitrogen inputs. In addition, unmanaged recreational activities can adversely affect the site through physical damage such as trampling and erosion and from associated problems such as fire, and vandalism.

2.34 The Dungeness, Romney Marsh and Rye Bay SPA and Ramsar in the south of the study area are designated for their bird assemblages and are therefore susceptible to the effects of recreational activities associated with disturbance.

**2.35** In light of the above, **all of the European sites considered in this assessment have been screened in for potential likely significant effects associated with recreational disturbance potentially resulting from the new or significantly revised housing allocations within the Proposed Submission Core Strategy Review (Policies SS6-SS9 New Garden Settlement, and CSD9 Sellindge).**

### Water quantity and quality

2.36 An increase in demand for water abstraction and treatment resulting from the growth could result in changes in hydrology at European sites, specifically a decrease in water quality or changes to water levels. Depending on the qualifying features and particular vulnerabilities of the European sites, there could be a likely significant effect on site integrity.

2.37 The following sites have been screened out from impacts associated with changes in water quantity and quality because they do not have hydrological connectivity with the proposed allocations and are designated for features (e.g. dry grasslands) which are of low sensitivity to increased water abstraction and treatment associated with the Proposed Submission Core Strategy Review:

- Blean Complex SAC.
- Dover to Kingsdown Cliffs SAC.
- Folkestone to Etchinghill Escarpment SAC.
- Lydden and Temple Ewell Downs SAC.
- Parkgate Down SAC.

- Wye and Crundale Downs SAC.

2.38 The Dungeness SAC, SPA and Ramsar sites are designated for features which are susceptible to changes in water quantity and quality and have hydrological connectivity with allocations specified within the Plan. **As a result, the potential for likely significant effects associated with hydrological changes will be considered for the Dungeness sites only**.

## Summary of screening assumptions

2.39 **Table 2.2** below summarises the screening assumptions that are being applied to the HRA of the Proposed Submission Core Strategy Review. Where certain types of effects are screened out in **Table 2.2,** they did not need to be considered further so are not referred to in the screening matrix in **Appendix 2**.

**Table 2.2: Summary of screening assumptions**

| European Site | Physical damage/ loss of habitat | Non-physical disturbance | Air pollution | Recreation | Water quantity and quality | Non-toxic contamination (invasive species) |
|---|---|---|---|---|---|---|
| Blean Complex SAC | Screened out | Screened out | **Screened in** | **Screened in** | Screened out | Screened out |
| Dover to Kingsdown Cliffs SAC | Screened out | Screened out | **Screened in** | **Screened in** | Screened out | Screened out |
| Folkestone to Etchinghill Escarpment SAC | Screened out | Screened out | **Screened in** | **Screened in** | Screened out | Screened out |
| Lydden and Temple Ewell Downs SAC | Screened out | Screened out | **Screened in** | **Screened in** | Screened out | Screened out |
| Parkgate Down SAC | Screened out | Screened out | Screened out | **Screened in** | Screened out | Screened out |
| Wye and Crundale Downs SAC | Screened out | Screened out | Screened out | **Screened in** | Screened out | Screened out |
| Dungeness SAC | **Screened in (offsite only)** | Screened out | **Screened in** | **Screened in** | **Screened in** | Screened out |
| Dungeness, Romney Marsh and Rye Bay SPA | **Screened in (offsite only)** | Screened out | **Screened in** | **Screened in** | **Screened in** | Screened out |
| Dungeness, Romney Marsh and Rye Bay | **Screened in (offsite only)** | Screened out | **Screened in** | **Screened in** | **Screened in** | Screened out |

| European Site | Physical damage/ loss of habitat | Non-physical disturbance | Air pollution | Recreation | Water quantity and quality | Non-toxic contamination (invasive species) |
|---|---|---|---|---|---|---|
| Ramsar | | | | | | |

## Identification of other plans and projects which may have 'in-combination' effects

2.40 Regulation 105 of the Amended Habitats Regulations 2017 requires an Appropriate Assessment where "*a land use plan is likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and is not directly connected with or necessary to the management of the site*". The purpose of the in-combination effects assessment is to make sure that the effects of numerous small activities, which alone would not result in a significant effect, are assessed to determine whether their combined effect would be significant. It is therefore necessary to focus the assessment of in-combination effects on those elements of the Plan that are not considered to have significant effects on their own.

2.41 As described in **Chapter 1**, Folkestone & Hythe District's adopted Core Strategy (2013) was subject to HRA and therefore, the findings of this HRA are considered to remain valid for those existing policies or those which have not significantly changed. The adopted Core Strategy policies that have not materially changed have only been appraised through consideration of the in-combination effects to the Core Strategy Review as a whole.

2.42 The HRAs of the adopted and emerging local plans of the four authorities adjacent to Folkestone & Hythe identified the following potential issues, depending on the borough or district concerned:

- Physical impacts on offsite habitat to Dungeness, Romney Marsh and Rye Bay SPA/Ramsar.
- Air pollution impacts to Blean Complex SAC, Lydden to Temple Ewell Downs SAC, and Dungeness SAC, Dungeness, Romney Marsh and Rye Bay SPA/Ramsar.
- Recreational impacts to Blean Complex SAC; Wye and Crundale SAC; Dover to Kingsdown Cliffs SAC; Lydden to Temple Ewell Downs SAC; Folkestone to Etchinghill Escarpment SAC; Dungeness SAC, and Dungeness, Romney Marsh and Rye Bay SPA/Ramsar.
- Water quality and quantity impacts to Dungeness, Romney Marsh and Rye Bay SPA/Ramsar.
- Urbanisation impacts to Lydden to Temple Ewell Downs SAC.

2.43 All of the HRAs undertaken to date have either concluded no likely significant effects on European sites either alone or in-combination with other plans and projects or have concluded no adverse effect on the integrity of the European sites either alone or in-combination with other plans or projects. The exception is Dover District Council's HRA of the Dover Core Strategy (which was adopted in 2010), which requires the re-assessment of the Core Strategy once recommendations provided within the HRA are included. The potential for in-combination effects to result in adverse effects on the integrity of European Sites is considered at the Appropriate Assessment stage.

2.44 For those new or changed policies included in the Folkestone & Hythe Proposed Submission Core Strategy Review, an assessment of the likelihood of significant in-combination effects has been assessed as part of this HRA. This is particularly relevant to air quality because the best practice approach to assessing changes in air quality has changed in light of a High Court judgement known as the 'Ashdown Forest judgement'. As a result, an updated air quality assessment (see **Appendix 3**) was undertaken as part of this HRA to explicitly consider the effect of the Core Strategy Review in-combination with other plans and projects.

## Appropriate Assessment

2.45 The Appropriate Assessment stage of HRA focuses on those policies and related impacts judged likely to have a significant effect at the screening stage, and seeks to conclude whether, in light of the mitigation and avoidance measures proposed, they would result in an adverse effect on the integrity of the qualifying features of a European site(s), or where insufficient certainty regarding this remains. The integrity of a site depends on the site being able to sustain its 'qualifying features' across the whole of the site and ensure their continued viability.

# 3 HRA Screening Assessment

3.1 As described in **Chapter 2**, a screening assessment was carried out in order to identify the likely significant effects of the Folkestone & Hythe Proposed Submission Core Strategy Review on the European sites in and around Folkestone & Hythe District. The full screening matrix, which sets out the decision making process used for this assessment can be found in **Appendix 2** and the findings are summarised below. The screening assessment provided below assesses the likelihood of significant effects at each of the European Sites with reference to specific policies as required.

3.2 As described in **Chapter 1** and within the Proposed Submission Core Strategy Review, the review is being undertaken to assess housing and employment needs over a longer period than the adopted Core Strategy - to 2036/37. However, where the policies within the 2013 Core Strategy are still relevant they are not proposed to be amended and remain unchanged. Other policies in the Proposed Submission Core Strategy Review include minor changes from the 2013 Core Strategy but will not result in material changes.

3.3 The 2013 Core Strategy was subject to an HRA, and therefore the conclusions of the HRA in relation to retained policies or those which do not result in material changes are considered to remain valid. As a result, following a review of the changes, only those new policies or those which propose significant changes from the 2013 Core Strategy have been considered in detail as part of this screening assessment. For clarity, policies included in this screening assessment include the following:

- Policy SS6 – New Garden Settlement – Development Requirements.
- Policy SS7 – New Garden Settlement – Place Shaping Principles.
- Policy SS8 – New Garden Settlement – Sustainability and Healthy New Town Principles.
- Policy SS9 – New Garden Settlement – Infrastructure, Delivery and Management.
- Policy CSD9 – Sellindge Strategy.

### Policies with Potential to Result in Likely Significant Effects

3.4 Of the above policies, SS7, SS8 and SS9 detail specific development control and/or design principles and will not therefore be capable of resulting in Likely Significant Effects to European Sites. As a result, the screening assessment is restricted to the following policies which have potential to result in Likely Significant Effects on European Sites:

- Policy SS6 - A new Garden Settlement within the North Downs Character Area.
- Policy CSD9 – Sellindge Strategy.

### Updated Air Quality Assessment

3.5 In addition to the consideration of the above specific policies, an updated air quality assessment (see **Appendix 3**) has been undertaken to assess the effect of the revised quantum and location of development specified in the Proposed Submission Core Strategy Review, both alone, and in-combination with the other plans and projects including strategic growth in Folkestone & Hythe and neighbouring authorities.

### Blean Complex SAC

*Air Pollution*

3.6 The Blean complex is located c.9.9km to the north west of Folkestone & Hythe District and situated on the northwest edge of Canterbury. Air pollution is a recognised threat to the woodland habitats for which this SAC is designated. A relatively small proportion of the SAC is located within 200m of the A290. This section of road is located over 20 miles from Folkestone and given that it is positioned beyond Canterbury, the majority of traffic journeys between north Kent's coastal towns and Folkestone & Hythe's site allocations would be expected to bypass Canterbury by using the A2 to the west or the A28 to the east. As a result, the potential traffic increases and associated air pollution along this road as a result of the Core Strategy Review are likely to be low. Nevertheless, in line with a precautionary approach, this site was included in the updated Air Quality Assessment (see **Appendix 3**) which concluded that the **Folkestone & Hythe Core Strategy Review will not result in likely significant effects on the Blean Complex SAC as a result of changes in air quality, either alone or in-combination with other plans and projects**.

*Recreation*

3.7 The qualifying features of the Blean Complex SAC are susceptible to the effects of recreation and associated pressures, for example as a result of erosion, nutrient enrichment and fire.

3.8 A well-established approach to avoiding recreational pressures is currently being advocated as part of local plans throughout the UK, typically involving the use of zones of influence to identify where avoidance and mitigation (such as the provision of alternative open space, and management of the European site) is required.

3.9 This approach was initially developed as part of planning decisions which involve the Thames Basin Heaths SPA (TBH SPA). The TBH SPA, located in southern England, is designated for heathland birds and is particularly sensitive to recreational pressures. To ensure adverse effects on the TBH SPA are avoided, a Joint Strategic Partnership involving Natural England (NE) and relevant planning authorities was established. The Partnership produced a Delivery Framework which uses a 'zone' system based on distance from the SPA. Given the particular sensitivities of the TBH SPA to recreational pressure, the findings and recommendations of the Delivery Framework provide useful contextual information in reaching assumptions in relation to recreational impacts associated with the Folkestone & Hythe Proposed Submission Core Strategy Review.

3.10 The TBH Delivery Framework (DF) – which is endorsed by Natural England, and which was scrutinised for robustness and appropriateness by the Technical Assessor of the South East Plan – suggests that at distances between 400m and 5km, residential housing is likely to result in significant effects on Annex II heathland birds as a result of recreation. These distances have been based on various research commissioned by Natural England which investigated people's recreational movements, behaviour and distance travelled to pursue recreational activities at such sites. Importantly, the research indicates that beyond 5km, the effect of recreational pressures from the majority of housing developments is likely to be minimal on these sites. It specifies that large housing schemes of over 50 dwellings may require consideration up to 7km from the SPA.

3.11 It is recognised that different habitats and landscapes will have widely varying levels of attractiveness to visitors and accordingly will therefore have different zones of influence (ZoI). For example, the ZoI's of unique coastal landscapes may have ZoIs of over 20km. Nevertheless, the habitat types which comprise the Blean Complex SAC are broadly comparable with those of the TBH SPA including lowland heathland and woodland habitats and therefore the research which has informed the TBH SPA Delivery Framework is considered to be directly relevant in assessing the potential for recreational impacts on this SAC through recreation. As a result of a distance of of over 20km from the locations of development proposed in Policies SS6 and CSD9, **the Folkestone & Hythe Proposed Submission Core Strategy Review is not predicted to result in a likely significant effect upon the Blean Complex SAC as a result of recreation, either alone or in-combination with other plans and projects**.

### Dover to Kingsdown Cliffs SAC

*Air pollution*

3.12 The grassland habitats for which this SAC is designated are susceptible to deposition of nitrogen associated with traffic emissions, which can act as a fertiliser, encouraging non-target plant species to dominate and resulting in increased scrub succession which can limit the extent of, or degrade the quality of, the designated grassland feature.

3.13 As specified in the air quality assessment (see **Appendix 3**), a single transect was modelled into this SAC, from the A2 (Jubilee Way). This is a major road but also lies 146m from the SAC at its closest. The assessment identified this as the only road within 200m of the SAC that could conceivably constitute a journey to work route for residents of Folkestone & Hythe. Baseline NOx concentrations throughout the modelled transect were slightly above the critical level.

3.14 The air quality assessment forecast that the Folkestone & Hythe Proposed Submission Core Strategy Review would result in an increase in flows on the A2. However, because of the distance of the road from the SAC this has a limited effect.

**3.15** The air quality assessment concluded that "*there would be no likely significant effect alone or in-combination with other projects and plans*", and therefore the **Folkestone & Hythe Proposed Submission Core Strategy Review will not result in likely significant effects on the Dover to Kingsdown Cliffs SAC, either alone or in-combination with other plans and projects.**

*Recreation*

**3.16** The SAC is located 8.5km outside of Folkestone & Hythe, and the distance between policies SS6 and CSD9 is c.20km. It is recognised that the habitats present within the Dover to Kingsdown Cliffs SAC offer a relatively unique attraction for visitors but similarly accessible open grassland sites occur on chalk cliffs and escarpments in the vicinity of the New Garden Settlement and Sellindge, and therefore the contribution of site allocations to increasing visitor pressure on Dover to Kingsdown Cliffs SAC is likely to be negligible. Furthermore, the Site Improvement Plan for this SAC does not list recreational disturbance as a current pressure or threat. In light of the above, the **Folkestone & Hythe Proposed Submission Core Strategy Review is not predicted to result in a likely significant effect on the Dover to Kingsdown Cliffs SAC as a result of recreation, either alone or in-combination with other plans and projects.**

### Folkestone to Etchinghill Escarpment SAC

3.17 Key threats to the Folkestone to Etchinghill Escarpment SAC that have been identified in Natural England's Site Improvement Plan and the HRA screening assumptions include air pollution and recreational pressures.

*Air pollution*

3.18 The SAC is located in the north-east of the Folkestone & Hythe District, situated along a natural chalk escarpment at the northern edge of Folkestone. The SAC is composed of a total area of 263.25 ha, supporting broadleaved woodland and calcareous grasslands. The grassland habitats for which this SAC has been designated are susceptible to atmospheric deposition of nitrogen associated with vehicular emissions. The Site Improvement Plan specifies that current levels of nitrogen deposition exceed the critical load for chalk grassland habitat at the site, and recognises that air pollution as a result of nitrogen deposition is an existing pressure at the site.

3.19 Main roads occur within 200m of the site and as indicated in the updated air quality assessment in Appendix 3, reliance upon mitigation and avoidance safeguards would be required to provide certainty that Likely Significant Effects can be avoided. However, following the 'People over Wind' CJEU ruling, it is no longer appropriate to consider the role of such mitigation and avoidance safeguards at the screening stage, and therefore **further assessment is required at the Appropriate Assessment stage to determine whether the Folkestone & Hythe Proposed Submission Core Strategy Review would result in adverse effects on the integrity of the site either alone or in-combination with other plans and projects**.

*Recreation*

3.20 The chalk grasslands and orchids, for which the SAC is designated, are susceptible to recreational activities including dog walking and associated nutrient enrichment which may alter the soil chemistry and increase the prevalence of competitive species, or by physical disturbances such as through trampling, vandalism, fire or taking of plants.

3.21 Due to the proximity of the site to Folkestone and other towns and villages in north east Folkestone & Hythe, parts of the SAC already receive relatively high levels of recreational access and discussions with the White Cliffs Countryside Partnership (WCCP)[20] revealed recent damage by trampling and theft of the rare orchid species, which has resulted in the management team to consider the potential for additional protective measures to conserve the orchid populations.

3.22 Recreation at the site is currently well managed and recreation is not identified as a current pressure or threat in Natural England's Site Improvement Plan. Nevertheless, increased recreational usage of the site as a result of Policy SS6, which proposes a New Garden Settlement near Westenhanger, and Policy CSD9, which proposes strategic housing growth at Sellindge has the potential to result in likely significant effects as a result of increases in the above impacts. As a result, mitigation and avoidance measures are likely to be required to ensure adverse effects are avoided or reduced to acceptable levels.

3.23 Therefore the potential for likely significant effects cannot be ruled out at this stage and **further consideration is required at the Appropriate Assessment stage, including in light of mitigation and avoidance measures, to determine whether the Folkestone & Hythe Proposed Submission Core Strategy Review would result in adverse effects on the integrity of Folkestone to Etchinghill Escarpment SAC, either alone or in-combination with other plans and projects**.

### Lydden and Temple Ewell Downs SAC

*Air Pollution*

3.24 Sections of the Lydden and Temple Ewell Downs SAC are within 200m of a section of the A2 which runs between Dover and Canterbury. The air quality assessment (see **Appendix 3**) confirms that two representative transects were modelled into this SAC, one south-west into the SAC from the A2 and the other north-east into the SAC from Canterbury Road. Both links lie 90-95m from the SAC and this means that the area most affected by vehicle emissions lies well outside the SAC boundary.

3.25 The air quality modelling showed that, in terms of NOx, the Proposed Submission Folkestone & Hythe Core Strategy Review will play no part in retarding the forecast improvement in NOx on Canterbury Road and a very small role in retarding the forecast improvement along this section of the A2.

3.26 In terms of nitrogen deposition, the Proposed Submission Folkestone & Hythe Core Strategy Review plays no part in retarding the forecast improvement along Canterbury Road and only a nominal role in retarding improvement along the A2. This was considered ecologically insignificant.

3.27 The air quality assessment concluded that given that the 'in combination' deposition rate is a) forecast to be below the critical load and well below the rate at which *Caporn et al* report a decline in diversity in calcareous grassland, b) forecast to fall further to 2031 and c) barely retarded by the Proposed Submission Folkestone & Hythe Core Strategy Review, no likely significant effect is expected alone or in-combination despite the elevated NOx concentrations.

3.28 **Therefore, the Proposed Submission Folkestone & Hythe Core Strategy Review is not predicted to result in likely significant effects on Lydden and Temple Ewell Downs SAC as a result of changes in air quality, either alone or in-combination with other plans and projects**.

[20] Pers comm (21,09,2016), Kirk Alexander – Project Manager, White Cliffs Countryside Partnership

*Recreation*

3.29 This site is located approximately 15km to the northeast of development proposed under Policies SS6 and CSD9 and therefore, in line with the reasoning provided above for the Dover to Kingsdown Cliffs SAC, the distance between these locations is considered sufficient to negate impacts associated with recreational pressures.

**3.30** As a result, the **Proposed Submission Folkestone & Hythe Core Strategy Review is not predicted to result in likely significant effects upon the Lydden and Temple Ewell Downs SAC as a result of recreation, either alone of in-combination with other plans and projects.**

### Parkgate Down SAC

*Recreation*

3.31 Parkgate Down is currently managed as a nature reserve by the Kent Wildlife Trust (KWT). No public rights of way enter the site and a warden is employed by KWT to manage and monitor the site and oversee implementation of access restrictions to protect sensitive ecological features including the orchid assemblage for which the site is designated as an SAC. The entire site is currently in favourable condition as evidence of the current successful management. Furthermore, the site is located c.9.5km from development proposed in Policies SS6 and CSD9.

3.32 As a result, the increase in visitors at the site as a result of the Proposed Submission Folkestone & Hythe Core Strategy Review is likely to be negligible, and would be unlikely to jeopardise the success of the existing management regime. **Therefore, the Proposed Submission Folkestone & Hythe Core Strategy Review is not predicted to result in likely significant effects to Parkgate Down SAC, either alone or in-combination with other plans and projects**.

### Dungeness SAC and Dungeness, Romney Marsh and Rye Bay SPA/Ramsar

*Air Pollution*

3.33 The air quality assessment (see **Appendix 3**) reported that the Proposed Submission Folkestone & Hythe Core Strategy Review will effectively play no part in retarding the forecast improvement in NOx. This is probably due to the small part adjacent roads play in journeys to work to/from Folkestone & Hythe, and forecast additional traffic on key roads by 2031 as a result of the Proposed Submission Folkestone & Hythe Core Strategy Review is so small that it constitutes zero increase in Annual Average Daily Traffic (AADT). The air quality assessment concluded that "*there would be no likely significant effect either alone or in-combination with other projects and plans*".

**3.34 Therefore, the Proposed Submission Folkestone & Hythe Core Strategy Review will not result in likely significant effects on the Dungeness Complex (SAC, SPA and Ramsar) as a result of air pollution, either alone, or in-combination with other plans and projects.**

*Physical Damage/Loss (offsite)*

3.35 Development proposed in Policies SS6 and CSD9 would be located over 12km from the SAC at the closest point and the Proposed Submission Folkestone & Hythe Core Strategy Review will therefore not result in **likely significant effects on the Dungeness Complex (SAC, SPA and Ramsar) as a result of physical loss or damage, either alone or in-combination with other plans and projects**.

*Recreation*

3.36 Recreational pressures associated with population growth in Folkestone & Hythe and the South East represent a notable threat to the Dungeness complex, including the SAC, SPA and Ramsar. Nevertheless, this threat was recognised by the HRA of the adopted Core Strategy (2013) and the HRA[21] of the Folkestone & Hythe Places and Policies Local Plan (PPLP). As a result, a proactive approach to managing recreational pressures is currently underway in the form of a Sustainable Access and Recreation Management Strategy (SARMS)[22] which sets out how the site will be

[21] LUC (August 2018) Folkestone & Hythe Places and Policies Local Plan Habitats Regulations Assessment

[22] http://www.rother.gov.uk/article/13264/Draft---Sustainable-Access-and-Recreation-Management-Strategy-SARMS

managed and monitored over the plan period. Both of the above HRAs concluded that, providing the necessary avoidance and mitigation measures were implemented, adverse effects on the integrity of the Dungeness complex would be avoided. These conclusions were supported by Natural England.

3.37 The SARMS is currently underway and comprises the following key stages:

- Stage 1 (Visitor Surveys) has been completed. It comprises a comprehensive visitor survey and provides initial key recommendations.
- Stage 2 (The Strategy) is currently in progress and will develop a strategy which recognises existing key pressures and threats, recommends measures required to address current and future pressures, and identifies and sets out future monitoring requirements to ensure that there is a robust feedback loop.

3.38 Onsite visitor surveys undertaken as part of Stage 1 revealed that visitors within 0 to 5km of the SAC comprised a very small proportion of visitors (4%) whilst a much greater proportion (67%) were found to travel 30km or more. Although developments proposed under Policies SS6 and CSD9 within the Folkestone & Hythe Proposed Submission Core Strategy Review Local Plan are located c10km from the Dungeness complex at the nearest point. As a result there is potential for development policies SS6 and CSD9 to contribute to increases in recreational pressure at these European Sites.

**3.39 As a result, the Folkestone & Hythe Proposed Submission Core Strategy Review has the potential to result in likely significant effects on the Dungeness European Sites as a result of increases in recreational pressure, and will require more detailed assessment at the Appropriate Assessment stage to determine whether it would result in adverse effects on integrity either alone or in-combination with other plans and projects.**

*Water Quality and Quantity*

**3.40** The developments proposed in the policies being assessed as part of this HRA of the Folkestone & Hythe Proposed Submission Core Strategy Review are located in the North Downs area, located over 12km from the Dungeness European Sites, and are separated hydrologically by the extensive Romney Marsh network of floodplain, ditches and field drains, and the Royal Military Canal. There is no pathway by which policies SS6 and CSD9 could affect the hydrology of the Dungeness European sites and therefore due to an absence of hydrological connectivity the Folkestone & Hythe Proposed Submission Core Strategy Review **would not result in likely significant effects on the Dungeness SAC, SPA or Ramsar as a result of changes in water quality or quantity either alone, or in-combination with other plans and projects.**

### Wye and Crundale Downs SAC

*Recreation*

3.41 This SAC is located to the west of Folkestone & Hythe, over 7km from development proposed under Policies SS6 and CSD9. Recreational activities at the site are well managed through on-site management and wardening and the Site Improvement Plan does not specify recreational activities as a current pressure or threat. Given the intervening distance between policies SS6 and CSD9 and the SAC, the Folkestone & Hythe Proposed Submission Core Strategy Review is considered unlikely to result in significant effects on this site as a result of recreation, either alone or in-combination.

**3.42 Therefore, in summary, the Folkestone & Hythe Proposed Submission Core Strategy Review is not predicted to result in likely significant effects to Wye and Crundale Downs SAC as a result of recreation, either alone or in-combination with other plans and projects.**

## Summary of screening conclusions

3.43 **Table 3.1** below summarises the screening conclusions reached in this HRA for those impact types that were not ruled out in the screening assumptions described in Chapter 2. Impact types for which a conclusion of 'No Likely Significant Effect' (LSE) was reached are shaded in green.

Impact types for which a conclusion of 'No Likely Significant Effect' (LSE) could not be ruled out are shaded in amber.

**Table 3.1: Summary of screening conclusions**

| European site | Physical damage/ loss of habitat (Offsite) | Air Pollution | Recreational Disturbance | Water Quantity and Quality |
|---|---|---|---|---|
| Blean Complex SAC | Screened out | No LSE | No LSE | Screened out |
| Dover to Kingsdown Cliffs SAC | Screened out | No LSE | No LSE | Screened out |
| Folkestone to Etchinghill Escarpment SAC | Screened out | Uncertain – proceed to AA | Uncertain – proceed to AA | Screened out |
| Lydden and Temple Ewell Downs SAC | Screened out | No LSE | No LSE | Screened out |
| Parkgate Down SAC | Screened out | Screened out | No LSE | Screened out |
| Wye and Crundale Downs SAC | Screened out | Screened out | No LSE | Screened out |
| Dungeness SAC | No LSE | No LSE | Uncertain – proceed to AA | No LSE |
| Dungeness SPA | No LSE | No LSE | Uncertain – proceed to AA | No LSE |
| Dungeness Ramsar | No LSE | No LSE | Uncertain – proceed to AA | No LSE |

# 4 Appropriate Assessment

## Folkestone to Etchinghill Escarpment SAC

4.1 The conservation objectives for the Folkestone to Etchinghill Escarpment SAC are to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its semi-natural dry grassland habitat by maintaining or restoring the extent and distribution of qualifying habitat, the structure and function (including typical species) of qualifying natural habitats, and the supporting processes on which qualifying natural habitats rely.

### Air Pollution

4.2 The Folkestone to Etchinghill Escarpment SAC is located in the north-east of Folkestone & Hythe District, situated along a natural chalk escarpment at the northern edge of Folkestone. The SAC is composed of a total area of 263.25 ha, supporting broadleaved woodland and calcareous grasslands. The grassland habitats for which this SAC has been designated are susceptible to atmospheric deposition of nitrogen associated with vehicular emissions. The Site Improvement Plan[23] specifies that current levels of nitrogen deposition exceed the critical load for chalk grassland habitat at the site, and recognises that air pollution as a result of nitrogen deposition is an existing pressure at the site.

4.3 The majority of the SAC is located beyond 200m from main roads and therefore the potential for air quality related effects in these areas as a result of the Folkestone & Hythe Proposed Submission Core Strategy Review is considered minimal. Areas of the SAC at increased risk of air pollution include the following component SSSI units located in the south-east of the SAC, in close proximity to main strategic roads on the northern outskirts of Folkestone:

- SSSI Unit 7 – the A260 (Canterbury Road) is adjacent to Sugar Loaf Hill within the SAC; the A20 is adjacent to Castle Hill and Round Hill within the SAC, and the A259 which is 65m to the south of the Sugar Loaf Hill section of the SAC.
- SSSI Unit 8 – the A260 (Canterbury Road) is adjacent to Wingate Hill within the SAC, and the B2011 is adjacent to Creteway Down at the south easternmost section of the SAC.

4.4 Discussionwith the Natural England officer[24] responsible for the site, and a review of the SSSI site condition assessments was undertaken to confirm the current condition of the component SSSI units of the SAC in areas susceptible to the effects of air quality. This approach confirmed that in terms of current condition, Unit 7 of the component Folkestone to Etchinghill Downs Escarpment SSSI is currently in favourable condition. This Unit meets all of the condition objectives including in terms of species diversity, scrub control, an absence of negative factors and the presence of target orchid species. The most recent condition assessment of Unit 8 confirmed that the unit is in 'unfavourable recovering' condition due to undergrazing resulting in scrub encroachment. In summary, 95% of the Folkestone to Etchinghill Escarpment SSSI is in 'favourable' or 'favourable recovering' condition, with less than 5% classified as 'unfavourable no-change' or 'unfavourable declining'. Nevertheless, it is recognised that Common Standards Monitoring, which is used to monitor the condition of the component SSSIs, was not designed to recognise adverse effects associated with deposition of pollutants, and often habitats are slow to display visible signs of the effects of changes in air quality. Therefore, the absence of apparent adverse factors does not necessarily indicate an absence of effects associated with nutrient enrichment and airborne pollutants.

4.5 The Natural England Site Improvement Plan lists air pollution as a key pressure for the site and confirms that the critical load range for calcareous grassland has been exceeded at the site. A

[23] http://publications.naturalengland.org.uk/file/5225310515625984- Accessed 14/12/2018

[24] Pers comm (21,09,2016), Philip Williams, Natural England

review of the Air Pollution Information System (APIS) confirmed that between 2012-2014 nitrogen deposition was found to be on average 14.4 kg N/ha/yr for the SAC which is below the critical load range of 15 – 25kg N/ha/yr. However, a maximum average level of 15.4kg N/ha/yr has been recorded during this period, which is beyond the lower critical range threshold by 0.4kg N/ha/yr.

4.6 Natural England as part of the Site Improvement Plan recommended trying to control, reduce and ameliorate atmospheric nitrogen impacts with a Site Nitrogen Action Plan (SNAP), a government improvement programme which aims to identify, tackle and reduce sources of atmospheric nitrogen and trying to restore and maintain habitats to mitigate the impact of the atmospheric nitrogen. However, discussions the White Cliffs Partnership[25] who oversee management at the site, confirmed that no such plan has yet been produced or implemented.

4.7 The Proposed Submission Core Strategy Review identifies the strategic need to minimise local carbon emissions, maintain air quality, control pollutants and promote sustainable management as supported by individual policies.

4.8 As described above, a key effect of increased nitrogen deposition is nutrient enrichment leading to increased rates of succession and increases in the spread and abundance of dominant species at the expense of target species and species richness. The SSSI units in areas susceptible to nitrogen deposition are currently in 'favourable' or 'unfavourable recovering' condition despite the existing levels of nitrogen in the air, and the historic, long-term presence of main roads in the vicinity of this SAC. This may indicate that the potential effect of nutrient enrichment on chalk grassland habitat at this location is, at least partly, controlled and avoided via the provision of appropriate management such as grazing and mechanical scrub control. Both of the relevant SSSI units are currently being actively managed using both of these methods and therefore in light of the above, the SAC may show some resilience to the effects of nitrogen deposition.

4.9 An air quality assessment (see **Appendix 3**) assessed the effect of the Proposed Submission Core Strategy Review on European Sites, including Folkestone to Etchinghill Escarpment SAC in-combination with other plans and projects. The key measures of particular relevance regarding air quality impacts included; i) concentration of oxides of nitrogen (known as NOx) in the atmosphere, and ii) direct determination of the rate of the resulting nitrogen deposition. The air quality assessment explains that, in relation to NOx:

*"The main importance is as a source of nitrogen, which is then deposited on adjacent habitats (including directly onto the plants themselves) either directly (known as dry deposition) or washed out in rainfall (known as wet deposition). The deposited nitrogen can then have a range of effects, primarily growth stimulation or inhibition, but also biochemical and physiological effects such as changes to chlorophyll content. NOx may also have some effects which are un-related to its role in total nitrogen intake (such as the acidity of the gas potentially affecting lipid biosynthesis) but the evidence for these effects is limited and they do not appear to occur until high annual concentrations of NOx are reached. The guideline atmospheric concentration of NOx advocated by Government for the protection of vegetation is 30 micrograms per cubic metre (µgm-3), known as the Critical Level. This is driven by the role of NOx in nitrogen deposition and in particular in growth stimulation and inhibition. If the total NOx concentration in a given area is below the critical level, it is unlikely that nitrogen deposition will be an issue unless there are other sources of nitrogen (e.g. ammonia). If it is above the critical level then local nitrogen deposition from NOx could be an issue and should be investigated".*

4.10 The air quality assessment also explains that:

*"calculating nitrogen deposition rates rather than relying purely on scrutiny of NOx concentrations has the advantage of being habitat specific (the critical level for NOx is entirely generic; in reality different habitats have varying tolerance to nitrogen) and, for many habitats, of being directly relatable to measurable effects on the ground through scrutiny of published dose-response relationships that do not exist for NOx. Unlike NOx, the nitrogen deposition rate below which current evidence suggests that effects should not arise is different for each habitat".*

4.11 The air quality assessment included an assessment scenario based on an additional 8,000 dwellings delivered through the Proposed Submission Core Strategy Review over the plan period

[25] Pers comm (21,09,2016), Kirk Alexander – Project Manager, White Cliffs Countryside Partnership

2018/19 to 2036/37. As specified in Policy SS2, the additional housing delivery includes 6,375 dwellings delivered through the allocated garden settlement, 350 delivered through the further expansion of Sellindge, and a further 935 'Windfall' sites (allowance of 55 units per annum for 17 years). This provides a total additional housing figure of 7,660 and therefore the air quality assessment provides a precautionary approach in assessing 8,000 dwellings.

4.12 In assessing the effects of the Proposed Submission Core Strategy Review on Folkestone to Etchinghill Escarpment SAC, the air quality assessment identified that the baseline NOx concentrations where the SAC lies adjacent to the very busy A20 are high. By 2031, total flows on the A20 are forecast to increase to 'in combination', and the bulk of this increase is attributable to the Proposed Submission Core Strategy Review. Whilst NOx concentrations throughout the modelled transect are forecast to experience a net reduction on all links.

4.13 The assessment considered a 'Do Something' scenario with the 2017 Base, and showed the forecast 'in-combination' change in NOx concentrations to 2031, including the Folkestone & Hythe Proposed Submission Core Strategy Review, PPLP and strategic growth proposed in neighbouring authorities. It states that:

*"for the A20, it can be seen that the Shepway* [now Folkestone & Hythe] *Draft Core Strategy Partial Review Local Plan will retard the forecast improvement in NOx by a worst-case 3 µgm-3 (10% of the critical level) at the closest point to the A20 and even at 30-40m from the roadside will retard improvement by c. 1 µgm-3. This still leaves a substantial net forecast improvement of c. 26 µgm-3 but is certainly a large retardation. The primary role of NOx for vegetation is as a source of nitrogen. The retardation of forecast improvement attributable to the Shepway* [now Folkestone & Hythe] *Draft Core Strategy Partial Review Local Plan is clearly high enough to mean the resulting nitrogen deposition must be modelled directly to determine what botanical effect would result".*

4.14 In assessing the effect of NOx on nitrogen deposition, the air quality assessment goes on to explain that:

*"since NOx is the main source of nitrogen from vehicle exhaust emissions, the results from the NOx analysis carry over to the nitrogen deposition calculations. However, since most of the emitted NOx is not deposited at the roadside, the change in nitrogen deposition rates due to the Shepway* [now Folkestone & Hythe] *Draft Core Strategy Partial Review Local Plan is forecast to be lower than the change in NOx concentrations".*

4.15 The air quality assessment takes into account forecast improvements in NOx reductions over the plan period. Crucially, the air quality assessment found that, if the forecast improvement is realised in practice, it will bring the deposition rates below the critical load at all links, even adjacent to the A20.

4.16 The air quality assessment concluded that:

*"Given that the 'in combination' deposition rate is a) forecast to be below the critical load of 15 kgN/ha/yr and well below the rate of 25 kgN/ha/yr at which Caporn et al report a decline in diversity in calcareous grassland, b) forecast to fall further to 2031 and c) only retarded by the Shepway* [now Folkestone & Hythe] *Draft Core Strategy Partial Review Local Plan to a small extent along even the most affected road,* ***no likely significant effect is expected alone or in combination despite the elevated NOx concentrations****".*

4.17 Nevertheless, the conclusions presented within the air quality assessment are based on forecast reductions in NOx and deposition rates over the plan period and included the following recommendation to provide a sufficient level of certainty that likely significant effects would be avoided:

- **For the A20 in particular the Folkestone & Hythe Proposed Submission Core Strategy Review Local Plan should include a commitment to monitoring roadside NOx at regular intervals over the plan period in order to track the projected improvements in air quality. This would also enable the introduction of any specific local measures if an improving trend is not recorded in practice. Reporting on this metric could be tied to the planned cycle of reviews of the Plan**.

4.18 The air quality assessment was completed prior to the recent 'People over Wind' CJEU ruling, and therefore relied, at least to some extent on the above safeguard in concluding that there would

not be a Likely Significant Effect. The screening stage test of 'likely significance' has a lower threshold than that of the Appropriate Assessment stage which determines whether a plan or project would result in 'adverse effects on integrity'. As a result, in light of the 'People over Wind' ruling the above conclusion and recommended wording, which has been included in the Folkestone & Hythe Proposed Submission Core Strategy Review, provides certainty that the Folkestone & Hythe Proposed Submission Core Strategy Review would avoid adverse effects on integrity alone or in-combination.

4.19 Notably, the air quality assessment was based on levels of growth as a result of the Folkestone & Hythe Proposed Submission Core Strategy Review (not just policies SS6 and CSD9) in combination with the PPLP and future predicted traffic levels and air quality trends within the South East and also accounts for growth in neighbouring authorities. Therefore it takes into account the 'in-combination' scenario. In light of the conclusions of the updated air quality assessment, and the inclusion of a commitment to the above recommendation within the Plan, providing that such recommendations are implemented as part of the Folkestone & Hythe Proposed Submission Core Strategy Review, **it can be concluded that the Folkestone & Hythe Proposed Submission Core Strategy Review will not result in adverse effects on the integrity of the Folkestone to Etchinghill Escarpment SAC as a result of air pollution, either alone or in-combination with other plans and projects**.

### Recreation

4.20 The chalk grasslands and orchids, for which the SAC is designated, are susceptible to recreational activities including dog walking and associated nutrient enrichment which may alter the soil chemistry and increase the prevalence of competitive species, or by physical disturbances such as through trampling, vandalism, or fire. Due to the proximity of the site to Folkestone and other towns and villages in north east Folkestone & Hythe, parts of the SAC already receive relatively high levels of recreational access. Discussions with the White Cliffs Countryside Partnership (WCCP)[26] revealed recent damage by trampling and theft of the rare orchid species, which has resulted in the management team to consider the potential for additional protective measures to conserve the orchid populations. Nevertheless, recreation at the site is currently well managed and recreation is not identified as a current pressure or threat in Natural England's Site Improvement Plan.

4.21 The SAC is managed by the WCCP in partnership with Natural England, to maintain and restore the extent, distribution, structure, function and supporting processes of the chalk grassland and important orchid populations for which the SAC is designated. The condition summary of the Folkestone to Etchinghill Escarpment SSSI, which encompasses the SAC, indicates that 95% of the SSSI is currently in favourable or unfavourable but recovering condition.

4.22 The SAC management is implemented by the WCCP[27], which seeks to secure chalk downland habitat restoration and creation around Dover and Folkestone through re-introducing grazing management, the provision of new infrastructure and encouraging a partnership between landowners, managers and communities. Key components of the current management of the SAC include cattle-grazing, provision of fencing and gates, invasive species control and mechanical scrub management.

4.23 The HRA of the Adopted Core Strategy (2013) identified that north and east Folkestone, Lyminge, Hawkinge, and possibly east Hythe all lie within the core recreational catchment area of the SAC. In particular, housing in Hawkinge was identified as being likely to contribute to increased recreational visits to the SAC. The HRA concluded that a 'worst-case' increase in visitor numbers of 13% would be unlikely to be unmanageable given the current successful management being implemented and the condition of the SAC. However, the HRA of the Core Strategy identified that "*precautionary monitoring of recreational activity at the site is required such that any future need to introduce recreation management can be triggered"*. The HRA identified specific safeguards incorporated into the Core Strategy and concluded that, given the mechanisms already in place to manage and monitor the SAC, together with the provision of green infrastructure, the Adopted

[26] Pers comm (21,09,2016), Kirk Alexander – Project Manager, White Cliffs Countryside Partnership

[27] http://www.whitecliffscountryside.org.uk/index.php?id_sec=108& - Accessed 14/12/2018

Core Strategy would be unlikely to lead to significant effects on Folkestone to Etchinghill Escarpment SAC as a result of recreational pressure.

4.24 Natural England provided the following response[28] to the conclusions of the Shepway (Now Folkestone & Hythe) Core Strategy HRA in relation to the effects of recreation:

"*The assumptions made by the HRA regarding the four SACs outside of the Dungeness Complex appear reasonable however, some of the survey data is still not available (visitor survey at Folkestone to Etchinghill Escarpment SAC, due for completion Summer 2011) and exactly how some of these assumptions will play out remains a concern for Natural England. The Conclusion drawn for Folkestone to Etchinghill Escarpment and Dover to Kingsdown Cliffs SACs are of particular concern given their location to large housing proposals and also the attraction they pose to tourists in the area.*

*"We require a revisit of the predicted impacts when the final survey data is complete in order to gain a more robust understanding of the recreational pressure these sites are currently experiencing. Taking a precautionary approach to managing the risks regarding the assumptions made, Natural England require a monitoring programme to be put in place to identify whether these assumptions come to fruition and help inform how development should proceed during the lifetime of the plan. Any policies which direct growth to areas where impacts as a result of recreational pressures are possible but unclear due to ongoing development of an evidence base should state that 'The council will revisit the rate, scale, and/or distribution of development across the district to respond to the findings of new evidence'. This is an approach that has been taken in the wider south-east to address similar issues of uncertainty."*

4.25 In light of the above findings of the HRA of the Core Strategy, and Natural England's subsequent comments, it is clear that a responsive and adaptable approach to implementing the Folkestone & Hythe Proposed Submission Core Strategy Review will continue to be required to ensure the potential for adverse effects on integrity are minimised. In particular, this relates to a requirement for monitoring of recreation at the site. The HRA of the Adopted Core Strategy (2013) referred to a visitor strategy which was underway in 2011. However, liaison with the District Council, Natural England, and WCCP confirmed that the findings of such a survey had not been finalised, published or made available. This HRA therefore draws on the visitor study[29] completed for the Lydden and Temple Ewell Downs SAC, undertaken to inform the Whitfield Urban Extension. Lydden and Temple Ewell Downs SAC is also designated for the presence of chalk grassland and provides a similar visitor experience to the Folkestone to Etchinghill Downs SAC. Parameters can be drawn from this study to help inform this assessment. The visitor study presented the following key conclusions:

- The majority of visitors to the NNR / SAC are of local origin (50% living within 2km of the NNR / SAC) and make very regular visits, daily or at least several times per week.
- Most (75%) make the journey to the NNR / SAC by walking rather than driving, although car parking is very limited in close proximity to most of the formal access points.
- The majority of visitors (75%) live within 4km of the SAC.
- Dog walking is the primary reason for visiting the NNR / SAC, with almost as many dogs as people encountered during the course of the three surveys.
- The majority of dogs are allowed off their leads during all or part of their visit.
- During the summer months there is an increase in the number of people visiting because of the wildlife interest of the area, but dog walking remains the reason that most people visit the NNR / SAC.
- The majority of visitors walk between 1 – 3km within the NNR / SAC, with less than 10% of visits involving a walk of more than 3km. Visitor access is predominantly within the two easternmost parcels of the NNR /SAC.
- Routes followed within the NNR / SAC are not random, with visitors following identifiable paths or 'desire lines' for much of their routes.

[28] Natural England Letter Dated 30th September 2011. ref. 29304

[29] Aspect Ecology (Aug 2010), Lydden and Temple Ewell Downs SAC and NNR Visitors Study

- Proximity to the visitors' homes and the lack of alternative sites within walking distance were cited by approximately two thirds of visitors questioned as being the reasons for visiting this particular location rather than another.

4.26 The visitor study concluded that the provision of appropriately designed green infrastructure within the Whitfield Urban Extension area will provide effective mitigation for potential impacts on the SAC.

4.27 The above study found that 75% of visitors to the SAC lived within 4km. This is in keeping with the results of visitor studies undertaken for heathland SPAs in the south of England, such as the Thames Basin Heaths. A joint strategic partnership (JSP) was formed to address the potential effects of recreational pressures on this SPA. The JSP produced a Delivery Framework which set out the mitigation and avoidance measures required. The primary measure specified within the Delivery Framework is a requirement to contribute to strategic access management and monitoring (SAMM) and to provide or contribute to the provision of suitable alternative natural greenspace (SANG) for new residential development within zones of 5km or 7km (depending on scale of development). This example demonstrates the importance and effectiveness of providing new open space alongside new residential developments in mitigating recreational pressures on sensitive sites.

4.28 Another key finding of the Lydden and Temple Ewell Downs Visitor Survey, and similar to the studies undertaken to inform the Thames Basin Heaths Delivery Framework, is that people tend to follow desire lines and utilise regular routes. Whilst this can lead to a concentration of negative effects to specific locations, it may also infer that direct pressures to the wider site can be restricted and efforts to manage and restrict recreational activities can be more efficiently focused. This is likely to be particularly so for Folkestone to Etchinghill Escarpment SAC because the site is actively managed, including provision of gates and fencing, and the presence of on-site wardening. In addition the qualifying features of grassland and orchids are typically only susceptible to direct effects associated with recreation, for example, plant collecting, localised nutrient enrichment from dogs, and trampling and erosion associated with walking and illegal use of motorbikes. Furthermore, much of the SAC is located on steep escarpments which are not conducive to recreational activities and therefore likely to avoid associated adverse effects. In addition, the SAC qualifying features of orchids, are dependent upon symbiotic relationships with other plants and therefore would be affected by impacts to such plants. Nevertheless, those plant species upon which the orchids may depend would be restricted to those which contribute to the structure and function of the calcareous grassland for which the SAC is designated, and therefore the potential for adverse effects through inter-dependencies between species and habitats is fully considered in this assessment.

4.29 In light of the above contextual information, Policy SS6, which proposes a New Garden Settlement near Westenhanger, and Policy CSD9, which proposes strategic housing growth at Sellindge, are considered unlikely to contribute to tangible increases in recreational pressures because both are located over 5km from the SAC at their closest point. This conclusion is strengthened by the incorporation of high quality accessible natural greenspace within the developments which will be provided for by both of these policies. Indeed, policy SS6 specifies the inclusion of a new Country Park, whilst Policy CSD9 specifies the inclusion of new accessible open space and landscaping. These provisions, particularly the new Country Park, would be expected to provide an attractive alternative to visiting the SAC.

4.30 In addition to the above, the Council will be updating their Green Infrastructure Plan which will identify areas such as Biodiversity Opportunity Areas (BOAs) where enhancements to biodiversity can be targeted. This provides an additional opportunity to incorporate strategic provision of high quality alternative open space which provides an alternative to the use of the Folkestone to Etchinghill Escarpment SAC.

4.31 The approach used elsewhere and intended as part of the Policies SS6 and CSD9 has been developed specifically to address recreational pressures in-combination. Indeed it is the cumulative effect of visitors which has the potential to result in adverse effects on integrity. In reviewing other plans and projects, the potential for in-combination effects was limited to the Folkestone and Hythe Places and Policies Local Plan (PPLP) because other plans and projects were located beyond 7km from the SAC and are therefore unlikely to contribute significantly to increases in recreation at the site. The PPLP included the provision of a range of mitigating

policies relating to the provision of open space, management of access and provision of Green Infrastructure. The HRA of the PPLP recommended a commitment to completing a visitor study, undertaking monitoring, project level HRA, and a green infrastructure plan which seeks to protect the SAC. The conclusion of the HRA was that the Folkestone & Hythe PPLP would not result in adverse effects on the integrity of the Folkestone to Etchinghill Escarpment SAC, either alone or in-combination with other plans and projects as a result of recreation. As such, and in light of the assessment provided above, there is no opportunity for in-combination effects with the Proposed Submission Folkestone & Hythe Core Strategy Review.

4.32 In terms of avoidance and mitigation, Policy SS7 (New Garden Settlement Place Shaping Principles) commits to the provision of:

*"Publicly accessible, well-managed and high quality open spaces, which are linked to the open countryside and adjoining settlements. This shall be informed by an access strategy that seeks to protect and enhance existing public rights of way, and create new public rights of way. The strategy shall balance demands for public access with ecological and landscape protection, taking into account the impacts of increased access on the Kent Downs AONB and Folkestone to Etchinghill Escarpment Special Area of Conservation and other protected areas, which might necessitate the need for mitigation to be secured".*

4.33 In addition, Policy CSD3 (rural and tourism development) states that:

*"as at Dungeness, the council has long supported work to sustainably manage the Downs and will continue to do so through working with partners including the White Cliffs Countryside Partnership, Natural England and the Kent Downs AONB Unit, to explore new opportunities to monitor impacts and manage the Folkestone–Etchinghill international habitat".*

4.34 Despite the distance between the policy allocations and the SAC, this provides sufficient certainty that the minor contributions these policies are likely to add to increases in recreational pressure at the Folkestone to Etchinghill Escarpment SAC are adequately mitigated.

**4.35** In light of the above information, the Proposed Submission Folkestone & Hythe Core Strategy Review **is not predicted to result in adverse effects on the Folkestone to Etchinghill Escarpment SAC, either alone or in-combination with other plans and projects as a result of recreation.**

## Dungeness SAC and Dungeness, Romney Marsh and Rye Bay SPA/Ramsar

### Recreation

4.36 Increased recreational pressures associated with population growth in Folkestone & Hythe and the South East represent a notable in-combination threat to the Dungeness complex, including the SAC, SPA and Ramsar. Nevertheless, this in-combination threat was recognised by the HRA of the adopted Core Strategy (2013) and the HRA of the PPLP. As a result, a proactive approach to managing recreational pressures is currently underway in the form of a Sustainable Access and Recreation Management Strategy (SARMS)[30] which sets out how the site will be managed and monitored over the plan period. Both of the above HRAs concluded that, providing the necessary avoidance and mitigation measures were implemented, adverse effects on the integrity of the Dungeness complex would be avoided. These conclusions were supported by Natural England.

4.37 The SARMS is currently underway and comprises the following key stages:

- Stage 1 (Visitor Surveys) has been completed. It comprises a comprehensive visitor survey and provides initial key recommendations.
- Stage 2 (The Strategy) is currently in progress and will develop a strategy which recognises existing key pressures and threats, recommends measures required to address current and

[30] http://www.rother.gov.uk/article/13264/Draft---Sustainable-Access-and-Recreation-Management-Strategy-SARMS - Accessed 14/12/2018

future pressures, and identifies and sets out future monitoring requirements to ensure that there is a robust feedback loop.

4.38 Onsite visitor surveys undertaken as part of Stage 1 revealed that visitors within 0 to 5km of the SAC comprised a very small proportion of visitors (4%) whilst a much greater proportion (67%) were found to travel 30km or more. The screening stage therefore identified the potential for development policies SS6 and CSD9 to contribute to increases in recreational pressure at the Dungeness Complex (SAC, SPA and Ramsar).

4.39 The initial conclusions presented in the Stage 1 report indicates that users of the Dungeness complex predominantly visit the site irregularly and are more likely to travel from areas further away rather than from the local area. This is reflective of the specific and unique recreational opportunities that the Dungeness Complex offers and suggests that any increases in local housing would be expected to result in relatively low levels of subsequent increase in recreational pressure on the Dungeness complex. In light of this, Policies SS6 and CSD9 are unlikely to contribute to regular visitors to the site, but given the unique attraction of Dungeness, measures such as SANG are unlikely to deter less regular visits to the site.

4.40 The overall aim of the SARMS is to provide a joined up mechanism for avoiding significant impacts on the Dungeness Complex, either alone or in-combination as a result of the combined pressures across the Folkestone & Hythe and Rother Districts and from contributory pressures from further afield. Crucially, the SARMS will set out requirements for infrastructure improvements and will include monitoring and feedback to ensure that significant effects are identified at the earliest opportunity.

4.41 The SARMS is yet to be finalised and therefore the extent and detail of the strategy is yet to be agreed. Nevertheless, it is expected that the strategy will only be adopted when the joint Councils are satisfied of its effectiveness, following consultation with Natural England and likely input from the RSPB. Furthermore, the Strategy represents a key recommendation stemming from detailed consultation as part of the joint HRA of the Rother and Folkestone & Hythe Core Strategies in relation to the Dungeness Complex. As a result, there is a high level of confidence that the SARMS will provide an effective platform for implementing avoidance and/or remedial management measures prior to the realisation of adverse effects on the integrity of qualifying features and this approach provides a key mitigation measure in avoiding adverse effects on the Dungeness complex.

4.42 Given that the development through Policies SS6 and CSD9 will be over 10km distance from the Dungeness complex, and the minor and irregular contribution to recreational pressures that the developments would be expected to add, the strategic approach to managing and avoiding recreational pressure being adopted through the SARMS is considered sufficiently robust to provide sufficient certainty that the site allocations can be implemented without adverse effects on the integrity of the Dungeness complex.

4.43 Importantly, however, to enable a finding of no adverse effect on integrity, the Council will need to recognise the findings of the SARMS (when finalised) and adopt a flexible approach in delivering the Folkestone & Hythe Proposed Submission Core Strategy Review by ensuring that any additional recommendations and mitigation measures are provided in line with the conclusions made. Importantly, the SARMS provides a baseline against which to measure the status of recreational pressures going forward. It is likely that future updated monitoring will be required to ensure that any significant effects in relation to recreational pressures are recognised and avoided through refinements in the strategy before they have the potential to result in adverse effects on the qualifying features of the Dungeness complex (SAC, SPA and Ramsar).

**4.44 Providing the Council continues to adopt the flexible, strategic and pro-active approach described above, and successfully implements the recommendations of the SARMS, the Folkestone & Hythe Proposed Submission Core Strategy Review will avoid adverse effects on the integrity of Dungeness European Sites as a result of increases in recreational pressure, either alone or in-combination with other plans and projects.**

# 5 Conclusion

5.1 Most policies and potential sources of impact were ruled out at the screening stage. However, potential likely significant effects could not be ruled out for Folkestone to Etchinghill Escarpment SAC as a result of recreational pressures and changes in air quality, and for the Dungeness SAC, SPA and Ramsar sites as a result of recreational pressures.

5.2 The Folkestone to Etchinghill Escarpment SAC is located within 200m of the A20. The grassland habitats for which this SAC has been designated are susceptible to atmospheric deposition of nitrogen associated with vehicular emissions. The Site Improvement Plan[31] specifies that current levels of nitrogen deposition exceed the critical load for chalk grassland habitat at the site, and recognises that air pollution as a result of nitrogen deposition is an existing pressure at the site. As a result, a detailed air quality assessment (See **Appendix 3**) was completed using in-combination forecast increases in traffic.

5.3 The air quality modelling concluded that no likely significant effect is expected alone or in combination despite elevated NOx concentrations. Nevertheless, the conclusions presented within the air quality assessment are based on forecast reductions in NOx and deposition rates over the plan period and therefore it was recommended that the Folkestone & Hythe Proposed Submission Core Strategy Review should include a commitment to monitoring roadside NOx at regular intervals along the A20 over the plan period in order to track the projected improvements in air quality. This would also enable the introduction of any specific local measures if an improving trend is not recorded in practice. Reporting on this metric could be tied to the planned cycle of reviews of the Plan.

5.4 The air quality assessment was completed prior to the recent 'People over Wind' CJEU ruling, and therefore relied, at least to some extent on the above safeguard in concluding that there would not be a Likely Significant Effect. As a result, the findings of the air quality assessment were considered as part of the appropriate assessment stage. The screening stage test of 'likely significance' has a lower threshold than that of the Appropriate Assessment stage which determines whether a plan or project would result in 'adverse effects on integrity'. As a result, the conclusion of no likely significant effect reported in the air quality assessment, together with the commitment to roadside air quality monitoring specified within the plan, is sufficient to conclude that **the Folkestone & Hythe Proposed Submission Core Strategy Review will not adversely affect the integrity of the Folkestone to Etchinghill Escarpment SAC either alone or in-combination as a result of air pollution**.

5.5 Policy SS6, which proposes a New Garden Settlement near Westenhanger, and Policy CSD9, which proposes strategic housing growth at Sellindge, were considered unlikely to contribute to tangible increases in recreational pressures at the Folkestone to Etchinghill Escarpment SAC because both are located over 5km away. This conclusion was strengthened by the incorporation of high quality accessible natural greenspace within the developments which will be provided for by both of these policies, including the provision of a new Country Park and accessible open space and landscaping, updating of the Green Infrastructure Plan and policy commitments to "*balance demands for public access with ecological and landscape protection, taking into account the impacts of increased access on the Kent Downs AONB and Folkestone to Etchinghill Escarpment Special Area of Conservation and other protected areas, which might necessitate the need for mitigation to be secured*". As a result the appropriate assessment concluded that the Proposed Submission Folkestone & Hythe Core Strategy Review is not predicted to result in adverse effects on the Folkestone to Etchinghill Escarpment SAC, either alone or in-combination with other plans and projects as a result of recreation.

[31] http://publications.naturalengland.org.uk/file/5225310515625984- Accessed 14/12/2018

5.6 With regards to recreational pressures on Dungeness, the Appropriate Assessment concluded that the strategic approach adopted by the Council in managing and avoiding recreational pressure through the preparation and implementation of the SARMS provides a mechanism for ensuring that adverse effects can be avoided by adopting an iterative approach to future management of Dungeness. This approach fulfils the recommendations made by Natural England in response to the Folkestone & Hythe Core Strategy HRA, and therefore the Appropriate Assessment concluded that no adverse effects on the Dungeness SAC/SPA/Ramsar are predicted as a result of recreational pressure. However, it should be recognised that this conclusion of the Appropriate Assessment is reliant on Folkestone & Hythe District Council's successful implementation of the SARMS, and ensuring that there is sufficient flexibility to implement potential refinements and remedial actions in the future in line with updates to the SARMS.

**5.7 In conclusion, the Appropriate Assessment concluded that, subject to implementation of safeguards, the Folkestone & Hythe Proposed Submission Core Strategy Review will not result in adverse effects on Folkestone to Etchinghill Escarpment SAC, Dungeness SAC, SPA, or Ramsar, or other European sites, either alone or in-combination with other plans and projects**

# Appendix 1 – Attributes of European Sites

| European Site | Area (ha) | Location | Qualifying Features | Key vulnerabilities and environmental conditions to support site integrity |
|---|---|---|---|---|
| Dungeness, Romney Marsh and Rye Bay Ramsar Site | 6377.63 | A large site partially situated within the District and within 10km of the District boundary. | Criterion 2a<br><br>Supports a number of rare species of plants:<br>• Least lettuce (*Lactuca saligna*);<br>• Rootless duckweed (Wolffia arrhiza);<br>• Soft hornwort (*Ceratophyllum submersum*);<br>• Brackish water crowfoot (*Ranunculus baudotii*);<br>• Hair-like pondweed (*Potamogeton trichoides*);<br>• Divided sedge (*Carex divisa*);<br>• Marsh mallow (*Althaae officinalis*);<br>• sea-heath (*Frankenia laevis*)<br><br>The variety of habitats also supports a diverse invertebrate assemblage. More than fifteen wetland Red Data Book (RDB) species have been recorded from the site, including:<br>• Ground beetle *Omophron limbatum*,<br>• Aquatic weevil *Bagous cylindrus*,<br>• Two species of hoverfly,<br>• Three species of aquatic beetles and the<br>• Medicinal leech (*Hirudo medicinalis*)<br><br>Criterion 3c<br><br>Supports, in winter, an internationally important population of Bewick's swan. In the five winter period 1992/93-1996/97 an average peak count of 179 birds was recorded, representing 1.1% of the North-West European wintering population. | No threats recorded. See Dungeness, Romney Marsh and Rye Bay SPA and Dungeness SAC for threats likely to affect this Ramsar site. |

| European Site | Area (ha) | Location | Qualifying Features | Key vulnerabilities and environmental conditions to support site integrity |
|---|---|---|---|---|
| | | | The site is also notable for nationally important wintering populations of other waterfowl populations.<br><br>The site also supports a nationally important population of whimbrel (Numenius phaeopus) during spring and autumn passage periods. An average peak count of 275 birds was recorded during the five year period 1987-1991, representing about 5.5% of the British passage population. | |
| Dungeness, Romney Marsh and Rye Bay SPA | 4010.29 | A fragmented site partially situated in the south of the District and within 10km of the District boundary. | A176(B) *Larus melanocephalus*: Mediterranean gull<br><br>A193(B) *Sterna hirundo*: Common tern<br><br>A195(B) *Sterna albifrons*: Little tern<br><br>A037(NB) *Cygnus columbianus bewickii*: Bewick swan<br><br>A056(NB) *Anas clypeata*: Northern shoveler | Threats identified in Site Improvement Plan include physical loss/damage, recreational disturbance and water quality and quantity.<br><br>• Disturbance to qualifying bird species, particularly during the winter from illicit vehicles is a threat.<br>• Management of non-native species, such as Crassula and Valerian to prevent loss of nesting and foraging habitat.<br>• Lack of scrub control on the natural pit wetlands on the shingle ridges (located on the RSPB reserve) would result in loss of fen species due to overshadowing of the wetlands<br>• Disturbance during the bird breeding season from public accessing the territories of sensitive breeding bird species could impact on breeding success. Recreational activities include dog walking, sand yachting, kite boarding, wind surfing. |

| European Site | Area (ha) | Location | Qualifying Features | Key vulnerabilities and environmental conditions to support site integrity |
|---|---|---|---|---|
| | | | | • Rising sea levels and coastal defences in the area may lead to loss of habitat for qualifying bird species. |
| Wye and Crundale Downs SAC | 112.24 | A small fragmented site 1.2km north-west of the District. | H6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) | Threats identified in Site Improvement Plan include air pollution.<br>• Scrub encroachment on the steep slopes of the Devil's Kneading Trough and other areas of the NNR is only partially controlled by grazing, which is leading to a reduction in the extent of grassland feature. |
| Lydden and Temple Ewell Downs SAC | 61.7 | A small site situated 2km to the north-east of the District. | H6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) | Threats identified in Site Improvement Plan include air pollution and recreational disturbance.<br>• Public use of the site, primarily dog walking, has increased in the last 10 - 15 years causing trampling to the grassland and potential nutrient increases in the soil, leading to changes in the species composition. |
| Folkestone to Etchinghill Escarpment SAC | 181.94 | A linear site situated in the north of the District. | H6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) | Threats identified in Site Improvement Plan include air pollution.<br>• Extensive scrub development on Creteway Down is reducing the extent of the qualifying grassland feature. |
| Dungeness SAC | 3223.56 | The site is situated to | S1166 *Triturus cristatus*: Great crested newt | Threats identified in Site Improvement Plan include |

| European Site | Area (ha) | Location | Qualifying Features | Key vulnerabilities and environmental conditions to support site integrity |
|---|---|---|---|---|
| | | the south of the District. | H1210 Annual vegetation of drift lines<br>H1220 Perennial vegetation of stony banks | physical loss/damage, recreational disturbance, air pollution, and water quality and quantity.<br>Vehicles: illicit<br>• Great crested newt breeding ponds require regular scrub management on the margins to control the negative effects of overshadowing<br>• There is public access throughout the SAC, which allows direct access and disturbance to the vegetated shingle.<br>• Air pollution threatens lichen associated with perennial vegetation of stony banks. Nitrogen exceeds critical load of the site.<br>• Changing water levels has the potential to impact great crested newt breeding habitat. |
| Blean Complex SAC | 520.62 | A medium sized site situated 10km from the District boundary. | H9160 Sub-Atlantic and medio-European oak or oak-hornbeam forests of the *Carpinion betuli* | Threats identified in Site Improvement Plan include air pollution.<br>• Although, sensitive qualifying features are recorded to be in favourable condition, nitrogen levels are exceeding the critical load. |
| Dover to Kingsdown Cliffs SAC | 183.85 | A linear site situated 9.5km away from the District boundary. | H1230 Vegetated sea cliffs of the Atlantic and Baltic coasts<br>H6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) | Threats identified in Site Improvement Plan include air pollution.<br>• Air pollution is a risk of increases in tall grasses, a decline in species diversity, increased mineralization, N leaching; surface acidification. |

| European Site | Area (ha) | Location | Qualifying Features | Key vulnerabilities and environmental conditions to support site integrity |
|---|---|---|---|---|
| | | | | • Small areas of the site in private ownership are insufficiently managed. Scrub management needs to be undertaken to retain chalk grassland habitat. |
| Parkgate Down SAC | 6.94 | A small site situated in the North of the District. | H6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) | Threats identified in Site Improvement Plan include air pollution.<br>• Although, sensitive qualifying features are recorded to be in favourable condition, nitrogen levels are exceeding the critical load. |

# Appendix 2 - HRA Screening of the Folkestone & Hythe Proposed Submission Core Strategy Review

**To help navigate through the matrix, conclusions are also colour coded green where significant effects are likely, orange where likely significant effects are uncertain, and red, where likely significant effects will occur.**

| Policy Ref. | Significant changes from 2013 Core Strategy | Potential Likely effect | European site(s) potentially affected | Likely significant effect on European site |
|---|---|---|---|---|
| Policy SS1: District Spatial Strategy | No significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA | n/a | n/a | n/a |
| Policy SS2: Housing and the Economy Growth Strategy | Changes relate to new housing targets specifically in relation to Policies SS6-9 and CSD9. And therefore these changes are assessed under the specific policies below.<br>No other significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA | n/a | n/a | n/a |
| Policy SS3: Place Shaping and Sustainable Settlements Strategy | No significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA | n/a | n/a | n/a |
| Policy SS4: Priority Centres of Activity Strategy Revisions | No changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA | n/a | n/a | n/a |

| Policy Ref. | Significant changes from 2013 Core Strategy | Potential Likely effect | European site(s) potentially affected | Likely significant effect on European site |
|---|---|---|---|---|
| Policy SS5: District Infrastructure Planning | No significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA | n/a | n/a | n/a |
| Policy SS6: New Garden Settlement – Development Requirements | New policy for development of a new garden settlement in the North Downs Area. | Loss of offsite habitat<br>Air pollution<br>Changes in water quality and quantity<br>Recreational impacts | Dungeness complex (SAC, SPA, Ramsar) – all effects<br>Blean Complex SAC – (air pollution & recreation only)<br>Dover to Kingsdown Cliffs SAC (air pollution & recreation only)<br>Folkestone to Etchinghill Escarpment SAC (air pollution & recreation only)<br>Lydden and Temple Ewell Downs SAC (air pollution & recreation only)<br>Parkgate Down SAC (recreation only)<br>Wye and Crundale Downs SAC (recreation only) | No LSE predicted due to distance from European sites and mitigation. |
| Policy SS7: New Garden Settlement – Place Shaping Principles | This policy sets out design principles and will not directly lead to development which could result in LSE's. | n/a | n/a | n/a |

| Policy Ref. | Significant changes from 2013 Core Strategy | Potential Likely effect | European site(s) potentially affected | Likely significant effect on European site |
|---|---|---|---|---|
| Policy SS8: New Garden Settlement - Sustainability and Healthy New Town Principles | This policy sets out design principles and will not directly lead to development which could result in LSE's. | n/a | n/a | n/a |
| Policy SS9: New Garden Settlement – Infrastructure, Delivery and Management | This policy sets out deliver and management principles and will not directly lead to development which could result in LSE's. | n/a | n/a | n/a |
| Policy SS10: Spatial Strategy for Folkestone Seafront | No changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA | n/a | n/a | n/a |
| SS11: Spatial Strategy for Shorncliffe Garrison, Folkestone | No changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA | n/a | n/a | n/a |
| Policy CSD1: Balanced Neighbourhoods | No significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA | n/a | n/a | n/a |

| Policy Ref. | Significant changes from 2013 Core Strategy | Potential Likely effect | European site(s) potentially affected | Likely significant effect on European site |
|---|---|---|---|---|
| Policy CSD2: District Residential Needs | No significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA | n/a | n/a | n/a |
| Policy CSD3: Rural and Tourism Development | No changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA | n/a | n/a | n/a |
| Policy CSD4: Green Infrastructure of Natural Networks, Open Spaces and Recreation | No significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA | n/a | n/a | n/a |
| Policy CSD5: Water and Coastal Environment Management | No significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA | n/a | n/a | n/a |
| Policy CSD6: Central Folkestone Strategy | No significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA | n/a | n/a | n/a |

| Policy Ref. | Significant changes from 2013 Core Strategy | Potential Likely effect | European site(s) potentially affected | Likely significant effect on European site |
|---|---|---|---|---|
| Policy CSD7: Hythe Strategy | No changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA | n/a | n/a | n/a |
| Policy CSD8: New Romney Strategy | No significant changes from 2013 Core Strategy and therefore previous HRA conclusions of no adverse effect on integrity remain valid. Not considered further in this HRA | n/a | n/a | n/a |
| Policy CSD9: Sellindge Strategy | Allocation for housing and mixed used development changed from 250 to 600 dwellings. | Loss of offsite habitat<br>Air pollution<br>Changes in water quality and quantity<br>Recreational impacts | Dungeness complex (SAC, SPA, Ramsar) – all effects<br>Blean Complex SAC – (air pollution & recreation only)<br>Dover to Kingsdown Cliffs SAC (air pollution & recreation only)<br>Folkestone to Etchinghill Escarpment SAC (air pollution & recreation only)<br>Lydden and Temple Ewell Downs SAC (air pollution & recreation only)<br>Parkgate Down SAC (recreation only)<br>Wye and Crundale Downs SAC (recreation only) | No LSE predicted due to distance from European sites and mitigation. |

# Appendix 3 – Air Quality Assessment

# Air Quality Assessment of European Sites

Report to inform HRA of Shepway Local Plan

Shepway District Council

23 November 2017

## Quality information

| Prepared by | Checked by | Verified by | Approved by |
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## Revision History

| Revision | Revision date | Details | Authorized | Name | Position |
|---|---|---|---|---|---|
| 0 | 23/11/17 | Final | JR | James Riley | Associate |
| | | | | | |
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# Figures

# 1. Introduction

1.1 In order to assist with the Habitat Regulations Assessment of the Shepway Places & Policies Local Plan (PPLP) AECOM was commissioned to undertake traffic modelling and subsequent air quality modelling and ecological interpretation of the effects of the PPLP on internationally important wildlife sites in Shepway and beyond. AECOM were also asked to undertake a similar exercise for the Core Strategy Review (CSR) to 2037 for two different growth quanta: 6,500 dwellings and 8,000 dwellings.

1.2 The air quality effects of the PPLP on internationally important wildlife sites are associated with the extent to which housing and employment growth in the PPLP will use roads within 200m of any such sites for journeys to work as this is the main cause of daily traffic movements from housing/employment. The sites and links chosen for analysis in this study were therefore based on the likelihood that the links would experience anything other than a nominal increase in daily journeys to work arising from Shepway District. The modelled links/designated sites were:

- A2 (Jubilee Way) at Dover to Kingsdown Cliffs SAC;
- Jury's Gap Road at Dungeness SAC;
- A259 (New Winchelsea Road), A259 (New Road/Guldeford Road), A268 (Rye Road) and Jury's Gap Road at Dungeness, Romney Marsh & Rye Bay SPA and Ramsar site;
- A2 and Canterbury Road at Lydden to Temple Ewell Downs SAC; and
- Crete Road West, A20, A259 (Churchill Avenue and A260 (Canterbury Road) at Folkestone to Etchinghill Escarpment SAC.

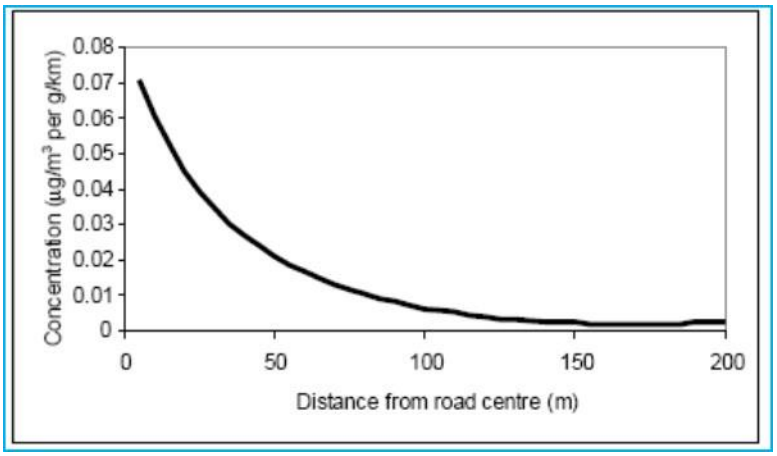
1.3 In addition, the Blean Complex SAC was modelled for completeness although it was considered unlikely that significant journey to work traffic arising from Shepway would pass this SAC given the distance of the SAC from the district.

1.4 All modelling took account not only of forecast traffic growth arising from the PPLP (or CSR) but also forecast growth arising from all other sources (e.g. surrounding authorities) over the same time period. Therefore the modelling for each link is 'in combination' with other plans and projects. The CSR modelling essentially extended the time period for the PPLP modelling to 2037 and increased the modelled quantum of housing delivery to either 6,500 dwellings or 8,000 dwellings.

# 2. Methodology

2.1 Traffic modelling and air quality impact assessment was undertaken in line with the standard Design Manual for Roads and Bridges (DMRB) methodology[1]. As a general rule vehicle exhaust emissions are considered to only have a local effect within a narrow band along the roadside; typically within 200m of the centreline of the road. Beyond 200m emissions should generally have dispersed sufficiently that atmospheric concentrations are essentially background levels. The rate of decline is steeply curved rather than linear. In other words concentrations will decline rapidly as one begins to move away from the roadside, slackening to a more gradual decline over the rest of the distance up to 200m.

**Figure 1: Traffic contribution to concentrations of pollutants at different distances from a road**




2.2 There are two measures of particular relevance regarding air quality impacts from vehicle exhausts. The first is the concentration of oxides of nitrogen (known as NOx) in the atmosphere. The main importance is as a source of nitrogen, which is then deposited on adjacent habitats (including directly onto the plants themselves) either directly (known as dry deposition) or washed out in rainfall (known as wet deposition). The deposited nitrogen can then have a range of effects, primarily growth stimulation or inhibition[2], but also biochemical and physiological effects such as changes to chlorophyll content. NOx may also have some effects which are un-related to its role in total nitrogen intake (such as the acidity of the gas potentially affecting lipid biosynthesis) but the evidence for these effects is limited and they do not appear to occur until high annual concentrations of NOx are reached. The guideline atmospheric concentration of NOx advocated by Government for the protection of vegetation is 30 micrograms per cubic metre ($\mu gm^{-3}$), known as the Critical Level. This is driven by the role of NOx in nitrogen deposition and in particular in growth stimulation and inhibition. If the total NOx concentration in a given area is below the critical level, it is unlikely that nitrogen deposition will be an issue unless there are other sources of nitrogen (e.g. ammonia). If it is above the critical level then local nitrogen deposition from NOx could be an issue and should be investigated.

2.3 The second important metric is a direct determination of the rate of the resulting nitrogen deposition. Calculating nitrogen deposition rates rather than relying purely on scrutiny of NOx concentrations has the advantage of being habitat specific (the critical level for NOx is entirely generic; in reality different habitats have varying tolerance to nitrogen) and, for many habitats, of being directly relatable to measurable effects on the ground through scrutiny of published dose-response relationships that do not exist for NOx. Unlike NOx, the nitrogen deposition rate below which current evidence suggests that effects should not arise is different for each habitat. The rate (known as the Critical Load) is provided on the UK Air Pollution Information System website (www.apis.ac.uk) and is expressed as a quantity (kilograms) of nitrogen over a given

[1] Design Manual for Roads and Bridges, Volume 11, Section 3 Part 1 (HA207/07) and subsequent Interim Advice Notes
[2] The addition of nitrogen is a form of fertilization, which can have a negative effect on habitats over time by encouraging more competitive plant species that can force out the less competitive species that are more characteristic of such habitats.

area (hectare) per year ($kgNha^{-1}yr^{-1}$). More recently, there has also been research compiled[3] which investigates nitrogen dose-response relationships in a range of habitats.

2.4 For completeness, rates of acid deposition were also calculated. Acid deposition derives from both sulphur and nitrogen. It is expressed in terms of kiloequivalents (keq) per hectare per year. The thresholds against which acid deposition is assessed are referred to as the Critical Load Function. The principle is similar to that for a nitrogen deposition Critical Load but it is calculated very differently.

2.5 In April 2017 a High Court judgment[4] (colloquially known as the Ashdown Forest judgment) partially quashed the Lewes District and South Downs National Park Joint Core Strategy. This was on the basis that the HRA supporting the Joint Core Strategy only considered its own contribution to changes in traffic flows (and specifically whether such flows would exceed 1000 Annual Average Daily Traffic) in determining whether there would be a likely significant air quality effect on Ashdown Forest SPA. The judge ruled that the HRA had thus explicitly failed to undertake any form of assessment 'in combination' with growth in other authorities that would affect the same road links and that this was in contravention of the Conservation of Habitats and Species Regulations 2010.

2.6 The air quality modelling undertaken for this exercise avoided the problems that led to the successful Ashdown Forest Judicial Review for two reasons:

- Even when the change in flows due to the PPLP was forecast to be below 1,000 AADT air quality modelling was still undertaken; and
- The air quality modelling is in accordance with standard methodology in Volume 11 of the Design Manual for Roads and Bridges. This method inherently involves modelling growth in surrounding authorities (such as Dover and Rother) to generate a forecast of future flows known as the 'Do Minimum' scenario. PPLP growth was then factored into the Do Minimum scenario to create the 'Do Something' scenario. Therefore, the Do Something scenario reported in the appendices represents the forecast total flows expected by 2031 or 2037 based on the traffic modelling available, irrespective of source.

2.7 The Do Minimum scenario draws upon a government database tool called the National Trip End Model Presentation Programme (TEMPro version 7.2). This contains data for each local authority district in England regarding expected changes in population, households, workforce and employment (in addition to data such as car ownership). The traffic modellers used this to forecast the change in traffic flows that would occur due to growth other than the PPLP over the period to 2031 and growth other than the CSR to 2037 (e.g. that arising from Dover, Rother and further afield). The result was the Do Minimum scenario. Growth in the PPLP (or CSR) was then modelled by manually distributing trips on the network (taking account of census journey to work routes) and the results were factored into the Do Minimum scenario to create the Do Something scenario. Comparing the Do Something scenario with the Base case therefore enables one to see the effect of all forecast traffic growth on the roads in question 'in combination', within the context of forecast improvement in vehicle emission factors and background nitrogen deposition rates over the same timescale.

2.8 Using the generated traffic scenarios, and information on average vehicle speeds and percentage heavy duty vehicles (both of which influence the emissions profile), air quality specialists calculated expected NOx concentrations, nitrogen deposition rates and acid deposition rates for those road links where traffic flows were forecast to increase. For some road sections multiple transects were modelled to account for the influence of the predominant wind direction.

2.9 The predictions of nitrogen deposition and annual mean $NO_X$ concentrations are based on the assessment methodology presented in Annex F of the Design Manual for Roads and Bridges

[3] Compiled and analysed in Caporn, S., Field, C., Payne, R., Dise, N., Britton, A., Emmett, B., Jones, L., Phoenix, G., S Power, S., Sheppard, L. & Stevens, C. 2016. Assessing the effects of small increments of atmospheric nitrogen deposition (above the critical load) on semi-natural habitats of conservation importance. Natural England Commissioned Reports, Number 210.

[4] http://www.bailii.org/ew/cases/EWHC/Admin/2017/351.html [accessed 26/10/2017]

(DMRB), Volume 11, Section 3, Part 1 (HA207/07)[5] for the assessment of impacts on sensitive designated ecosystems due to highways works. Background data for the predictions for 2031 (or 2037) were sourced from the Department of Environment, Food and Rural Affairs (Defra) background maps. Background nitrogen deposition rates were sourced from the Air Pollution Information System (APIS) website[6].

2.10 Given that the assessment years (2031/2037) are a considerable distance into the future, it is important for the air quality calculations to take account of improvements in background air quality and vehicle emissions that are expected nationally over the plan period. Making an allowance for a realistic improvement in background concentrations and deposition rates is in line with the Institute of Air Quality Management (IAQM) position[7] as well as that of central government[8]. Although in recent years improvements have not kept pace with predictions, the general long-term trend for NOx has been one of improvement (particularly since 1990) despite an increase in vehicles on the roads[9]. Guidance note HA207/07 advises that background rates are reduced by 2% per year to allow for an improvement in background air quality over the project/plan period as a result of ongoing (inter)national initiatives to improve emissions and the expected improvement in vehicle emissions over that period.

2.11 However, due to the uncertainty in the rate with which projected future vehicle emission rates and background pollution concentrations are improving, the assumption was made in this modelling that conditions in 2023 (the approximate midpoint between the base year and the years of assessment) are representative of conditions in both 2031 and 2037 (the years of assessment). This approach is widely used within the professional air quality community and accounts for known recent improvements in vehicle technologies (new standard Euro 6/VI vehicles), whilst excluding the more distant and therefore more uncertain projections on the future evolution of the vehicle fleet. AECOMs professional judgment is that such an approach provides a more realistic impression of conditions in 2031 and 2037 than assuming no improvement in emission rates or background concentrations, but still remains conservative and defensible.

2.12 Annual mean concentrations of NOx were calculated at two 200m transects modelled back from all links. Predictions were made using the latest version of ADMS-Roads using emission rates derived from the Defra Emission Factor Toolkit (version 6.0.2) which utilises traffic data in the form of 24-hour Annual Average Daily Traffic (AADT), detailed vehicle fleet composition and average speed. The end of the PPLP (2031) and CSR (2037) periods were selected for the future scenarios as this is the point at which the total emissions due to plan traffic will be at their greatest.

2.13 Once the air quality calculations were complete, they were subject to ecological interpretation. Traditionally, the implications of the 'in combination' scenario would only have been discussed if the forecast change in flows due to the PPLP exceeded either 1,000 AADT or 1% of the critical level (for NOx) or load (for nitrogen and acid deposition). In the light of the Ashdown Forest case AECOM began the examination of the air quality modelling with a discussion of the 'in combination' scenario.

2.14 This considered factors such as whether the critical level or critical load is currently exceeded or is forecast to be exceeded 'in combination' and whether improvements in background rates and emission factors are expected to offset the 'in combination' increase in pollution to a large extent. The ecological interpretation of any deterioration (or retardation of improvement) due to the PPLP considers the presence of SAC/SPA features within the affected area (or the potential for them to be present in the future), the extent of the affected area as a proportion of the entire European site and the degree of deterioration/retardation forecast, within the context of

[5] Design Manual for Roads and Bridges, HA207/07, Highways Agency
[6] Air Pollution Information System (APIS) www.apis.ac.uk
[7] http://www.iaqm.co.uk/text/position_statements/vehicle_NOx_emission_factors.pdf
[8] For example, The UK Government's recent national Air Quality Plan also shows expected improvements over the relevant time period (up to 2031) https://www.gov.uk/government/publications/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2017
[9] Emissions of nitrogen oxides fell by 69% between 1970 and 2015. Source: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/579200/Emissions_airpollutants_statisticalrelease_2016_final.pdf [accessed 08/06/17]

experimentally derived nitrogen dose-response relationships that have now been established for a variety of habitats. This includes consideration of existing background nitrogen deposition rates as it has been established that many habitats become less sensitive to additional nitrogen inputs the higher the background deposition rate (and thus the more nitrogen is already present in excess).

2.15 The following Scenarios were modelled for each link and each designated site:

- Base Case
- End of PPLP period (2031) Do Minimum (i.e. all expected growth without the PPLP)
- End of PPLP period (2031) Do Something (i.e. all expected growth including the PPLP)
- End of CSR period (2037) Do Minimum
- End of Core Strategy Review period (2037) Do Something (6,500 residential units)
- End of Core Strategy Review period (2037) Do Something (8,000 residential units)

2.16 In the results sections that follow, the 2031 situation is discussed first, followed by the 2037 situation. In each chapter the European sites are discussed in turn.

2.17 Case law has established that ‘appropriate assessment’ is not a technical term. In other words, there are no particular technical analyses, or level of technical analysis, that are classified by law as belonging to appropriate assessment rather than determination of likely significant effects. Therefore it is legal to undertake the fullest level of technical assessment possible and still term the analysis an investigation into likely significant effects. Drawing the line between the studies that belong in the 'likely significant effects' section of analysis and those that belong in the 'appropriate assessment' of the analysis is therefore a judgment to be made by each competent authority. The ultimate legal requirement is that, whether the analysis is termed an investigation into likely significant effects or an appropriate assessment, the analysis supports the conclusion. In this report AECOM has chosen to discuss the entire analysis using the term ‘likely significant effect’. However, we can confirm that the technical analyses undertaken would also support an ‘appropriate assessment’ if the competent authority chose to discuss the assessment in terms of ‘adverse effects on integrity’.

# 3. Likely Significant Effects of PPLP growth (2031)

## Blean Complex SAC

### Oxides of Nitrogen

3.1 The modelled transect is shown on Map CWB1. Baseline NOx concentrations at the closest part of this site to the modelled road (the A290 Blean Hill) are well below the critical level (30 $\mu gm^{-3}$) according to Defra data, at 11 $\mu gm^{-3}$. This is probably due partly to the distance of the SAC from the road (60m at the closest point) and partly to the rural location of the SAC. In a rural location ammonia from agriculture can be expected to be the biggest local source of nitrogen, rather than combustion (NOx).

3.2 Comparison of the 'Do Minimum' scenario with the 2017 Base shows the forecast change in NOx concentrations to 2031, without taking account of the PPLP. Due to the forecast improvements in vehicle emission factors and the resulting reduction in background NOx concentrations and nitrogen deposition rates to 2031, NOx concentrations throughout the modelled transect are forecast to experience a net reduction of c. 2 $\mu gm^{-3}$ notwithstanding expected growth in traffic flows over that same period.

3.3 Comparison of the 'Do Something' scenario with the 2017 Base shows the forecast 'in combination' change in NOx concentrations to 2031, this time including the PPLP. It can be seen that the PPLP will effectively play no part in retarding the forecast improvement in NOx. This is probably due to the small part this road plays in journeys to work arising from Shepway: only a further 77 AADT are forecast on this road by 2031 as a result of growth in the district.

### Nitrogen deposition

3.4 Unsurprisingly, since NOx is the main source of nitrogen from vehicle exhaust emissions, the results from the NOx analysis carry over to the nitrogen deposition calculations. Baseline nitrogen deposition rates are high despite the low NOx concentrations, which supports the view that ammonia from agriculture may be the primary source of atmospheric nitrogen in this area. Due to the forecast improvement in NOx concentrations over the plan period nitrogen deposition rates are also forecast to decrease and the PPLP plays no part in retarding that improvement.

### Acid deposition

3.5 There are two sources of acid deposition: sulphur and nitrogen. Since sulphur is no longer emitted by vehicle exhausts the only source of acid derived from traffic is nitrogen. Since the effect of the PPLP in retarding the forecast improvement in nitrogen deposition rates is negligible this carries across to the acid deposition calculations.

### Conclusion

3.6 It is therefore concluded that there would be no likely significant effect either alone or in combination with other projects and plans.

## Dover to Kingsdown Cliffs SAC

### Oxides of Nitrogen

3.7 A single transect (shown on Map DKC1) was modelled into this SAC, from the A2 (Jubilee Way). This is a major road but also lies 146m from the SAC at its closest. This is the only road within 200m of the SAC that could conceivably constitute a journey to work route for residents of Shepway. Baseline NOx concentrations throughout the modelled transect are slightly above the critical level (30 $\mu gm^{-3}$) according to Defra data, at 33 $\mu gm^{-3}$.

3.8 The PPLP is forecast to result in a considerable increase in flows on the A2, from a 2031 Do Nothing of c. 17,000 AADT to c. 29,000 AADT. However, because of the distance of the road from the SAC this has a limited effect.

3.9 Comparison of the 'Do Minimum' scenario with the 2017 Base shows the forecast change in NOx concentrations to 2031, without taking account of the PPLP. Due to the forecast improvements in vehicle emission factors and the resulting reduction in background NOx concentrations and nitrogen deposition rates to 2031, NOx concentrations throughout the modelled transect are forecast to experience a net reduction of just over 2 $\mu gm^{-3}$ notwithstanding expected growth in traffic.

3.10 Comparison of the 'Do Something' scenario with the 2017 Base shows the forecast 'in combination' change in NOx concentrations to 2031, this time including the PPLP. It can be seen that, notwithstanding the substantial increase in traffic due to the PPLP, the PPLP will play a modest part in retarding the forecast improvement in NOx of c.0.5 $\mu gm^{-3}$, which still leaves a net forecast improvement of just below 2 $\mu gm^{-3}$. Nonetheless, this retardation of forecast improvement is not enough to dismiss the botanical effects without modelling the resulting nitrogen deposition directly.

## Nitrogen deposition

3.11 Unsurprisingly, since NOx is the main source of nitrogen from vehicle exhaust emissions, the results from the NOx analysis carry over to the nitrogen deposition calculations. However, since most of the emitted NOx is not deposited at the roadside the change in nitrogen deposition rates due to the PPLP is forecast to be even lower than the change in NOx concentrations. Baseline nitrogen deposition rates on all modelled transects are fairly low at c. 13 kgN/ha/yr (compared to a critical load range for calcareous grassland of 15-20 kgN/ha/yr), which reflects the distance of the site from the road. Due to the forecast improvement in NOx concentrations over the plan period nitrogen deposition rates are also forecast to decrease by c. 1.5 kgN/ha/yr, notwithstanding the forecast growth in traffic due to the PPLP 'in combination' with all other expected development.

3.12 The PPLP plays a very limited part in retarding that improvement due to the distance of the SAC from the roadside: the retardation due to the PPLP is forecast to be 0.02-0.03 kgN/ha/yr or a further 2-3 milligrams of nitrogen per square metre over the course of a year[10]. This is ecologically insignificant and no retardation of any expected improvement in vegetation would occur. Moreover, there is reason to believe that using a critical load of 15 kgN/ha/yr for calcareous grassland may be quite conservative. Research commissioned by Natural England has concluded that calcareous habitats are less affected by nitrogen deposition than less well pH buffered systems[11] and that a decline in the frequency of characteristic calcareous grassland species and a lower number of rare and scarce species has only been recorded in the cited research at deposition rates above 25 kgN/ha/yr[12].

3.13 Given that the 'in combination' deposition rate is a) forecast to be is below the critical load of 15 kgN/ha/yr and well below the rate of 25 kgN/ha/yr at which Caporn et al report a decline in diversity in calcareous grassland, b) forecast to fall further to 2031 and c) barely affected by the PPLP, no likely significant effect is expected alone or in combination.

## Acid deposition

3.14 There are two sources of acid deposition: sulphur and nitrogen. Since sulphur is no longer emitted by vehicle exhausts the only source of acid derived from traffic is nitrogen. Since the effect of the PPLP in retarding the forecast improvement in nitrogen deposition rates is negligible this carries across to the acid deposition calculations.

## Conclusion

3.15 It is therefore concluded that there would be no likely significant effect either alone or in combination with other projects and plans.

[10] For ease of comparison, a teaspoon of salt typically weighs 5000-6000 milligrams and a pinch of salt (c. 1/16th of a teaspoon) weighs roughly 300 milligrams

[11] Caporn, S., Field, C., Payne, R., Dise, N., Britton, A., Emmett, B., Jones, L., Phoenix, G., S Power, S., Sheppard, L. & Stevens, C. 2016. Assessing the effects of small increments of atmospheric nitrogen deposition (above the critical load) on semi-natural habitats of conservation importance. Natural England Commissioned Reports, Number 210. Page 45

[12] Ibid. pages 38 and 41

# Dungeness SAC

## Oxides of Nitrogen

3.16 A single transect was modelled into this SAC, from Jurys Gap Road (shown on Map DRMB1). This is the only road within 200m of the SAC that could conceivably constitute a journey to work route for residents of Shepway. Baseline NOx concentrations at the closest part of this site to the modelled road are well below the critical level (30 $\mu gm^{-3}$) according to Defra data, at 12 $\mu gm^{-3}$, despite the fact that Jury's Gap Road immediately abuts the SAC. This is probably due to the rural location of the SAC and its distance from the nearest significant combustion sources. Jury's Gap Road is a minor road with very low measured base flows of 2,300 AADT.

3.17 Comparison of the 'Do Minimum' scenario with the 2017 Base shows the forecast change in NOx concentrations to 2031, without taking account of the PPLP. Due to the forecast improvements in vehicle emission factors and the resulting reduction in background NOx concentrations and nitrogen deposition rates to 2031, NOx concentrations throughout the modelled transect are forecast to experience a net reduction of c. 1-3 $\mu gm^{-3}$ notwithstanding expected minor growth in traffic flows over that same period (an estimated 54 AADT from all sources).

3.18 Comparison of the 'Do Something' scenario with the 2017 Base shows the forecast 'in combination' change in NOx concentrations to 2031, this time including the PPLP. It can be seen that the PPLP will effectively play no part in retarding the forecast improvement in NOx. This is probably due to the small part this road plays in journeys to work arising from Shepway: forecast additional traffic on this road by 2031 as a result of the PPLP is so small that it constitutes zero AADT[13].

## Nitrogen deposition

3.19 Unsurprisingly, since NOx is the main source of nitrogen from vehicle exhaust emissions, the results from the NOx analysis carry over to the nitrogen deposition calculations. Baseline nitrogen deposition rates are fairly low at c. 10 kgN/ha/yr, which reflects the remoteness of the site. Due to the forecast improvement in NOx concentrations over the plan period nitrogen deposition rates are also forecast to decrease and the PPLP plays no part in retarding that improvement.

## Acid deposition

3.20 There are two sources of acid deposition: sulphur and nitrogen. Since sulphur is no longer emitted by vehicle exhausts the only source of acid derived from traffic is nitrogen. Since the effect of the PPLP in retarding the forecast improvement in nitrogen deposition rates is negligible this carries across to the acid deposition calculations.

## Conclusion

3.21 It is therefore concluded that there would be no likely significant effect either alone or in combination with other projects and plans.

# Dungeness, Romney Marsh & Rye Bay SPA and Ramsar site

## Oxides of Nitrogen

3.22 A total of five transects were modelled in various locations around this SPA and Ramsar site, in order to reflect the small number of roads (other than farm tracks and other very minor routes) that lie within 200m. The modelled roads are:

- A268 Rye Road (DRMB3) – transect modelled into the saltmarsh of Rye Harbour;
- A259 New Winchelsea Road (DRMB5) – coastal floodplain and grazing marsh;
- A259 New Road/Guldeford Road (Maps DRMB6 and DRMB7) – coastal floodplain and grazing marsh;

[13] This does not mean that literally no additional journeys are forecast but rather that any additional journeys are expected to be sufficiently few and infrequent that they would not represent an increase in annual average daily traffic.

- Jury's Gap Road is within 200m of the SPA/Ramsar site as well as Dungeness SAC. The habitat here is coastal vegetated shingle. This road has already been discussed so is not discussed further below.

3.23 A single transect was modelled into the SPA/Ramsar site in each case, except for the A259 New Road/Guldeford Road where two transects were modelled: one (DRMRB6) at Rye, into the saltmarsh habitat of Rye Harbour and the second (DRMRB7) on the coastal floodplain and grazing marsh habitat of the East Guldeford Levels, north-east of Rye.

3.24 Baseline NOx concentrations at the closest part of this site to all modelled roads are well below the critical level (30 $\mu gm^{-3}$) according to Defra data, being typically 10 - 12 $\mu gm^{-3}$. This is probably due to the distance of the SPA/Ramsar site from some of these links (40m at the closest point from A259 New Winchelsea Road, 168m at the closest point from the A268 Rye Road). Even the highest concentrations, adjacent to the busiest sections of road (the A259 New Road/Guldeford Road) are modelled to be 22 – 23 $\mu gm^{-3}$ and this rapidly falls to just 15-16 $\mu gm^{-3}$ at 10-15m from the roadside. This is probably attributable to the rural location of the SPA/Ramsar site and the modest base flows on even the busiest road (c, 10,700 AADT on the A259 New Road/Guldeford Road).

3.25 Comparison of the 'Do Minimum' scenario with the 2017 Base shows the forecast change in NOx concentrations to 2031, without taking account of the PPLP. Due to the forecast improvements in vehicle emission factors and the resulting reduction in background NOx concentrations and nitrogen deposition rates to 2031, NOx concentrations throughout all the modelled transects are forecast to experience a net reduction of c. 2 - 7 $\mu gm^{-3}$ (depending on distance from the road and business of that road) notwithstanding expected growth in traffic flows over that same period.

3.26 Comparison of the 'Do Something' scenario with the 2017 Base shows the forecast 'in combination' change in NOx concentrations to 2031, this time including the PPLP. It can be seen that the PPLP will effectively play no part in retarding the forecast improvement in NOx along most of the links (making a contribution of zero[14] to 0.1 $\mu gm^{-3}$). For the busiest road (A259 New Road/Guldeford Road) the retardation is greater, but is still only 0.7 $\mu gm^{-3}$ at the roadside, leaving a net forecast improvement of c. 6 $\mu gm^{-3}$. There would thus be a substantial forecast net improvement in NOx concentrations even allowing for PPLP growth and the total NOx concentrations would remain below the critical level.

## Nitrogen deposition

3.27 Unsurprisingly, since NOx is the main source of nitrogen from vehicle exhaust emissions, the results from the NOx analysis carry over to the nitrogen deposition calculations. Baseline nitrogen deposition rates on all modelled transects are fairly low at c. 11-12 kgN/ha/yr (compared to a critical load range for floodplain grazing marsh of 20-30 kgN/ha/yr), which reflects the remoteness of the site. Due to the forecast improvement in NOx concentrations over the plan period nitrogen deposition rates are also forecast to decrease.

3.28 The PPLP plays a very limited part in retarding that improvement: even adjacent to the busiest road (A259 New Road/Guldeford Road) the retardation due to the PPLP will be 0.04 kgN/ha/yr. To put this into context, even for nitrogen sensitive habitats such as lowland heathland, modelled dose-response relationships[15] have identified that at background deposition rates of 10 kgN/ha/yr (the approximate deposition rate forecast at the roadside by 2031 in this model) an increase of 0.8 kgN/ha/yr (i.e. 20 times that forecast due to the PPLP) would be required to reduce species richness by one[16]. Floodplain grazing marsh is relatively tolerant of nitrogen deposition (hence its higher critical load) and therefore it is probable than considerably more than 0.8 kgN/ha/yr would be required to cause a measurable effect.

[14] Note that zero does not literally mean that no NOx will be contributed but rather that whatever contribution the planned growth is forecast to make is too small to show in the model

[15] Summarised in Caporn, S., Field, C., Payne, R., Dise, N., Britton, A., Emmett, B., Jones, L., Phoenix, G., S Power, S., Sheppard, L. & Stevens, C. 2016. Assessing the effects of small increments of atmospheric nitrogen deposition (above the critical load) on semi-natural habitats of conservation importance. Natural England Commissioned Reports, Number 210. Table 21.

[16] This is a good indicator of the effect of nitrogen deposition on vegetation as it arises at low background deposition rates, is easily detectable and occurs across different habitats. Note that 'reduction in species richness' only means that fewer species are recorded in a randomly placed 2m x 2m quadrat. Therefore, it does not mean species are 'lost' from the affected area, it simply means that at least one species occurs at a reduced frequency.

3.29 Given that a) the existing deposition rate is modelled to be well below the critical load for this habitat and is likely to fall further to 2031 and that b) the PPLP will not play a material role in retarding any resulting habitat improvement, no likely significant effect is expected alone or in combination. This is particularly the case since only 5% of the total area of the SAC lies within 200m of the A2 and thus would be affected at all by the road.

### Acid deposition

3.30 There are two sources of acid deposition: sulphur and nitrogen. Since sulphur is no longer emitted by vehicle exhausts the only source of acid derived from traffic is nitrogen. Since the effect of the PPLP in retarding the forecast improvement in nitrogen deposition rates is negligible this carries across to the acid deposition calculations.

### Conclusion

3.31 It is therefore concluded that there would be no likely significant effect either alone or in combination with other projects and plans.

## Folkestone to Etchinghill Escarpment SAC

### Oxides of Nitrogen

3.32 A total of six transects were modelled into this SAC (Maps FEE1 to FEE6). The modelled links, which all lie adjacent to the SAC, are:

- Crete Road West (two transects were modelled, one of which lies between the A20 and A260);
- The A20 (west of the SAC, prior to entering tunnel under the escarpment);
- The A259 Churchill Avenue; and
- The A260 Canterbury Road (two transects were modelled as the SAC lies on both sides of this road).

3.33 Where multiple roads lie within 200m of the same part of the SAC the combined effect of all the roads has been modelled.

3.34 Unsurprisingly baseline NOx concentrations where the SAC lies adjacent to the very busy A20 (two-way base flows of c. 44,000 AADT) are high, modelled to be c. 71 $\mu gm^{-3}$ (more than double the critical level), falling below the critical level at c. 30m from the roadside. The next highest baseline concentrations are adjacent to A260 (being c. 30 $\mu gm^{-3}$), with the other links having baseline concentrations well below the critical level (18-19 $\mu gm^{-3}$ even at the roadside).

3.35 By 2031, total flows on the A20 are forecast to increase to c. 50,000 AADT 'in combination', and the bulk of this increase is attributable to the PPLP (c. 5,000 AADT).

3.36 Comparison of the 'Do Minimum' scenario with the 2017 Base shows the forecast change in NOx concentrations to 2031, without taking account of the PPLP. Due to the forecast improvements in vehicle emission factors and the resulting reduction in background NOx concentrations and nitrogen deposition rates to 2031, NOx concentrations throughout the modelled transect are forecast to experience a net reduction on all links.

3.37 For the A20, this improvement is forecast to be in the vicinity of c. 14-29 $\mu gm^{-3}$ within 10m of the road, notwithstanding expected growth in traffic flows over that same period, although they will remain above the critical level throughout that zone. For the other links the existing flows are considerably lower and thus the expected reduction in NOx concentrations due to improved vehicle emissions is also lower, being c. 3-8 $\mu gm^{-3}$ depending on the link and the point on the transect.

3.38 Comparison of the 'Do Something' scenario with the 2017 Base shows the forecast 'in combination' change in NOx concentrations to 2031, this time including the PPLP. For the A20, it can be seen that the PPLP will retard the forecast improvement in NOx by a worst-case 3 $\mu gm^{-3}$ (10% of the critical level) at the closest point to the A20 and even at 30-40m from the roadside will retard improvement by c. 1 $\mu gm^{-3}$. This still leaves a substantial net forecast improvement of c. 26 $\mu gm^{-3}$ but is certainly a large retardation. The primarily role of NOx for

vegetation is as a source of nitrogen. The retardation of forecast improvement attributable to the PPLP is clearly high enough to mean the resulting nitrogen deposition must be modelled directly to determine what botanical effect would result[17].

3.39 For all other links a similar pattern is seen i.e. a net improvement in NOx concentrations that is forecast to be retarded by traffic associated with the PPLP. However, in the cases the scale of retardation is smaller. For the second busiest road (the A260) this retardation is forecast to be c. 1 $\mu gm^{-3}$ at the roadside, falling steeply to 0.3 $\mu gm^{-3}$ by 10m from the roadside. For the smaller roads the retardation of improvement due to the PPLP is considerably smaller, being 0.2-0.3 $\mu gm^{-3}$ even at the roadside.

## Nitrogen deposition

3.40 Unsurprisingly, since NOx is the main source of nitrogen from vehicle exhaust emissions, the results from the NOx analysis carry over to the nitrogen deposition calculations. However, since most of the emitted NOx is not deposited at the roadside the change in nitrogen deposition rates due to the PPLP is forecast to be lower than the change in NOx concentrations.

3.41 Baseline nitrogen deposition rates on all modelled transects are moderate at c. 14 - 17 kgN/ha/yr (compared to a critical load range for calcareous grassland of 15-20 kgN/ha/yr). The highest rates are unsurprisingly adjacent to the busiest road (A20). Due to the forecast improvement in NOx concentrations over the plan period nitrogen deposition rates are also forecast to decrease by c. 1.7 – 2.7 kgN/ha/yr, notwithstanding the forecast growth in traffic due to the PPLP 'in combination' with all other expected development. The greatest forecast reduction is adjacent to the A20. If the forecast improvement is realised in practice it will bring the deposition rates below the critical load at all links, even adjacent to the A20.

3.42 The part played by the PPLP in retarding that improvement reflects the pattern for NOx concentrations in that the retardation would be greatest along the A20. However, because not all NOx is deposited as nitrogen within 200m of the roadside the actual magnitudes of retardation are lower. On most links the retardation is a nominal worst-case 0.01 kgN/ha/yr (nominal because if it were any smaller it would not appear in the model results at all). For the A260 the worst-case retardation is a larger, but still very small, 0.04 kgN/ha/yr (in other words it would make the difference between a deposition rate of 13.05 kgN/ha/yr and 13.09 kgN/ha/yr which in ecological terms is essentially the same rate since no habitats studies to date reveal themselves to be responsive to such small changes in deposition rate). For the most affected road, the A20, the retardation is greater still, but nonetheless small, at 0.15 kgN/ha/yr (1% of the critical load). Moreover, there is reason to believe that using a critical load of 15 kgN/ha/yr for calcareous grassland may be quite conservative as already discussed.

3.43 Given that the 'in combination' deposition rate is a) forecast to be below the critical load of 15 kgN/ha/yr and well below the rate of 25 kgN/ha/yr at which Caporn et al report a decline in diversity in calcareous grassland, b) forecast to fall further to 2031 and c) only retarded by the PPLP to a small extent along even the most affected road, no likely significant effect is expected alone or in combination despite the elevated NOx concentrations.

## Acid deposition

3.44 There are two sources of acid deposition: sulphur and nitrogen. Since sulphur is no longer emitted by vehicle exhausts the only source of acid derived from traffic is nitrogen. Since the effect of the PPLP in retarding the forecast improvement in nitrogen deposition rates is negligible this carries across to the acid deposition calculations.

## Recommendation

3.45 Although no mitigation is identified as being required, the conclusions of this assessment do depend in part on forecast improvements in background NOx concentrations and deposition rates due to (inter)national initiatives and if those improvements were not realised in practice the PPLP would make a large contribution to raising NOx concentrations even if that is not forecast to translate into an ecologically significant increase in nitrogen deposition.

[17] The critical level for NOx is entirely generic. Therefore, while it can be used as a broad guide to any likely issues, nitrogen deposition rates need to be calculated to get a true picture of the resulting ecological effect, because different habitats have different susceptibility to additional nitrogen in practice, and only a proportion of NOx is deposited as nitrogen within 200m of the roadside.

3.46 In light of this, it is recommended that for the A20 in particular the PPLP includes a commitment to monitoring roadside NOx at regular intervals over the plan period in order to track the projected improvements in air quality. This would also enable the introduction of any specific local measures if an improving trend is not recorded in practice. Reporting on this metric could be tied to the planned cycle of 5-year reviews of the PPLP/Core Strategy. This SAC has been singled out because along the A20 it has NOx concentrations that are currently high and are expected to remain above the critical level (albeit considerably improved compared to the 2017 baseline) even by 2031.

# Lydden and Temple Ewell Downs SAC

## Oxides of Nitrogen

3.47 Two representative transects were modelled into this SAC, one south-west into the SAC from the A2 (Map LTED1) and the other north-east into the SAC from Canterbury Road (Map LTED2). Both links lie 90-95m from the SAC and this means that the area most affected by vehicle emissions lies well outside the SAC boundary.

3.48 Baseline NOx concentrations at the closest part of this site to the modelled roads are well below the critical level (30 $\mu gm^{-3}$) according to Defra data, at c.13 $\mu gm^{-3}$. This is probably due partly to the distance of the SAC from the road and partly to the rural location of the SAC. In a rural location ammonia from agriculture can be expected to be the biggest local source of nitrogen, rather than combustion (NOx).

3.49 Comparison of the 'Do Minimum' scenario with the 2017 Base for both links shows the forecast change in NOx concentrations to 2031, without taking account of the PPLP. Due to the forecast improvements in vehicle emission factors and the resulting reduction in background NOx concentrations and nitrogen deposition rates to 2031, NOx concentrations throughout the modelled transects are forecast to experience a net reduction of c. 2 $\mu gm^{-3}$ notwithstanding expected growth in traffic flows over that same period.

3.50 Comparison of the 'Do Something' scenario with the 2017 Base shows the forecast 'in combination' change in NOx concentrations to 2031, this time including the PPLP. It can be seen that the PPLP will play no part in retarding the forecast improvement in NOx on Canterbury Road and a very small role (0.1 $\mu gm^{-3}$ throughout the transect) in retarding the forecast improvement along this section of the A2.

## Nitrogen deposition

3.51 Unsurprisingly, since NOx is the main source of nitrogen from vehicle exhaust emissions, the results from the NOx analysis carry over to the nitrogen deposition calculations. Baseline nitrogen deposition rates are moderately high at c. 17 kgN/ha/yr, despite the low NOx concentrations. This supports the view that ammonia from agriculture may be the primary source of atmospheric nitrogen in this area. Due to the forecast improvement in NOx concentrations over the plan period nitrogen deposition rates are also forecast to decrease by c. 2kgN/ha/yr. The PPLP plays no part in retarding that improvement along Canterbury Road and only a nominal role (0.01 kgN/ha/yr or a further 2-3 milligrams of nitrogen per square metre over the course of a year[18]) in retarding improvement along this stretch of the A2 (nominal because if it were any smaller it would not appear in the model results at all). This is ecologically insignificant and no retardation of any expected improvement in vegetation would occur. Moreover, there is reason to believe that using a critical load of 15 kgN/ha/yr for calcareous grassland may be quite conservative as already discussed.

3.52 Given that the 'in combination' deposition rate is a) forecast to be below the critical load of 15 kgN/ha/yr and well below the rate of 25 kgN/ha/yr at which Caporn et al report a decline in diversity in calcareous grassland, b) forecast to fall further to 2031 and c) barely retarded by the PPLP, no likely significant effect is expected alone or in combination despite the elevated NOx concentrations.

[18] For ease of comparison, a teaspoon of salt typically weighs 5000-6000 milligrams and a pinch of salt (c. 1/16th of a teaspoon) weighs roughly 300 milligrams

### Acid deposition

3.53 There are two sources of acid deposition: sulphur and nitrogen. Since sulphur is no longer emitted by vehicle exhausts the only source of acid derived from traffic is nitrogen. Since the effect of the PPLP in retarding the forecast improvement in nitrogen deposition rates is negligible this carries across to the acid deposition calculations.

### Conclusion

3.54 It is therefore concluded that there would be no likely significant effect either alone or in combination with other projects and plans

## Overall conclusion

3.55 Having modelled the PPLP growth from 2017 to 2031 the conclusion is that there will be no likely significant effect on any internationally important wildlife site either alone or in combination with other projects and plans.

3.56 Although no mitigation is identified as being required, the conclusions of this assessment do depend in part on forecast improvements in background NOx concentrations and deposition rates due to (inter)national initiatives and if those improvements were not realised in practice the PPLP would make a large contribution to raising NOx concentrations even if that is not forecast to translate into an ecologically significant increase in nitrogen deposition.

3.57 In light of this, it is recommended that for the A20 within 200m of Folkestone to Etchinghill Escarpment SAC the PPLP includes a commitment to monitoring roadside NOx at regular intervals over the plan period in order to track the projected improvements in air quality. This would also enable the introduction of any specific local measures to be triggered if an improving trend is not recorded in practice. Reporting on this metric could be tied to any planned regular reviews of the PPLP/Core Strategy. This SAC has been singled out because along the A20 it has NOx concentrations that are currently high and are expected to remain above the critical level (albeit considerably improved compared to the 2017 baseline) even by 2031.

# 4. Likely Significant Effects of 2037 Core Strategy Review (6,500 dwellings)

## Blean Complex SAC

4.1 Modelling of this 2037 Core Strategy Review scenario underlines the fact that the modelled road plays a small part in journeys to work arising from Shepway; even extending the assessment year to 2037 and modelling 6,500 dwellings the total change in flows due to Shepway between 2017 and 2037 is only 234 AADT. Since the SAC is 60m from the road at its closest point the modelling continues to show that growth in Shepway will have a negligible effect on NOx concentrations and nitrogen/acid deposition rates at this SAC.

4.2 It is therefore concluded that there would be no likely significant effect either alone or in combination with other projects and plans.

## Dover to Kingsdown Cliffs SAC

### Oxides of Nitrogen

4.3 The contribution of growth in Shepway to 2037 to traffic flows on the A2 (Jubilee Way) is very large, with a forecast increase of nearly 28,000 AADT compared to the Do Minimum scenario for the same year. However, because the SAC lies 146m from the A2 at its closest the area most affected by this road is outside the SAC.

4.4 Comparison of the 'Do Minimum' scenario with the 2017 Base shows the forecast change in NOx concentrations to 2037, without taking account of growth in Shepway. Due to the forecast improvements in vehicle emission factors and the resulting reduction in background NOx concentrations and nitrogen deposition rates to 2037, NOx concentrations throughout the modelled transect are forecast to experience a net reduction of just over 2.4 $\mu gm^{-3}$ notwithstanding expected growth in traffic flows over that same period.

4.5 Comparison of the 'Do Something' scenario with the 2017 Base shows the forecast 'in combination' change in NOx concentrations to 2037, this time including growth in Shepway. It can be seen that growth in Shepway is forecast to retard the forecast improvement in NOx by up to 1.3 $\mu gm^{-3}$ (approximately 50% of that which is otherwise forecast at this distance from the road). This is probably due to the very large change in forecast flows on this section of the A2 due to growth in Shepway despite the considerable distance of the SAC from the roadside. Clearly, this retardation of forecast improvement is not enough to dismiss the botanical effects without modelling the resulting nitrogen deposition directly.

4.6 It should, however, be noted that this is based on a cautious assumption in the modelling, namely that no improvement in background NOx will occur after 2023. If in fact such improvements did continue (as one could expect) then it may well offset the majority of the retardation forecast in this modelling. Moreover, it should be noted that the affected area of the SAC overlaps almost entirely with management unit 15 of the underlying SSSI, which is identified in the latest available Natural England condition assessment as 'unfavourable no change'. The assessment states that '*Unit remains unmanaged and without appropriate remedies in place. Fails on numerous criteria, including scrub cover, sward height, species composition and grass to herb ratio. Some shorter grass persists along informal paths, which has harebell, salad burnet, sainfoin, autumn gentian'*. A long-term severe lack of management is likely to render this part of the site much less vulnerable to changes in NOx and nitrogen deposition than a well-managed site would be, and the introduction of appropriate management would have a much greater effect on restoring the botanical quality of the sward than any measures to address NOx concentrations.

### Nitrogen deposition

4.7 As already discussed, baseline nitrogen deposition rates on all modelled transects are fairly low at c. 13 kgN/ha/yr (compared to a critical load range for calcareous grassland of 15-20 kgN/ha/yr), which reflects the distance of the site from the road. Due to the forecast improvement in NOx concentrations over the plan period nitrogen deposition rates are also forecast to decrease by c. 1.5 kgN/ha/yr, notwithstanding the forecast growth in traffic due to growth in Shepway 'in combination' with all other expected development.

4.8 Despite the large increase in flows and the associated retardation of improvement in NOx concentrations, growth in Shepway to 2037 plays a very limited part in retarding that improvement due to the distance of the SAC from the roadside and the fact that much of the emitted NOx is not locally deposited as nitrogen: the retardation due to Shepway growth is forecast to be 0.05-0.07 kgN/ha/yr or a further 5-7 milligrams of nitrogen per square metre over the course of a year[19]. This is ecologically insignificant and no retardation of any expected improvement in vegetation would occur. Moreover, as already discussed there is reason to believe that using a critical load of 15 kgN/ha/yr for calcareous grassland may be quite conservative.

4.9 Given that the 'in combination' deposition rate is a) forecast to be is below the critical load of 15 kgN/ha/yr and well below the 25 kgN/ha/yr rate at which Caporn et al report a decline in diversity in calcareous grassland, b) forecast to fall further to 2037 and c) barely affected by the PPLP, no likely significant effect is expected alone or in combination.

### Acid deposition

4.10 There are two sources of acid deposition: sulphur and nitrogen. Since sulphur is no longer emitted by vehicle exhausts the only source of acid derived from traffic is nitrogen. Since the effect of the PPLP in retarding the forecast improvement in nitrogen deposition rates is minimal this carries across to the acid deposition calculations.

### Conclusion

4.11 When the forecast change in NOx concentrations is converted into a forecast change in nitrogen deposition rates it is possible to conclude that there would be no likely significant effect either alone or in combination with other projects and plans.

## Dungeness SAC

4.12 A single transect was modelled into this SAC, from Jurys Gap Road. This is the only road within 200m of the SAC that could conceivably constitute a journey to work route for residents of Shepway. It can be seen that Shepway growth to 2037 will effectively play no part in retarding the forecast improvement in NOx, nitrogen deposition or acid deposition. This is probably due to the small part this road plays in journeys to work arising from Shepway: forecast additional traffic on this road by 2037 as a result of Shepway growth is so small that it constitutes zero AADT[20].

4.13 It is therefore concluded that there would be no likely significant effect either alone or in combination with other projects and plans

## Dungeness, Romney Marsh & Rye Bay SPA and Ramsar site

4.14 For this SPA and Ramsar site the modelling for the 2037 scenario is almost identical to that for the 2031 scenario. This is probably due to the fact that on all links the expected flows by 2037 due to the CSR are only slightly higher than those forecast to 2031. For example, even on the busiest road (A259 New Road/Guldeford Road) only a further 111 AADT are forecast by 2037 under the CSR scenario than were forecast to 2031 under the PPLP scenario. This reflects the fact that none of the modelled roads are particularly busy, with the A259 having measured 2017 base flows of c. 10.700 AADT. As such they are of limited use as journey to work routes for

[19] For ease of comparison, a teaspoon of salt typically weighs 5000-6000 milligrams and a pinch of salt (c. 1/16th of a teaspoon) weighs roughly 300 milligrams

[20] This does not mean that literally no additional journeys are forecast but rather that any additional journeys are expected to be sufficiently few and infrequent that they would not represent an increase in annual average daily traffic.

Shepway residents who are focussed at the opposite end of the district around Folkestone and Hythe.

4.15 The conclusions of the 2031 analysis therefore carry over to the 2037 analysis. It is therefore concluded that there would be no likely significant effect either alone or in combination with other projects and plans

# Folkestone to Etchinghill Escarpment SAC

## Oxides of Nitrogen

4.16 Along the busiest link (the A20/M20) the forecast increase in two-way flows due to growth in Shepway increases from c. 5,000 AADT (using the 2031 scenario) to c. 8,000 (using the 2037 scenario) with commensurate increases in retardation of 'in combination' NOx improvement and nitrogen deposition rate.

4.17 Comparison of the 'Do Something' scenario with the 2017 Base shows that, for the A20, Shepway growth will retard the forecast improvement in NOx by a worst-case 7 $\mu gm^{-3}$ (23% of the critical level) at the closest point to the A20, compared to a retardation of 3 $\mu gm^{-3}$ (10% of the critical level) at the same point under the 2031 scenario. DMRB Interim Advice Note 174/12[21] classifies both of these as a 'large' change (which it defines in line with Institute of Air Quality Management practice as a change equivalent to more than 10% of the critical level). Shepway growth will retard improvement by c. 1 $\mu gm^{-3}$ up to 100m from the roadside under the 2037 scenario (compared to up to 30-40m from the roadside under the 2031 scenario).

4.18 This still leaves a substantial net forecast improvement of c. 22 $\mu gm^{-3}$ at the closest point to the A20 but is certainly a very large retardation in the improvement that would otherwise arise. The primarily role of NOx for vegetation is as a source of nitrogen. The retardation of forecast improvement attributable to Shepway growth from 2017-2037 is clearly high enough to mean the resulting nitrogen deposition must be modelled directly to determine what botanical effect would result[22].

## Nitrogen deposition

4.19 The main difference from the 2031 results is that, since the retardation of improvement in NOx concentrations is greater due to the additional traffic arising from Shepway growth, the retardation of improvement in nitrogen deposition rates also increases. At the most affected point (adjacent to the A20/M20) the difference is a retardation of 0.36 kgN/ha/yr for the 2037 scenario compared to a retardation of 0.15 kgN/ha/yr for the 2031 scenario. This is 2.4% of the critical load, which DMRB Interim Advice Note 174/12 classifies as a 'small' change (which it defines as a change equivalent to less than 5% of the critical level), Moreover, as already discussed there is some reason to believe that using a critical load of 15 kgN/ha/yr for calcareous grassland may be quite conservative.

4.20 Furthermore, a considerable net 'in combination' improvement is still forecast (a forecast reduction of 2.68 kgN/ha/yr with growth in Shepway, compared to 2.83 kgN/ha/yr without growth in Shepway) and that forecast is based on the conservative assumption that there will be no further reduction in background NOx concentrations or nitrogen deposition rates after 2023. Given this, the fact that the 'in combination' NOx concentrations are forecast to be more than 22 $\mu gm^{-3}$ better than the current baseline, and the fact that deposition rate is forecast to be below the critical load of 15 kgN/ha/yr by 2037 even adjacent to the A20/M20 and well below the 25 kgN/ha/yr rate at which Caporn et al report a decline in diversity in calcareous grassland no likely significant effect is expected alone or in combination despite the elevated NOx concentrations.

[21] The Design Manual for Roads and Bridges Interim Advice Note 174/12 Updated advice for evaluating significant local air quality effects for users of DMRB Volume 11, Section 3, Part 1 'Air Quality (HA207/07)

[22] The critical level for NOx is entirely generic. Therefore, while it can be used as a broad guide to any likely issues, nitrogen deposition rates need to be calculated to get a true picture of the resulting ecological effect, because different habitats have different susceptibility to additional nitrogen in practice, and only a proportion of NOx is deposited as nitrogen within 200m of the roadside.

### Acid deposition

4.21 There are two sources of acid deposition: sulphur and nitrogen. Since sulphur is no longer emitted by vehicle exhausts the only source of acid derived from traffic is nitrogen. Since the effect of the PPLP in retarding the forecast improvement in nitrogen deposition rates is very small this carries across to the acid deposition calculations.

### Recommendation

4.22 Although no mitigation is identified as being required, the conclusions of this assessment do depend in part on forecast improvements in background NOx concentrations and deposition rates due to (inter)national initiatives and if those improvements were not realised in practice the CSR would make a large contribution to raising NOx concentrations even if that is not forecast to translate into an ecologically significant increase in nitrogen deposition.

4.23 In light of this, it is recommended that for the A20 in particular the CSR includes a commitment to monitoring roadside NOx at regular intervals over the plan period in order to track the projected improvements in air quality. This would also enable the introduction of any specific local measures to be triggered if an improving trend is not recorded in practice. Reporting on this metric could be tied to 5-year reviews of the Core Strategy and associated documents. This SAC has been singled out because along the A20 it has NOx concentrations that are currently high and are expected to remain above the critical level (albeit considerably improved compared to the 2017 baseline) even by 2037.

4.24 Moreover, since the forecast change in NOx concentrations due to the CSR is well over 10% of the CL (23%) there is a distinct possibility that Natural England may raise concerns over such a large retardation of otherwise forecast improvement in pollution even if it is not expected to translate directly to negative botanical effects on the SAC. It is therefore recommended that the Council and its transport modelling team investigate available traffic solutions that would be able to reduce the retardation of NOx concentrations to at least 10% of the critical level at the closest point to the A20, if not lower.

## Lydden and Temple Ewell Downs SAC

4.25 The modelling results and conclusions for this SAC are very similar to those for the 2031 scenario. The main differences are that the 2037 scenario forecasts a retardation of 0.3 $\mu gm^{-3}$ in improvement of NOx concentrations at the closest point to the A2 compared to 0.1 $\mu gm^{-3}$ for the 2031 scenario. This translates into a worst-cast 0.02 kgN/ha/yr retardation of improvement in nitrogen deposition rates compared to 0.01 kgN/ha/yr under the 2031 scenario. However, the same ecological interpretation and conclusion applies and a substantial net improvement in NOx concentrations and nitrogen and acid deposition rates is still forecast.

4.26 It is therefore concluded that there would be no likely significant effect either alone or in combination with other projects and plans.

## Overall conclusion

4.27 Having modelled the CSR growth from 2017 to 2037 the conclusion is that there will be no likely significant effect on any internationally important wildlife site either alone or in combination with other projects and plans.

4.28 Although no mitigation is identified as being required, the conclusions of this assessment do depend in part on forecast improvements in background NOx concentrations and deposition rates due to (inter)national initiatives and if those improvements were not realised in practice the CSR would make a large contribution to raising NOx concentrations even if that is not forecast to translate into an ecologically significant increase in nitrogen deposition.

4.29 In light of this, it is recommended that for the A20 within 200m of Folkestone to Etchinghill Escarpment SAC the CSR includes a commitment to monitoring roadside NOx at regular intervals over the plan period in order to track the projected improvements in air quality. This would also enable the introduction of any specific local measures to be triggered if an improving trend is not recorded in practice. Reporting on this metric could be tied to 5-year reviews of the Core Strategy and associated documents. This SAC has been singled out because along the

A20 it has NOx concentrations that are currently high and are expected to remain above the critical level (albeit considerably improved compared to the 2017 baseline) even by 2037.

# 5. Likely Significant Effects of 2037 Core Strategy Review (8,000 dwellings)

## Blean Complex SAC

5.1 Modelling results and conclusions regarding the contribution of growth in Shepway District are identical to those under the 2031 scenario and the 6,500 dwelling 2037 scenario. It is therefore concluded that there would be no likely significant effect either alone or in combination with other projects and plans.

## Dover to Kingsdown Cliffs SAC

5.2 Modelling results and conclusions regarding the contribution of growth in Shepway District are virtually identical to those under the 6,500 dwelling 2037 scenario. The forecast worst-case retardation of improvement in NOx concentrations increases from 1.3 $\mu gm^{-3}$ to 1.5 $\mu gm^{-3}$ while the forecast retardation of improvement in nitrogen deposition rates increases from 0.07 to 0.08 kgN/ha/yr. These changes are not sufficiently large to alter the conclusions. It is therefore concluded that there would be no likely significant effect either alone or in combination with other projects and plans.

## Dungeness SAC

5.3 Modelling results and conclusions regarding the contribution of growth in Shepway District are identical to those under the 2031 scenario and the 6,500 dwelling 2037 scenario. It is therefore concluded that there would be no likely significant effect either alone or in combination with other projects and plans.

## Dungeness, Romney Marsh & Rye Bay SPA and Ramsar site

5.4 Modelling results and conclusions regarding the contribution of growth in Shepway District are identical to those under the 6,500 dwelling 2037 scenario. It is therefore concluded that there would be no likely significant effect either alone or in combination with other projects and plans.

## Folkestone to Etchinghill Escarpment SAC

5.5 Modelling results and conclusions regarding the contribution of growth in Shepway District are similar to those under the 6,500 dwelling 2037 scenario. The forecast worst-case retardation of improvement in NOx concentrations increases from 7.6 $\mu gm^{-3}$ to 8.6 $\mu gm^{-3}$. DMRB Interim Advice Note 174/12 classifies both of these as a ‘large’ change. The forecast retardation of improvement in nitrogen deposition rates increases from 0.36 (2.4% of the critical load) to 0.41 kgN/ha/yr (2.7% of the critical load). DMRB Interim Advice Note 174/12 classifies both of these as a ‘small’ change. These differences are thus not sufficiently large to alter the conclusions.

5.6 Given this, the fact that the ‘in combination’ NOx concentrations are forecast to be more than 21 $\mu gm^{-3}$ better than the current baseline, and the fact that deposition rate is forecast to be below the critical load of 15 kgN/ha/yr by 2037 even adjacent to the A20/M20 and well below the 25 kgN/ha/yr rate at which Caporn et al report a decline in diversity in calcareous grassland no likely significant effect is expected alone or in combination despite the elevated NOx concentrations.

### Recommendation

5.7 Although no mitigation is identified as being required, the conclusions of this assessment do depend in part on forecast improvements in background NOx concentrations and deposition rates due to (inter)national initiatives and if those improvements were not realised in practice

the PPLP would make a large contribution to raising NOx concentrations even if that is not forecast to translate into an ecologically significant increase in nitrogen deposition.

5.8 In light of this, it is recommended that for the A20 in particular the PPLP includes a commitment to monitoring roadside NOx at regular intervals over the plan period in order to track the projected improvements in air quality. This would also enable the introduction of any specific local measures to be triggered if an improving trend is not recorded in practice. Reporting on this metric could be tied to 5-year reviews of the PPLP/Core Strategy and associated documents. This SAC has been singled out because along the A20 it has NOx concentrations that are currently high and are expected to remain above the critical level (albeit considerably improved compared to the 2017 baseline) even by 2031.

5.9 Moreover, since the forecast change in NOx concentrations due to the CSR is well over 10% of the CL (23%) there is a distinct possibility that Natural England may raise concerns over such a large retardation of otherwise forecast improvement in pollution even if it is not expected to translate directly to negative botanical effects on the SAC. It is therefore recommended that the Council and its transport modelling team investigate available traffic solutions that would be able to reduce the retardation of NOx concentrations to at least 10% of the critical level at the closest point to the A20, if not lower.

# Lydden and Temple Ewell Downs SAC

## Oxides of Nitrogen

5.10 Two transects were modelled into this SAC, one south-west into the SAC from the A2 and the other north-east into the SAC from Canterbury Road. Both links lie 90-95m from the SAC and this means that the area most affected by vehicle emissions lies well outside the SAC boundary.

5.11 Baseline NOx concentrations at the closest part of this site to the modelled roads are well below the critical level (30 $\mu gm^{-3}$) according to Defra data, at c.13 $\mu gm^{-3}$. This is probably due partly to the distance of the SAC from the road and partly to the rural location of the SAC. In a rural location ammonia from agriculture can be expected to be the biggest local source of nitrogen, rather than combustion (NOx).

5.12 Comparison of the 'Do Minimum' scenario with the 2017 Base for both links shows the forecast change in NOx concentrations to 2031, <u>without</u> taking account of the PPLP. Due to the forecast improvements in vehicle emission factors and the resulting reduction in background NOx concentrations and nitrogen deposition rates to 2031, NOx concentrations throughout the modelled transects are forecast to experience a net reduction of c. 2 $\mu gm^{-3}$ notwithstanding expected growth in traffic flows over that same period.

5.13 Comparison of the 'Do Something' scenario with the 2017 Base shows the forecast 'in combination' change in NOx concentrations to 2031, this time <u>including</u> the PPLP. It can be seen that the PPLP will play no part in retarding the forecast improvement in NOx on Canterbury Road and a very small role (0.1 $\mu gm^{-3}$ throughout the transect) in retarding the forecast improvement along this section of the A2.

## Nitrogen deposition

5.14 Unsurprisingly, since NOx is the main source of nitrogen from vehicle exhaust emissions, the results from the NOx analysis carry over to the nitrogen deposition calculations. Baseline nitrogen deposition rates are moderately high at c. 17 kgN/ha/yr, despite the low NOx concentrations. This supports the view that ammonia from agriculture may be the primary source of atmospheric nitrogen in this area. Due to the forecast improvement in NOx concentrations over the plan period nitrogen deposition rates are also forecast to decrease by c. 2kgN/ha/yr. The PPLP plays no part in retarding that improvement along Canterbury Road and only a nominal role (0.01 kgN/ha/yr or a further 2-3 milligrams of nitrogen per square metre over the course of a year[23]) in retarding improvement along this stretch of the A2 (nominal because if it were any smaller it would not appear in the model results at all). This is

[23] For ease of comparison, a teaspoon of salt typically weighs 5000-6000 milligrams and a pinch of salt (c. 1/16th of a teaspoon) weighs roughly 300 milligrams

ecologically insignificant and no retardation of any expected improvement in vegetation would occur.

5.15 Moreover, there is reason to believe that using a critical load of 15 kgN/ha/yr for calcareous grassland may be quite conservative. Research commissioned by Natural England has concluded that calcareous habitats are less affected by nitrogen deposition than less well pH buffered systems[24] and that a decline in the frequency of characteristic calcareous grassland species and a lower number of rare and scarce species is only recorded at deposition rates above 25 kgN/ha/yr[25].

5.16 Given that the 'in combination' deposition rate is a) forecast to be below the critical load of 15 kgN/ha/yr and well below the rate of 25 kgN/ha/yr at which Caporn et al report a decline in diversity in calcareous grassland, b) forecast to fall further to 2031 and c) barely retarded by the PPLP, no likely significant effect is expected alone or in combination despite the elevated NOx concentrations.

### Acid deposition

5.17 There are two sources of acid deposition: sulphur and nitrogen. Since sulphur is no longer emitted by vehicle exhausts the only source of acid derived from traffic is nitrogen. Since the effect of the PPLP in retarding the forecast improvement in nitrogen deposition rates is negligible this carries across to the acid deposition calculations.

### Conclusion

5.18 It is therefore concluded that there would be no likely significant effect either alone or in combination with other projects and plans

## Overall conclusion

5.19 The overall conclusion is identical to that for the CSR (6,500 dwellings) scenario for 2037.

[24] Caporn, S., Field, C., Payne, R., Dise, N., Britton, A., Emmett, B., Jones, L., Phoenix, G., S Power, S., Sheppard, L. & Stevens, C. 2016. Assessing the effects of small increments of atmospheric nitrogen deposition (above the critical load) on semi-natural habitats of conservation importance. Natural England Commissioned Reports, Number 210. Page 45

[25] Ibid. pages 38 and 41

# Appendix A Air Quality Modelling Results 2031 (PPLP)

In the table below, DM is Do Minimum and DS is Do Something. DS-Base is the change due to all forecast traffic growth between 2017 and 2031, while DS-DM thus shows the contribution of the PPLP. Negative numbers in the DS-DM and DS-Base columns indicate a forecast reduction (improvement). Zeros do not necessarily mean a literal absence of emissions/deposition but that the contribution is too small to show in the model reporting (deposition rates are rarely reported to more than two decimal places to avoid a spurious impression of precision). The colours in the table are decorative and have no significance.

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2031) | (2031) | (DS-DM) | (DS-BL) | (2017) | (2031) | (2031) | (DS-DM) | (DS-BL) | Base | (2031) | (2031) | (DS-DM) | (DS-BL) |
| | **Blean Complex SAC** | | | | | | | | | | | | | | | | |
| 1 | CWB_1_60m | 60 | 11.2 | 8.9 | 8.9 | 0.0 | -2.3 | 22.69 | 20.08 | 20.08 | 0.00 | -2.61 | 1.73 | 1.72 | 1.72 | 0.00 | 0.00 |
| 2 | CWB_1_65m | 65 | 11.1 | 8.9 | 8.9 | 0.0 | -2.3 | 22.68 | 20.08 | 20.08 | 0.00 | -2.61 | 1.73 | 1.72 | 1.72 | 0.00 | 0.00 |
| 3 | CWB_1_70m | 70 | 11.1 | 8.8 | 8.8 | 0.0 | -2.2 | 22.68 | 20.07 | 20.08 | 0.00 | -2.60 | 1.73 | 1.72 | 1.72 | 0.00 | 0.00 |
| 4 | CWB_1_75m | 75 | 11.0 | 8.8 | 8.8 | 0.0 | -2.2 | 22.68 | 20.07 | 20.07 | 0.00 | -2.60 | 1.73 | 1.72 | 1.72 | 0.00 | 0.00 |
| 5 | CWB_1_80m | 80 | 10.9 | 8.7 | 8.7 | 0.0 | -2.2 | 22.67 | 20.07 | 20.07 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 6 | CWB_1_90m | 90 | 10.8 | 8.7 | 8.7 | 0.0 | -2.2 | 22.67 | 20.07 | 20.07 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 7 | CWB_1_100m | 100 | 10.8 | 8.6 | 8.6 | 0.0 | -2.1 | 22.66 | 20.07 | 20.07 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 8 | CWB_1_110m | 110 | 10.7 | 8.6 | 8.6 | 0.0 | -2.1 | 22.66 | 20.06 | 20.06 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 9 | CWB_1_120m | 120 | 10.7 | 8.6 | 8.6 | 0.0 | -2.1 | 22.66 | 20.06 | 20.06 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 10 | CWB_1_130m | 130 | 10.6 | 8.5 | 8.5 | 0.0 | -2.1 | 22.66 | 20.06 | 20.06 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 11 | CWB_1_140m | 140 | 10.6 | 8.5 | 8.5 | 0.0 | -2.1 | 22.65 | 20.06 | 20.06 | 0.00 | -2.59 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 12 | CWB_1_150m | 150 | 10.5 | 8.5 | 8.5 | 0.0 | -2.0 | 22.65 | 20.06 | 20.06 | 0.00 | -2.59 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 13 | CWB_1_160m | 160 | 10.5 | 8.5 | 8.5 | 0.0 | -2.0 | 22.65 | 20.06 | 20.06 | 0.00 | -2.59 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 14 | CWB_1_185m | 185 | 10.5 | 8.5 | 8.5 | 0.0 | -2.0 | 22.65 | 20.06 | 20.06 | 0.00 | -2.59 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| | **Dover to Kingsdown Cliffs SAC** | | | | | | | | | | | | | | | | |
| 15 | DKC_1_146m | 146 | 33.8 | 31.5 | 32.0 | 0.5 | -1.8 | 12.77 | 11.28 | 11.31 | 0.03 | -1.47 | 0.97 | 0.97 | 0.97 | 0.00 | 0.00 |
| 16 | DKC_1_151m | 151 | 33.8 | 31.4 | 32.0 | 0.5 | -1.8 | 12.77 | 11.28 | 11.30 | 0.03 | -1.47 | 0.97 | 0.96 | 0.97 | 0.00 | 0.00 |

| Look up ID | Road Link | From Road (m) | Annual Mean Nox Conc. (ug/m3) Base (2017) | DM (2031) | DS (2031) | Change (DS-DM) | Change (DS-BL) | Annual Mean N Dep (k N/ha/yr) Base (2017) | DM (2031) | DS (2031) | Change (DS-DM) | Change (DS-BL) | Annual Mean A Dep (keq/ha/yr) BL Base | DM (2031) | DS (2031) | Change (DS-DM) | Change (DS-BL) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | DKC_1_156m | 156 | 33.7 | 31.4 | 31.9 | 0.5 | -1.8 | 12.77 | 11.28 | 11.30 | 0.03 | -1.46 | 0.97 | 0.96 | 0.97 | 0.00 | 0.00 |
| 18 | DKC_1_161m | 161 | 33.7 | 31.4 | 31.9 | 0.5 | -1.8 | 12.76 | 11.27 | 11.30 | 0.03 | -1.46 | 0.97 | 0.96 | 0.97 | 0.00 | 0.00 |
| 19 | DKC_1_166m | 166 | 33.6 | 31.3 | 31.8 | 0.5 | -1.8 | 12.76 | 11.27 | 11.30 | 0.02 | -1.46 | 0.97 | 0.96 | 0.97 | 0.00 | 0.00 |
| 20 | DKC_1_176m | 176 | 33.5 | 31.3 | 31.7 | 0.4 | -1.8 | 12.76 | 11.27 | 11.29 | 0.02 | -1.46 | 0.97 | 0.96 | 0.97 | 0.00 | 0.00 |
| 21 | DKC_1_186m | 186 | 33.4 | 31.3 | 31.7 | 0.4 | -1.8 | 12.75 | 11.27 | 11.29 | 0.02 | -1.46 | 0.97 | 0.96 | 0.97 | 0.00 | 0.00 |
| 22 | DKC_1_196m | 196 | 33.3 | 31.2 | 31.6 | 0.4 | -1.7 | 12.75 | 11.27 | 11.29 | 0.02 | -1.46 | 0.97 | 0.96 | 0.97 | 0.00 | 0.00 |
| | **DungenessSAC** | | | | | | | | | | | | | | | | |
| 23 | DRMRB_1_0m | 0 | 12.2 | 9.6 | 9.6 | 0.0 | -2.6 | 10.50 | 9.24 | 9.24 | 0.00 | -1.25 | 0.80 | 0.79 | 0.79 | 0.00 | -0.01 |
| 24 | DRMRB_1_5m | 5 | 10.9 | 8.8 | 8.8 | 0.0 | -2.0 | 10.42 | 9.20 | 9.20 | 0.00 | -1.22 | 0.79 | 0.79 | 0.79 | 0.00 | 0.00 |
| 25 | DRMRB_1_10m | 10 | 10.4 | 8.5 | 8.5 | 0.0 | -1.8 | 10.40 | 9.19 | 9.19 | 0.00 | -1.21 | 0.79 | 0.78 | 0.78 | 0.00 | 0.00 |
| 26 | DRMRB_1_15m | 15 | 10.1 | 8.4 | 8.4 | 0.0 | -1.7 | 10.38 | 9.18 | 9.18 | 0.00 | -1.20 | 0.79 | 0.78 | 0.78 | 0.00 | 0.00 |
| 27 | DRMRB_1_20m | 20 | 9.9 | 8.3 | 8.3 | 0.0 | -1.6 | 10.37 | 9.17 | 9.17 | 0.00 | -1.20 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 28 | DRMRB_1_30m | 30 | 9.7 | 8.2 | 8.2 | 0.0 | -1.5 | 10.36 | 9.16 | 9.16 | 0.00 | -1.19 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 29 | DRMRB_1_40m | 40 | 9.5 | 8.1 | 8.1 | 0.0 | -1.5 | 10.35 | 9.16 | 9.16 | 0.00 | -1.19 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 30 | DRMRB_1_50m | 50 | 9.5 | 8.0 | 8.0 | 0.0 | -1.4 | 10.35 | 9.16 | 9.16 | 0.00 | -1.19 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 31 | DRMRB_1_60m | 60 | 9.4 | 8.0 | 8.0 | 0.0 | -1.4 | 10.34 | 9.16 | 9.16 | 0.00 | -1.19 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 32 | DRMRB_1_70m | 70 | 9.4 | 8.0 | 8.0 | 0.0 | -1.4 | 10.34 | 9.15 | 9.15 | 0.00 | -1.19 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 33 | DRMRB_1_80m | 80 | 9.3 | 8.0 | 8.0 | 0.0 | -1.4 | 10.34 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 34 | DRMRB_1_90m | 90 | 9.3 | 7.9 | 7.9 | 0.0 | -1.4 | 10.34 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 35 | DRMRB_1_100m | 100 | 9.3 | 7.9 | 7.9 | 0.0 | -1.3 | 10.34 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 36 | DRMRB_1_125m | 125 | 9.2 | 7.9 | 7.9 | 0.0 | -1.3 | 10.33 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 37 | DRMRB_1_150m | 150 | 9.2 | 7.9 | 7.9 | 0.0 | -1.3 | 10.33 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 38 | DRMRB_1_175m | 175 | 9.2 | 7.9 | 7.9 | 0.0 | -1.3 | 10.33 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 39 | DRMRB_1_200m | 200 | 9.2 | 7.9 | 7.9 | 0.0 | -1.3 | 10.33 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| | **Dungeness, Romney Marsh & Rye** | | | | | | | | | | | | | | | | |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link Bay SPA/Ramsar site | From Road (m) | (2017) | (2031) | (2031) | (DS-DM) | (DS-BL) | (2017) | (2031) | (2031) | (DS-DM) | (DS-BL) | Base | (2031) | (2031) | (DS-DM) | (DS-BL) |
| 40 | DRMRB_2_0m | 0 | 11.8 | 9.3 | 9.3 | 0.0 | -2.5 | 11.57 | 10.20 | 10.20 | 0.00 | -1.37 | 0.89 | 0.88 | 0.88 | 0.00 | -0.01 |
| 41 | DRMRB_2_5m | 5 | 10.8 | 8.8 | 8.8 | 0.0 | -2.1 | 11.52 | 10.17 | 10.17 | 0.00 | -1.35 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 42 | DRMRB_2_10m | 10 | 10.4 | 8.5 | 8.5 | 0.0 | -1.9 | 11.49 | 10.16 | 10.16 | 0.00 | -1.34 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 43 | DRMRB_2_15m | 15 | 10.1 | 8.3 | 8.3 | 0.0 | -1.7 | 11.48 | 10.15 | 10.15 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 44 | DRMRB_2_20m | 20 | 9.9 | 8.2 | 8.2 | 0.0 | -1.7 | 11.47 | 10.14 | 10.14 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 45 | DRMRB_2_30m | 30 | 9.7 | 8.1 | 8.1 | 0.0 | -1.6 | 11.45 | 10.13 | 10.13 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 46 | DRMRB_2_40m | 40 | 9.5 | 8.0 | 8.0 | 0.0 | -1.5 | 11.45 | 10.13 | 10.13 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 47 | DRMRB_2_50m | 50 | 9.4 | 8.0 | 8.0 | 0.0 | -1.5 | 11.44 | 10.13 | 10.13 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 48 | DRMRB_2_60m | 60 | 9.4 | 7.9 | 7.9 | 0.0 | -1.4 | 11.44 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 49 | DRMRB_2_70m | 70 | 9.3 | 7.9 | 7.9 | 0.0 | -1.4 | 11.44 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 50 | DRMRB_2_80m | 80 | 9.3 | 7.9 | 7.9 | 0.0 | -1.4 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 51 | DRMRB_2_90m | 90 | 9.3 | 7.9 | 7.9 | 0.0 | -1.4 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 52 | DRMRB_2_100m | 100 | 9.3 | 7.9 | 7.9 | 0.0 | -1.4 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 53 | DRMRB_2_125m | 125 | 9.2 | 7.8 | 7.8 | 0.0 | -1.4 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 54 | DRMRB_2_150m | 150 | 9.2 | 7.8 | 7.8 | 0.0 | -1.4 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 55 | DRMRB_2_175m | 175 | 9.2 | 7.8 | 7.8 | 0.0 | -1.3 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 56 | DRMRB_2_200m | 200 | 9.1 | 7.8 | 7.8 | 0.0 | -1.3 | 11.42 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 57 | DRMRB_3_168m | 168 | 11.0 | 9.0 | 9.0 | 0.0 | -1.9 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 58 | DRMRB_3_173m | 173 | 10.9 | 9.0 | 9.0 | 0.0 | -1.9 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 59 | DRMRB_3_178m | 178 | 10.9 | 9.0 | 9.0 | 0.0 | -1.9 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 60 | DRMRB_3_183m | 183 | 10.9 | 9.0 | 9.0 | 0.0 | -1.9 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 61 | DRMRB_3_188m | 188 | 10.9 | 9.0 | 9.0 | 0.0 | -1.9 | 11.45 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 62 | DRMRB_3_198m | 198 | 10.9 | 8.9 | 9.0 | 0.0 | -1.9 | 11.45 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 63 | DRMRB_5_38m | 38 | 11.5 | 9.1 | 9.2 | 0.1 | -2.3 | 11.54 | 10.19 | 10.20 | 0.01 | -1.35 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2031) | (2031) | (DS-DM) | (DS-BL) | (2017) | (2031) | (2031) | (DS-DM) | (DS-BL) | Base | (2031) | (2031) | (DS-DM) | (DS-BL) |
| 64 | DRMRB_5_43m | 43 | 11.3 | 9.0 | 9.0 | 0.1 | -2.2 | 11.53 | 10.18 | 10.19 | 0.01 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 65 | DRMRB_5_48m | 48 | 11.1 | 8.8 | 8.9 | 0.1 | -2.2 | 11.52 | 10.18 | 10.18 | 0.00 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 66 | DRMRB_5_53m | 53 | 11.0 | 8.8 | 8.8 | 0.1 | -2.1 | 11.51 | 10.17 | 10.18 | 0.00 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 67 | DRMRB_5_58m | 58 | 10.8 | 8.7 | 8.7 | 0.1 | -2.1 | 11.51 | 10.17 | 10.17 | 0.00 | -1.33 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 68 | DRMRB_5_68m | 68 | 10.6 | 8.6 | 8.6 | 0.1 | -2.0 | 11.50 | 10.16 | 10.16 | 0.00 | -1.33 | 0.88 | 0.87 | 0.88 | 0.00 | 0.00 |
| 69 | DRMRB_5_78m | 78 | 10.5 | 8.5 | 8.5 | 0.1 | -2.0 | 11.49 | 10.16 | 10.16 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 70 | DRMRB_5_88m | 88 | 10.4 | 8.4 | 8.4 | 0.0 | -1.9 | 11.48 | 10.15 | 10.15 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 71 | DRMRB_5_98m | 98 | 10.3 | 8.3 | 8.4 | 0.0 | -1.9 | 11.47 | 10.15 | 10.15 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 72 | DRMRB_5_108m | 108 | 10.2 | 8.3 | 8.3 | 0.0 | -1.9 | 11.47 | 10.15 | 10.15 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 73 | DRMRB_5_118m | 118 | 10.1 | 8.2 | 8.3 | 0.0 | -1.8 | 11.47 | 10.14 | 10.15 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 74 | DRMRB_5_128m | 128 | 10.0 | 8.2 | 8.2 | 0.0 | -1.8 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 75 | DRMRB_5_138m | 138 | 10.0 | 8.2 | 8.2 | 0.0 | -1.8 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 76 | DRMRB_5_163m | 163 | 9.9 | 8.1 | 8.1 | 0.0 | -1.8 | 11.45 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 77 | DRMRB_5_188m | 188 | 9.8 | 8.1 | 8.1 | 0.0 | -1.7 | 11.45 | 10.13 | 10.14 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 78 | DRMRB_6_0m | 0 | 23.5 | 16.5 | 17.2 | 0.7 | -6.3 | 12.14 | 10.54 | 10.58 | 0.04 | -1.56 | 0.94 | 0.91 | 0.92 | 0.00 | -0.03 |
| 79 | DRMRB_6_5m | 5 | 18.4 | 13.4 | 13.8 | 0.4 | -4.5 | 11.86 | 10.38 | 10.40 | 0.02 | -1.46 | 0.92 | 0.90 | 0.90 | 0.00 | -0.02 |
| 80 | DRMRB_6_10m | 10 | 16.2 | 12.1 | 12.4 | 0.3 | -3.8 | 11.75 | 10.31 | 10.33 | 0.02 | -1.42 | 0.90 | 0.89 | 0.89 | 0.00 | -0.01 |
| 81 | DRMRB_6_15m | 15 | 15.0 | 11.4 | 11.6 | 0.2 | -3.4 | 11.68 | 10.27 | 10.28 | 0.01 | -1.40 | 0.90 | 0.89 | 0.89 | 0.00 | -0.01 |
| 82 | DRMRB_6_20m | 20 | 14.2 | 10.9 | 11.1 | 0.2 | -3.1 | 11.64 | 10.24 | 10.26 | 0.01 | -1.38 | 0.89 | 0.88 | 0.88 | 0.00 | -0.01 |
| 83 | DRMRB_6_30m | 30 | 13.3 | 10.4 | 10.5 | 0.2 | -2.7 | 11.59 | 10.21 | 10.22 | 0.01 | -1.36 | 0.89 | 0.88 | 0.88 | 0.00 | -0.01 |
| 84 | DRMRB_6_40m | 40 | 12.7 | 10.0 | 10.2 | 0.1 | -2.5 | 11.55 | 10.19 | 10.20 | 0.01 | -1.35 | 0.88 | 0.88 | 0.88 | 0.00 | -0.01 |
| 85 | DRMRB_6_50m | 50 | 12.3 | 9.8 | 9.9 | 0.1 | -2.4 | 11.53 | 10.18 | 10.19 | 0.01 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 86 | DRMRB_6_60m | 60 | 12.1 | 9.7 | 9.8 | 0.1 | -2.3 | 11.52 | 10.17 | 10.18 | 0.00 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 87 | DRMRB_6_70m | 70 | 11.9 | 9.5 | 9.6 | 0.1 | -2.3 | 11.51 | 10.17 | 10.17 | 0.00 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 88 | DRMRB_6_80m | 80 | 11.7 | 9.5 | 9.5 | 0.1 | -2.2 | 11.50 | 10.16 | 10.17 | 0.00 | -1.33 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 89 | DRMRB_6_90m | 90 | 11.6 | 9.4 | 9.5 | 0.1 | -2.2 | 11.49 | 10.16 | 10.16 | 0.00 | -1.33 | 0.88 | 0.87 | 0.88 | 0.00 | 0.00 |

| Look up ID | Road Link | From Road (m) | Annual Mean Nox Conc. (ug/m3) Base (2017) | DM (2031) | DS (2031) | Change (DS-DM) | Change (DS-BL) | Annual Mean N Dep (k N/ha/yr) Base (2017) | DM (2031) | DS (2031) | Change (DS-DM) | Change (DS-BL) | Annual Mean A Dep (keq/ha/yr) BL Base | DM (2031) | DS (2031) | Change (DS-DM) | Change (DS-BL) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 90 | DRMRB_6_100m | 100 | 11.5 | 9.3 | 9.4 | 0.1 | -2.1 | 11.49 | 10.16 | 10.16 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 91 | DRMRB_6_125m | 125 | 11.3 | 9.2 | 9.3 | 0.1 | -2.1 | 11.48 | 10.15 | 10.15 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 92 | DRMRB_6_150m | 150 | 11.2 | 9.1 | 9.2 | 0.0 | -2.0 | 11.47 | 10.15 | 10.15 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 93 | DRMRB_6_175m | 175 | 11.1 | 9.1 | 9.1 | 0.0 | -2.0 | 11.47 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 94 | DRMRB_6_200m | 200 | 11.0 | 9.0 | 9.1 | 0.0 | -2.0 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 95 | DRMRB_7_0m | 0 | 22.4 | 15.6 | 16.3 | 0.7 | -6.2 | 12.13 | 10.54 | 10.58 | 0.04 | -1.55 | 0.94 | 0.91 | 0.92 | 0.00 | -0.03 |
| 96 | DRMRB_7_5m | 5 | 17.0 | 12.3 | 12.8 | 0.4 | -4.3 | 11.84 | 10.37 | 10.39 | 0.02 | -1.45 | 0.91 | 0.90 | 0.90 | 0.00 | -0.02 |
| 97 | DRMRB_7_10m | 10 | 14.9 | 11.0 | 11.3 | 0.3 | -3.5 | 11.73 | 10.30 | 10.31 | 0.02 | -1.41 | 0.90 | 0.89 | 0.89 | 0.00 | -0.01 |
| 98 | DRMRB_7_15m | 15 | 13.7 | 10.3 | 10.6 | 0.2 | -3.1 | 11.66 | 10.26 | 10.27 | 0.01 | -1.39 | 0.90 | 0.89 | 0.89 | 0.00 | -0.01 |
| 99 | DRMRB_7_20m | 20 | 12.9 | 9.9 | 10.1 | 0.2 | -2.8 | 11.62 | 10.23 | 10.25 | 0.01 | -1.37 | 0.89 | 0.88 | 0.88 | 0.00 | -0.01 |
| 100 | DRMRB_7_30m | 30 | 12.0 | 9.3 | 9.4 | 0.1 | -2.5 | 11.57 | 10.20 | 10.21 | 0.01 | -1.36 | 0.89 | 0.88 | 0.88 | 0.00 | -0.01 |
| 101 | DRMRB_7_40m | 40 | 11.4 | 9.0 | 9.1 | 0.1 | -2.3 | 11.54 | 10.18 | 10.19 | 0.01 | -1.35 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 102 | DRMRB_7_50m | 50 | 11.0 | 8.7 | 8.8 | 0.1 | -2.2 | 11.52 | 10.17 | 10.18 | 0.01 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 103 | DRMRB_7_60m | 60 | 10.7 | 8.6 | 8.6 | 0.1 | -2.1 | 11.50 | 10.16 | 10.17 | 0.01 | -1.33 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 104 | DRMRB_7_70m | 70 | 10.5 | 8.4 | 8.5 | 0.1 | -2.0 | 11.49 | 10.16 | 10.16 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 105 | DRMRB_7_80m | 80 | 10.4 | 8.4 | 8.4 | 0.1 | -2.0 | 11.48 | 10.15 | 10.15 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 106 | DRMRB_7_90m | 90 | 10.3 | 8.3 | 8.3 | 0.1 | -1.9 | 11.47 | 10.15 | 10.15 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 107 | DRMRB_7_100m | 100 | 10.2 | 8.2 | 8.3 | 0.0 | -1.9 | 11.47 | 10.14 | 10.15 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 108 | DRMRB_7_125m | 125 | 10.0 | 8.1 | 8.2 | 0.0 | -1.8 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 109 | DRMRB_7_150m | 150 | 9.9 | 8.1 | 8.1 | 0.0 | -1.8 | 11.45 | 10.13 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 110 | DRMRB_7_175m | 175 | 9.8 | 8.0 | 8.0 | 0.0 | -1.8 | 11.45 | 10.13 | 10.13 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 111 | DRMRB_7_200m | 200 | 9.7 | 8.0 | 8.0 | 0.0 | -1.7 | 11.44 | 10.13 | 10.13 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| | **Folkestone to Etchinghill Escarpment SAC** | | | | | | | | | | | | | | | | |
| 112 | FEE_1_0m | 0 | 70.6 | 41.6 | 44.7 | 3.2 | -25.9 | 16.93 | 14.10 | 14.25 | 0.15 | -2.68 | 1.36 | 1.24 | 1.25 | 0.02 | -0.11 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2031) | (2031) | (DS-DM) | (DS-BL) | (2017) | (2031) | (2031) | (DS-DM) | (DS-BL) | Base | (2031) | (2031) | (DS-DM) | (DS-BL) |
| 113 | FEE_1_5m | 5 | 50.4 | 30.9 | 33.0 | 2.0 | -17.4 | 16.02 | 13.58 | 13.68 | 0.10 | -2.34 | 1.27 | 1.18 | 1.19 | 0.01 | -0.07 |
| 114 | FEE_1_10m | 10 | 42.0 | 26.5 | 28.1 | 1.6 | -13.9 | 15.62 | 13.35 | 13.43 | 0.08 | -2.19 | 1.23 | 1.16 | 1.17 | 0.01 | -0.06 |
| 115 | FEE_1_15m | 15 | 37.1 | 23.9 | 25.2 | 1.3 | -11.9 | 15.38 | 13.22 | 13.29 | 0.07 | -2.09 | 1.20 | 1.15 | 1.15 | 0.01 | -0.05 |
| 116 | FEE_1_20m | 20 | 33.8 | 22.2 | 23.3 | 1.1 | -10.5 | 15.22 | 13.13 | 13.19 | 0.06 | -2.03 | 1.19 | 1.14 | 1.14 | 0.01 | -0.04 |
| 117 | FEE_1_30m | 30 | 29.5 | 19.9 | 20.8 | 0.9 | -8.7 | 15.00 | 13.01 | 13.06 | 0.05 | -1.94 | 1.16 | 1.13 | 1.13 | 0.00 | -0.03 |
| 118 | FEE_1_40m | 40 | 26.8 | 18.5 | 19.2 | 0.7 | -7.7 | 14.86 | 12.93 | 12.97 | 0.04 | -1.89 | 1.15 | 1.12 | 1.12 | 0.00 | -0.03 |
| 119 | FEE_1_50m | 50 | 25.0 | 17.5 | 18.1 | 0.6 | -6.9 | 14.76 | 12.88 | 12.91 | 0.03 | -1.85 | 1.14 | 1.11 | 1.12 | 0.00 | -0.02 |
| 120 | FEE_1_60m | 60 | 23.6 | 16.7 | 17.3 | 0.5 | -6.3 | 14.69 | 12.84 | 12.87 | 0.03 | -1.82 | 1.13 | 1.11 | 1.11 | 0.00 | -0.02 |
| 121 | FEE_1_70m | 70 | 22.5 | 16.1 | 16.6 | 0.5 | -5.9 | 14.64 | 12.81 | 12.84 | 0.03 | -1.80 | 1.13 | 1.11 | 1.11 | 0.00 | -0.02 |
| 122 | FEE_1_80m | 80 | 21.7 | 15.7 | 16.1 | 0.4 | -5.6 | 14.59 | 12.78 | 12.81 | 0.02 | -1.78 | 1.12 | 1.10 | 1.11 | 0.00 | -0.02 |
| 123 | FEE_1_90m | 90 | 21.0 | 15.3 | 15.7 | 0.4 | -5.3 | 14.55 | 12.76 | 12.79 | 0.02 | -1.77 | 1.12 | 1.10 | 1.10 | 0.00 | -0.02 |
| 124 | FEE_1_100m | 100 | 20.4 | 15.0 | 15.3 | 0.4 | -5.0 | 14.52 | 12.75 | 12.77 | 0.02 | -1.75 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 125 | FEE_1_125m | 125 | 19.2 | 14.3 | 14.6 | 0.3 | -4.6 | 14.46 | 12.71 | 12.73 | 0.02 | -1.73 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 126 | FEE_1_150m | 150 | 18.4 | 13.9 | 14.1 | 0.2 | -4.2 | 14.41 | 12.69 | 12.70 | 0.01 | -1.71 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 127 | FEE_1_175m | 175 | 17.8 | 13.6 | 13.8 | 0.2 | -4.0 | 14.38 | 12.67 | 12.68 | 0.01 | -1.70 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 128 | FEE_1_200m | 200 | 17.3 | 13.3 | 13.5 | 0.2 | -3.8 | 14.35 | 12.66 | 12.67 | 0.01 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 129 | FEE_2_0m | 0 | 17.7 | 13.4 | 13.6 | 0.2 | -4.1 | 14.41 | 12.69 | 12.70 | 0.01 | -1.71 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 130 | FEE_2_5m | 5 | 17.3 | 13.2 | 13.3 | 0.2 | -4.0 | 14.39 | 12.68 | 12.69 | 0.01 | -1.70 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 131 | FEE_2_10m | 10 | 17.2 | 13.1 | 13.3 | 0.2 | -3.9 | 14.39 | 12.67 | 12.68 | 0.01 | -1.70 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 132 | FEE_2_15m | 15 | 17.2 | 13.1 | 13.3 | 0.2 | -3.9 | 14.39 | 12.67 | 12.68 | 0.01 | -1.70 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 133 | FEE_2_20m | 20 | 17.3 | 13.1 | 13.3 | 0.2 | -4.0 | 14.39 | 12.67 | 12.69 | 0.01 | -1.70 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 134 | FEE_2_30m | 30 | 17.4 | 13.2 | 13.4 | 0.2 | -4.0 | 14.40 | 12.68 | 12.69 | 0.01 | -1.70 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 135 | FEE_2_40m | 40 | 17.6 | 13.3 | 13.5 | 0.2 | -4.1 | 14.41 | 12.68 | 12.70 | 0.01 | -1.71 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 136 | FEE_2_50m | 50 | 17.8 | 13.4 | 13.6 | 0.2 | -4.2 | 14.42 | 12.69 | 12.70 | 0.01 | -1.71 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 137 | FEE_2_60m | 60 | 18.1 | 13.5 | 13.8 | 0.3 | -4.3 | 14.43 | 12.70 | 12.71 | 0.01 | -1.72 | 1.11 | 1.09 | 1.10 | 0.00 | -0.01 |
| 138 | FEE_2_70m | 70 | 18.4 | 13.7 | 14.0 | 0.3 | -4.4 | 14.45 | 12.71 | 12.72 | 0.01 | -1.73 | 1.11 | 1.09 | 1.10 | 0.00 | -0.01 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2031) | (2031) | (DS-DM) | (DS-BL) | (2017) | (2031) | (2031) | (DS-DM) | (DS-BL) | Base | (2031) | (2031) | (DS-DM) | (DS-BL) |
| 139 | FEE_2_80m | 80 | 18.7 | 13.9 | 14.2 | 0.3 | -4.6 | 14.47 | 12.72 | 12.73 | 0.02 | -1.73 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 140 | FEE_2_90m | 90 | 19.1 | 14.1 | 14.4 | 0.3 | -4.7 | 14.49 | 12.73 | 12.75 | 0.02 | -1.74 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 141 | FEE_3_0m | 0 | 28.2 | 20.5 | 21.1 | 0.7 | -7.1 | 14.95 | 13.05 | 13.09 | 0.04 | -1.87 | 1.16 | 1.13 | 1.13 | 0.00 | -0.03 |
| 142 | FEE_3_5m | 5 | 23.0 | 17.1 | 17.6 | 0.4 | -5.4 | 14.68 | 12.87 | 12.90 | 0.02 | -1.78 | 1.13 | 1.11 | 1.11 | 0.00 | -0.02 |
| 143 | FEE_3_10m | 10 | 20.8 | 15.8 | 16.1 | 0.3 | -4.7 | 14.56 | 12.80 | 12.82 | 0.02 | -1.75 | 1.12 | 1.10 | 1.11 | 0.00 | -0.01 |
| 144 | FEE_3_15m | 15 | 19.6 | 15.0 | 15.2 | 0.3 | -4.3 | 14.50 | 12.76 | 12.77 | 0.01 | -1.72 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 145 | FEE_3_20m | 20 | 18.7 | 14.5 | 14.7 | 0.2 | -4.1 | 14.45 | 12.73 | 12.74 | 0.01 | -1.71 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 146 | FEE_3_30m | 30 | 17.8 | 13.8 | 14.0 | 0.2 | -3.7 | 14.40 | 12.70 | 12.71 | 0.01 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 147 | FEE_3_40m | 40 | 17.2 | 13.5 | 13.6 | 0.2 | -3.6 | 14.37 | 12.68 | 12.69 | 0.01 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 148 | FEE_3_50m | 50 | 16.8 | 13.2 | 13.4 | 0.2 | -3.4 | 14.35 | 12.66 | 12.67 | 0.01 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 149 | FEE_3_60m | 60 | 16.6 | 13.1 | 13.2 | 0.1 | -3.4 | 14.33 | 12.66 | 12.66 | 0.01 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 150 | FEE_3_70m | 70 | 16.4 | 13.0 | 13.1 | 0.1 | -3.3 | 14.32 | 12.65 | 12.66 | 0.01 | -1.67 | 1.09 | 1.09 | 1.09 | 0.00 | -0.01 |
| 151 | FEE_3_80m | 80 | 16.3 | 12.9 | 13.0 | 0.1 | -3.3 | 14.32 | 12.64 | 12.65 | 0.01 | -1.67 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 152 | FEE_3_90m | 90 | 16.2 | 12.8 | 12.9 | 0.1 | -3.2 | 14.31 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 153 | FEE_3_100m | 100 | 16.1 | 12.8 | 12.9 | 0.1 | -3.2 | 14.31 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 154 | FEE_3_125m | 125 | 16.0 | 12.7 | 12.8 | 0.1 | -3.2 | 14.30 | 12.63 | 12.64 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 155 | FEE_3_150m | 150 | 15.9 | 12.6 | 12.8 | 0.1 | -3.2 | 14.30 | 12.63 | 12.64 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 156 | FEE_3_175m | 175 | 15.9 | 12.6 | 12.8 | 0.1 | -3.2 | 14.30 | 12.63 | 12.64 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 157 | FEE_3_200m | 200 | 15.9 | 12.6 | 12.8 | 0.1 | -3.2 | 14.30 | 12.63 | 12.64 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 158 | FEE_4_0m | 0 | 30.9 | 22.1 | 22.9 | 0.8 | -8.0 | 15.09 | 13.14 | 13.18 | 0.04 | -1.91 | 1.17 | 1.14 | 1.14 | 0.00 | -0.03 |
| 159 | FEE_4_5m | 5 | 25.0 | 18.4 | 18.9 | 0.5 | -6.1 | 14.79 | 12.94 | 12.97 | 0.03 | -1.82 | 1.14 | 1.12 | 1.12 | 0.00 | -0.02 |
| 160 | FEE_4_10m | 10 | 22.4 | 16.7 | 17.1 | 0.4 | -5.2 | 14.64 | 12.85 | 12.87 | 0.02 | -1.77 | 1.13 | 1.11 | 1.11 | 0.00 | -0.02 |
| 161 | FEE_4_15m | 15 | 20.8 | 15.7 | 16.1 | 0.3 | -4.7 | 14.56 | 12.80 | 12.82 | 0.02 | -1.75 | 1.12 | 1.10 | 1.11 | 0.00 | -0.01 |
| 162 | FEE_4_20m | 20 | 19.8 | 15.1 | 15.4 | 0.3 | -4.4 | 14.51 | 12.76 | 12.78 | 0.02 | -1.73 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 163 | FEE_4_30m | 30 | 18.5 | 14.3 | 14.5 | 0.2 | -4.0 | 14.44 | 12.72 | 12.73 | 0.01 | -1.70 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2031) | (2031) | (DS-DM) | (DS-BL) | (2017) | (2031) | (2031) | (DS-DM) | (DS-BL) | Base | (2031) | (2031) | (DS-DM) | (DS-BL) |
| 164 | FEE_4_40m | 40 | 17.7 | 13.8 | 14.0 | 0.2 | -3.7 | 14.40 | 12.70 | 12.71 | 0.01 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 165 | FEE_4_50m | 50 | 17.2 | 13.5 | 13.7 | 0.2 | -3.6 | 14.37 | 12.68 | 12.69 | 0.01 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 166 | FEE_4_60m | 60 | 16.9 | 13.3 | 13.4 | 0.2 | -3.4 | 14.35 | 12.67 | 12.67 | 0.01 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 167 | FEE_4_70m | 70 | 16.6 | 13.1 | 13.2 | 0.1 | -3.3 | 14.34 | 12.66 | 12.66 | 0.01 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 168 | FEE_4_80m | 80 | 16.4 | 13.0 | 13.1 | 0.1 | -3.3 | 14.32 | 12.65 | 12.66 | 0.01 | -1.67 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 169 | FEE_4_90m | 90 | 16.2 | 12.9 | 13.0 | 0.1 | -3.2 | 14.31 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 170 | FEE_4_100m | 100 | 16.1 | 12.8 | 12.9 | 0.1 | -3.2 | 14.31 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 171 | FEE_4_125m | 125 | 15.8 | 12.6 | 12.7 | 0.1 | -3.1 | 14.29 | 12.63 | 12.64 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 172 | FEE_4_150m | 150 | 15.6 | 12.5 | 12.6 | 0.1 | -3.0 | 14.28 | 12.62 | 12.63 | 0.00 | -1.65 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 173 | FEE_4_175m | 175 | 15.5 | 12.4 | 12.5 | 0.1 | -3.0 | 14.27 | 12.62 | 12.62 | 0.00 | -1.65 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 174 | FEE_4_200m | 200 | 15.3 | 12.3 | 12.4 | 0.1 | -2.9 | 14.27 | 12.61 | 12.62 | 0.00 | -1.65 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 175 | FEE_5_0m | 0 | 19.1 | 14.4 | 14.6 | 0.2 | -4.5 | 14.47 | 12.72 | 12.74 | 0.01 | -1.73 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 176 | FEE_5_5m | 5 | 18.6 | 14.1 | 14.3 | 0.2 | -4.3 | 14.44 | 12.71 | 12.72 | 0.01 | -1.72 | 1.11 | 1.09 | 1.10 | 0.00 | -0.01 |
| 177 | FEE_5_10m | 10 | 18.4 | 13.9 | 14.2 | 0.2 | -4.2 | 14.43 | 12.70 | 12.72 | 0.01 | -1.72 | 1.11 | 1.09 | 1.10 | 0.00 | -0.01 |
| 178 | FEE_5_15m | 15 | 18.2 | 13.9 | 14.1 | 0.2 | -4.1 | 14.42 | 12.70 | 12.71 | 0.01 | -1.71 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 179 | FEE_5_20m | 20 | 18.1 | 13.8 | 14.0 | 0.2 | -4.1 | 14.42 | 12.69 | 12.71 | 0.01 | -1.71 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 180 | FEE_5_30m | 30 | 17.9 | 13.7 | 13.9 | 0.2 | -4.0 | 14.41 | 12.69 | 12.70 | 0.01 | -1.71 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 181 | FEE_5_40m | 40 | 17.7 | 13.6 | 13.8 | 0.2 | -3.9 | 14.40 | 12.68 | 12.70 | 0.01 | -1.70 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 182 | FEE_5_50m | 50 | 17.6 | 13.5 | 13.7 | 0.2 | -3.9 | 14.39 | 12.68 | 12.69 | 0.01 | -1.70 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 183 | FEE_5_60m | 60 | 17.5 | 13.5 | 13.7 | 0.2 | -3.8 | 14.38 | 12.68 | 12.69 | 0.01 | -1.70 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 184 | FEE_5_70m | 70 | 17.4 | 13.4 | 13.6 | 0.2 | -3.8 | 14.38 | 12.67 | 12.69 | 0.01 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 185 | FEE_5_80m | 80 | 17.3 | 13.4 | 13.6 | 0.2 | -3.7 | 14.37 | 12.67 | 12.68 | 0.01 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 186 | FEE_5_90m | 90 | 17.2 | 13.3 | 13.5 | 0.2 | -3.7 | 14.37 | 12.67 | 12.68 | 0.01 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 187 | FEE_5_100m | 100 | 17.2 | 13.3 | 13.5 | 0.2 | -3.7 | 14.37 | 12.67 | 12.68 | 0.01 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 188 | FEE_5_125m | 125 | 17.0 | 13.2 | 13.4 | 0.2 | -3.6 | 14.36 | 12.66 | 12.67 | 0.01 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 189 | FEE_5_150m | 150 | 16.9 | 13.2 | 13.4 | 0.2 | -3.6 | 14.35 | 12.66 | 12.67 | 0.01 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2031) | (2031) | (DS-DM) | (DS-BL) | (2017) | (2031) | (2031) | (DS-DM) | (DS-BL) | Base | (2031) | (2031) | (DS-DM) | (DS-BL) |
| 190 | FEE_5_175m | 175 | 16.8 | 13.1 | 13.3 | 0.2 | -3.5 | 14.35 | 12.66 | 12.67 | 0.01 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 191 | FEE_5_200m | 200 | 16.7 | 13.1 | 13.2 | 0.2 | -3.4 | 14.34 | 12.65 | 12.66 | 0.01 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 192 | FEE_6_62m | 62 | 19.1 | 14.7 | 15.0 | 0.3 | -4.1 | 14.41 | 12.70 | 12.71 | 0.01 | -1.69 | 1.10 | 1.09 | 1.10 | 0.00 | -0.01 |
| 193 | FEE_6_67m | 67 | 18.9 | 14.6 | 14.9 | 0.2 | -4.1 | 14.40 | 12.69 | 12.71 | 0.01 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 194 | FEE_6_72m | 72 | 18.7 | 14.5 | 14.7 | 0.2 | -4.0 | 14.39 | 12.69 | 12.70 | 0.01 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 195 | FEE_6_77m | 77 | 18.6 | 14.4 | 14.6 | 0.2 | -3.9 | 14.38 | 12.68 | 12.69 | 0.01 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 196 | FEE_6_82m | 82 | 18.4 | 14.3 | 14.5 | 0.2 | -3.9 | 14.37 | 12.68 | 12.69 | 0.01 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 197 | FEE_6_92m | 92 | 18.2 | 14.2 | 14.4 | 0.2 | -3.8 | 14.36 | 12.67 | 12.68 | 0.01 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 198 | FEE_6_102m | 102 | 18.0 | 14.1 | 14.2 | 0.2 | -3.8 | 14.35 | 12.66 | 12.67 | 0.01 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 199 | FEE_6_112m | 112 | 17.9 | 14.0 | 14.1 | 0.2 | -3.7 | 14.34 | 12.66 | 12.67 | 0.01 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 200 | FEE_6_122m | 122 | 17.7 | 13.9 | 14.0 | 0.2 | -3.7 | 14.33 | 12.65 | 12.66 | 0.01 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 201 | FEE_6_132m | 132 | 17.6 | 13.8 | 14.0 | 0.2 | -3.6 | 14.33 | 12.65 | 12.66 | 0.01 | -1.67 | 1.09 | 1.09 | 1.09 | 0.00 | -0.01 |
| 202 | FEE_6_142m | 142 | 17.5 | 13.8 | 13.9 | 0.2 | -3.6 | 14.32 | 12.65 | 12.65 | 0.01 | -1.67 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 203 | FEE_6_152m | 152 | 17.4 | 13.7 | 13.9 | 0.1 | -3.6 | 14.32 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 204 | FEE_6_162m | 162 | 17.4 | 13.7 | 13.8 | 0.1 | -3.6 | 14.31 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 205 | FEE_6_187m | 187 | 17.3 | 13.6 | 13.7 | 0.1 | -3.5 | 14.31 | 12.64 | 12.64 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| **Lydden and Temple Ewell Downs SAC** | | | | | | | | | | | | | | | | | |
| 206 | LTED_1_90m | 90 | 13.2 | 10.6 | 10.7 | 0.1 | -2.5 | 16.59 | 14.66 | 14.67 | 0.01 | -1.93 | 1.26 | 1.26 | 1.26 | 0.00 | 0.00 |
| 207 | LTED_1_95m | 95 | 13.1 | 10.5 | 10.6 | 0.1 | -2.5 | 16.59 | 14.66 | 14.66 | 0.01 | -1.92 | 1.26 | 1.26 | 1.26 | 0.00 | 0.00 |
| 208 | LTED_1_100m | 100 | 13.0 | 10.5 | 10.6 | 0.1 | -2.4 | 16.58 | 14.66 | 14.66 | 0.01 | -1.92 | 1.26 | 1.25 | 1.26 | 0.00 | 0.00 |
| 209 | LTED_1_105m | 105 | 13.0 | 10.5 | 10.6 | 0.1 | -2.4 | 16.58 | 14.65 | 14.66 | 0.01 | -1.92 | 1.26 | 1.25 | 1.26 | 0.00 | 0.00 |
| 210 | LTED_1_110m | 110 | 12.9 | 10.4 | 10.5 | 0.1 | -2.4 | 16.58 | 14.65 | 14.66 | 0.01 | -1.92 | 1.26 | 1.25 | 1.26 | 0.00 | 0.00 |
| 211 | LTED_1_120m | 120 | 12.8 | 10.4 | 10.5 | 0.1 | -2.3 | 16.57 | 14.65 | 14.65 | 0.01 | -1.92 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 212 | LTED_1_130m | 130 | 12.7 | 10.3 | 10.4 | 0.1 | -2.3 | 16.56 | 14.65 | 14.65 | 0.00 | -1.91 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2031) | (2031) | (DS-DM) | (DS-BL) | (2017) | (2031) | (2031) | (DS-DM) | (DS-BL) | Base | (2031) | (2031) | (DS-DM) | (DS-BL) |
| 213 | LTED_1_140m | 140 | 12.6 | 10.3 | 10.4 | 0.1 | -2.3 | 16.56 | 14.64 | 14.65 | 0.00 | -1.91 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 214 | LTED_1_150m | 150 | 12.5 | 10.2 | 10.3 | 0.1 | -2.2 | 16.56 | 14.64 | 14.65 | 0.00 | -1.91 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 215 | LTED_1_160m | 160 | 12.5 | 10.2 | 10.3 | 0.1 | -2.2 | 16.55 | 14.64 | 14.64 | 0.00 | -1.91 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 216 | LTED_1_170m | 170 | 12.4 | 10.2 | 10.2 | 0.1 | -2.2 | 16.55 | 14.64 | 14.64 | 0.00 | -1.91 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 217 | LTED_1_180m | 180 | 12.4 | 10.1 | 10.2 | 0.1 | -2.2 | 16.55 | 14.64 | 14.64 | 0.00 | -1.91 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 218 | LTED_1_190m | 190 | 12.3 | 10.1 | 10.2 | 0.1 | -2.1 | 16.54 | 14.64 | 14.64 | 0.00 | -1.91 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 219 | LTED_2_95m | 95 | 12.7 | 10.6 | 10.6 | 0.0 | -2.1 | 16.54 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 220 | LTED_2_100m | 100 | 12.7 | 10.6 | 10.6 | 0.0 | -2.1 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 221 | LTED_2_105m | 105 | 12.7 | 10.6 | 10.6 | 0.0 | -2.1 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 222 | LTED_2_110m | 110 | 12.7 | 10.6 | 10.6 | 0.0 | -2.1 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 223 | LTED_2_115m | 115 | 12.6 | 10.5 | 10.6 | 0.0 | -2.1 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 224 | LTED_2_125m | 125 | 12.6 | 10.5 | 10.5 | 0.0 | -2.1 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 225 | LTED_2_135m | 135 | 12.6 | 10.5 | 10.5 | 0.0 | -2.1 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 226 | LTED_2_145m | 145 | 12.6 | 10.5 | 10.5 | 0.0 | -2.0 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 227 | LTED_2_155m | 155 | 12.5 | 10.5 | 10.5 | 0.0 | -2.0 | 16.52 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 228 | LTED_2_165m | 165 | 12.5 | 10.5 | 10.5 | 0.0 | -2.0 | 16.52 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 229 | LTED_2_175m | 175 | 12.5 | 10.5 | 10.5 | 0.0 | -2.0 | 16.52 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 230 | LTED_2_185m | 185 | 12.5 | 10.5 | 10.5 | 0.0 | -2.0 | 16.52 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 231 | LTED_2_195m | 195 | 12.5 | 10.4 | 10.5 | 0.0 | -2.0 | 16.52 | 14.62 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |

# Appendix B Air Quality Modelling Results 2037 (CSR 6,500 dwellings)

In the table below, DM is Do Minimum and DS is Do Something. DS-Base is the change due to all forecast traffic growth between 2017 and 2031, while DS-DM thus shows the contribution of the CSR. Negative numbers in the DS-DM and DS-Base columns indicate a forecast reduction (improvement). Zeros do not necessarily mean a literal absence of emissions/deposition but that the contribution is too small to show in the model reporting (deposition rates are rarely reported to more than two decimal places to avoid a spurious impression of precision). The colours in the table are decorative and have no significance.

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| | **Blean Complex SAC** | | | | | | | | | | | | | | | | |
| 1 | CWB_1_60m | 60 | 11.2 | 8.9 | 8.9 | 0.0 | -2.3 | 22.69 | 20.08 | 20.08 | 0.00 | -2.61 | 1.73 | 1.72 | 1.72 | 0.00 | 0.00 |
| 2 | CWB_1_65m | 65 | 11.1 | 8.8 | 8.8 | 0.0 | -2.3 | 22.68 | 20.08 | 20.08 | 0.00 | -2.61 | 1.73 | 1.72 | 1.72 | 0.00 | 0.00 |
| 3 | CWB_1_70m | 70 | 11.1 | 8.8 | 8.8 | 0.0 | -2.3 | 22.68 | 20.07 | 20.07 | 0.00 | -2.61 | 1.73 | 1.72 | 1.72 | 0.00 | 0.00 |
| 4 | CWB_1_75m | 75 | 11.0 | 8.8 | 8.8 | 0.0 | -2.2 | 22.68 | 20.07 | 20.07 | 0.00 | -2.60 | 1.73 | 1.72 | 1.72 | 0.00 | 0.00 |
| 5 | CWB_1_80m | 80 | 10.9 | 8.7 | 8.7 | 0.0 | -2.2 | 22.67 | 20.07 | 20.07 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 6 | CWB_1_90m | 90 | 10.8 | 8.7 | 8.7 | 0.0 | -2.2 | 22.67 | 20.07 | 20.07 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 7 | CWB_1_100m | 100 | 10.8 | 8.6 | 8.6 | 0.0 | -2.1 | 22.66 | 20.06 | 20.07 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 8 | CWB_1_110m | 110 | 10.7 | 8.6 | 8.6 | 0.0 | -2.1 | 22.66 | 20.06 | 20.06 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 9 | CWB_1_120m | 120 | 10.7 | 8.6 | 8.6 | 0.0 | -2.1 | 22.66 | 20.06 | 20.06 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 10 | CWB_1_130m | 130 | 10.6 | 8.5 | 8.5 | 0.0 | -2.1 | 22.66 | 20.06 | 20.06 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 11 | CWB_1_140m | 140 | 10.6 | 8.5 | 8.5 | 0.0 | -2.1 | 22.65 | 20.06 | 20.06 | 0.00 | -2.59 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 12 | CWB_1_150m | 150 | 10.5 | 8.5 | 8.5 | 0.0 | -2.1 | 22.65 | 20.06 | 20.06 | 0.00 | -2.59 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 13 | CWB_1_160m | 160 | 10.5 | 8.5 | 8.5 | 0.0 | -2.0 | 22.65 | 20.06 | 20.06 | 0.00 | -2.59 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 14 | CWB_1_185m | 185 | 10.5 | 8.4 | 8.4 | 0.0 | -2.0 | 22.65 | 20.05 | 20.05 | 0.00 | -2.59 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| **Dover to Kingsdown Cliffs SAC** | | | | | | | | | | | | | | | | | |
| 15 | DKC_1_146m | 146 | 33.8 | 31.4 | 32.8 | 1.3 | -1.1 | 12.77 | 11.28 | 11.35 | 0.07 | -1.43 | 0.97 | 0.96 | 0.97 | 0.01 | 0.00 |
| 16 | DKC_1_151m | 151 | 33.8 | 31.4 | 32.7 | 1.3 | -1.1 | 12.77 | 11.28 | 11.34 | 0.07 | -1.43 | 0.97 | 0.96 | 0.97 | 0.01 | 0.00 |
| 17 | DKC_1_156m | 156 | 33.7 | 31.4 | 32.6 | 1.2 | -1.1 | 12.77 | 11.27 | 11.34 | 0.06 | -1.43 | 0.97 | 0.96 | 0.97 | 0.01 | 0.00 |
| 18 | DKC_1_161m | 161 | 33.7 | 31.4 | 32.6 | 1.2 | -1.1 | 12.76 | 11.27 | 11.34 | 0.06 | -1.43 | 0.97 | 0.96 | 0.97 | 0.01 | 0.00 |
| 19 | DKC_1_166m | 166 | 33.6 | 31.3 | 32.5 | 1.2 | -1.1 | 12.76 | 11.27 | 11.33 | 0.06 | -1.43 | 0.97 | 0.96 | 0.97 | 0.01 | 0.00 |
| 20 | DKC_1_176m | 176 | 33.5 | 31.3 | 32.4 | 1.1 | -1.1 | 12.76 | 11.27 | 11.33 | 0.06 | -1.43 | 0.97 | 0.96 | 0.97 | 0.01 | 0.00 |
| 21 | DKC_1_186m | 186 | 33.4 | 31.2 | 32.3 | 1.0 | -1.2 | 12.75 | 11.27 | 11.32 | 0.05 | -1.43 | 0.97 | 0.96 | 0.97 | 0.01 | 0.00 |
| 22 | DKC_1_196m | 196 | 33.3 | 31.2 | 32.2 | 1.0 | -1.2 | 12.75 | 11.27 | 11.32 | 0.05 | -1.43 | 0.97 | 0.96 | 0.97 | 0.01 | 0.00 |
| | **Dungeness SAC** | | | | | | | | | | | | | | | | |
| 23 | DRMRB_1_0m | 0 | 12.2 | 9.5 | 9.5 | 0.0 | -2.7 | 10.50 | 9.24 | 9.24 | 0.00 | -1.26 | 0.80 | 0.79 | 0.79 | 0.00 | -0.01 |
| 24 | DRMRB_1_5m | 5 | 10.9 | 8.8 | 8.8 | 0.0 | -2.1 | 10.42 | 9.20 | 9.20 | 0.00 | -1.22 | 0.79 | 0.79 | 0.79 | 0.00 | 0.00 |
| 25 | DRMRB_1_10m | 10 | 10.4 | 8.5 | 8.5 | 0.0 | -1.8 | 10.40 | 9.19 | 9.19 | 0.00 | -1.21 | 0.79 | 0.78 | 0.78 | 0.00 | 0.00 |
| 26 | DRMRB_1_15m | 15 | 10.1 | 8.4 | 8.4 | 0.0 | -1.7 | 10.38 | 9.18 | 9.18 | 0.00 | -1.20 | 0.79 | 0.78 | 0.78 | 0.00 | 0.00 |
| 27 | DRMRB_1_20m | 20 | 9.9 | 8.3 | 8.3 | 0.0 | -1.6 | 10.37 | 9.17 | 9.17 | 0.00 | -1.20 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 28 | DRMRB_1_30m | 30 | 9.7 | 8.1 | 8.1 | 0.0 | -1.5 | 10.36 | 9.16 | 9.16 | 0.00 | -1.19 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 29 | DRMRB_1_40m | 40 | 9.5 | 8.1 | 8.1 | 0.0 | -1.5 | 10.35 | 9.16 | 9.16 | 0.00 | -1.19 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 30 | DRMRB_1_50m | 50 | 9.5 | 8.0 | 8.0 | 0.0 | -1.4 | 10.35 | 9.16 | 9.16 | 0.00 | -1.19 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 31 | DRMRB_1_60m | 60 | 9.4 | 8.0 | 8.0 | 0.0 | -1.4 | 10.34 | 9.16 | 9.16 | 0.00 | -1.19 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 32 | DRMRB_1_70m | 70 | 9.4 | 8.0 | 8.0 | 0.0 | -1.4 | 10.34 | 9.15 | 9.15 | 0.00 | -1.19 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 33 | DRMRB_1_80m | 80 | 9.3 | 8.0 | 8.0 | 0.0 | -1.4 | 10.34 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 34 | DRMRB_1_90m | 90 | 9.3 | 7.9 | 7.9 | 0.0 | -1.4 | 10.34 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 35 | DRMRB_1_100m | 100 | 9.3 | 7.9 | 7.9 | 0.0 | -1.3 | 10.34 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 36 | DRMRB_1_125m | 125 | 9.2 | 7.9 | 7.9 | 0.0 | -1.3 | 10.33 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 37 | DRMRB_1_150m | 150 | 9.2 | 7.9 | 7.9 | 0.0 | -1.3 | 10.33 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 38 | DRMRB_1_175m | 175 | 9.2 | 7.9 | 7.9 | 0.0 | -1.3 | 10.33 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| 39 | DRMRB_1_200m | 200 | 9.2 | 7.9 | 7.9 | 0.0 | -1.3 | 10.33 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| **Dungeness, Romney Marsh & Rye Bay SPA/Ramsar site** | | | | | | | | | | | | | | | | | |
| 40 | DRMRB_2_0m | 0 | 11.8 | 9.3 | 9.3 | 0.0 | -2.6 | 11.57 | 10.20 | 10.20 | 0.00 | -1.37 | 0.89 | 0.88 | 0.88 | 0.00 | -0.01 |
| 41 | DRMRB_2_5m | 5 | 10.8 | 8.7 | 8.7 | 0.0 | -2.1 | 11.52 | 10.17 | 10.17 | 0.00 | -1.35 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 42 | DRMRB_2_10m | 10 | 10.4 | 8.5 | 8.5 | 0.0 | -1.9 | 11.49 | 10.15 | 10.15 | 0.00 | -1.34 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 43 | DRMRB_2_15m | 15 | 10.1 | 8.3 | 8.3 | 0.0 | -1.8 | 11.48 | 10.15 | 10.15 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 44 | DRMRB_2_20m | 20 | 9.9 | 8.2 | 8.2 | 0.0 | -1.7 | 11.47 | 10.14 | 10.14 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 45 | DRMRB_2_30m | 30 | 9.7 | 8.1 | 8.1 | 0.0 | -1.6 | 11.45 | 10.13 | 10.13 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 46 | DRMRB_2_40m | 40 | 9.5 | 8.0 | 8.0 | 0.0 | -1.5 | 11.45 | 10.13 | 10.13 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 47 | DRMRB_2_50m | 50 | 9.4 | 8.0 | 8.0 | 0.0 | -1.5 | 11.44 | 10.13 | 10.13 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 48 | DRMRB_2_60m | 60 | 9.4 | 7.9 | 7.9 | 0.0 | -1.5 | 11.44 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 49 | DRMRB_2_70m | 70 | 9.3 | 7.9 | 7.9 | 0.0 | -1.4 | 11.44 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 50 | DRMRB_2_80m | 80 | 9.3 | 7.9 | 7.9 | 0.0 | -1.4 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 51 | DRMRB_2_90m | 90 | 9.3 | 7.9 | 7.9 | 0.0 | -1.4 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 52 | DRMRB_2_100m | 100 | 9.3 | 7.9 | 7.9 | 0.0 | -1.4 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 53 | DRMRB_2_125m | 125 | 9.2 | 7.8 | 7.8 | 0.0 | -1.4 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 54 | DRMRB_2_150m | 150 | 9.2 | 7.8 | 7.8 | 0.0 | -1.4 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 55 | DRMRB_2_175m | 175 | 9.2 | 7.8 | 7.8 | 0.0 | -1.3 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 56 | DRMRB_2_200m | 200 | 9.1 | 7.8 | 7.8 | 0.0 | -1.3 | 11.42 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 57 | DRMRB_3_168m | 168 | 11.0 | 9.0 | 9.0 | 0.0 | -2.0 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 58 | DRMRB_3_173m | 173 | 10.9 | 9.0 | 9.0 | 0.0 | -2.0 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 59 | DRMRB_3_178m | 178 | 10.9 | 9.0 | 9.0 | 0.0 | -1.9 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 60 | DRMRB_3_183m | 183 | 10.9 | 9.0 | 9.0 | 0.0 | -1.9 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 61 | DRMRB_3_188m | 188 | 10.9 | 8.9 | 9.0 | 0.0 | -1.9 | 11.45 | 10.13 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| 62 | DRMRB_3_198m | 198 | 10.9 | 8.9 | 9.0 | 0.0 | -1.9 | 11.45 | 10.13 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 63 | DRMRB_5_38m | 38 | 11.5 | 9.0 | 9.1 | 0.1 | -2.4 | 11.54 | 10.19 | 10.19 | 0.00 | -1.35 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 64 | DRMRB_5_43m | 43 | 11.3 | 8.9 | 9.0 | 0.1 | -2.3 | 11.53 | 10.18 | 10.19 | 0.00 | -1.35 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 65 | DRMRB_5_48m | 48 | 11.1 | 8.8 | 8.9 | 0.1 | -2.2 | 11.52 | 10.18 | 10.18 | 0.00 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 66 | DRMRB_5_53m | 53 | 11.0 | 8.7 | 8.8 | 0.1 | -2.2 | 11.51 | 10.17 | 10.17 | 0.00 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 67 | DRMRB_5_58m | 58 | 10.8 | 8.6 | 8.7 | 0.1 | -2.1 | 11.51 | 10.17 | 10.17 | 0.00 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 68 | DRMRB_5_68m | 68 | 10.6 | 8.5 | 8.6 | 0.1 | -2.0 | 11.50 | 10.16 | 10.16 | 0.00 | -1.33 | 0.88 | 0.87 | 0.88 | 0.00 | 0.00 |
| 69 | DRMRB_5_78m | 78 | 10.5 | 8.4 | 8.5 | 0.1 | -2.0 | 11.49 | 10.15 | 10.16 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 70 | DRMRB_5_88m | 88 | 10.4 | 8.4 | 8.4 | 0.0 | -1.9 | 11.48 | 10.15 | 10.15 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 71 | DRMRB_5_98m | 98 | 10.3 | 8.3 | 8.4 | 0.0 | -1.9 | 11.47 | 10.15 | 10.15 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 72 | DRMRB_5_108m | 108 | 10.2 | 8.3 | 8.3 | 0.0 | -1.9 | 11.47 | 10.14 | 10.15 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 73 | DRMRB_5_118m | 118 | 10.1 | 8.2 | 8.3 | 0.0 | -1.8 | 11.47 | 10.14 | 10.14 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 74 | DRMRB_5_128m | 128 | 10.0 | 8.2 | 8.2 | 0.0 | -1.8 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 75 | DRMRB_5_138m | 138 | 10.0 | 8.2 | 8.2 | 0.0 | -1.8 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 76 | DRMRB_5_163m | 163 | 9.9 | 8.1 | 8.1 | 0.0 | -1.8 | 11.45 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 77 | DRMRB_5_188m | 188 | 9.8 | 8.0 | 8.1 | 0.0 | -1.7 | 11.45 | 10.13 | 10.13 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 78 | DRMRB_6_0m | 0 | 23.5 | 16.2 | 17.0 | 0.7 | -6.5 | 12.14 | 10.53 | 10.57 | 0.04 | -1.57 | 0.94 | 0.91 | 0.92 | 0.00 | -0.03 |
| 79 | DRMRB_6_5m | 5 | 18.4 | 13.3 | 13.7 | 0.4 | -4.7 | 11.86 | 10.37 | 10.39 | 0.02 | -1.47 | 0.92 | 0.90 | 0.90 | 0.00 | -0.02 |
| 80 | DRMRB_6_10m | 10 | 16.2 | 12.0 | 12.3 | 0.3 | -3.9 | 11.75 | 10.30 | 10.32 | 0.02 | -1.43 | 0.90 | 0.89 | 0.89 | 0.00 | -0.01 |
| 81 | DRMRB_6_15m | 15 | 15.0 | 11.3 | 11.6 | 0.3 | -3.4 | 11.68 | 10.26 | 10.28 | 0.01 | -1.40 | 0.90 | 0.89 | 0.89 | 0.00 | -0.01 |
| 82 | DRMRB_6_20m | 20 | 14.2 | 10.9 | 11.1 | 0.2 | -3.1 | 11.64 | 10.24 | 10.25 | 0.01 | -1.39 | 0.89 | 0.88 | 0.88 | 0.00 | -0.01 |
| 83 | DRMRB_6_30m | 30 | 13.3 | 10.3 | 10.5 | 0.2 | -2.8 | 11.59 | 10.21 | 10.22 | 0.01 | -1.37 | 0.89 | 0.88 | 0.88 | 0.00 | -0.01 |
| 84 | DRMRB_6_40m | 40 | 12.7 | 10.0 | 10.1 | 0.1 | -2.6 | 11.55 | 10.19 | 10.20 | 0.01 | -1.35 | 0.88 | 0.88 | 0.88 | 0.00 | -0.01 |
| 85 | DRMRB_6_50m | 50 | 12.3 | 9.8 | 9.9 | 0.1 | -2.5 | 11.53 | 10.18 | 10.19 | 0.01 | -1.35 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 86 | DRMRB_6_60m | 60 | 12.1 | 9.6 | 9.7 | 0.1 | -2.4 | 11.52 | 10.17 | 10.18 | 0.01 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| 87 | DRMRB_6_70m | 70 | 11.9 | 9.5 | 9.6 | 0.1 | -2.3 | 11.51 | 10.17 | 10.17 | 0.00 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 88 | DRMRB_6_80m | 80 | 11.7 | 9.4 | 9.5 | 0.1 | -2.2 | 11.50 | 10.16 | 10.17 | 0.00 | -1.33 | 0.88 | 0.87 | 0.88 | 0.00 | 0.00 |
| 89 | DRMRB_6_90m | 90 | 11.6 | 9.4 | 9.4 | 0.1 | -2.2 | 11.49 | 10.16 | 10.16 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 90 | DRMRB_6_100m | 100 | 11.5 | 9.3 | 9.4 | 0.1 | -2.2 | 11.49 | 10.15 | 10.16 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 91 | DRMRB_6_125m | 125 | 11.3 | 9.2 | 9.2 | 0.1 | -2.1 | 11.48 | 10.15 | 10.15 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 92 | DRMRB_6_150m | 150 | 11.2 | 9.1 | 9.2 | 0.0 | -2.0 | 11.47 | 10.14 | 10.15 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 93 | DRMRB_6_175m | 175 | 11.1 | 9.1 | 9.1 | 0.0 | -2.0 | 11.47 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 94 | DRMRB_6_200m | 200 | 11.0 | 9.0 | 9.1 | 0.0 | -2.0 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 95 | DRMRB_7_0m | 0 | 22.4 | 15.3 | 16.1 | 0.7 | -6.4 | 12.13 | 10.53 | 10.57 | 0.04 | -1.56 | 0.94 | 0.91 | 0.92 | 0.00 | -0.03 |
| 96 | DRMRB_7_5m | 5 | 17.0 | 12.2 | 12.6 | 0.4 | -4.4 | 11.84 | 10.36 | 10.38 | 0.02 | -1.46 | 0.91 | 0.90 | 0.90 | 0.00 | -0.02 |
| 97 | DRMRB_7_10m | 10 | 14.9 | 10.9 | 11.2 | 0.3 | -3.6 | 11.73 | 10.29 | 10.31 | 0.02 | -1.42 | 0.90 | 0.89 | 0.89 | 0.00 | -0.01 |
| 98 | DRMRB_7_15m | 15 | 13.7 | 10.2 | 10.5 | 0.2 | -3.2 | 11.66 | 10.25 | 10.27 | 0.01 | -1.39 | 0.90 | 0.88 | 0.89 | 0.00 | -0.01 |
| 99 | DRMRB_7_20m | 20 | 12.9 | 9.8 | 10.0 | 0.2 | -2.9 | 11.62 | 10.23 | 10.24 | 0.01 | -1.38 | 0.89 | 0.88 | 0.88 | 0.00 | -0.01 |
| 100 | DRMRB_7_30m | 30 | 12.0 | 9.2 | 9.4 | 0.2 | -2.6 | 11.57 | 10.20 | 10.21 | 0.01 | -1.36 | 0.89 | 0.88 | 0.88 | 0.00 | -0.01 |
| 101 | DRMRB_7_40m | 40 | 11.4 | 8.9 | 9.0 | 0.1 | -2.3 | 11.54 | 10.18 | 10.19 | 0.01 | -1.35 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 102 | DRMRB_7_50m | 50 | 11.0 | 8.7 | 8.8 | 0.1 | -2.2 | 11.52 | 10.17 | 10.18 | 0.01 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 103 | DRMRB_7_60m | 60 | 10.7 | 8.5 | 8.6 | 0.1 | -2.1 | 11.50 | 10.16 | 10.17 | 0.00 | -1.33 | 0.88 | 0.87 | 0.88 | 0.00 | 0.00 |
| 104 | DRMRB_7_70m | 70 | 10.5 | 8.4 | 8.5 | 0.1 | -2.0 | 11.49 | 10.15 | 10.16 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 105 | DRMRB_7_80m | 80 | 10.4 | 8.3 | 8.4 | 0.1 | -2.0 | 11.48 | 10.15 | 10.15 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 106 | DRMRB_7_90m | 90 | 10.3 | 8.3 | 8.3 | 0.1 | -1.9 | 11.47 | 10.15 | 10.15 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 107 | DRMRB_7_100m | 100 | 10.2 | 8.2 | 8.3 | 0.1 | -1.9 | 11.47 | 10.14 | 10.15 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 108 | DRMRB_7_125m | 125 | 10.0 | 8.1 | 8.1 | 0.0 | -1.8 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 109 | DRMRB_7_150m | 150 | 9.9 | 8.0 | 8.1 | 0.0 | -1.8 | 11.45 | 10.13 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 110 | DRMRB_7_175m | 175 | 9.8 | 8.0 | 8.0 | 0.0 | -1.8 | 11.45 | 10.13 | 10.13 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 111 | DRMRB_7_200m | 200 | 9.7 | 8.0 | 8.0 | 0.0 | -1.7 | 11.44 | 10.13 | 10.13 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link Folkestone to Etchinghill Escarpment SAC | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| 112 | FEE_1_0m | 0 | 70.6 | 40.7 | 48.3 | 7.6 | -22.3 | 16.93 | 14.06 | 14.42 | 0.36 | -2.51 | 1.36 | 1.23 | 1.27 | 0.04 | -0.09 |
| 113 | FEE_1_5m | 5 | 50.4 | 30.4 | 35.3 | 4.9 | -15.1 | 16.02 | 13.55 | 13.79 | 0.24 | -2.23 | 1.27 | 1.18 | 1.21 | 0.02 | -0.06 |
| 114 | FEE_1_10m | 10 | 42.0 | 26.1 | 29.8 | 3.7 | -12.2 | 15.62 | 13.33 | 13.52 | 0.19 | -2.10 | 1.23 | 1.16 | 1.18 | 0.02 | -0.05 |
| 115 | FEE_1_15m | 15 | 37.1 | 23.6 | 26.6 | 3.1 | -10.5 | 15.38 | 13.20 | 13.36 | 0.16 | -2.02 | 1.20 | 1.15 | 1.16 | 0.02 | -0.04 |
| 116 | FEE_1_20m | 20 | 33.8 | 21.8 | 24.5 | 2.6 | -9.3 | 15.22 | 13.11 | 13.25 | 0.14 | -1.97 | 1.19 | 1.14 | 1.15 | 0.01 | -0.04 |
| 117 | FEE_1_30m | 30 | 29.5 | 19.6 | 21.7 | 2.0 | -7.8 | 15.00 | 13.00 | 13.10 | 0.11 | -1.89 | 1.16 | 1.12 | 1.14 | 0.01 | -0.03 |
| 118 | FEE_1_40m | 40 | 26.8 | 18.2 | 19.9 | 1.7 | -6.9 | 14.86 | 12.92 | 13.01 | 0.09 | -1.85 | 1.15 | 1.12 | 1.13 | 0.01 | -0.02 |
| 119 | FEE_1_50m | 50 | 25.0 | 17.3 | 18.7 | 1.4 | -6.3 | 14.76 | 12.87 | 12.95 | 0.08 | -1.82 | 1.14 | 1.11 | 1.12 | 0.01 | -0.02 |
| 120 | FEE_1_60m | 60 | 23.6 | 16.6 | 17.8 | 1.2 | -5.8 | 14.69 | 12.83 | 12.90 | 0.07 | -1.79 | 1.13 | 1.11 | 1.11 | 0.01 | -0.02 |
| 121 | FEE_1_70m | 70 | 22.5 | 16.0 | 17.1 | 1.1 | -5.4 | 14.64 | 12.80 | 12.86 | 0.06 | -1.77 | 1.13 | 1.10 | 1.11 | 0.01 | -0.02 |
| 122 | FEE_1_80m | 80 | 21.7 | 15.5 | 16.5 | 1.0 | -5.1 | 14.59 | 12.78 | 12.83 | 0.05 | -1.76 | 1.12 | 1.10 | 1.11 | 0.01 | -0.01 |
| 123 | FEE_1_90m | 90 | 21.0 | 15.2 | 16.1 | 0.9 | -4.9 | 14.55 | 12.76 | 12.81 | 0.05 | -1.75 | 1.12 | 1.10 | 1.10 | 0.00 | -0.01 |
| 124 | FEE_1_100m | 100 | 20.4 | 14.9 | 15.7 | 0.8 | -4.7 | 14.52 | 12.74 | 12.78 | 0.04 | -1.73 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 125 | FEE_1_125m | 125 | 19.2 | 14.3 | 14.9 | 0.7 | -4.3 | 14.46 | 12.71 | 12.74 | 0.04 | -1.71 | 1.11 | 1.09 | 1.10 | 0.00 | -0.01 |
| 126 | FEE_1_150m | 150 | 18.4 | 13.8 | 14.4 | 0.5 | -4.0 | 14.41 | 12.68 | 12.71 | 0.03 | -1.70 | 1.10 | 1.09 | 1.10 | 0.00 | -0.01 |
| 127 | FEE_1_175m | 175 | 17.8 | 13.5 | 14.0 | 0.5 | -3.8 | 14.38 | 12.67 | 12.69 | 0.03 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 128 | FEE_1_200m | 200 | 17.3 | 13.2 | 13.6 | 0.4 | -3.6 | 14.35 | 12.65 | 12.67 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 129 | FEE_2_0m | 0 | 17.7 | 13.4 | 13.8 | 0.4 | -4.0 | 14.41 | 12.69 | 12.71 | 0.02 | -1.70 | 1.10 | 1.09 | 1.10 | 0.00 | -0.01 |
| 130 | FEE_2_5m | 5 | 17.3 | 13.1 | 13.5 | 0.4 | -3.8 | 14.39 | 12.67 | 12.70 | 0.02 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 131 | FEE_2_10m | 10 | 17.2 | 13.0 | 13.5 | 0.4 | -3.8 | 14.39 | 12.67 | 12.69 | 0.02 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 132 | FEE_2_15m | 15 | 17.2 | 13.0 | 13.5 | 0.5 | -3.7 | 14.39 | 12.67 | 12.70 | 0.02 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 133 | FEE_2_20m | 20 | 17.3 | 13.0 | 13.5 | 0.5 | -3.8 | 14.39 | 12.67 | 12.70 | 0.03 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 134 | FEE_2_30m | 30 | 17.4 | 13.1 | 13.6 | 0.5 | -3.8 | 14.40 | 12.68 | 12.70 | 0.03 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 135 | FEE_2_40m | 40 | 17.6 | 13.2 | 13.7 | 0.5 | -3.9 | 14.41 | 12.68 | 12.71 | 0.03 | -1.70 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| 136 | FEE_2_50m | 50 | 17.8 | 13.3 | 13.9 | 0.6 | -3.9 | 14.42 | 12.69 | 12.72 | 0.03 | -1.70 | 1.10 | 1.09 | 1.10 | 0.00 | -0.01 |
| 137 | FEE_2_60m | 60 | 18.1 | 13.5 | 14.1 | 0.6 | -4.0 | 14.43 | 12.69 | 12.73 | 0.03 | -1.71 | 1.11 | 1.09 | 1.10 | 0.00 | -0.01 |
| 138 | FEE_2_70m | 70 | 18.4 | 13.6 | 14.3 | 0.6 | -4.1 | 14.45 | 12.70 | 12.74 | 0.04 | -1.71 | 1.11 | 1.09 | 1.10 | 0.00 | -0.01 |
| 139 | FEE_2_80m | 80 | 18.7 | 13.8 | 14.5 | 0.7 | -4.3 | 14.47 | 12.71 | 12.75 | 0.04 | -1.72 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 140 | FEE_2_90m | 90 | 19.1 | 14.0 | 14.7 | 0.7 | -4.4 | 14.49 | 12.72 | 12.76 | 0.04 | -1.72 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 141 | FEE_3_0m | 0 | 28.2 | 20.1 | 20.9 | 0.7 | -7.4 | 14.95 | 13.03 | 13.07 | 0.04 | -1.88 | 1.16 | 1.13 | 1.13 | 0.00 | -0.03 |
| 142 | FEE_3_5m | 5 | 23.0 | 16.9 | 17.4 | 0.5 | -5.6 | 14.68 | 12.86 | 12.89 | 0.03 | -1.79 | 1.13 | 1.11 | 1.11 | 0.00 | -0.02 |
| 143 | FEE_3_10m | 10 | 20.8 | 15.6 | 16.0 | 0.4 | -4.8 | 14.56 | 12.79 | 12.81 | 0.02 | -1.75 | 1.12 | 1.10 | 1.11 | 0.00 | -0.01 |
| 144 | FEE_3_15m | 15 | 19.6 | 14.8 | 15.2 | 0.3 | -4.4 | 14.50 | 12.75 | 12.77 | 0.02 | -1.73 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 145 | FEE_3_20m | 20 | 18.7 | 14.3 | 14.6 | 0.3 | -4.1 | 14.45 | 12.72 | 12.74 | 0.02 | -1.71 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 146 | FEE_3_30m | 30 | 17.8 | 13.7 | 14.0 | 0.3 | -3.8 | 14.40 | 12.69 | 12.71 | 0.01 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 147 | FEE_3_40m | 40 | 17.2 | 13.4 | 13.6 | 0.2 | -3.6 | 14.37 | 12.67 | 12.69 | 0.01 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 148 | FEE_3_50m | 50 | 16.8 | 13.2 | 13.4 | 0.2 | -3.4 | 14.35 | 12.66 | 12.67 | 0.01 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 149 | FEE_3_60m | 60 | 16.6 | 13.0 | 13.2 | 0.2 | -3.3 | 14.33 | 12.65 | 12.66 | 0.01 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 150 | FEE_3_70m | 70 | 16.4 | 12.9 | 13.1 | 0.2 | -3.3 | 14.32 | 12.65 | 12.66 | 0.01 | -1.67 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 151 | FEE_3_80m | 80 | 16.3 | 12.8 | 13.0 | 0.2 | -3.2 | 14.32 | 12.64 | 12.65 | 0.01 | -1.67 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 152 | FEE_3_90m | 90 | 16.2 | 12.8 | 13.0 | 0.2 | -3.2 | 14.31 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 153 | FEE_3_100m | 100 | 16.1 | 12.7 | 12.9 | 0.2 | -3.2 | 14.31 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 154 | FEE_3_125m | 125 | 16.0 | 12.6 | 12.8 | 0.2 | -3.1 | 14.30 | 12.63 | 12.64 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 155 | FEE_3_150m | 150 | 15.9 | 12.6 | 12.8 | 0.2 | -3.1 | 14.30 | 12.63 | 12.64 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 156 | FEE_3_175m | 175 | 15.9 | 12.6 | 12.8 | 0.2 | -3.1 | 14.30 | 12.63 | 12.64 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 157 | FEE_3_200m | 200 | 15.9 | 12.6 | 12.8 | 0.2 | -3.1 | 14.30 | 12.63 | 12.64 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 158 | FEE_4_0m | 0 | 30.9 | 21.7 | 22.6 | 0.8 | -8.3 | 15.09 | 13.12 | 13.16 | 0.04 | -1.93 | 1.17 | 1.14 | 1.14 | 0.00 | -0.03 |
| 159 | FEE_4_5m | 5 | 25.0 | 18.1 | 18.7 | 0.6 | -6.3 | 14.79 | 12.93 | 12.96 | 0.03 | -1.83 | 1.14 | 1.12 | 1.12 | 0.00 | -0.02 |
| 160 | FEE_4_10m | 10 | 22.4 | 16.5 | 17.0 | 0.5 | -5.4 | 14.64 | 12.84 | 12.87 | 0.02 | -1.78 | 1.13 | 1.11 | 1.11 | 0.00 | -0.02 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| 161 | FEE_4_15m | 15 | 20.8 | 15.6 | 16.0 | 0.4 | -4.8 | 14.56 | 12.79 | 12.81 | 0.02 | -1.75 | 1.12 | 1.10 | 1.11 | 0.00 | -0.01 |
| 162 | FEE_4_20m | 20 | 19.8 | 15.0 | 15.3 | 0.3 | -4.5 | 14.51 | 12.76 | 12.78 | 0.02 | -1.73 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 163 | FEE_4_30m | 30 | 18.5 | 14.2 | 14.5 | 0.3 | -4.0 | 14.44 | 12.72 | 12.73 | 0.02 | -1.71 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 164 | FEE_4_40m | 40 | 17.7 | 13.7 | 14.0 | 0.2 | -3.7 | 14.40 | 12.69 | 12.70 | 0.01 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 165 | FEE_4_50m | 50 | 17.2 | 13.4 | 13.6 | 0.2 | -3.6 | 14.37 | 12.67 | 12.69 | 0.01 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 166 | FEE_4_60m | 60 | 16.9 | 13.2 | 13.4 | 0.2 | -3.4 | 14.35 | 12.66 | 12.67 | 0.01 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 167 | FEE_4_70m | 70 | 16.6 | 13.0 | 13.2 | 0.2 | -3.4 | 14.34 | 12.65 | 12.66 | 0.01 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 168 | FEE_4_80m | 80 | 16.4 | 12.9 | 13.1 | 0.2 | -3.3 | 14.32 | 12.65 | 12.66 | 0.01 | -1.67 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 169 | FEE_4_90m | 90 | 16.2 | 12.8 | 13.0 | 0.2 | -3.2 | 14.31 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 170 | FEE_4_100m | 100 | 16.1 | 12.7 | 12.9 | 0.2 | -3.2 | 14.31 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 171 | FEE_4_125m | 125 | 15.8 | 12.6 | 12.7 | 0.2 | -3.1 | 14.29 | 12.63 | 12.64 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 172 | FEE_4_150m | 150 | 15.6 | 12.5 | 12.6 | 0.1 | -3.0 | 14.28 | 12.62 | 12.63 | 0.01 | -1.65 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 173 | FEE_4_175m | 175 | 15.5 | 12.4 | 12.5 | 0.1 | -3.0 | 14.27 | 12.62 | 12.62 | 0.01 | -1.65 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 174 | FEE_4_200m | 200 | 15.3 | 12.3 | 12.4 | 0.1 | -2.9 | 14.27 | 12.61 | 12.62 | 0.01 | -1.65 | 1.09 | 1.08 | 1.09 | 0.00 | 0.00 |
| 175 | FEE_5_0m | 0 | 19.1 | 14.3 | 14.8 | 0.6 | -4.2 | 14.47 | 12.72 | 12.75 | 0.03 | -1.72 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 176 | FEE_5_5m | 5 | 18.6 | 14.0 | 14.5 | 0.5 | -4.1 | 14.44 | 12.71 | 12.73 | 0.03 | -1.71 | 1.11 | 1.09 | 1.10 | 0.00 | -0.01 |
| 177 | FEE_5_10m | 10 | 18.4 | 13.9 | 14.4 | 0.5 | -4.0 | 14.43 | 12.70 | 12.73 | 0.03 | -1.71 | 1.11 | 1.09 | 1.10 | 0.00 | -0.01 |
| 178 | FEE_5_15m | 15 | 18.2 | 13.8 | 14.3 | 0.5 | -3.9 | 14.42 | 12.69 | 12.72 | 0.03 | -1.70 | 1.10 | 1.09 | 1.10 | 0.00 | -0.01 |
| 179 | FEE_5_20m | 20 | 18.1 | 13.7 | 14.2 | 0.5 | -3.9 | 14.42 | 12.69 | 12.72 | 0.03 | -1.70 | 1.10 | 1.09 | 1.10 | 0.00 | -0.01 |
| 180 | FEE_5_30m | 30 | 17.9 | 13.6 | 14.1 | 0.5 | -3.8 | 14.41 | 12.68 | 12.71 | 0.03 | -1.70 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 181 | FEE_5_40m | 40 | 17.7 | 13.5 | 14.0 | 0.5 | -3.7 | 14.40 | 12.68 | 12.70 | 0.02 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 182 | FEE_5_50m | 50 | 17.6 | 13.5 | 13.9 | 0.4 | -3.7 | 14.39 | 12.68 | 12.70 | 0.02 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 183 | FEE_5_60m | 60 | 17.5 | 13.4 | 13.8 | 0.4 | -3.7 | 14.38 | 12.67 | 12.70 | 0.02 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 184 | FEE_5_70m | 70 | 17.4 | 13.4 | 13.8 | 0.4 | -3.6 | 14.38 | 12.67 | 12.69 | 0.02 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 185 | FEE_5_80m | 80 | 17.3 | 13.3 | 13.7 | 0.4 | -3.6 | 14.37 | 12.67 | 12.69 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 186 | FEE_5_90m | 90 | 17.2 | 13.3 | 13.7 | 0.4 | -3.6 | 14.37 | 12.67 | 12.69 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| 187 | FEE_5_100m | 100 | 17.2 | 13.3 | 13.6 | 0.4 | -3.6 | 14.37 | 12.67 | 12.68 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 188 | FEE_5_125m | 125 | 17.0 | 13.2 | 13.5 | 0.3 | -3.5 | 14.36 | 12.66 | 12.68 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 189 | FEE_5_150m | 150 | 16.9 | 13.1 | 13.4 | 0.3 | -3.5 | 14.35 | 12.66 | 12.68 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 190 | FEE_5_175m | 175 | 16.8 | 13.1 | 13.4 | 0.3 | -3.4 | 14.35 | 12.66 | 12.67 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 191 | FEE_5_200m | 200 | 16.7 | 13.0 | 13.3 | 0.3 | -3.4 | 14.34 | 12.65 | 12.67 | 0.02 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 192 | FEE_6_62m | 62 | 19.1 | 14.7 | 15.1 | 0.4 | -4.0 | 14.41 | 12.69 | 12.72 | 0.02 | -1.69 | 1.10 | 1.09 | 1.10 | 0.00 | -0.01 |
| 193 | FEE_6_67m | 67 | 18.9 | 14.5 | 14.9 | 0.4 | -4.0 | 14.40 | 12.69 | 12.71 | 0.02 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 194 | FEE_6_72m | 72 | 18.7 | 14.4 | 14.8 | 0.4 | -3.9 | 14.39 | 12.68 | 12.70 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 195 | FEE_6_77m | 77 | 18.6 | 14.3 | 14.7 | 0.4 | -3.9 | 14.38 | 12.68 | 12.70 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 196 | FEE_6_82m | 82 | 18.4 | 14.3 | 14.6 | 0.3 | -3.8 | 14.37 | 12.67 | 12.69 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 197 | FEE_6_92m | 92 | 18.2 | 14.1 | 14.4 | 0.3 | -3.8 | 14.36 | 12.66 | 12.68 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 198 | FEE_6_102m | 102 | 18.0 | 14.0 | 14.3 | 0.3 | -3.7 | 14.35 | 12.66 | 12.68 | 0.02 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 199 | FEE_6_112m | 112 | 17.9 | 13.9 | 14.2 | 0.3 | -3.7 | 14.34 | 12.65 | 12.67 | 0.02 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 200 | FEE_6_122m | 122 | 17.7 | 13.8 | 14.1 | 0.3 | -3.6 | 14.33 | 12.65 | 12.66 | 0.01 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | 0.00 |
| 201 | FEE_6_132m | 132 | 17.6 | 13.8 | 14.0 | 0.3 | -3.6 | 14.33 | 12.65 | 12.66 | 0.02 | -1.67 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 202 | FEE_6_142m | 142 | 17.5 | 13.7 | 14.0 | 0.3 | -3.6 | 14.32 | 12.64 | 12.66 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 203 | FEE_6_152m | 152 | 17.4 | 13.7 | 13.9 | 0.2 | -3.5 | 14.32 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 204 | FEE_6_162m | 162 | 17.4 | 13.6 | 13.9 | 0.2 | -3.5 | 14.31 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 205 | FEE_6_187m | 187 | 17.3 | 13.5 | 13.8 | 0.2 | -3.5 | 14.31 | 12.63 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| **Lydden and Temple Ewell Downs SAC** | | | | | | | | | | | | | | | | | |
| 206 | LTED_1_90m | 90 | 13.2 | 10.5 | 10.8 | 0.3 | -2.4 | 16.59 | 14.66 | 14.67 | 0.02 | -1.92 | 1.26 | 1.26 | 1.26 | 0.00 | 0.00 |
| 207 | LTED_1_95m | 95 | 13.1 | 10.5 | 10.8 | 0.3 | -2.3 | 16.59 | 14.66 | 14.67 | 0.02 | -1.92 | 1.26 | 1.26 | 1.26 | 0.00 | 0.00 |
| 208 | LTED_1_100m | 100 | 13.0 | 10.5 | 10.7 | 0.3 | -2.3 | 16.58 | 14.65 | 14.67 | 0.01 | -1.92 | 1.26 | 1.25 | 1.26 | 0.00 | 0.00 |
| 209 | LTED_1_105m | 105 | 13.0 | 10.4 | 10.7 | 0.3 | -2.3 | 16.58 | 14.65 | 14.67 | 0.01 | -1.91 | 1.26 | 1.25 | 1.26 | 0.00 | 0.00 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| 210 | LTED_1_110m | 110 | 12.9 | 10.4 | 10.6 | 0.2 | -2.3 | 16.58 | 14.65 | 14.66 | 0.01 | -1.91 | 1.26 | 1.25 | 1.26 | 0.00 | 0.00 |
| 211 | LTED_1_120m | 120 | 12.8 | 10.3 | 10.6 | 0.2 | -2.2 | 16.57 | 14.65 | 14.66 | 0.01 | -1.91 | 1.26 | 1.25 | 1.26 | 0.00 | 0.00 |
| 212 | LTED_1_130m | 130 | 12.7 | 10.3 | 10.5 | 0.2 | -2.2 | 16.56 | 14.64 | 14.66 | 0.01 | -1.91 | 1.26 | 1.25 | 1.26 | 0.00 | 0.00 |
| 213 | LTED_1_140m | 140 | 12.6 | 10.3 | 10.5 | 0.2 | -2.2 | 16.56 | 14.64 | 14.65 | 0.01 | -1.91 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 214 | LTED_1_150m | 150 | 12.5 | 10.2 | 10.4 | 0.2 | -2.1 | 16.56 | 14.64 | 14.65 | 0.01 | -1.91 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 215 | LTED_1_160m | 160 | 12.5 | 10.2 | 10.4 | 0.2 | -2.1 | 16.55 | 14.64 | 14.65 | 0.01 | -1.90 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 216 | LTED_1_170m | 170 | 12.4 | 10.2 | 10.3 | 0.2 | -2.1 | 16.55 | 14.64 | 14.65 | 0.01 | -1.90 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 217 | LTED_1_180m | 180 | 12.4 | 10.1 | 10.3 | 0.2 | -2.1 | 16.55 | 14.64 | 14.64 | 0.01 | -1.90 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 218 | LTED_1_190m | 190 | 12.3 | 10.1 | 10.3 | 0.1 | -2.1 | 16.54 | 14.63 | 14.64 | 0.01 | -1.90 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 219 | LTED_2_95m | 95 | 12.7 | 10.6 | 10.6 | 0.0 | -2.1 | 16.54 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 220 | LTED_2_100m | 100 | 12.7 | 10.6 | 10.6 | 0.0 | -2.1 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 221 | LTED_2_105m | 105 | 12.7 | 10.6 | 10.6 | 0.0 | -2.1 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 222 | LTED_2_110m | 110 | 12.7 | 10.5 | 10.6 | 0.0 | -2.1 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 223 | LTED_2_115m | 115 | 12.6 | 10.5 | 10.6 | 0.0 | -2.1 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 224 | LTED_2_125m | 125 | 12.6 | 10.5 | 10.6 | 0.0 | -2.1 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 225 | LTED_2_135m | 135 | 12.6 | 10.5 | 10.5 | 0.0 | -2.0 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 226 | LTED_2_145m | 145 | 12.6 | 10.5 | 10.5 | 0.0 | -2.0 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 227 | LTED_2_155m | 155 | 12.5 | 10.5 | 10.5 | 0.0 | -2.0 | 16.52 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 228 | LTED_2_165m | 165 | 12.5 | 10.5 | 10.5 | 0.0 | -2.0 | 16.52 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 229 | LTED_2_175m | 175 | 12.5 | 10.5 | 10.5 | 0.0 | -2.0 | 16.52 | 14.63 | 14.63 | 0.00 | -1.89 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 230 | LTED_2_185m | 185 | 12.5 | 10.4 | 10.5 | 0.0 | -2.0 | 16.52 | 14.62 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 231 | LTED_2_195m | 195 | 12.5 | 10.4 | 10.5 | 0.0 | -2.0 | 16.52 | 14.62 | 14.63 | 0.00 | -1.89 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |

# Appendix C Air Quality Modelling Results 2037 (CSR 8,000 dwellings)

In the table below, DM is Do Minimum and DS is Do Something. DS-Base is the change due to all forecast traffic growth between 2017 and 2037, while DS-DM thus shows the contribution of the CSR. Negative numbers in the DS-DM and DS-Base columns indicate a forecast reduction (improvement). Zeros do not necessarily mean a literal absence of emissions/deposition but that the contribution is too small to show in the model reporting (deposition rates are rarely reported to more than two decimal places to avoid a spurious impression of precision). The colours in the table are decorative and have no significance.

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| | **Blean Complex SAC** | | | | | | | | | | | | | | | | |
| 1 | CWB_1_60m | 60 | 11.2 | 8.9 | 8.9 | 0.0 | -2.3 | 22.69 | 20.08 | 20.08 | 0.00 | -2.61 | 1.73 | 1.72 | 1.72 | 0.00 | 0.00 |
| 2 | CWB_1_65m | 65 | 11.1 | 8.8 | 8.8 | 0.0 | -2.3 | 22.68 | 20.08 | 20.08 | 0.00 | -2.61 | 1.73 | 1.72 | 1.72 | 0.00 | 0.00 |
| 3 | CWB_1_70m | 70 | 11.1 | 8.8 | 8.8 | 0.0 | -2.3 | 22.68 | 20.07 | 20.07 | 0.00 | -2.61 | 1.73 | 1.72 | 1.72 | 0.00 | 0.00 |
| 4 | CWB_1_75m | 75 | 11.0 | 8.8 | 8.8 | 0.0 | -2.2 | 22.68 | 20.07 | 20.07 | 0.00 | -2.60 | 1.73 | 1.72 | 1.72 | 0.00 | 0.00 |
| 5 | CWB_1_80m | 80 | 10.9 | 8.7 | 8.7 | 0.0 | -2.2 | 22.67 | 20.07 | 20.07 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 6 | CWB_1_90m | 90 | 10.8 | 8.7 | 8.7 | 0.0 | -2.2 | 22.67 | 20.07 | 20.07 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 7 | CWB_1_100m | 100 | 10.8 | 8.6 | 8.6 | 0.0 | -2.1 | 22.66 | 20.06 | 20.07 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 8 | CWB_1_110m | 110 | 10.7 | 8.6 | 8.6 | 0.0 | -2.1 | 22.66 | 20.06 | 20.06 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 9 | CWB_1_120m | 120 | 10.7 | 8.6 | 8.6 | 0.0 | -2.1 | 22.66 | 20.06 | 20.06 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 10 | CWB_1_130m | 130 | 10.6 | 8.5 | 8.5 | 0.0 | -2.1 | 22.66 | 20.06 | 20.06 | 0.00 | -2.60 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 11 | CWB_1_140m | 140 | 10.6 | 8.5 | 8.5 | 0.0 | -2.1 | 22.65 | 20.06 | 20.06 | 0.00 | -2.59 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 12 | CWB_1_150m | 150 | 10.5 | 8.5 | 8.5 | 0.0 | -2.0 | 22.65 | 20.06 | 20.06 | 0.00 | -2.59 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 13 | CWB_1_160m | 160 | 10.5 | 8.5 | 8.5 | 0.0 | -2.0 | 22.65 | 20.06 | 20.06 | 0.00 | -2.59 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |
| 14 | CWB_1_185m | 185 | 10.5 | 8.4 | 8.4 | 0.0 | -2.0 | 22.65 | 20.05 | 20.05 | 0.00 | -2.59 | 1.72 | 1.72 | 1.72 | 0.00 | 0.00 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| **Dover to Kingsdown Cliffs SAC** | | | | | | | | | | | | | | | | | |
| 15 | DKC_1_146m | 146 | 33.8 | 31.4 | 33.0 | 1.5 | -0.9 | 12.77 | 11.28 | 11.36 | 0.08 | -1.42 | 0.97 | 0.96 | 0.97 | 0.01 | 0.00 |
| 16 | DKC_1_151m | 151 | 33.8 | 31.4 | 32.9 | 1.5 | -0.9 | 12.77 | 11.28 | 11.35 | 0.08 | -1.42 | 0.97 | 0.96 | 0.97 | 0.01 | 0.00 |
| 17 | DKC_1_156m | 156 | 33.7 | 31.4 | 32.8 | 1.4 | -0.9 | 12.77 | 11.27 | 11.35 | 0.07 | -1.42 | 0.97 | 0.96 | 0.97 | 0.01 | 0.00 |
| 18 | DKC_1_161m | 161 | 33.7 | 31.4 | 32.7 | 1.4 | -0.9 | 12.76 | 11.27 | 11.34 | 0.07 | -1.42 | 0.97 | 0.96 | 0.97 | 0.01 | 0.00 |
| 19 | DKC_1_166m | 166 | 33.6 | 31.3 | 32.6 | 1.3 | -1.0 | 12.76 | 11.27 | 11.34 | 0.07 | -1.42 | 0.97 | 0.96 | 0.97 | 0.01 | 0.00 |
| 20 | DKC_1_176m | 176 | 33.5 | 31.3 | 32.5 | 1.2 | -1.0 | 12.76 | 11.27 | 11.33 | 0.06 | -1.42 | 0.97 | 0.96 | 0.97 | 0.01 | 0.00 |
| 21 | DKC_1_186m | 186 | 33.4 | 31.2 | 32.4 | 1.2 | -1.0 | 12.75 | 11.27 | 11.33 | 0.06 | -1.42 | 0.97 | 0.96 | 0.97 | 0.01 | 0.00 |
| 22 | DKC_1_196m | 196 | 33.3 | 31.2 | 32.3 | 1.1 | -1.1 | 12.75 | 11.27 | 11.32 | 0.06 | -1.43 | 0.97 | 0.96 | 0.97 | 0.01 | 0.00 |
| | **Dungeness SAC** | | | | | | | | | | | | | | | | |
| 23 | DRMRB_1_0m | 0 | 12.2 | 9.5 | 9.5 | 0.0 | -2.7 | 10.50 | 9.24 | 9.24 | 0.00 | -1.26 | 0.80 | 0.79 | 0.79 | 0.00 | -0.01 |
| 24 | DRMRB_1_5m | 5 | 10.9 | 8.8 | 8.8 | 0.0 | -2.1 | 10.42 | 9.20 | 9.20 | 0.00 | -1.22 | 0.79 | 0.79 | 0.79 | 0.00 | 0.00 |
| 25 | DRMRB_1_10m | 10 | 10.4 | 8.5 | 8.5 | 0.0 | -1.8 | 10.40 | 9.19 | 9.19 | 0.00 | -1.21 | 0.79 | 0.78 | 0.78 | 0.00 | 0.00 |
| 26 | DRMRB_1_15m | 15 | 10.1 | 8.4 | 8.4 | 0.0 | -1.7 | 10.38 | 9.18 | 9.18 | 0.00 | -1.20 | 0.79 | 0.78 | 0.78 | 0.00 | 0.00 |
| 27 | DRMRB_1_20m | 20 | 9.9 | 8.3 | 8.3 | 0.0 | -1.6 | 10.37 | 9.17 | 9.17 | 0.00 | -1.20 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 28 | DRMRB_1_30m | 30 | 9.7 | 8.1 | 8.1 | 0.0 | -1.5 | 10.36 | 9.16 | 9.16 | 0.00 | -1.19 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 29 | DRMRB_1_40m | 40 | 9.5 | 8.1 | 8.1 | 0.0 | -1.5 | 10.35 | 9.16 | 9.16 | 0.00 | -1.19 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 30 | DRMRB_1_50m | 50 | 9.5 | 8.0 | 8.0 | 0.0 | -1.4 | 10.35 | 9.16 | 9.16 | 0.00 | -1.19 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 31 | DRMRB_1_60m | 60 | 9.4 | 8.0 | 8.0 | 0.0 | -1.4 | 10.34 | 9.16 | 9.16 | 0.00 | -1.19 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 32 | DRMRB_1_70m | 70 | 9.4 | 8.0 | 8.0 | 0.0 | -1.4 | 10.34 | 9.15 | 9.15 | 0.00 | -1.19 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 33 | DRMRB_1_80m | 80 | 9.3 | 8.0 | 8.0 | 0.0 | -1.4 | 10.34 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 34 | DRMRB_1_90m | 90 | 9.3 | 7.9 | 7.9 | 0.0 | -1.4 | 10.34 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 35 | DRMRB_1_100m | 100 | 9.3 | 7.9 | 7.9 | 0.0 | -1.3 | 10.34 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 36 | DRMRB_1_125m | 125 | 9.2 | 7.9 | 7.9 | 0.0 | -1.3 | 10.33 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 37 | DRMRB_1_150m | 150 | 9.2 | 7.9 | 7.9 | 0.0 | -1.3 | 10.33 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| 38 | DRMRB_1_175m | 175 | 9.2 | 7.9 | 7.9 | 0.0 | -1.3 | 10.33 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| 39 | DRMRB_1_200m | 200 | 9.2 | 7.9 | 7.9 | 0.0 | -1.3 | 10.33 | 9.15 | 9.15 | 0.00 | -1.18 | 0.78 | 0.78 | 0.78 | 0.00 | 0.00 |
| **Dungeness, Romney Marsh & Rye Bay SPA/Ramsar site** | | | | | | | | | | | | | | | | | |
| 40 | DRMRB_2_0m | 0 | 11.8 | 9.3 | 9.3 | 0.0 | -2.6 | 11.57 | 10.20 | 10.20 | 0.00 | -1.37 | 0.89 | 0.88 | 0.88 | 0.00 | -0.01 |
| 41 | DRMRB_2_5m | 5 | 10.8 | 8.7 | 8.7 | 0.0 | -2.1 | 11.52 | 10.17 | 10.17 | 0.00 | -1.35 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 42 | DRMRB_2_10m | 10 | 10.4 | 8.5 | 8.5 | 0.0 | -1.9 | 11.49 | 10.15 | 10.15 | 0.00 | -1.34 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 43 | DRMRB_2_15m | 15 | 10.1 | 8.3 | 8.3 | 0.0 | -1.8 | 11.48 | 10.15 | 10.15 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 44 | DRMRB_2_20m | 20 | 9.9 | 8.2 | 8.2 | 0.0 | -1.7 | 11.47 | 10.14 | 10.14 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 45 | DRMRB_2_30m | 30 | 9.7 | 8.1 | 8.1 | 0.0 | -1.6 | 11.45 | 10.13 | 10.13 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 46 | DRMRB_2_40m | 40 | 9.5 | 8.0 | 8.0 | 0.0 | -1.5 | 11.45 | 10.13 | 10.13 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 47 | DRMRB_2_50m | 50 | 9.4 | 8.0 | 8.0 | 0.0 | -1.5 | 11.44 | 10.13 | 10.13 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 48 | DRMRB_2_60m | 60 | 9.4 | 7.9 | 7.9 | 0.0 | -1.5 | 11.44 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 49 | DRMRB_2_70m | 70 | 9.3 | 7.9 | 7.9 | 0.0 | -1.4 | 11.44 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 50 | DRMRB_2_80m | 80 | 9.3 | 7.9 | 7.9 | 0.0 | -1.4 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 51 | DRMRB_2_90m | 90 | 9.3 | 7.9 | 7.9 | 0.0 | -1.4 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 52 | DRMRB_2_100m | 100 | 9.3 | 7.9 | 7.9 | 0.0 | -1.4 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 53 | DRMRB_2_125m | 125 | 9.2 | 7.8 | 7.8 | 0.0 | -1.4 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 54 | DRMRB_2_150m | 150 | 9.2 | 7.8 | 7.8 | 0.0 | -1.4 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 55 | DRMRB_2_175m | 175 | 9.2 | 7.8 | 7.8 | 0.0 | -1.3 | 11.43 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 56 | DRMRB_2_200m | 200 | 9.1 | 7.8 | 7.8 | 0.0 | -1.3 | 11.42 | 10.12 | 10.12 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 57 | DRMRB_3_168m | 168 | 11.0 | 9.0 | 9.0 | 0.0 | -2.0 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 58 | DRMRB_3_173m | 173 | 10.9 | 9.0 | 9.0 | 0.0 | -2.0 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 59 | DRMRB_3_178m | 178 | 10.9 | 9.0 | 9.0 | 0.0 | -1.9 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 60 | DRMRB_3_183m | 183 | 10.9 | 9.0 | 9.0 | 0.0 | -1.9 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 61 | DRMRB_3_188m | 188 | 10.9 | 8.9 | 9.0 | 0.0 | -1.9 | 11.45 | 10.13 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| 62 | DRMRB_3_198m | 198 | 10.9 | 8.9 | 9.0 | 0.0 | -1.9 | 11.45 | 10.13 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 63 | DRMRB_5_38m | 38 | 11.5 | 9.0 | 9.1 | 0.1 | -2.4 | 11.54 | 10.19 | 10.19 | 0.00 | -1.35 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 64 | DRMRB_5_43m | 43 | 11.3 | 8.9 | 9.0 | 0.1 | -2.3 | 11.53 | 10.18 | 10.19 | 0.00 | -1.35 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 65 | DRMRB_5_48m | 48 | 11.1 | 8.8 | 8.9 | 0.1 | -2.2 | 11.52 | 10.18 | 10.18 | 0.00 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 66 | DRMRB_5_53m | 53 | 11.0 | 8.7 | 8.8 | 0.1 | -2.2 | 11.51 | 10.17 | 10.17 | 0.00 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 67 | DRMRB_5_58m | 58 | 10.8 | 8.6 | 8.7 | 0.1 | -2.1 | 11.51 | 10.17 | 10.17 | 0.00 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 68 | DRMRB_5_68m | 68 | 10.6 | 8.5 | 8.6 | 0.1 | -2.0 | 11.50 | 10.16 | 10.16 | 0.00 | -1.33 | 0.88 | 0.87 | 0.88 | 0.00 | 0.00 |
| 69 | DRMRB_5_78m | 78 | 10.5 | 8.4 | 8.5 | 0.1 | -2.0 | 11.49 | 10.15 | 10.16 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 70 | DRMRB_5_88m | 88 | 10.4 | 8.4 | 8.4 | 0.1 | -1.9 | 11.48 | 10.15 | 10.15 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 71 | DRMRB_5_98m | 98 | 10.3 | 8.3 | 8.4 | 0.0 | -1.9 | 11.47 | 10.15 | 10.15 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 72 | DRMRB_5_108m | 108 | 10.2 | 8.3 | 8.3 | 0.0 | -1.9 | 11.47 | 10.14 | 10.15 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 73 | DRMRB_5_118m | 118 | 10.1 | 8.2 | 8.3 | 0.0 | -1.8 | 11.47 | 10.14 | 10.14 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 74 | DRMRB_5_128m | 128 | 10.0 | 8.2 | 8.2 | 0.0 | -1.8 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 75 | DRMRB_5_138m | 138 | 10.0 | 8.2 | 8.2 | 0.0 | -1.8 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 76 | DRMRB_5_163m | 163 | 9.9 | 8.1 | 8.1 | 0.0 | -1.8 | 11.45 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 77 | DRMRB_5_188m | 188 | 9.8 | 8.0 | 8.1 | 0.0 | -1.7 | 11.45 | 10.13 | 10.13 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 78 | DRMRB_6_0m | 0 | 23.5 | 16.2 | 17.0 | 0.7 | -6.5 | 12.14 | 10.53 | 10.57 | 0.04 | -1.57 | 0.94 | 0.91 | 0.92 | 0.00 | -0.03 |
| 79 | DRMRB_6_5m | 5 | 18.4 | 13.3 | 13.7 | 0.5 | -4.6 | 11.86 | 10.37 | 10.40 | 0.03 | -1.47 | 0.92 | 0.90 | 0.90 | 0.00 | -0.02 |
| 80 | DRMRB_6_10m | 10 | 16.2 | 12.0 | 12.3 | 0.3 | -3.9 | 11.75 | 10.30 | 10.32 | 0.02 | -1.42 | 0.90 | 0.89 | 0.89 | 0.00 | -0.01 |
| 81 | DRMRB_6_15m | 15 | 15.0 | 11.3 | 11.6 | 0.3 | -3.4 | 11.68 | 10.26 | 10.28 | 0.02 | -1.40 | 0.90 | 0.89 | 0.89 | 0.00 | -0.01 |
| 82 | DRMRB_6_20m | 20 | 14.2 | 10.9 | 11.1 | 0.2 | -3.1 | 11.64 | 10.24 | 10.25 | 0.01 | -1.39 | 0.89 | 0.88 | 0.88 | 0.00 | -0.01 |
| 83 | DRMRB_6_30m | 30 | 13.3 | 10.3 | 10.5 | 0.2 | -2.8 | 11.59 | 10.21 | 10.22 | 0.01 | -1.37 | 0.89 | 0.88 | 0.88 | 0.00 | -0.01 |
| 84 | DRMRB_6_40m | 40 | 12.7 | 10.0 | 10.1 | 0.1 | -2.6 | 11.55 | 10.19 | 10.20 | 0.01 | -1.35 | 0.88 | 0.88 | 0.88 | 0.00 | -0.01 |
| 85 | DRMRB_6_50m | 50 | 12.3 | 9.8 | 9.9 | 0.1 | -2.5 | 11.53 | 10.18 | 10.19 | 0.01 | -1.35 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 86 | DRMRB_6_60m | 60 | 12.1 | 9.6 | 9.7 | 0.1 | -2.4 | 11.52 | 10.17 | 10.18 | 0.01 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| 87 | DRMRB_6_70m | 70 | 11.9 | 9.5 | 9.6 | 0.1 | -2.3 | 11.51 | 10.17 | 10.17 | 0.01 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 88 | DRMRB_6_80m | 80 | 11.7 | 9.4 | 9.5 | 0.1 | -2.2 | 11.50 | 10.16 | 10.17 | 0.00 | -1.33 | 0.88 | 0.87 | 0.88 | 0.00 | 0.00 |
| 89 | DRMRB_6_90m | 90 | 11.6 | 9.4 | 9.4 | 0.1 | -2.2 | 11.49 | 10.16 | 10.16 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 90 | DRMRB_6_100m | 100 | 11.5 | 9.3 | 9.4 | 0.1 | -2.1 | 11.49 | 10.15 | 10.16 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 91 | DRMRB_6_125m | 125 | 11.3 | 9.2 | 9.2 | 0.1 | -2.1 | 11.48 | 10.15 | 10.15 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 92 | DRMRB_6_150m | 150 | 11.2 | 9.1 | 9.2 | 0.0 | -2.0 | 11.47 | 10.14 | 10.15 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 93 | DRMRB_6_175m | 175 | 11.1 | 9.1 | 9.1 | 0.0 | -2.0 | 11.47 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 94 | DRMRB_6_200m | 200 | 11.0 | 9.0 | 9.1 | 0.0 | -2.0 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 95 | DRMRB_7_0m | 0 | 22.4 | 15.3 | 16.1 | 0.7 | -6.4 | 12.13 | 10.53 | 10.57 | 0.04 | -1.56 | 0.94 | 0.91 | 0.92 | 0.00 | -0.03 |
| 96 | DRMRB_7_5m | 5 | 17.0 | 12.2 | 12.6 | 0.4 | -4.4 | 11.84 | 10.36 | 10.39 | 0.02 | -1.46 | 0.91 | 0.90 | 0.90 | 0.00 | -0.02 |
| 97 | DRMRB_7_10m | 10 | 14.9 | 10.9 | 11.2 | 0.3 | -3.6 | 11.73 | 10.29 | 10.31 | 0.02 | -1.42 | 0.90 | 0.89 | 0.89 | 0.00 | -0.01 |
| 98 | DRMRB_7_15m | 15 | 13.7 | 10.2 | 10.5 | 0.3 | -3.2 | 11.66 | 10.25 | 10.27 | 0.01 | -1.39 | 0.90 | 0.88 | 0.89 | 0.00 | -0.01 |
| 99 | DRMRB_7_20m | 20 | 12.9 | 9.8 | 10.0 | 0.2 | -2.9 | 11.62 | 10.23 | 10.24 | 0.01 | -1.38 | 0.89 | 0.88 | 0.88 | 0.00 | -0.01 |
| 100 | DRMRB_7_30m | 30 | 12.0 | 9.2 | 9.4 | 0.2 | -2.6 | 11.57 | 10.20 | 10.21 | 0.01 | -1.36 | 0.89 | 0.88 | 0.88 | 0.00 | -0.01 |
| 101 | DRMRB_7_40m | 40 | 11.4 | 8.9 | 9.0 | 0.1 | -2.3 | 11.54 | 10.18 | 10.19 | 0.01 | -1.35 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 102 | DRMRB_7_50m | 50 | 11.0 | 8.7 | 8.8 | 0.1 | -2.2 | 11.52 | 10.17 | 10.18 | 0.01 | -1.34 | 0.88 | 0.88 | 0.88 | 0.00 | 0.00 |
| 103 | DRMRB_7_60m | 60 | 10.7 | 8.5 | 8.6 | 0.1 | -2.1 | 11.50 | 10.16 | 10.17 | 0.00 | -1.33 | 0.88 | 0.87 | 0.88 | 0.00 | 0.00 |
| 104 | DRMRB_7_70m | 70 | 10.5 | 8.4 | 8.5 | 0.1 | -2.0 | 11.49 | 10.15 | 10.16 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 105 | DRMRB_7_80m | 80 | 10.4 | 8.3 | 8.4 | 0.1 | -2.0 | 11.48 | 10.15 | 10.15 | 0.00 | -1.33 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 106 | DRMRB_7_90m | 90 | 10.3 | 8.3 | 8.3 | 0.1 | -1.9 | 11.47 | 10.15 | 10.15 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 107 | DRMRB_7_100m | 100 | 10.2 | 8.2 | 8.3 | 0.1 | -1.9 | 11.47 | 10.14 | 10.15 | 0.00 | -1.32 | 0.88 | 0.87 | 0.87 | 0.00 | 0.00 |
| 108 | DRMRB_7_125m | 125 | 10.0 | 8.1 | 8.2 | 0.0 | -1.8 | 11.46 | 10.14 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 109 | DRMRB_7_150m | 150 | 9.9 | 8.0 | 8.1 | 0.0 | -1.8 | 11.45 | 10.13 | 10.14 | 0.00 | -1.32 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 110 | DRMRB_7_175m | 175 | 9.8 | 8.0 | 8.0 | 0.0 | -1.8 | 11.45 | 10.13 | 10.13 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |
| 111 | DRMRB_7_200m | 200 | 9.7 | 8.0 | 8.0 | 0.0 | -1.7 | 11.44 | 10.13 | 10.13 | 0.00 | -1.31 | 0.87 | 0.87 | 0.87 | 0.00 | 0.00 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link Folkestone to Etchinghill Escarpment SAC | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| 112 | FEE_1_0m | 0 | 70.6 | 40.7 | 49.3 | 8.6 | -21.2 | 16.93 | 14.06 | 14.46 | 0.41 | -2.47 | 1.36 | 1.23 | 1.28 | 0.04 | -0.09 |
| 113 | FEE_1_5m | 5 | 50.4 | 30.4 | 35.9 | 5.5 | -14.5 | 16.02 | 13.55 | 13.82 | 0.28 | -2.20 | 1.27 | 1.18 | 1.21 | 0.03 | -0.06 |
| 114 | FEE_1_10m | 10 | 42.0 | 26.1 | 30.3 | 4.2 | -11.7 | 15.62 | 13.33 | 13.55 | 0.22 | -2.08 | 1.23 | 1.16 | 1.18 | 0.02 | -0.05 |
| 115 | FEE_1_15m | 15 | 37.1 | 23.6 | 27.1 | 3.5 | -10.1 | 15.38 | 13.20 | 13.38 | 0.18 | -2.00 | 1.20 | 1.15 | 1.16 | 0.02 | -0.04 |
| 116 | FEE_1_20m | 20 | 33.8 | 21.8 | 24.8 | 3.0 | -9.0 | 15.22 | 13.11 | 13.27 | 0.15 | -1.95 | 1.19 | 1.14 | 1.15 | 0.02 | -0.03 |
| 117 | FEE_1_30m | 30 | 29.5 | 19.6 | 21.9 | 2.3 | -7.6 | 15.00 | 13.00 | 13.12 | 0.12 | -1.88 | 1.16 | 1.12 | 1.14 | 0.01 | -0.03 |
| 118 | FEE_1_40m | 40 | 26.8 | 18.2 | 20.1 | 1.9 | -6.7 | 14.86 | 12.92 | 13.02 | 0.10 | -1.84 | 1.15 | 1.12 | 1.13 | 0.01 | -0.02 |
| 119 | FEE_1_50m | 50 | 25.0 | 17.3 | 18.9 | 1.6 | -6.1 | 14.76 | 12.87 | 12.96 | 0.09 | -1.81 | 1.14 | 1.11 | 1.12 | 0.01 | -0.02 |
| 120 | FEE_1_60m | 60 | 23.6 | 16.6 | 18.0 | 1.4 | -5.6 | 14.69 | 12.83 | 12.91 | 0.08 | -1.78 | 1.13 | 1.11 | 1.12 | 0.01 | -0.02 |
| 121 | FEE_1_70m | 70 | 22.5 | 16.0 | 17.2 | 1.2 | -5.3 | 14.64 | 12.80 | 12.87 | 0.07 | -1.77 | 1.13 | 1.10 | 1.11 | 0.01 | -0.02 |
| 122 | FEE_1_80m | 80 | 21.7 | 15.5 | 16.7 | 1.1 | -5.0 | 14.59 | 12.78 | 12.84 | 0.06 | -1.75 | 1.12 | 1.10 | 1.11 | 0.01 | -0.01 |
| 123 | FEE_1_90m | 90 | 21.0 | 15.2 | 16.2 | 1.0 | -4.8 | 14.55 | 12.76 | 12.81 | 0.05 | -1.74 | 1.12 | 1.10 | 1.11 | 0.01 | -0.01 |
| 124 | FEE_1_100m | 100 | 20.4 | 14.9 | 15.8 | 0.9 | -4.6 | 14.52 | 12.74 | 12.79 | 0.05 | -1.73 | 1.11 | 1.10 | 1.10 | 0.01 | -0.01 |
| 125 | FEE_1_125m | 125 | 19.2 | 14.3 | 15.0 | 0.7 | -4.2 | 14.46 | 12.71 | 12.75 | 0.04 | -1.71 | 1.11 | 1.09 | 1.10 | 0.00 | -0.01 |
| 126 | FEE_1_150m | 150 | 18.4 | 13.8 | 14.4 | 0.6 | -3.9 | 14.41 | 12.68 | 12.72 | 0.03 | -1.69 | 1.10 | 1.09 | 1.10 | 0.00 | -0.01 |
| 127 | FEE_1_175m | 175 | 17.8 | 13.5 | 14.0 | 0.5 | -3.7 | 14.38 | 12.67 | 12.70 | 0.03 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 128 | FEE_1_200m | 200 | 17.3 | 13.2 | 13.7 | 0.5 | -3.6 | 14.35 | 12.65 | 12.68 | 0.03 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 129 | FEE_2_0m | 0 | 17.7 | 13.4 | 13.8 | 0.5 | -3.9 | 14.41 | 12.69 | 12.71 | 0.03 | -1.70 | 1.10 | 1.09 | 1.10 | 0.00 | -0.01 |
| 130 | FEE_2_5m | 5 | 17.3 | 13.1 | 13.6 | 0.5 | -3.7 | 14.39 | 12.67 | 12.70 | 0.03 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 131 | FEE_2_10m | 10 | 17.2 | 13.0 | 13.5 | 0.5 | -3.7 | 14.39 | 12.67 | 12.70 | 0.03 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 132 | FEE_2_15m | 15 | 17.2 | 13.0 | 13.5 | 0.5 | -3.7 | 14.39 | 12.67 | 12.70 | 0.03 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 133 | FEE_2_20m | 20 | 17.3 | 13.0 | 13.6 | 0.5 | -3.7 | 14.39 | 12.67 | 12.70 | 0.03 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 134 | FEE_2_30m | 30 | 17.4 | 13.1 | 13.7 | 0.6 | -3.7 | 14.40 | 12.68 | 12.71 | 0.03 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 135 | FEE_2_40m | 40 | 17.6 | 13.2 | 13.8 | 0.6 | -3.8 | 14.41 | 12.68 | 12.71 | 0.03 | -1.69 | 1.10 | 1.09 | 1.10 | 0.00 | -0.01 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| 136 | FEE_2_50m | 50 | 17.8 | 13.3 | 14.0 | 0.6 | -3.9 | 14.42 | 12.69 | 12.72 | 0.04 | -1.70 | 1.10 | 1.09 | 1.10 | 0.00 | -0.01 |
| 137 | FEE_2_60m | 60 | 18.1 | 13.5 | 14.1 | 0.7 | -4.0 | 14.43 | 12.69 | 12.73 | 0.04 | -1.70 | 1.11 | 1.09 | 1.10 | 0.00 | -0.01 |
| 138 | FEE_2_70m | 70 | 18.4 | 13.6 | 14.3 | 0.7 | -4.1 | 14.45 | 12.70 | 12.74 | 0.04 | -1.71 | 1.11 | 1.09 | 1.10 | 0.00 | -0.01 |
| 139 | FEE_2_80m | 80 | 18.7 | 13.8 | 14.6 | 0.8 | -4.2 | 14.47 | 12.71 | 12.75 | 0.04 | -1.71 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 140 | FEE_2_90m | 90 | 19.1 | 14.0 | 14.8 | 0.8 | -4.3 | 14.49 | 12.72 | 12.77 | 0.05 | -1.72 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 141 | FEE_3_0m | 0 | 28.2 | 20.1 | 20.9 | 0.7 | -7.4 | 14.95 | 13.03 | 13.07 | 0.04 | -1.88 | 1.16 | 1.13 | 1.13 | 0.00 | -0.03 |
| 142 | FEE_3_5m | 5 | 23.0 | 16.9 | 17.4 | 0.5 | -5.6 | 14.68 | 12.86 | 12.89 | 0.03 | -1.79 | 1.13 | 1.11 | 1.11 | 0.00 | -0.02 |
| 143 | FEE_3_10m | 10 | 20.8 | 15.6 | 16.0 | 0.4 | -4.8 | 14.56 | 12.79 | 12.81 | 0.02 | -1.75 | 1.12 | 1.10 | 1.11 | 0.00 | -0.01 |
| 144 | FEE_3_15m | 15 | 19.6 | 14.8 | 15.2 | 0.4 | -4.4 | 14.50 | 12.75 | 12.77 | 0.02 | -1.73 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 145 | FEE_3_20m | 20 | 18.7 | 14.3 | 14.7 | 0.3 | -4.1 | 14.45 | 12.72 | 12.74 | 0.02 | -1.71 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 146 | FEE_3_30m | 30 | 17.8 | 13.7 | 14.0 | 0.3 | -3.7 | 14.40 | 12.69 | 12.71 | 0.01 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 147 | FEE_3_40m | 40 | 17.2 | 13.4 | 13.6 | 0.3 | -3.5 | 14.37 | 12.67 | 12.69 | 0.01 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 148 | FEE_3_50m | 50 | 16.8 | 13.2 | 13.4 | 0.2 | -3.4 | 14.35 | 12.66 | 12.67 | 0.01 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 149 | FEE_3_60m | 60 | 16.6 | 13.0 | 13.2 | 0.2 | -3.3 | 14.33 | 12.65 | 12.66 | 0.01 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 150 | FEE_3_70m | 70 | 16.4 | 12.9 | 13.1 | 0.2 | -3.3 | 14.32 | 12.65 | 12.66 | 0.01 | -1.67 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 151 | FEE_3_80m | 80 | 16.3 | 12.8 | 13.0 | 0.2 | -3.2 | 14.32 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 152 | FEE_3_90m | 90 | 16.2 | 12.8 | 13.0 | 0.2 | -3.2 | 14.31 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 153 | FEE_3_100m | 100 | 16.1 | 12.7 | 12.9 | 0.2 | -3.2 | 14.31 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 154 | FEE_3_125m | 125 | 16.0 | 12.6 | 12.9 | 0.2 | -3.1 | 14.30 | 12.63 | 12.64 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 155 | FEE_3_150m | 150 | 15.9 | 12.6 | 12.8 | 0.2 | -3.1 | 14.30 | 12.63 | 12.64 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 156 | FEE_3_175m | 175 | 15.9 | 12.6 | 12.8 | 0.2 | -3.1 | 14.30 | 12.63 | 12.64 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 157 | FEE_3_200m | 200 | 15.9 | 12.6 | 12.8 | 0.2 | -3.1 | 14.30 | 12.63 | 12.64 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 158 | FEE_4_0m | 0 | 30.9 | 21.7 | 22.6 | 0.9 | -8.3 | 15.09 | 13.12 | 13.16 | 0.04 | -1.93 | 1.17 | 1.14 | 1.14 | 0.00 | -0.03 |
| 159 | FEE_4_5m | 5 | 25.0 | 18.1 | 18.7 | 0.6 | -6.3 | 14.79 | 12.93 | 12.96 | 0.03 | -1.83 | 1.14 | 1.12 | 1.12 | 0.00 | -0.02 |
| 160 | FEE_4_10m | 10 | 22.4 | 16.5 | 17.0 | 0.5 | -5.4 | 14.64 | 12.84 | 12.87 | 0.03 | -1.78 | 1.13 | 1.11 | 1.11 | 0.00 | -0.02 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| 161 | FEE_4_15m | 15 | 20.8 | 15.6 | 16.0 | 0.4 | -4.8 | 14.56 | 12.79 | 12.81 | 0.02 | -1.75 | 1.12 | 1.10 | 1.11 | 0.00 | -0.01 |
| 162 | FEE_4_20m | 20 | 19.8 | 15.0 | 15.3 | 0.4 | -4.4 | 14.51 | 12.76 | 12.78 | 0.02 | -1.73 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 163 | FEE_4_30m | 30 | 18.5 | 14.2 | 14.5 | 0.3 | -4.0 | 14.44 | 12.72 | 12.73 | 0.02 | -1.71 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 164 | FEE_4_40m | 40 | 17.7 | 13.7 | 14.0 | 0.3 | -3.7 | 14.40 | 12.69 | 12.70 | 0.01 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 165 | FEE_4_50m | 50 | 17.2 | 13.4 | 13.7 | 0.2 | -3.6 | 14.37 | 12.67 | 12.69 | 0.01 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 166 | FEE_4_60m | 60 | 16.9 | 13.2 | 13.4 | 0.2 | -3.4 | 14.35 | 12.66 | 12.67 | 0.01 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 167 | FEE_4_70m | 70 | 16.6 | 13.0 | 13.2 | 0.2 | -3.3 | 14.34 | 12.65 | 12.66 | 0.01 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 168 | FEE_4_80m | 80 | 16.4 | 12.9 | 13.1 | 0.2 | -3.3 | 14.32 | 12.65 | 12.66 | 0.01 | -1.67 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 169 | FEE_4_90m | 90 | 16.2 | 12.8 | 13.0 | 0.2 | -3.2 | 14.31 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 170 | FEE_4_100m | 100 | 16.1 | 12.7 | 12.9 | 0.2 | -3.2 | 14.31 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 171 | FEE_4_125m | 125 | 15.8 | 12.6 | 12.7 | 0.2 | -3.1 | 14.29 | 12.63 | 12.64 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 172 | FEE_4_150m | 150 | 15.6 | 12.5 | 12.6 | 0.2 | -3.0 | 14.28 | 12.62 | 12.63 | 0.01 | -1.65 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 173 | FEE_4_175m | 175 | 15.5 | 12.4 | 12.5 | 0.1 | -2.9 | 14.27 | 12.62 | 12.62 | 0.01 | -1.65 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 174 | FEE_4_200m | 200 | 15.3 | 12.3 | 12.4 | 0.1 | -2.9 | 14.27 | 12.61 | 12.62 | 0.01 | -1.65 | 1.09 | 1.08 | 1.09 | 0.00 | 0.00 |
| 175 | FEE_5_0m | 0 | 19.1 | 14.3 | 14.9 | 0.6 | -4.2 | 14.47 | 12.72 | 12.75 | 0.03 | -1.72 | 1.11 | 1.10 | 1.10 | 0.00 | -0.01 |
| 176 | FEE_5_5m | 5 | 18.6 | 14.0 | 14.6 | 0.6 | -4.0 | 14.44 | 12.71 | 12.74 | 0.03 | -1.71 | 1.11 | 1.09 | 1.10 | 0.00 | -0.01 |
| 177 | FEE_5_10m | 10 | 18.4 | 13.9 | 14.5 | 0.6 | -3.9 | 14.43 | 12.70 | 12.73 | 0.03 | -1.70 | 1.11 | 1.09 | 1.10 | 0.00 | -0.01 |
| 178 | FEE_5_15m | 15 | 18.2 | 13.8 | 14.4 | 0.6 | -3.9 | 14.42 | 12.69 | 12.72 | 0.03 | -1.70 | 1.10 | 1.09 | 1.10 | 0.00 | -0.01 |
| 179 | FEE_5_20m | 20 | 18.1 | 13.7 | 14.3 | 0.6 | -3.8 | 14.42 | 12.69 | 12.72 | 0.03 | -1.70 | 1.10 | 1.09 | 1.10 | 0.00 | -0.01 |
| 180 | FEE_5_30m | 30 | 17.9 | 13.6 | 14.1 | 0.5 | -3.7 | 14.41 | 12.68 | 12.71 | 0.03 | -1.69 | 1.10 | 1.09 | 1.10 | 0.00 | -0.01 |
| 181 | FEE_5_40m | 40 | 17.7 | 13.5 | 14.0 | 0.5 | -3.7 | 14.40 | 12.68 | 12.71 | 0.03 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 182 | FEE_5_50m | 50 | 17.6 | 13.5 | 14.0 | 0.5 | -3.7 | 14.39 | 12.68 | 12.70 | 0.03 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 183 | FEE_5_60m | 60 | 17.5 | 13.4 | 13.9 | 0.5 | -3.6 | 14.38 | 12.67 | 12.70 | 0.03 | -1.69 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 184 | FEE_5_70m | 70 | 17.4 | 13.4 | 13.8 | 0.5 | -3.6 | 14.38 | 12.67 | 12.70 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 185 | FEE_5_80m | 80 | 17.3 | 13.3 | 13.8 | 0.4 | -3.6 | 14.37 | 12.67 | 12.69 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 186 | FEE_5_90m | 90 | 17.2 | 13.3 | 13.7 | 0.4 | -3.5 | 14.37 | 12.67 | 12.69 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| 187 | FEE_5_100m | 100 | 17.2 | 13.3 | 13.7 | 0.4 | -3.5 | 14.37 | 12.67 | 12.69 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 188 | FEE_5_125m | 125 | 17.0 | 13.2 | 13.6 | 0.4 | -3.5 | 14.36 | 12.66 | 12.68 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 189 | FEE_5_150m | 150 | 16.9 | 13.1 | 13.5 | 0.4 | -3.4 | 14.35 | 12.66 | 12.68 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 190 | FEE_5_175m | 175 | 16.8 | 13.1 | 13.4 | 0.3 | -3.4 | 14.35 | 12.66 | 12.67 | 0.02 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 191 | FEE_5_200m | 200 | 16.7 | 13.0 | 13.3 | 0.3 | -3.3 | 14.34 | 12.65 | 12.67 | 0.02 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 192 | FEE_6_62m | 62 | 19.1 | 14.7 | 15.1 | 0.5 | -4.0 | 14.41 | 12.69 | 12.72 | 0.02 | -1.69 | 1.10 | 1.09 | 1.10 | 0.00 | -0.01 |
| 193 | FEE_6_67m | 67 | 18.9 | 14.5 | 15.0 | 0.4 | -3.9 | 14.40 | 12.69 | 12.71 | 0.02 | -1.68 | 1.10 | 1.09 | 1.10 | 0.00 | -0.01 |
| 194 | FEE_6_72m | 72 | 18.7 | 14.4 | 14.8 | 0.4 | -3.9 | 14.39 | 12.68 | 12.70 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 195 | FEE_6_77m | 77 | 18.6 | 14.3 | 14.7 | 0.4 | -3.8 | 14.38 | 12.68 | 12.70 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 196 | FEE_6_82m | 82 | 18.4 | 14.3 | 14.6 | 0.4 | -3.8 | 14.37 | 12.67 | 12.69 | 0.02 | -1.68 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 197 | FEE_6_92m | 92 | 18.2 | 14.1 | 14.5 | 0.4 | -3.7 | 14.36 | 12.66 | 12.68 | 0.02 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 198 | FEE_6_102m | 102 | 18.0 | 14.0 | 14.3 | 0.3 | -3.7 | 14.35 | 12.66 | 12.68 | 0.02 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | -0.01 |
| 199 | FEE_6_112m | 112 | 17.9 | 13.9 | 14.2 | 0.3 | -3.6 | 14.34 | 12.65 | 12.67 | 0.02 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | 0.00 |
| 200 | FEE_6_122m | 122 | 17.7 | 13.8 | 14.1 | 0.3 | -3.6 | 14.33 | 12.65 | 12.67 | 0.02 | -1.67 | 1.10 | 1.09 | 1.09 | 0.00 | 0.00 |
| 201 | FEE_6_132m | 132 | 17.6 | 13.8 | 14.1 | 0.3 | -3.6 | 14.33 | 12.65 | 12.66 | 0.02 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 202 | FEE_6_142m | 142 | 17.5 | 13.7 | 14.0 | 0.3 | -3.5 | 14.32 | 12.64 | 12.66 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 203 | FEE_6_152m | 152 | 17.4 | 13.7 | 13.9 | 0.3 | -3.5 | 14.32 | 12.64 | 12.66 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 204 | FEE_6_162m | 162 | 17.4 | 13.6 | 13.9 | 0.3 | -3.5 | 14.31 | 12.64 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| 205 | FEE_6_187m | 187 | 17.3 | 13.5 | 13.8 | 0.2 | -3.5 | 14.31 | 12.63 | 12.65 | 0.01 | -1.66 | 1.09 | 1.09 | 1.09 | 0.00 | 0.00 |
| **Lydden and Temple Ewell Downs SAC** | | | | | | | | | | | | | | | | | |
| 206 | LTED_1_90m | 90 | 13.2 | 10.5 | 10.9 | 0.3 | -2.3 | 16.59 | 14.66 | 14.68 | 0.02 | -1.92 | 1.26 | 1.26 | 1.26 | 0.00 | 0.00 |
| 207 | LTED_1_95m | 95 | 13.1 | 10.5 | 10.8 | 0.3 | -2.3 | 16.59 | 14.66 | 14.67 | 0.02 | -1.91 | 1.26 | 1.26 | 1.26 | 0.00 | 0.00 |
| 208 | LTED_1_100m | 100 | 13.0 | 10.5 | 10.8 | 0.3 | -2.3 | 16.58 | 14.65 | 14.67 | 0.02 | -1.91 | 1.26 | 1.25 | 1.26 | 0.00 | 0.00 |
| 209 | LTED_1_105m | 105 | 13.0 | 10.4 | 10.7 | 0.3 | -2.3 | 16.58 | 14.65 | 14.67 | 0.01 | -1.91 | 1.26 | 1.25 | 1.26 | 0.00 | 0.00 |

| Look up | | | Annual Mean Nox Conc. (ug/m3) | | | | | Annual Mean N Dep (k N/ha/yr) | | | | | Annual Mean A Dep (keq/ha/yr) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Base | DM | DS | Change | | Base | DM | DS | Change | | BL | DM | DS | Change | |
| ID | Road Link | From Road (m) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | (2017) | (2037) | (2037) | (DS-DM) | (DS-BL) | Base | (2037) | (2037) | (DS-DM) | (DS-BL) |
| 210 | LTED_1_110m | 110 | 12.9 | 10.4 | 10.7 | 0.3 | -2.2 | 16.58 | 14.65 | 14.67 | 0.02 | -1.91 | 1.26 | 1.25 | 1.26 | 0.00 | 0.00 |
| 211 | LTED_1_120m | 120 | 12.8 | 10.3 | 10.6 | 0.3 | -2.2 | 16.57 | 14.65 | 14.66 | 0.01 | -1.91 | 1.26 | 1.25 | 1.26 | 0.00 | 0.00 |
| 212 | LTED_1_130m | 130 | 12.7 | 10.3 | 10.5 | 0.2 | -2.2 | 16.56 | 14.64 | 14.66 | 0.01 | -1.91 | 1.26 | 1.25 | 1.26 | 0.00 | 0.00 |
| 213 | LTED_1_140m | 140 | 12.6 | 10.3 | 10.5 | 0.2 | -2.1 | 16.56 | 14.64 | 14.65 | 0.01 | -1.91 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 214 | LTED_1_150m | 150 | 12.5 | 10.2 | 10.4 | 0.2 | -2.1 | 16.56 | 14.64 | 14.65 | 0.01 | -1.90 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 215 | LTED_1_160m | 160 | 12.5 | 10.2 | 10.4 | 0.2 | -2.1 | 16.55 | 14.64 | 14.65 | 0.01 | -1.90 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 216 | LTED_1_170m | 170 | 12.4 | 10.2 | 10.3 | 0.2 | -2.1 | 16.55 | 14.64 | 14.65 | 0.01 | -1.90 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 217 | LTED_1_180m | 180 | 12.4 | 10.1 | 10.3 | 0.2 | -2.1 | 16.55 | 14.64 | 14.65 | 0.01 | -1.90 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 218 | LTED_1_190m | 190 | 12.3 | 10.1 | 10.3 | 0.2 | -2.0 | 16.54 | 14.63 | 14.64 | 0.01 | -1.90 | 1.26 | 1.25 | 1.25 | 0.00 | 0.00 |
| 219 | LTED_2_95m | 95 | 12.7 | 10.6 | 10.6 | 0.0 | -2.1 | 16.54 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 220 | LTED_2_100m | 100 | 12.7 | 10.6 | 10.6 | 0.0 | -2.1 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 221 | LTED_2_105m | 105 | 12.7 | 10.6 | 10.6 | 0.0 | -2.1 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 222 | LTED_2_110m | 110 | 12.7 | 10.5 | 10.6 | 0.0 | -2.1 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 223 | LTED_2_115m | 115 | 12.6 | 10.5 | 10.6 | 0.0 | -2.1 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 224 | LTED_2_125m | 125 | 12.6 | 10.5 | 10.6 | 0.0 | -2.1 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 225 | LTED_2_135m | 135 | 12.6 | 10.5 | 10.5 | 0.0 | -2.0 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 226 | LTED_2_145m | 145 | 12.6 | 10.5 | 10.5 | 0.0 | -2.0 | 16.53 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 227 | LTED_2_155m | 155 | 12.5 | 10.5 | 10.5 | 0.0 | -2.0 | 16.52 | 14.63 | 14.63 | 0.00 | -1.90 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 228 | LTED_2_165m | 165 | 12.5 | 10.5 | 10.5 | 0.0 | -2.0 | 16.52 | 14.63 | 14.63 | 0.00 | -1.89 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 229 | LTED_2_175m | 175 | 12.5 | 10.5 | 10.5 | 0.0 | -2.0 | 16.52 | 14.63 | 14.63 | 0.00 | -1.89 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 230 | LTED_2_185m | 185 | 12.5 | 10.4 | 10.5 | 0.0 | -2.0 | 16.52 | 14.62 | 14.63 | 0.00 | -1.89 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |
| 231 | LTED_2_195m | 195 | 12.5 | 10.4 | 10.5 | 0.0 | -2.0 | 16.52 | 14.62 | 14.63 | 0.00 | -1.89 | 1.25 | 1.25 | 1.25 | 0.00 | 0.00 |

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